

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	22.13	-1.47	18.51	<=38.45	Pass
			836.6	22.13	-1.47	18.51	<=38.45	Pass
			846.6	22.08	-1.47	18.46	<=38.45	Pass
	HSDPA	Subtest 1	826.4	19.97	-1.47	16.35	<=38.45	Pass
		Subtest 2	826.4	19.95	-1.47	16.33	<=38.45	Pass
		Subtest 3	826.4	19.95	-1.47	16.33	<=38.45	Pass
		Subtest 4	826.4	19.94	-1.47	16.32	<=38.45	Pass
		Subtest 1	836.6	19.87	-1.47	16.25	<=38.45	Pass
		Subtest 2	836.6	19.88	-1.47	16.26	<=38.45	Pass
		Subtest 3	836.6	19.89	-1.47	16.27	<=38.45	Pass
		Subtest 4	836.6	19.86	-1.47	16.24	<=38.45	Pass
		Subtest 1	846.6	19.91	-1.47	16.29	<=38.45	Pass
		Subtest 2	846.6	19.88	-1.47	16.26	<=38.45	Pass
		Subtest 3	846.6	19.89	-1.47	16.27	<=38.45	Pass
		Subtest 4	846.6	19.87	-1.47	16.25	<=38.45	Pass
	HSUPA	Subtest 1	826.4	17.82	-1.47	14.20	<=38.45	Pass
		Subtest 2	826.4	17.76	-1.47	14.14	<=38.45	Pass
		Subtest 3	826.4	17.79	-1.47	14.17	<=38.45	Pass
		Subtest 4	826.4	17.60	-1.47	13.98	<=38.45	Pass
		Subtest 5	826.4	18.20	-1.47	14.58	<=38.45	Pass
		Subtest 1	836.6	17.28	-1.47	13.66	<=38.45	Pass
		Subtest 2	836.6	17.57	-1.47	13.95	<=38.45	Pass
		Subtest 3	836.6	17.12	-1.47	13.50	<=38.45	Pass
		Subtest 4	836.6	17.28	-1.47	13.66	<=38.45	Pass
		Subtest 5	836.6	17.87	-1.47	14.25	<=38.45	Pass
		Subtest 1	846.6	17.30	-1.47	13.68	<=38.45	Pass
		Subtest 2	846.6	17.28	-1.47	13.66	<=38.45	Pass
		Subtest 3	846.6	17.29	-1.47	13.67	<=38.45	Pass
		Subtest 4	846.6	17.28	-1.47	13.66	<=38.45	Pass
		Subtest 5	846.6	17.51	-1.47	13.89	<=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	-4.814	-0.0058	-2.5 to 2.5	Pass
			3.85	-13.683	-0.0166	-2.5 to 2.5	Pass
			4.43	-11.165	-0.0135	-2.5 to 2.5	Pass
		-30	3.85	-14.348	-0.0174	-2.5 to 2.5	Pass
		-20	3.85	-10.228	-0.0124	-2.5 to 2.5	Pass

		-10	3.85	-10.972	-0.0133	-2.5 to 2.5	Pass
		0	3.85	-11.165	-0.0135	-2.5 to 2.5	Pass
		10	3.85	-13.261	-0.0160	-2.5 to 2.5	Pass
		30	3.85	-10.400	-0.0126	-2.5 to 2.5	Pass
		40	3.85	-13.433	-0.0163	-2.5 to 2.5	Pass
	836.6	50	3.85	-9.699	-0.0117	-2.5 to 2.5	Pass
		20	3.27	-13.626	-0.0163	-2.5 to 2.5	Pass
			3.85	-10.257	-0.0123	-2.5 to 2.5	Pass
			4.43	-11.244	-0.0134	-2.5 to 2.5	Pass
		-30	3.85	-8.883	-0.0106	-2.5 to 2.5	Pass
		-20	3.85	-10.908	-0.0130	-2.5 to 2.5	Pass
		-10	3.85	-11.816	-0.0141	-2.5 to 2.5	Pass
		0	3.85	-12.338	-0.0147	-2.5 to 2.5	Pass
		10	3.85	-12.159	-0.0145	-2.5 to 2.5	Pass
		30	3.85	-9.620	-0.0115	-2.5 to 2.5	Pass
		40	3.85	-8.626	-0.0103	-2.5 to 2.5	Pass
		50	3.85	-11.609	-0.0139	-2.5 to 2.5	Pass
	846.6	20	3.27	-7.124	-0.0084	-2.5 to 2.5	Pass
			3.85	-9.506	-0.0112	-2.5 to 2.5	Pass
			4.43	-7.360	-0.0087	-2.5 to 2.5	Pass
		-30	3.85	-10.071	-0.0119	-2.5 to 2.5	Pass
		-20	3.85	-12.925	-0.0153	-2.5 to 2.5	Pass
		-10	3.85	-11.430	-0.0135	-2.5 to 2.5	Pass
		0	3.85	-8.733	-0.0103	-2.5 to 2.5	Pass
		10	3.85	-6.888	-0.0081	-2.5 to 2.5	Pass
		30	3.85	-12.624	-0.0149	-2.5 to 2.5	Pass
		40	3.85	-9.570	-0.0113	-2.5 to 2.5	Pass
		50	3.85	-8.783	-0.0104	-2.5 to 2.5	Pass
HSDPA	826.4	20	3.27	-7.796	-0.0094	-2.5 to 2.5	Pass
			3.85	-10.686	-0.0129	-2.5 to 2.5	Pass
			4.43	-0.629	-0.0008	-2.5 to 2.5	Pass
		-30	3.85	-2.360	-0.0029	-2.5 to 2.5	Pass
		-20	3.85	-4.306	-0.0052	-2.5 to 2.5	Pass
		-10	3.85	-5.829	-0.0071	-2.5 to 2.5	Pass
		0	3.85	-3.219	-0.0039	-2.5 to 2.5	Pass
		10	3.85	-3.777	-0.0046	-2.5 to 2.5	Pass
		30	3.85	-5.271	-0.0064	-2.5 to 2.5	Pass
		40	3.85	-5.686	-0.0069	-2.5 to 2.5	Pass
		50	3.85	-3.054	-0.0037	-2.5 to 2.5	Pass
	836.6	20	3.27	-12.667	-0.0151	-2.5 to 2.5	Pass
			3.85	-5.929	-0.0071	-2.5 to 2.5	Pass
			4.43	-3.905	-0.0047	-2.5 to 2.5	Pass
		-30	3.85	-4.134	-0.0049	-2.5 to 2.5	Pass
		-20	3.85	-5.329	-0.0064	-2.5 to 2.5	Pass
		-10	3.85	-8.368	-0.0100	-2.5 to 2.5	Pass
		0	3.85	-8.290	-0.0099	-2.5 to 2.5	Pass
		10	3.85	-6.366	-0.0076	-2.5 to 2.5	Pass
		30	3.85	-8.583	-0.0103	-2.5 to 2.5	Pass
		40	3.85	-11.752	-0.0140	-2.5 to 2.5	Pass
	846.6	20	3.27	-2.174	-0.0026	-2.5 to 2.5	Pass
			3.85	-2.303	-0.0027	-2.5 to 2.5	Pass
			4.43	-3.469	-0.0041	-2.5 to 2.5	Pass
		-30	3.85	-3.612	-0.0043	-2.5 to 2.5	Pass
		-20	3.85	-1.152	-0.0014	-2.5 to 2.5	Pass
		-10	3.85	-1.130	-0.0013	-2.5 to 2.5	Pass
		0	3.85	-1.531	-0.0018	-2.5 to 2.5	Pass
		10	3.85	-0.851	-0.0010	-2.5 to 2.5	Pass
		30	3.85	-0.050	-0.0001	-2.5 to 2.5	Pass

HSUPA		40	3.85	0.093	0.0001	-2.5 to 2.5	Pass
		50	3.85	0.851	0.0010	-2.5 to 2.5	Pass
	826.4	20	3.27	-3.347	-0.0041	-2.5 to 2.5	Pass
			3.85	-5.050	-0.0061	-2.5 to 2.5	Pass
			4.43	-9.570	-0.0116	-2.5 to 2.5	Pass
		-30	3.85	-15.335	-0.0186	-2.5 to 2.5	Pass
		-20	3.85	-10.479	-0.0127	-2.5 to 2.5	Pass
		-10	3.85	-5.400	-0.0065	-2.5 to 2.5	Pass
		0	3.85	-7.181	-0.0087	-2.5 to 2.5	Pass
		10	3.85	-9.134	-0.0111	-2.5 to 2.5	Pass
		30	3.85	-11.573	-0.0140	-2.5 to 2.5	Pass
		40	3.85	-11.258	-0.0136	-2.5 to 2.5	Pass
		50	3.85	-14.269	-0.0173	-2.5 to 2.5	Pass
	836.6	20	3.27	-3.254	-0.0039	-2.5 to 2.5	Pass
			3.85	-10.171	-0.0122	-2.5 to 2.5	Pass
			4.43	-11.237	-0.0134	-2.5 to 2.5	Pass
		-30	3.85	-17.695	-0.0212	-2.5 to 2.5	Pass
		-20	3.85	-9.942	-0.0119	-2.5 to 2.5	Pass
		-10	3.85	-10.765	-0.0129	-2.5 to 2.5	Pass
		0	3.85	-10.650	-0.0127	-2.5 to 2.5	Pass
		10	3.85	-8.647	-0.0103	-2.5 to 2.5	Pass
		30	3.85	-13.225	-0.0158	-2.5 to 2.5	Pass
		40	3.85	-13.647	-0.0163	-2.5 to 2.5	Pass
		50	3.85	-13.897	-0.0166	-2.5 to 2.5	Pass
	846.6	20	3.27	-9.463	-0.0112	-2.5 to 2.5	Pass
			3.85	-11.630	-0.0137	-2.5 to 2.5	Pass
			4.43	-9.348	-0.0110	-2.5 to 2.5	Pass
		-30	3.85	-11.752	-0.0139	-2.5 to 2.5	Pass
		-20	3.85	-15.049	-0.0178	-2.5 to 2.5	Pass
		-10	3.85	-7.539	-0.0089	-2.5 to 2.5	Pass
		0	3.85	-12.789	-0.0151	-2.5 to 2.5	Pass
		10	3.85	-12.031	-0.0142	-2.5 to 2.5	Pass
		30	3.85	-13.289	-0.0157	-2.5 to 2.5	Pass
		40	3.85	-8.590	-0.0101	-2.5 to 2.5	Pass
		50	3.85	-8.326	-0.0098	-2.5 to 2.5	Pass

3. Modulation Characteristics

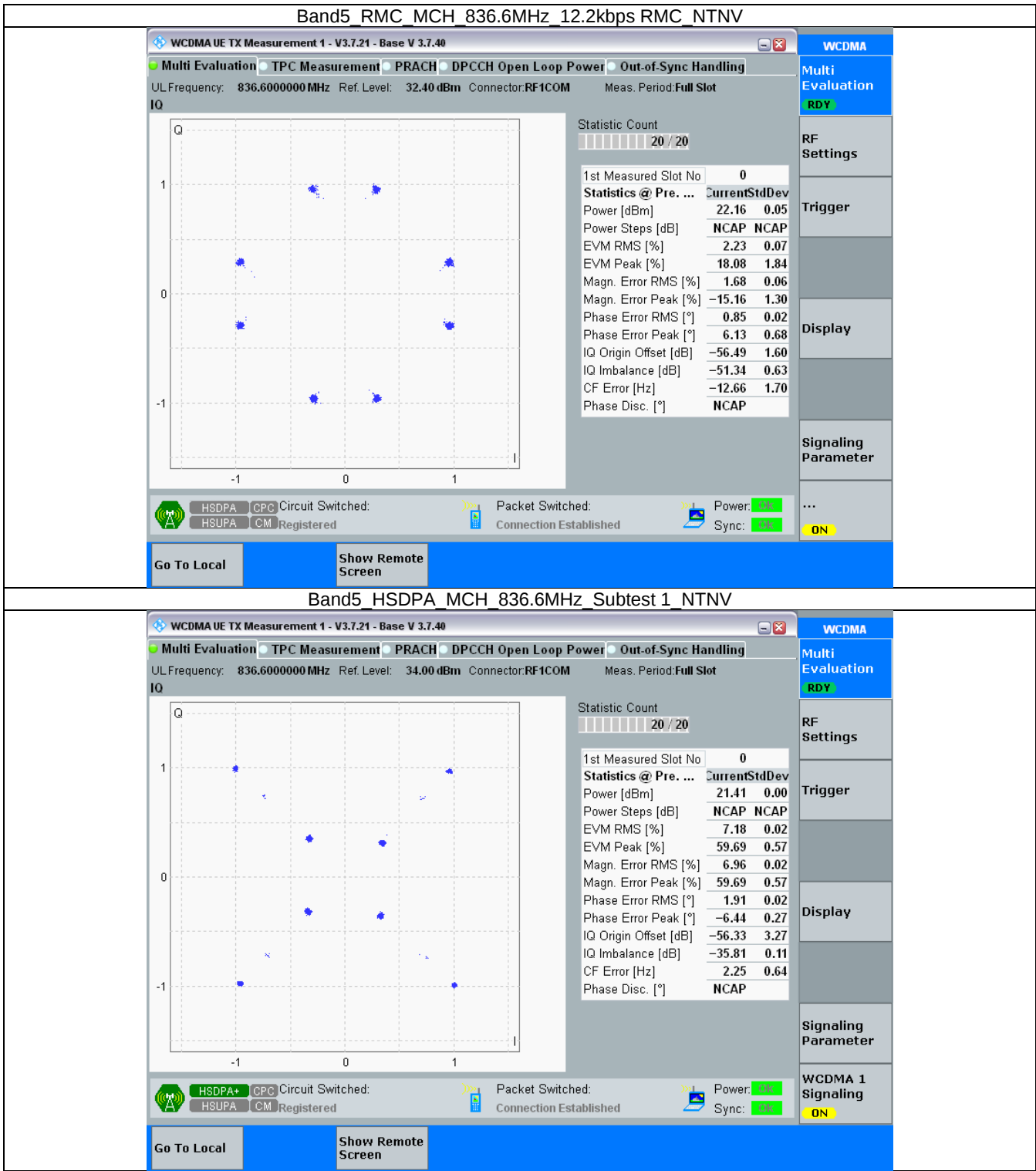
3.1 Test Result

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 HSUPA MCH 836.6MHz Subtest 1 NTN

WCDMA UE TX Measurement 1 - V3.7.21 - Base V 3.7.40

Multi Evaluation

TPC Measurement

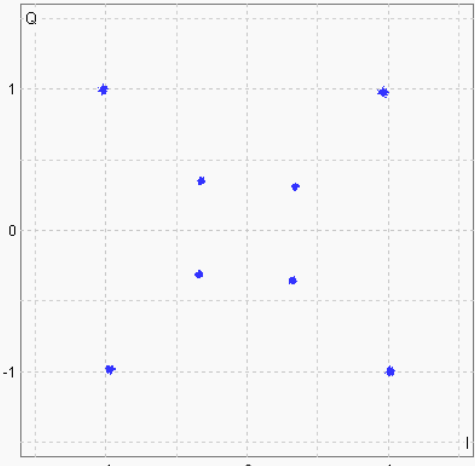
PRACH

DPCCH Open Loop Power

Out-of-Sync Handling

UL Frequency: 836.600000 MHz Ref. Level: 35.50 dBm Connector: RF1COM Meas. Period: Full Slot

IQ



Statistic Count

20 / 20

1st Measured Slot No

0

Statistics @ Pre. ...

CurrentStdDev

Power [dBm]

19.66 2.48

Power Steps [dB]

NCAP NCAP

EVM RMS [%]

2.87 0.22

EVM Peak [%]

6.53 3.42

Magn. Error RMS [%]

1.97 0.05

Magn. Error Peak [%]

-5.50 2.68

Phase Error RMS [°]

2.22 0.62

Phase Error Peak [°]

-5.89 1.37

IQ Origin Offset [dB]

-54.60 3.39

IQ Imbalance [dB]

-35.80 0.08

CF Error [Hz]

11.70 7.34

Phase Disc. [°]

NCAP

HSDPA+ CPO Circuit Switched:

HSUPA CM Registered

Packet Switched:

Connection Established

Power: 5%

Sync: 100%

Go To Local

Show Remote Screen

WCDMA

Multi Evaluation

RDY

RF Settings

Trigger

Display

Signaling Parameter

WCDMA 1 Signaling

ON

4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band5_OBW

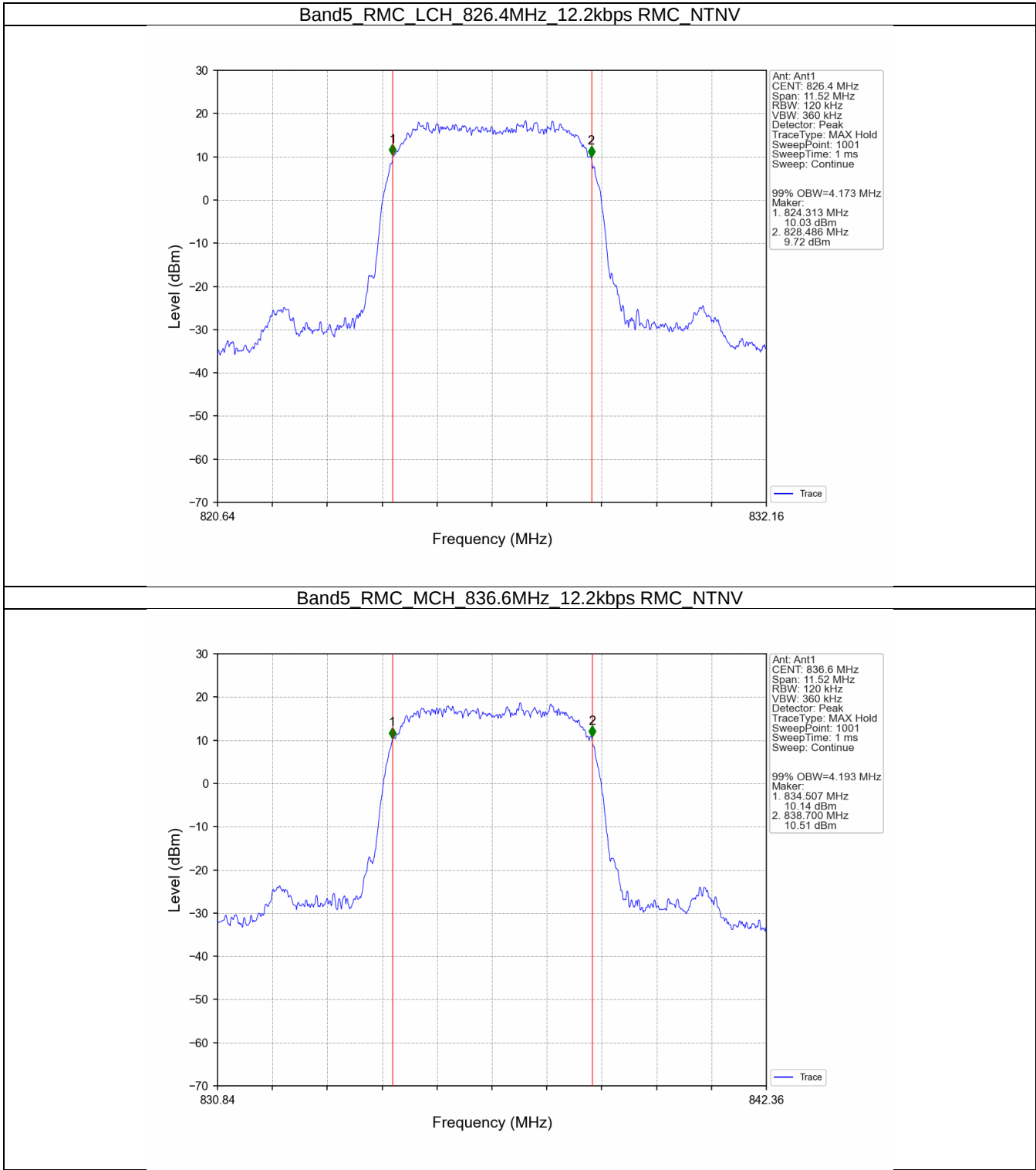
Band: 5						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.173	/	Pass
			836.6	4.193	/	Pass
			846.6	4.199	/	Pass
	HSDPA	Subtest 1	826.4	4.197	/	Pass
			836.6	4.259	/	Pass
			846.6	4.239	/	Pass
	HSUPA	Subtest 1	826.4	4.221	/	Pass
			836.6	4.230	/	Pass
			846.6	4.212	/	Pass

