

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	21.18	-1.15	17.88	<=38.45	Pass	
			836.6	21.29	-1.15	17.99	<=38.45	Pass	
			846.6	21.17	-1.15	17.87	<=38.45	Pass	
	HSDPA	Subtest 1	826.4	19.00	-1.15	15.70	<=38.45	Pass	
		Subtest 2	826.4	18.98	-1.15	15.68	<=38.45	Pass	
		Subtest 3	826.4	19.02	-1.15	15.72	<=38.45	Pass	
		Subtest 4	826.4	19.00	-1.15	15.70	<=38.45	Pass	
		Subtest 1	836.6	19.13	-1.15	15.83	<=38.45	Pass	
		Subtest 2	836.6	19.15	-1.15	15.85	<=38.45	Pass	
		Subtest 3	836.6	19.14	-1.15	15.84	<=38.45	Pass	
		Subtest 4	836.6	19.11	-1.15	15.81	<=38.45	Pass	
		Subtest 1	846.6	18.95	-1.15	15.65	<=38.45	Pass	
		Subtest 2	846.6	18.98	-1.15	15.68	<=38.45	Pass	
		Subtest 3	846.6	18.96	-1.15	15.66	<=38.45	Pass	
		Subtest 4	846.6	18.95	-1.15	15.65	<=38.45	Pass	
		HSUPA	Subtest 1	826.4	16.98	-1.15	13.68	<=38.45	Pass
			Subtest 2	826.4	16.51	-1.15	13.21	<=38.45	Pass
			Subtest 3	826.4	16.99	-1.15	13.69	<=38.45	Pass
	Subtest 4		826.4	16.49	-1.15	13.19	<=38.45	Pass	
	Subtest 5		826.4	17.00	-1.15	13.70	<=38.45	Pass	
	Subtest 1		836.6	17.13	-1.15	13.83	<=38.45	Pass	
	Subtest 2		836.6	16.66	-1.15	13.36	<=38.45	Pass	
	Subtest 3		836.6	16.58	-1.15	13.28	<=38.45	Pass	
	Subtest 4		836.6	17.12	-1.15	13.82	<=38.45	Pass	
	Subtest 5		836.6	16.61	-1.15	13.31	<=38.45	Pass	
	Subtest 1		846.6	17.00	-1.15	13.70	<=38.45	Pass	
	Subtest 2		846.6	16.99	-1.15	13.69	<=38.45	Pass	
	Subtest 3		846.6	16.77	-1.15	13.47	<=38.45	Pass	
	Subtest 4		846.6	16.51	-1.15	13.21	<=38.45	Pass	
	Subtest 5		846.6	16.98	-1.15	13.68	<=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	-9.406	-0.0114	-2.5 to 2.5	Pass
			3.85	-14.226	-0.0172	-2.5 to 2.5	Pass
			4.43	-15.235	-0.0184	-2.5 to 2.5	Pass
		-30	3.85	-14.048	-0.0170	-2.5 to 2.5	Pass
		-20	3.85	-15.879	-0.0192	-2.5 to 2.5	Pass

