

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	22.88	2.44	23.17	<=38.45	Pass	
			836.6	22.84	2.44	23.13	<=38.45	Pass	
			846.6	23.01	2.44	23.30	<=38.45	Pass	
	HSDPA	Subtest 1	826.4	20.64	2.44	20.93	<=38.45	Pass	
		Subtest 2	826.4	20.63	2.44	20.92	<=38.45	Pass	
		Subtest 3	826.4	20.63	2.44	20.92	<=38.45	Pass	
		Subtest 4	826.4	20.63	2.44	20.92	<=38.45	Pass	
		Subtest 1	836.6	20.67	2.44	20.96	<=38.45	Pass	
		Subtest 2	836.6	20.66	2.44	20.95	<=38.45	Pass	
		Subtest 3	836.6	20.64	2.44	20.93	<=38.45	Pass	
		Subtest 4	836.6	20.67	2.44	20.96	<=38.45	Pass	
		Subtest 1	846.6	20.69	2.44	20.98	<=38.45	Pass	
		Subtest 2	846.6	20.68	2.44	20.97	<=38.45	Pass	
		Subtest 3	846.6	20.68	2.44	20.97	<=38.45	Pass	
		Subtest 4	846.6	20.69	2.44	20.98	<=38.45	Pass	
		HSUPA	Subtest 1	826.4	18.40	2.44	18.69	<=38.45	Pass
			Subtest 2	826.4	18.64	2.44	18.93	<=38.45	Pass
			Subtest 3	826.4	18.09	2.44	18.38	<=38.45	Pass
	Subtest 4		826.4	18.10	2.44	18.39	<=38.45	Pass	
	Subtest 5		826.4	18.37	2.44	18.66	<=38.45	Pass	
	Subtest 1		836.6	18.08	2.44	18.37	<=38.45	Pass	
	Subtest 2		836.6	18.04	2.44	18.33	<=38.45	Pass	
	Subtest 3		836.6	18.32	2.44	18.61	<=38.45	Pass	
	Subtest 4		836.6	18.09	2.44	18.38	<=38.45	Pass	
	Subtest 5		836.6	18.32	2.44	18.61	<=38.45	Pass	
	Subtest 1		846.6	18.73	2.44	19.02	<=38.45	Pass	
	Subtest 2		846.6	18.26	2.44	18.55	<=38.45	Pass	
	Subtest 3		846.6	18.25	2.44	18.54	<=38.45	Pass	
	Subtest 4		846.6	18.48	2.44	18.77	<=38.45	Pass	
	Subtest 5		846.6	18.23	2.44	18.52	<=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	-13.754	-0.0166	-2.5 to 2.5	Pass
			3.85	-14.613	-0.0177	-2.5 to 2.5	Pass
			4.43	-12.124	-0.0147	-2.5 to 2.5	Pass

	836.6	-30	3.85	-13.919	-0.0168	-2.5 to 2.5	Pass	
		-20	3.85	-6.516	-0.0079	-2.5 to 2.5	Pass	
		-10	3.85	-14.405	-0.0174	-2.5 to 2.5	Pass	
		0	3.85	-12.975	-0.0157	-2.5 to 2.5	Pass	
		10	3.85	-11.094	-0.0134	-2.5 to 2.5	Pass	
		30	3.85	-11.244	-0.0136	-2.5 to 2.5	Pass	
		40	3.85	-13.740	-0.0166	-2.5 to 2.5	Pass	
		50	3.85	-14.327	-0.0173	-2.5 to 2.5	Pass	
		20	3.27	-13.847	-0.0166	-2.5 to 2.5	Pass	
			3.85	-12.059	-0.0144	-2.5 to 2.5	Pass	
			4.43	-14.606	-0.0175	-2.5 to 2.5	Pass	
		-30	3.85	-13.611	-0.0163	-2.5 to 2.5	Pass	
		-20	3.85	-11.280	-0.0135	-2.5 to 2.5	Pass	
		-10	3.85	-11.880	-0.0142	-2.5 to 2.5	Pass	
		0	3.85	-9.027	-0.0108	-2.5 to 2.5	Pass	
	10	3.85	-8.805	-0.0105	-2.5 to 2.5	Pass		
	30	3.85	-13.747	-0.0164	-2.5 to 2.5	Pass		
	40	3.85	-11.265	-0.0135	-2.5 to 2.5	Pass		
	50	3.85	-15.750	-0.0188	-2.5 to 2.5	Pass		
	846.6	20	3.27	-9.863	-0.0117	-2.5 to 2.5	Pass	
			3.85	-9.570	-0.0113	-2.5 to 2.5	Pass	
			4.43	-14.856	-0.0175	-2.5 to 2.5	Pass	
		-30	3.85	-13.475	-0.0159	-2.5 to 2.5	Pass	
		-20	3.85	-12.066	-0.0143	-2.5 to 2.5	Pass	
		-10	3.85	-9.878	-0.0117	-2.5 to 2.5	Pass	
		0	3.85	-7.374	-0.0087	-2.5 to 2.5	Pass	
		10	3.85	-11.287	-0.0133	-2.5 to 2.5	Pass	
		30	3.85	-5.035	-0.0059	-2.5 to 2.5	Pass	
		40	3.85	-10.800	-0.0128	-2.5 to 2.5	Pass	
		50	3.85	-10.672	-0.0126	-2.5 to 2.5	Pass	
HSDPA		826.4	20	3.27	-7.231	-0.0088	-2.5 to 2.5	Pass
				3.85	-8.390	-0.0102	-2.5 to 2.5	Pass
				4.43	-10.879	-0.0132	-2.5 to 2.5	Pass
			-30	3.85	-15.986	-0.0193	-2.5 to 2.5	Pass
	-20		3.85	-11.530	-0.0140	-2.5 to 2.5	Pass	
	-10		3.85	-13.740	-0.0166	-2.5 to 2.5	Pass	
	0		3.85	-13.804	-0.0167	-2.5 to 2.5	Pass	
	10		3.85	-14.563	-0.0176	-2.5 to 2.5	Pass	
	30		3.85	-15.407	-0.0186	-2.5 to 2.5	Pass	
	40		3.85	-10.271	-0.0124	-2.5 to 2.5	Pass	
	50		3.85	-16.150	-0.0195	-2.5 to 2.5	Pass	
	836.6		20	3.27	-8.962	-0.0107	-2.5 to 2.5	Pass
				3.85	-9.634	-0.0115	-2.5 to 2.5	Pass
				4.43	-8.283	-0.0099	-2.5 to 2.5	Pass
			-30	3.85	-16.165	-0.0193	-2.5 to 2.5	Pass
		-20	3.85	-14.040	-0.0168	-2.5 to 2.5	Pass	
		-10	3.85	-12.474	-0.0149	-2.5 to 2.5	Pass	
		0	3.85	-11.938	-0.0143	-2.5 to 2.5	Pass	
		10	3.85	-9.570	-0.0114	-2.5 to 2.5	Pass	
		30	3.85	-12.345	-0.0148	-2.5 to 2.5	Pass	
	40	3.85	-12.996	-0.0155	-2.5 to 2.5	Pass		
	50	3.85	-8.698	-0.0104	-2.5 to 2.5	Pass		
	846.6	20	3.27	-15.821	-0.0187	-2.5 to 2.5	Pass	
			3.85	-15.442	-0.0182	-2.5 to 2.5	Pass	
			4.43	-15.492	-0.0183	-2.5 to 2.5	Pass	
		-30	3.85	-16.236	-0.0192	-2.5 to 2.5	Pass	
		-20	3.85	-16.043	-0.0189	-2.5 to 2.5	Pass	

		-10	3.85	-18.775	-0.0222	-2.5 to 2.5	Pass	
		0	3.85	-13.118	-0.0155	-2.5 to 2.5	Pass	
		10	3.85	-18.268	-0.0216	-2.5 to 2.5	Pass	
		30	3.85	-13.454	-0.0159	-2.5 to 2.5	Pass	
		40	3.85	-12.760	-0.0151	-2.5 to 2.5	Pass	
		50	3.85	-14.169	-0.0167	-2.5 to 2.5	Pass	
HSUPA	826.4	20	3.27	-8.440	-0.0102	-2.5 to 2.5	Pass	
			3.85	-10.793	-0.0131	-2.5 to 2.5	Pass	
			4.43	-9.584	-0.0116	-2.5 to 2.5	Pass	
		-30	3.85	-10.428	-0.0126	-2.5 to 2.5	Pass	
		-20	3.85	-13.225	-0.0160	-2.5 to 2.5	Pass	
		-10	3.85	-8.168	-0.0099	-2.5 to 2.5	Pass	
		0	3.85	-8.433	-0.0102	-2.5 to 2.5	Pass	
		10	3.85	-10.972	-0.0133	-2.5 to 2.5	Pass	
		30	3.85	-7.474	-0.0090	-2.5 to 2.5	Pass	
		40	3.85	-10.722	-0.0130	-2.5 to 2.5	Pass	
		50	3.85	-3.734	-0.0045	-2.5 to 2.5	Pass	
		836.6	20	3.27	-7.868	-0.0094	-2.5 to 2.5	Pass
				3.85	-10.707	-0.0128	-2.5 to 2.5	Pass
				4.43	-11.802	-0.0141	-2.5 to 2.5	Pass
			-30	3.85	-9.756	-0.0117	-2.5 to 2.5	Pass
	-20		3.85	-10.600	-0.0127	-2.5 to 2.5	Pass	
	-10		3.85	-9.155	-0.0109	-2.5 to 2.5	Pass	
	0		3.85	-15.399	-0.0184	-2.5 to 2.5	Pass	
	10		3.85	-13.676	-0.0163	-2.5 to 2.5	Pass	
	30		3.85	-10.214	-0.0122	-2.5 to 2.5	Pass	
	40		3.85	-11.501	-0.0137	-2.5 to 2.5	Pass	
	50		3.85	-8.233	-0.0098	-2.5 to 2.5	Pass	
	846.6		20	3.27	-12.016	-0.0142	-2.5 to 2.5	Pass
				3.85	-13.826	-0.0163	-2.5 to 2.5	Pass
				4.43	-14.226	-0.0168	-2.5 to 2.5	Pass
			-30	3.85	-10.271	-0.0121	-2.5 to 2.5	Pass
		-20	3.85	-14.584	-0.0172	-2.5 to 2.5	Pass	
		-10	3.85	-11.315	-0.0134	-2.5 to 2.5	Pass	
		0	3.85	-12.066	-0.0143	-2.5 to 2.5	Pass	
		10	3.85	-14.055	-0.0166	-2.5 to 2.5	Pass	
30		3.85	-8.798	-0.0104	-2.5 to 2.5	Pass		
40		3.85	-10.872	-0.0128	-2.5 to 2.5	Pass		
50	3.85	-13.983	-0.0165	-2.5 to 2.5	Pass			

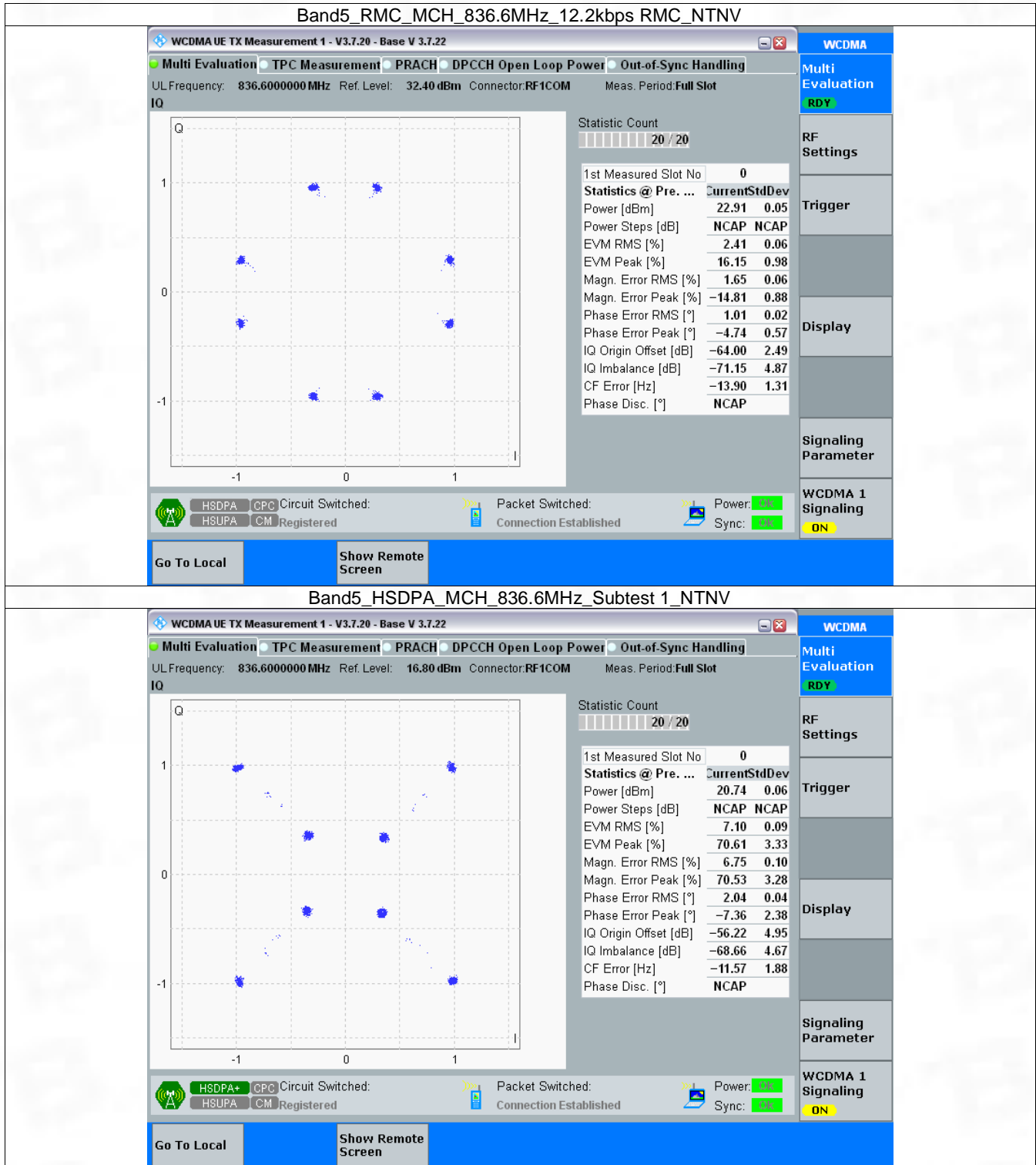
3. Modulation Characteristics

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: 34.00 dBm Connector: RF1COM Meas. Period: Full Slot

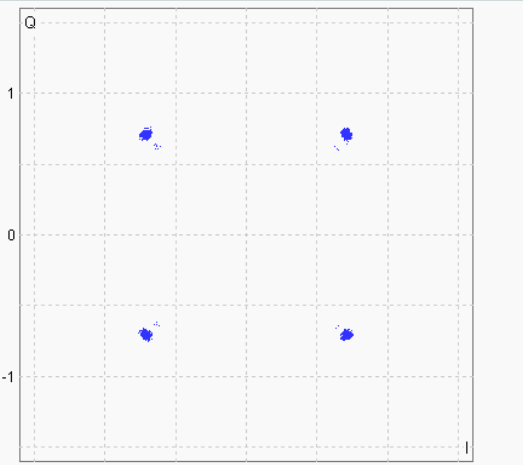
WCDMA

Multi Evaluation

RDY

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. ...	Current	StdDev
Power [dBm]	16.00	2.35
Power Steps [dB]	NCAP	NCAP
EVM RMS [%]	2.16	2.94
EVM Peak [%]	6.17	33.33
Magn. Error RMS [%]	1.39	3.19
Magn. Error Peak [%]	-4.07	34.06
Phase Error RMS [°]	0.95	0.52
Phase Error Peak [°]	-3.44	4.73
IQ Origin Offset [dB]	-58.52	3.61
IQ Imbalance [dB]	-59.75	6.78
CF Error [Hz]	-9.62	2.71
Phase Disc. [°]	NCAP	

HSDPA+ CPO Circuit Switched: ON

HSUPA CM Registered

Packet Switched: ON

Connection Established

Power: ON

Sync: ON

WCDMA 1 Signaling

ON

Go To Local

Show Remote Screen

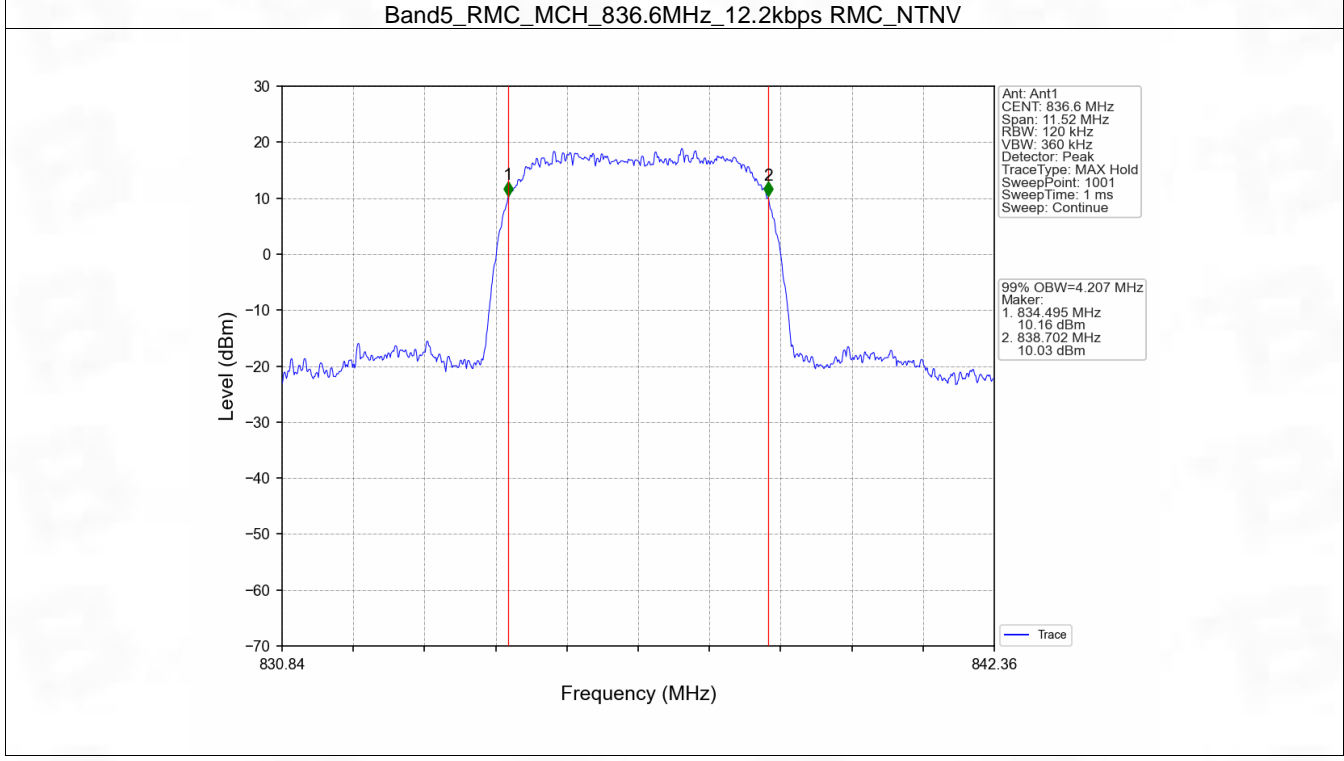
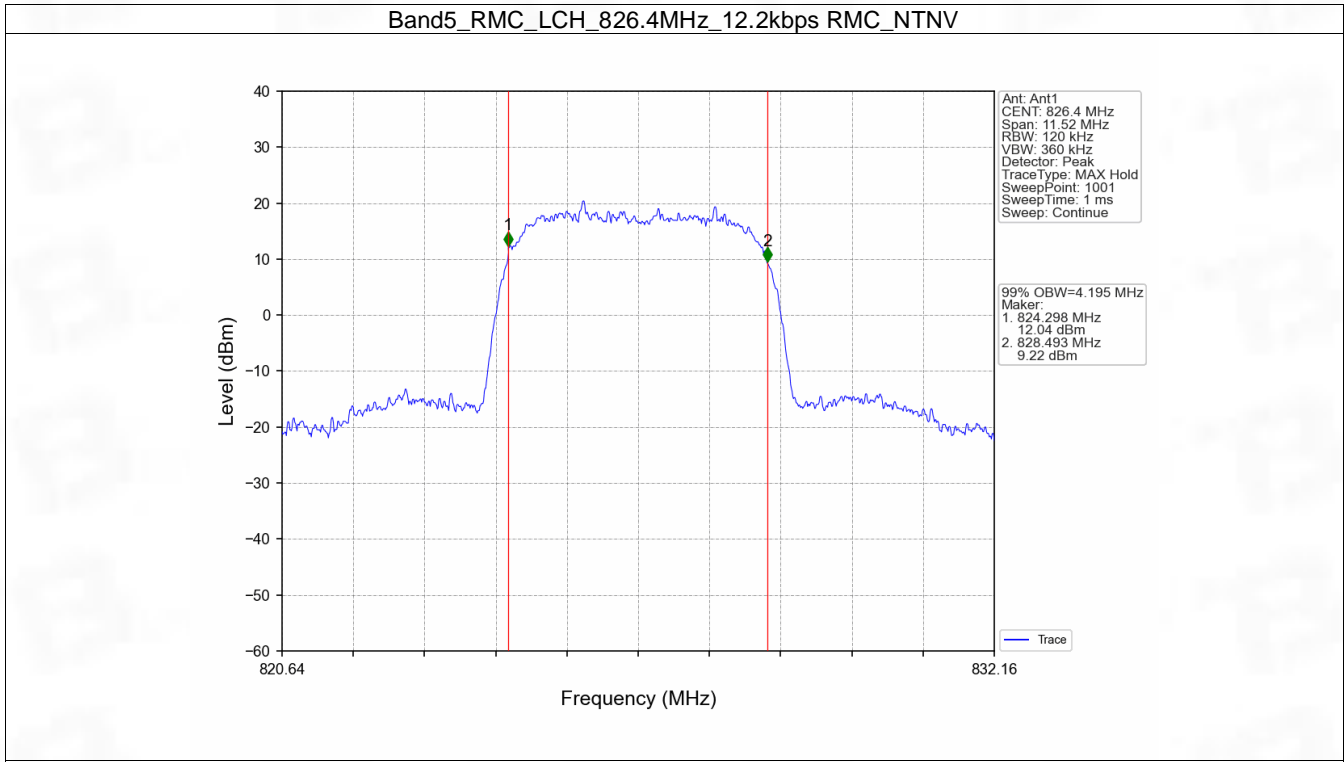
4. 99% & 26dB Bandwidth