4.1.2 Band5_XDB

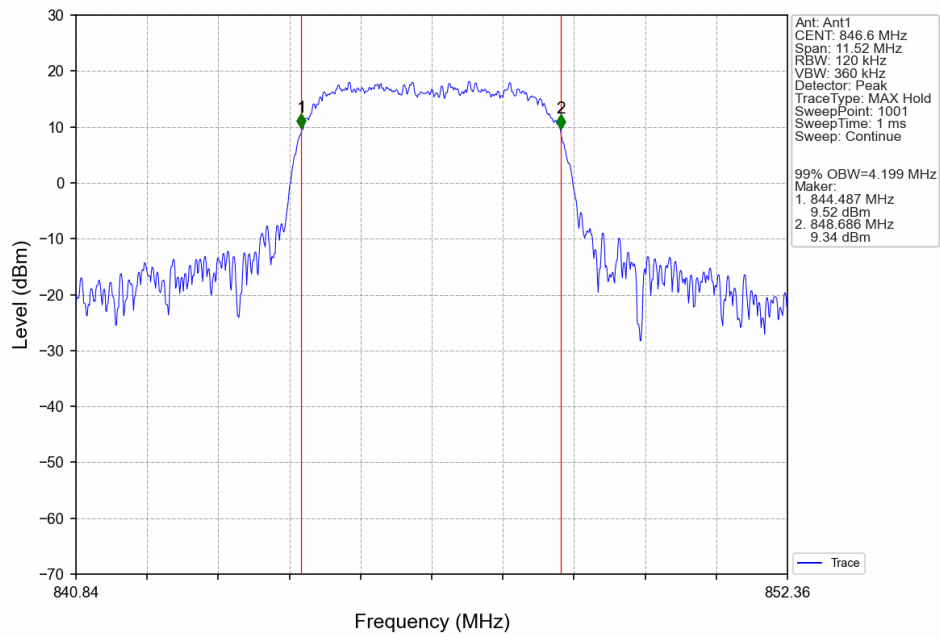
Band: 5						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.751	/	Pass
			836.6	4.739	/	Pass
			846.6	5.120	/	Pass
	HSDPA	Subtest 1	826.4	4.735	/	Pass
			836.6	6.039	/	Pass
			846.6	5.405	/	Pass
	HSUPA	Subtest 1	826.4	4.960	/	Pass
			836.6	5.015	/	Pass
			846.6	4.953	/	Pass

