

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	22.93	2.46	23.24	<=38.45	Pass			
			836.6	22.90	2.46	23.21	<=38.45	Pass			
			846.6	23.05	2.46	23.36	<=38.45	Pass			
	HSDPA		Subtest 1	826.4	20.67	2.46	20.98	<=38.45	Pass		
			Subtest 2	826.4	20.67	2.46	20.98	<=38.45	Pass		
			Subtest 3	826.4	20.67	2.46	20.98	<=38.45	Pass		
			Subtest 4	826.4	20.67	2.46	20.98	<=38.45	Pass		
			Subtest 1	836.6	20.68	2.46	20.99	<=38.45	Pass		
			Subtest 2	836.6	20.68	2.46	20.99	<=38.45	Pass		
			Subtest 3	836.6	20.69	2.46	21.00	<=38.45	Pass		
			Subtest 4	836.6	20.67	2.46	20.98	<=38.45	Pass		
			Subtest 1	846.6	20.77	2.46	21.08	<=38.45	Pass		
			Subtest 2	846.6	20.76	2.46	21.07	<=38.45	Pass		
			Subtest 3	846.6	20.75	2.46	21.06	<=38.45	Pass		
			Subtest 4	846.6	20.77	2.46	21.08	<=38.45	Pass		
			HSUPA		Subtest 1	826.4	18.68	2.46	18.99	<=38.45	Pass
					Subtest 2	826.4	18.19	2.46	18.50	<=38.45	Pass
					Subtest 3	826.4	18.48	2.46	18.79	<=38.45	Pass
	Subtest 4	826.4			18.13	2.46	18.44	<=38.45	Pass		
	Subtest 5	826.4			18.49	2.46	18.80	<=38.45	Pass		
	Subtest 1	836.6			18.60	2.46	18.91	<=38.45	Pass		
	Subtest 2	836.6			18.06	2.46	18.37	<=38.45	Pass		
	Subtest 3	836.6			18.13	2.46	18.44	<=38.45	Pass		
	Subtest 4	836.6			18.59	2.46	18.90	<=38.45	Pass		
	Subtest 5	836.6			18.61	2.46	18.92	<=38.45	Pass		
	Subtest 1	846.6			18.79	2.46	19.10	<=38.45	Pass		
	Subtest 2	846.6			18.25	2.46	18.56	<=38.45	Pass		
	Subtest 3	846.6			18.25	2.46	18.56	<=38.45	Pass		
	Subtest 4	846.6			18.77	2.46	19.08	<=38.45	Pass		
	Subtest 5	846.6			18.23	2.46	18.54	<=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	-11.408	-0.0138	-2.5 to 2.5	Pass
			3.85	-7.031	-0.0085	-2.5 to 2.5	Pass
			4.43	-11.916	-0.0144	-2.5 to 2.5	Pass
		-30	3.85	-10.457	-0.0127	-2.5 to 2.5	Pass
		-20	3.85	-7.417	-0.0090	-2.5 to 2.5	Pass

	836.6	-10	3.85	-10.321	-0.0125	-2.5 to 2.5	Pass	
		0	3.85	-13.554	-0.0164	-2.5 to 2.5	Pass	
		10	3.85	-10.378	-0.0126	-2.5 to 2.5	Pass	
		30	3.85	-14.584	-0.0176	-2.5 to 2.5	Pass	
		40	3.85	-8.655	-0.0105	-2.5 to 2.5	Pass	
		50	3.85	-9.162	-0.0111	-2.5 to 2.5	Pass	
		20	3.27	-6.216	-0.0074	-2.5 to 2.5	Pass	
			3.85	-12.059	-0.0144	-2.5 to 2.5	Pass	
			4.43	-7.524	-0.0090	-2.5 to 2.5	Pass	
			-30	3.85	-12.345	-0.0148	-2.5 to 2.5	Pass
			-20	3.85	-8.869	-0.0106	-2.5 to 2.5	Pass
			-10	3.85	-7.482	-0.0089	-2.5 to 2.5	Pass
			0	3.85	-12.288	-0.0147	-2.5 to 2.5	Pass
			10	3.85	-6.473	-0.0077	-2.5 to 2.5	Pass
			30	3.85	-12.016	-0.0144	-2.5 to 2.5	Pass
	40		3.85	-7.746	-0.0093	-2.5 to 2.5	Pass	
	50	3.85	-7.374	-0.0088	-2.5 to 2.5	Pass		
	846.6	20	3.27	-10.364	-0.0122	-2.5 to 2.5	Pass	
			3.85	-11.001	-0.0130	-2.5 to 2.5	Pass	
			4.43	-13.833	-0.0163	-2.5 to 2.5	Pass	
		-30	3.85	-12.138	-0.0143	-2.5 to 2.5	Pass	
		-20	3.85	-14.756	-0.0174	-2.5 to 2.5	Pass	
		-10	3.85	-12.567	-0.0148	-2.5 to 2.5	Pass	
		0	3.85	-10.121	-0.0120	-2.5 to 2.5	Pass	
		10	3.85	-10.035	-0.0119	-2.5 to 2.5	Pass	
		30	3.85	-7.532	-0.0089	-2.5 to 2.5	Pass	
		40	3.85	-7.854	-0.0093	-2.5 to 2.5	Pass	
		50	3.85	-13.640	-0.0161	-2.5 to 2.5	Pass	
		826.4	20	3.27	-7.489	-0.0091	-2.5 to 2.5	Pass
				3.85	-10.571	-0.0128	-2.5 to 2.5	Pass
4.43				-9.835	-0.0119	-2.5 to 2.5	Pass	
-30			3.85	-7.868	-0.0095	-2.5 to 2.5	Pass	
-20	3.85		-10.257	-0.0124	-2.5 to 2.5	Pass		
-10	3.85		-5.457	-0.0066	-2.5 to 2.5	Pass		
0	3.85		-7.739	-0.0094	-2.5 to 2.5	Pass		
10	3.85		-10.350	-0.0125	-2.5 to 2.5	Pass		
30	3.85		-7.224	-0.0087	-2.5 to 2.5	Pass		
40	3.85		-10.958	-0.0133	-2.5 to 2.5	Pass		
50	3.85		-7.160	-0.0087	-2.5 to 2.5	Pass		
836.6	20		3.27	-13.132	-0.0157	-2.5 to 2.5	Pass	
			3.85	-10.092	-0.0121	-2.5 to 2.5	Pass	
			4.43	-11.115	-0.0133	-2.5 to 2.5	Pass	
	-30		3.85	-16.544	-0.0198	-2.5 to 2.5	Pass	
	-20	3.85	-9.170	-0.0110	-2.5 to 2.5	Pass		
	-10	3.85	-13.812	-0.0165	-2.5 to 2.5	Pass		
	0	3.85	-10.979	-0.0131	-2.5 to 2.5	Pass		
	10	3.85	-12.245	-0.0146	-2.5 to 2.5	Pass		
	30	3.85	-14.935	-0.0179	-2.5 to 2.5	Pass		
	40	3.85	-14.677	-0.0175	-2.5 to 2.5	Pass		
	50	3.85	-10.085	-0.0121	-2.5 to 2.5	Pass		
	846.6	20	3.27	-13.669	-0.0161	-2.5 to 2.5	Pass	
			3.85	-14.005	-0.0165	-2.5 to 2.5	Pass	
			4.43	-14.005	-0.0165	-2.5 to 2.5	Pass	
		-30	3.85	-16.558	-0.0196	-2.5 to 2.5	Pass	
-20		3.85	-16.909	-0.0200	-2.5 to 2.5	Pass		
-10		3.85	-14.176	-0.0167	-2.5 to 2.5	Pass		
0		3.85	-14.842	-0.0175	-2.5 to 2.5	Pass		
10		3.85	-11.745	-0.0139	-2.5 to 2.5	Pass		
30		3.85	-9.327	-0.0110	-2.5 to 2.5	Pass		

		40	3.85	-15.543	-0.0184	-2.5 to 2.5	Pass
		50	3.85	-14.319	-0.0169	-2.5 to 2.5	Pass
HSUPA	826.4	20	3.27	-7.982	-0.0097	-2.5 to 2.5	Pass
			3.85	-14.541	-0.0176	-2.5 to 2.5	Pass
			4.43	-13.647	-0.0165	-2.5 to 2.5	Pass
		-30	3.85	-12.739	-0.0154	-2.5 to 2.5	Pass
		-20	3.85	-13.053	-0.0158	-2.5 to 2.5	Pass
		-10	3.85	-15.478	-0.0187	-2.5 to 2.5	Pass
		0	3.85	-13.390	-0.0162	-2.5 to 2.5	Pass
		10	3.85	-13.204	-0.0160	-2.5 to 2.5	Pass
		30	3.85	-10.471	-0.0127	-2.5 to 2.5	Pass
		40	3.85	-7.811	-0.0095	-2.5 to 2.5	Pass
		50	3.85	-8.898	-0.0108	-2.5 to 2.5	Pass
	836.6	20	3.27	-15.957	-0.0191	-2.5 to 2.5	Pass
			3.85	-13.082	-0.0156	-2.5 to 2.5	Pass
			4.43	-13.189	-0.0158	-2.5 to 2.5	Pass
		-30	3.85	-13.347	-0.0160	-2.5 to 2.5	Pass
		-20	3.85	-16.029	-0.0192	-2.5 to 2.5	Pass
		-10	3.85	-11.659	-0.0139	-2.5 to 2.5	Pass
		0	3.85	-15.564	-0.0186	-2.5 to 2.5	Pass
		10	3.85	-15.965	-0.0191	-2.5 to 2.5	Pass
		30	3.85	-11.487	-0.0137	-2.5 to 2.5	Pass
		40	3.85	-10.314	-0.0123	-2.5 to 2.5	Pass
		50	3.85	-10.951	-0.0131	-2.5 to 2.5	Pass
	846.6	20	3.27	-11.179	-0.0132	-2.5 to 2.5	Pass
			3.85	-10.686	-0.0126	-2.5 to 2.5	Pass
			4.43	-16.079	-0.0190	-2.5 to 2.5	Pass
		-30	3.85	-14.026	-0.0166	-2.5 to 2.5	Pass
		-20	3.85	-12.302	-0.0145	-2.5 to 2.5	Pass
		-10	3.85	-10.808	-0.0128	-2.5 to 2.5	Pass
		0	3.85	-11.258	-0.0133	-2.5 to 2.5	Pass
		10	3.85	-14.484	-0.0171	-2.5 to 2.5	Pass
		30	3.85	-11.122	-0.0131	-2.5 to 2.5	Pass
		40	3.85	-9.727	-0.0115	-2.5 to 2.5	Pass
		50	3.85	-11.845	-0.0140	-2.5 to 2.5	Pass