4.1 Band5_OBW

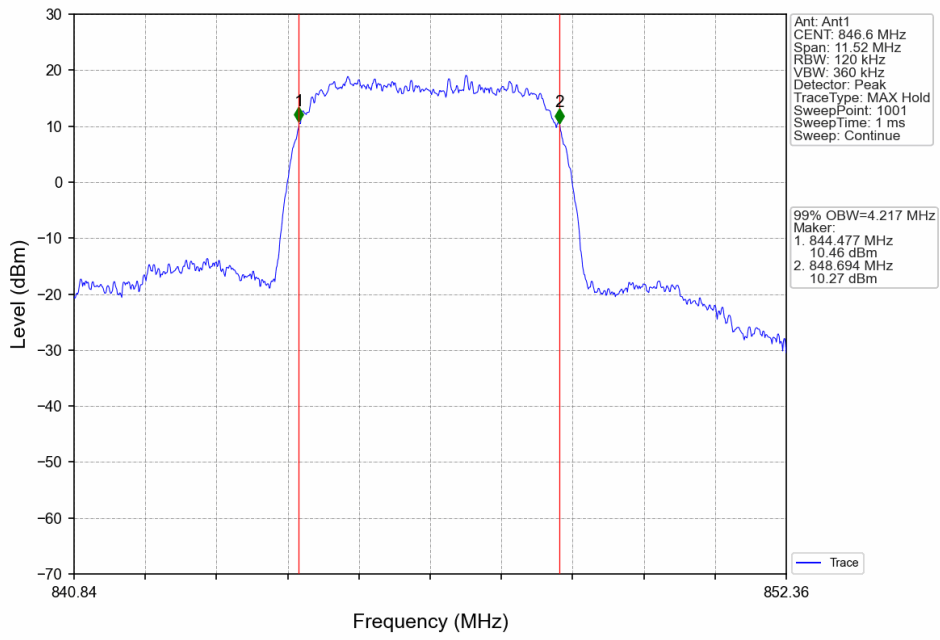
4.1.1 Test Result

Band: 5					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	RMC	12.2kbps RMC	826.4	4.195	Pass
			836.6	4.207	Pass
			846.6	4.217	Pass
	HSDPA	Subtest 1	826.4	4.208	Pass
			836.6	4.208	Pass
			846.6	4.232	Pass
	HSUPA	Subtest 1	826.4	4.179	Pass
			836.6	4.217	Pass
			846.6	4.204	Pass

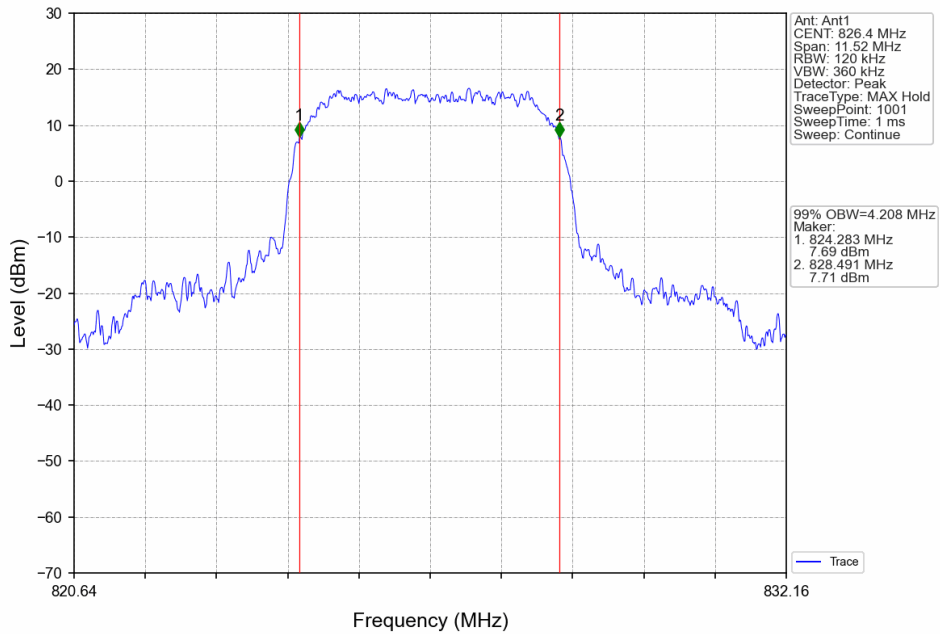
4.1.2 Test Graph



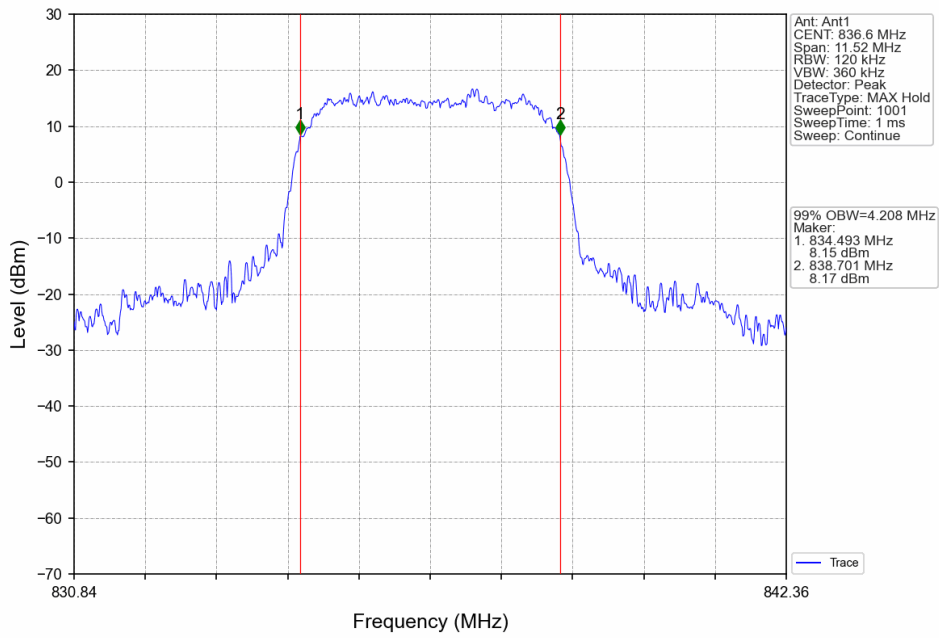
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



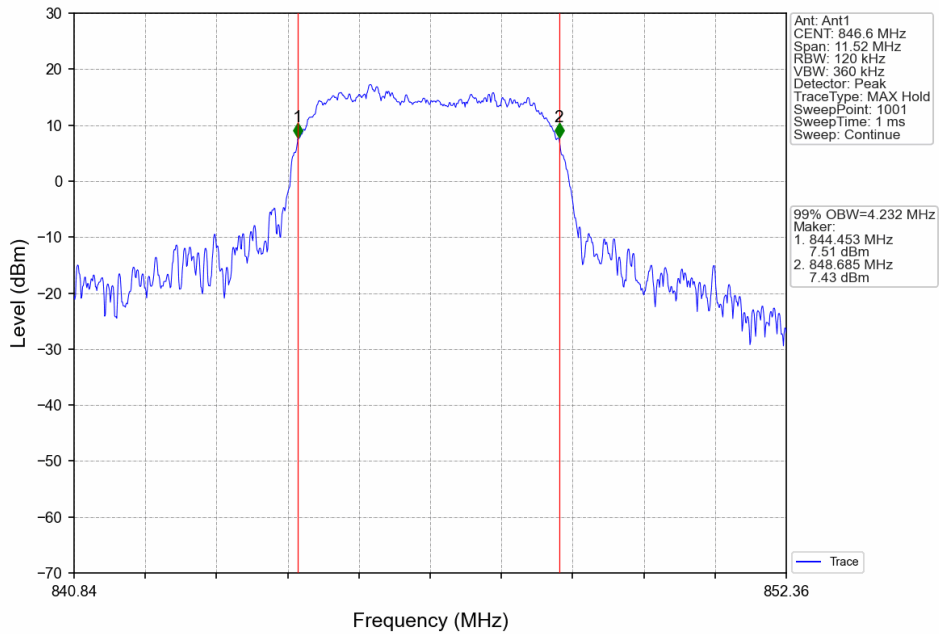
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



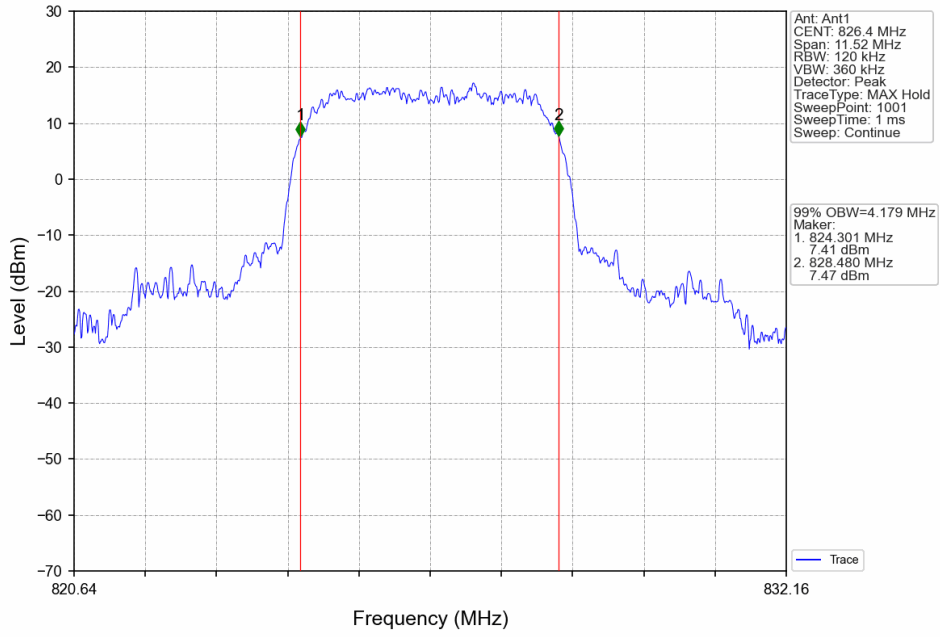
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



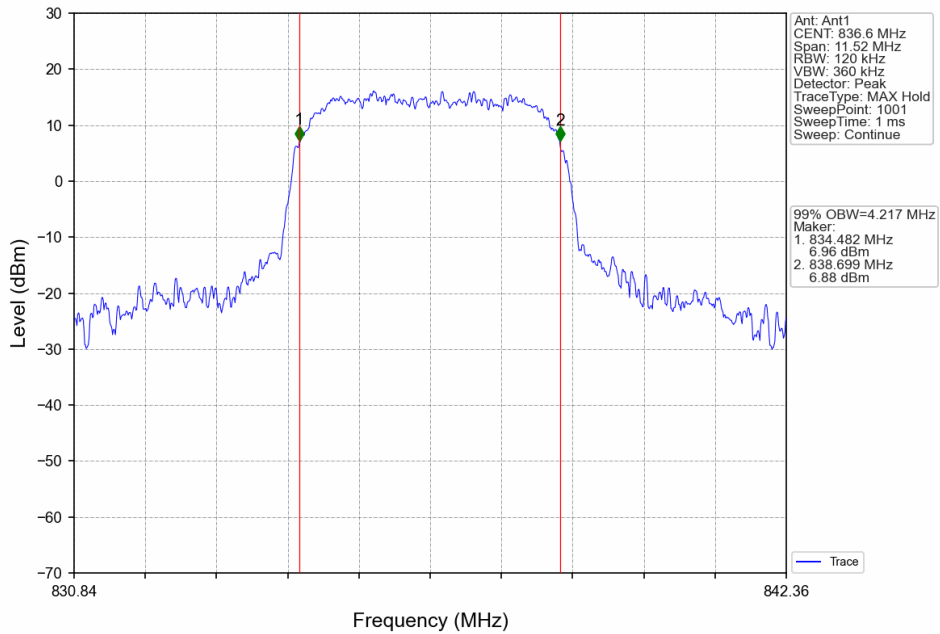
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



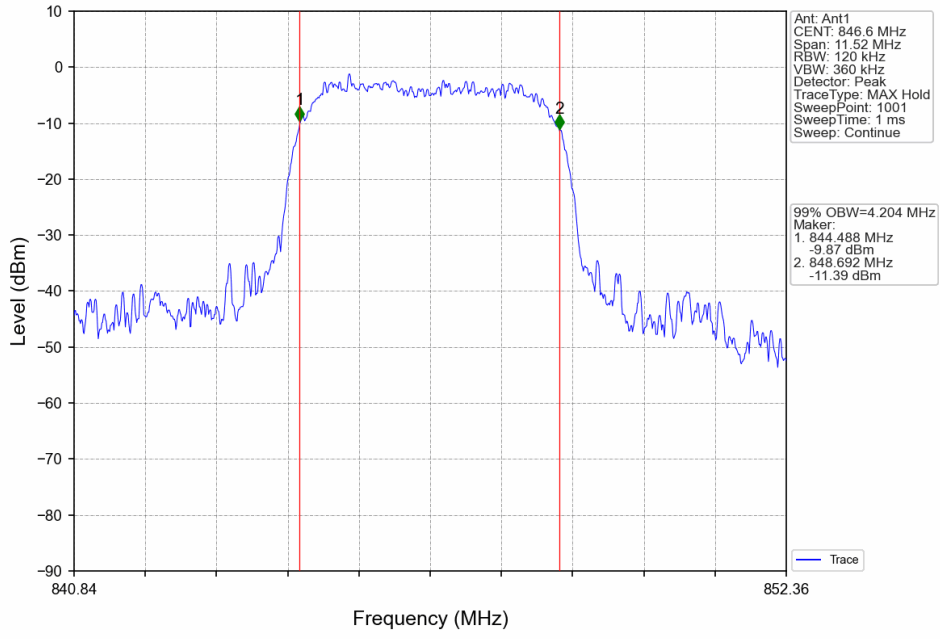
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV

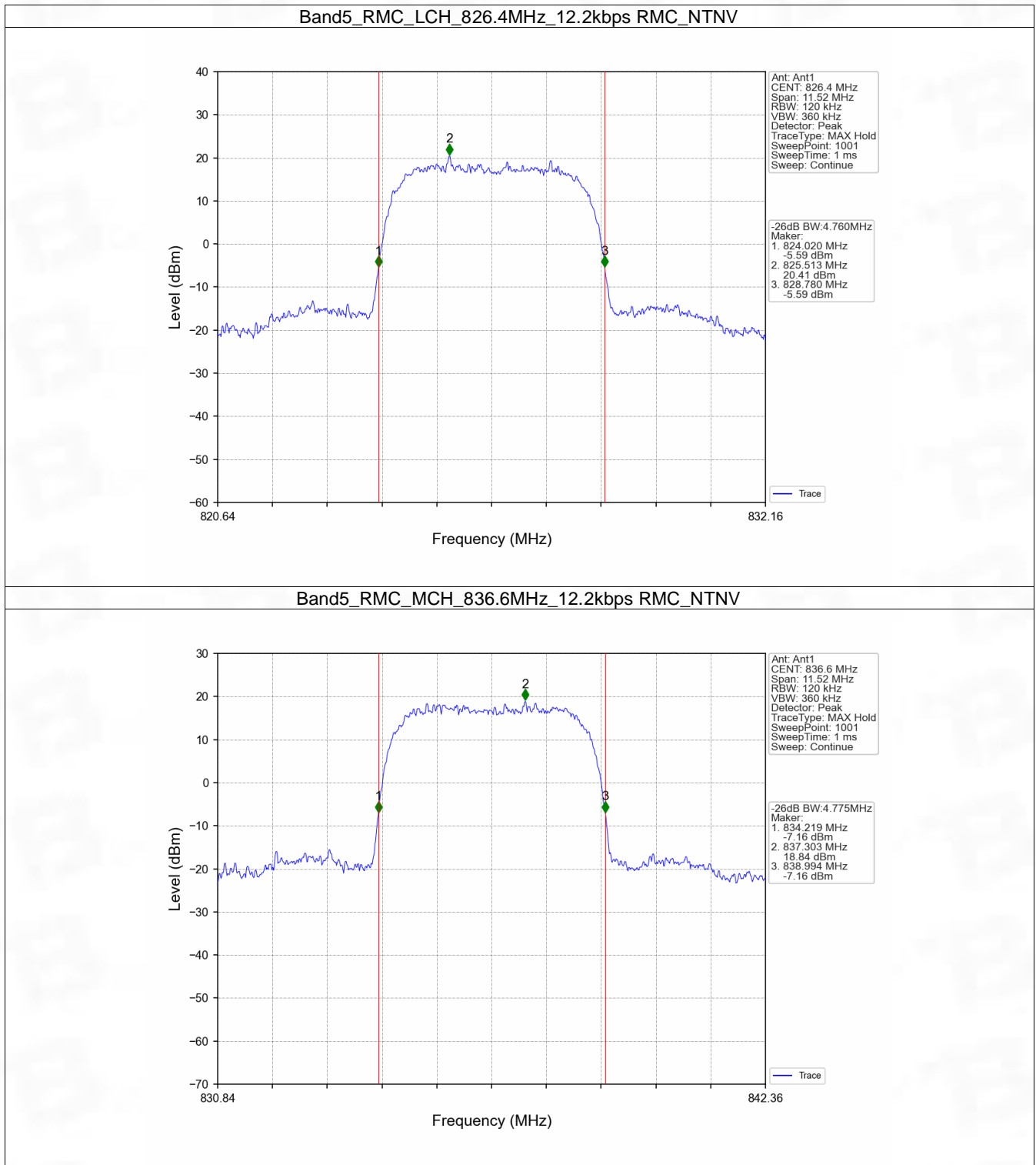


4.2 Band5_XDB

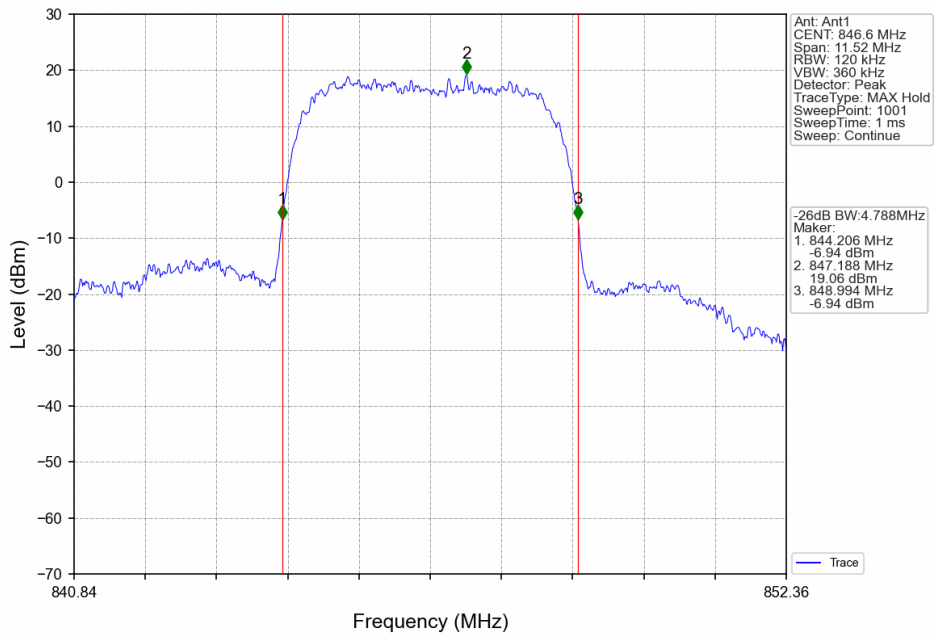
4.2.1 Test Result

Band: 5					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz) Result	Verdict
	Network	Subset			
NTNV	RMC	12.2kbps RMC	826.4	4.760	Pass
			836.6	4.775	Pass
			846.6	4.788	Pass
	HSDPA	Subtest 1	826.4	4.754	Pass
			836.6	4.852	Pass
			846.6	5.291	Pass
	HSUPA	Subtest 1	826.4	4.742	Pass
			836.6	4.767	Pass
			846.6	4.747	Pass

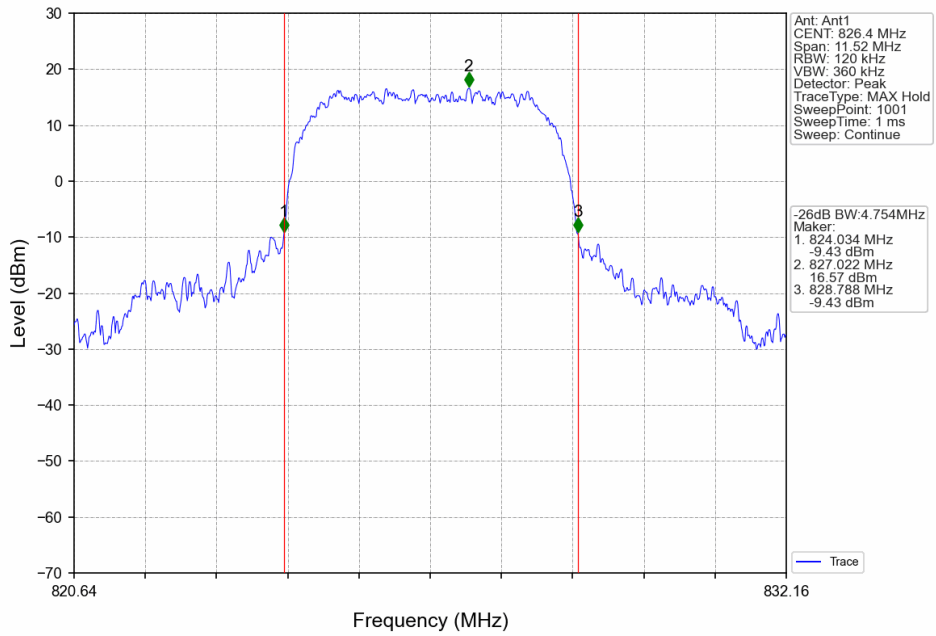
4.2.2 Test Graph



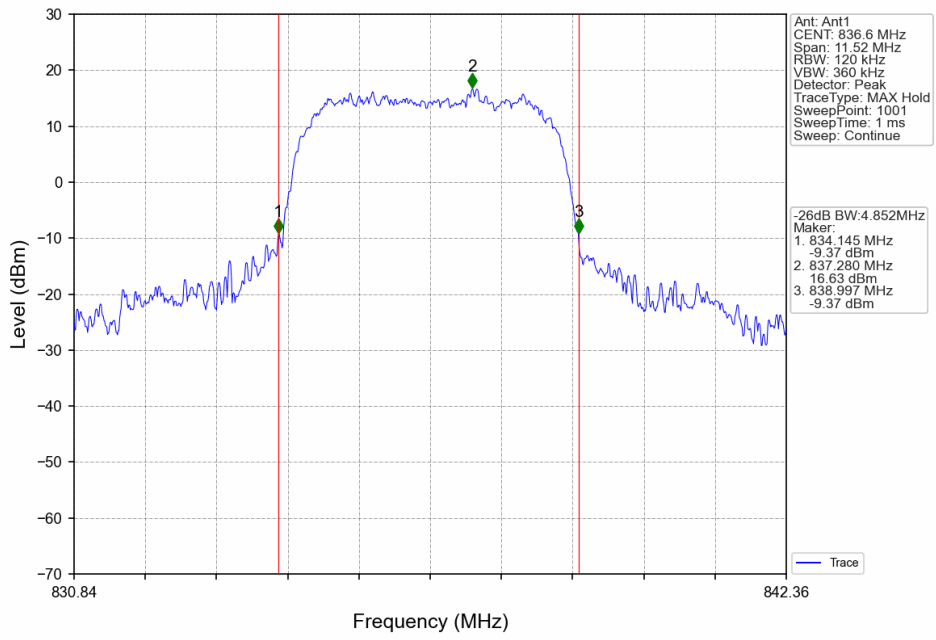
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



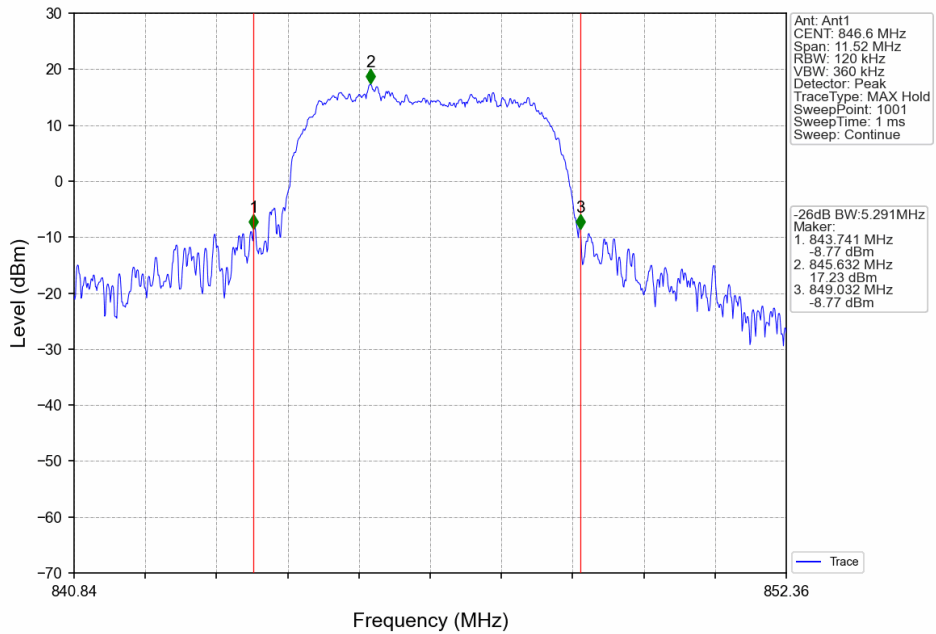
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



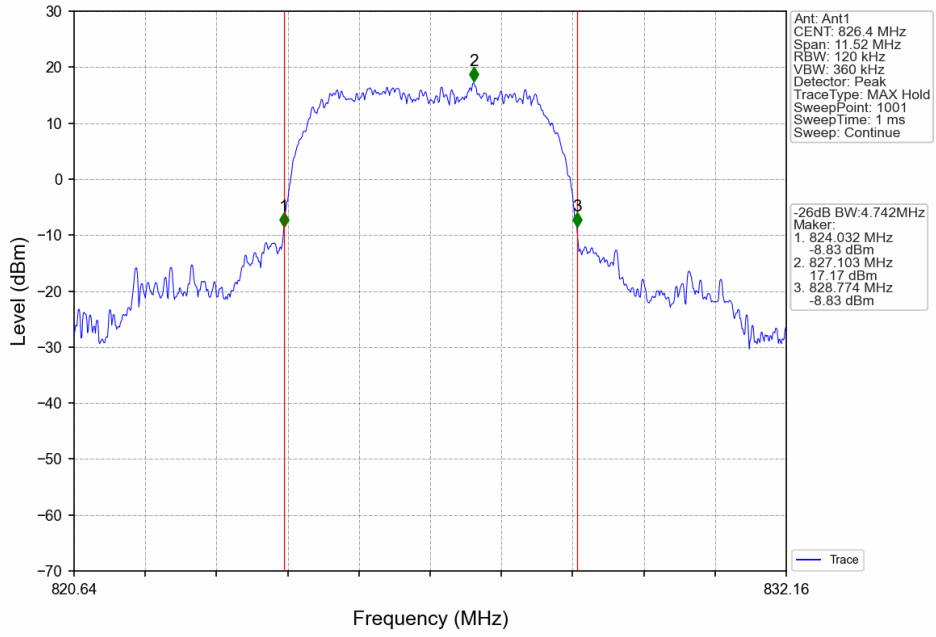
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



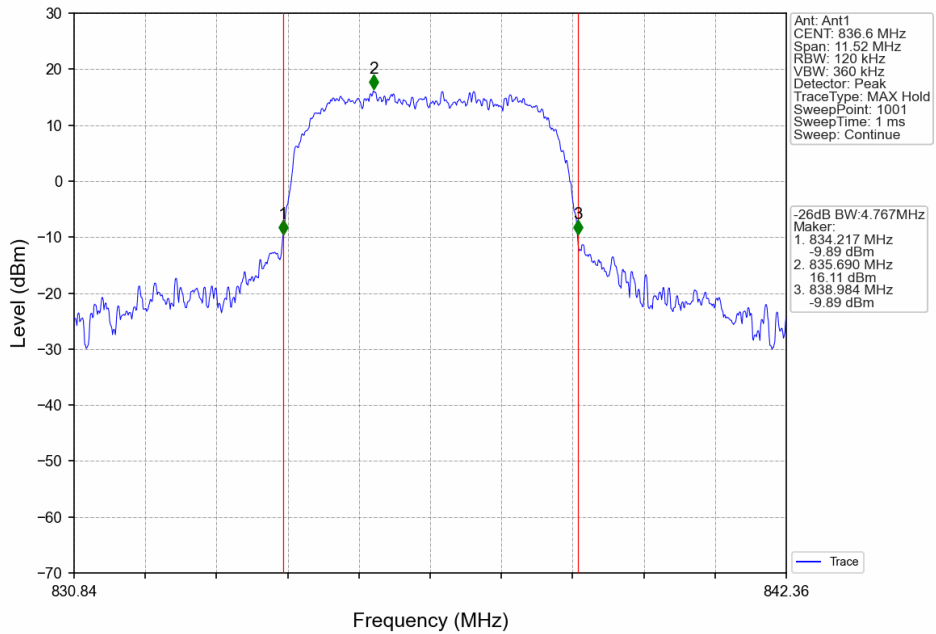
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



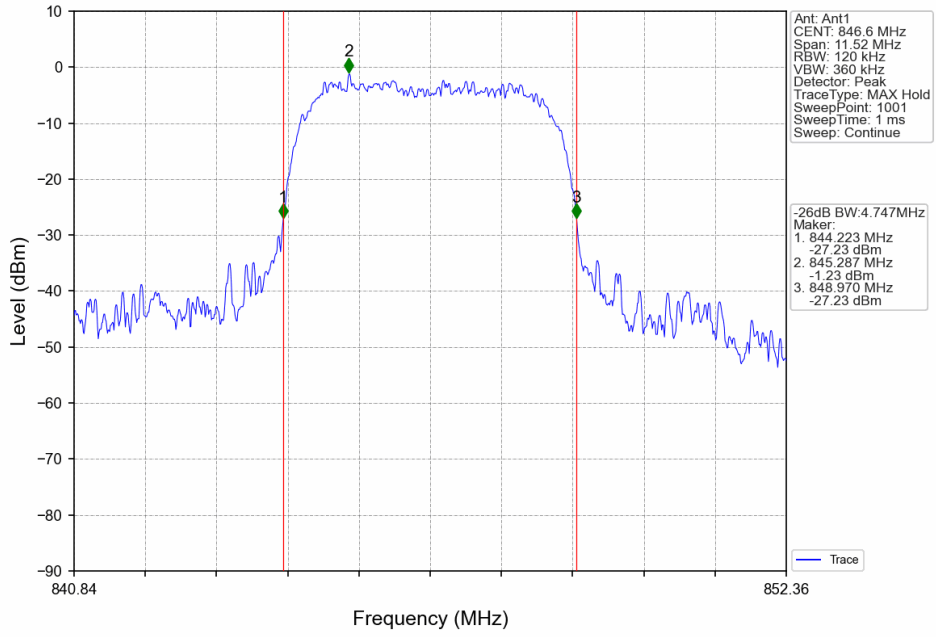
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



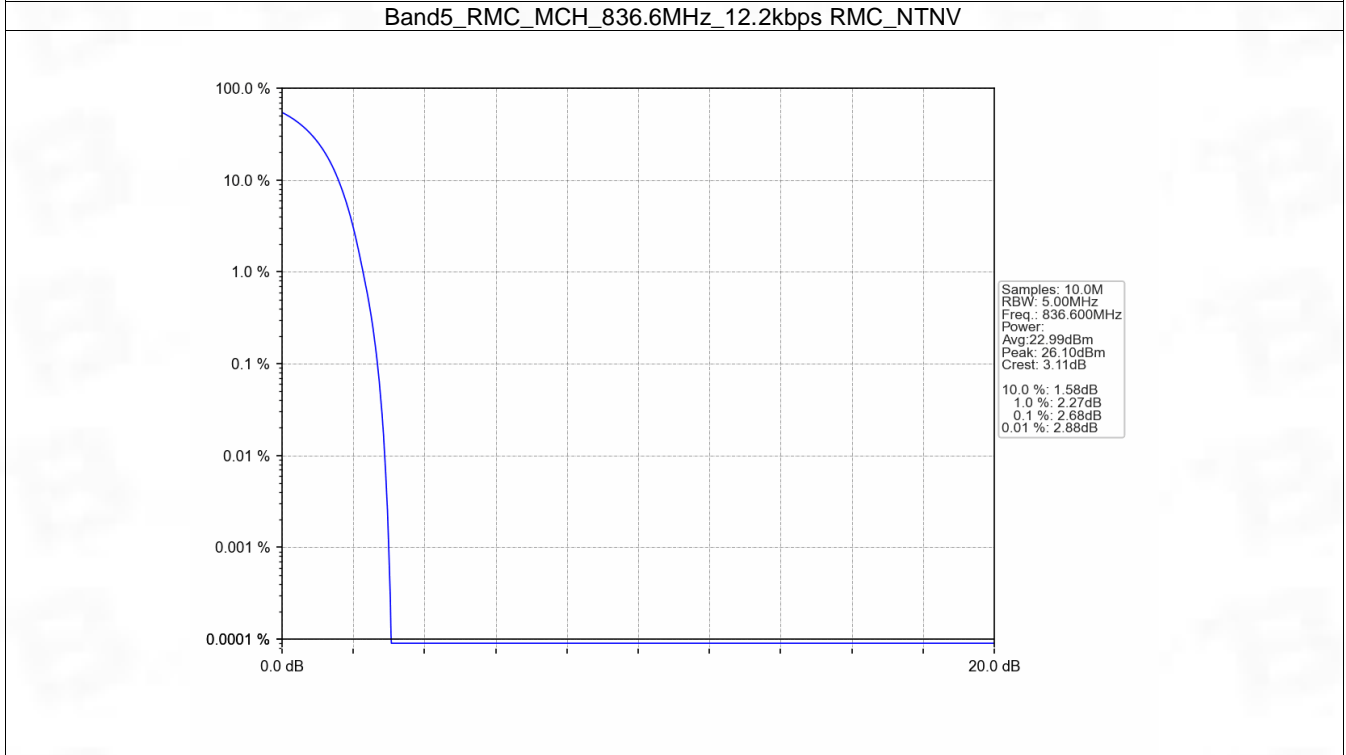
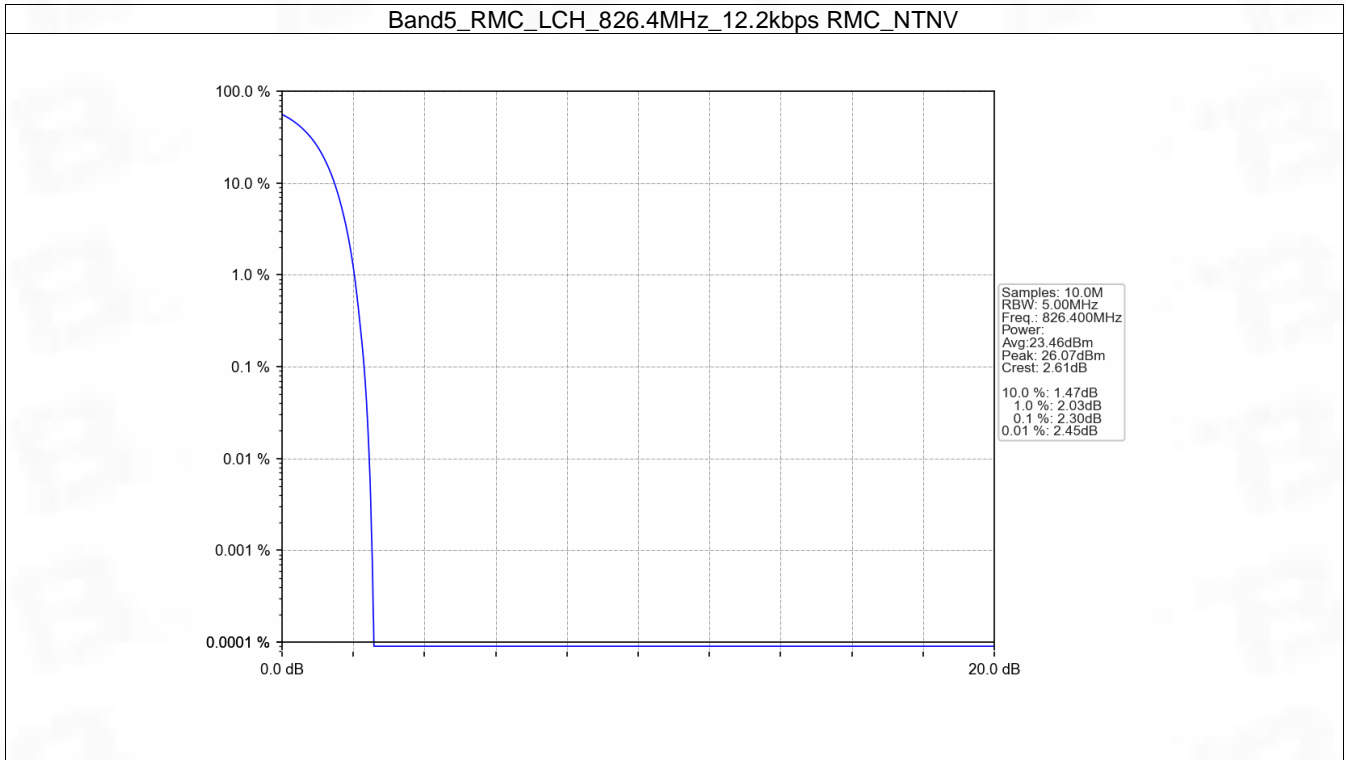
5. Peak-Average Ratio