4.2 Test Graph

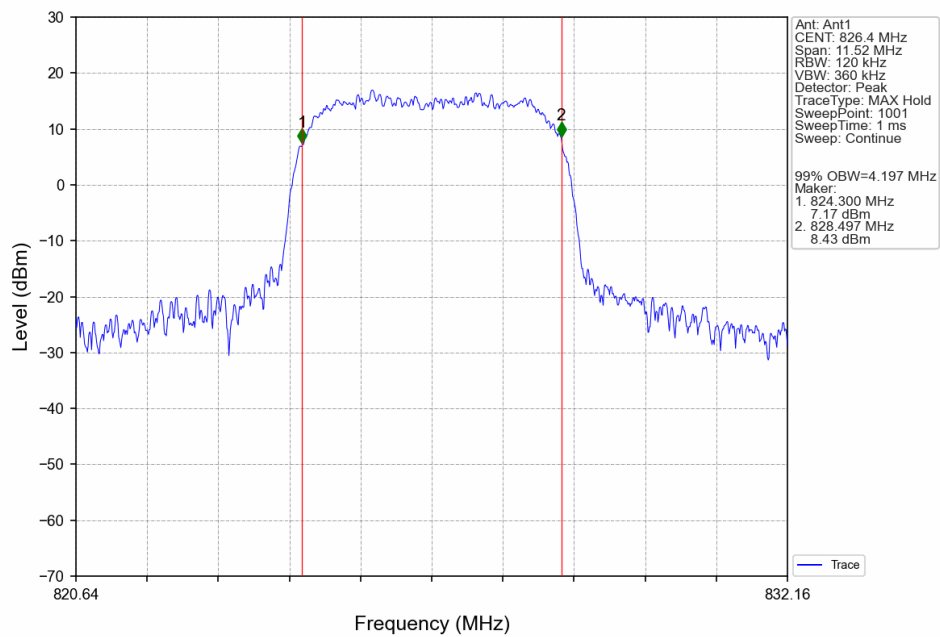
4.2.1 Band5_OBW



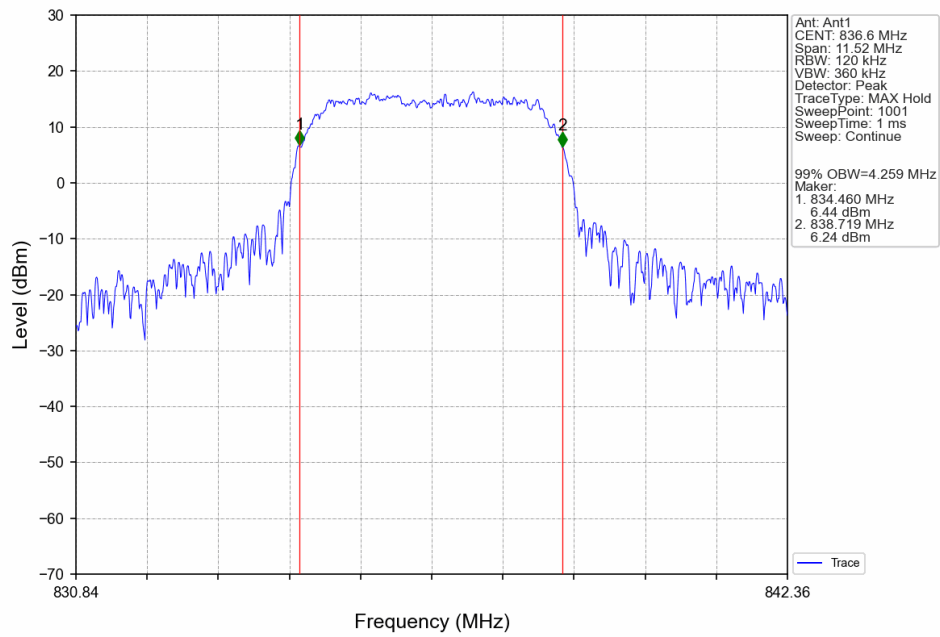
Band5 RMC HCH 846.6MHz 12.2kbps RMC NTN



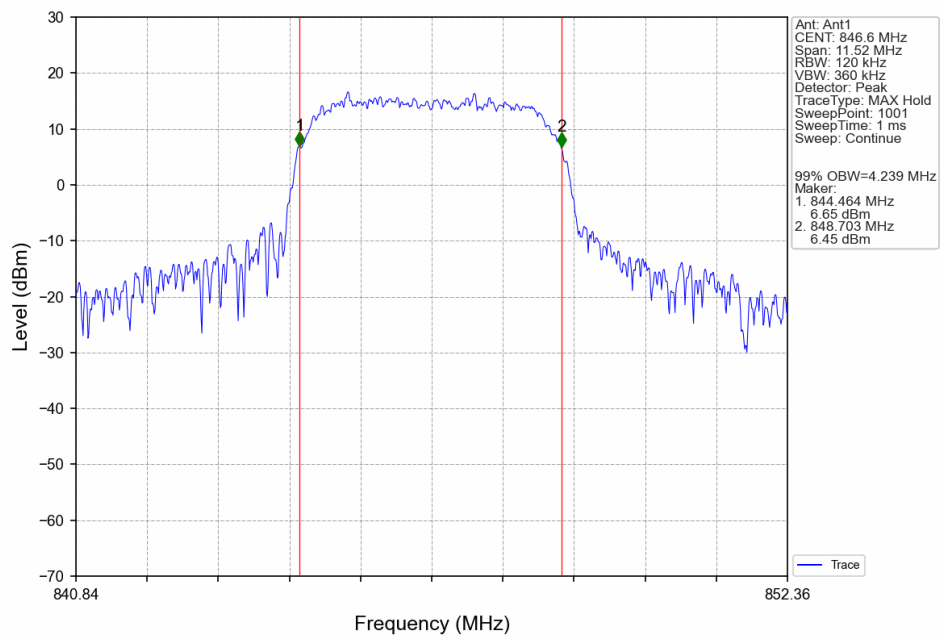
Band5 HSDPA LCH 826.4MHz Subtest 1 NTN



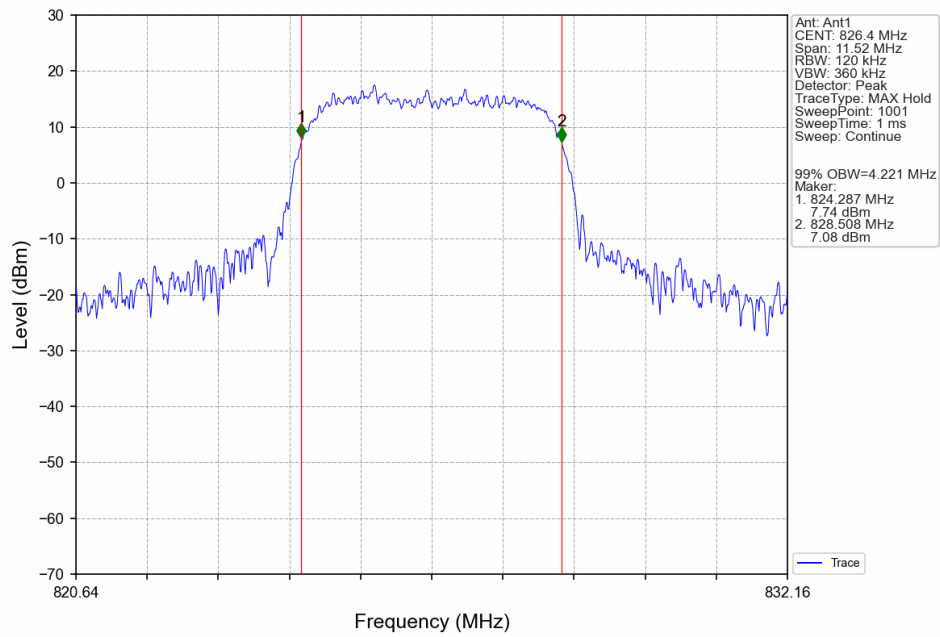
Band5 HSDPA MCH 836.6MHz Subtest 1 NTN



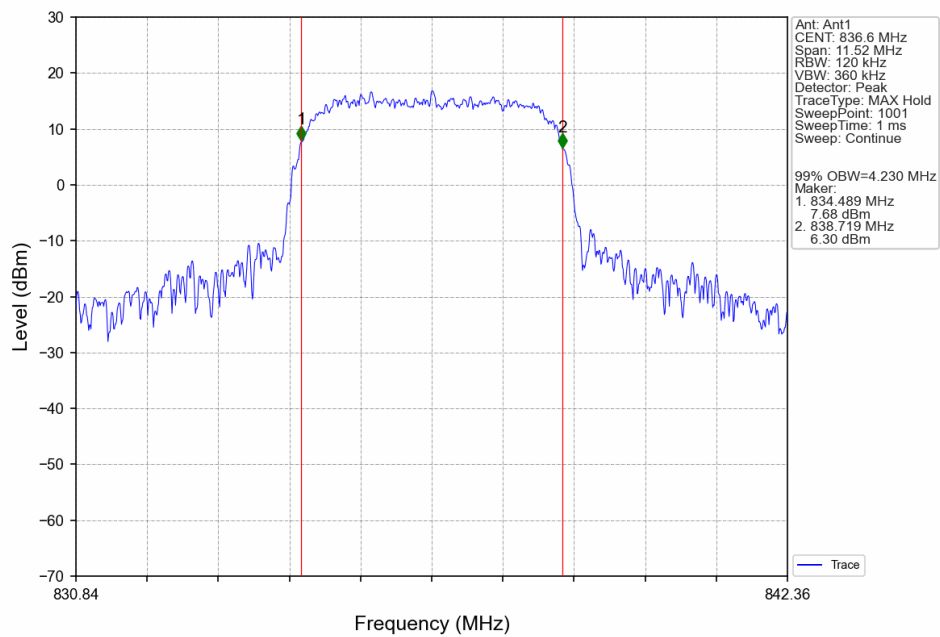
Band5 HSDPA HCH 846.6MHz Subtest 1 NTN



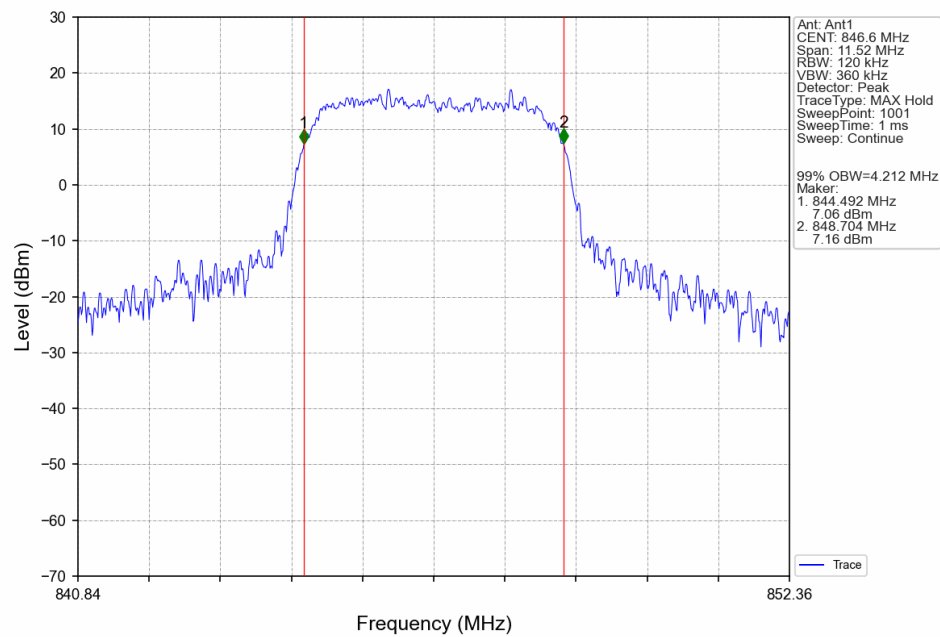
Band5 HSUPA LCH 826.4MHz Subtest 1 NTN



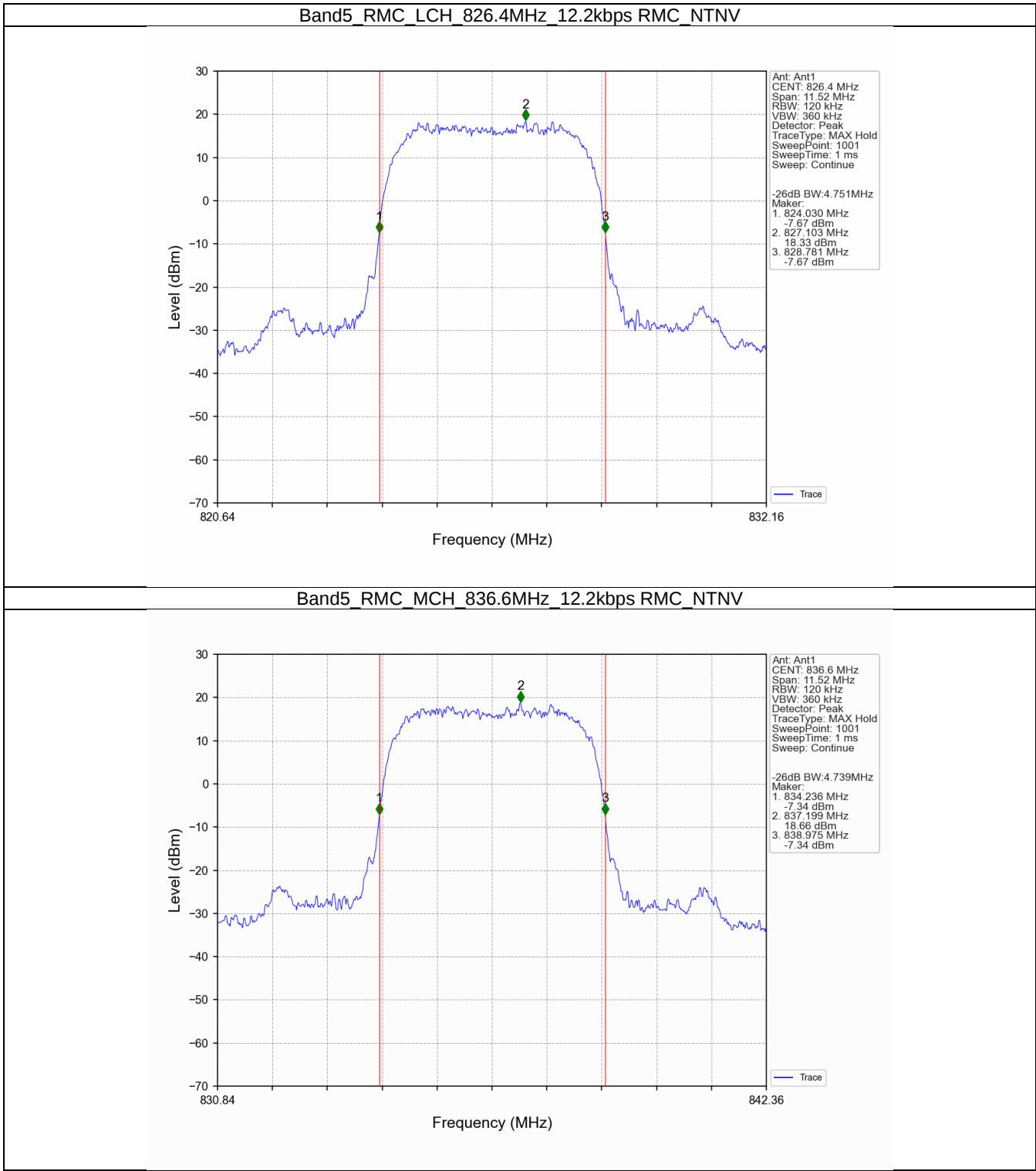
Band5 HSUPA MCH 836.6MHz Subtest 1 NTN



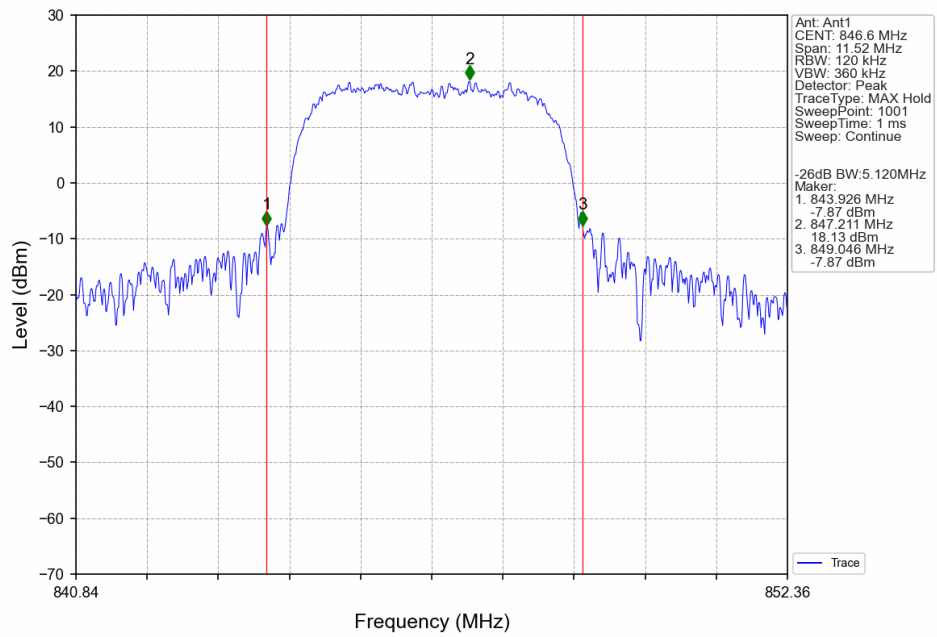
Band5 HSUPA HCH 846.6MHz Subtest 1 NTN



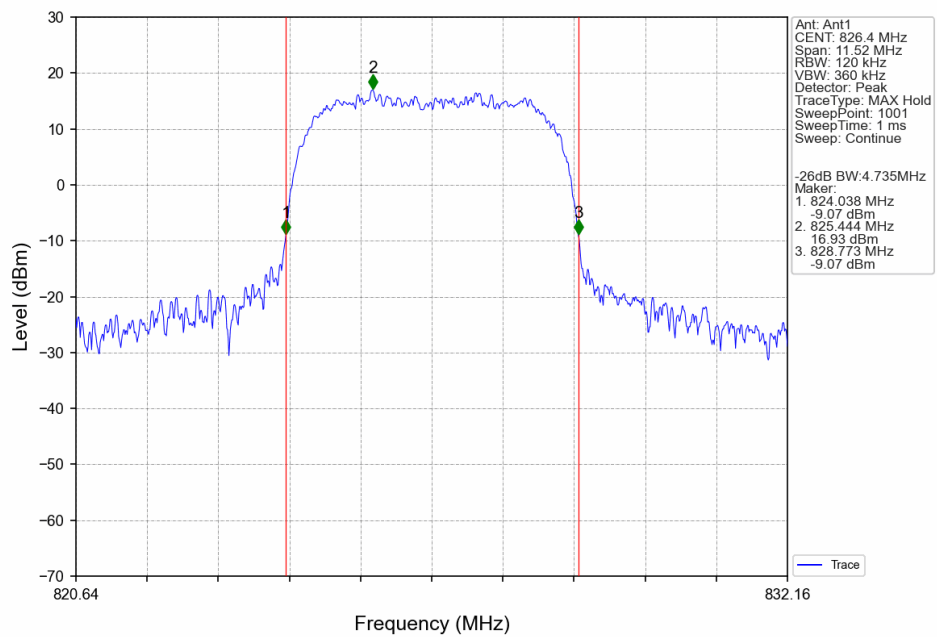
4.2.2 Band5_XDB



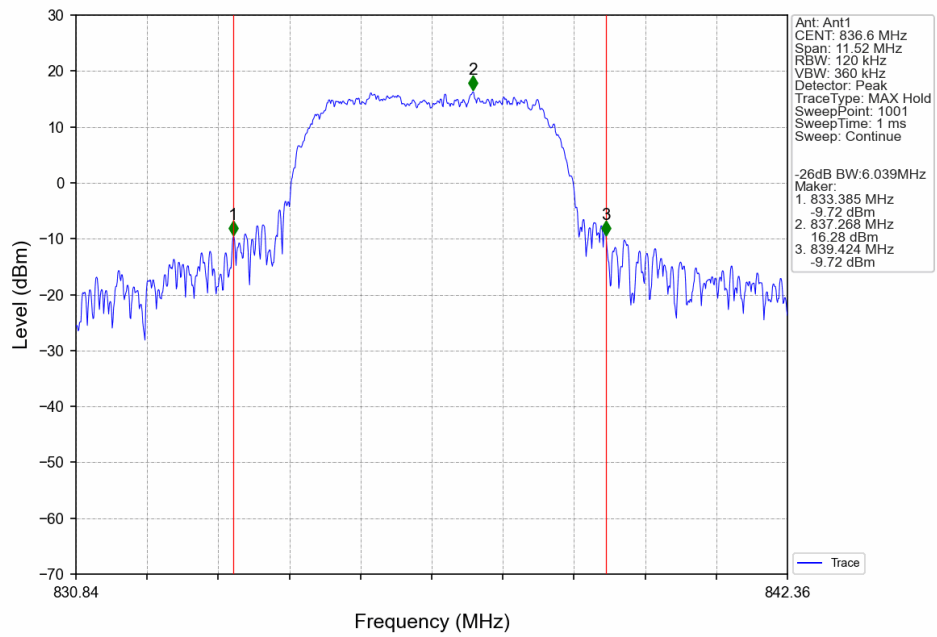
Band5 RMC HCH 846.6MHz 12.2kbps RMC NTN



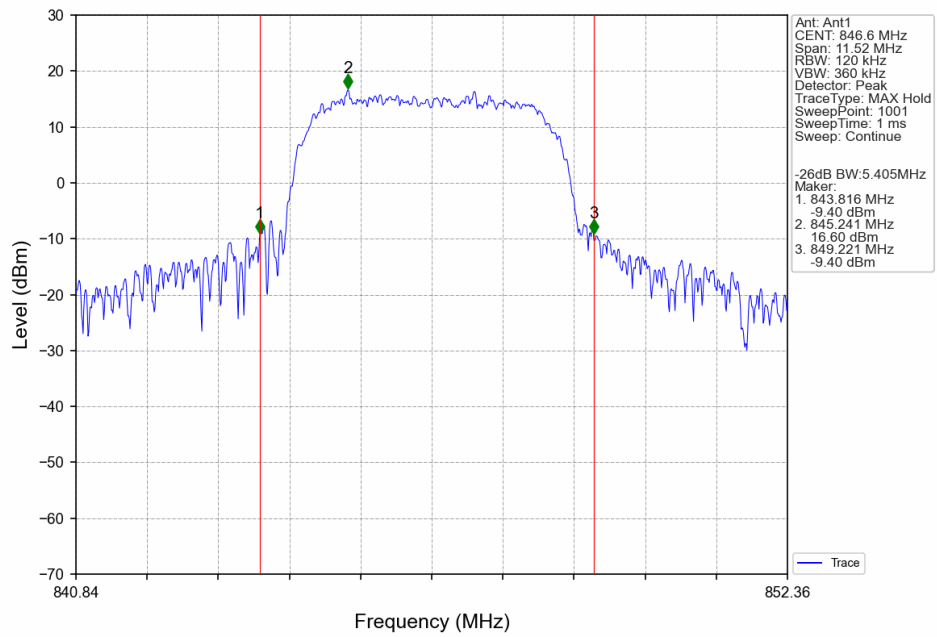
Band5 HSDPA LCH 826.4MHz Subtest 1 NTN



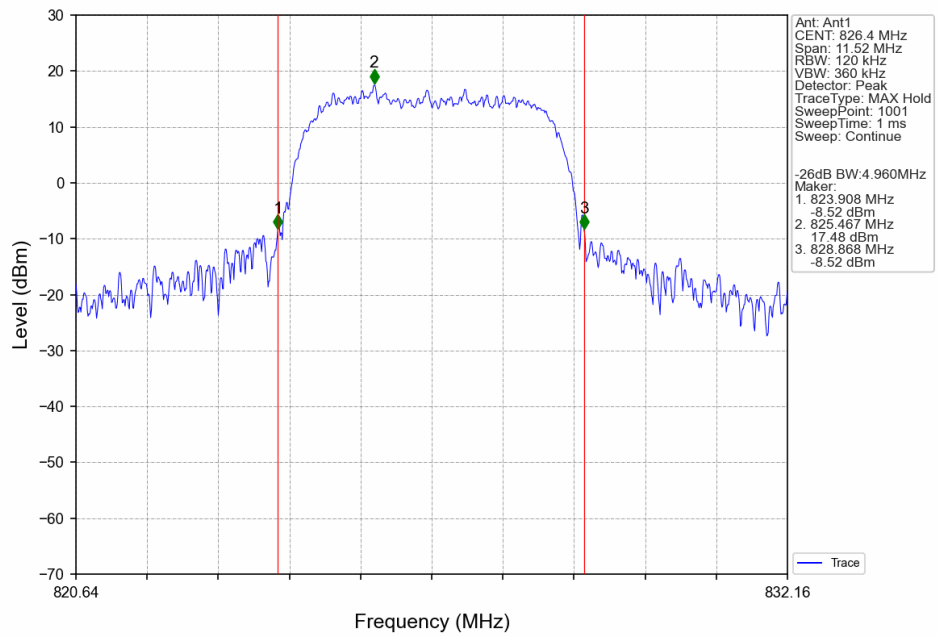
Band5 HSDPA MCH 836.6MHz Subtest 1 NTNV



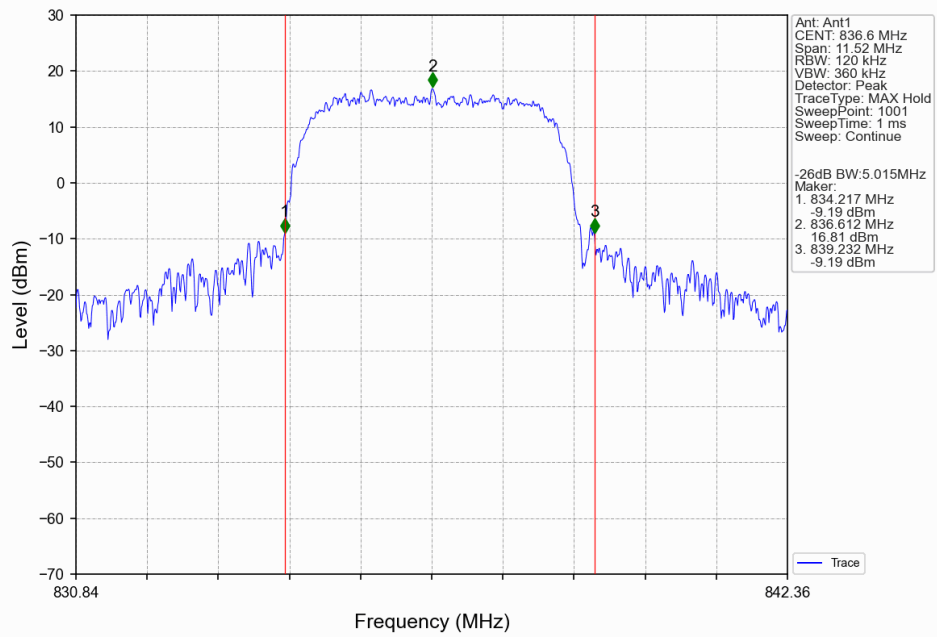
Band5 HSDPA HCH 846.6MHz Subtest 1 NTNV



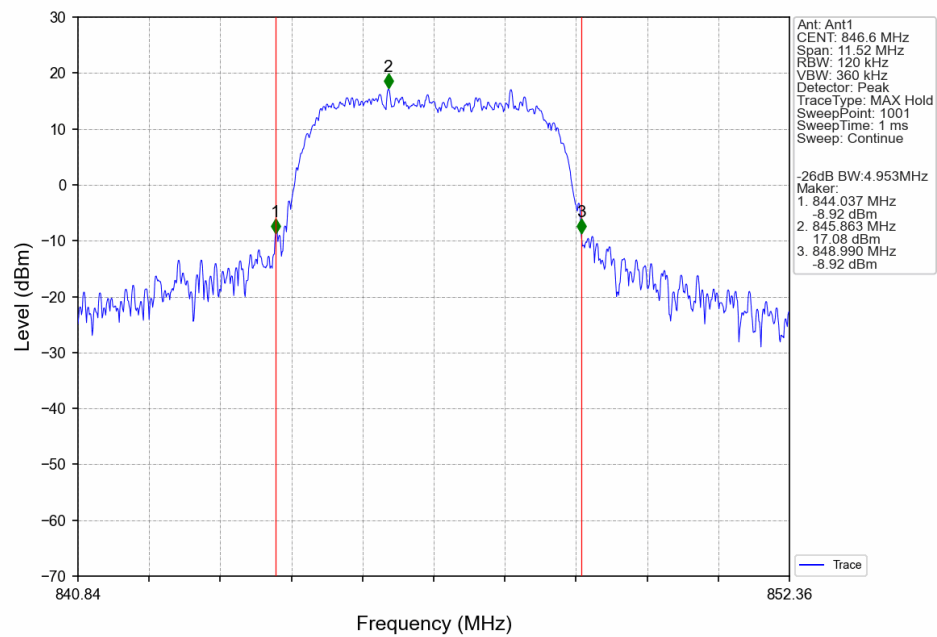
Band5 HSUPA LCH 826.4MHz Subtest 1 NTN



Band5 HSUPA MCH 836.6MHz Subtest 1 NTN



Band5 HSUPA HCH 846.6MHz Subtest 1 NTN



5. Peak-Average Ratio

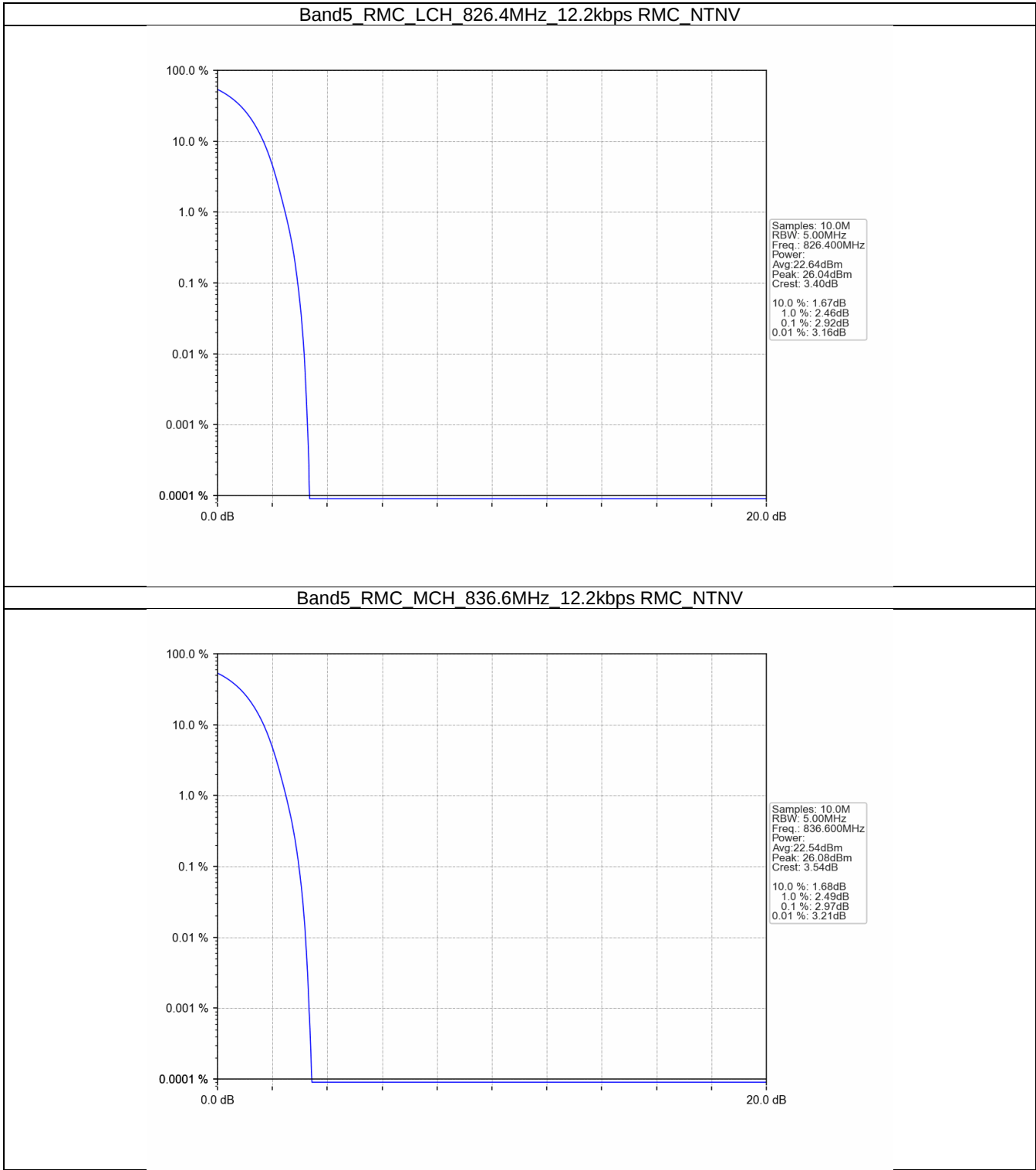
5.1 Test Result

5.1.1 Band5

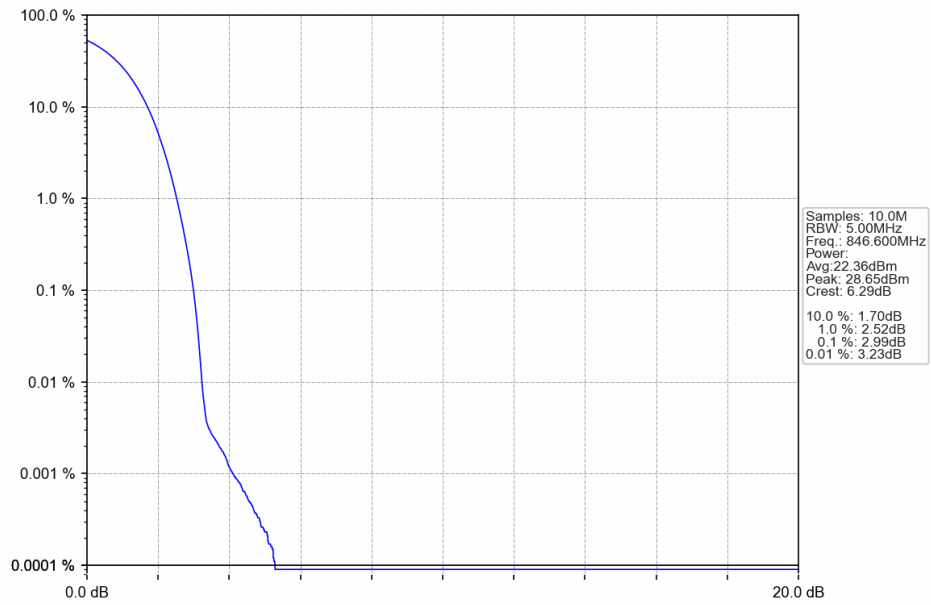
Band: 5						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.92	<=13	Pass
			836.6	2.97	<=13	Pass
			846.6	2.99	<=13	Pass
	HSDPA	Subtest 1	826.4	5.87	<=13	Pass
			836.6	5.88	<=13	Pass
			846.6	5.90	<=13	Pass
	HSUPA	Subtest 1	826.4	5.43	<=13	Pass
			836.6	5.62	<=13	Pass
			846.6	5.59	<=13	Pass