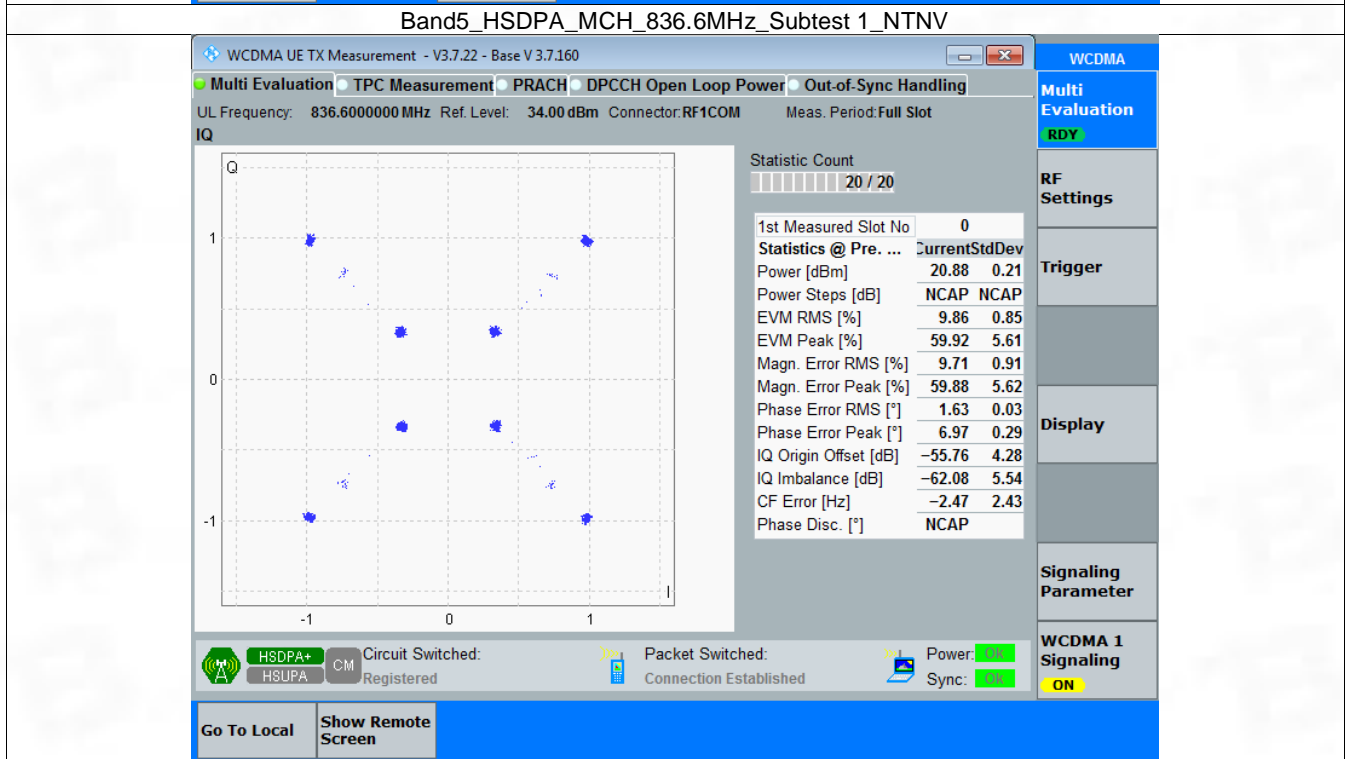
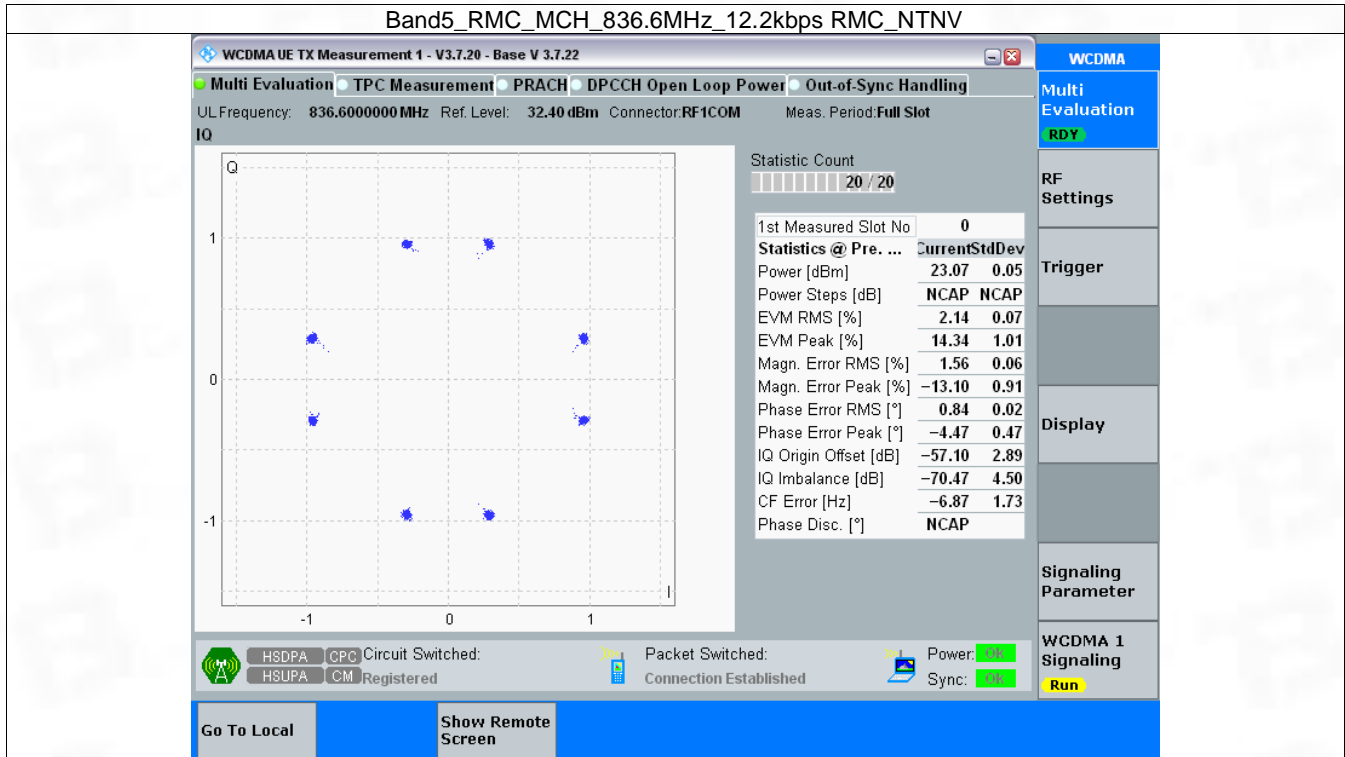
3. Modulation Characteristics

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



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV

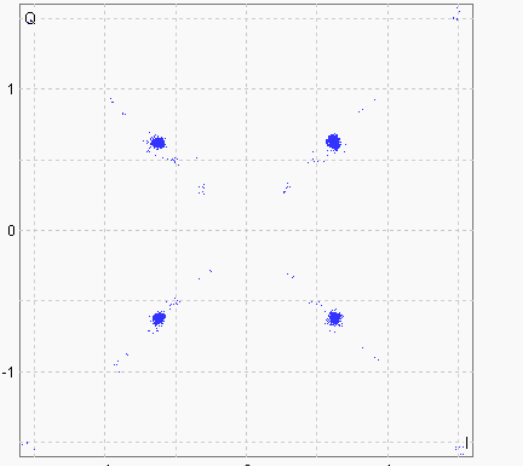
WCDMA UE TX Measurement 1 - V3.7.20 - Base V 3.7.22

UL Frequency: 836.600000 MHz Ref. Level: 16.80 dBm Connector: RF1COM Meas. Period: Full Slot

WCDMA

Multi Evaluation
 TPC Measurement
 PRACH
 DPCCH Open Loop Power
 Out-of-Sync Handling

IQ



Statistic Count
 20 / 20

1st Measured Slot No	0
Statistics @ Pre. ...	CurrentStdDev
Power [dBm]	-3.68 3.36
Power Steps [dB]	NCAP NCAP
EVM RMS [%]	12.50 4.15
EVM Peak [%]	100.00 40.25
Magn. Error RMS [%]	12.32 4.43
Magn. Error Peak [%]	100.00 40.45
Phase Error RMS [°]	1.33 0.39
Phase Error Peak [°]	-10.61 3.10
IQ Origin Offset [dB]	-56.19 4.10
IQ Imbalance [dB]	-62.94 5.79
CF Error [Hz]	-1.85 3.40
Phase Disc. [°]	NCAP

Multi Evaluation

RDY

RF Settings

Trigger

Display

Signaling Parameter

WCDMA 1 Signaling

ON

HSDPA+
CPC
 Circuit Switched:

HSUPA
CM
 Registered

»» Packet Switched:

»» Connection Established

»» Power:

»» Sync:

Go To Local

Show Remote Screen

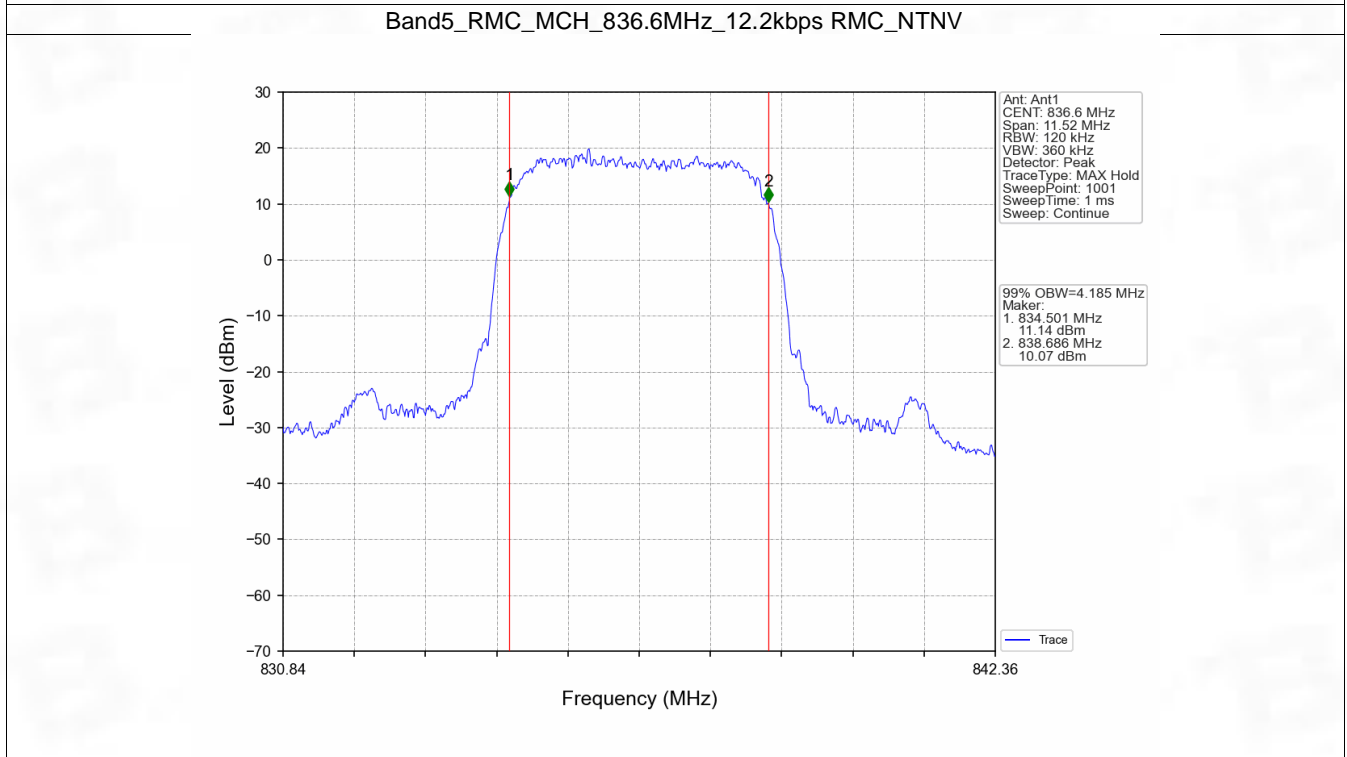
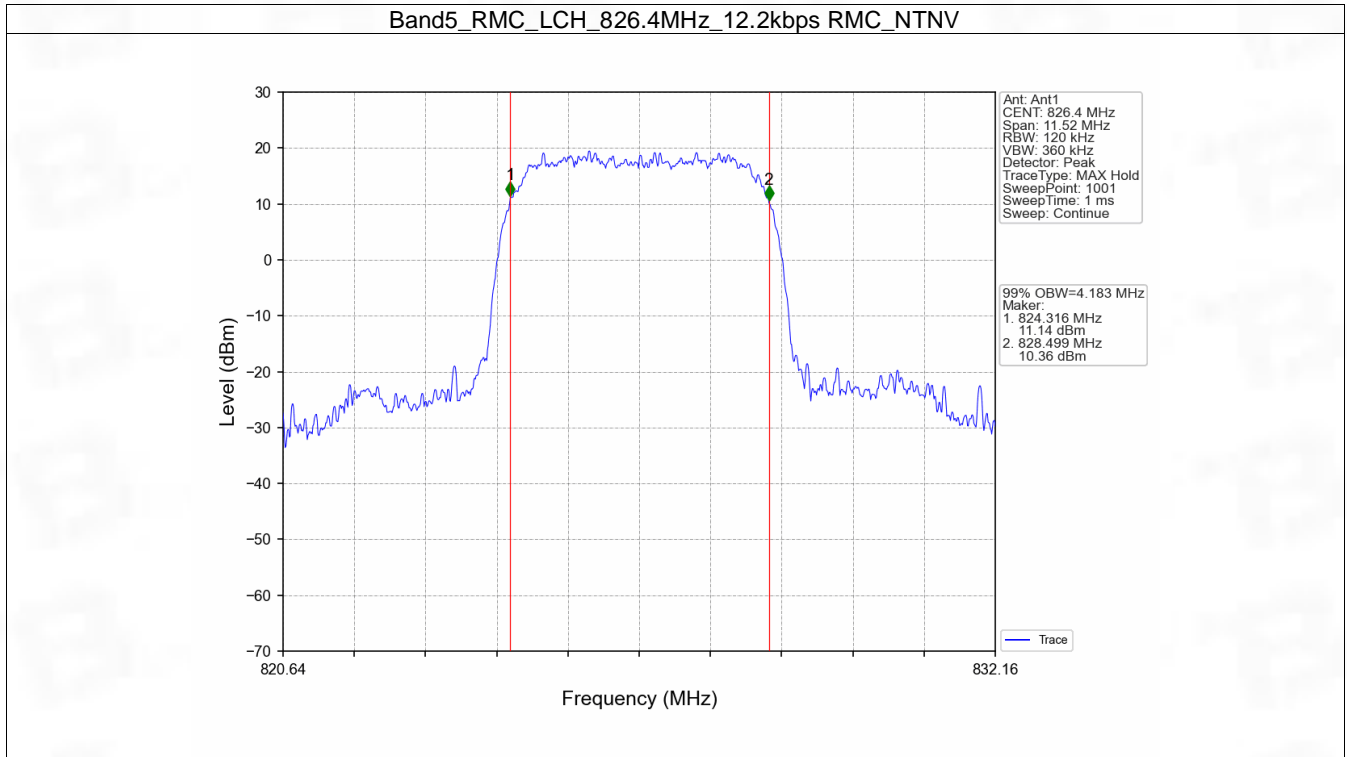
4. 99% & 26dB Bandwidth

4.1 Band5_OBW

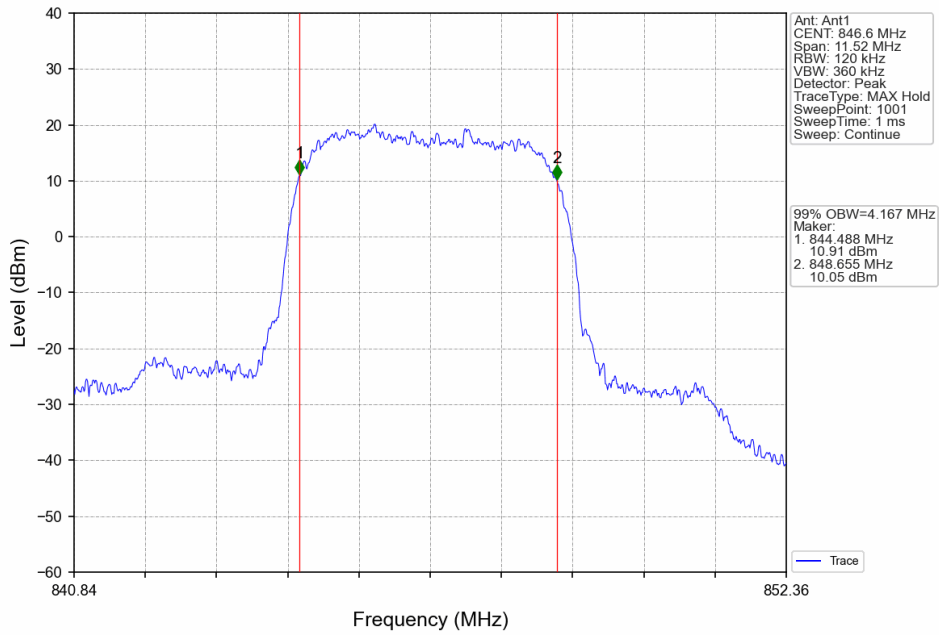
4.1.1 Test Result

Band: 5					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	RMC	12.2kbps RMC	826.4	4.183	Pass
			836.6	4.185	Pass
			846.6	4.167	Pass
	HSDPA	Subtest 1	826.4	4.231	Pass
			836.6	4.244	Pass
			846.6	4.203	Pass
	HSUPA	Subtest 1	826.4	4.219	Pass
			836.6	4.238	Pass
			846.6	4.205	Pass