5.1 Band5

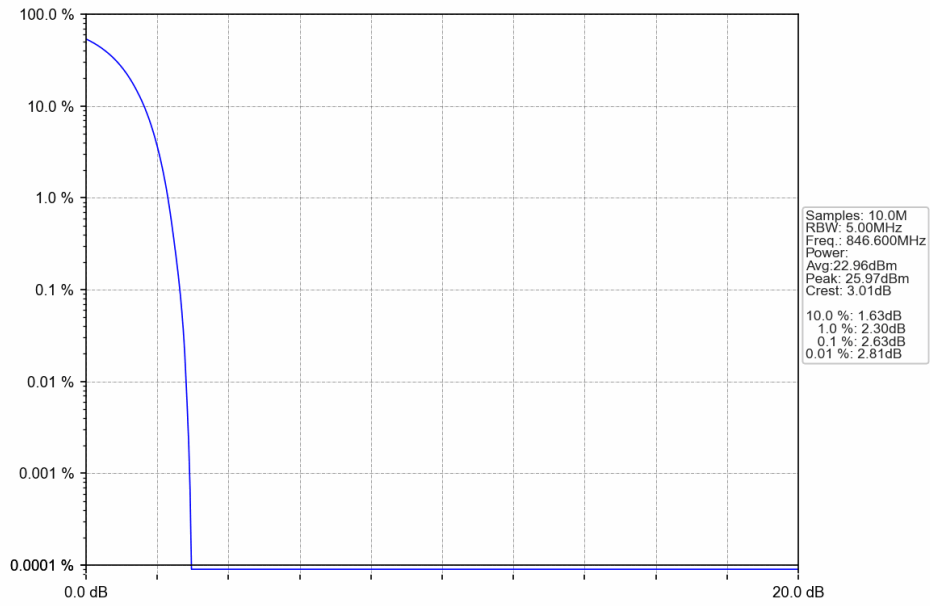
5.1.1 Test Result

Band: 5						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.30	<=13	Pass
			836.6	2.68	<=13	Pass
			846.6	2.63	<=13	Pass
	HSDPA	Subtest 1	826.4	5.76	<=13	Pass
			836.6	5.80	<=13	Pass
			846.6	5.81	<=13	Pass
	HSUPA	Subtest 1	826.4	5.60	<=13	Pass
			836.6	5.70	<=13	Pass
			846.6	5.91	<=13	Pass

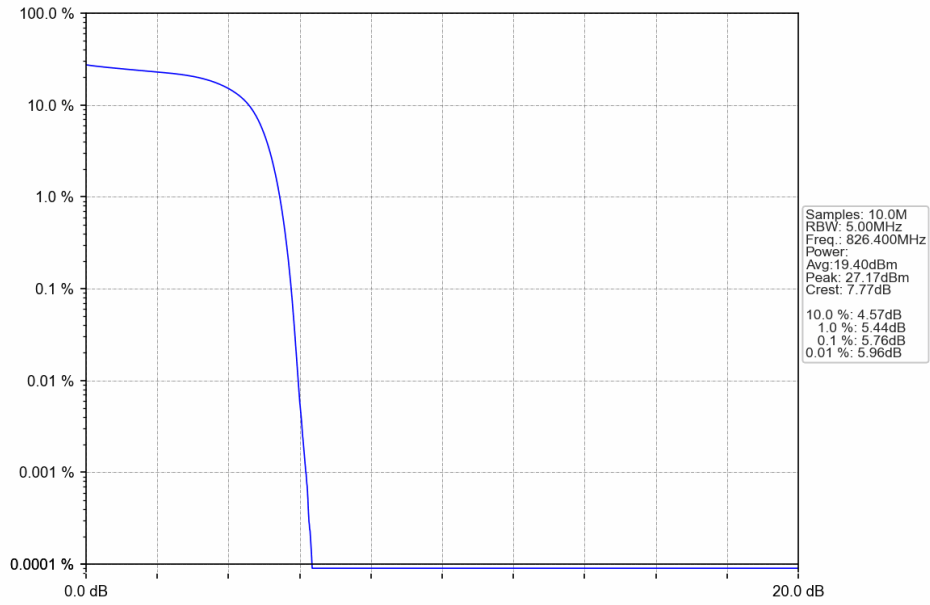
5.1.2 Test Graph



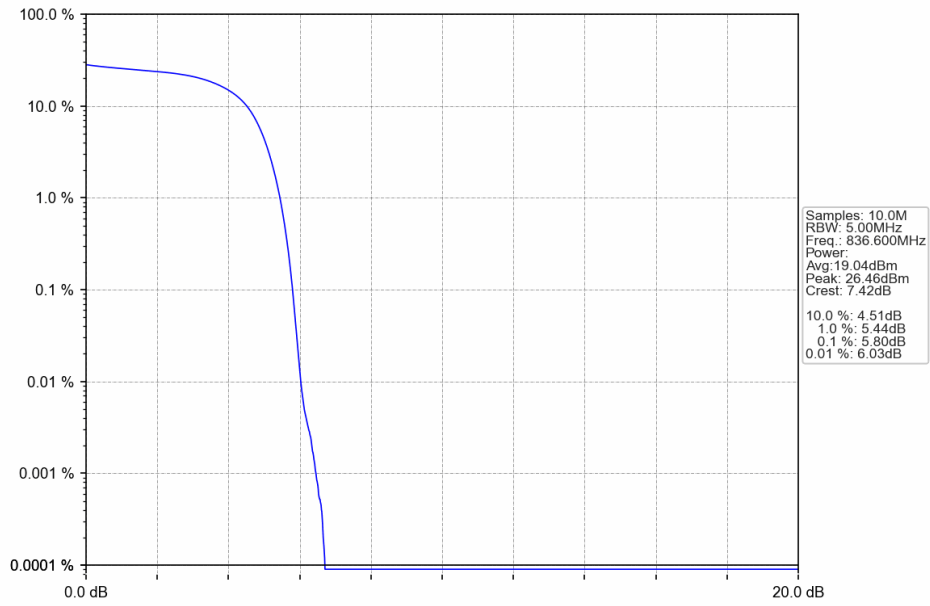
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



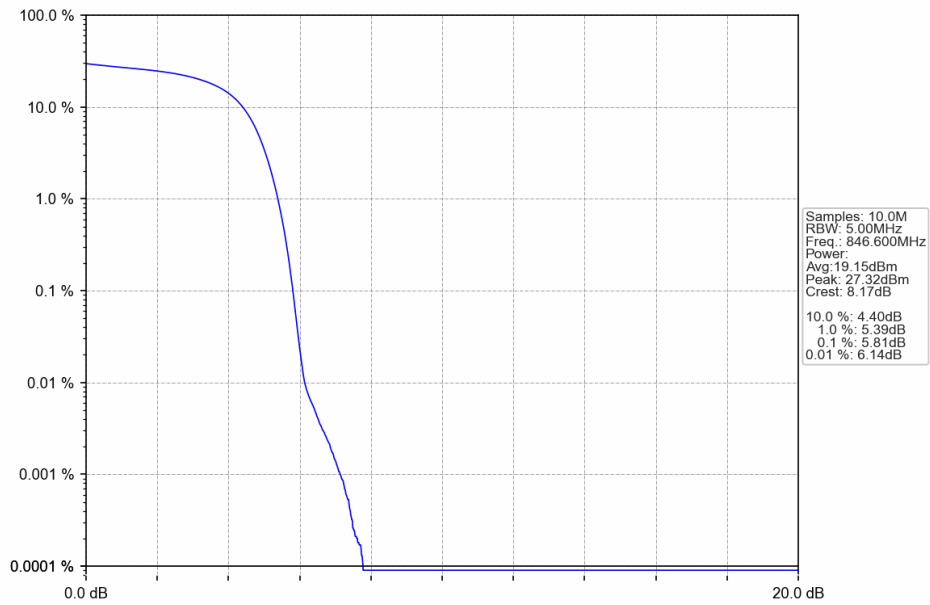
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



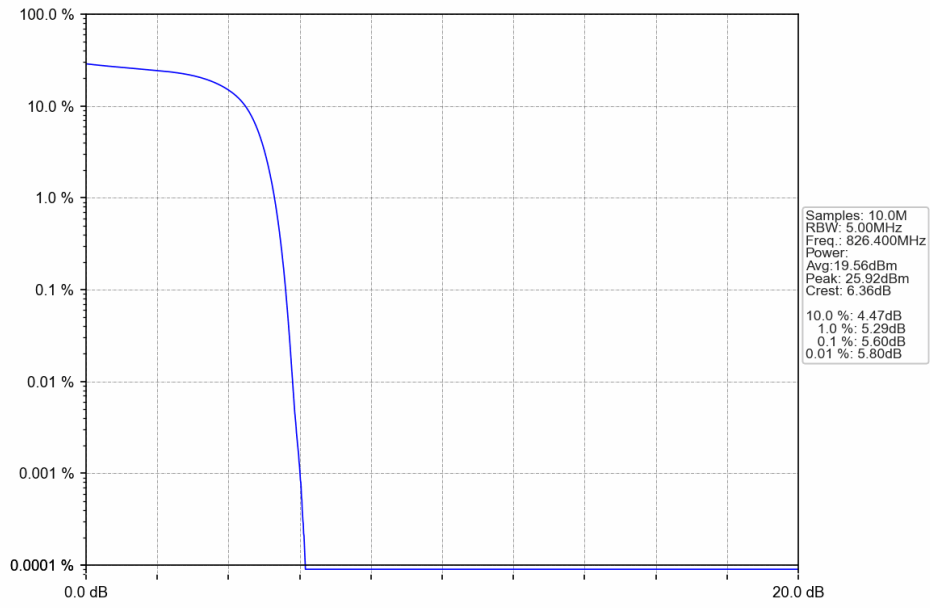
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



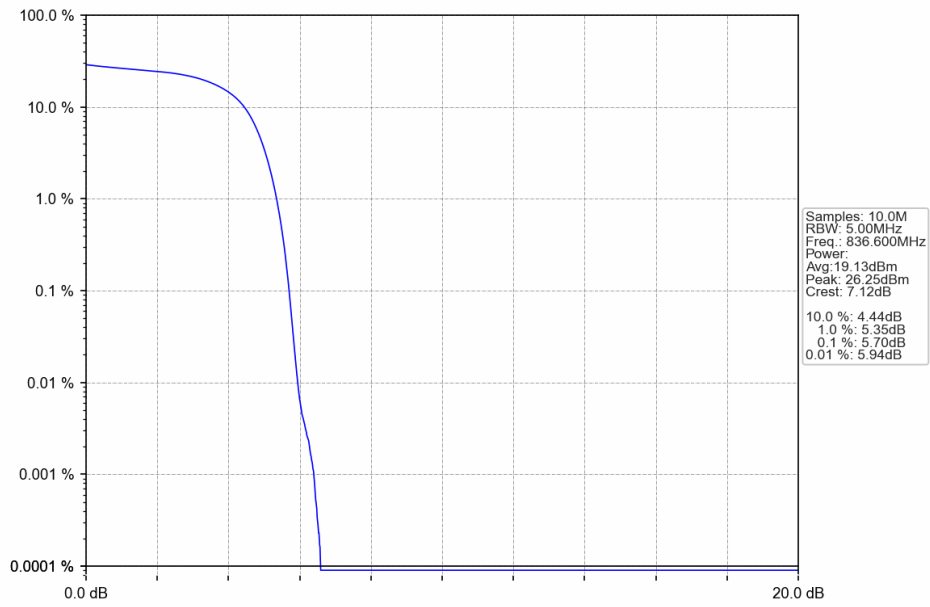
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



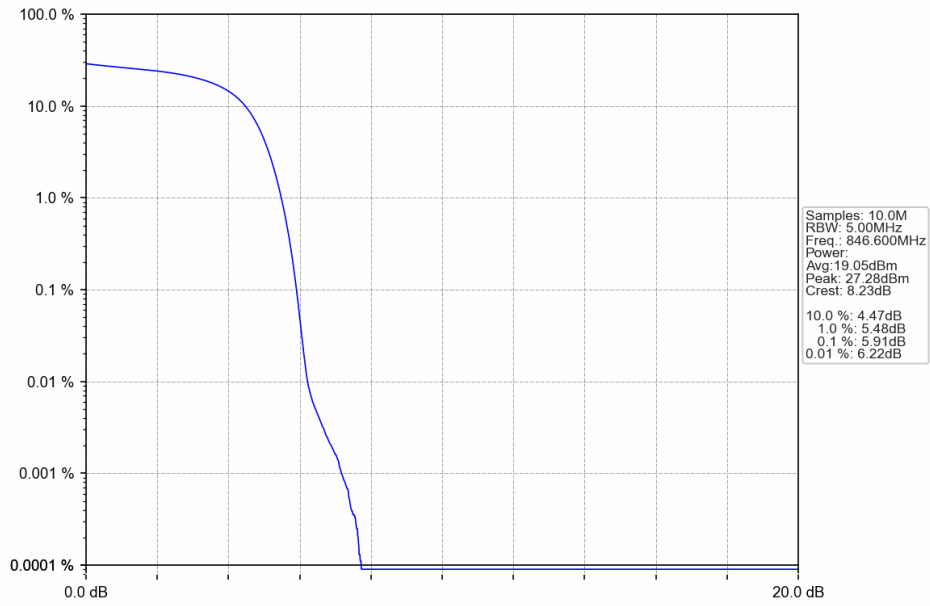
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



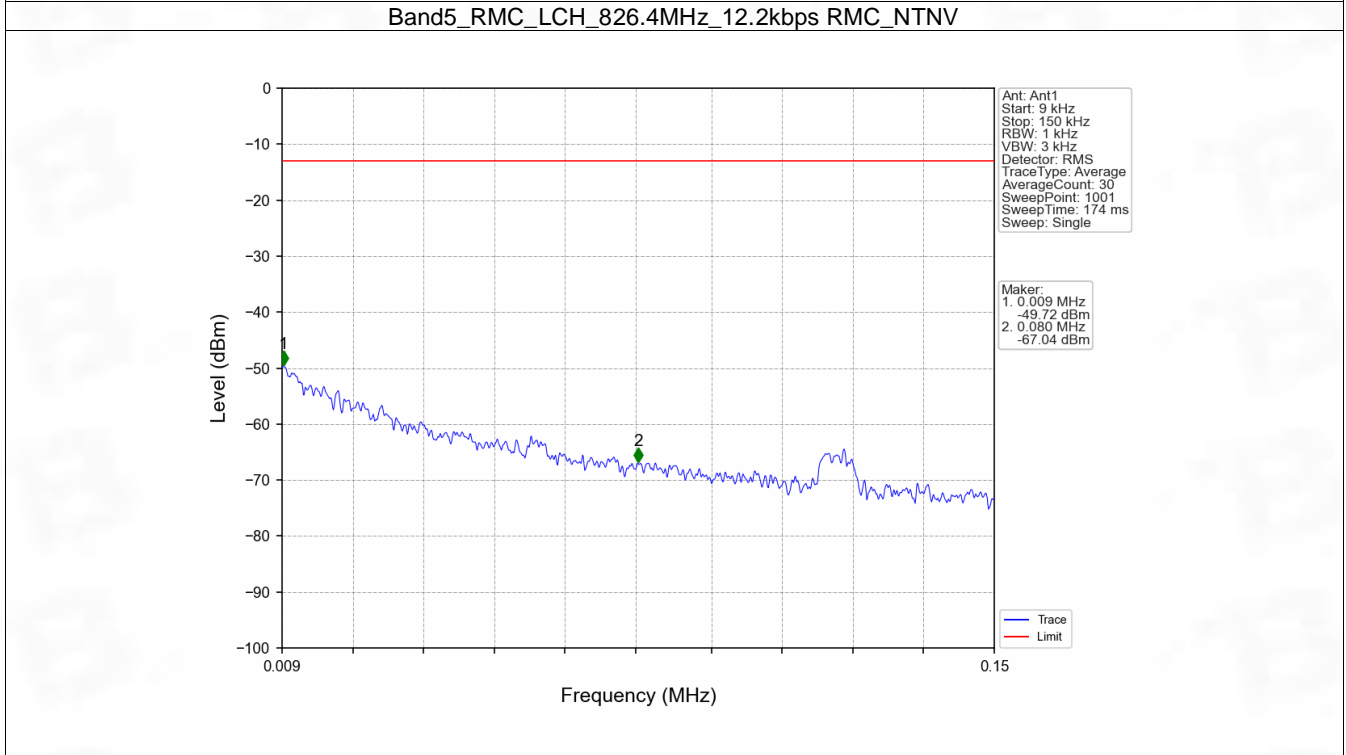
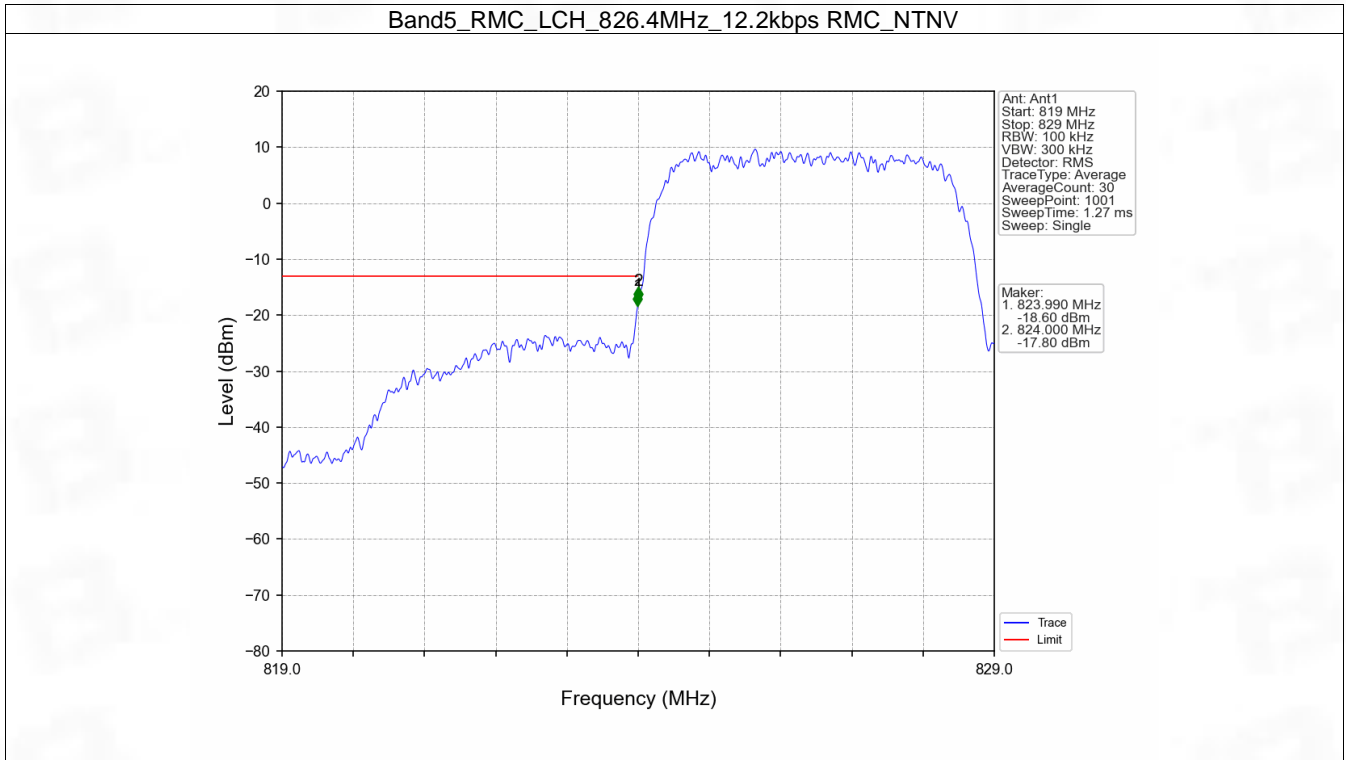
6. Spurious Emission