		-10	3.85	-15.092	-0.0183	-2.5 to 2.5	Pass	
		0	3.85	-15.113	-0.0183	-2.5 to 2.5	Pass	
		10	3.85	-9.534	-0.0115	-2.5 to 2.5	Pass	
		30	3.85	-15.929	-0.0193	-2.5 to 2.5	Pass	
		40	3.85	-15.607	-0.0189	-2.5 to 2.5	Pass	
	836.6	20	3.85	-8.626	-0.0104	-2.5 to 2.5	Pass	
			3.27	-11.280	-0.0135	-2.5 to 2.5	Pass	
			4.43	-12.660	-0.0151	-2.5 to 2.5	Pass	
		-30	3.85	-13.053	-0.0156	-2.5 to 2.5	Pass	
		-20	3.85	-9.706	-0.0116	-2.5 to 2.5	Pass	
		-10	3.85	-12.925	-0.0154	-2.5 to 2.5	Pass	
		0	3.85	-12.774	-0.0153	-2.5 to 2.5	Pass	
		10	3.85	-6.673	-0.0080	-2.5 to 2.5	Pass	
		30	3.85	-12.338	-0.0147	-2.5 to 2.5	Pass	
		40	3.85	-14.284	-0.0171	-2.5 to 2.5	Pass	
		50	3.85	-12.467	-0.0149	-2.5 to 2.5	Pass	
		846.6	20	3.27	-14.727	-0.0174	-2.5 to 2.5	Pass
				3.85	-5.536	-0.0065	-2.5 to 2.5	Pass
				4.43	-9.034	-0.0107	-2.5 to 2.5	Pass
			-30	3.85	-11.609	-0.0137	-2.5 to 2.5	Pass
	-20		3.85	-14.713	-0.0174	-2.5 to 2.5	Pass	
	-10		3.85	-11.766	-0.0139	-2.5 to 2.5	Pass	
	0		3.85	-11.802	-0.0139	-2.5 to 2.5	Pass	
	10		3.85	-13.719	-0.0162	-2.5 to 2.5	Pass	
	30		3.85	-14.348	-0.0169	-2.5 to 2.5	Pass	
	40		3.85	-8.233	-0.0097	-2.5 to 2.5	Pass	
	HSDPA	826.4	20	3.27	-7.203	-0.0087	-2.5 to 2.5	Pass
				3.85	-7.217	-0.0087	-2.5 to 2.5	Pass
				4.43	-7.596	-0.0092	-2.5 to 2.5	Pass
			-30	3.85	-7.067	-0.0086	-2.5 to 2.5	Pass
-20			3.85	-8.390	-0.0102	-2.5 to 2.5	Pass	
-10			3.85	-11.251	-0.0136	-2.5 to 2.5	Pass	
0			3.85	-6.466	-0.0078	-2.5 to 2.5	Pass	
10			3.85	-8.605	-0.0104	-2.5 to 2.5	Pass	
30			3.85	-13.797	-0.0167	-2.5 to 2.5	Pass	
40			3.85	-7.710	-0.0093	-2.5 to 2.5	Pass	
50			3.85	-10.679	-0.0129	-2.5 to 2.5	Pass	
836.6			20	3.27	-8.247	-0.0099	-2.5 to 2.5	Pass
				3.85	-13.011	-0.0156	-2.5 to 2.5	Pass
				4.43	-15.492	-0.0185	-2.5 to 2.5	Pass
			-30	3.85	-15.850	-0.0189	-2.5 to 2.5	Pass
		-20	3.85	-12.367	-0.0148	-2.5 to 2.5	Pass	
		-10	3.85	-15.228	-0.0182	-2.5 to 2.5	Pass	
		0	3.85	-11.523	-0.0138	-2.5 to 2.5	Pass	
		10	3.85	-11.637	-0.0139	-2.5 to 2.5	Pass	
		30	3.85	-15.228	-0.0182	-2.5 to 2.5	Pass	
		40	3.85	-14.412	-0.0172	-2.5 to 2.5	Pass	
846.6		20	3.85	-12.567	-0.0150	-2.5 to 2.5	Pass	
			3.27	-13.475	-0.0159	-2.5 to 2.5	Pass	
			3.85	-14.527	-0.0172	-2.5 to 2.5	Pass	
		4.43	-13.890	-0.0164	-2.5 to 2.5	Pass		
		-30	3.85	-14.405	-0.0170	-2.5 to 2.5	Pass	
		-20	3.85	-14.784	-0.0175	-2.5 to 2.5	Pass	
		-10	3.85	-15.364	-0.0181	-2.5 to 2.5	Pass	
		0	3.85	-14.255	-0.0168	-2.5 to 2.5	Pass	
		10	3.85	-15.142	-0.0179	-2.5 to 2.5	Pass	
	30	3.85	-12.317	-0.0145	-2.5 to 2.5	Pass		