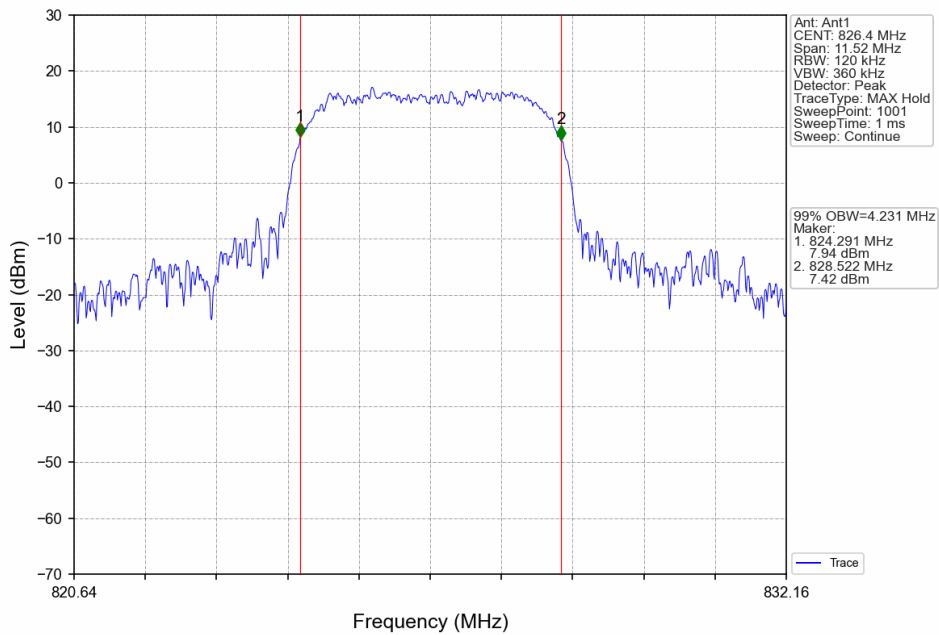
4.1.2 Test Graph



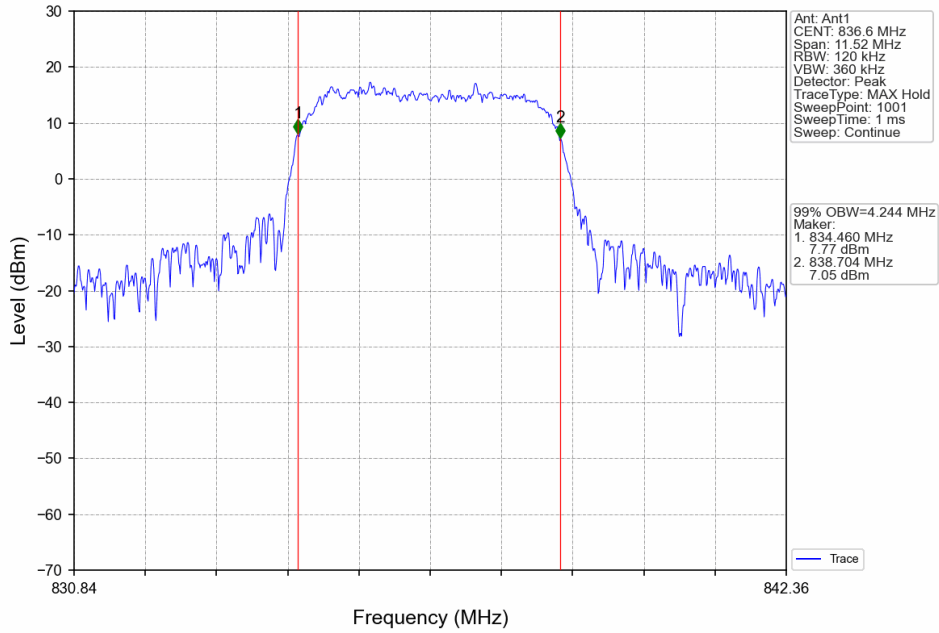
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



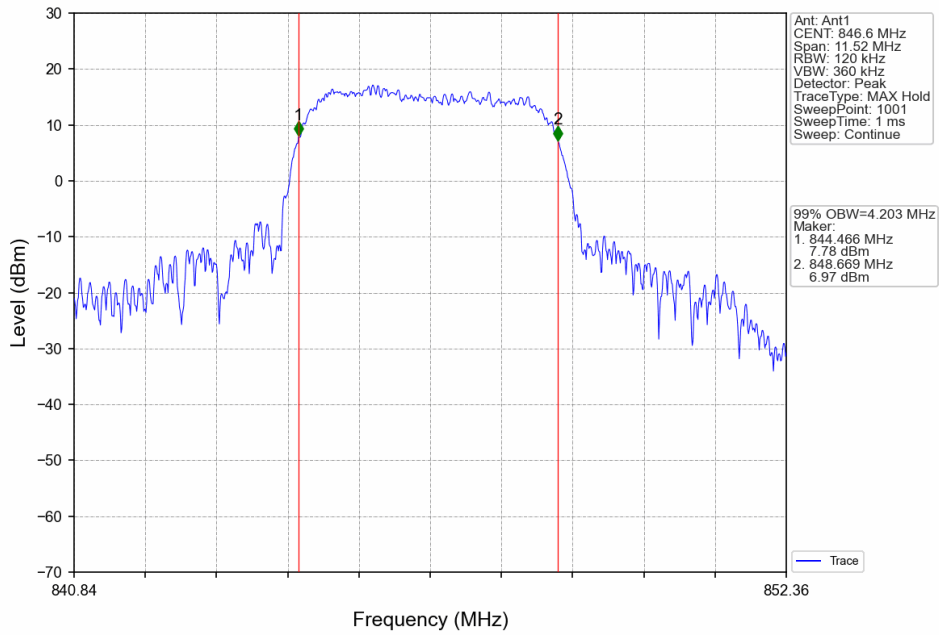
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



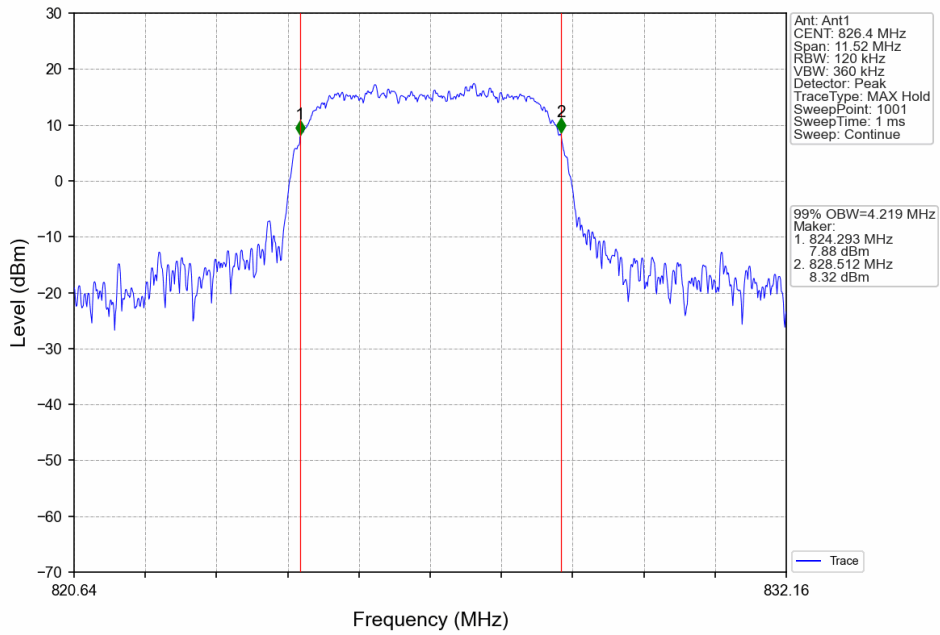
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



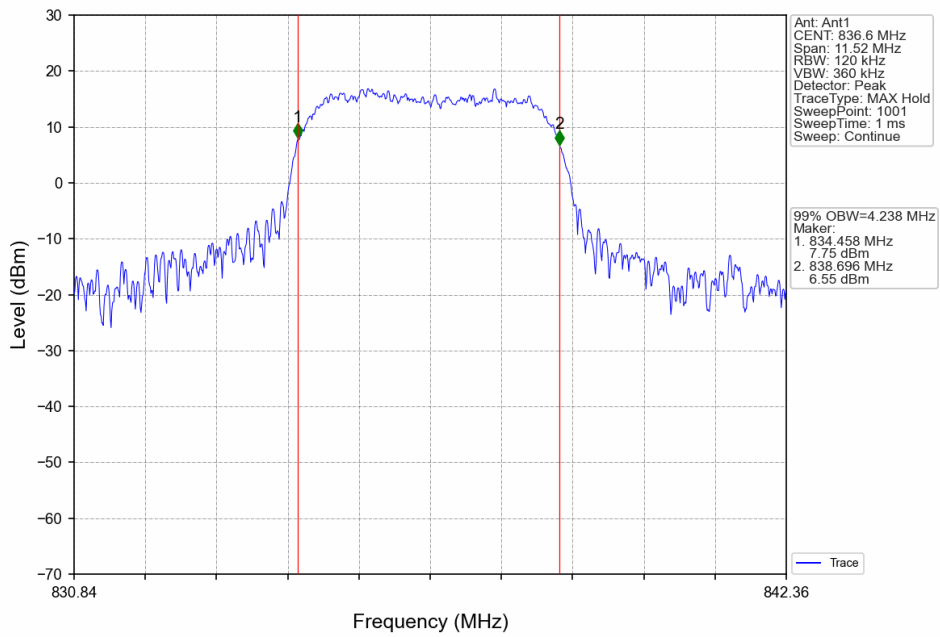
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



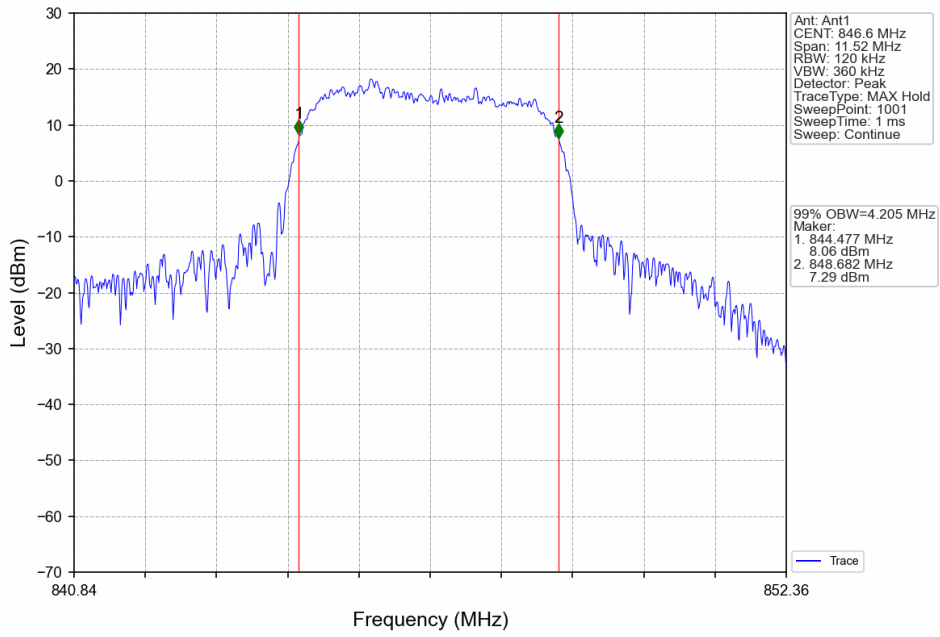
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV

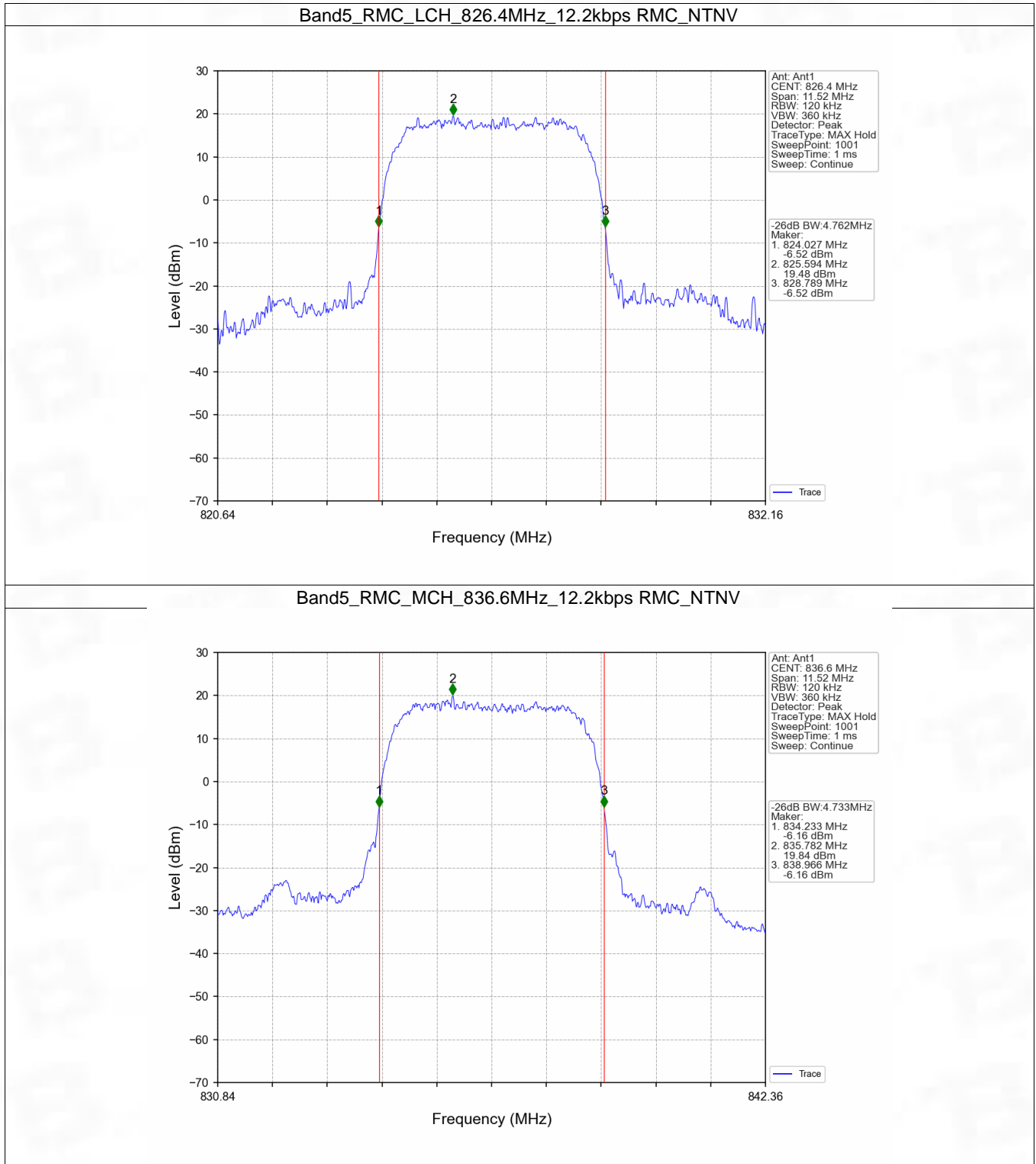


4.2 Band5_XDB

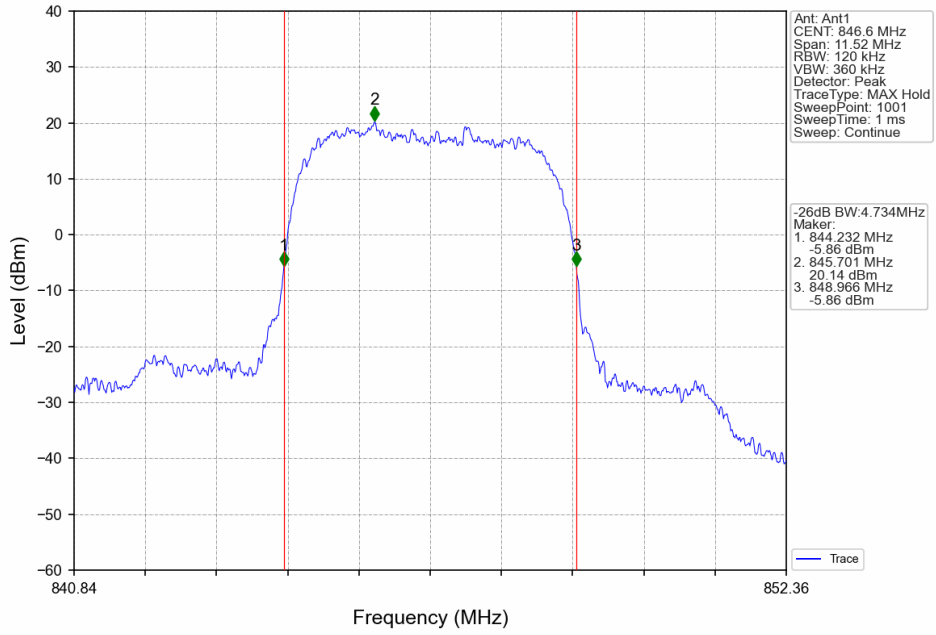
4.2.1 Test Result

Band: 5					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	RMC	12.2kbps RMC	826.4	4.762	Pass
			836.6	4.733	Pass
			846.6	4.734	Pass
	HSDPA	Subtest 1	826.4	5.536	Pass
			836.6	5.366	Pass
			846.6	5.283	Pass
	HSUPA	Subtest 1	826.4	5.101	Pass
			836.6	5.863	Pass
			846.6	5.153	Pass

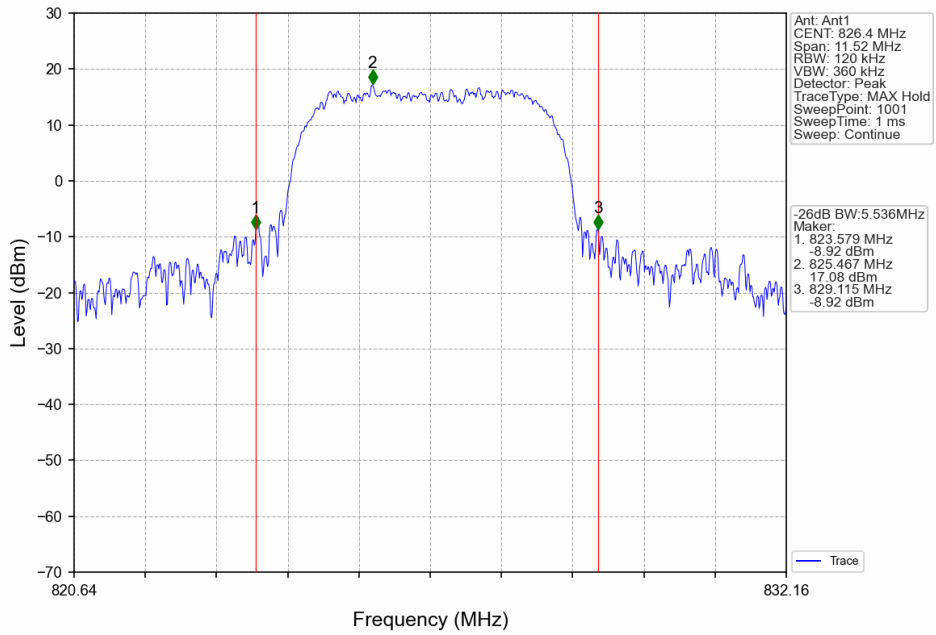
4.2.2 Test Graph



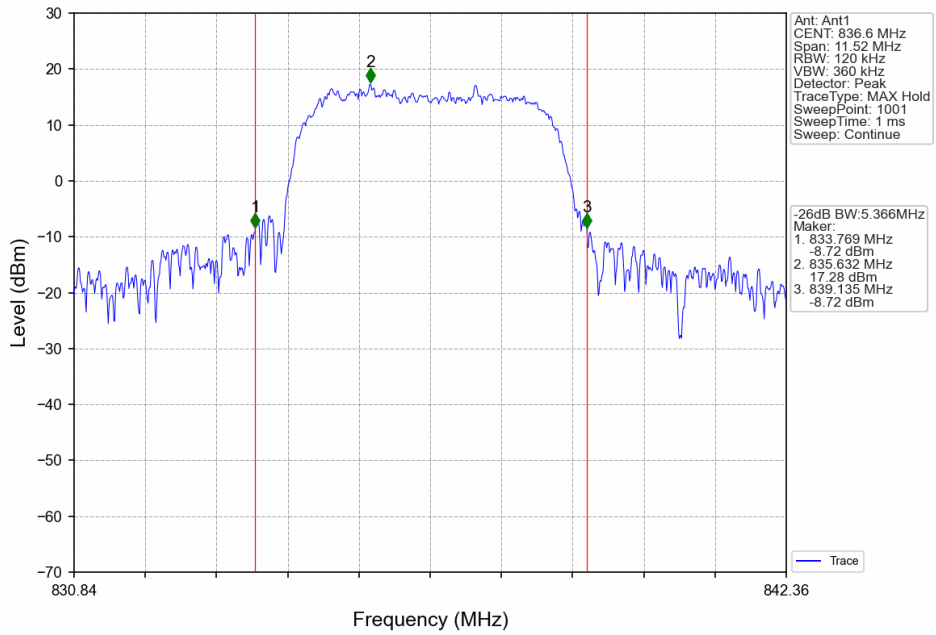
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



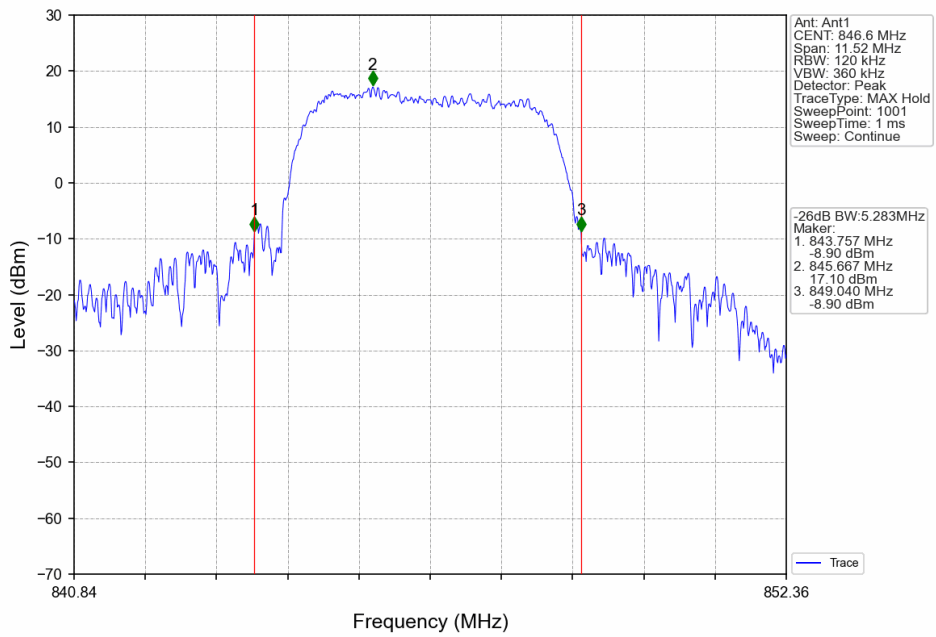
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



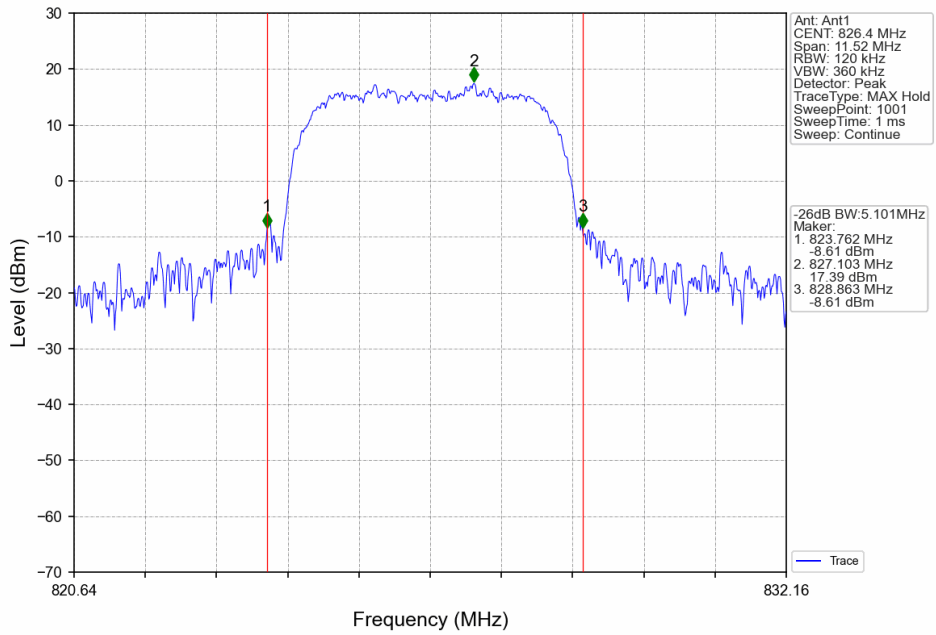
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