5.2 Test Graph

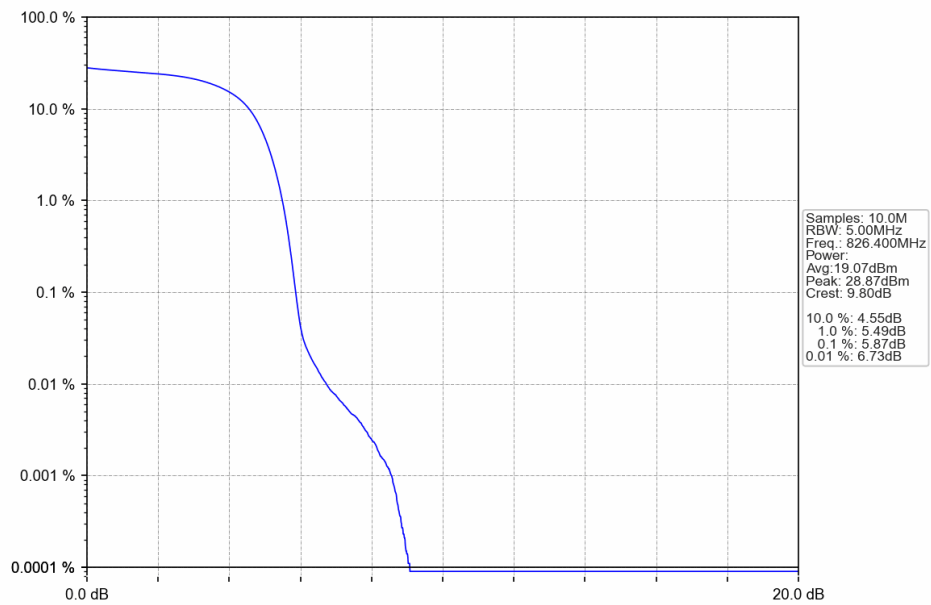
5.2.1 Band5



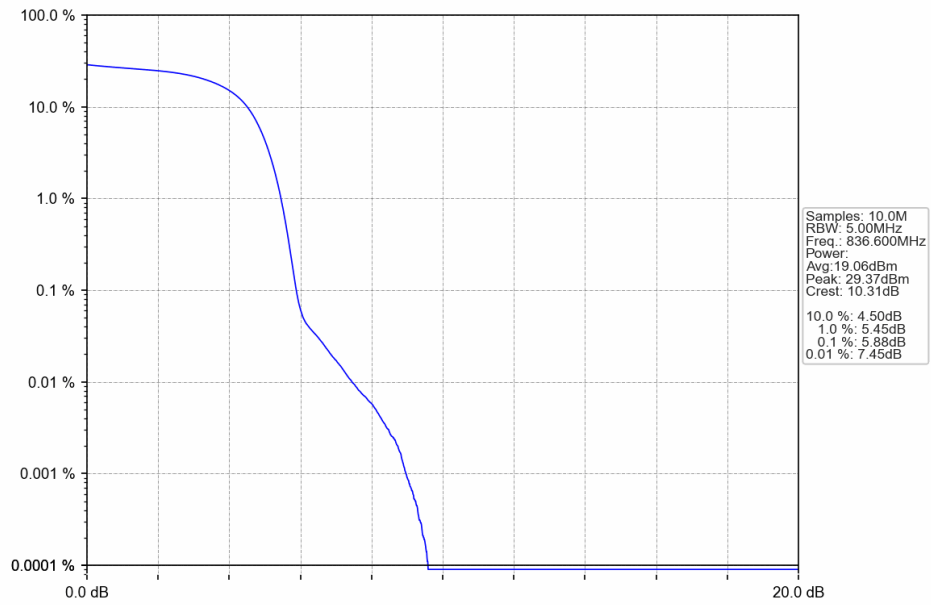
Band5 RMC HCH 846.6MHz 12.2kbps RMC NTN



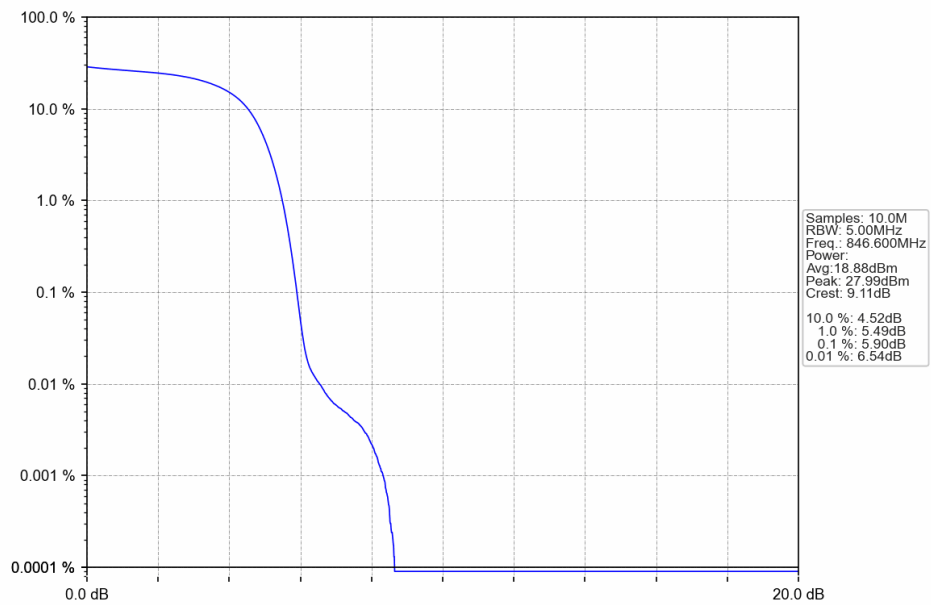
Band5 HSDPA LCH 826.4MHz Subtest 1 NTN



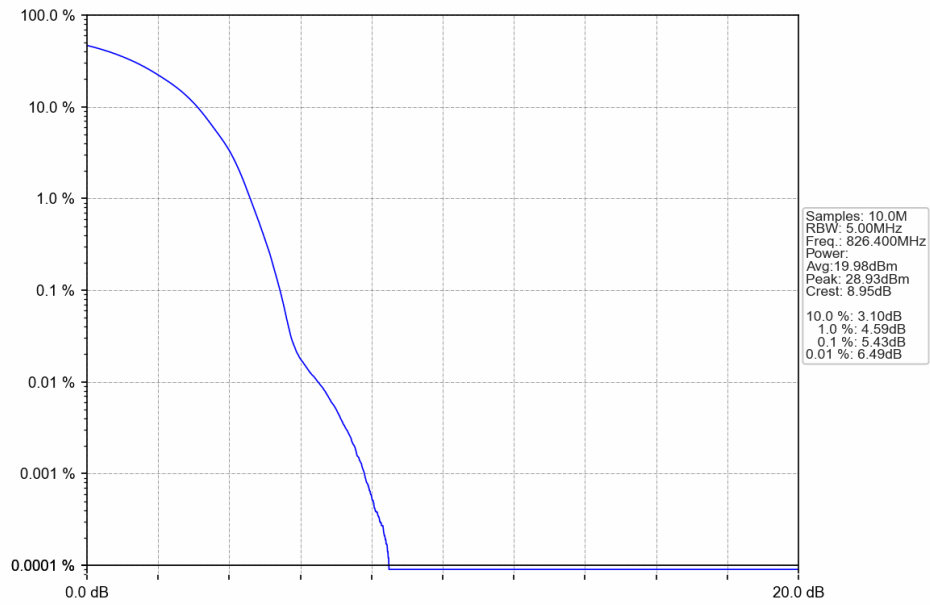
Band5 HSDPA MCH 836.6MHz Subtest 1 NTN



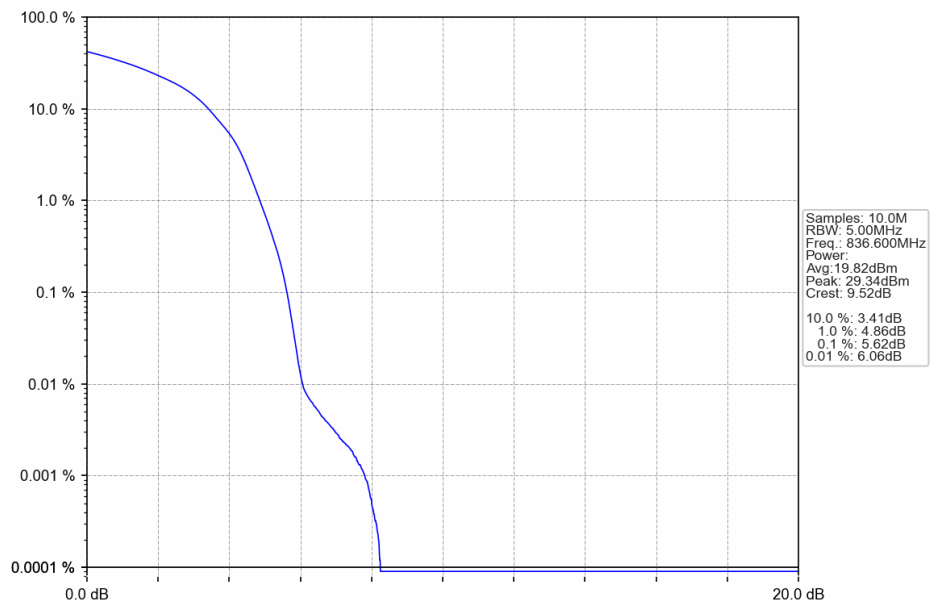
Band5 HSDPA HCH 846.6MHz Subtest 1 NTN



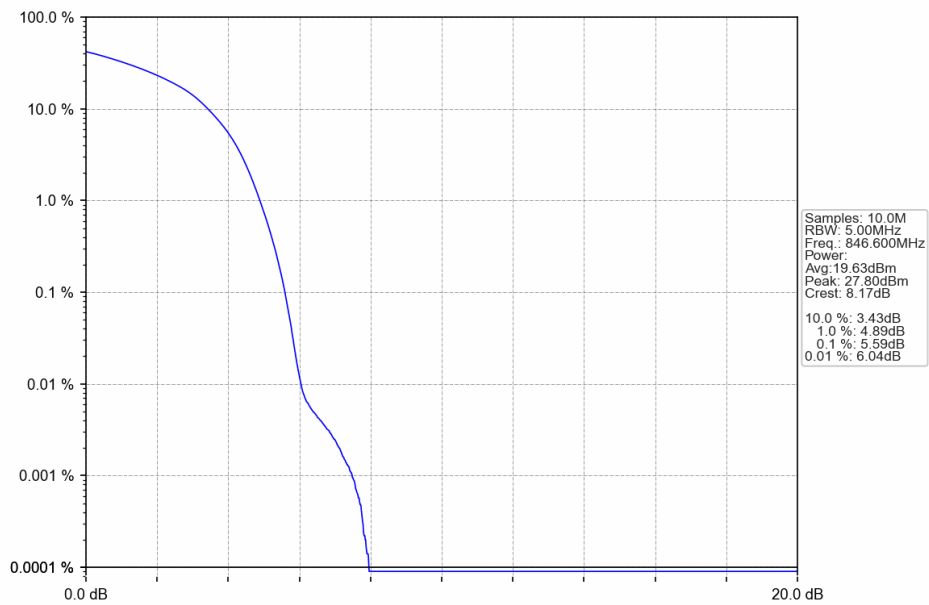
Band5 HSUPA LCH 826.4MHz Subtest 1 NTN



Band5 HSUPA MCH 836.6MHz Subtest 1 NTN



Band5 HSUPA HCH 846.6MHz Subtest 1 NTV



6. Spurious Emission

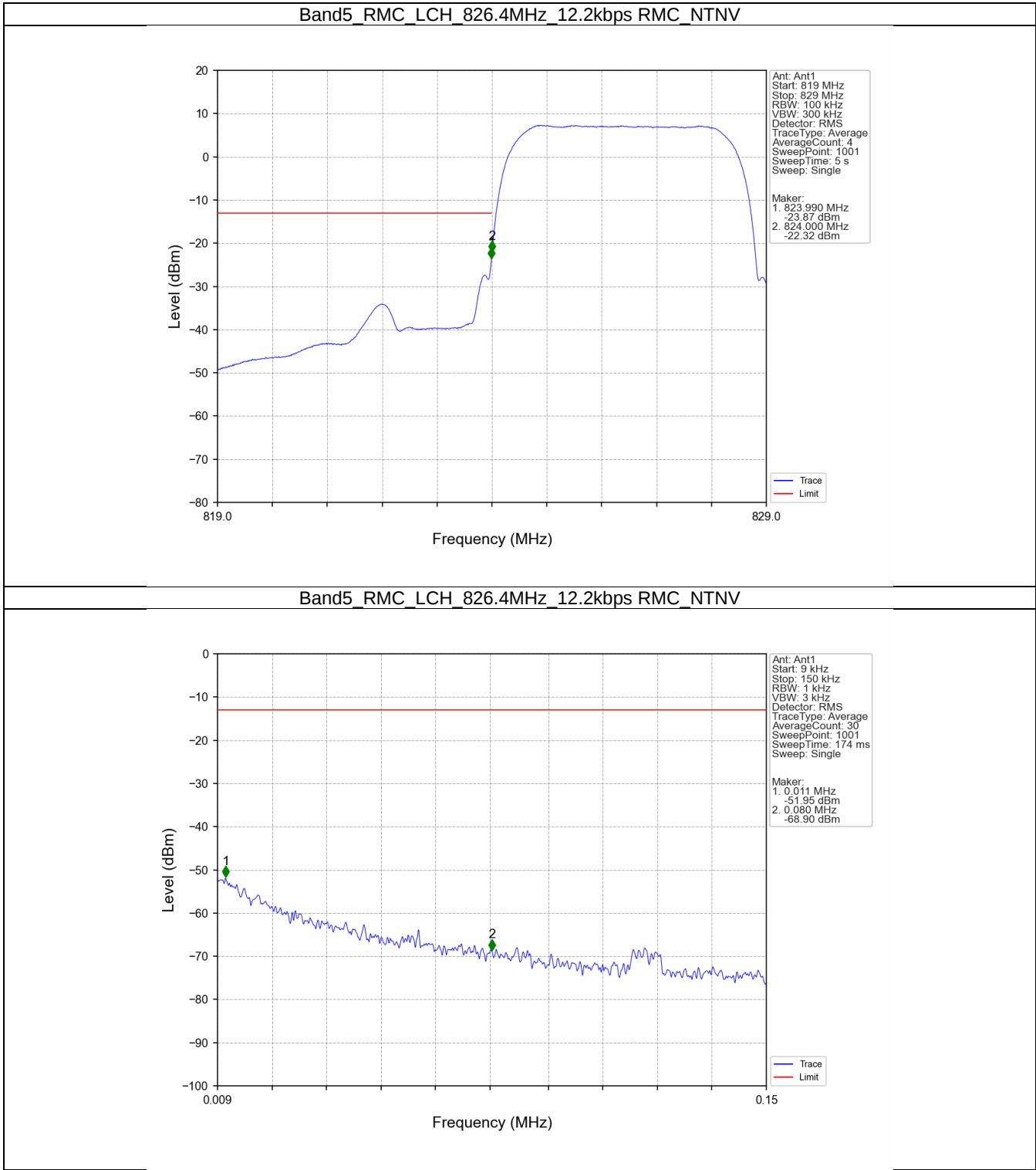
6.1 Test Result

6.1.1 Band5

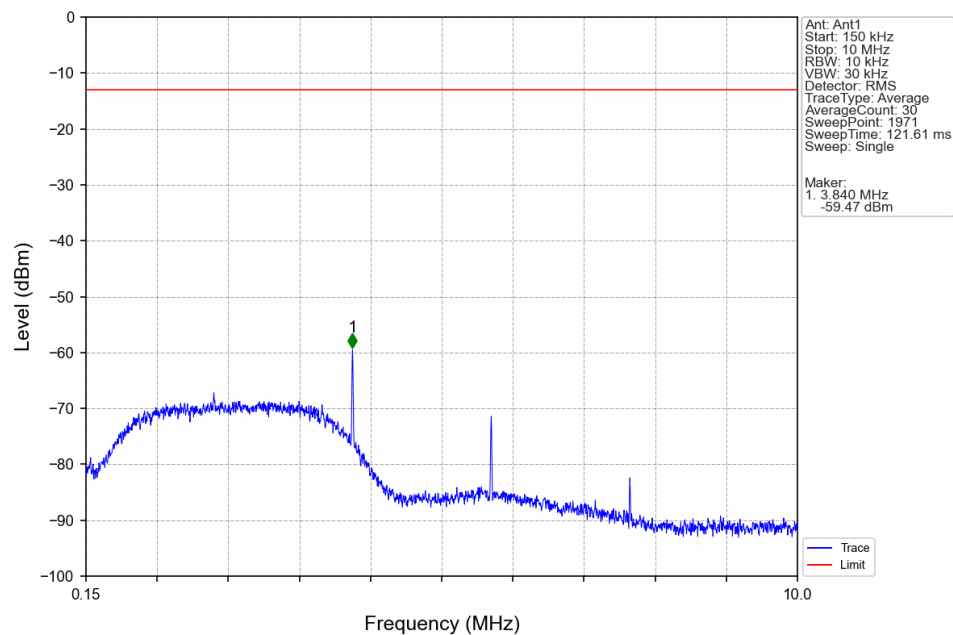
Band: 5						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph	Pass	
			846.6	Refer To Test Graph	Pass	
	HSDPA	Subtest 1	826.4	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph	Pass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