		40	3.85	-12.138	-0.0143	-2.5 to 2.5	Pass
		50	3.85	-11.487	-0.0136	-2.5 to 2.5	Pass
HSUPA	826.4	20	3.27	-12.453	-0.0151	-2.5 to 2.5	Pass
			3.85	-13.132	-0.0159	-2.5 to 2.5	Pass
			4.43	-13.862	-0.0168	-2.5 to 2.5	Pass
		-30	3.85	-9.749	-0.0118	-2.5 to 2.5	Pass
		-20	3.85	-12.081	-0.0146	-2.5 to 2.5	Pass
		-10	3.85	-9.577	-0.0116	-2.5 to 2.5	Pass
		0	3.85	-13.139	-0.0159	-2.5 to 2.5	Pass
		10	3.85	-14.870	-0.0180	-2.5 to 2.5	Pass
		30	3.85	-13.776	-0.0167	-2.5 to 2.5	Pass
		40	3.85	-11.659	-0.0141	-2.5 to 2.5	Pass
	50	3.85	-5.844	-0.0071	-2.5 to 2.5	Pass	
	836.6	20	3.27	-10.335	-0.0124	-2.5 to 2.5	Pass
			3.85	-9.806	-0.0117	-2.5 to 2.5	Pass
			4.43	-12.596	-0.0151	-2.5 to 2.5	Pass
		-30	3.85	-8.540	-0.0102	-2.5 to 2.5	Pass
		-20	3.85	-6.030	-0.0072	-2.5 to 2.5	Pass
		-10	3.85	-9.613	-0.0115	-2.5 to 2.5	Pass
		0	3.85	-13.211	-0.0158	-2.5 to 2.5	Pass
		10	3.85	-11.265	-0.0135	-2.5 to 2.5	Pass
		30	3.85	-8.354	-0.0100	-2.5 to 2.5	Pass
		40	3.85	-8.554	-0.0102	-2.5 to 2.5	Pass
	50	3.85	-7.367	-0.0088	-2.5 to 2.5	Pass	
	846.6	20	3.27	-6.452	-0.0076	-2.5 to 2.5	Pass
			3.85	-4.134	-0.0049	-2.5 to 2.5	Pass
			4.43	-5.615	-0.0066	-2.5 to 2.5	Pass
		-30	3.85	-11.272	-0.0133	-2.5 to 2.5	Pass
		-20	3.85	-5.851	-0.0069	-2.5 to 2.5	Pass
		-10	3.85	-9.356	-0.0111	-2.5 to 2.5	Pass
		0	3.85	-9.556	-0.0113	-2.5 to 2.5	Pass
		10	3.85	-9.463	-0.0112	-2.5 to 2.5	Pass
30		3.85	-9.334	-0.0110	-2.5 to 2.5	Pass	
40		3.85	-3.698	-0.0044	-2.5 to 2.5	Pass	
50	3.85	-3.691	-0.0044	-2.5 to 2.5	Pass		