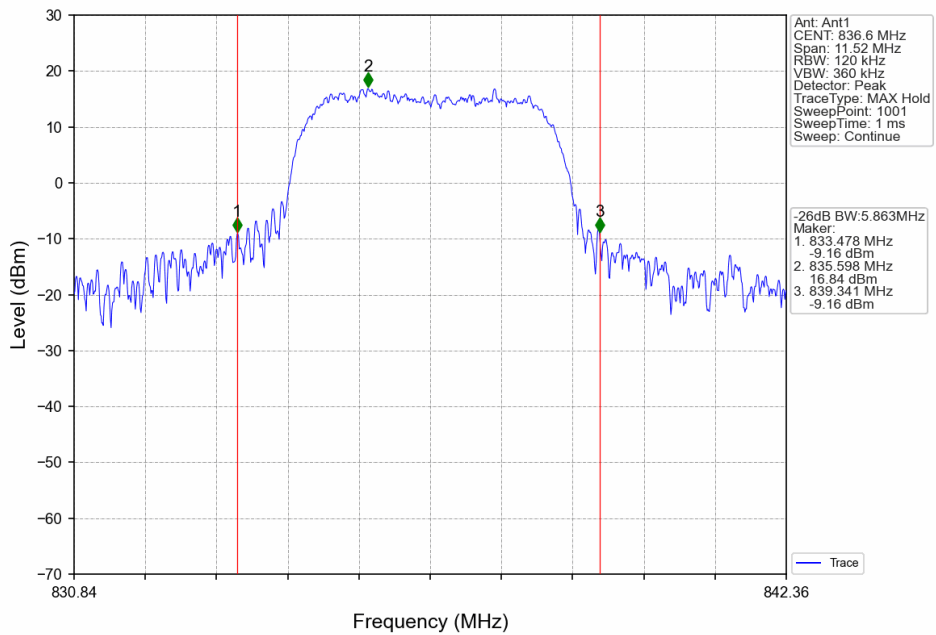
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



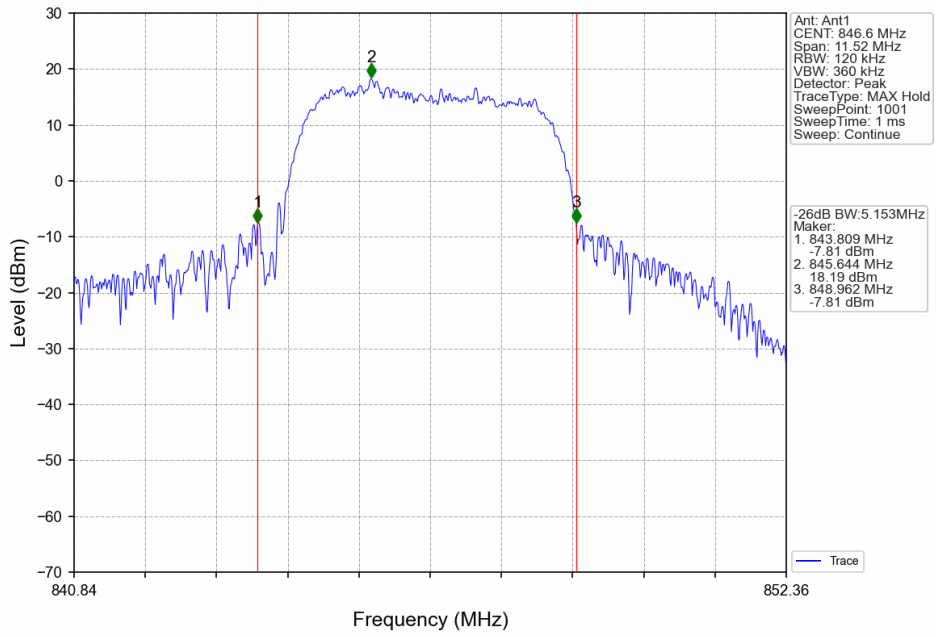
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



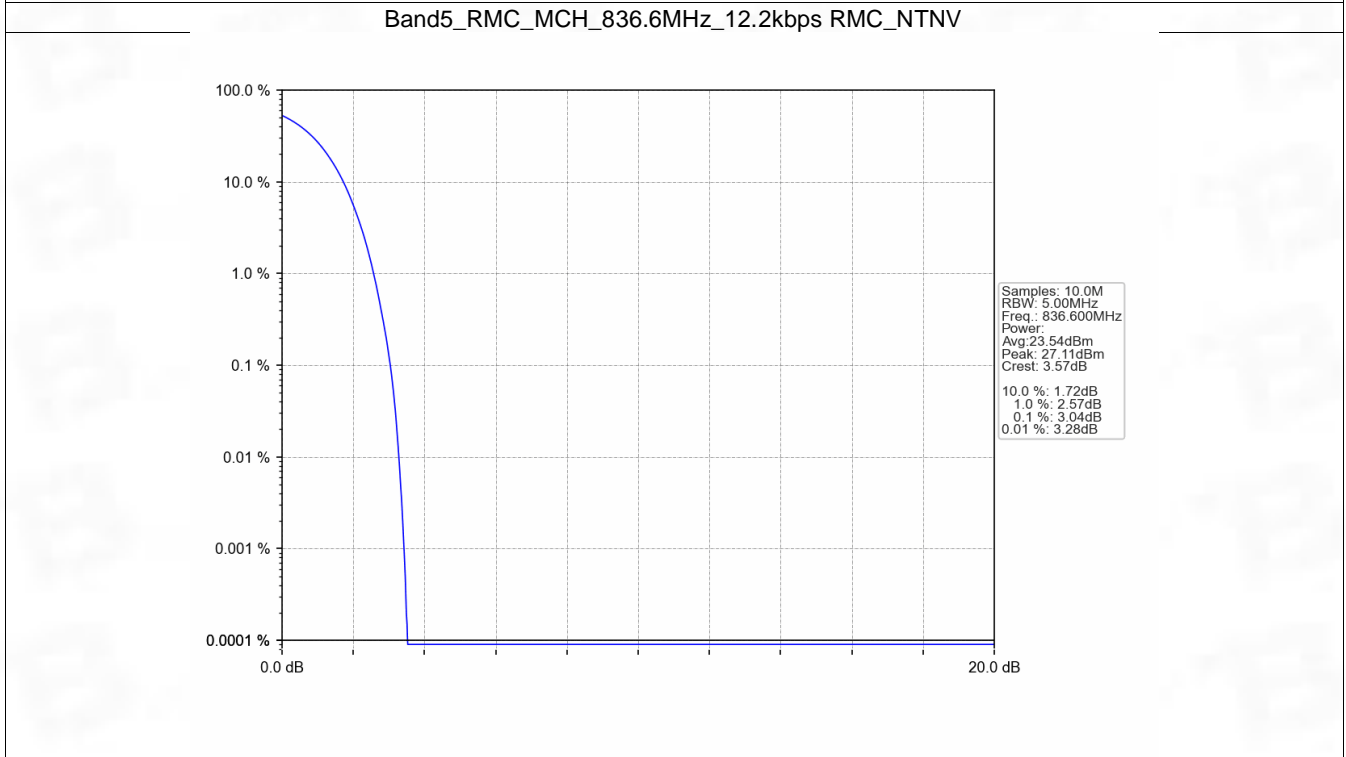
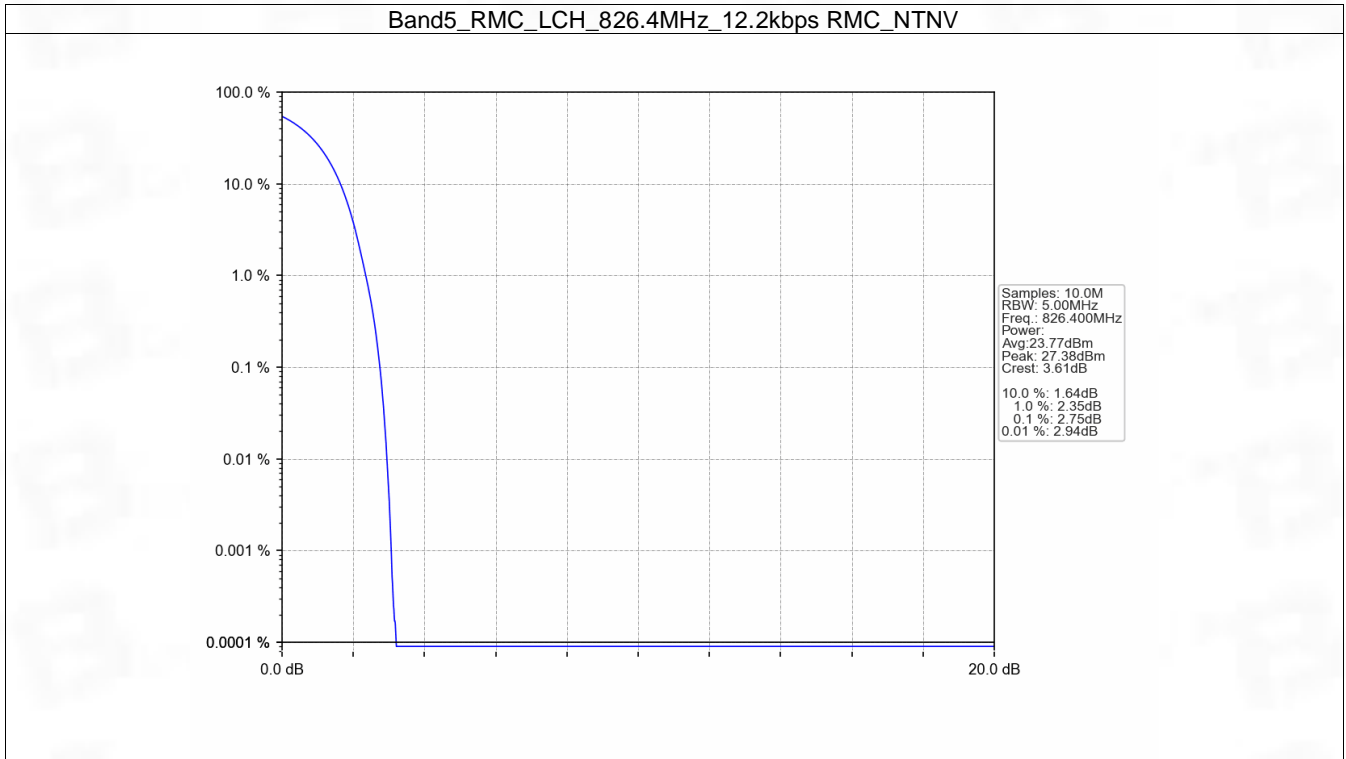
5. Peak-Average Ratio

5.1 Band5

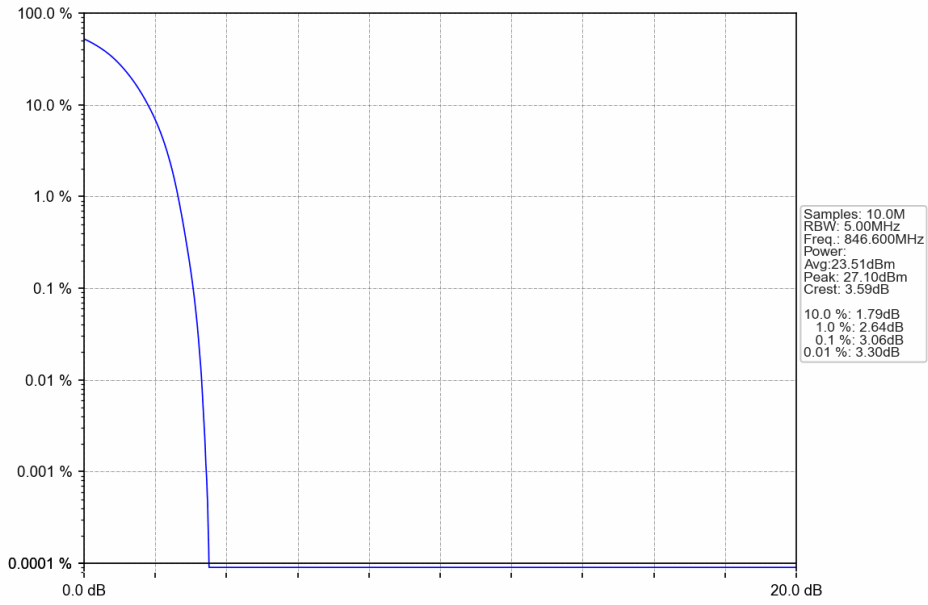
5.1.1 Test Result

Band: 5						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.75	<=13	Pass
			836.6	3.04	<=13	Pass
			846.6	3.06	<=13	Pass
	HSDPA	Subtest 1	826.4	5.81	<=13	Pass
			836.6	6.09	<=13	Pass
			846.6	6.20	<=13	Pass
	HSUPA	Subtest 1	826.4	5.81	<=13	Pass
			836.6	5.95	<=13	Pass
			846.6	6.08	<=13	Pass

