

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	HSDPA	Subtest 1	826.4	20.49	0.52	18.86	<=38.45	Pass
		Subtest 2	826.4	20.53	0.52	18.9	<=38.45	Pass
		Subtest 3	826.4	20.51	0.52	18.88	<=38.45	Pass
		Subtest 4	826.4	20.51	0.52	18.88	<=38.45	Pass
		Subtest 1	836.6	20.56	0.52	18.93	<=38.45	Pass
		Subtest 2	836.6	20.55	0.52	18.92	<=38.45	Pass
		Subtest 3	836.6	20.58	0.52	18.95	<=38.45	Pass
		Subtest 4	836.6	20.56	0.52	18.93	<=38.45	Pass
		Subtest 1	846.6	20.52	0.52	18.89	<=38.45	Pass
		Subtest 2	846.6	20.5	0.52	18.87	<=38.45	Pass
		Subtest 3	846.6	20.53	0.52	18.9	<=38.45	Pass
		Subtest 4	846.6	20.54	0.52	18.91	<=38.45	Pass
	RMC	12.2kbps RMC	826.4	22.71	0.52	21.08	<=38.45	Pass
	HSUPA	Subtest 1	826.4	18.47	0.52	16.84	<=38.45	Pass
		Subtest 2	826.4	18.24	0.52	16.61	<=38.45	Pass
		Subtest 3	826.4	18.49	0.52	16.86	<=38.45	Pass
		Subtest 4	826.4	18.5	0.52	16.87	<=38.45	Pass
		Subtest 5	826.4	18.49	0.52	16.86	<=38.45	Pass
	RMC	12.2kbps RMC	836.6	22.76	0.52	21.13	<=38.45	Pass
	HSUPA	Subtest 1	836.6	18.53	0.52	16.9	<=38.45	Pass
		Subtest 2	836.6	18.3	0.52	16.67	<=38.45	Pass
		Subtest 3	836.6	18.55	0.52	16.92	<=38.45	Pass
		Subtest 4	836.6	18.55	0.52	16.92	<=38.45	Pass
		Subtest 5	836.6	18.02	0.52	16.39	<=38.45	Pass
	RMC	12.2kbps RMC	846.6	22.77	0.52	21.14	<=38.45	Pass
	HSUPA	Subtest 2	846.6	18.33	0.52	16.7	<=38.45	Pass
		Subtest 3	846.6	18.31	0.52	16.68	<=38.45	Pass
		Subtest 4	846.6	18.02	0.52	16.39	<=38.45	Pass
		Subtest 5	846.6	18.01	0.52	16.38	<=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	
HSDPA	826.4	20	3.27	-0.107	-0.0001	-2.5 to 2.5	Pass
			3.85	0.064	0.0001	-2.5 to 2.5	Pass

			4.43	0.043	0.0001	-2.5 to 2.5	Pass	
		-30	3.85	-0.165	-0.0002	-2.5 to 2.5	Pass	
		-20	3.85	0.129	0.0002	-2.5 to 2.5	Pass	
		-10	3.85	0.393	0.0005	-2.5 to 2.5	Pass	
		0	3.85	-0.350	-0.0004	-2.5 to 2.5	Pass	
		10	3.85	0.558	0.0007	-2.5 to 2.5	Pass	
		30	3.85	0.129	0.0002	-2.5 to 2.5	Pass	
		40	3.85	-0.207	-0.0003	-2.5 to 2.5	Pass	
		50	3.85	0.250	0.0003	-2.5 to 2.5	Pass	
	836.6	20	3.27	-0.558	-0.0007	-2.5 to 2.5	Pass	
			3.85	-0.894	-0.0011	-2.5 to 2.5	Pass	
			4.43	-0.894	-0.0011	-2.5 to 2.5	Pass	
			-30	3.85	-0.415	-0.0005	-2.5 to 2.5	Pass
			-20	3.85	-0.751	-0.0009	-2.5 to 2.5	Pass
			-10	3.85	-0.443	-0.0005	-2.5 to 2.5	Pass
			0	3.85	-0.865	-0.0010	-2.5 to 2.5	Pass
			10	3.85	-0.072	-0.0001	-2.5 to 2.5	Pass
			30	3.85	-0.458	-0.0005	-2.5 to 2.5	Pass
			40	3.85	-0.057	-0.0001	-2.5 to 2.5	Pass
			50	3.85	-0.508	-0.0006	-2.5 to 2.5	Pass
		846.6	20	3.27	0.257	0.0003	-2.5 to 2.5	Pass
				3.85	0.243	0.0003	-2.5 to 2.5	Pass
	4.43			0.594	0.0007	-2.5 to 2.5	Pass	
			-30	3.85	0.265	0.0003	-2.5 to 2.5	Pass
			-20	3.85	0.215	0.0003	-2.5 to 2.5	Pass
			-10	3.85	-0.079	-0.0001	-2.5 to 2.5	Pass
			0	3.85	0.401	0.0005	-2.5 to 2.5	Pass
			10	3.85	0.143	0.0002	-2.5 to 2.5	Pass
			30	3.85	-0.222	-0.0003	-2.5 to 2.5	Pass
			40	3.85	0.036	0.0000	-2.5 to 2.5	Pass
			50	3.85	0.343	0.0004	-2.5 to 2.5	Pass
RMC	826.4		20	3.27	-0.672	-0.0008	-2.5 to 2.5	Pass
				3.85	-0.043	-0.0001	-2.5 to 2.5	Pass
HSUPA	826.4	20	3.27	-0.193	-0.0002	-2.5 to 2.5	Pass	
RMC	826.4	20	4.43	-0.050	-0.0001	-2.5 to 2.5	Pass	
HSUPA	826.4	20	3.85	-0.508	-0.0006	-2.5 to 2.5	Pass	
RMC	826.4	-30	3.85	-0.336	-0.0004	-2.5 to 2.5	Pass	
HSUPA	826.4	20	4.43	-0.536	-0.0006	-2.5 to 2.5	Pass	
RMC	826.4	-20	3.85	0.193	0.0002	-2.5 to 2.5	Pass	
HSUPA	826.4	-30	3.85	-0.122	-0.0001	-2.5 to 2.5	Pass	
RMC	826.4	-10	3.85	-0.422	-0.0005	-2.5 to 2.5	Pass	
HSUPA	826.4	-20	3.85	-0.186	-0.0002	-2.5 to 2.5	Pass	
RMC	826.4	0	3.85	0.172	0.0002	-2.5 to 2.5	Pass	
HSUPA	826.4	-10	3.85	-0.293	-0.0004	-2.5 to 2.5	Pass	
		0	3.85	-0.451	-0.0005	-2.5 to 2.5	Pass	
RMC	826.4	10	3.85	-0.343	-0.0004	-2.5 to 2.5	Pass	
		30	3.85	-0.458	-0.0005	-2.5 to 2.5	Pass	
HSUPA	826.4	10	3.85	-0.057	-0.0001	-2.5 to 2.5	Pass	
		30	3.85	0.072	0.0001	-2.5 to 2.5	Pass	
RMC	826.4	40	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass	
		50	3.85	-0.365	-0.0004	-2.5 to 2.5	Pass	
HSUPA	826.4	40	3.85	-0.272	-0.0003	-2.5 to 2.5	Pass	
		50	3.85	0.086	0.0001	-2.5 to 2.5	Pass	
RMC	836.6	20	3.27	0.186	0.0002	-2.5 to 2.5	Pass	
HSUPA	836.6	20	3.27	-0.029	0.0000	-2.5 to 2.5	Pass	
			3.85	0.508	0.0006	-2.5 to 2.5	Pass	
RMC	836.6	20	3.85	0.801	0.0009	-2.5 to 2.5	Pass	

			4.43	-0.193	-0.0002	-2.5 to 2.5	Pass
HSUPA	836.6	20	4.43	0.579	0.0007	-2.5 to 2.5	Pass
		-30	3.85	0.336	0.0004	-2.5 to 2.5	Pass
RMC	836.6	-30	3.85	0.508	0.0006	-2.5 to 2.5	Pass
HSUPA	836.6	-20	3.85	-0.257	-0.0003	-2.5 to 2.5	Pass
RMC	836.6	-20	3.85	0.222	0.0003	-2.5 to 2.5	Pass
		-10	3.85	0.300	0.0004	-2.5 to 2.5	Pass
HSUPA	836.6	-10	3.85	-1.009	-0.0012	-2.5 to 2.5	Pass
		0	3.85	-0.415	-0.0005	-2.5 to 2.5	Pass
RMC	836.6	0	3.85	-0.472	-0.0006	-2.5 to 2.5	Pass
HSUPA	836.6	10	3.85	0.036	0.0000	-2.5 to 2.5	Pass
RMC	836.6	10	3.85	0.072	0.0001	-2.5 to 2.5	Pass
HSUPA	836.6	30	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass
RMC	836.6	30	3.85	-0.594	-0.0007	-2.5 to 2.5	Pass
		40	3.85	-0.744	-0.0009	-2.5 to 2.5	Pass
HSUPA	836.6	40	3.85	-0.508	-0.0006	-2.5 to 2.5	Pass
RMC	836.6	50	3.85	-0.329	-0.0004	-2.5 to 2.5	Pass
HSUPA	836.6	50	3.85	-0.186	-0.0002	-2.5 to 2.5	Pass
RMC	846.6	20	3.27	0.136	0.0002	-2.5 to 2.5	Pass
HSUPA	846.6	20	3.27	0.172	0.0002	-2.5 to 2.5	Pass
RMC	846.6	20	3.85	0.365	0.0004	-2.5 to 2.5	Pass
HSUPA	846.6	20	3.85	0.451	0.0005	-2.5 to 2.5	Pass
RMC	846.6	20	4.43	0.465	0.0006	-2.5 to 2.5	Pass
HSUPA	846.6	20	4.43	0.172	0.0002	-2.5 to 2.5	Pass
		-30	3.85	0.315	0.0004	-2.5 to 2.5	Pass
RMC	846.6	-30	3.85	0.000	0.0000	-2.5 to 2.5	Pass
HSUPA	846.6	-20	3.85	0.021	0.0000	-2.5 to 2.5	Pass
RMC	846.6	-20	3.85	0.508	0.0006	-2.5 to 2.5	Pass
		-10	3.85	0.229	0.0003	-2.5 to 2.5	Pass
HSUPA	846.6	-10	3.85	-0.887	-0.0010	-2.5 to 2.5	Pass
		0	3.85	-0.672	-0.0008	-2.5 to 2.5	Pass
RMC	846.6	0	3.85	-1.280	-0.0015	-2.5 to 2.5	Pass
HSUPA	846.6	10	3.85	-1.187	-0.0014	-2.5 to 2.5	Pass
RMC	846.6	10	3.85	-1.209	-0.0014	-2.5 to 2.5	Pass
		30	3.85	-0.322	-0.0004	-2.5 to 2.5	Pass
HSUPA	846.6	30	3.85	-0.730	-0.0009	-2.5 to 2.5	Pass
		40	3.85	-0.894	-0.0011	-2.5 to 2.5	Pass
RMC	846.6	40	3.85	-0.644	-0.0008	-2.5 to 2.5	Pass
HSUPA	846.6	50	3.85	-0.973	-0.0011	-2.5 to 2.5	Pass
RMC	846.6	50	3.85	-0.944	-0.0011	-2.5 to 2.5	Pass