3. Modulation Characteristics

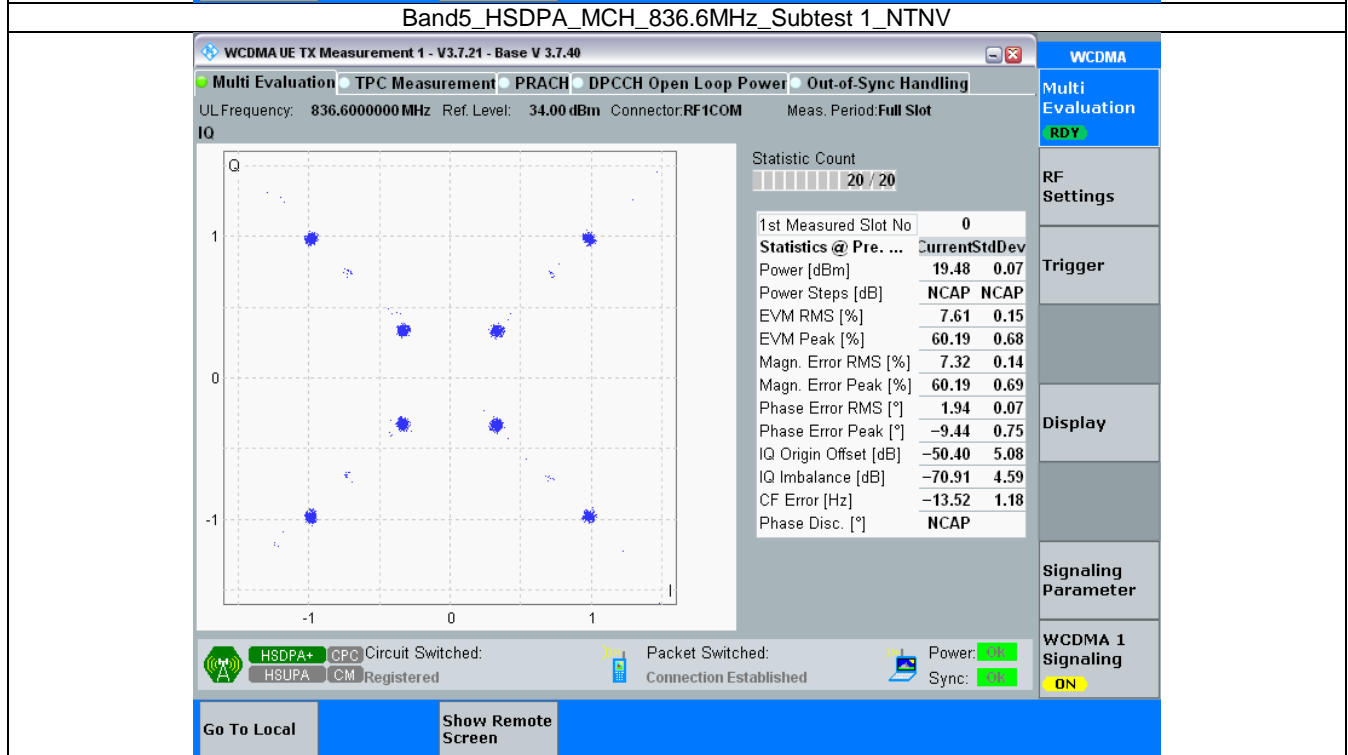
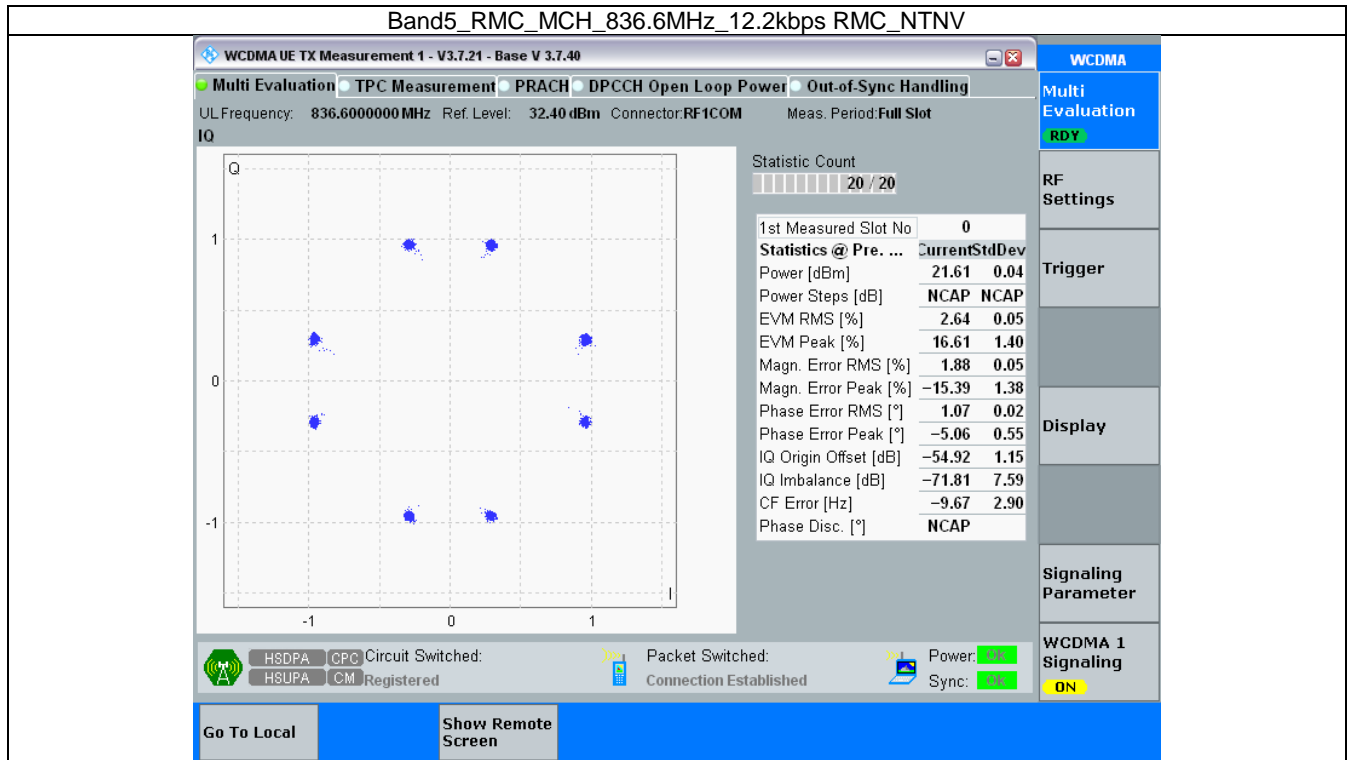
3.1 Test Result