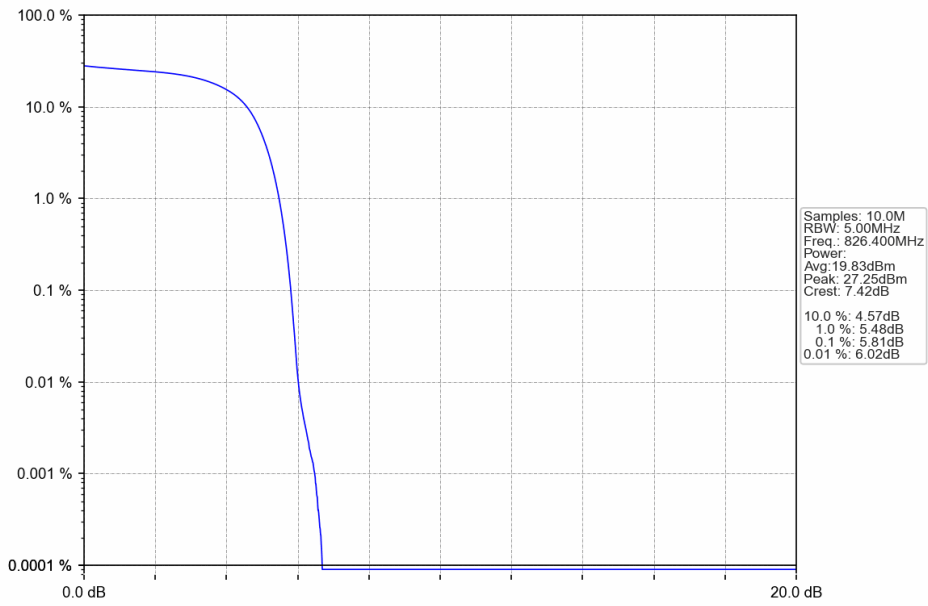
5.1.2 Test Graph



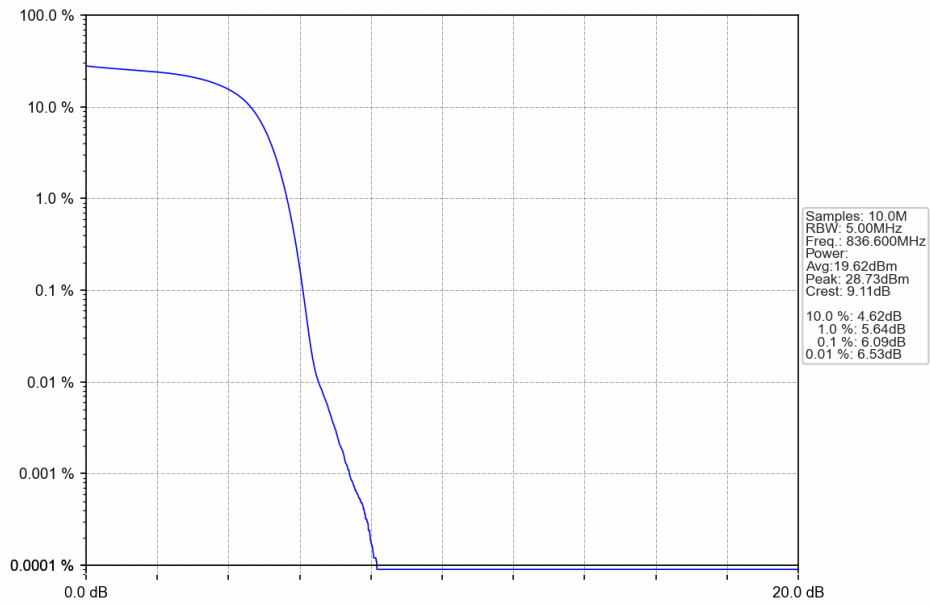
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



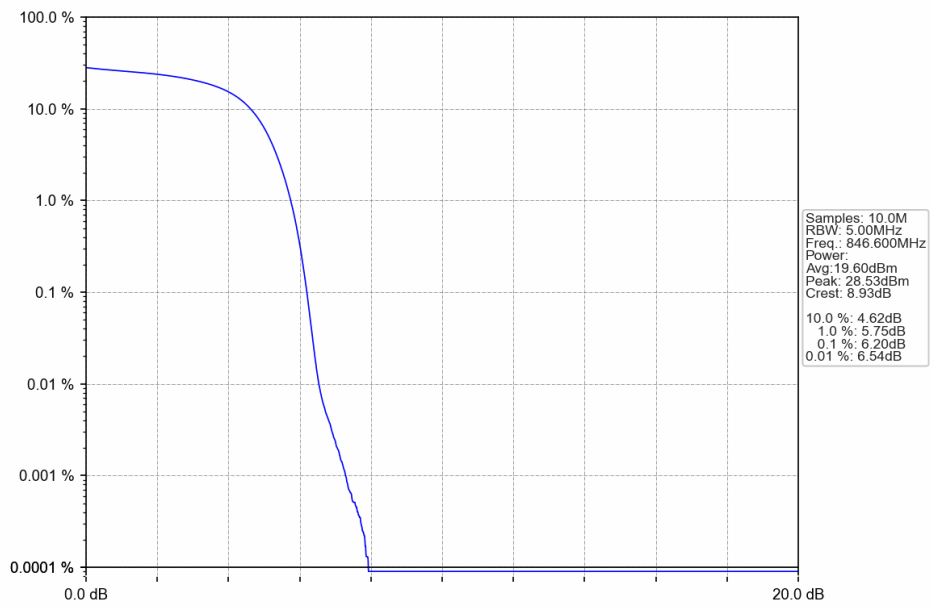
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



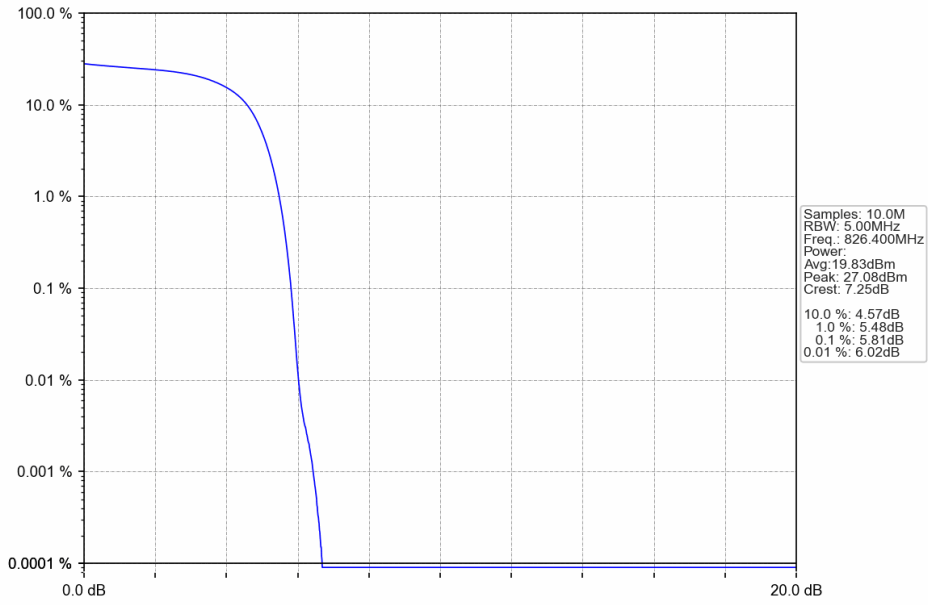
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



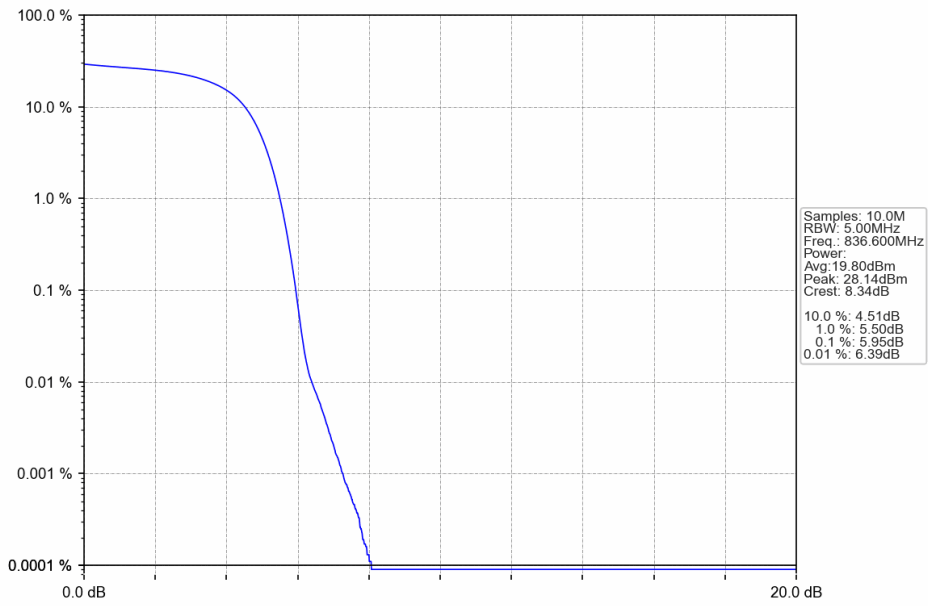
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



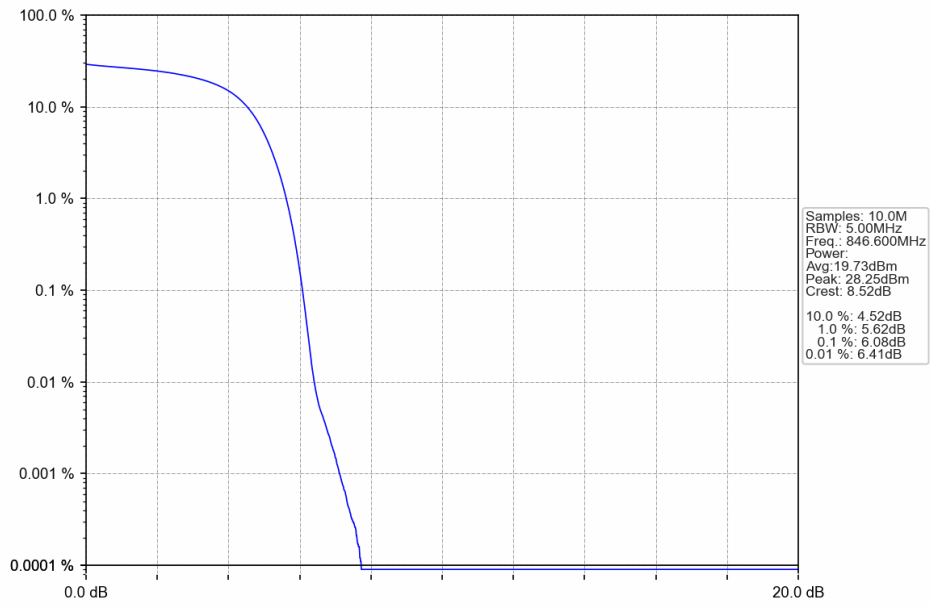
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



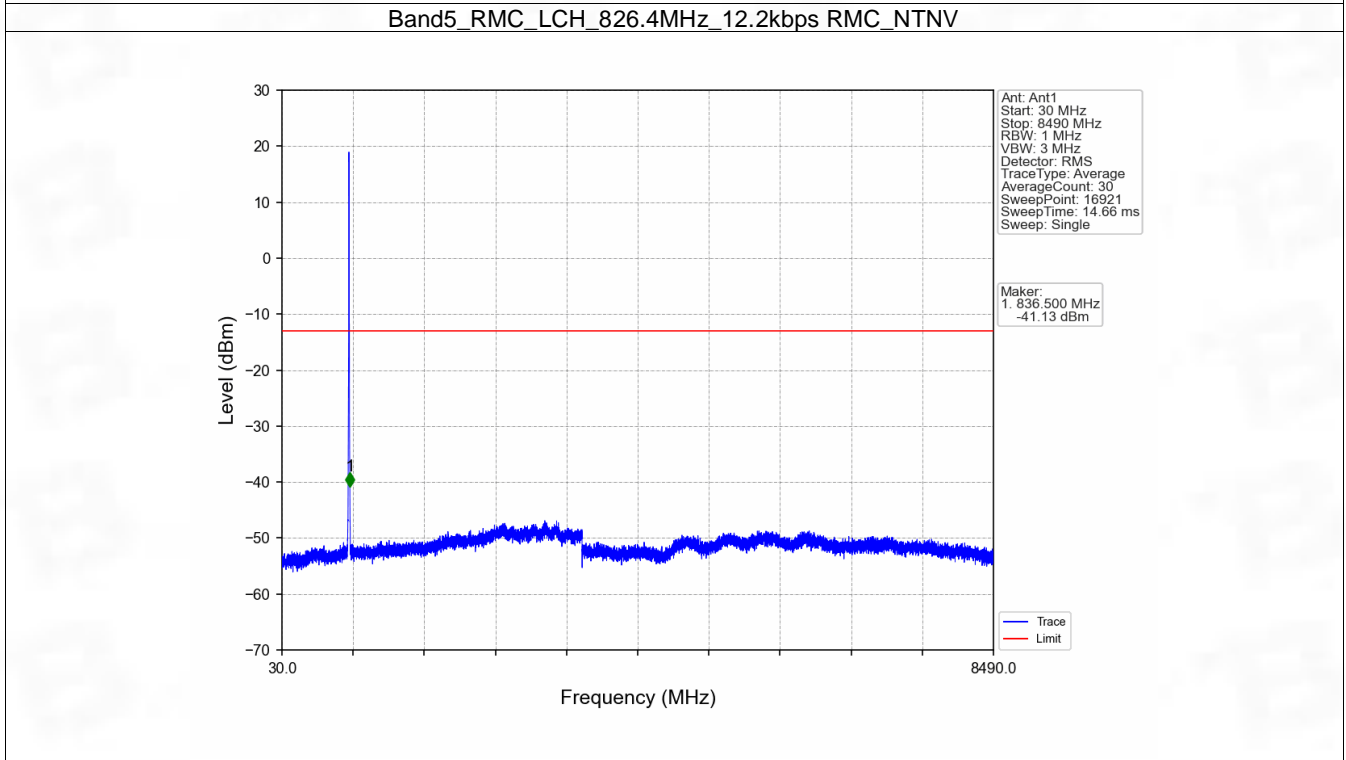
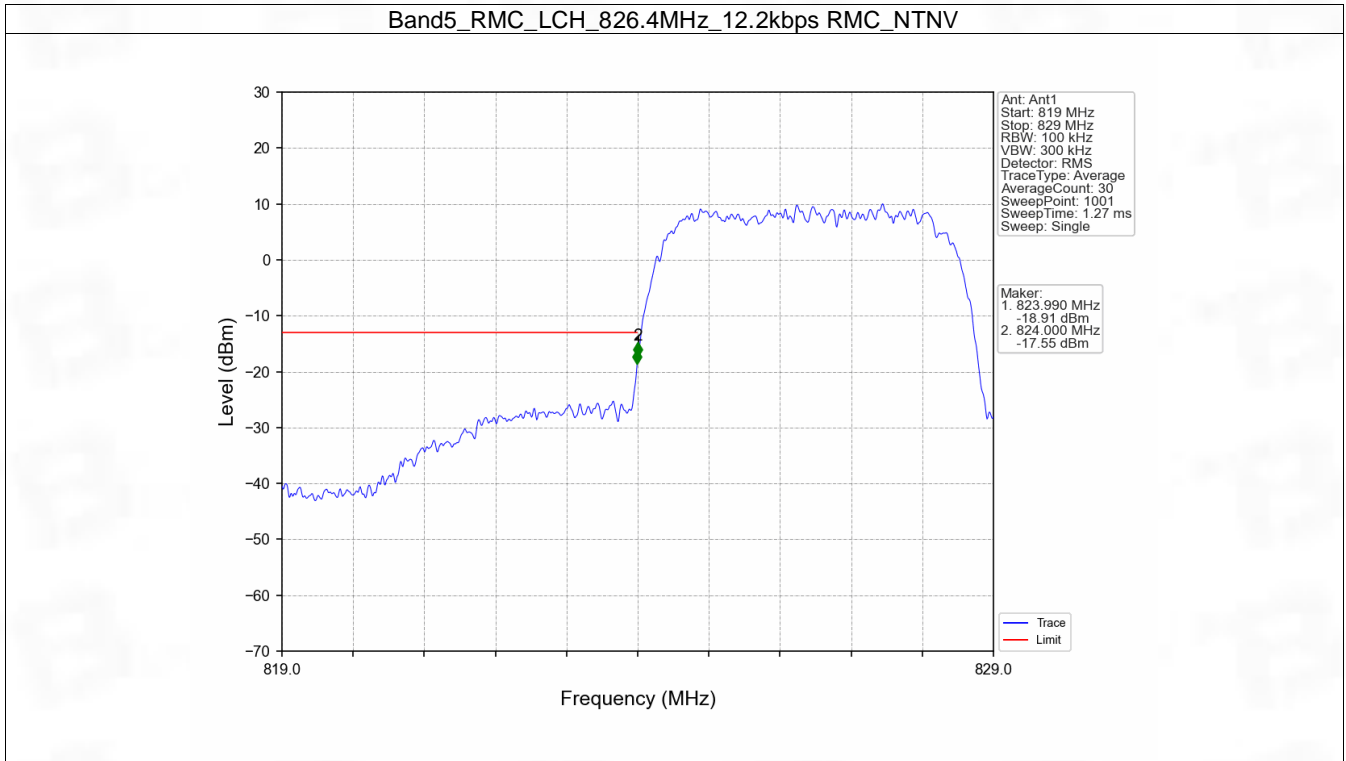
6. Spurious Emission