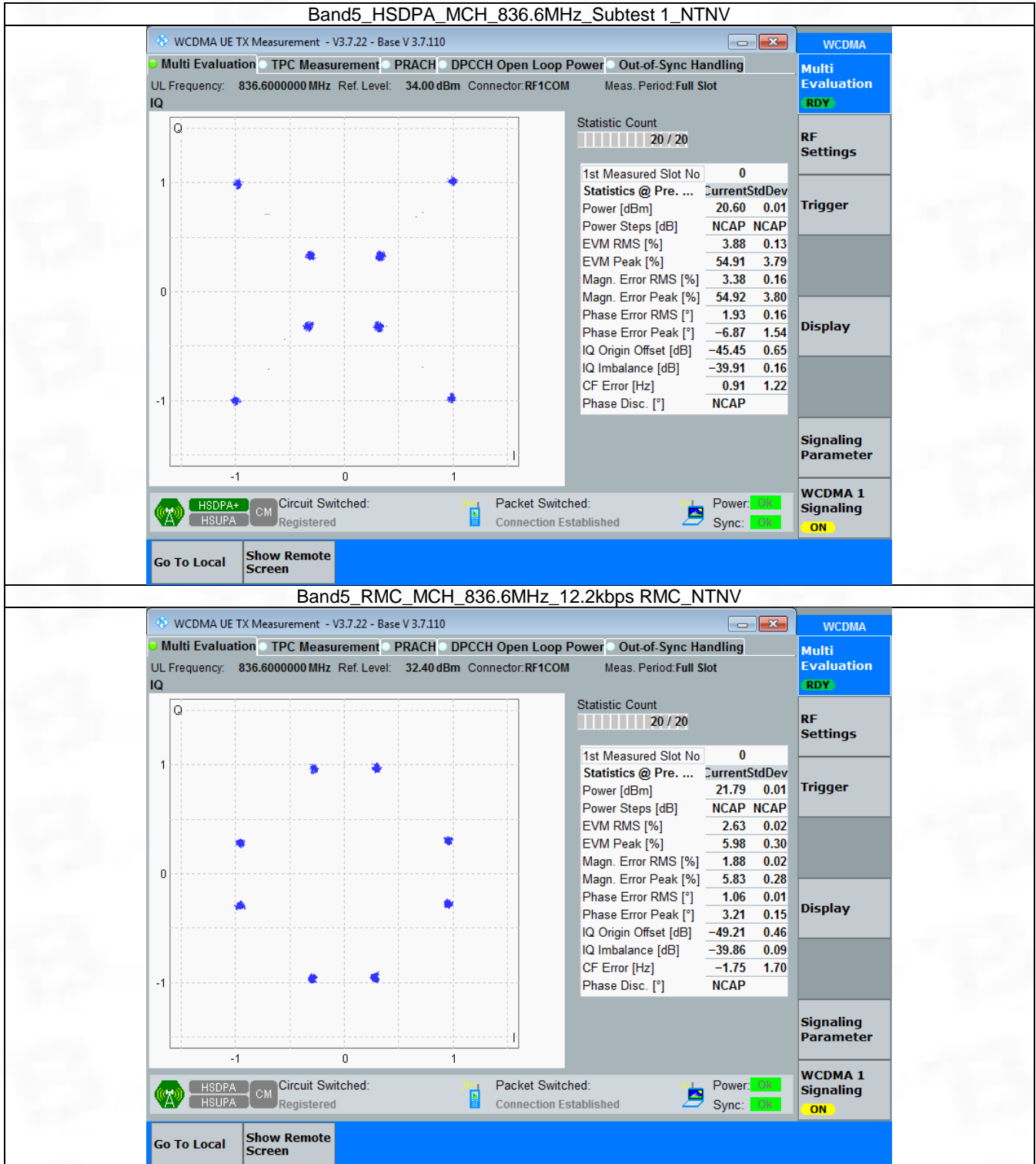
3. Modulation Characteristics

3.1 Band5

3.1.1 Test Result

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

3.1.2 Test Graph



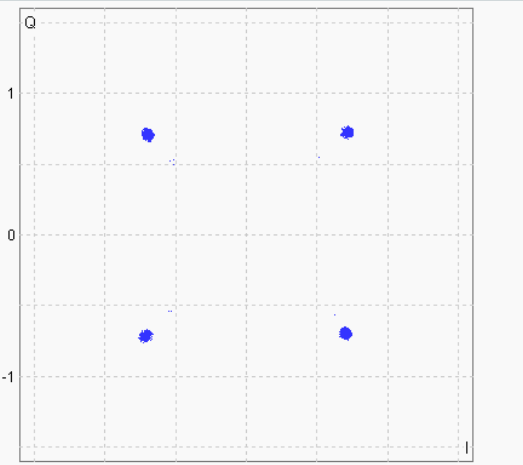
Band5 HSUPA MCH_836.6MHz Subtest 1_NTNV

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.110

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

UL Frequency: 836.600000 MHz Ref. Level: 34.00 dBm Connector: RF1COM Meas. Period: Full Slot

IQ



Statistic Count: 20 / 20

1st Measured Slot No	0
Statistics @ Pre. ...	CurrentStdDev
Power [dBm]	16.78 2.37
Power Steps [dB]	NCAP NCAP
EVM RMS [%]	2.78 1.25
EVM Peak [%]	6.26 37.87
Magn. Error RMS [%]	2.21 1.30
Magn. Error Peak [%]	5.88 38.08
Phase Error RMS [°]	0.97 0.44
Phase Error Peak [°]	2.80 4.07
IQ Origin Offset [dB]	-44.30 1.83
IQ Imbalance [dB]	-38.93 0.47
CF Error [Hz]	-0.19 1.52
Phase Disc. [°]	NCAP

HSDPA+ HSDPA CM Circuit Switched: Registered
 Packet Switched: Connection Established
 Power: ■ Sync: ■

WCDMA
 Multi Evaluation RDY
 RF Settings
 Trigger
 Display
 Signaling Parameter
 WCDMA 1 Signaling ON

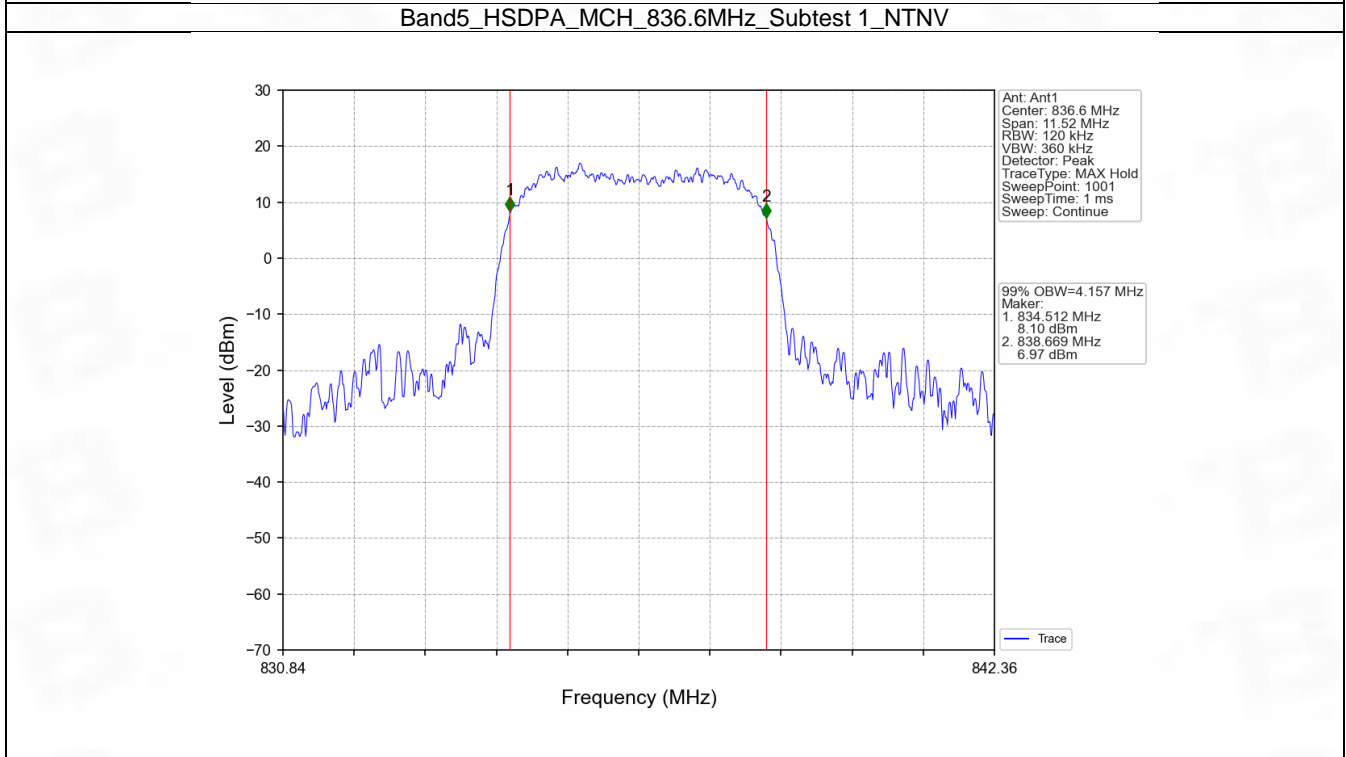
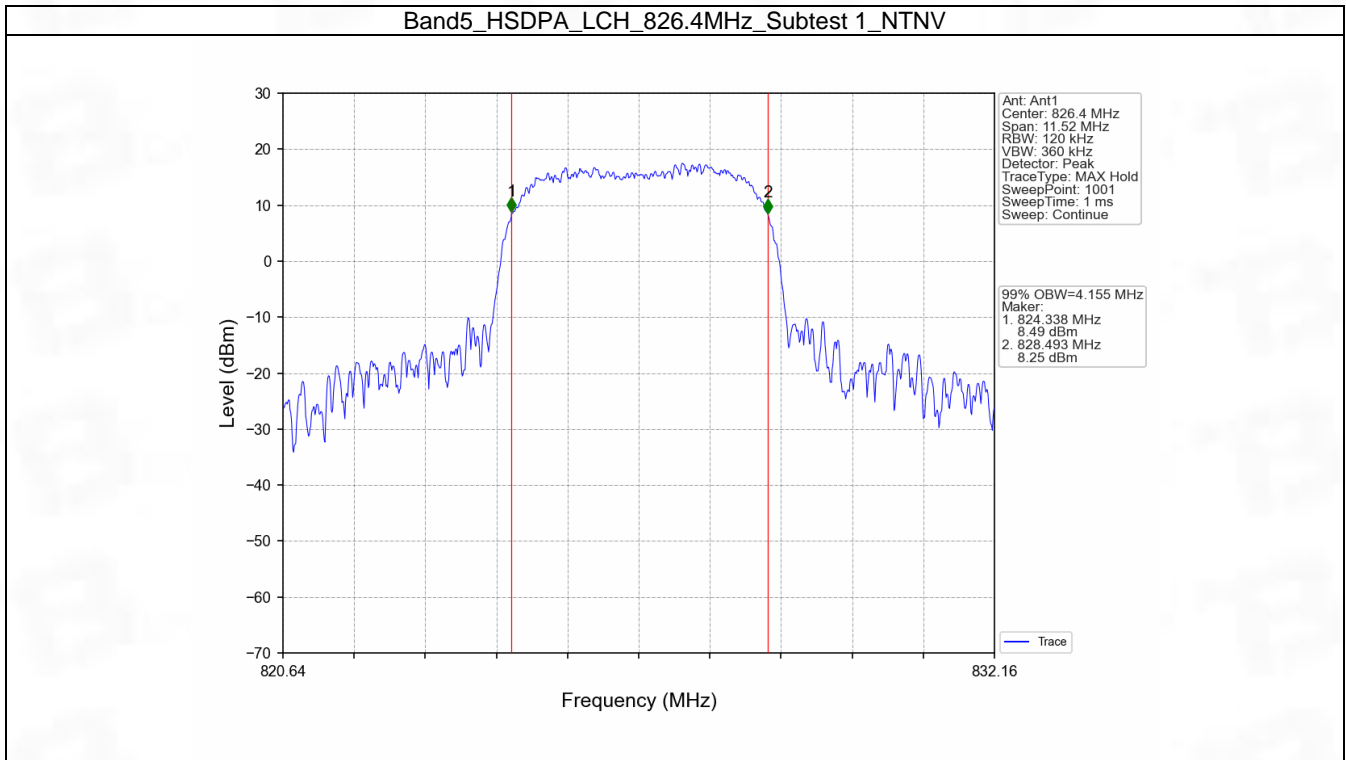
4. 99% & 26dB Bandwidth

4.1 Band5_OBW

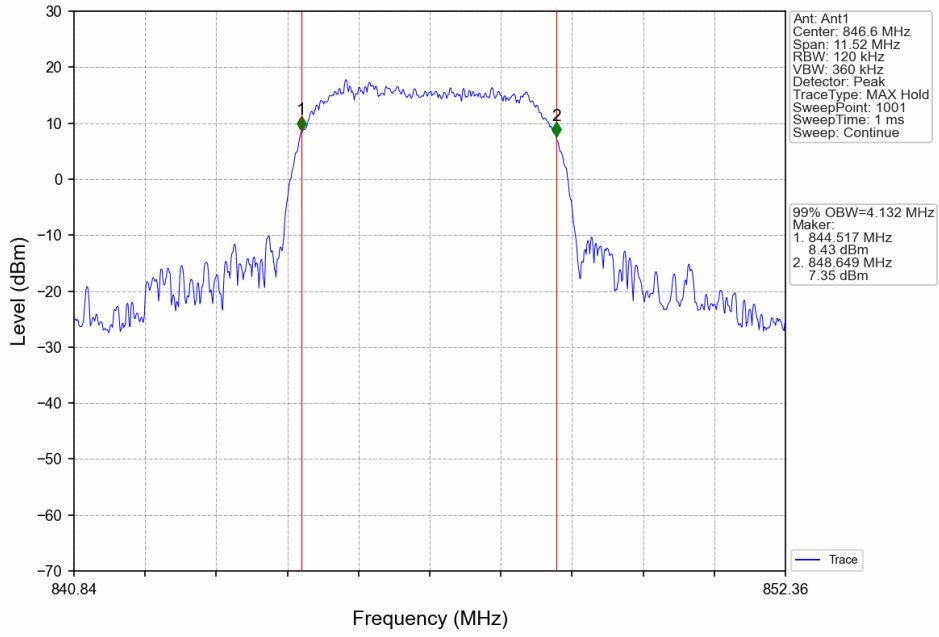
4.1.1 Test Result

Band: 5						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	HSDPA	Subtest 1	826.4	4.159	/	Pass
			836.6	4.158	/	Pass
			846.6	4.141	/	Pass
	RMC	12.2kbps RMC	826.4	4.155	/	Pass
	HSUPA	Subtest 1	826.4	4.157	/	Pass
			836.6	4.132	/	Pass
	RMC	12.2kbps RMC	836.6	4.145	/	Pass
			846.6	4.169	/	Pass
	HSUPA	Subtest 1	846.6	4.144	/	Pass