6.1 Band5

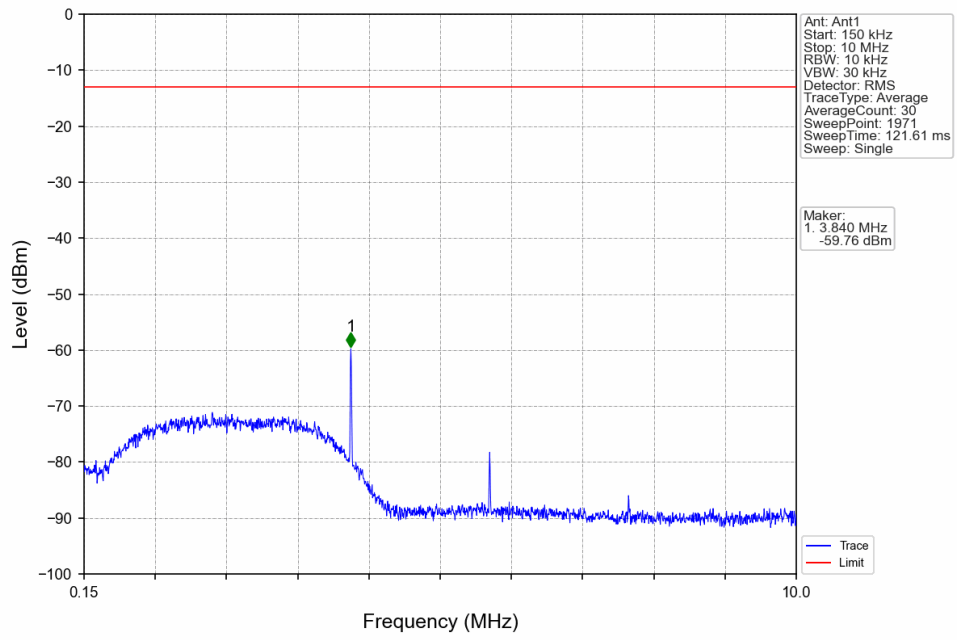
6.1.1 Test Result

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
	HSUPA	Subtest 1	826.4	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
			846.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	846.6	Refer To Test Graph		Pass

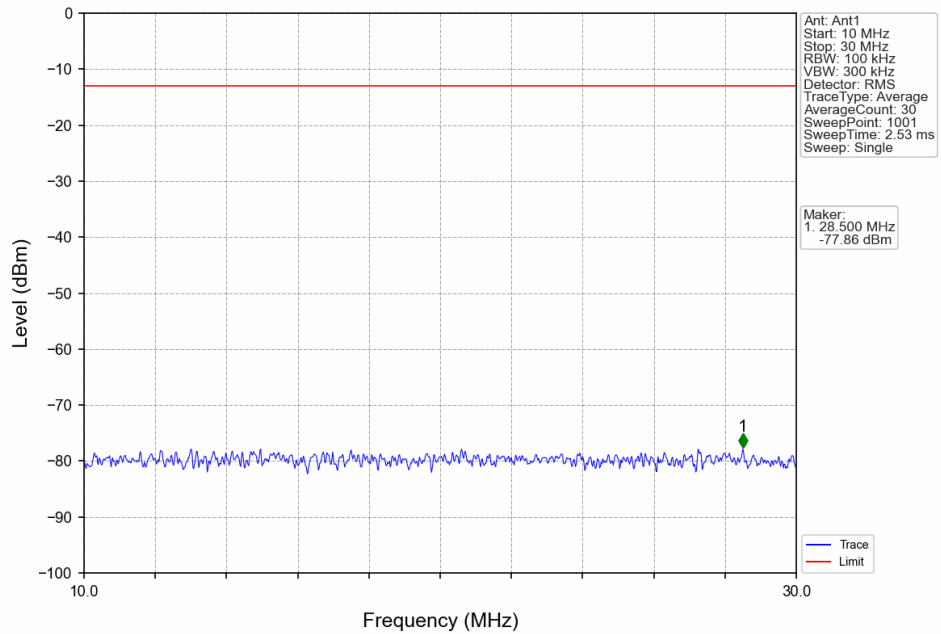
6.1.2 Test Graph



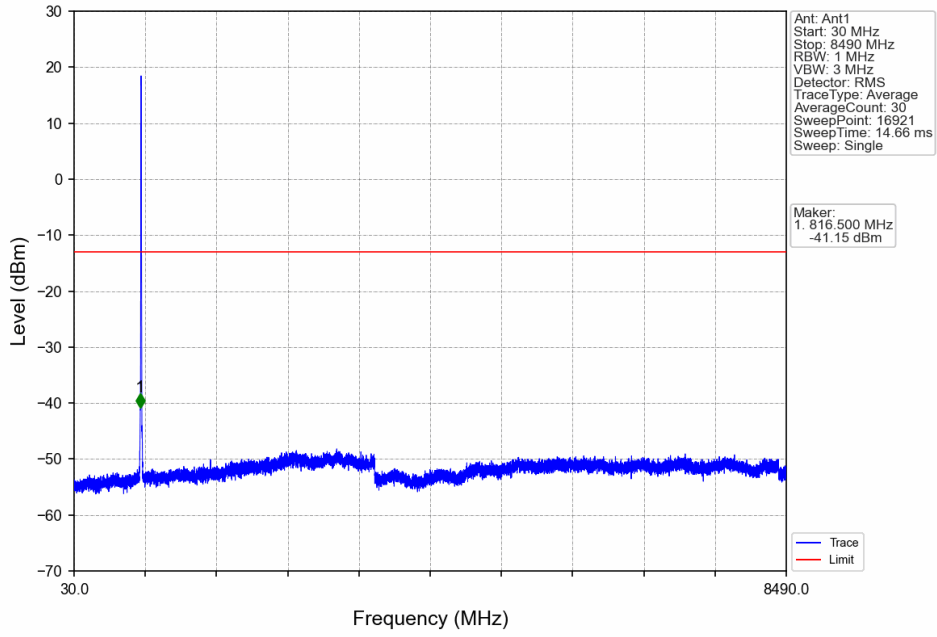
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



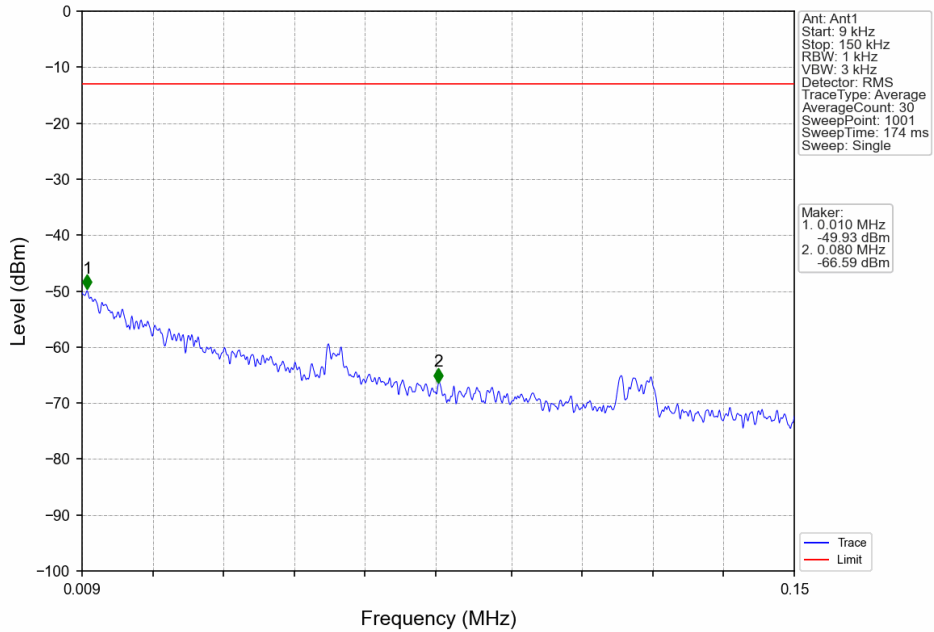
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



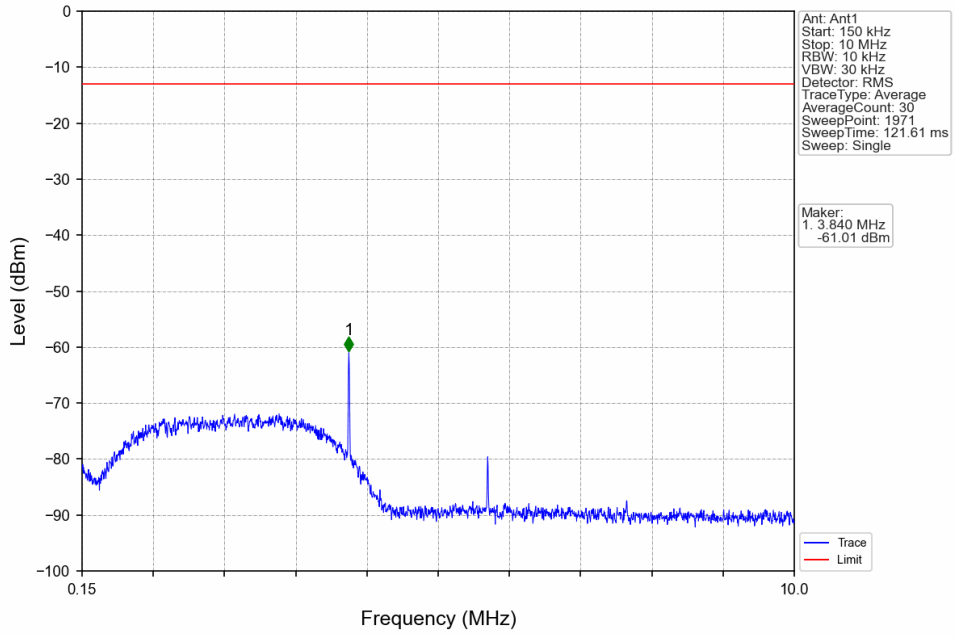
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



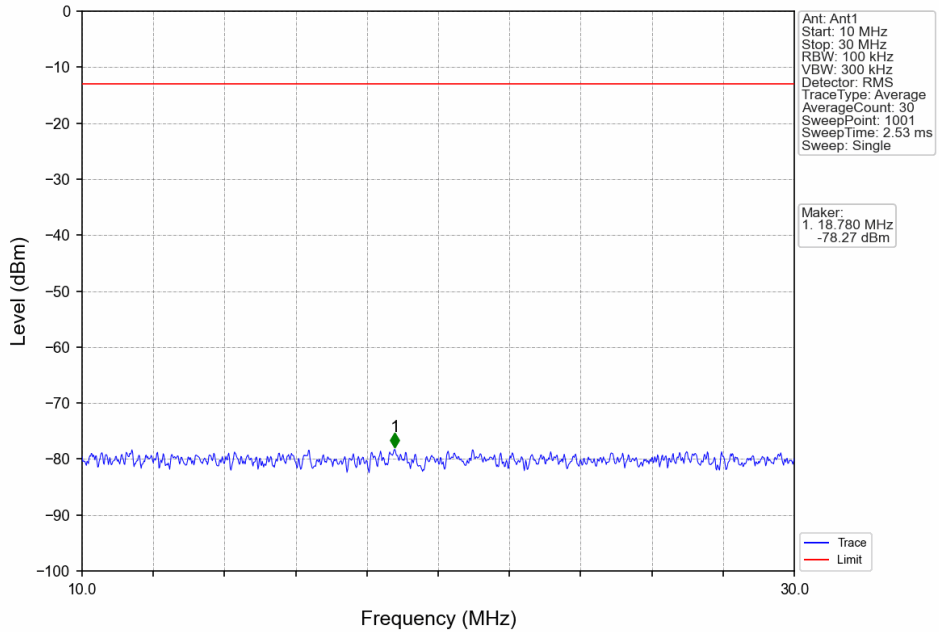
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



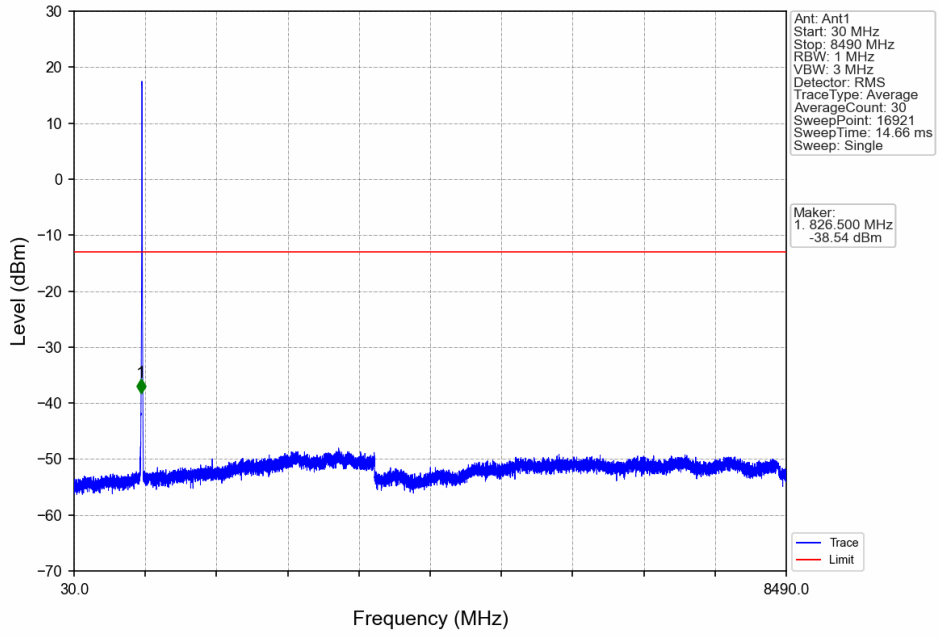
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



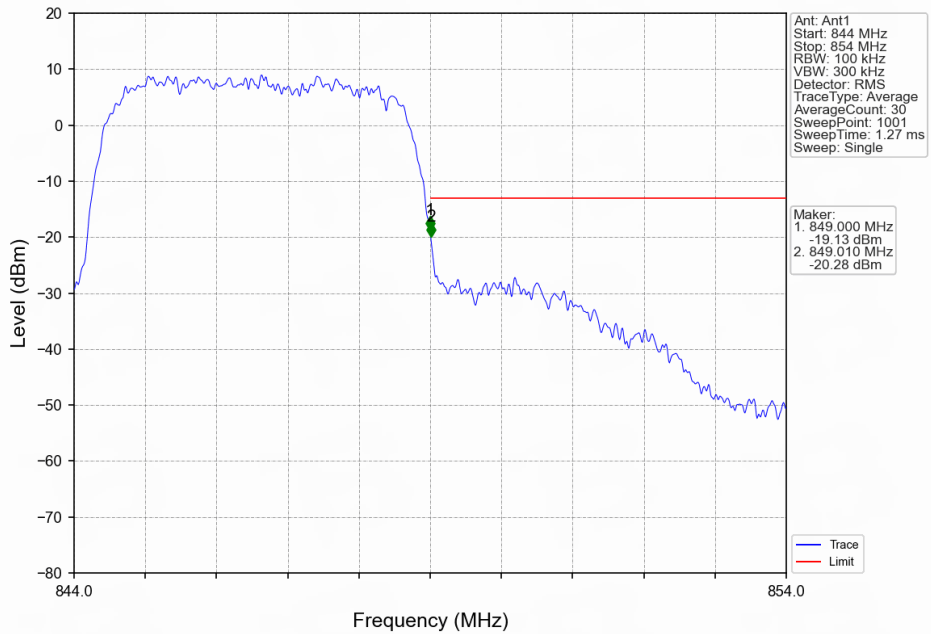
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



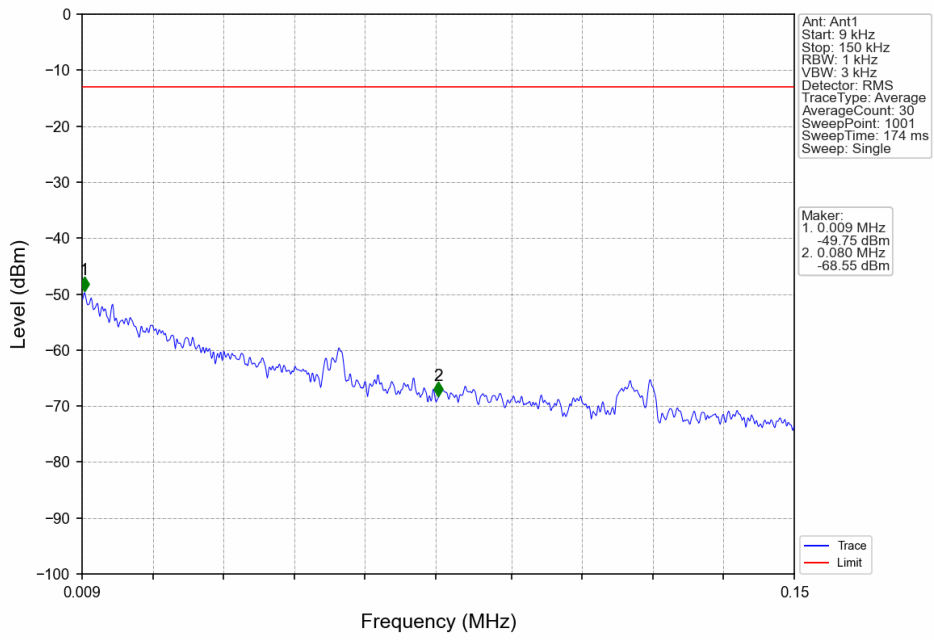
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