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



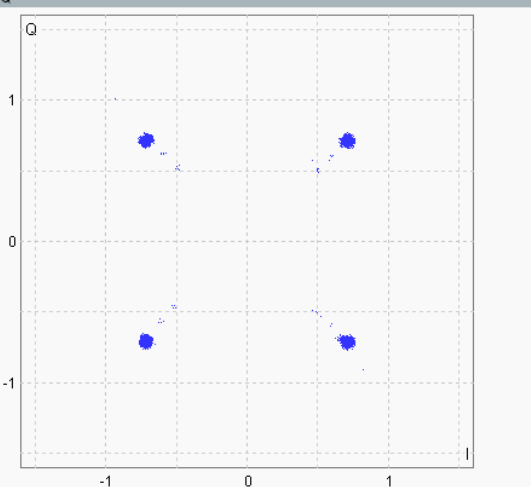
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV

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

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

WCDMA

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



Statistic Count
20 / 20

1st Measured Slot No	0
Statistics @ Pre. ...	CurrentStdDev
Power [dBm]	15.55 2.36
Power Steps [dB]	NCAP NCAP
EVM RMS [%]	3.20 3.61
EVM Peak [%]	6.78 35.75
Magn. Error RMS [%]	2.23 3.91
Magn. Error Peak [%]	6.31 36.10
Phase Error RMS [°]	1.31 0.38
Phase Error Peak [°]	-3.78 2.18
IQ Origin Offset [dB]	-47.45 1.89
IQ Imbalance [dB]	-59.19 5.93
CF Error [Hz]	-4.23 1.62
Phase Disc. [°]	NCAP