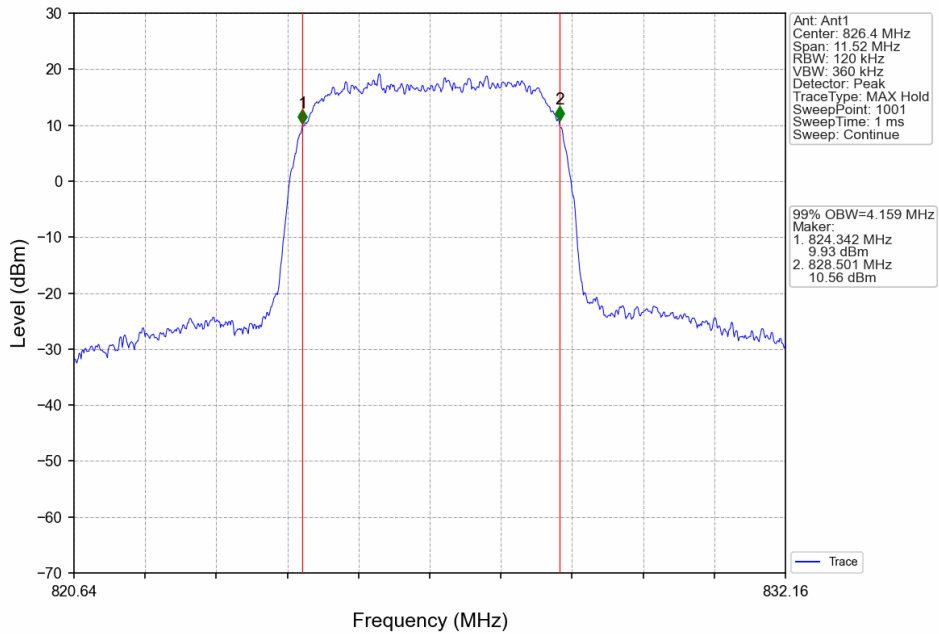
4.1.2 Test Graph



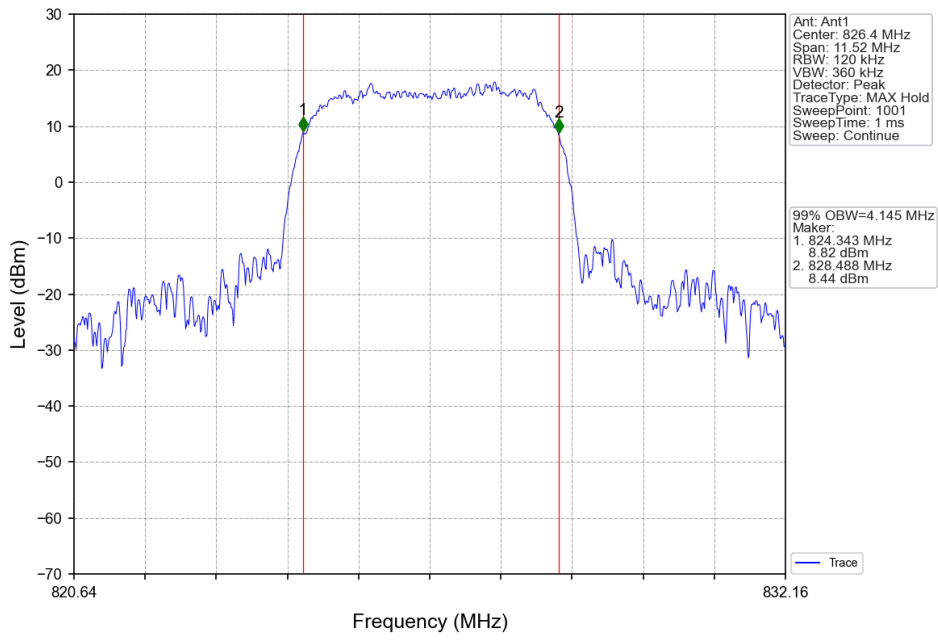
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



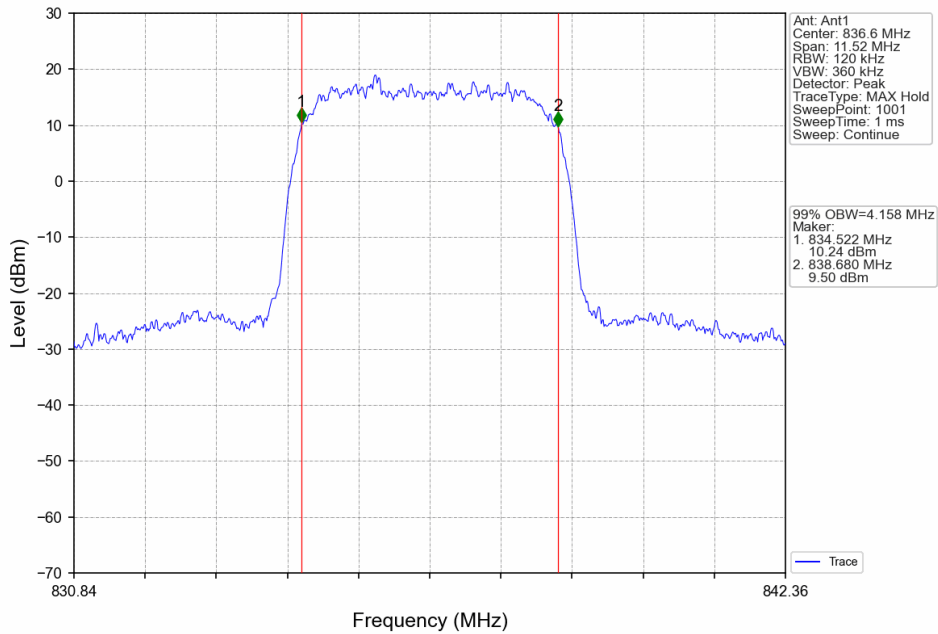
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



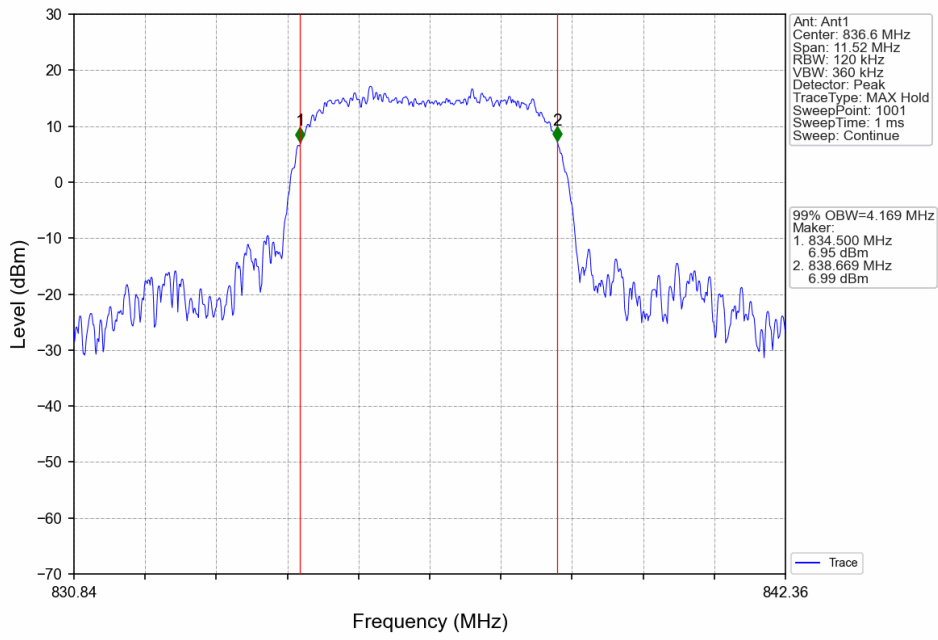
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



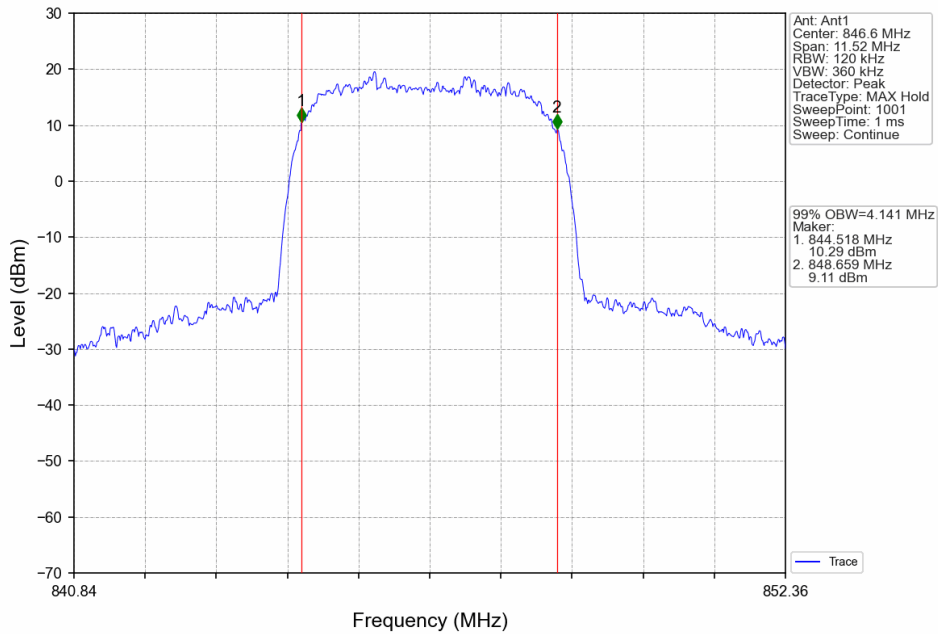
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



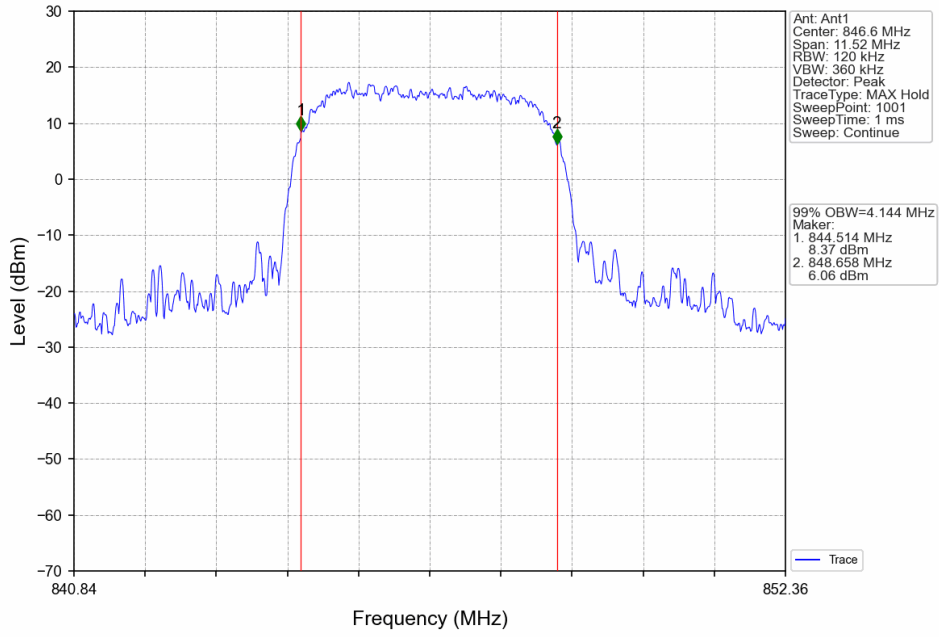
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV