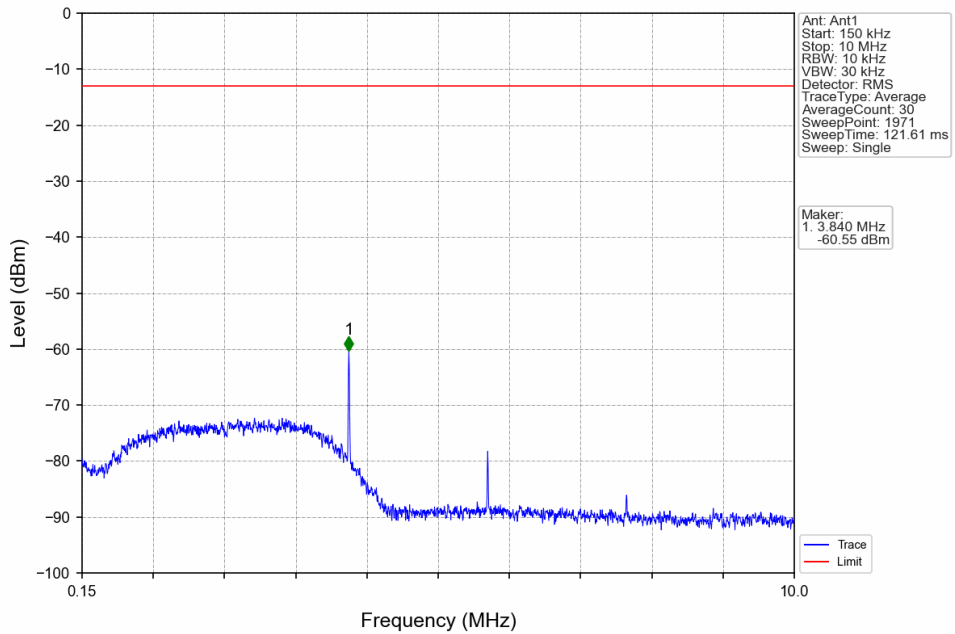
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



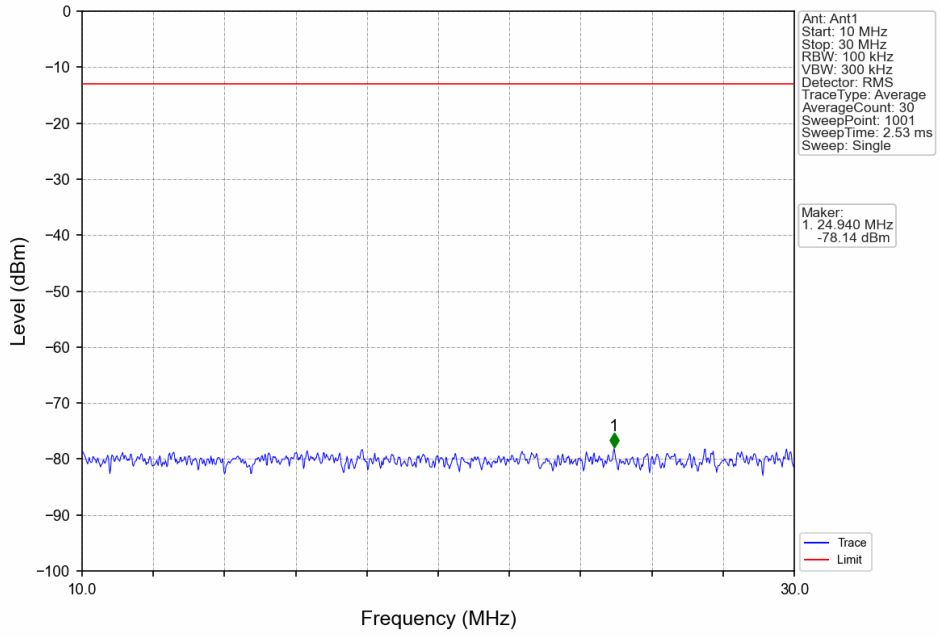
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



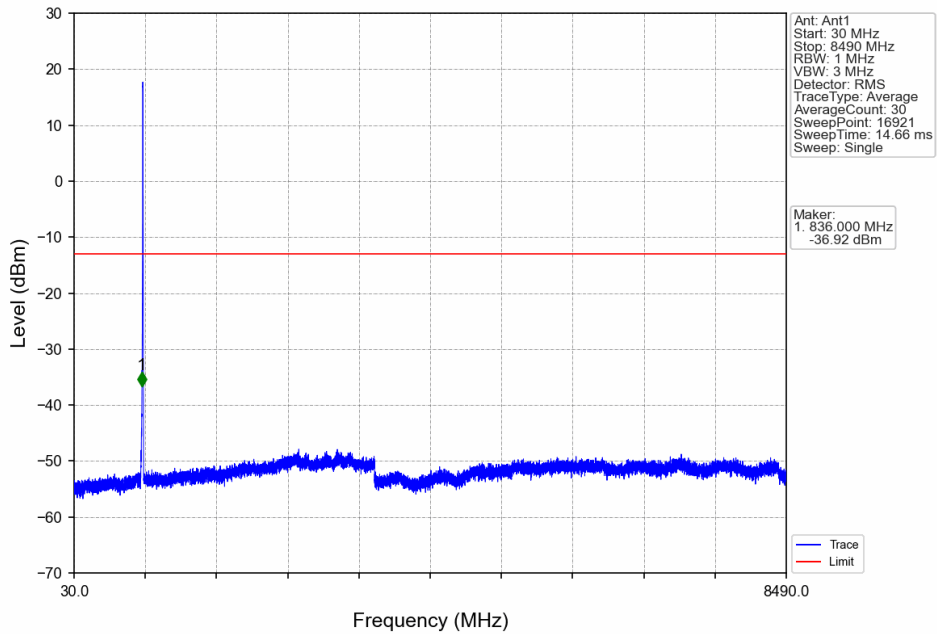
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



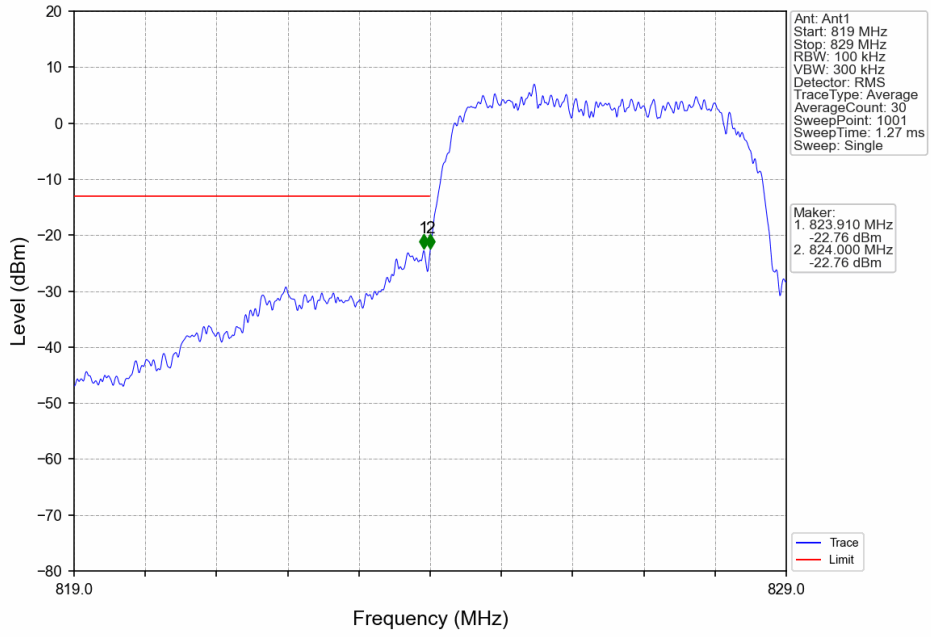
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



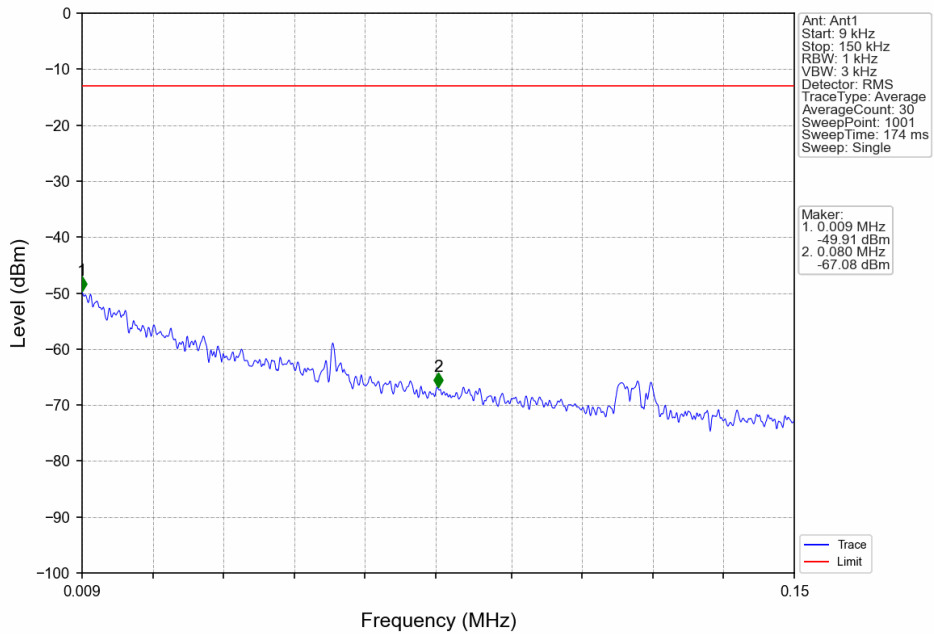
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



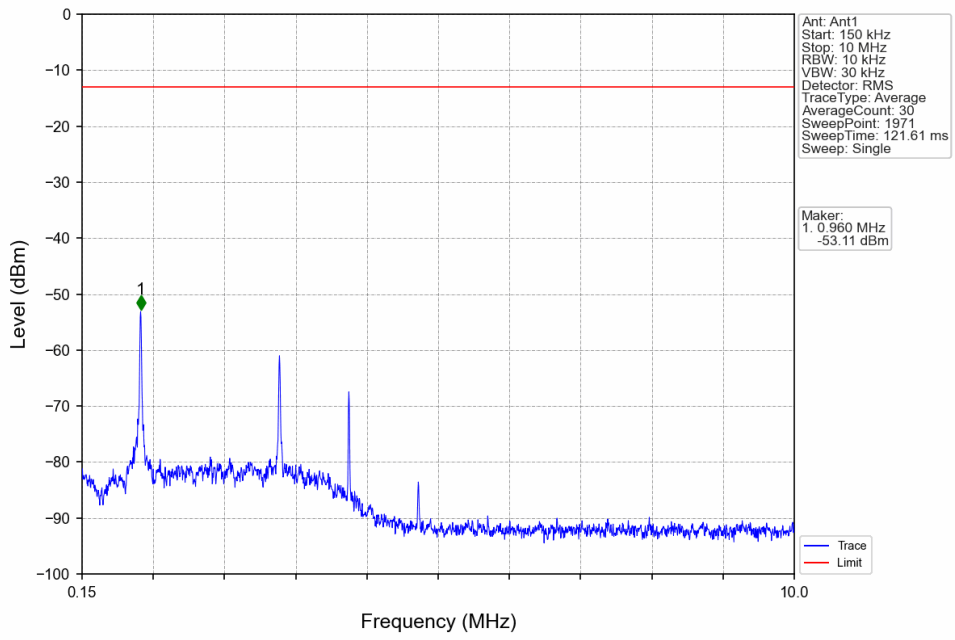
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



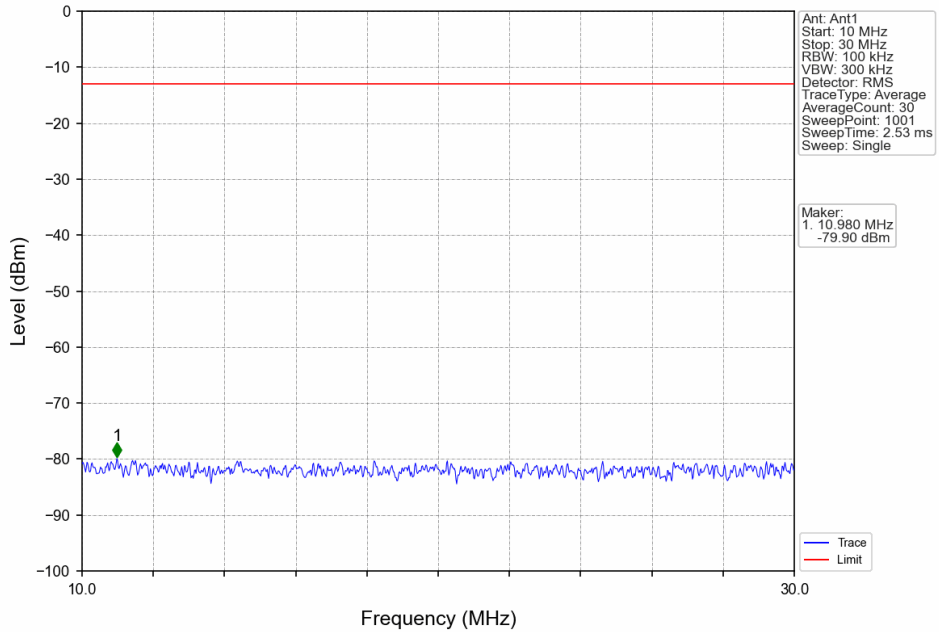
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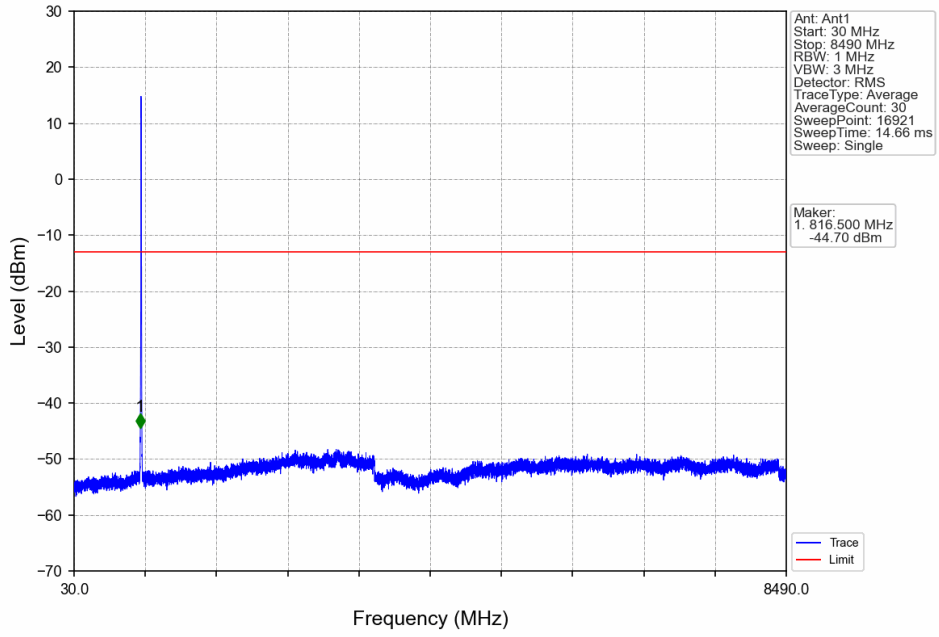
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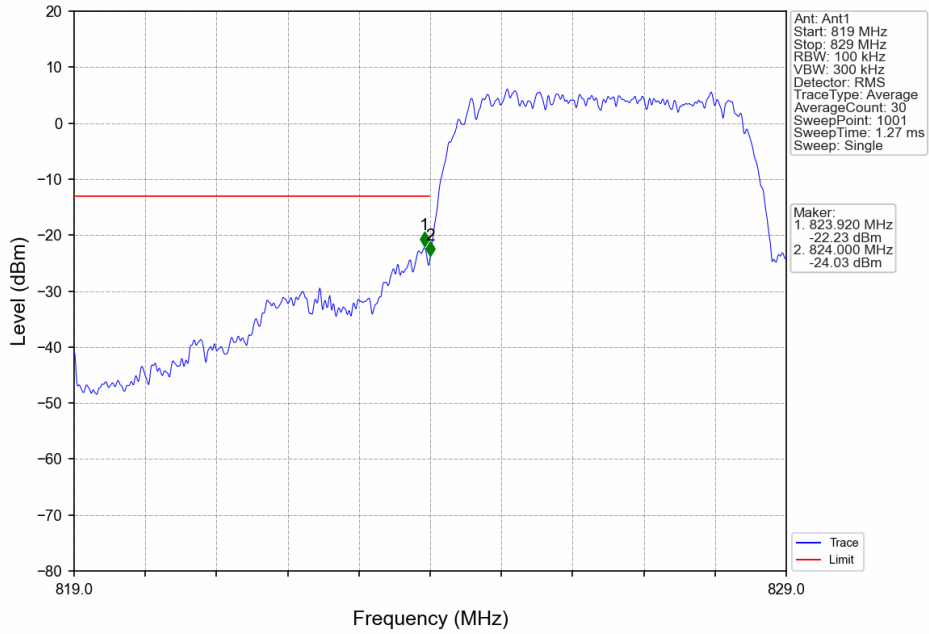
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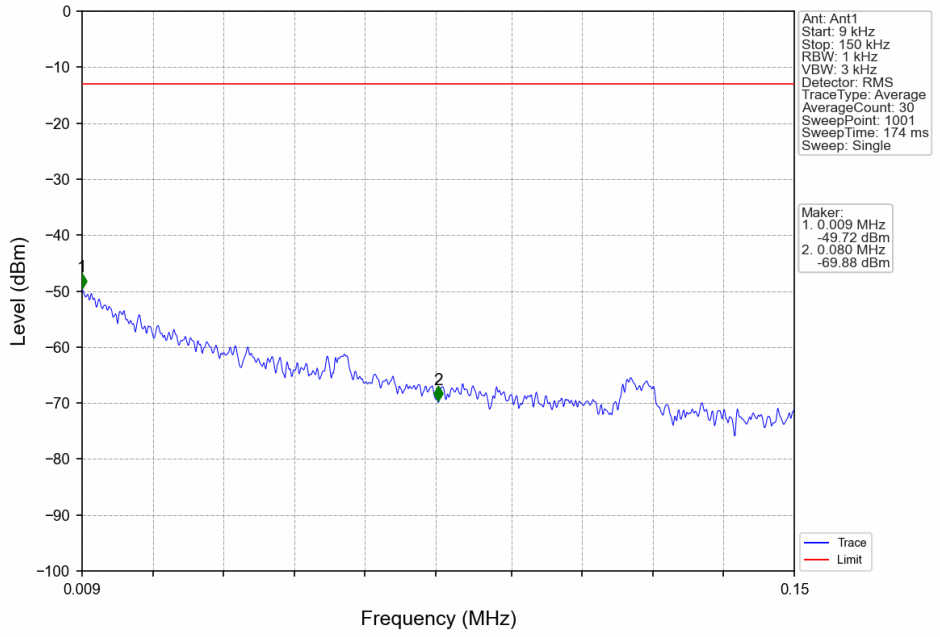
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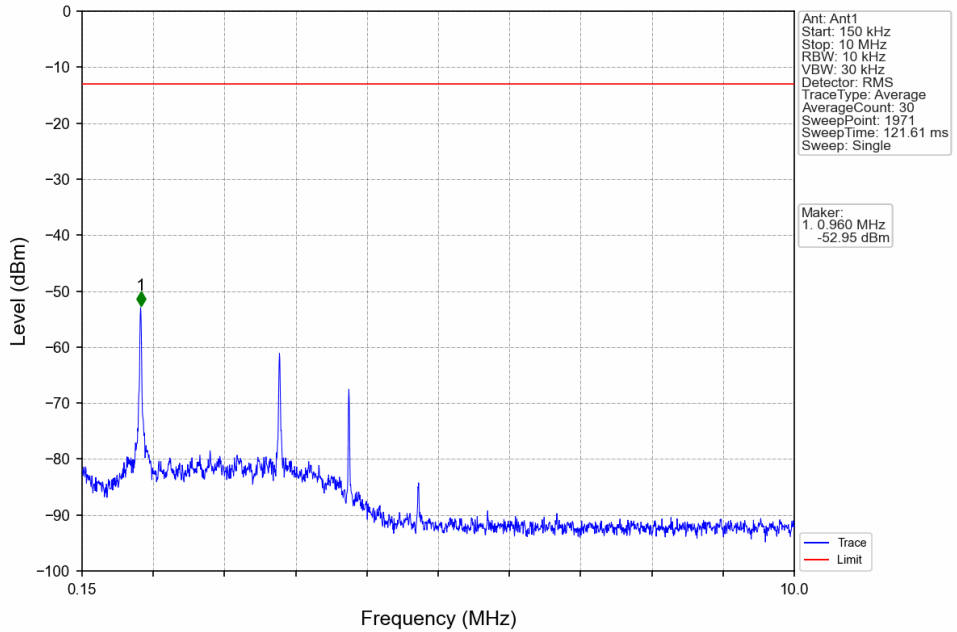
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