6.1 Band5

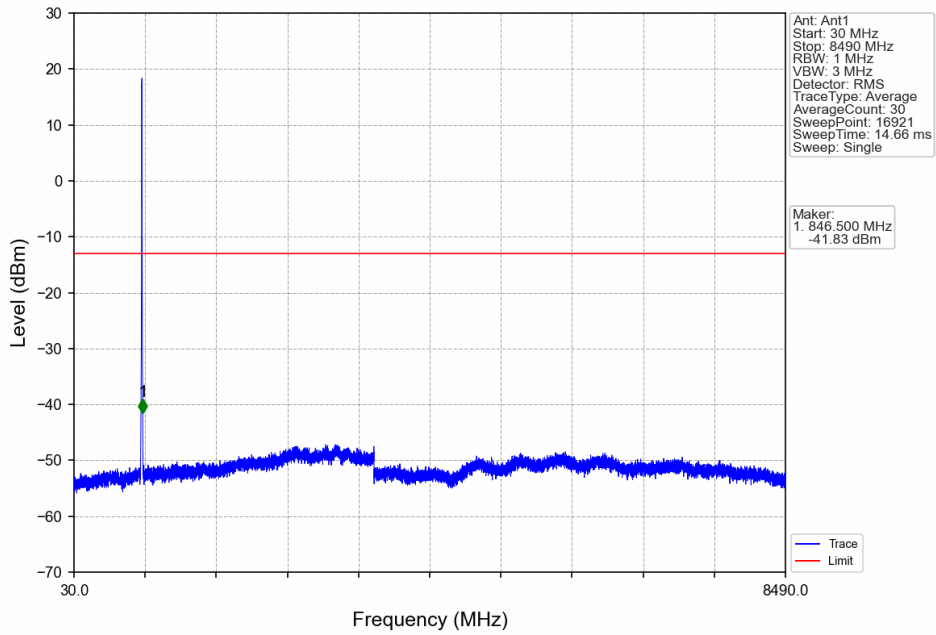
6.1.1 Test Result

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

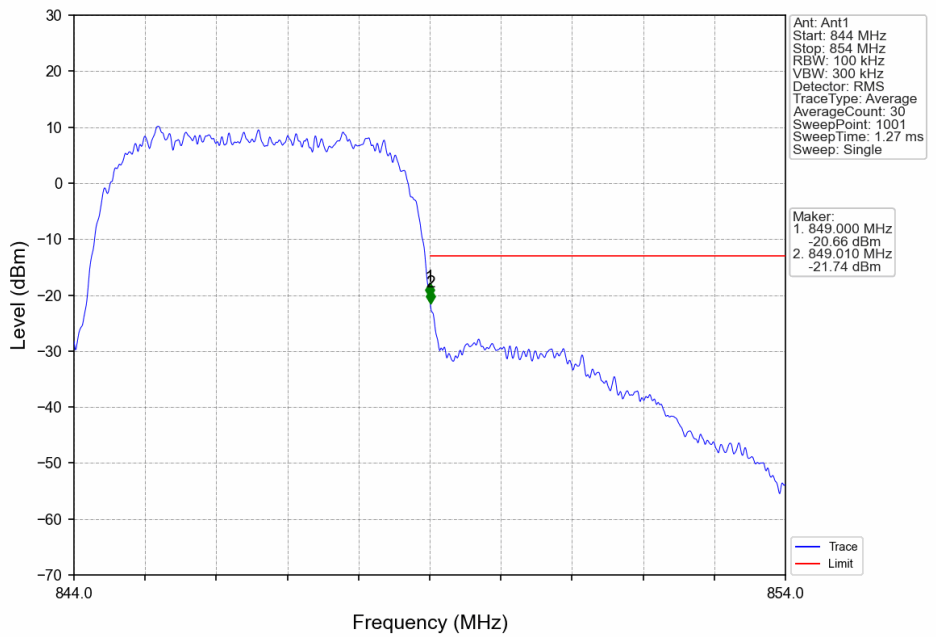
6.1.2 Test Graph



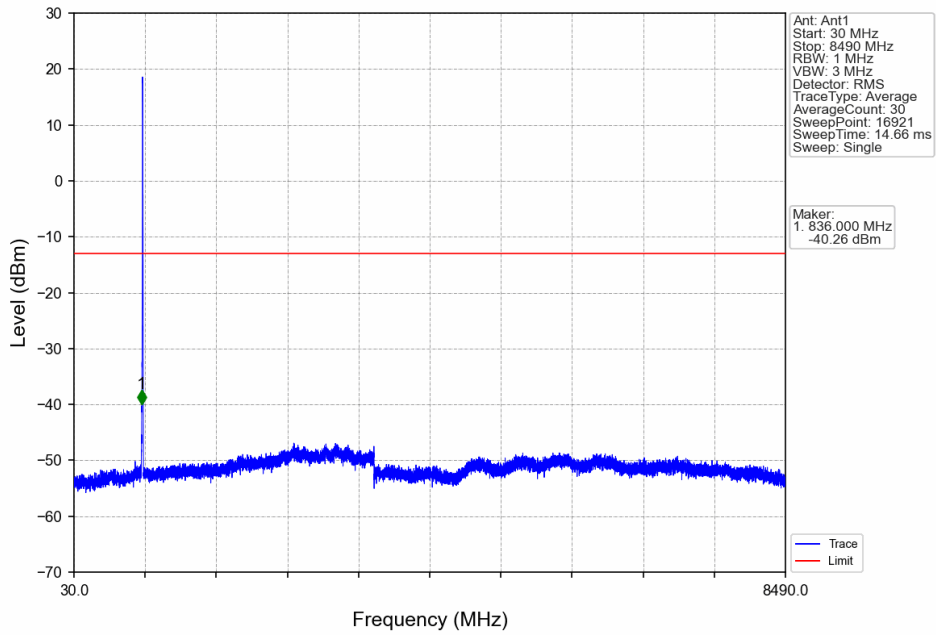
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



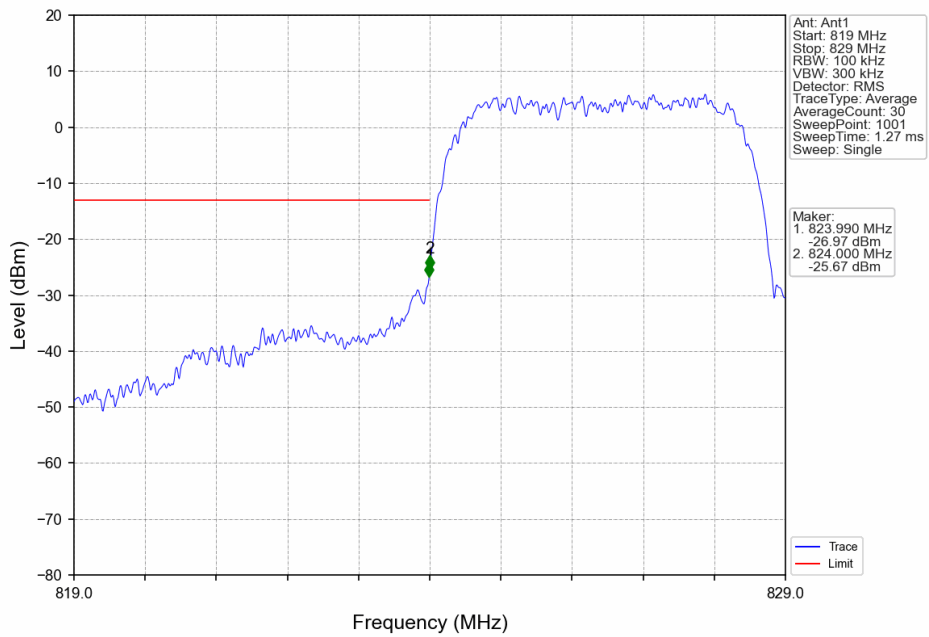
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



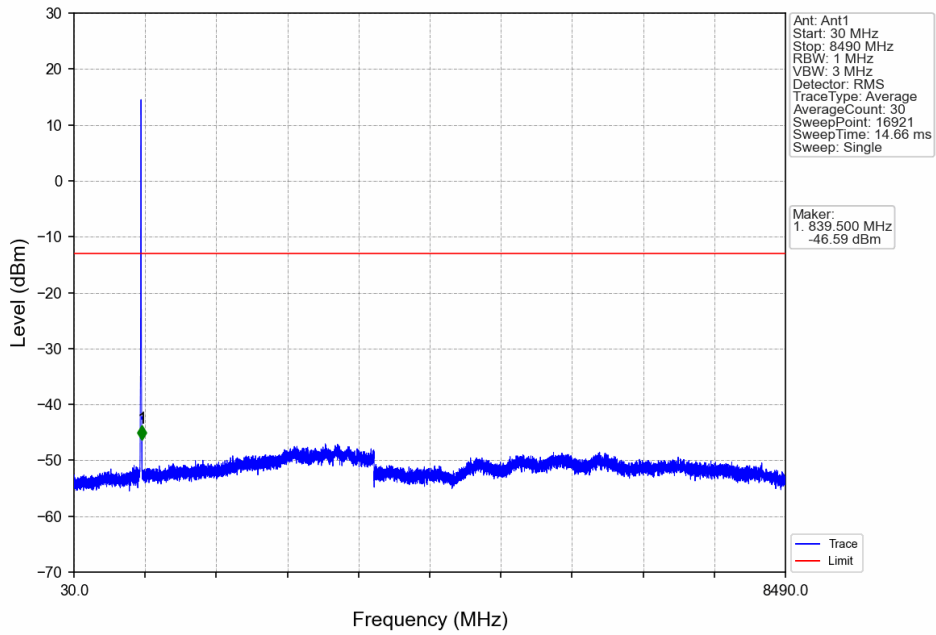
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



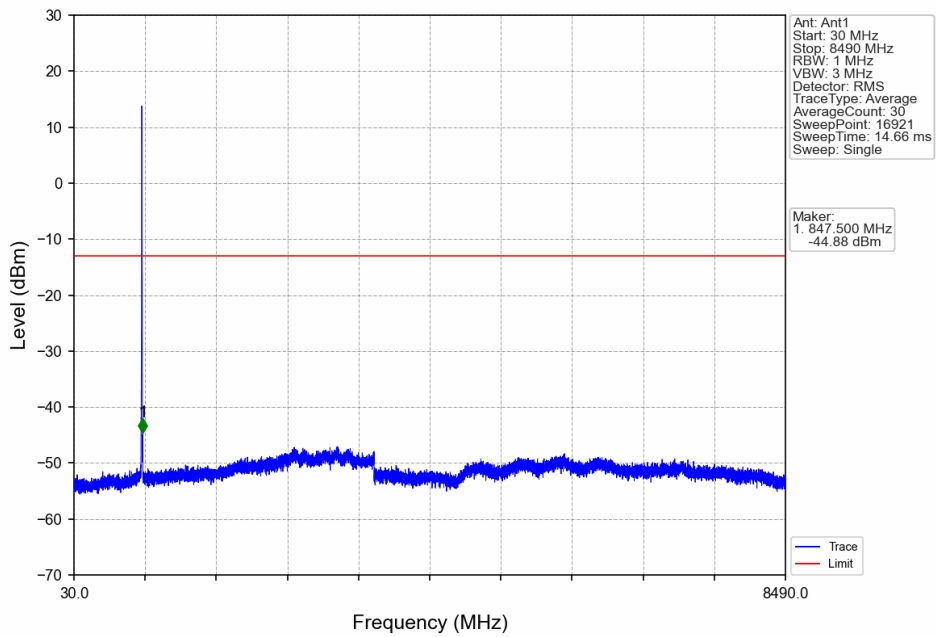
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