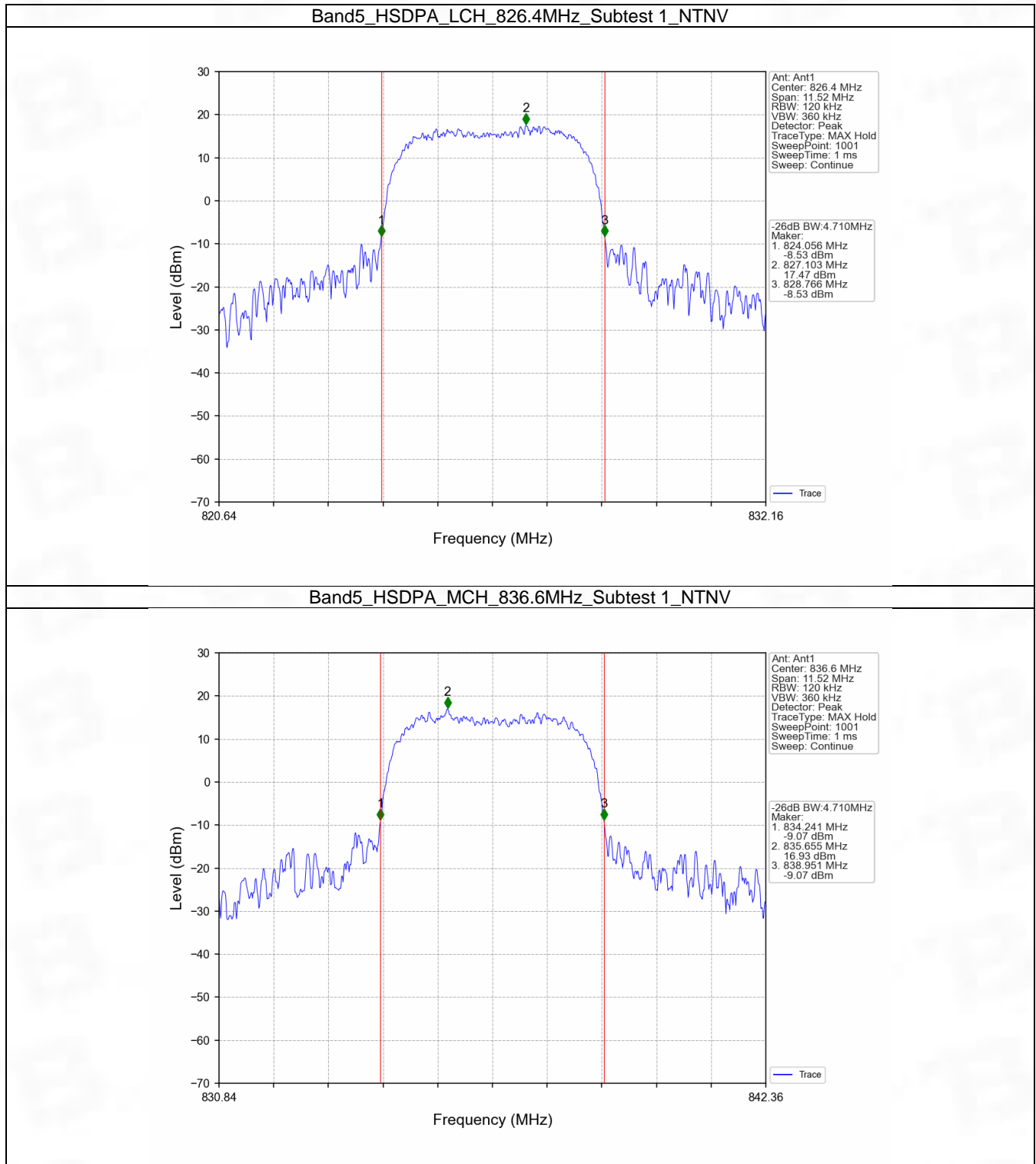


4.2 Band5_XDB

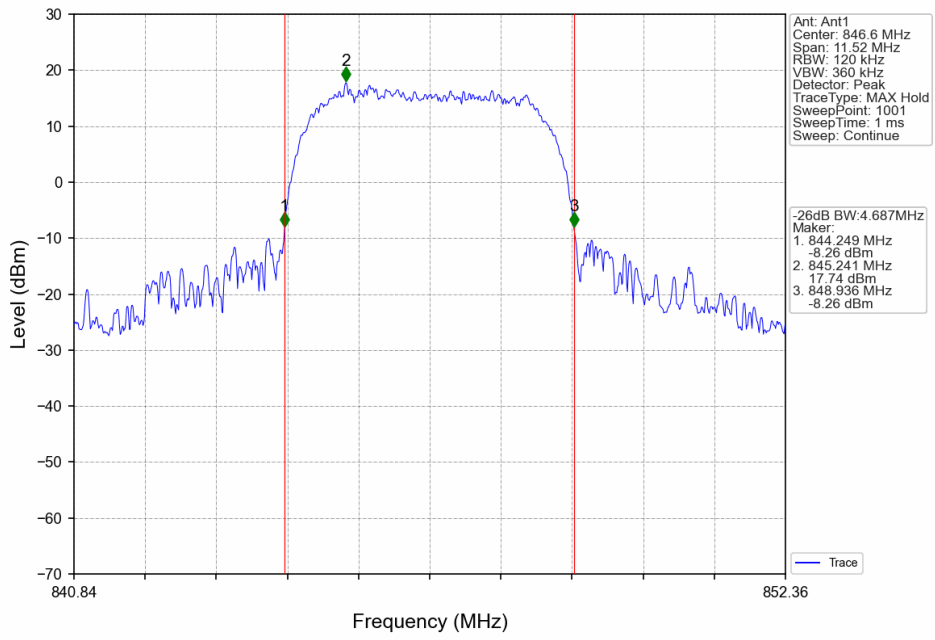
4.2.1 Test Result

Band: 5						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	HSDPA	Subtest 1	826.4	4.698	/	Pass
			836.6	4.675	/	Pass
			846.6	4.691	/	Pass
	RMC	12.2kbps RMC	826.4	4.710	/	Pass
	HSUPA	Subtest 1	826.4	4.710	/	Pass
	RMC	12.2kbps RMC	836.6	4.687	/	Pass
	HSUPA	Subtest 1	836.6	4.721	/	Pass
	RMC	12.2kbps RMC	846.6	4.713	/	Pass
	HSUPA	Subtest 1	846.6	4.710	/	Pass

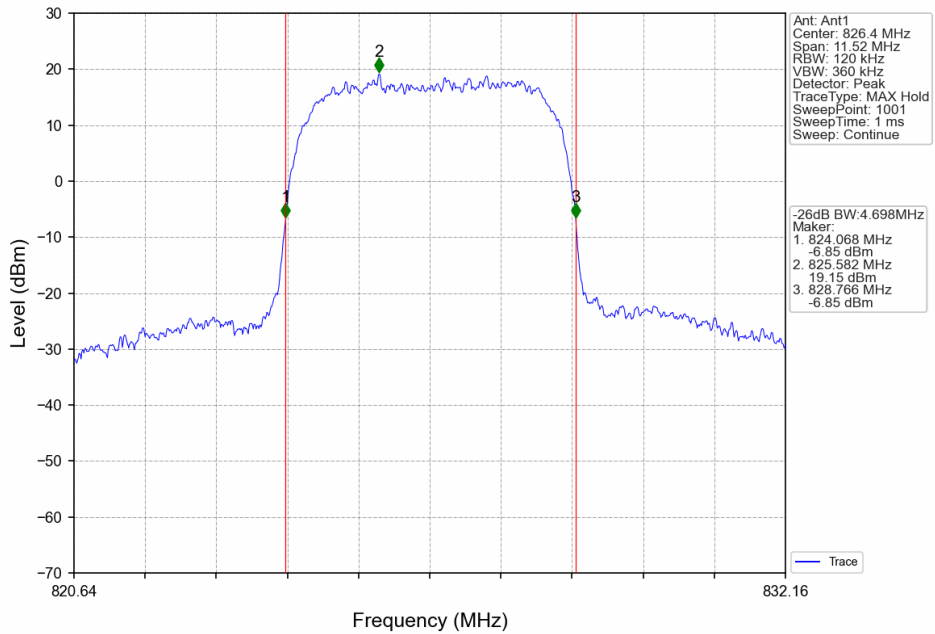
4.2.2 Test Graph



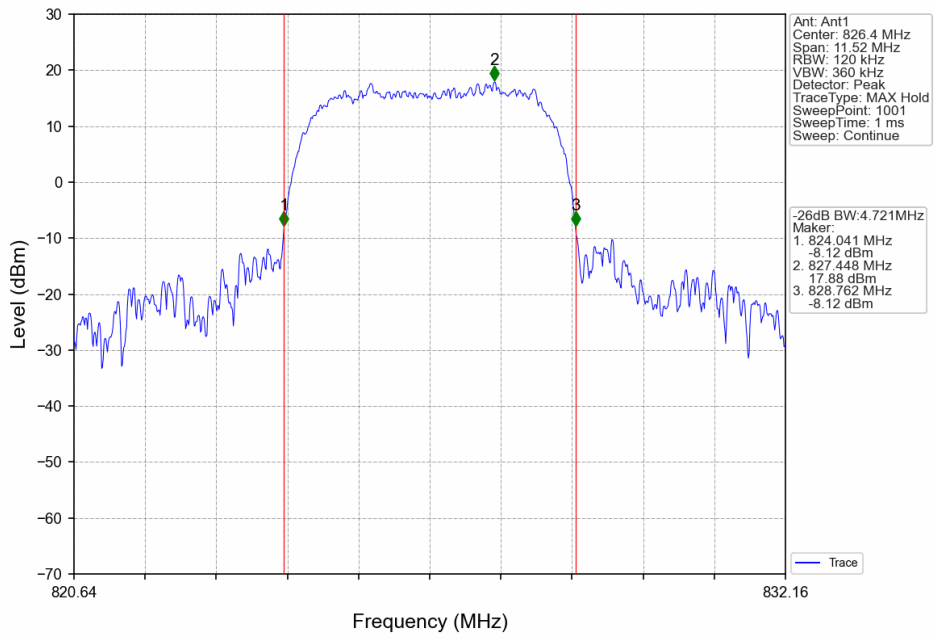
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



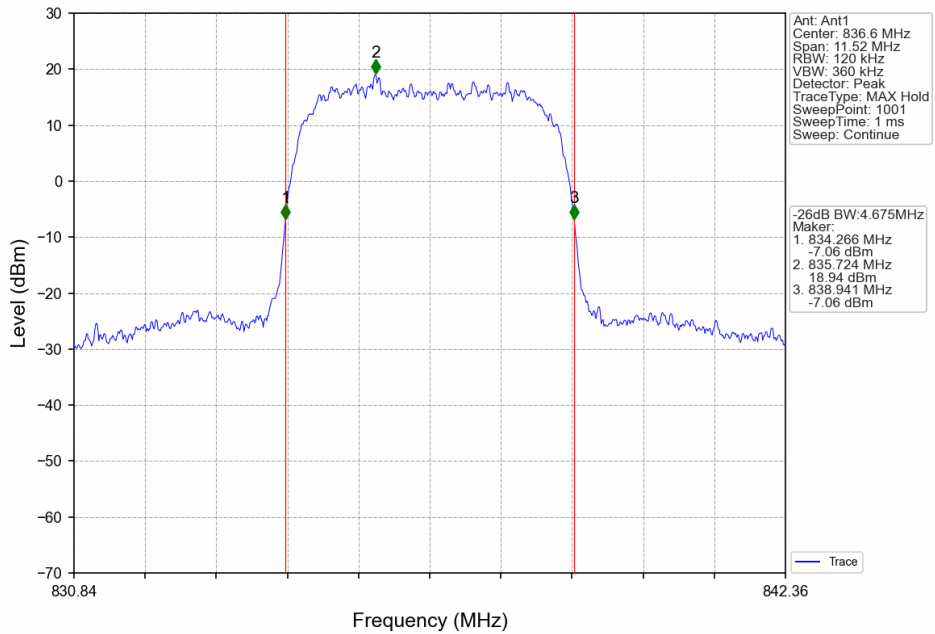
Band5_RMC_LCH_826.4MHz_12.2kbps_RMC_NTNV



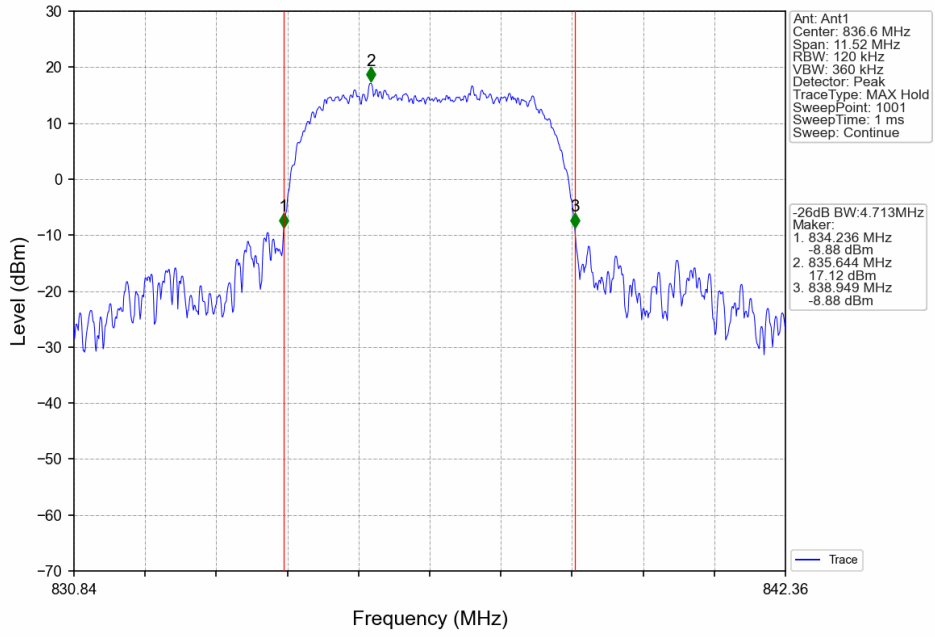
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