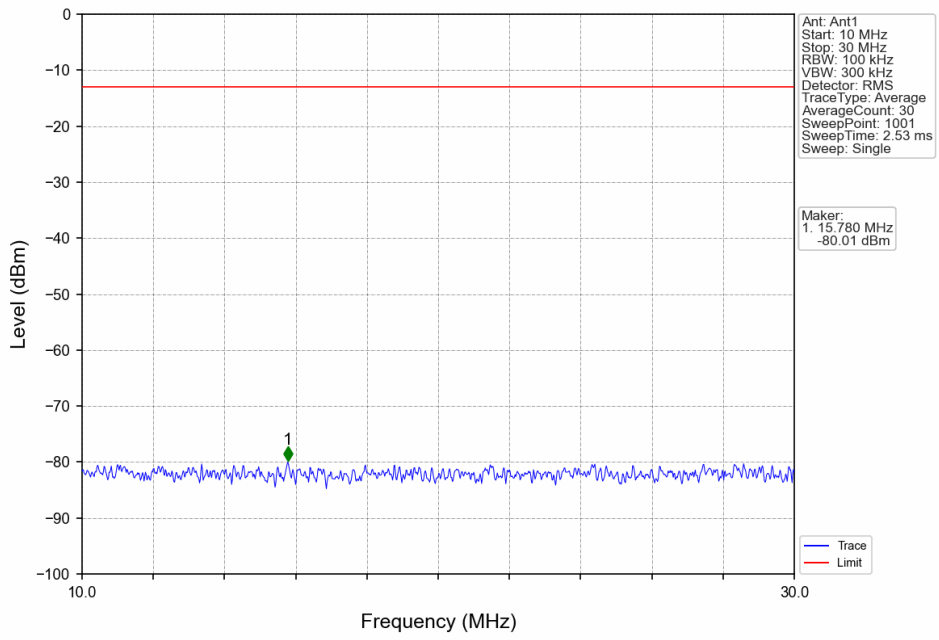
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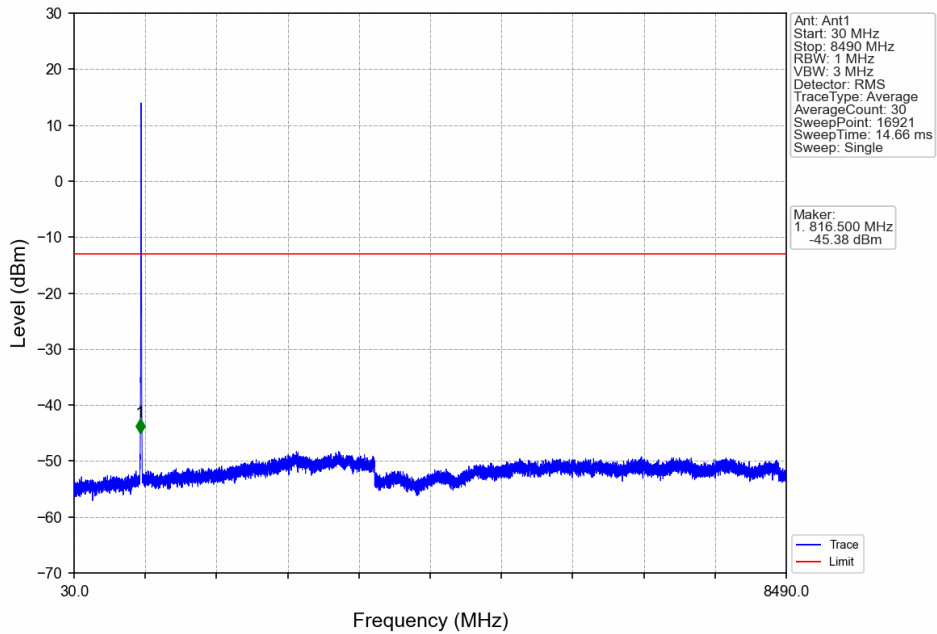
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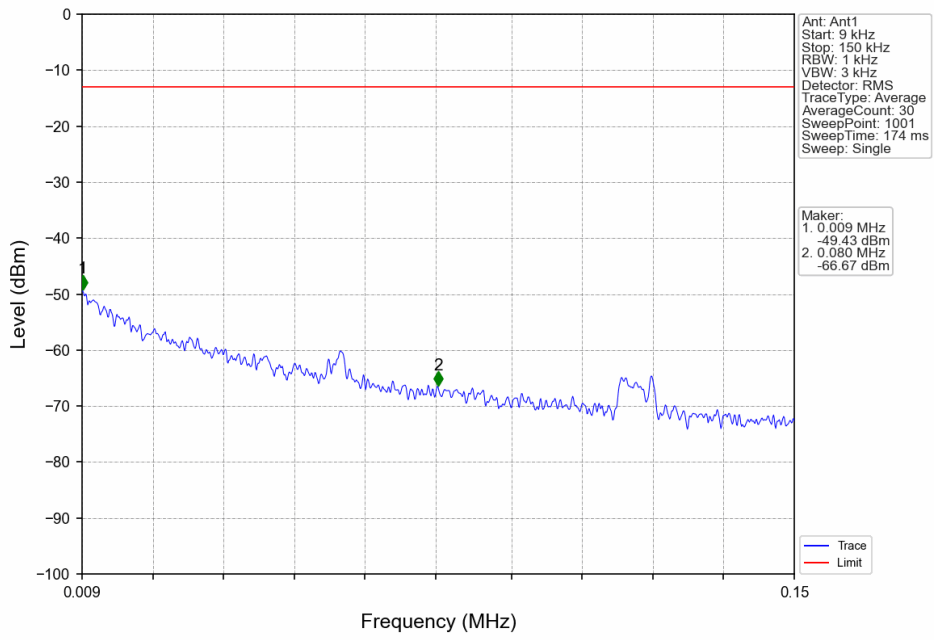
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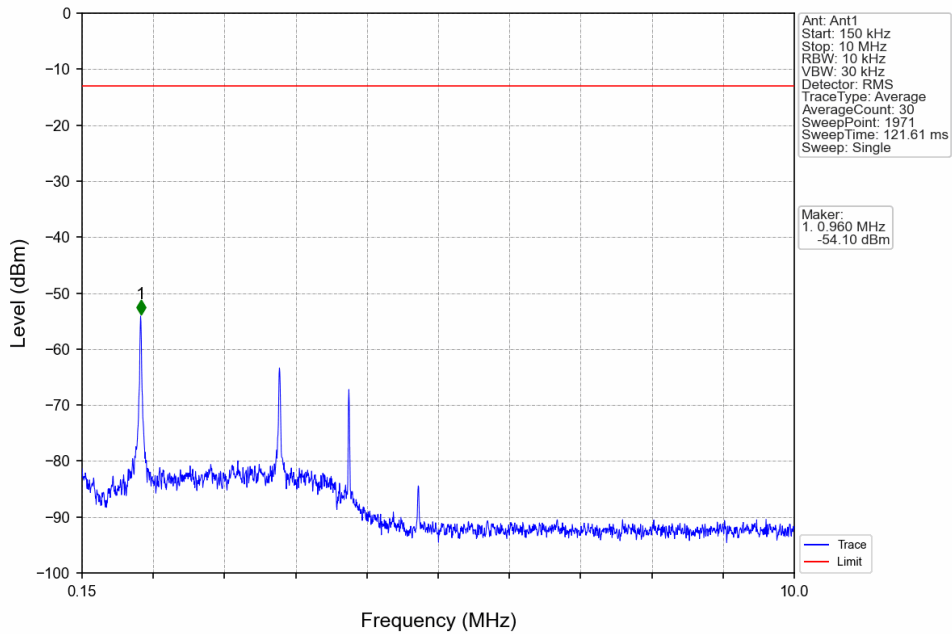
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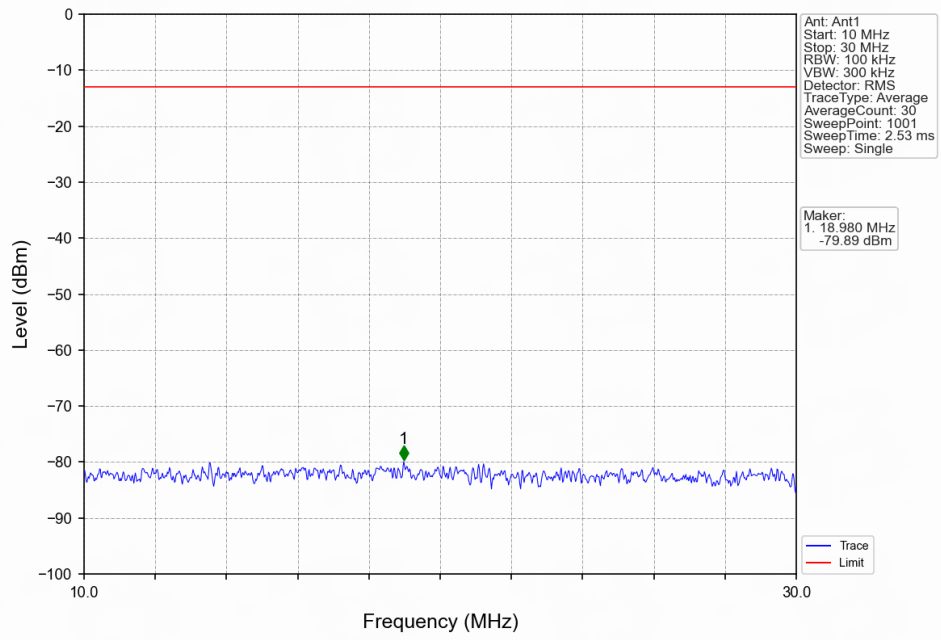
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



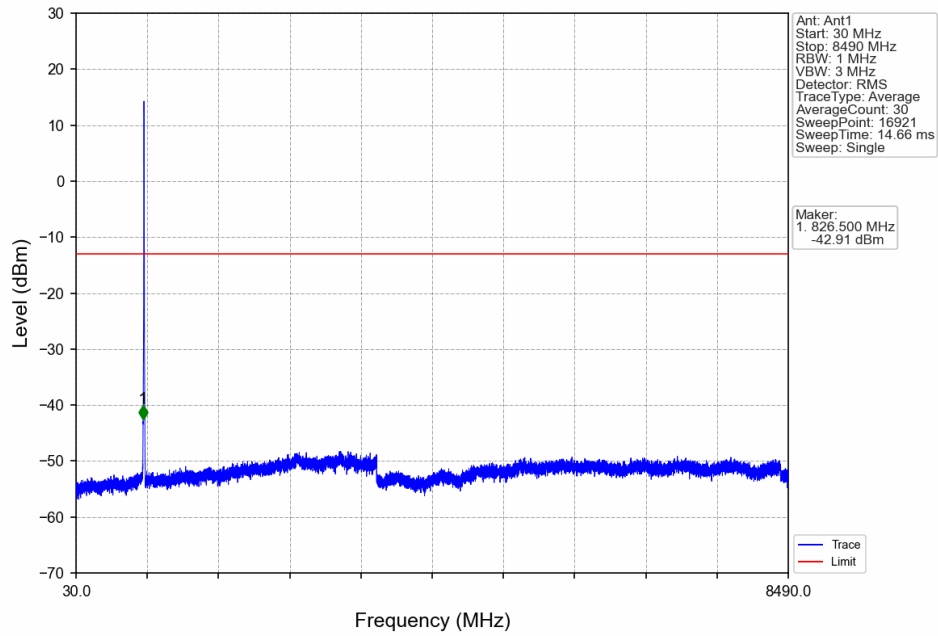
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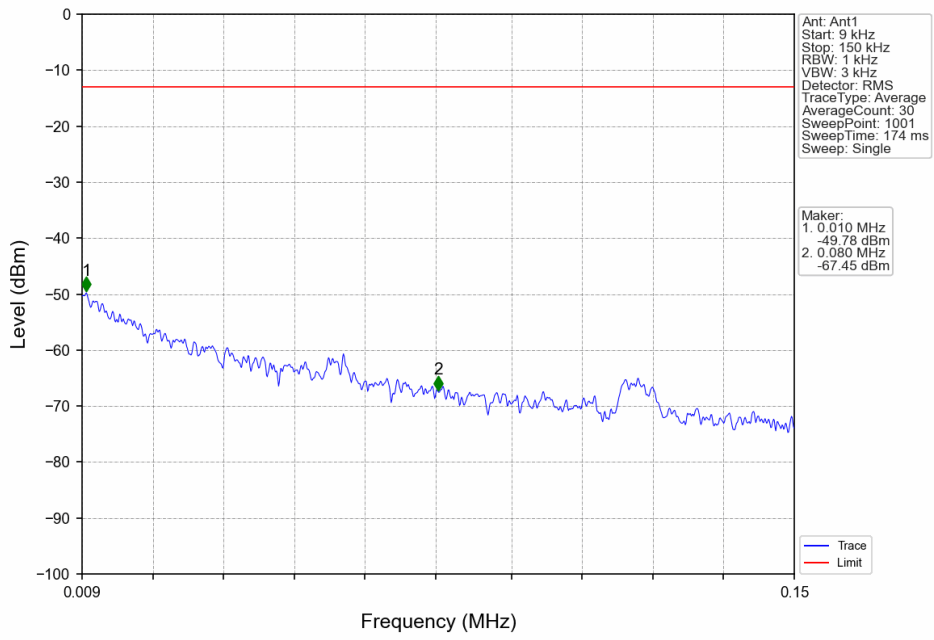
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