	Circuit Switched:		Power: ON
	CM Registered		Sync: ON

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

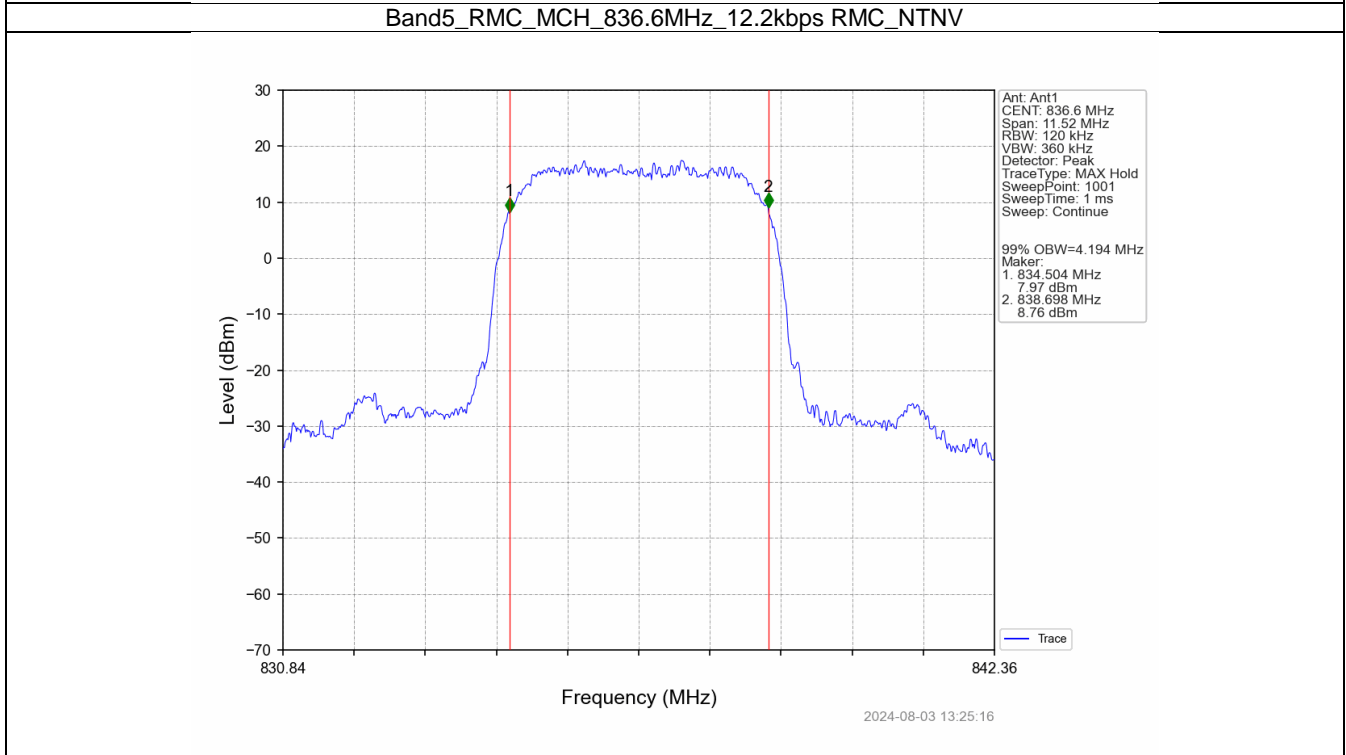
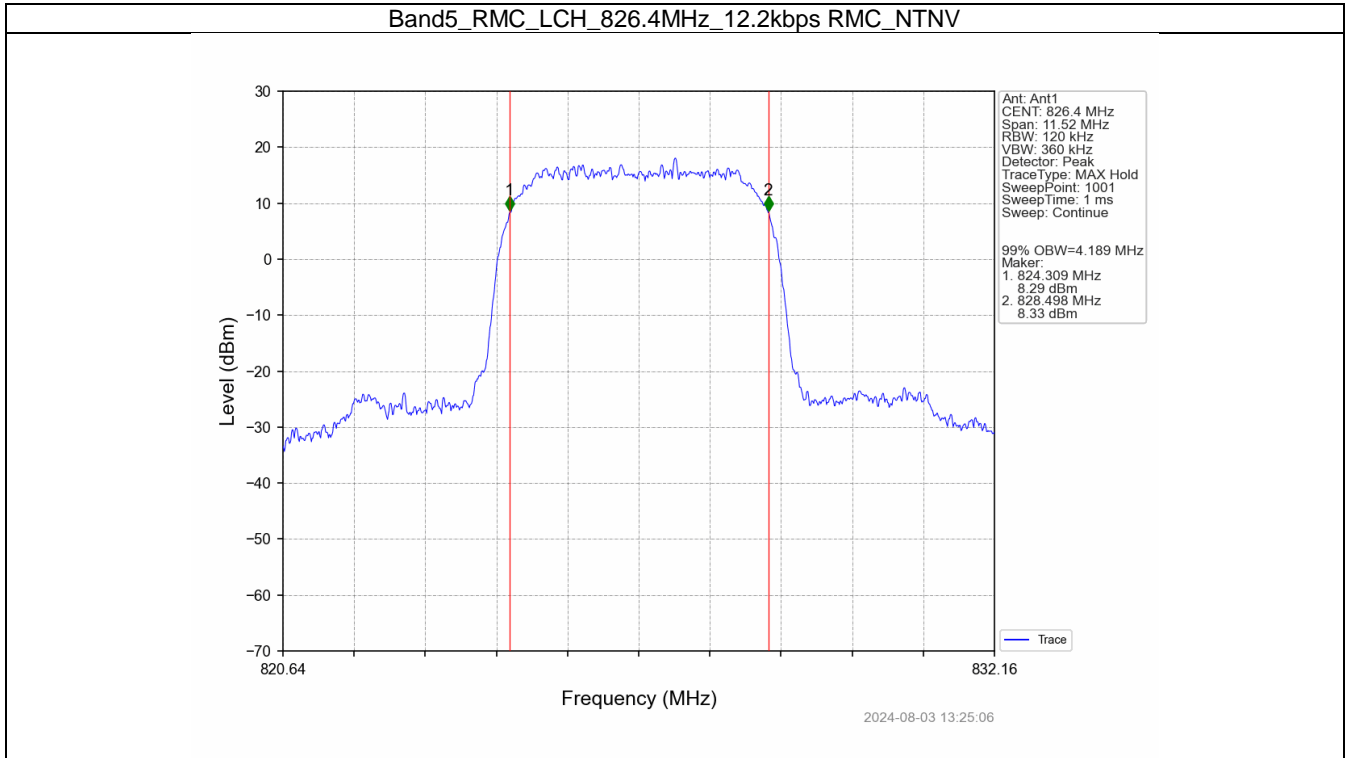
Band: 5						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.189	/	Pass
			836.6	4.194	/	Pass
			846.6	4.176	/	Pass
	HSDPA	Subtest 1	826.4	4.205	/	Pass
			836.6	4.200	/	Pass
			846.6	4.195	/	Pass
	HSUPA	Subtest 1	826.4	4.192	/	Pass
			836.6	4.199	/	Pass
			846.6	4.184	/	Pass