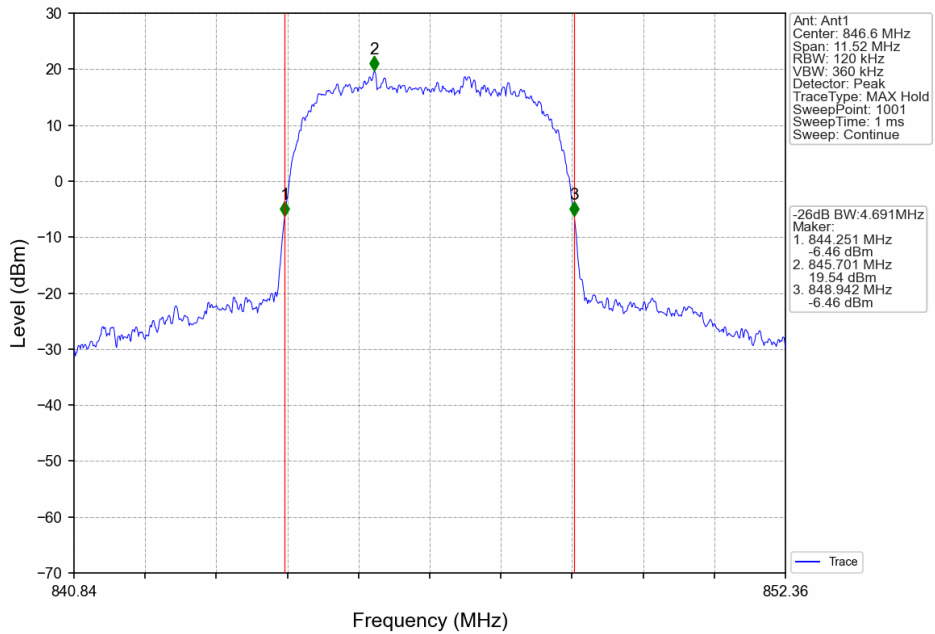
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



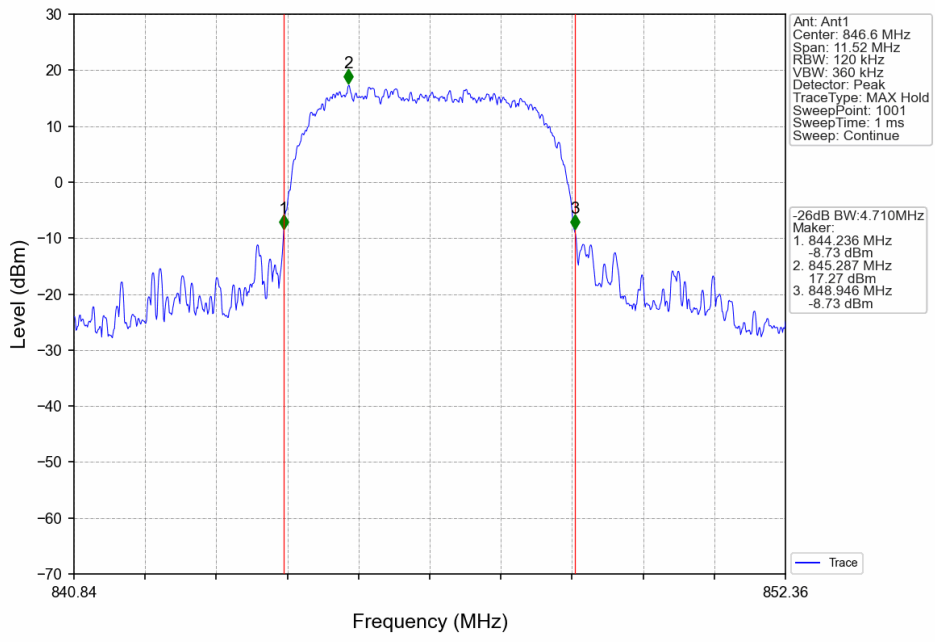
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



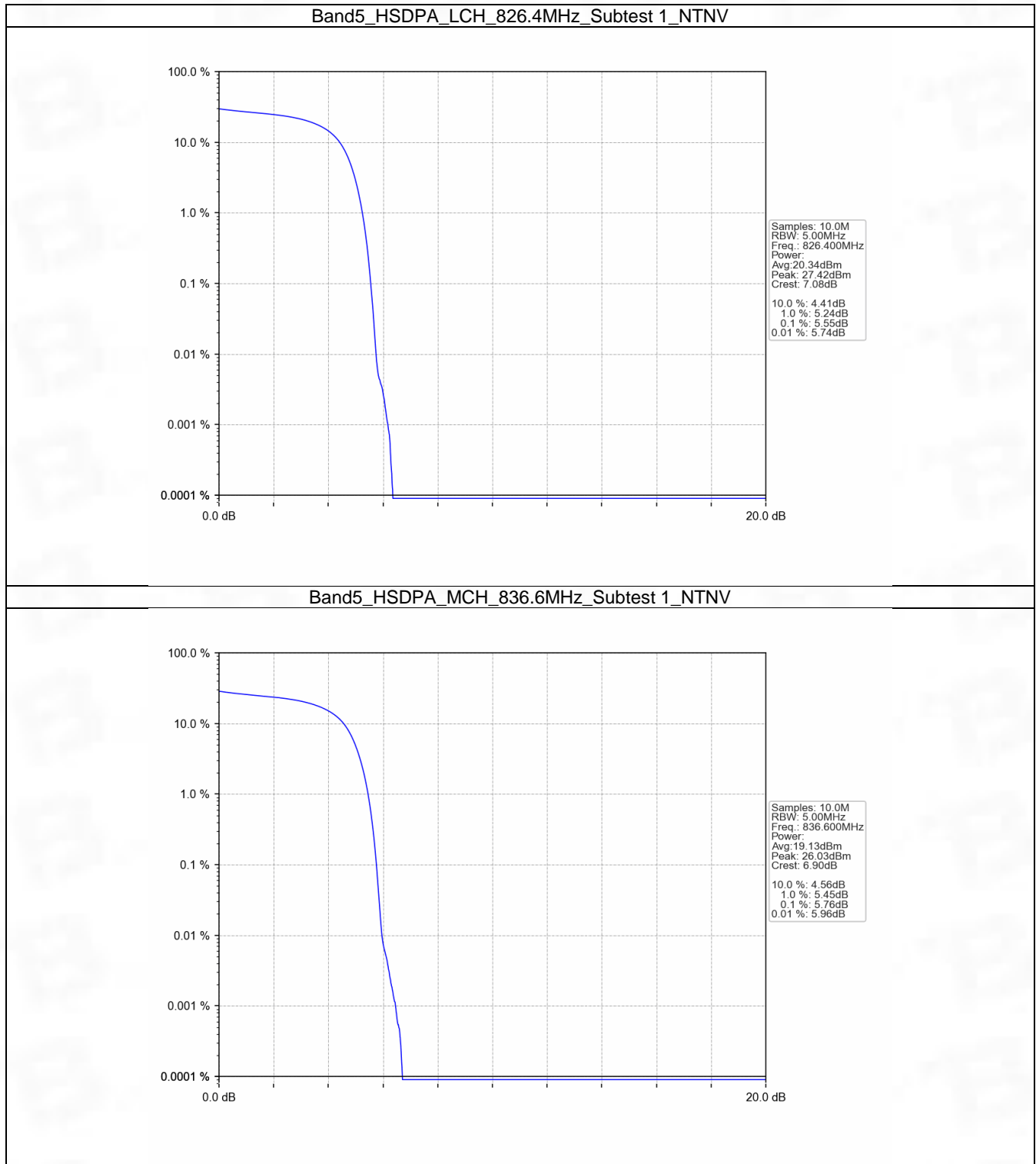
5. Peak-Average Ratio

5.1 Band5

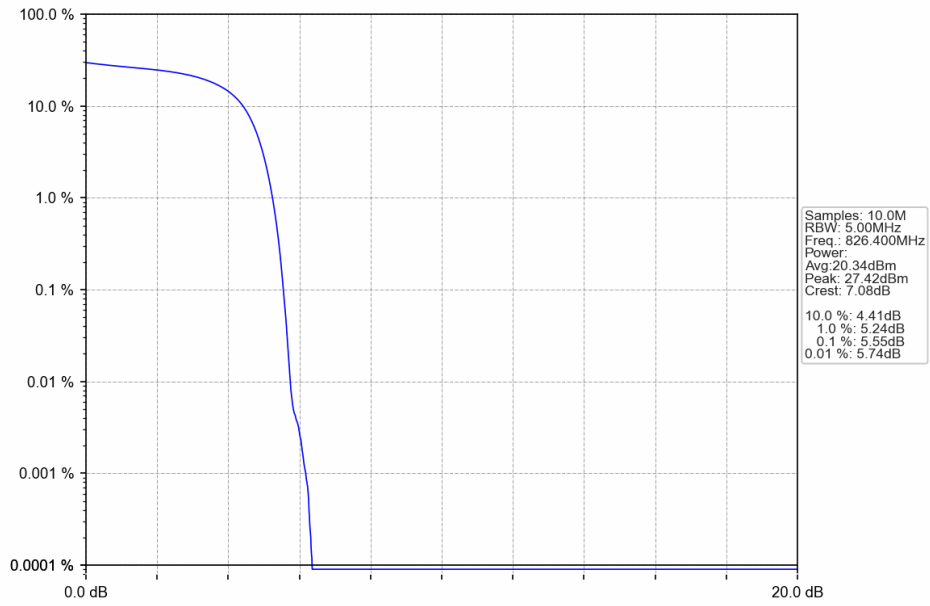
5.1.1 Test Result

Band: 5						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	HSDPA	Subtest 1	826.4	2.98	<=13	Pass
			836.6	3.06	<=13	Pass
			846.6	2.71	<=13	Pass
	RMC	12.2kbps RMC	826.4	5.55	<=13	Pass
	HSUPA	Subtest 1	826.4	5.76	<=13	Pass
	RMC	12.2kbps RMC	836.6	5.58	<=13	Pass
	HSUPA	Subtest 1	836.6	5.65	<=13	Pass
			846.6	5.78	<=13	Pass
RMC	12.2kbps RMC	846.6	5.62	<=13	Pass	

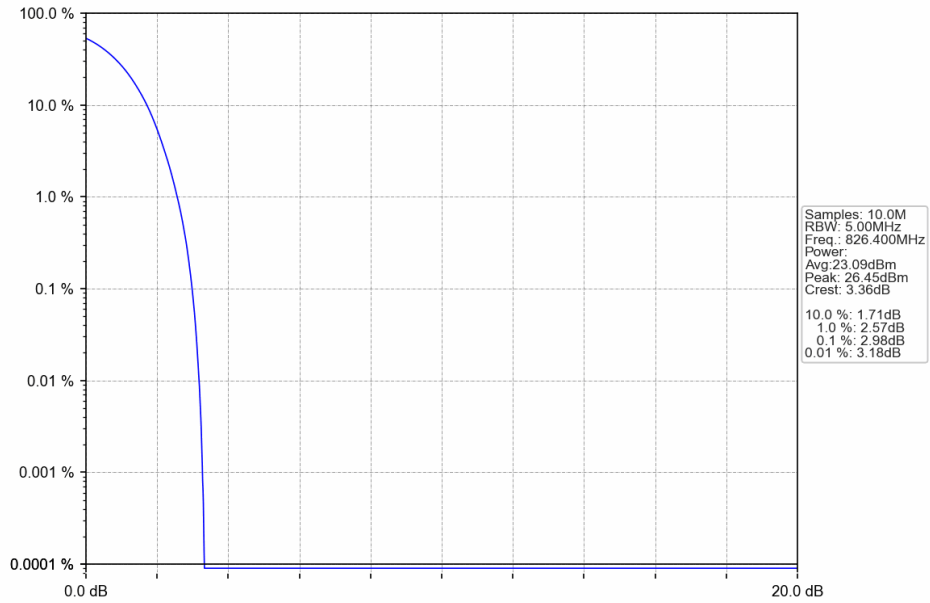
5.1.2 Test Graph



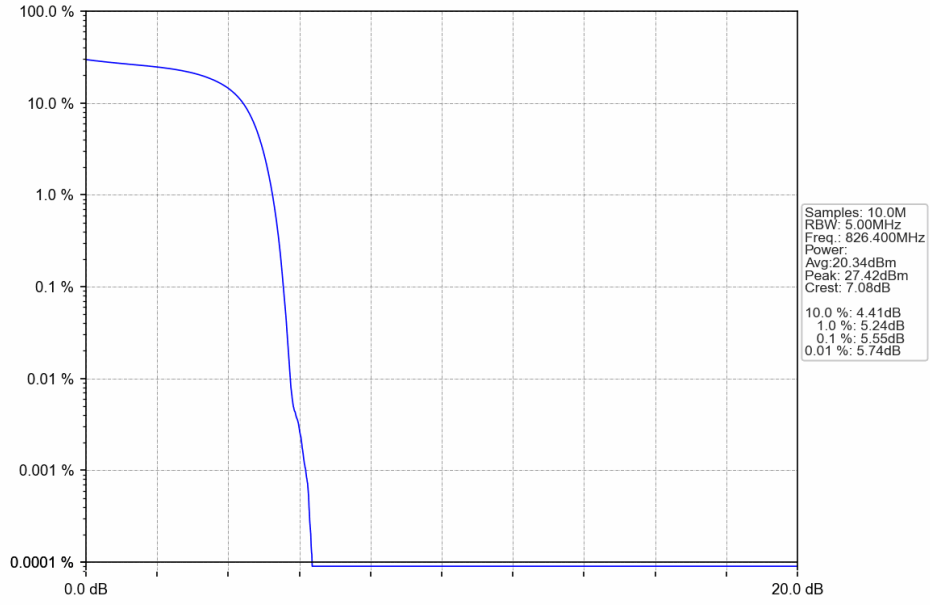
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