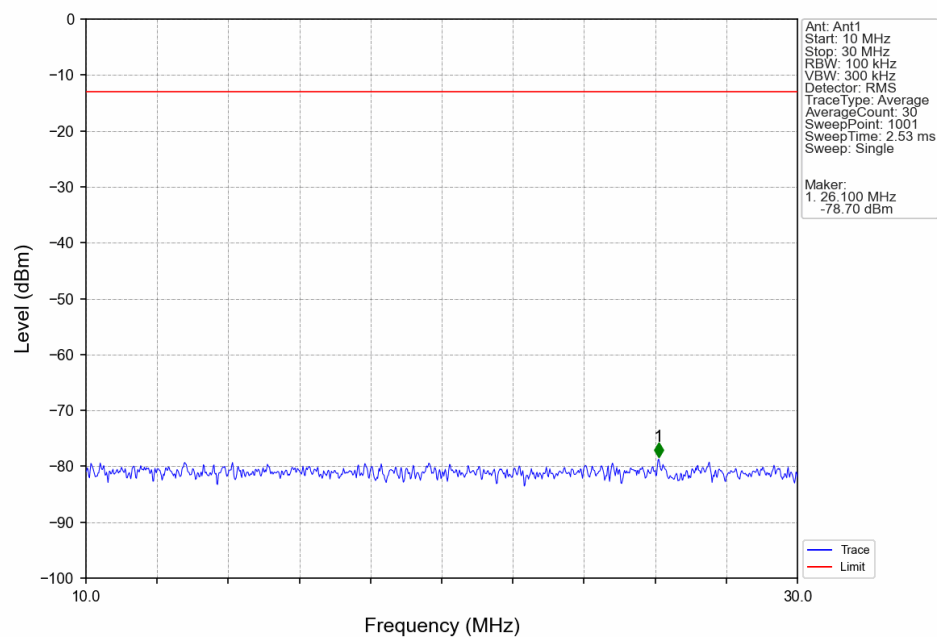
6.2.1 Band5



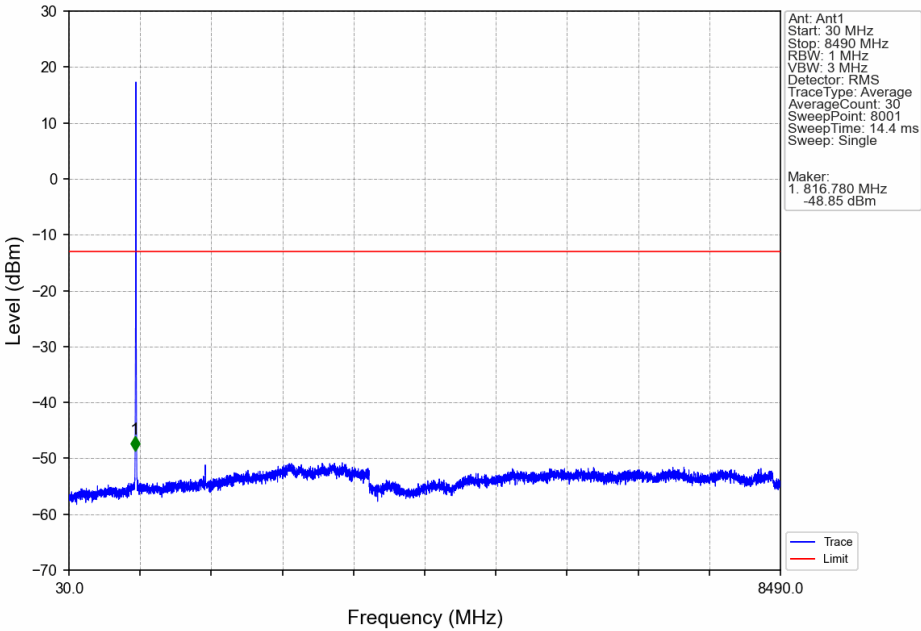
Band5_RMC_LCH_826.4MHz_12.2kbps_RMC_NTNV



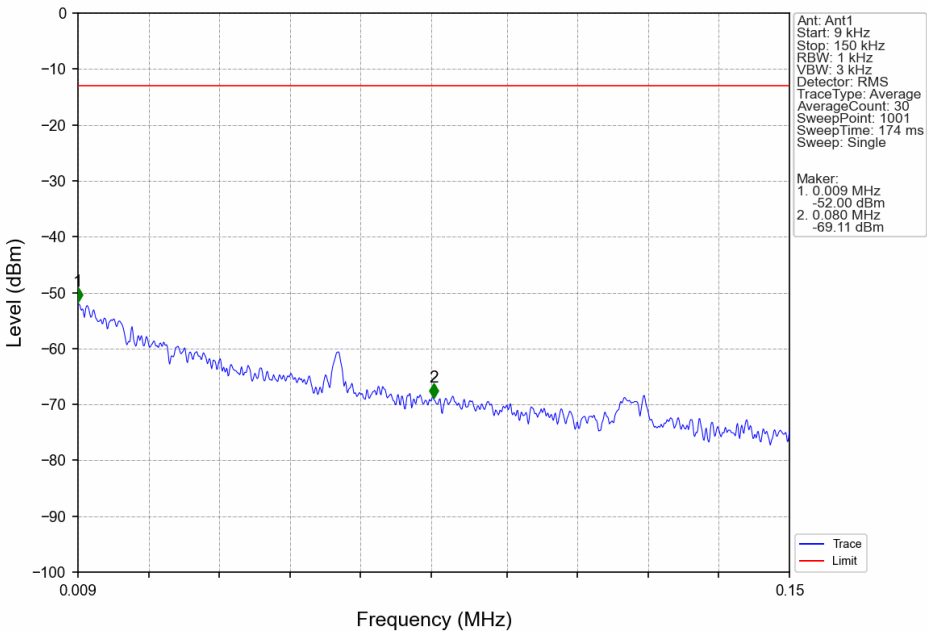
Band5_RMC_LCH_826.4MHz_12.2kbps_RMC_NTNV