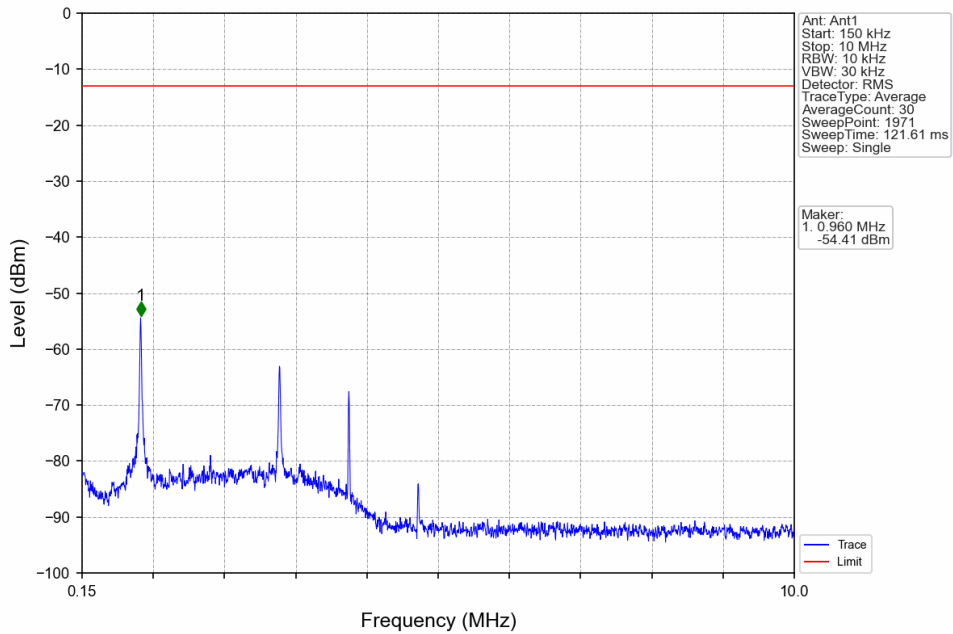
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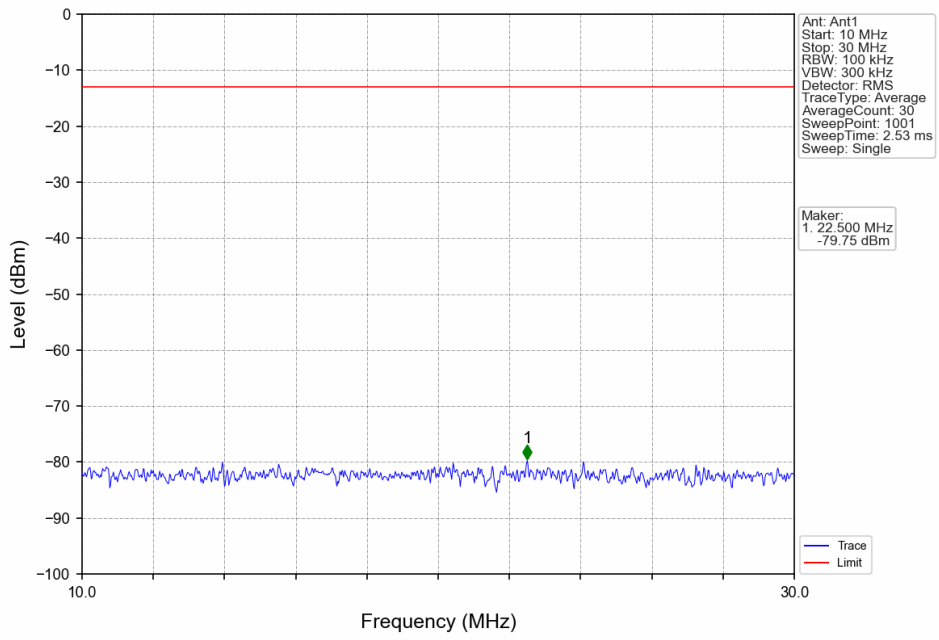
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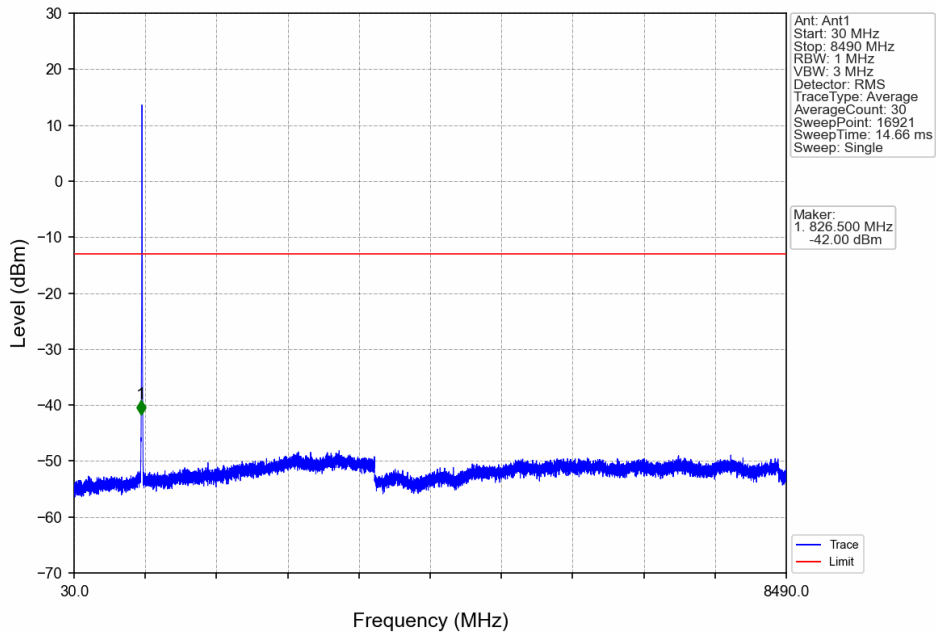
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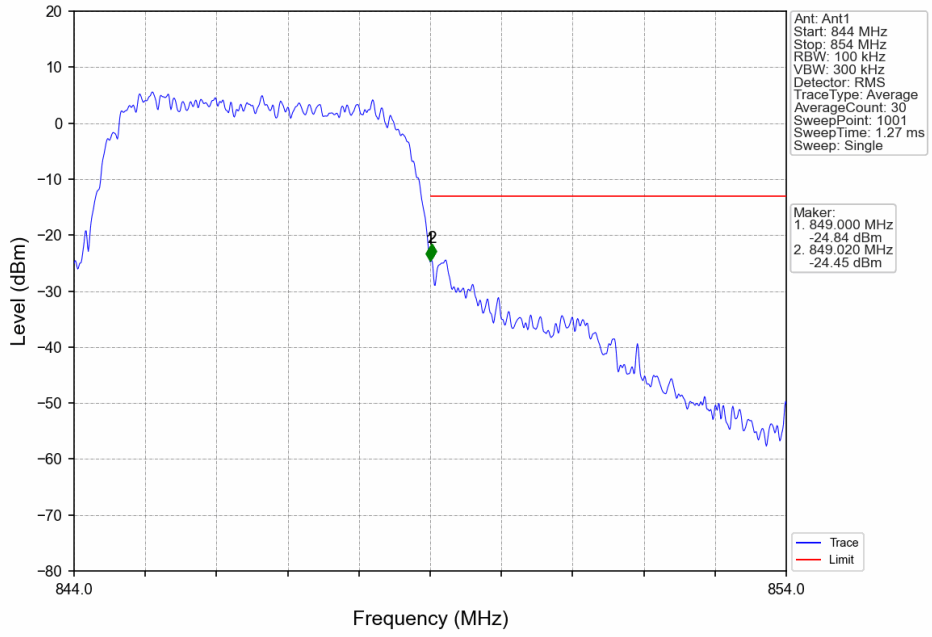
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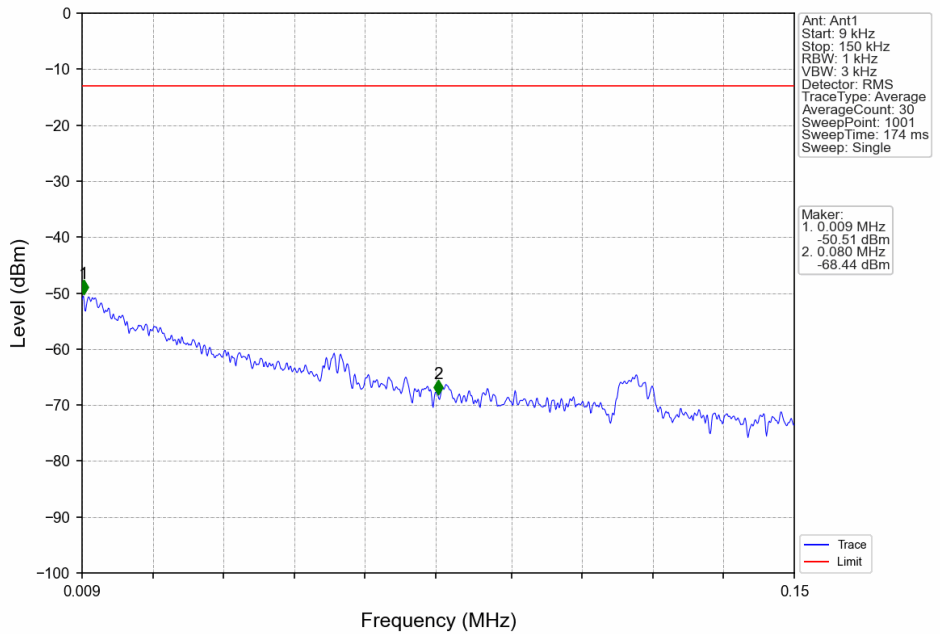
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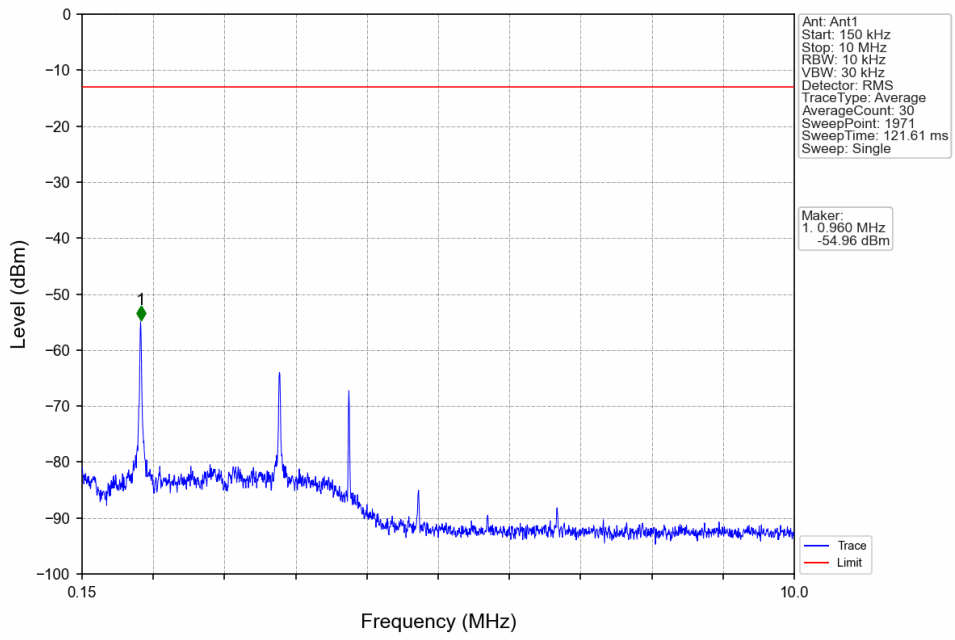
Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



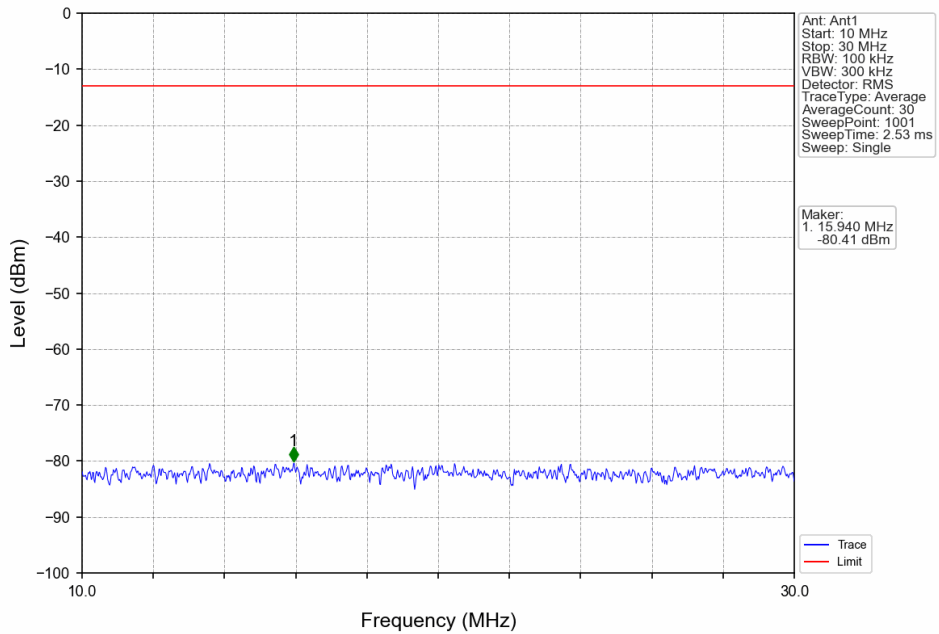
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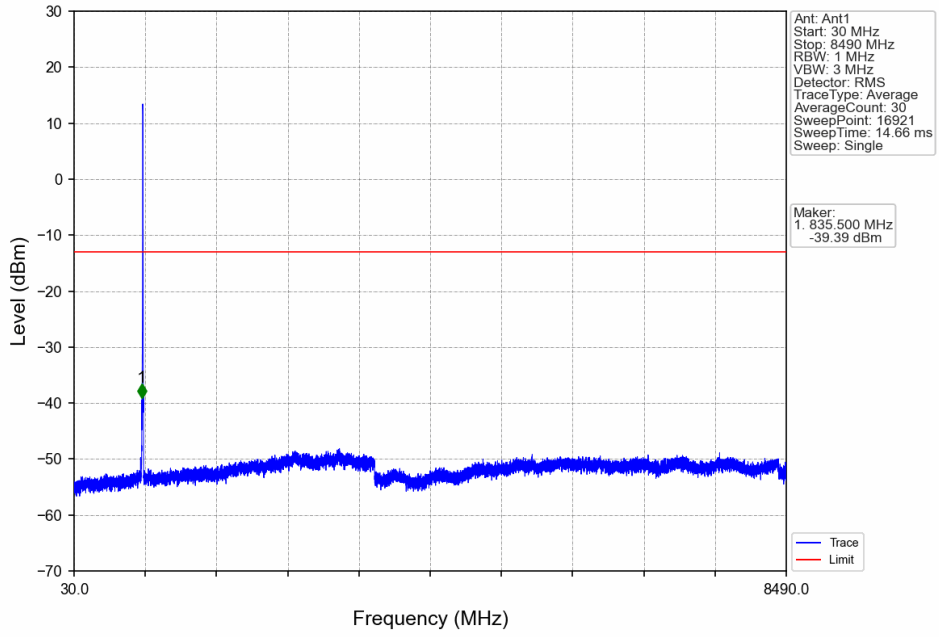
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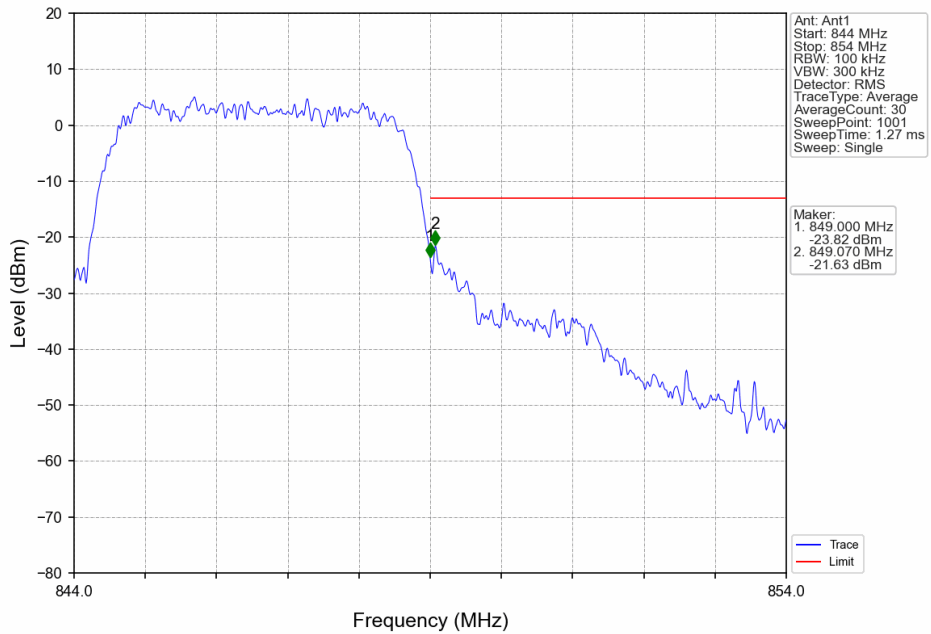
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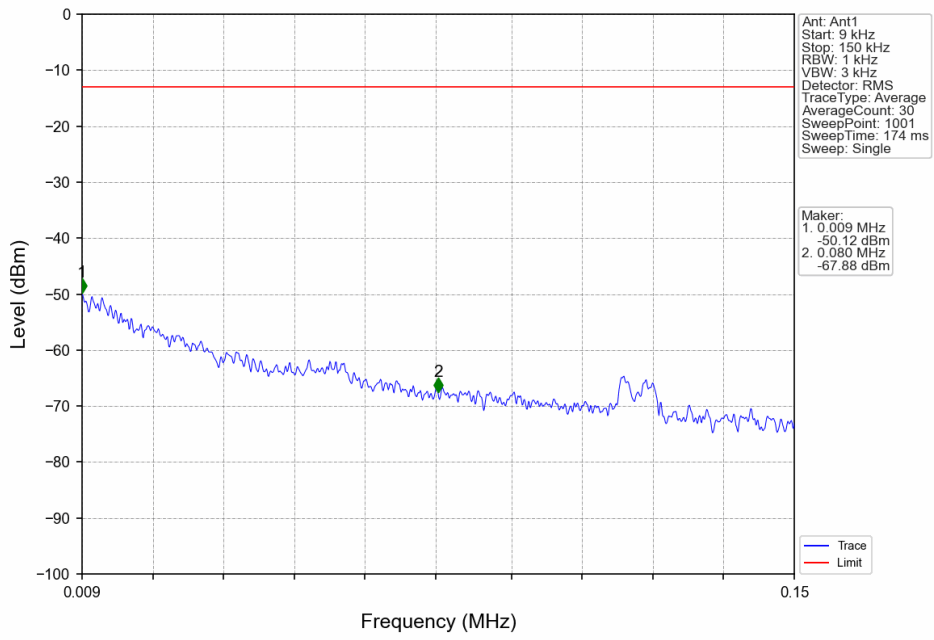
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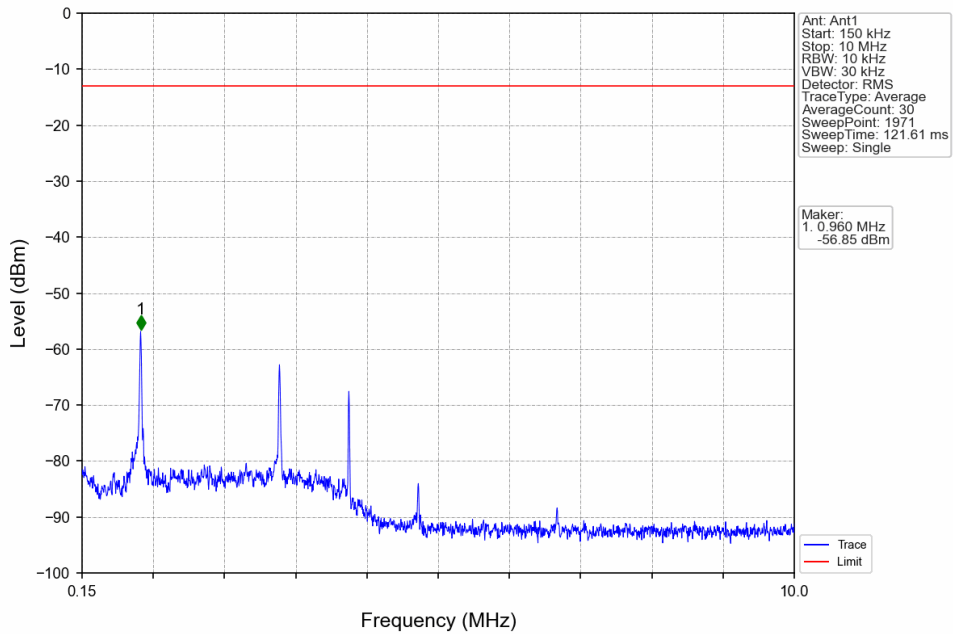
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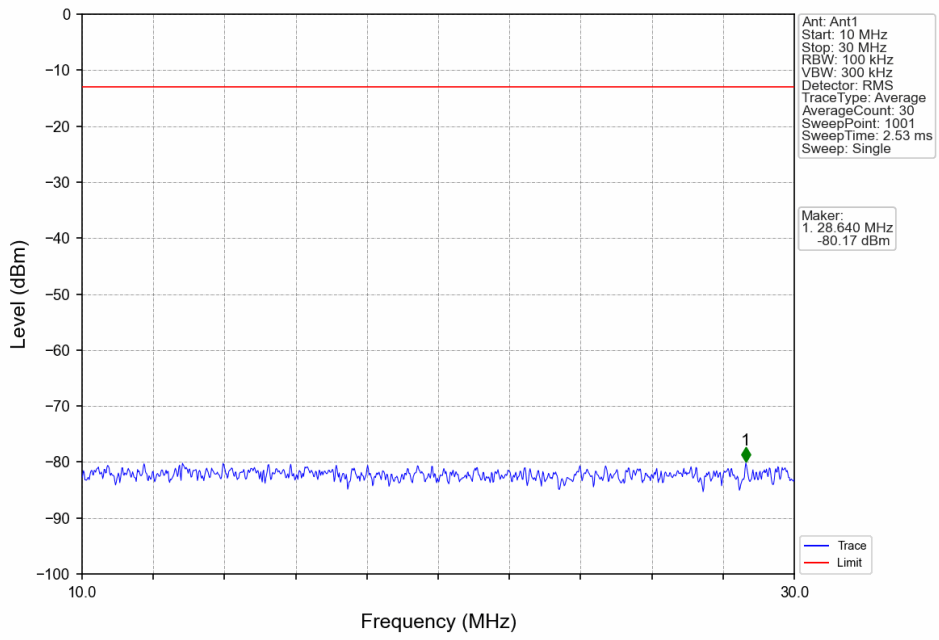
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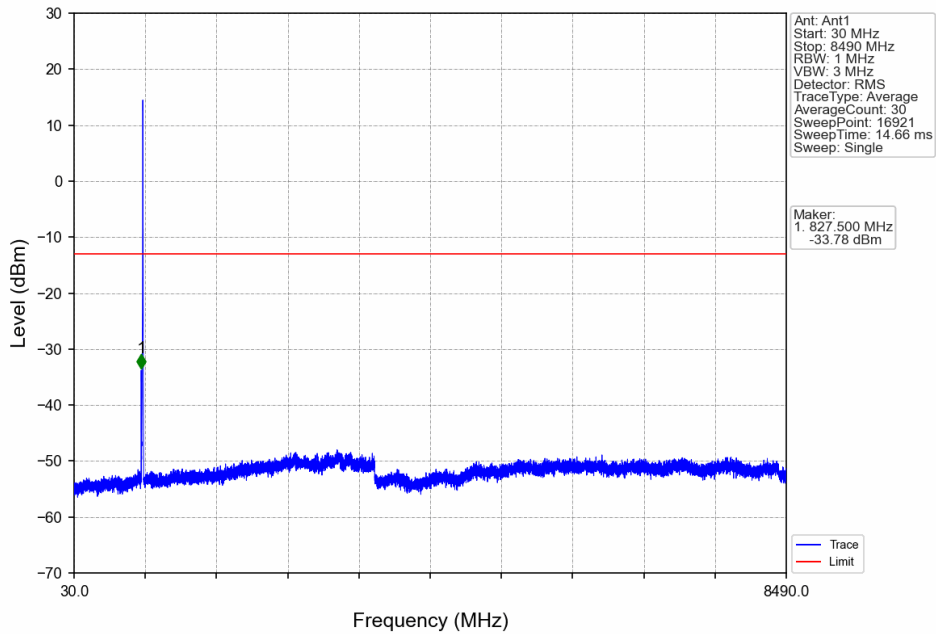
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



Band5_HSDPA_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	0.2000	0.0222	ppm	4M23F9W	24E	23.01

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	0.2138	0.0222	ppm	4M23F9W	24E	23.30