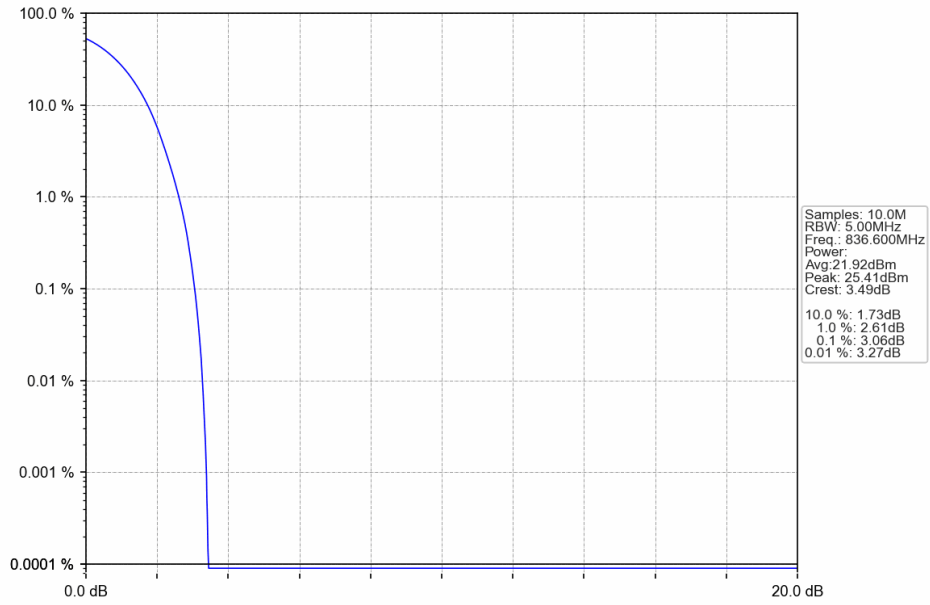
Band5_RMC_LCH_826.4MHz_12.2kbps_RMC_NTNV



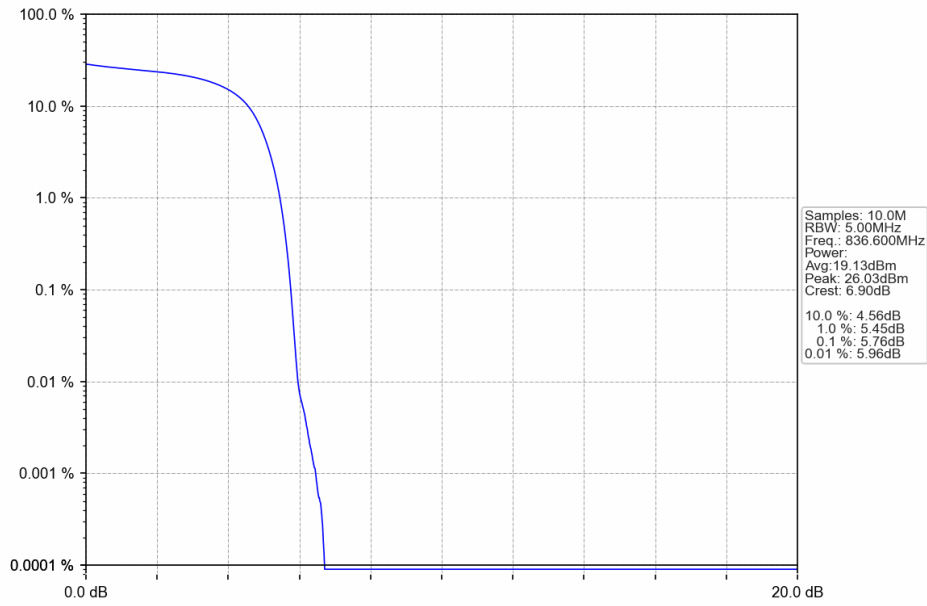
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



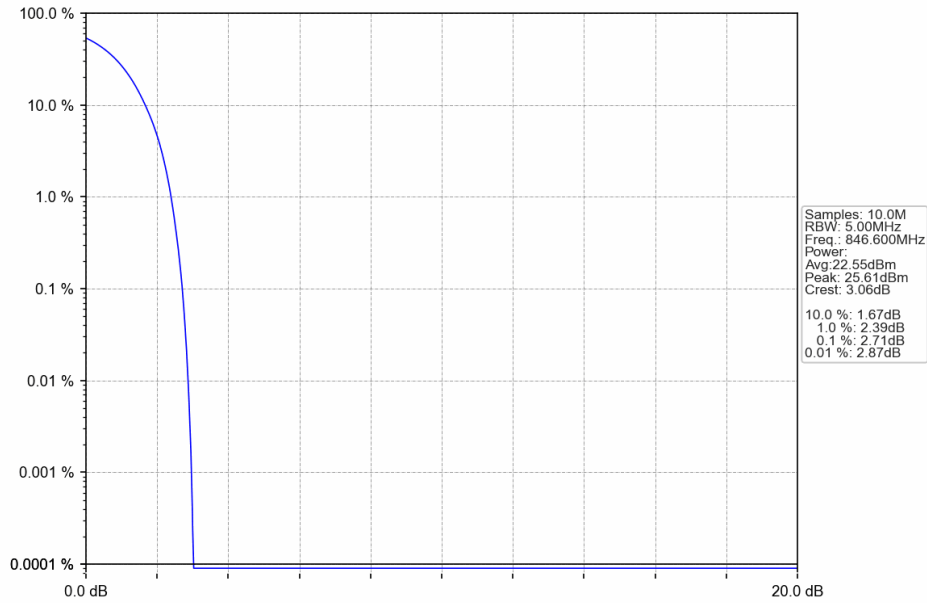
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



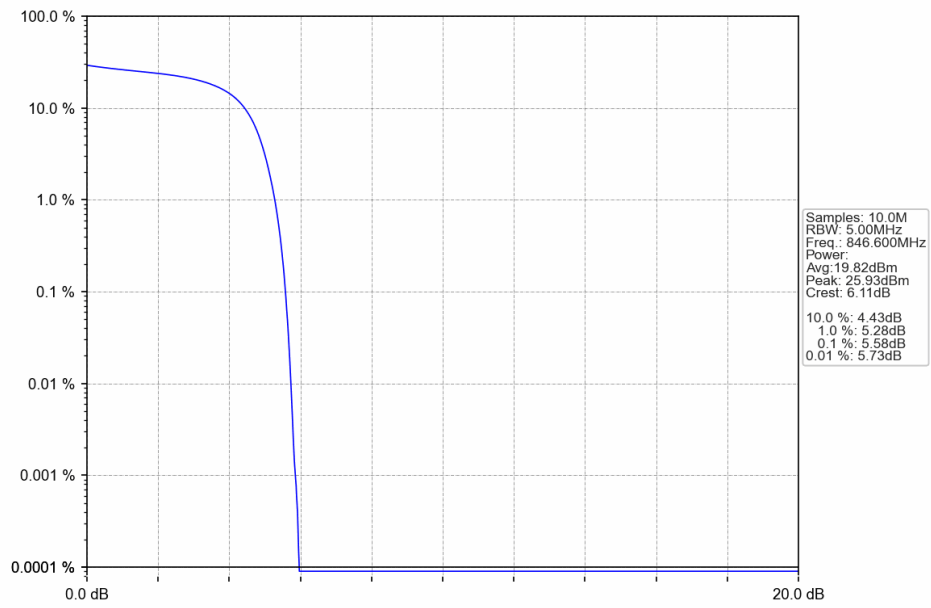
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



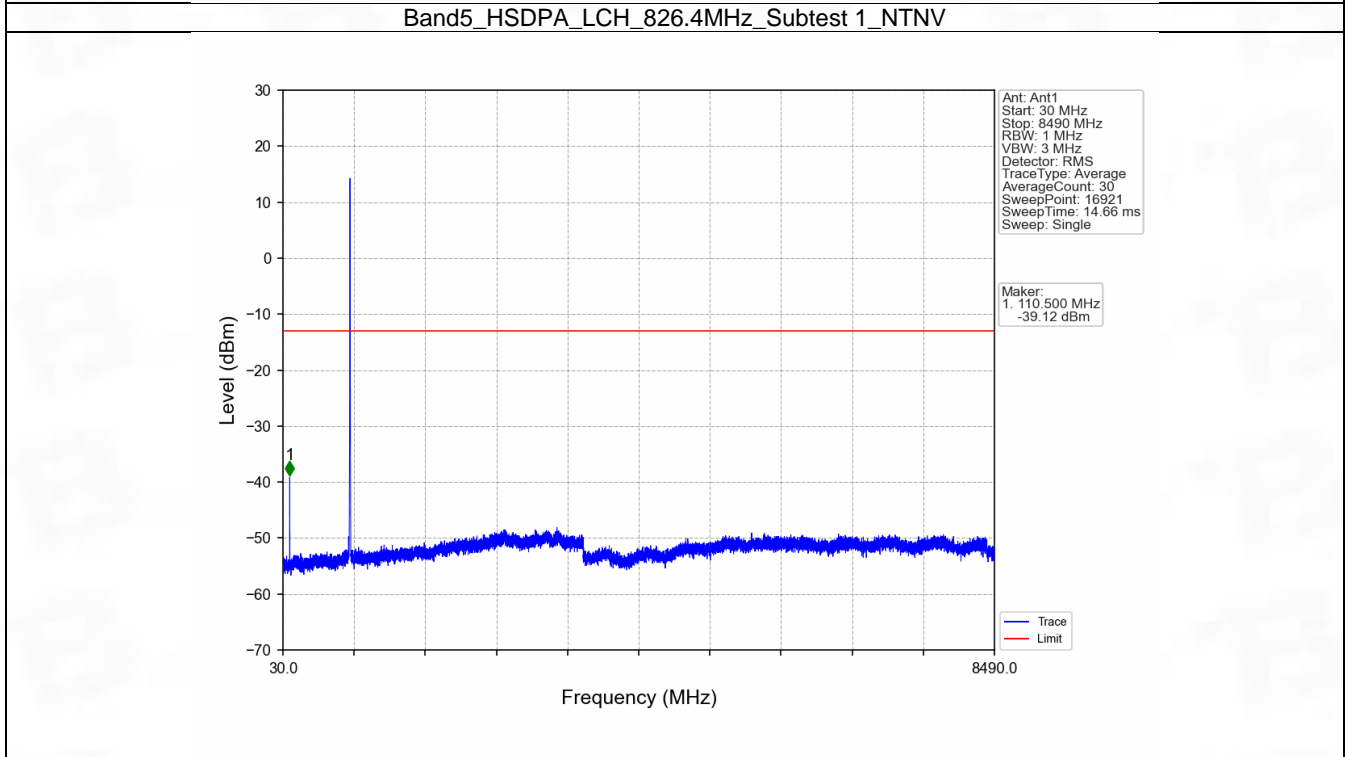
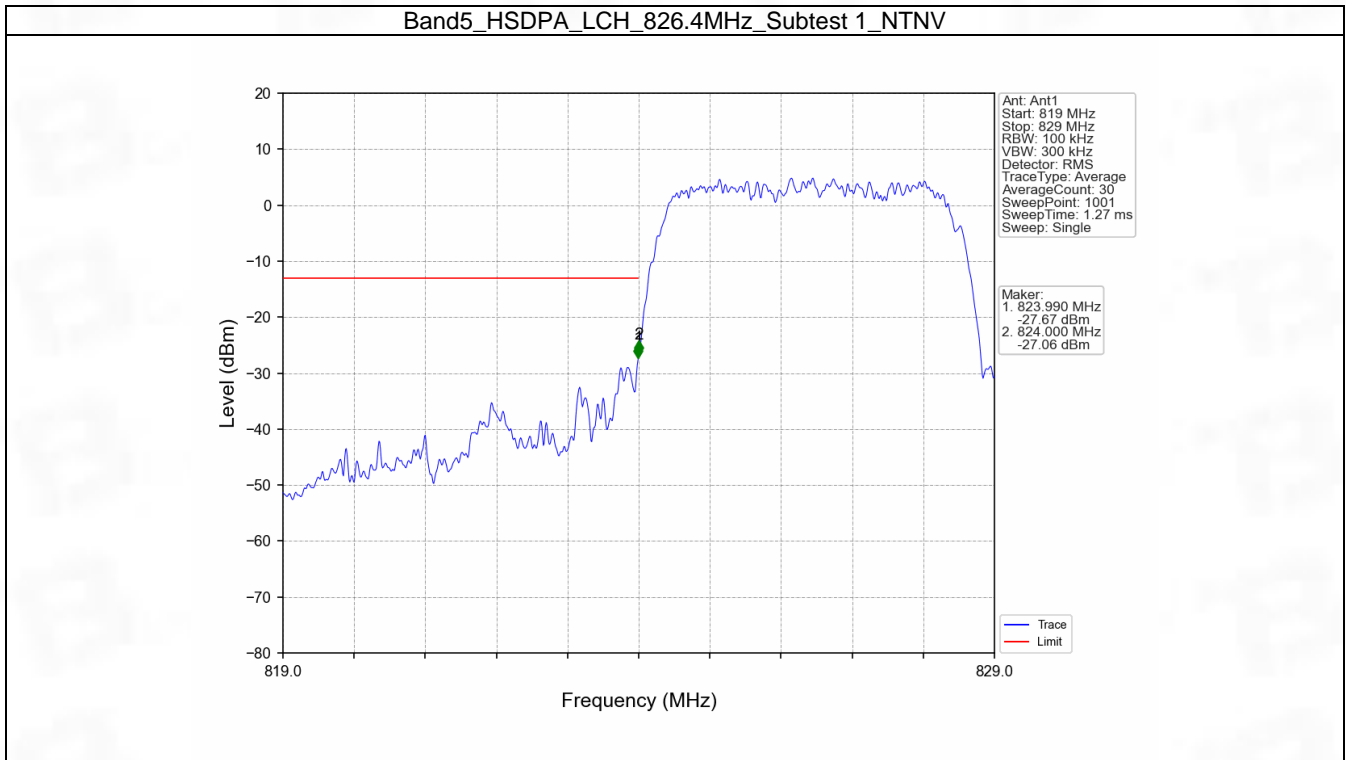
6. Spurious Emission