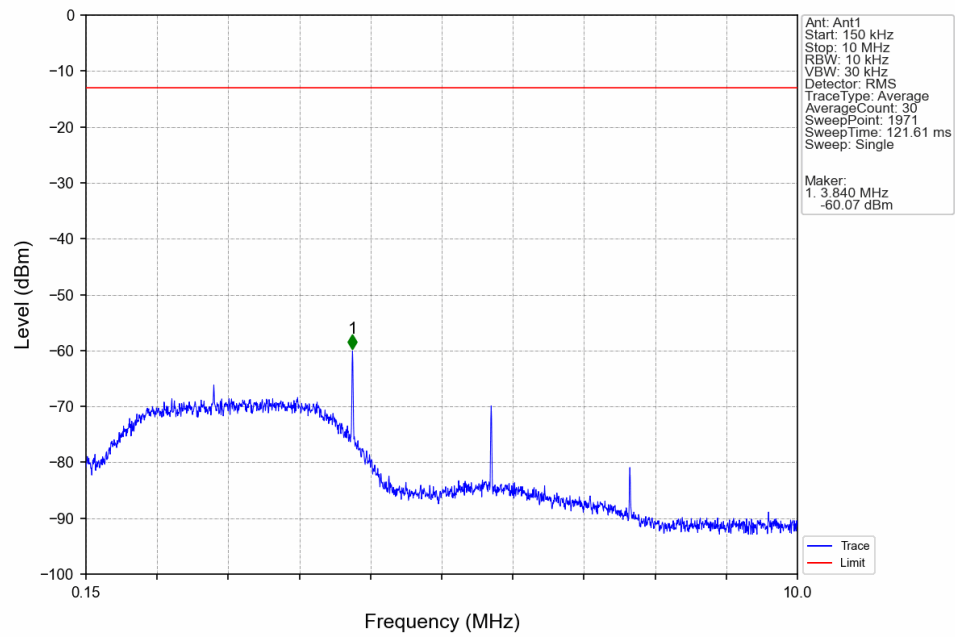
Band5 RMC LCH 826.4MHz 12.2kbps RMC NTN



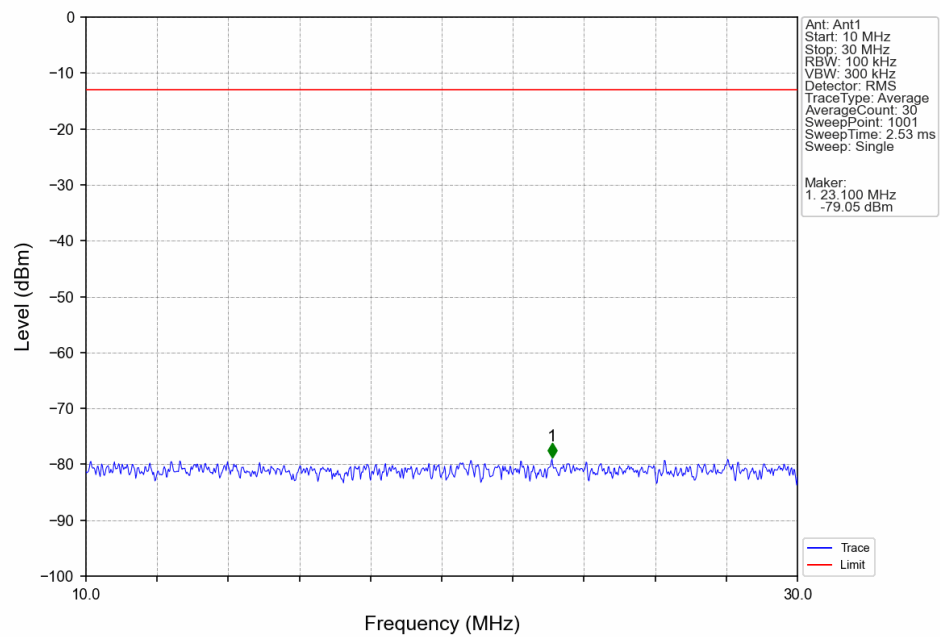
Band5 RMC MCH 836.6MHz 12.2kbps RMC NTN



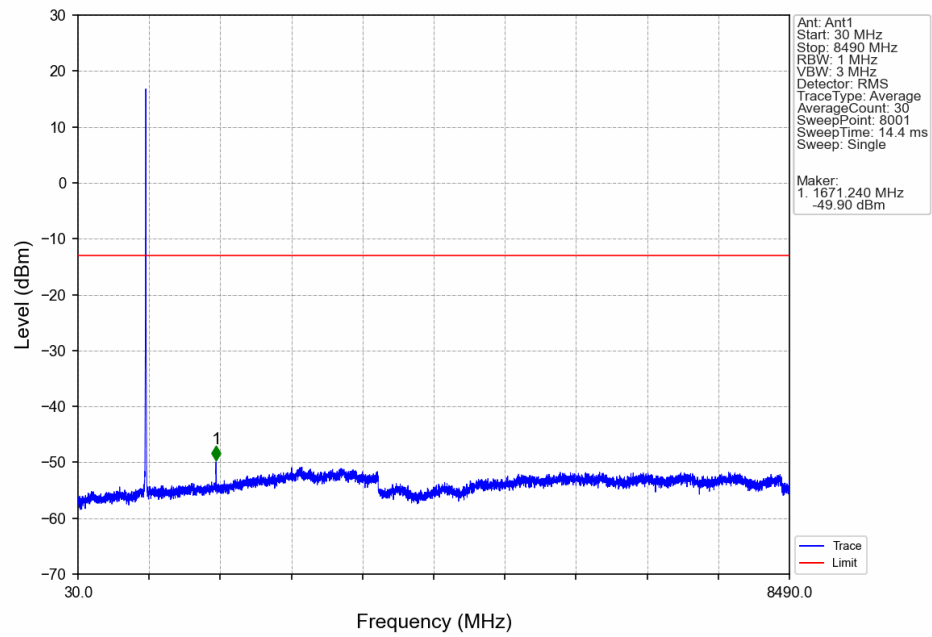
Band5 RMC MCH 836.6MHz 12.2kbps RMC NTN



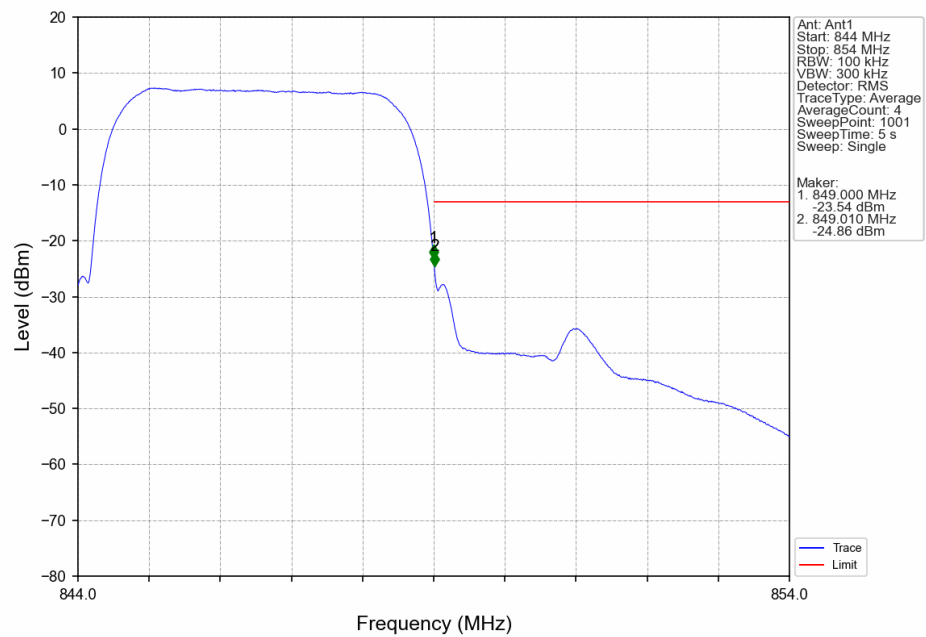
Band5 RMC MCH 836.6MHz 12.2kbps RMC NTN



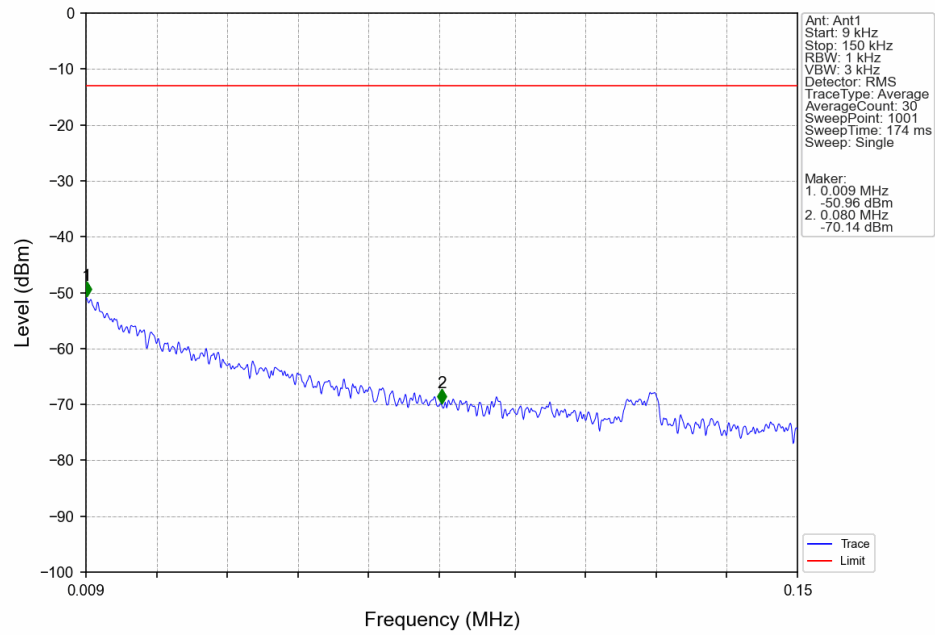
Band5 RMC MCH 836.6MHz 12.2kbps RMC NTN



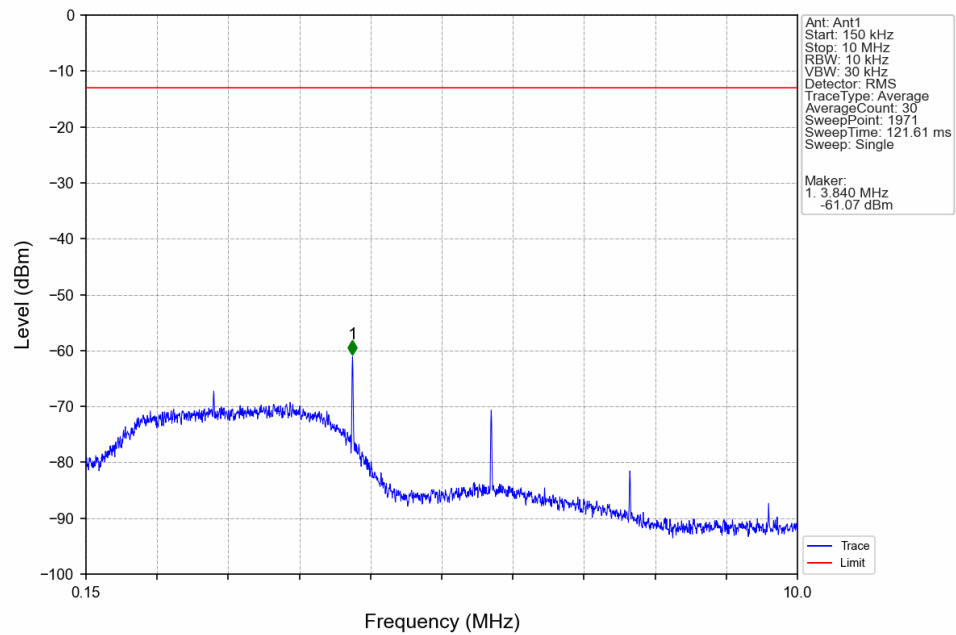
Band5 RMC HCH 846.6MHz 12.2kbps RMC NTN



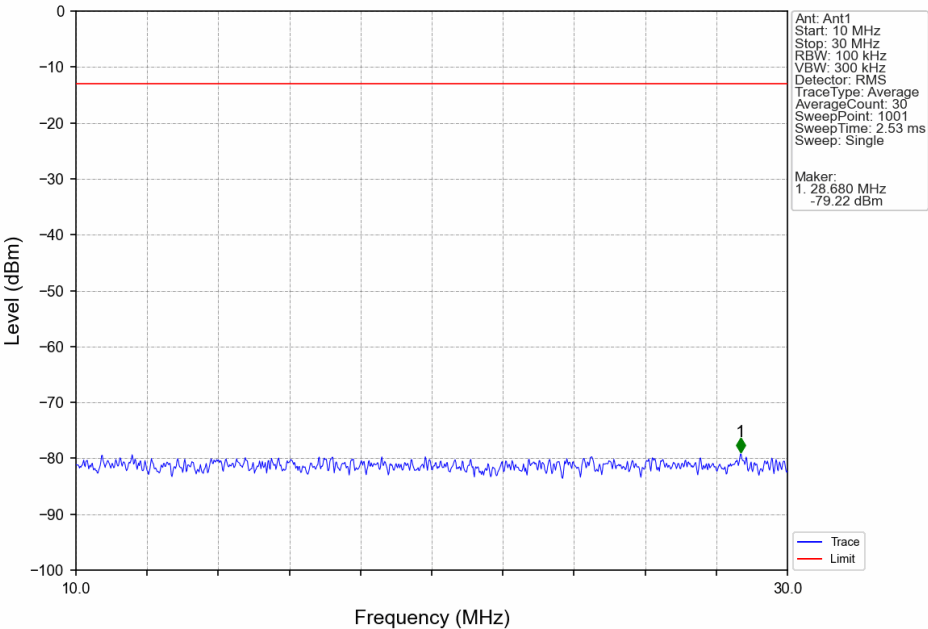
Band5 RMC HCH 846.6MHz 12.2kbps RMC NTN



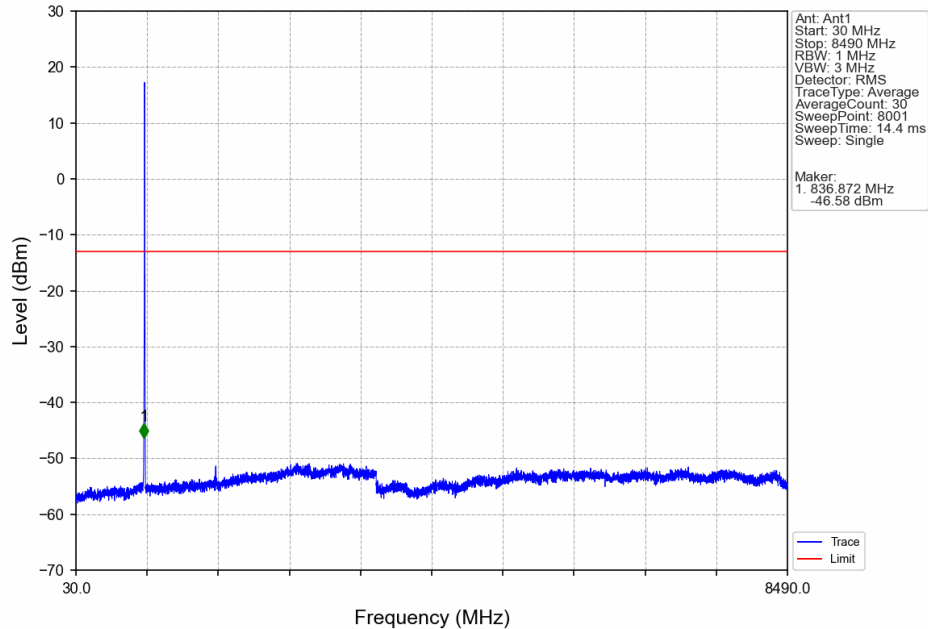
Band5 RMC HCH 846.6MHz 12.2kbps RMC NTN



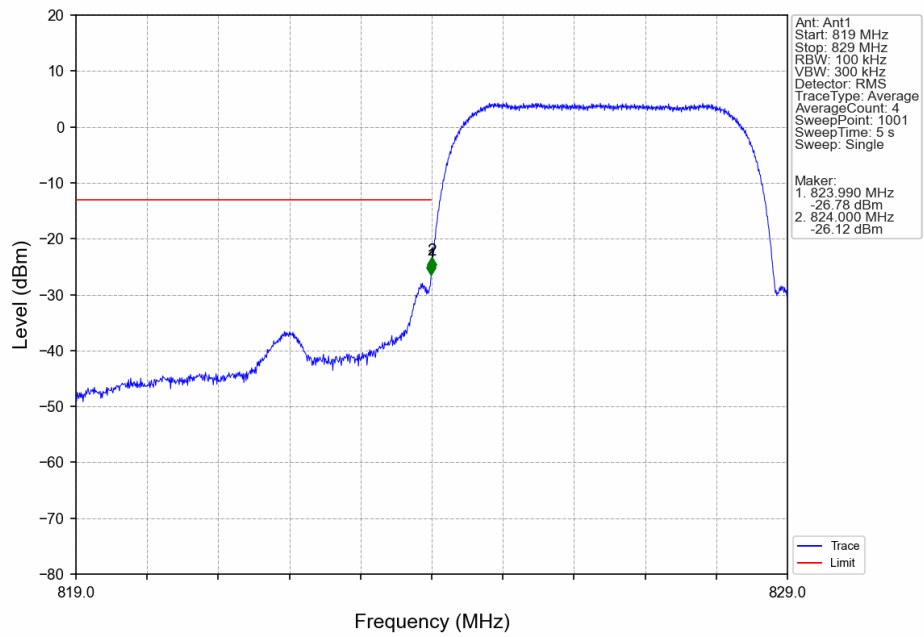
Band5 RMC HCH 846.6MHz 12.2kbps RMC NTN



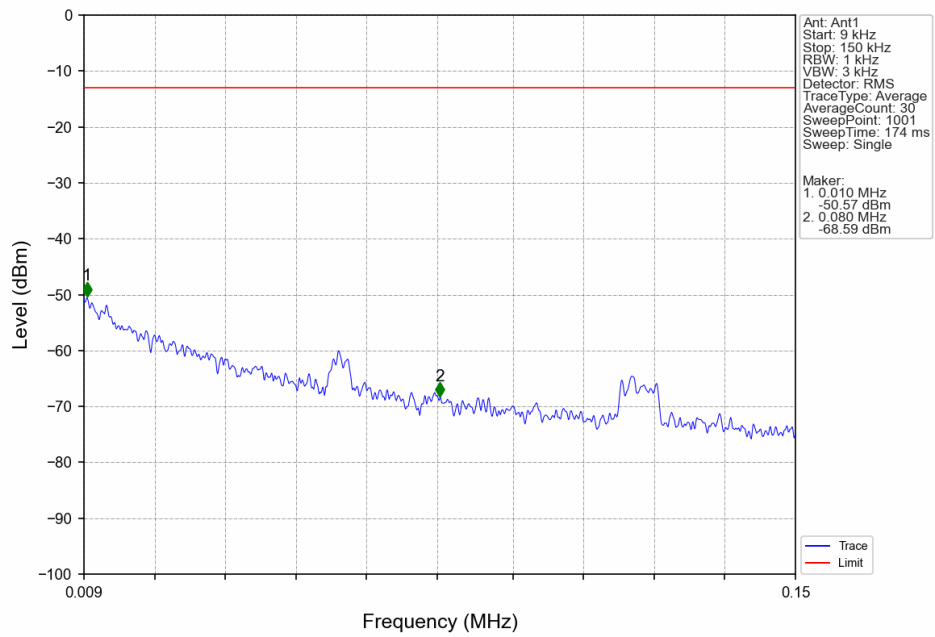
Band5 RMC HCH 846.6MHz 12.2kbps RMC NTN



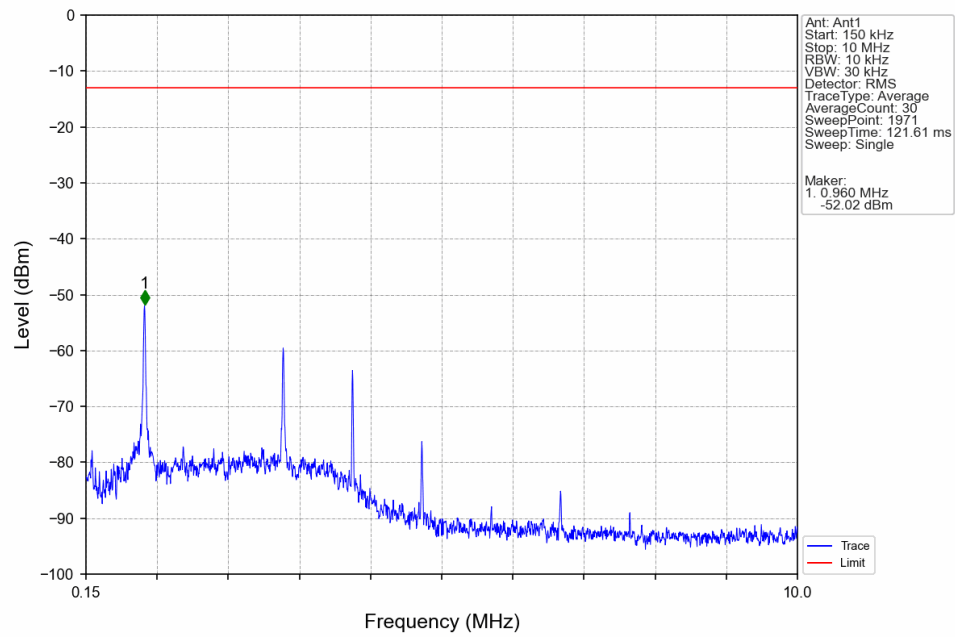
Band5 HSDPA LCH 826.4MHz Subtest 1 NTNV



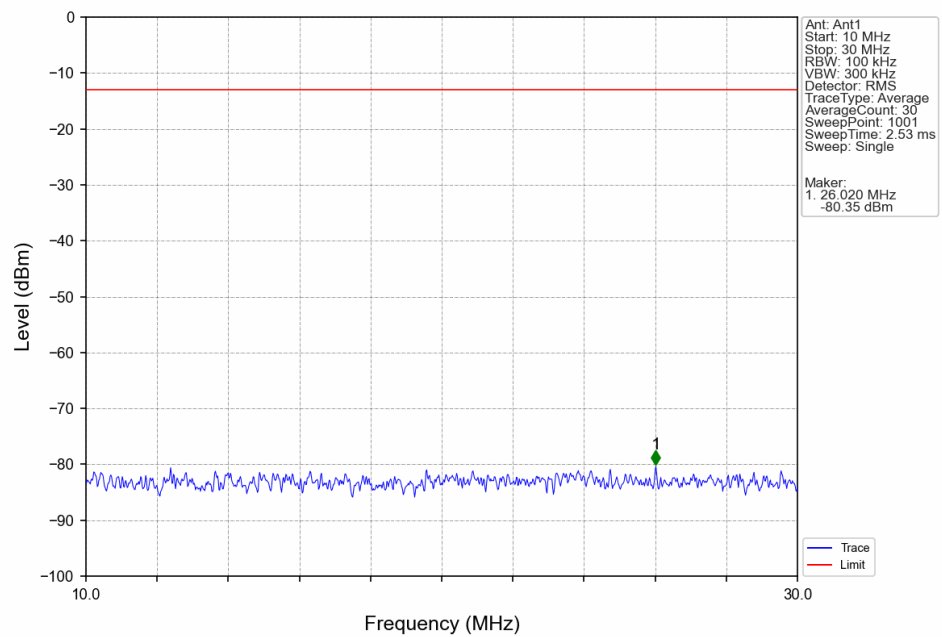
Band5 HSDPA LCH 826.4MHz Subtest 1 NTNV



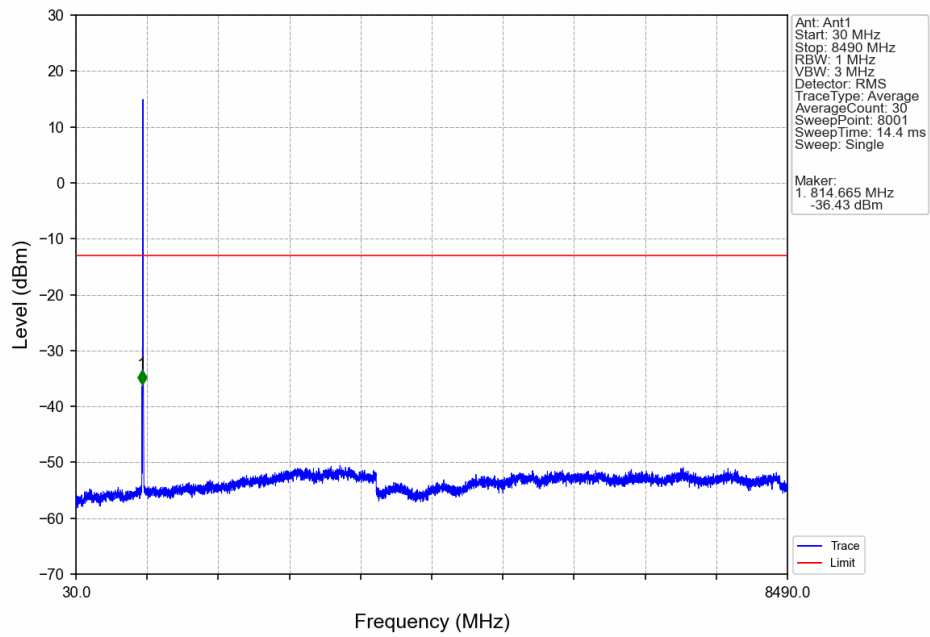
Band5 HSDPA LCH 826.4MHz Subtest 1 NTN