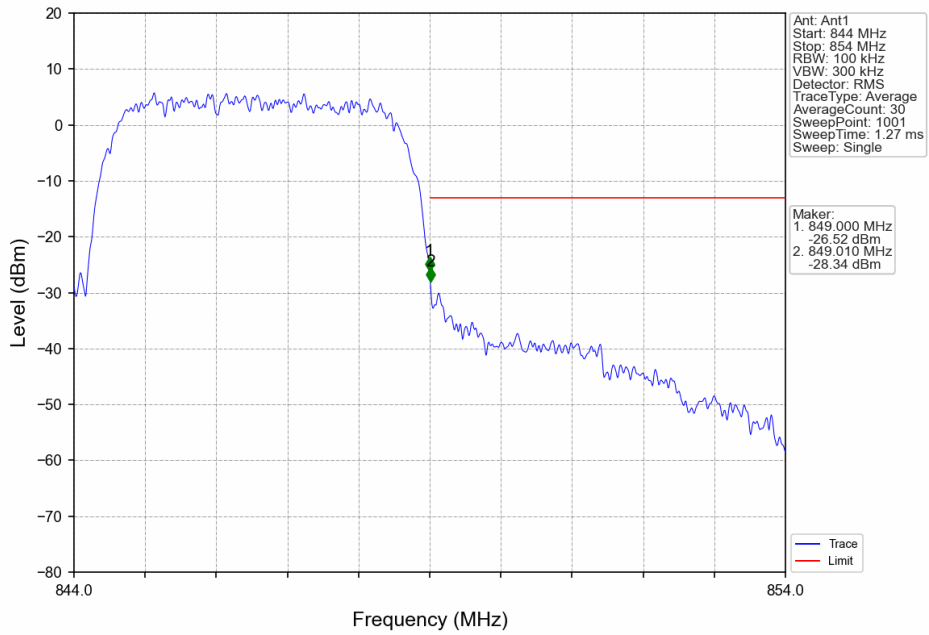
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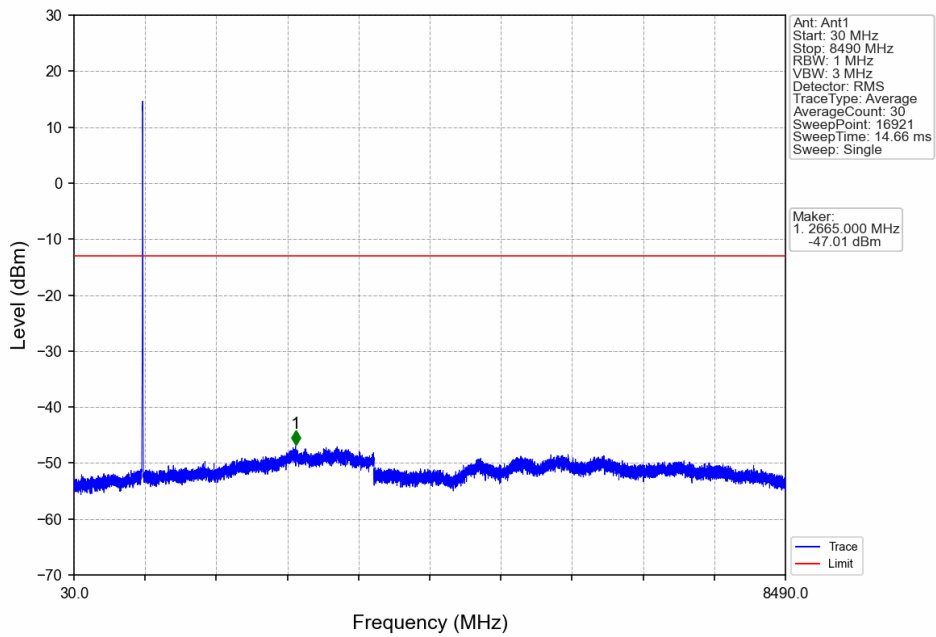
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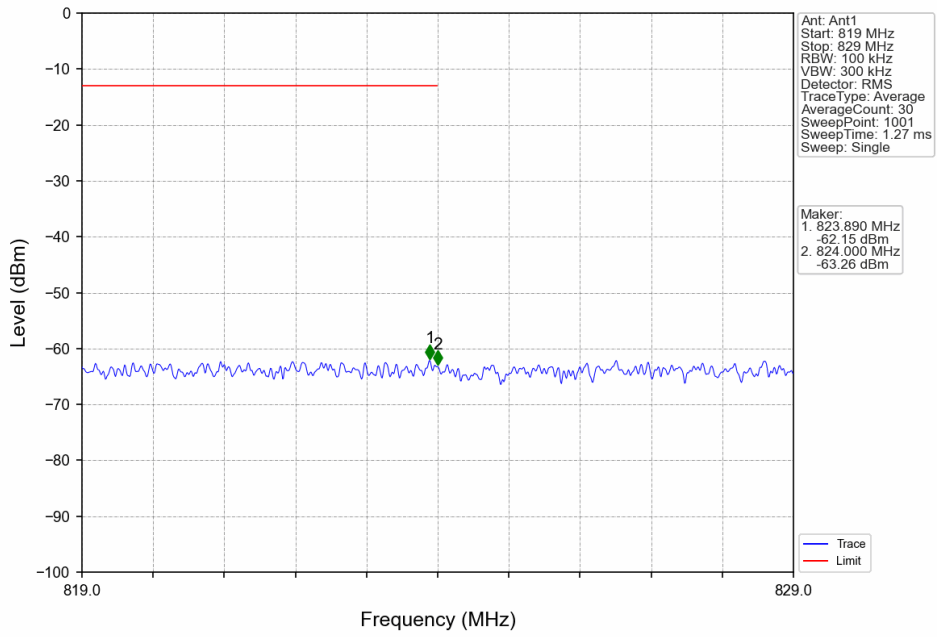
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



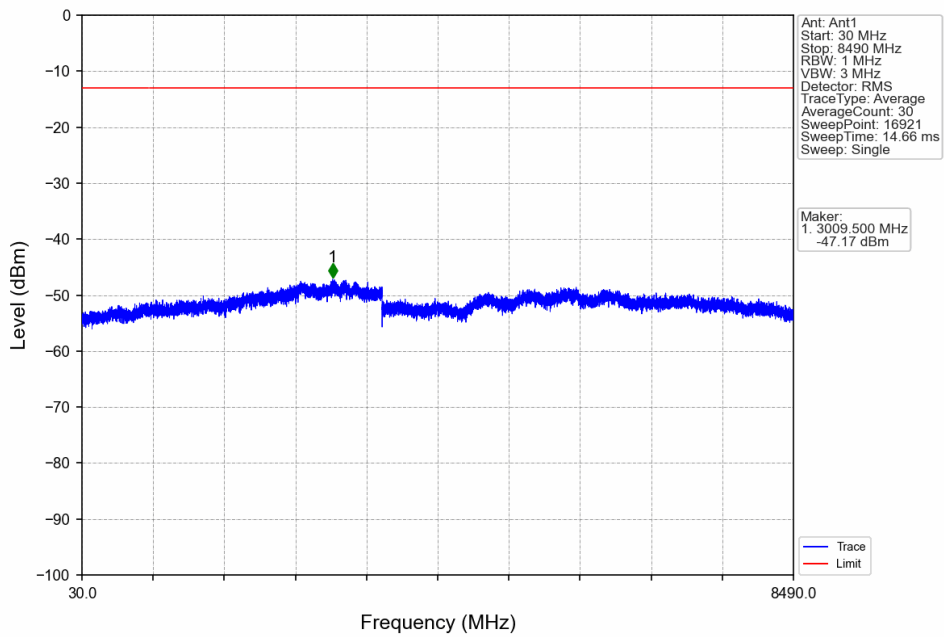
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



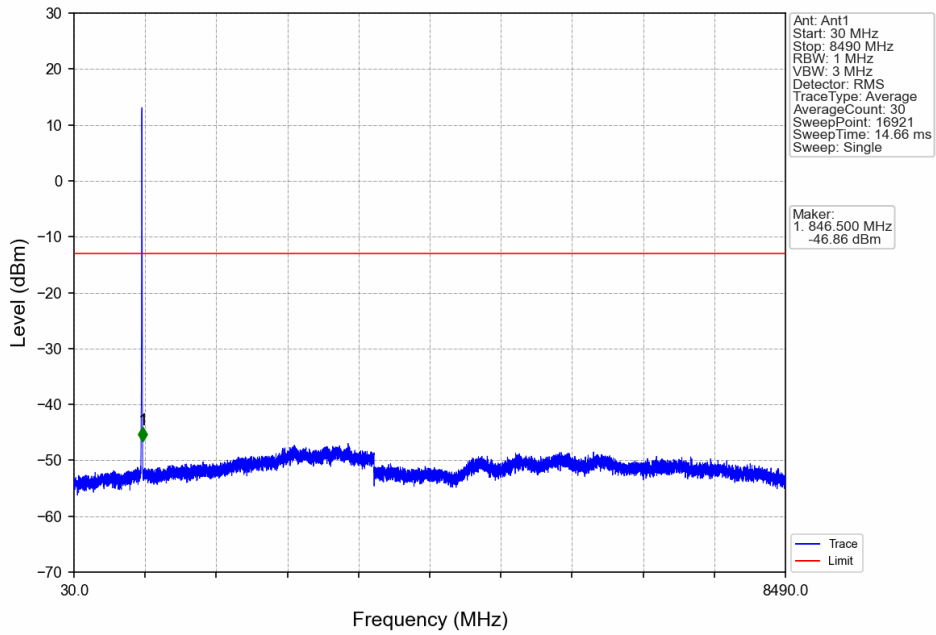
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



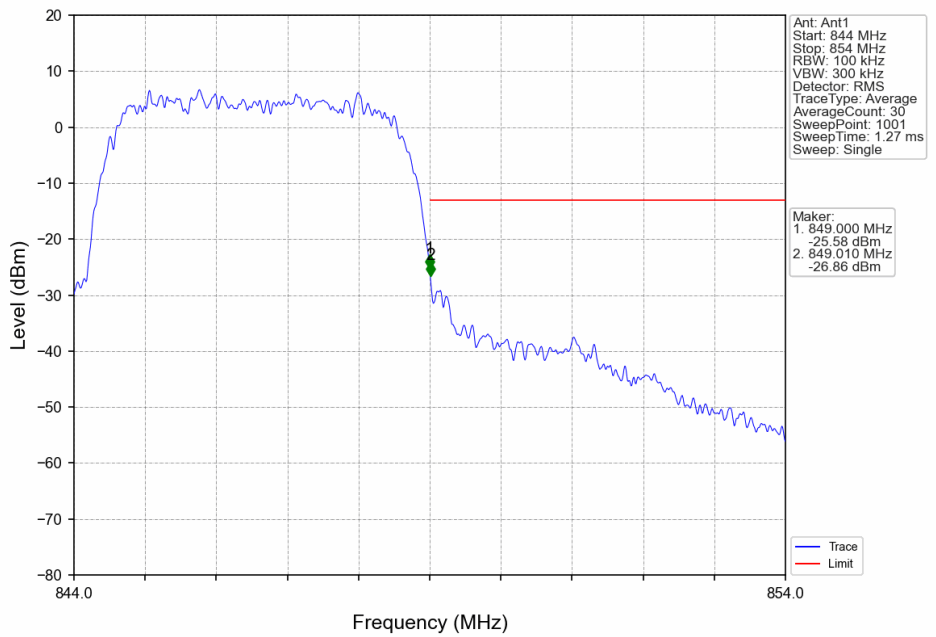
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



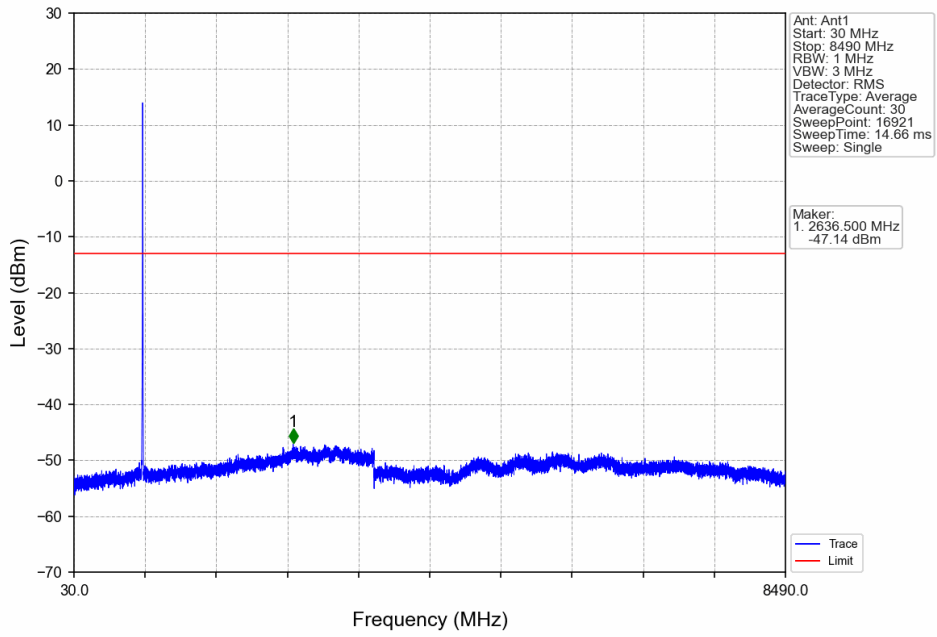
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



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	0.2018	0.0200	ppm	4M24F9W	24E	23.05

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	0.2168	0.0200	ppm	4M24F9W	24E	23.36