6.1 Band5

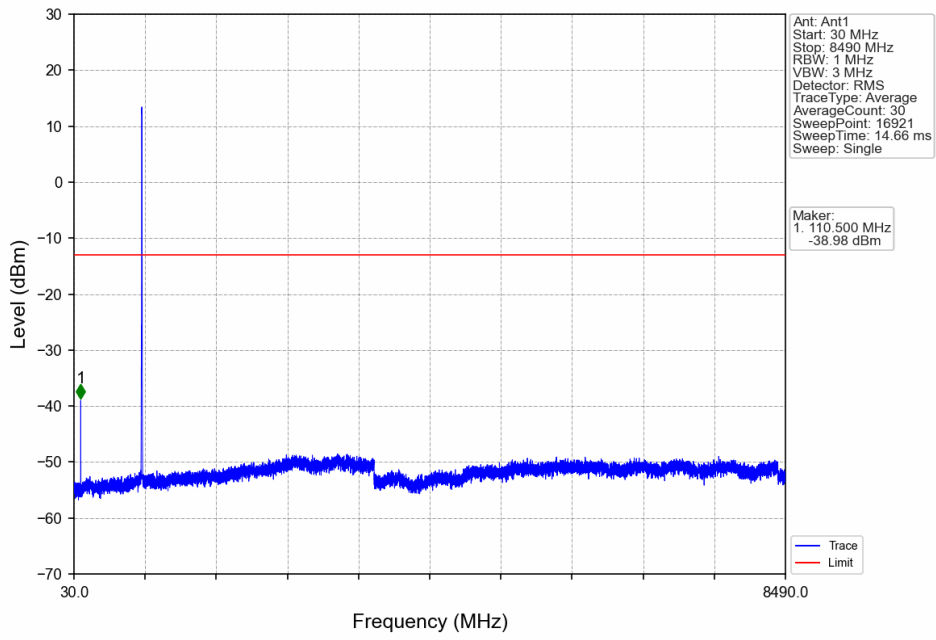
6.1.1 Test Result

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

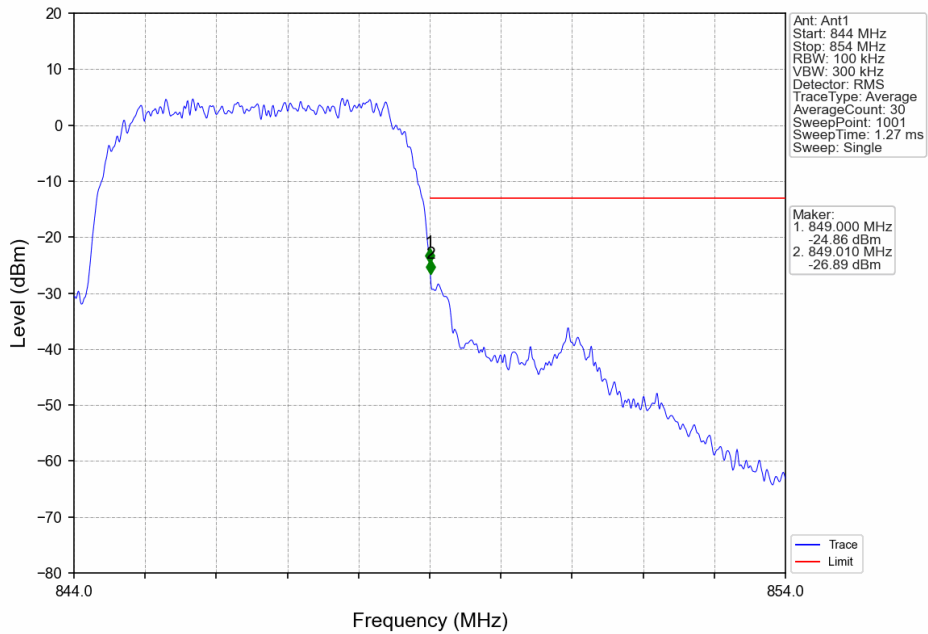
6.1.2 Test Graph



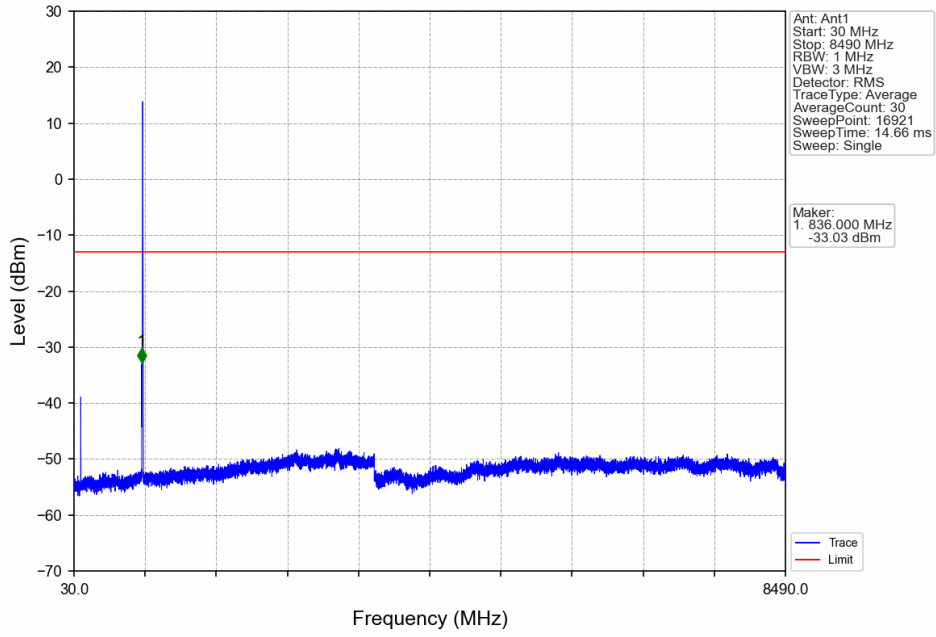
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



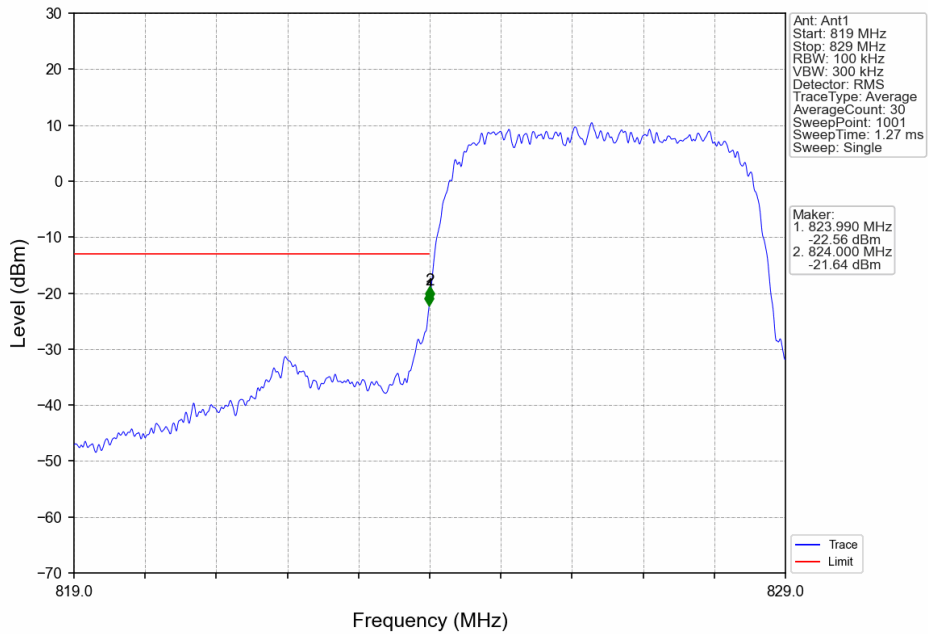
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



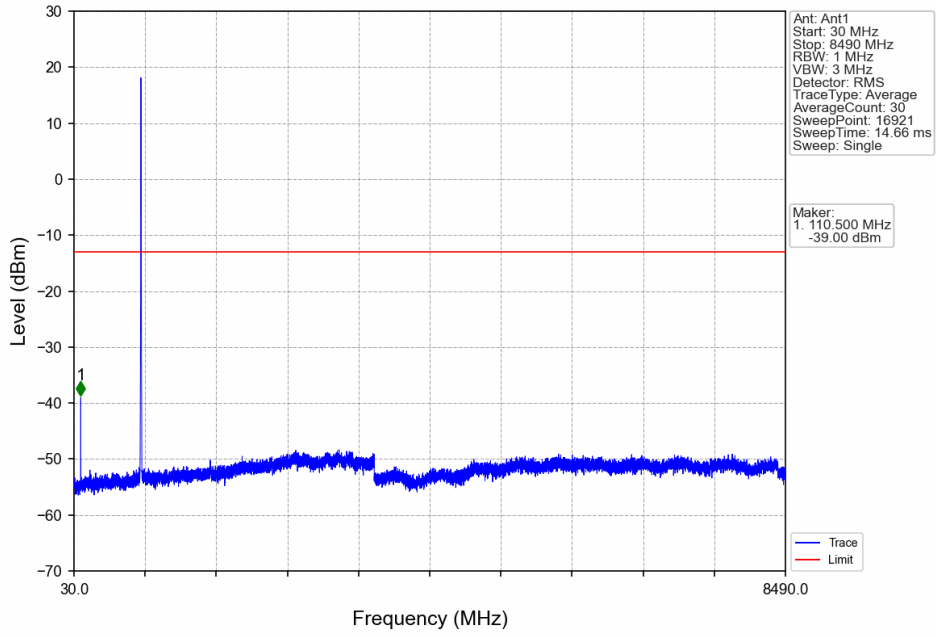
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



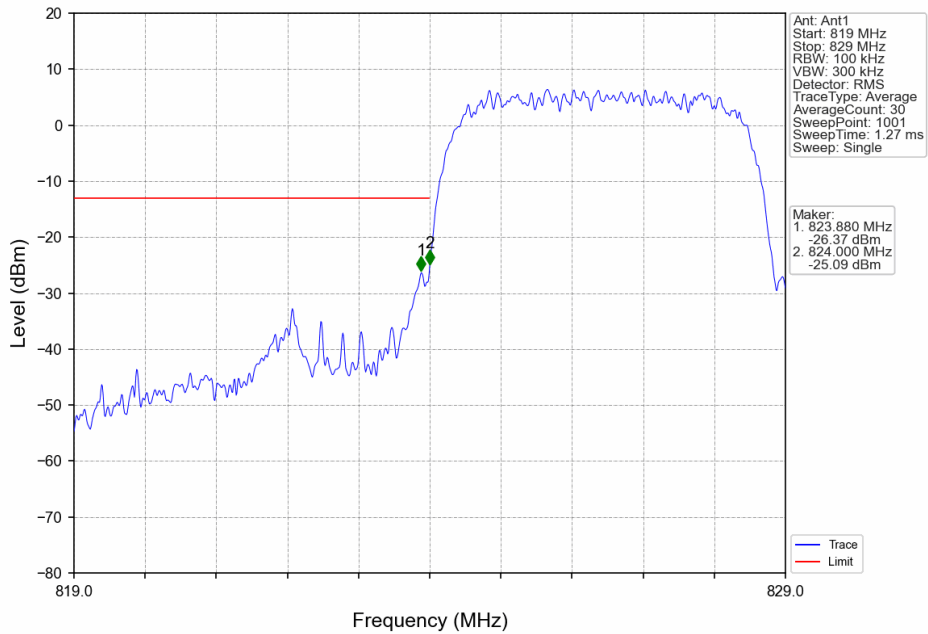
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