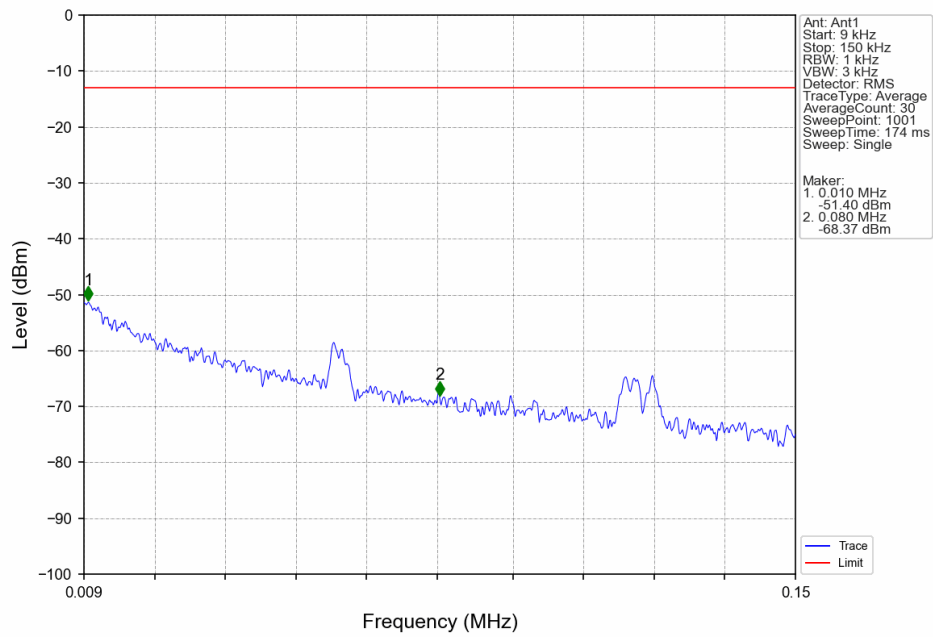
Band5 HSDPA LCH 826.4MHz Subtest 1 NTN



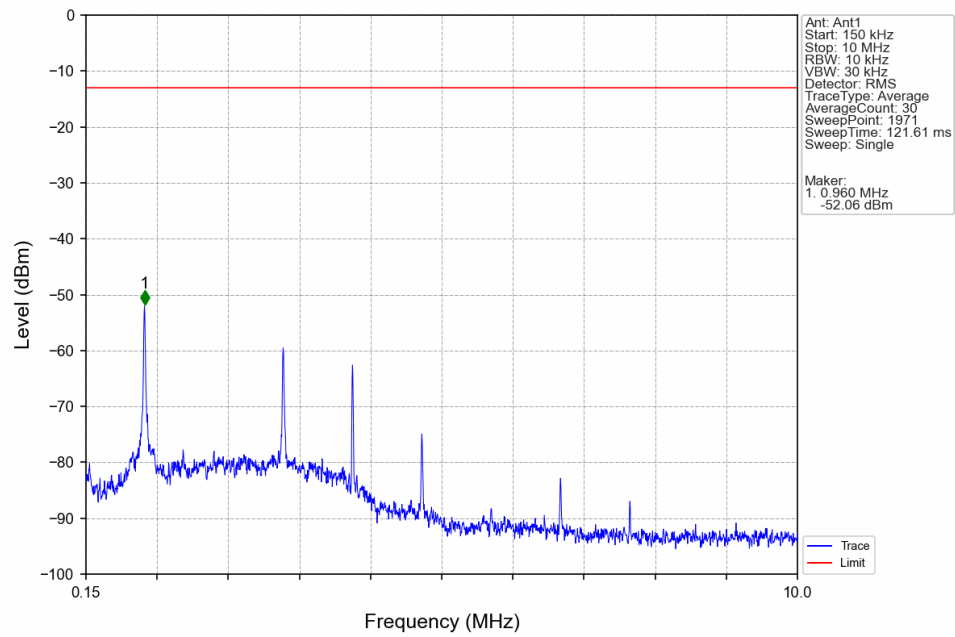
Band5 HSDPA LCH 826.4MHz Subtest 1 NTN



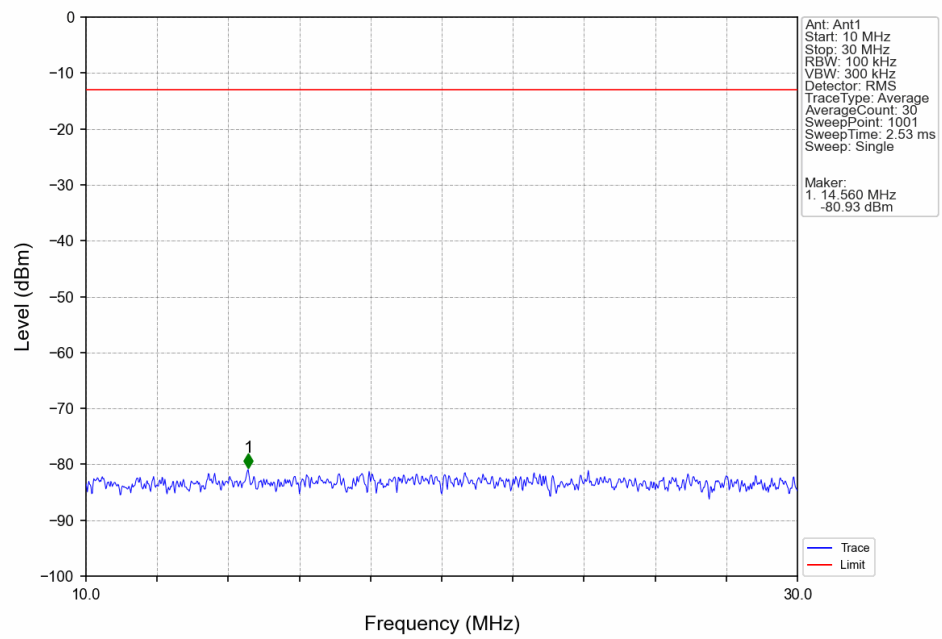
Band5 HSDPA MCH 836.6MHz Subtest 1 NTN



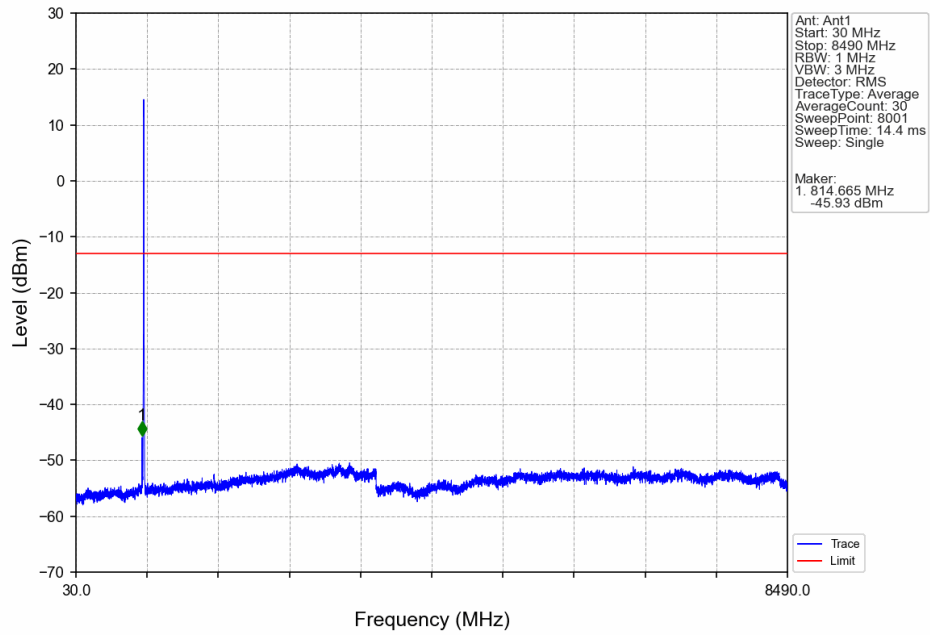
Band5 HSDPA MCH 836.6MHz Subtest 1 NTN



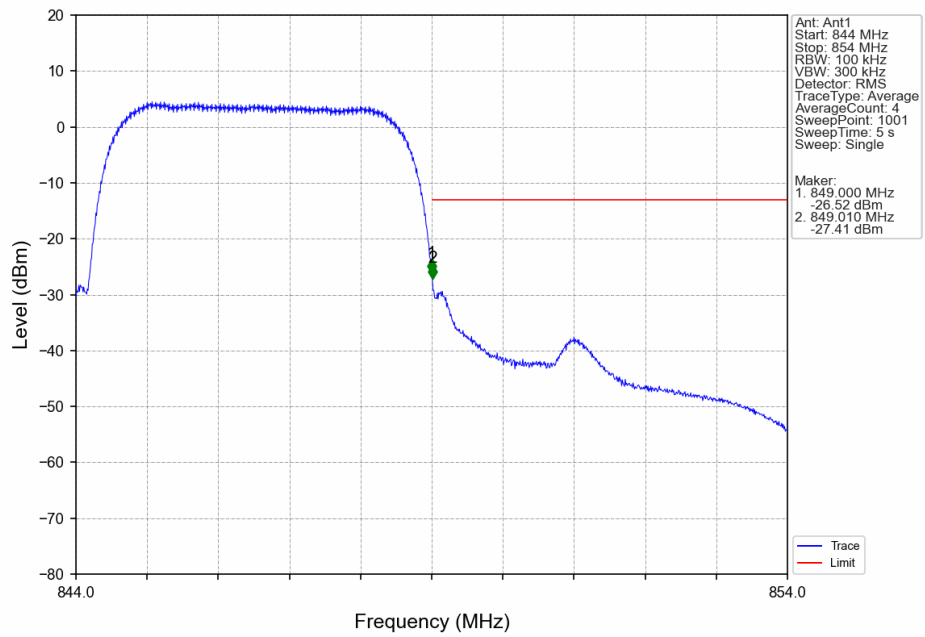
Band5 HSDPA MCH 836.6MHz Subtest 1 NTN



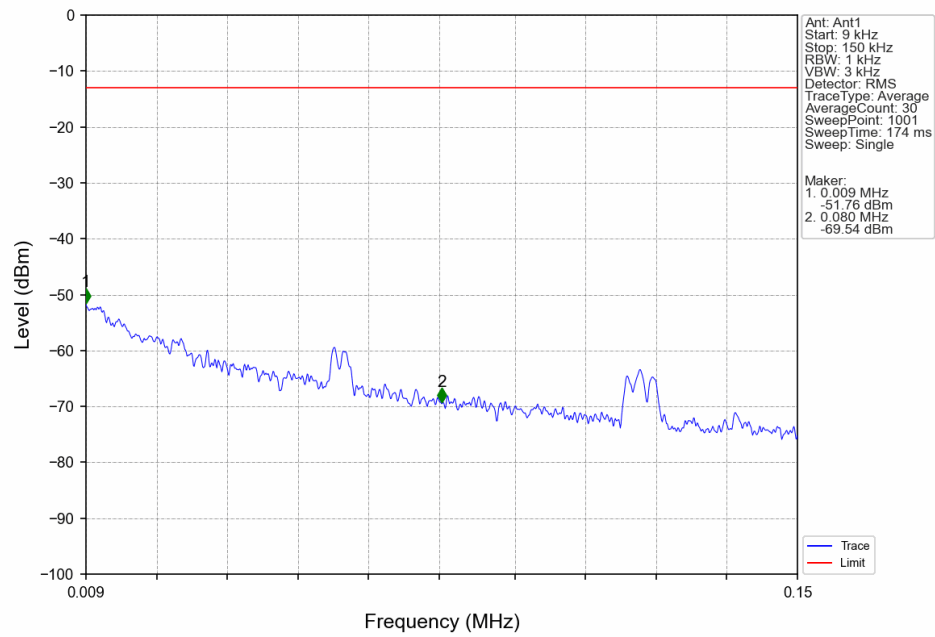
Band5 HSDPA MCH 836.6MHz Subtest 1 NTN



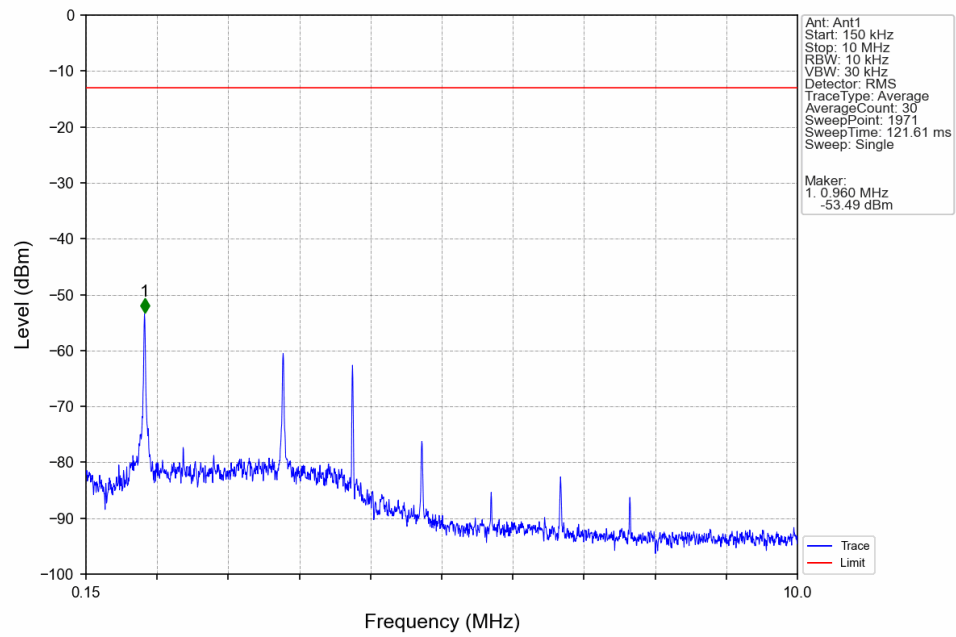
Band5 HSDPA HCH 846.6MHz Subtest 1 NTN



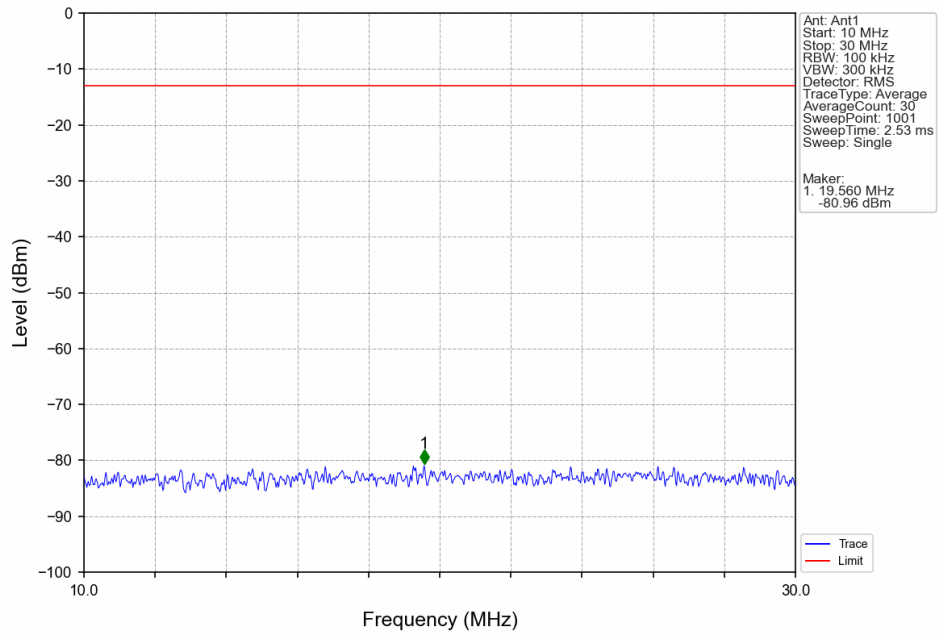
Band5 HSDPA HCH 846.6MHz Subtest 1 NTN



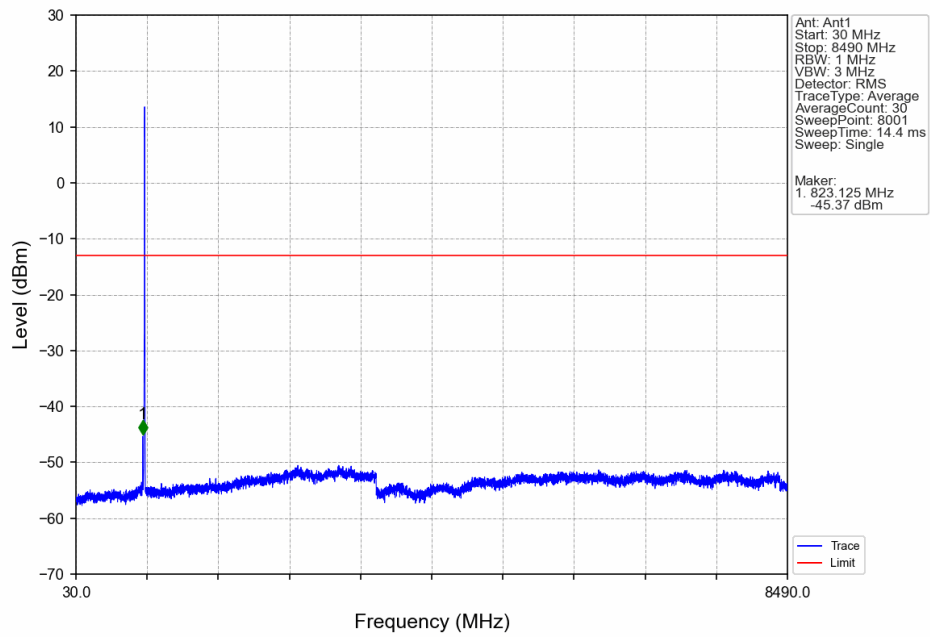
Band5 HSDPA HCH 846.6MHz Subtest 1 NTN



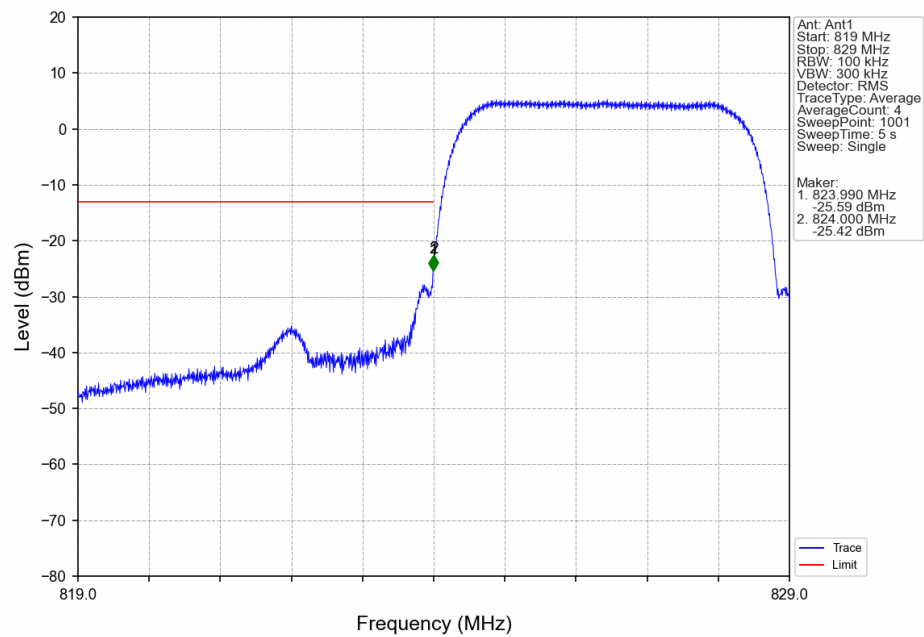
Band5 HSDPA HCH 846.6MHz Subtest 1 NTN



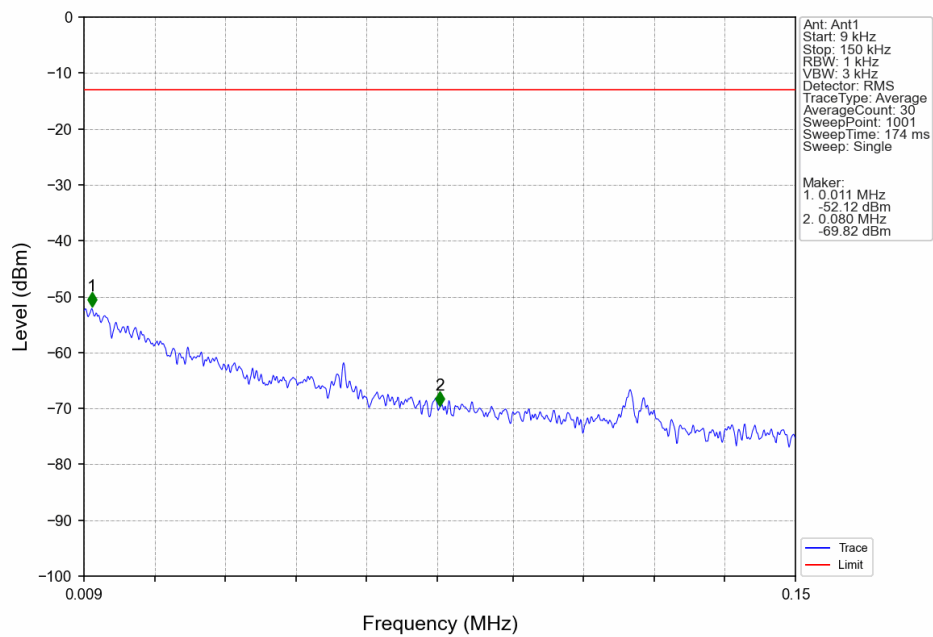
Band5 HSDPA HCH 846.6MHz Subtest 1 NTN



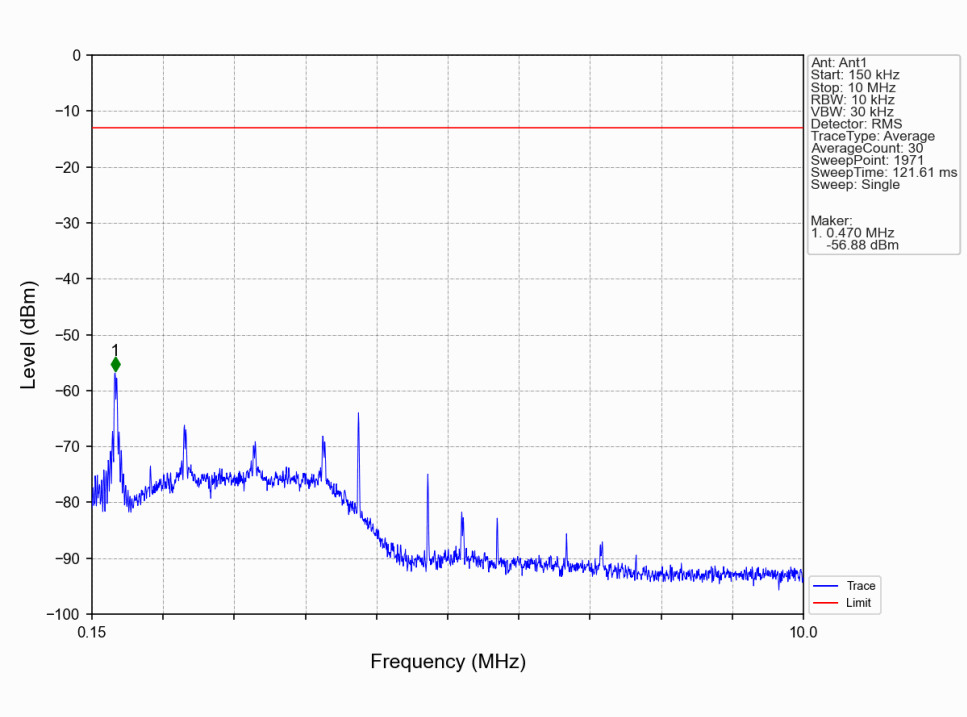
Band5 HSUPA LCH 826.4MHz Subtest 1 NTNV



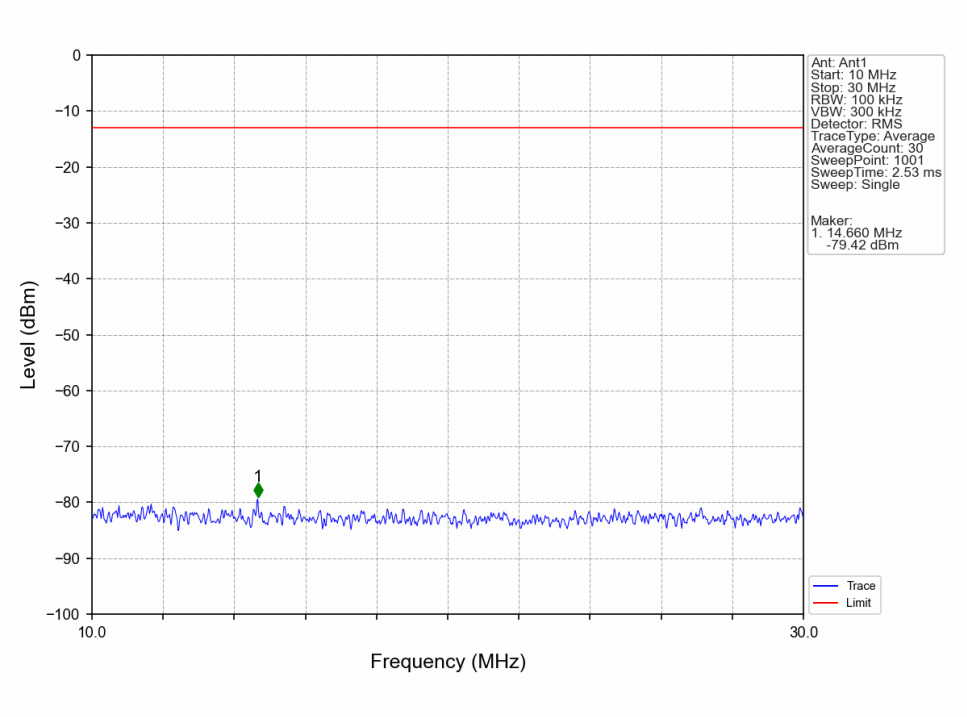
Band5 HSUPA LCH 826.4MHz Subtest 1 NTNV