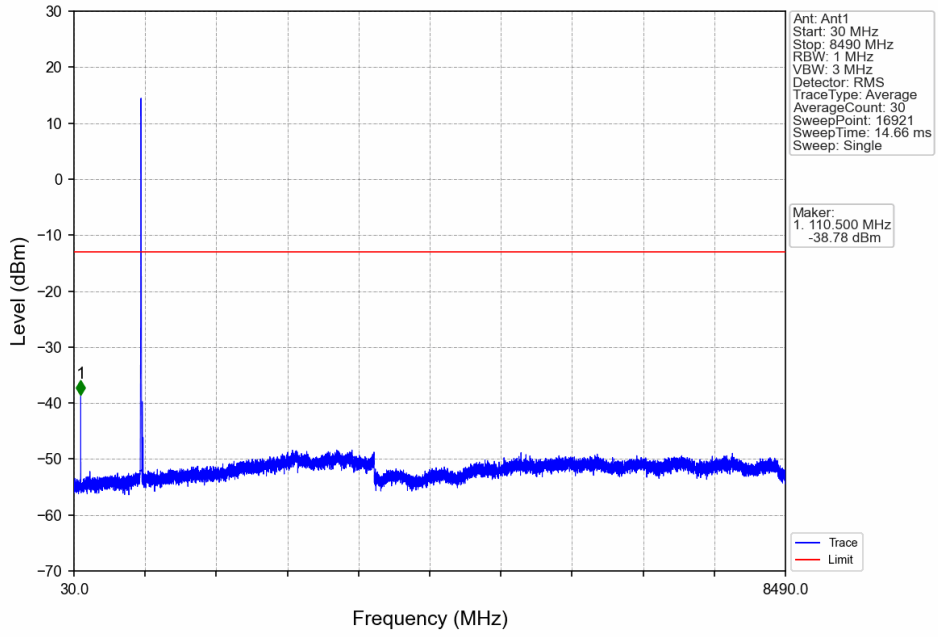
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



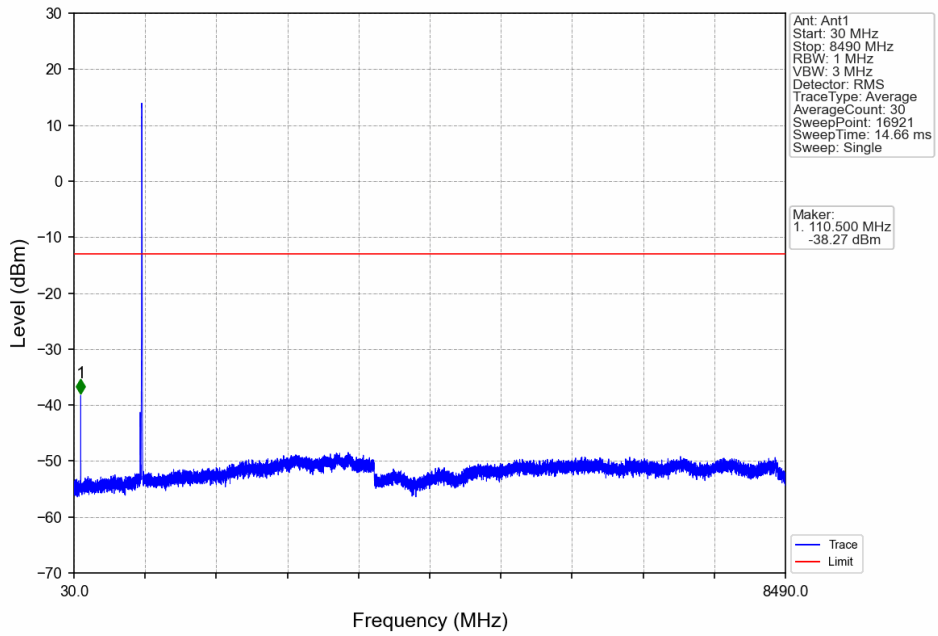
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



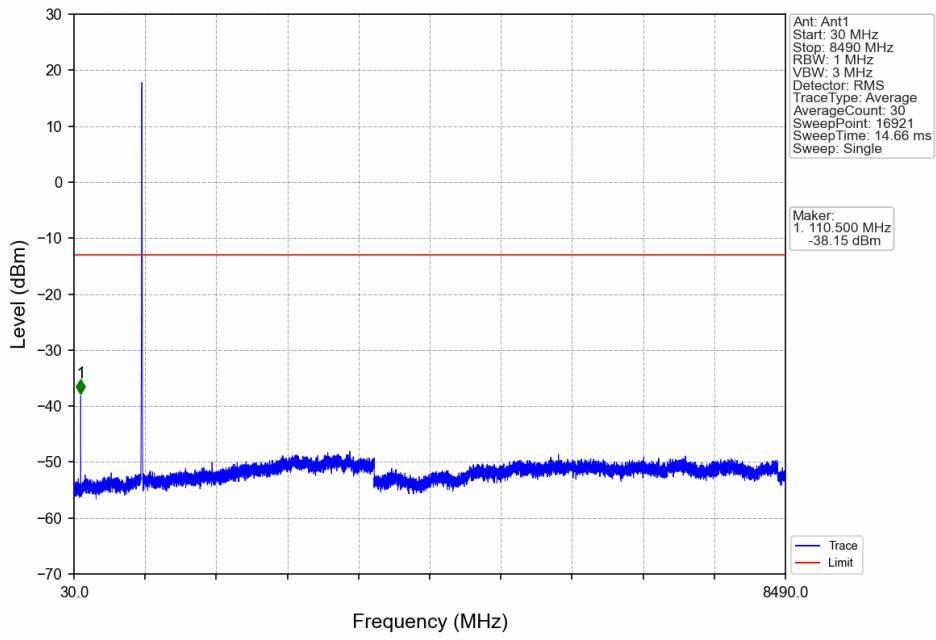
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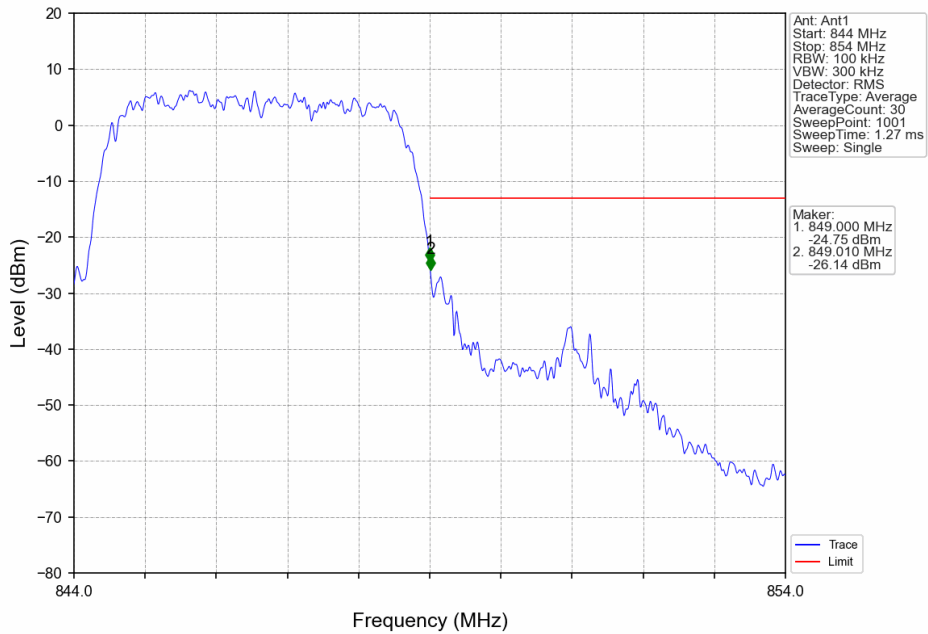
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



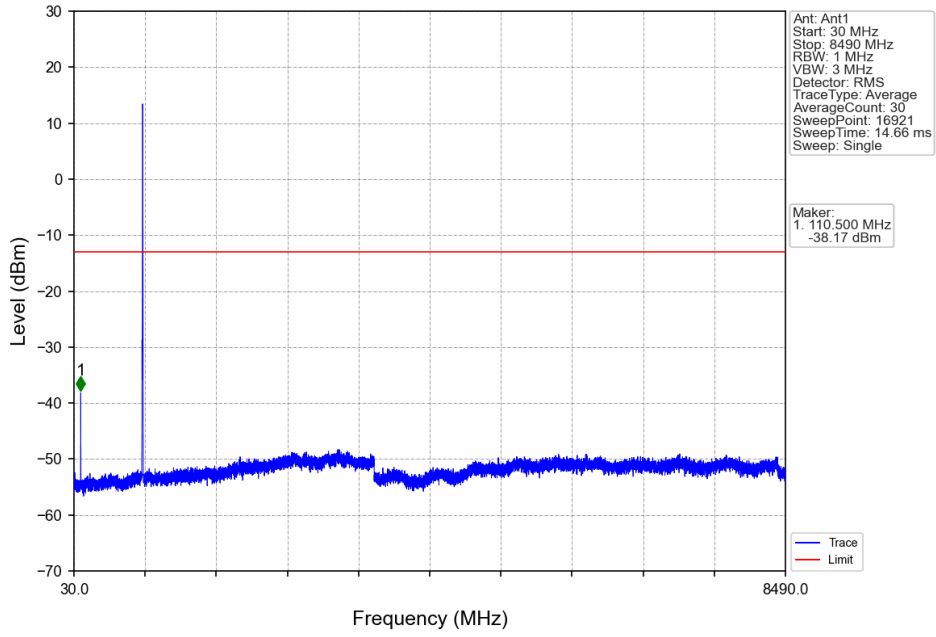
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



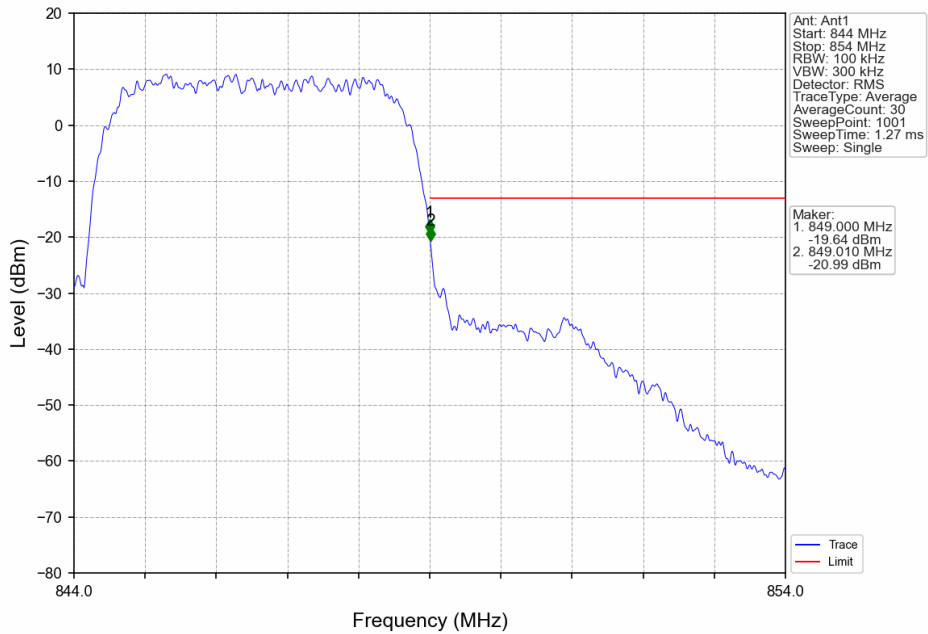
Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



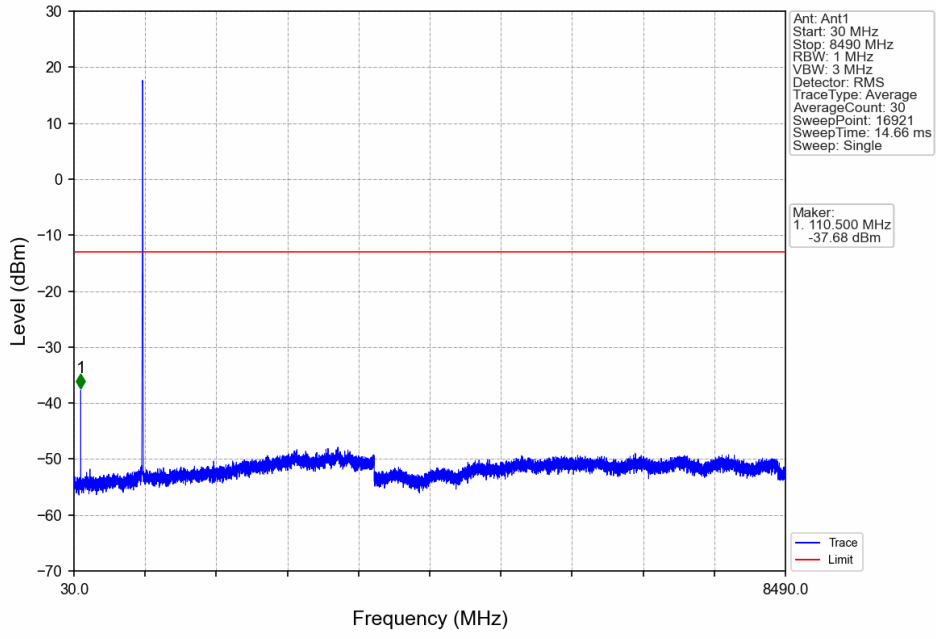
Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



Band5_RMC_HCH_846.6MHz_12.2kbps RMC_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	0.1892	0.0015	ppm	4M17F9W	24E	22.77

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	0.1452	0.0015	ppm	4M17F9W	24E	21.62