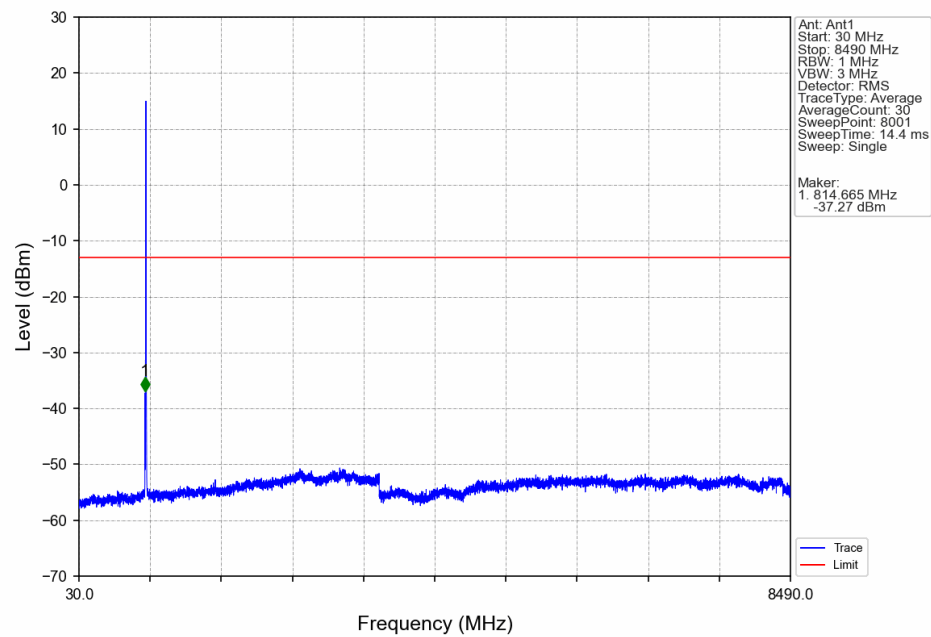
Band5 HSUPA LCH 826.4MHz Subtest 1 NTN



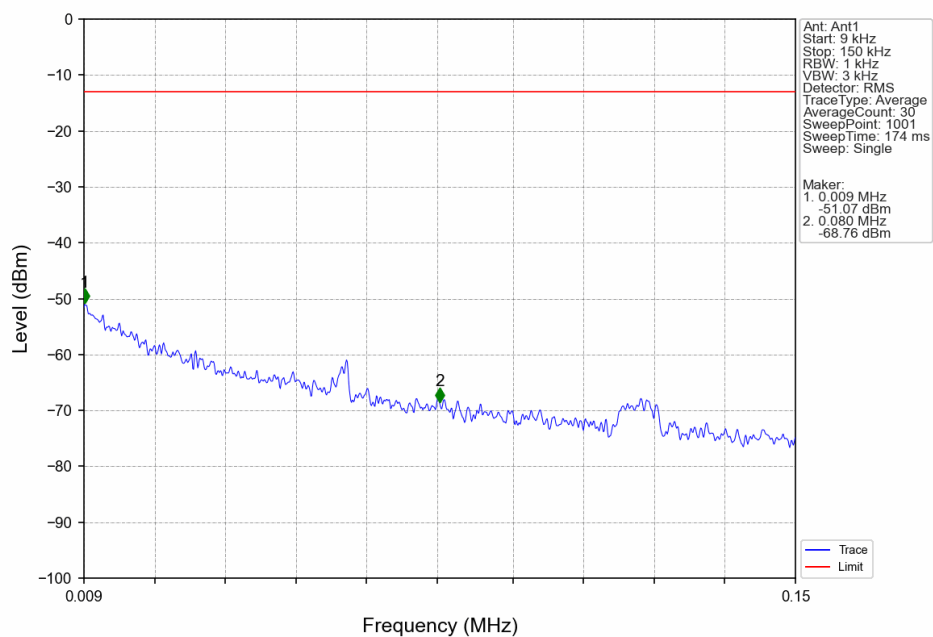
Band5 HSUPA LCH 826.4MHz Subtest 1 NTN



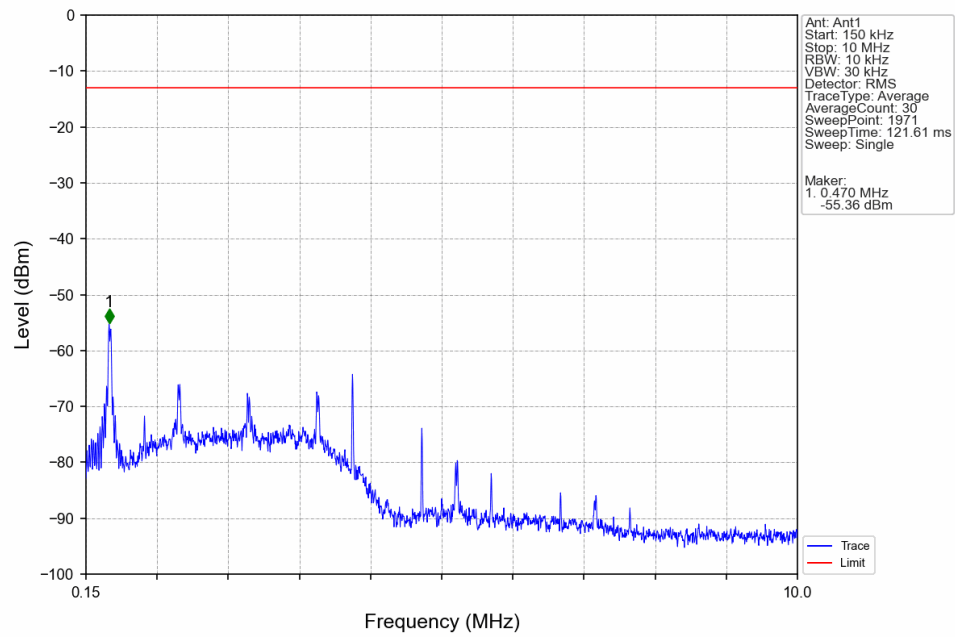
Band5 HSUPA LCH 826.4MHz Subtest 1 NTN



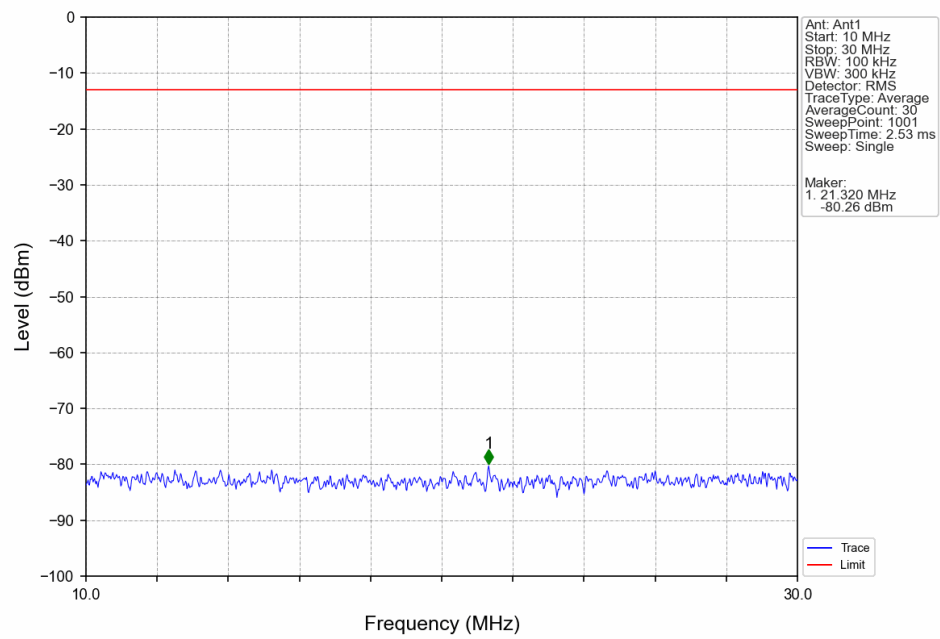
Band5 HSUPA MCH 836.6MHz Subtest 1 NTN



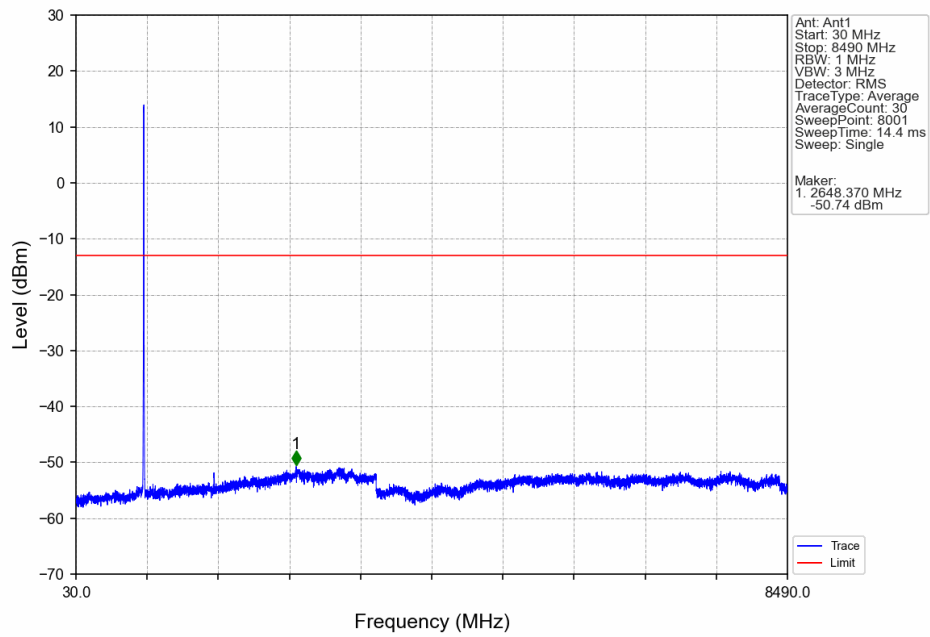
Band5 HSUPA MCH 836.6MHz Subtest 1 NTN



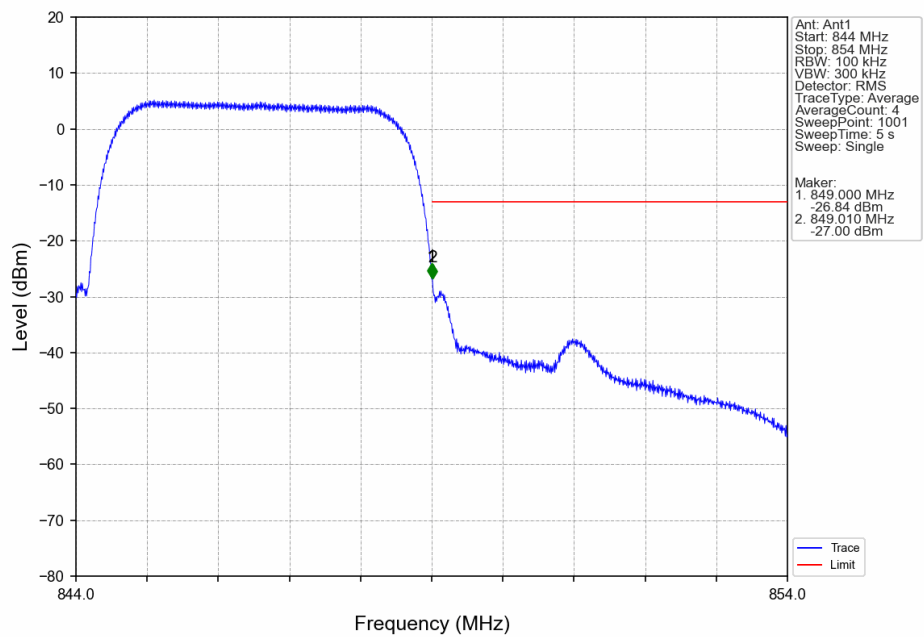
Band5 HSUPA MCH 836.6MHz Subtest 1 NTN



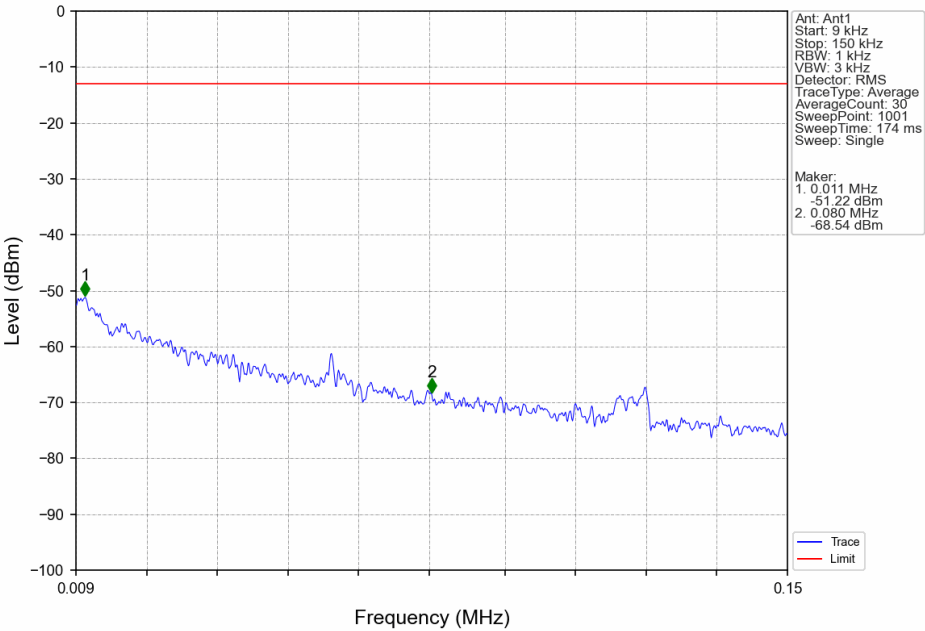
Band5 HSUPA MCH 836.6MHz Subtest 1 NTN



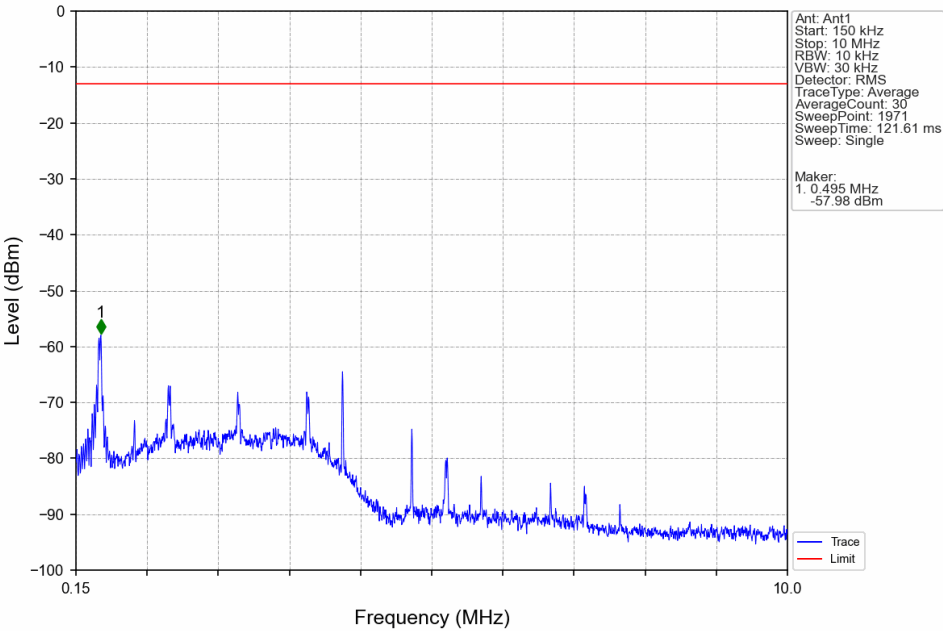
Band5 HSUPA HCH 846.6MHz Subtest 1 NTN



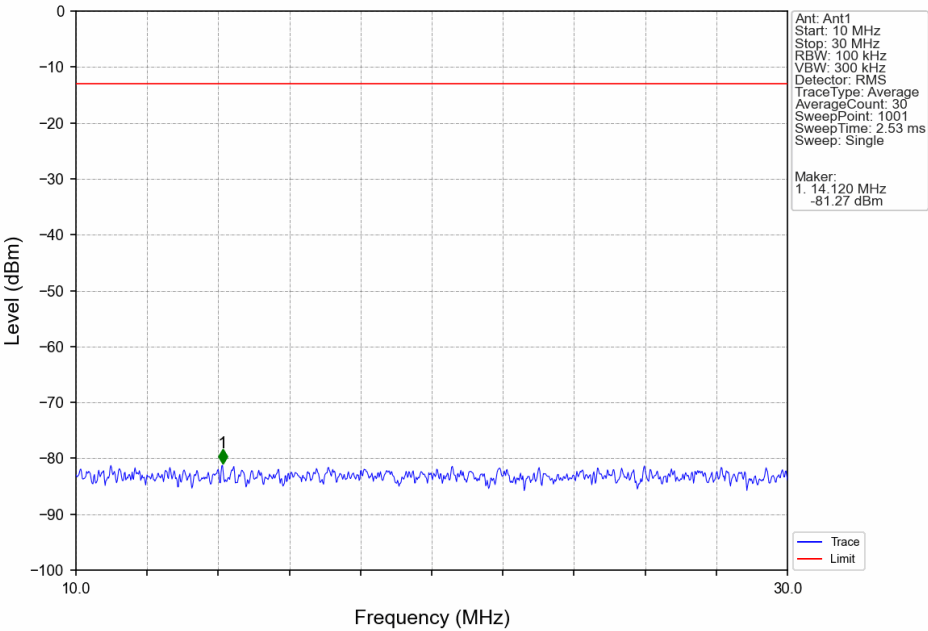
Band5 HSUPA HCH 846.6MHz Subtest 1 NTNV



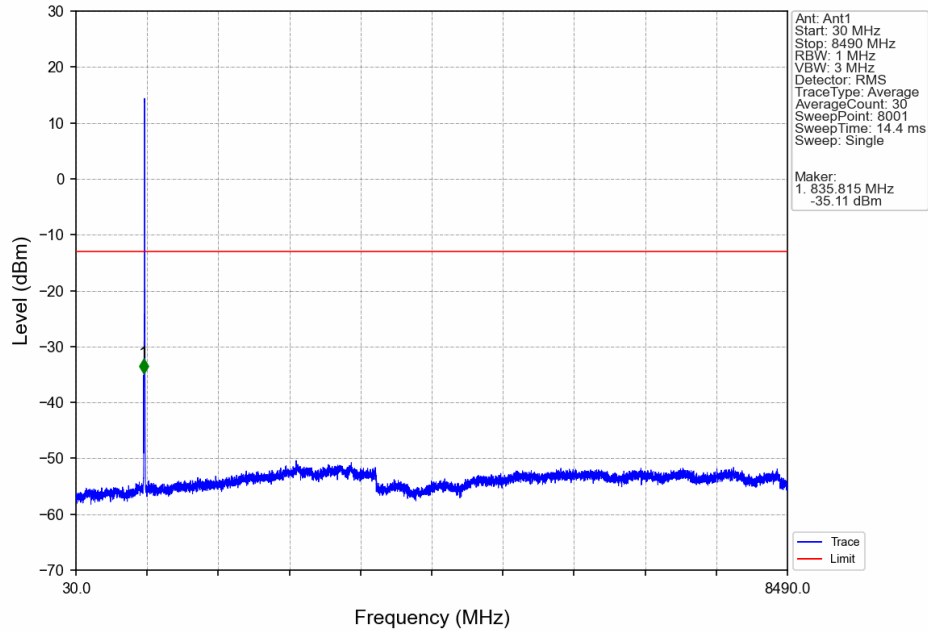
Band5 HSUPA HCH 846.6MHz Subtest 1 NTNV



Band5 HSUPA HCH 846.6MHz Subtest 1 NTN



Band5 HSUPA HCH 846.6MHz Subtest 1 NTN



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	0.1633	0.0212	ppm	4M26F9W	22H	22.13

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	0.0710	0.0212	ppm	4M26F9W	22H	18.51