4.1.2 Band5_XDB

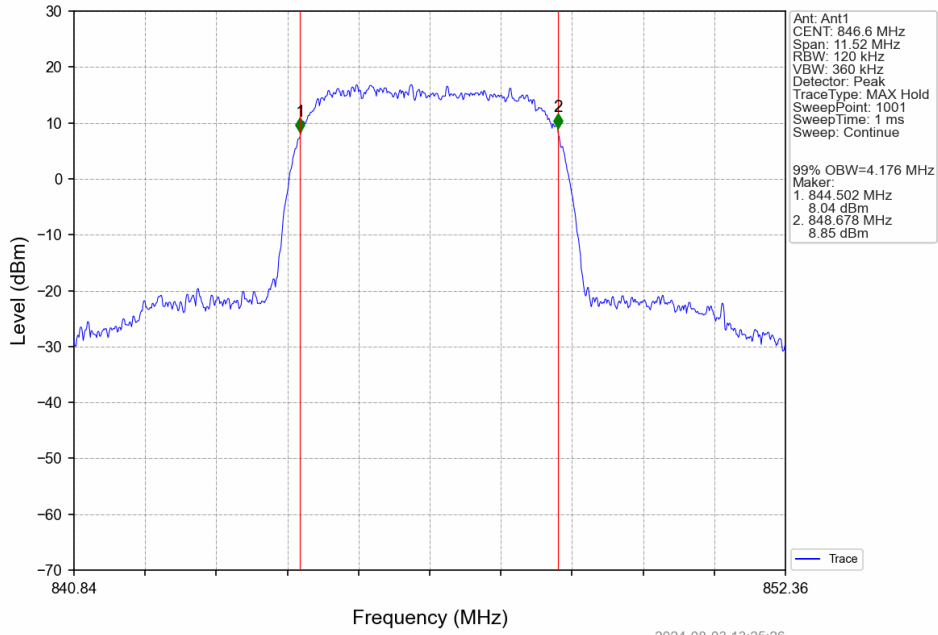
Band: 5						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.739	/	Pass
			836.6	4.763	/	Pass
			846.6	4.770	/	Pass
	HSDPA	Subtest 1	826.4	5.207	/	Pass
			836.6	4.962	/	Pass
			846.6	4.742	/	Pass
	HSUPA	Subtest 1	826.4	4.972	/	Pass
			836.6	4.963	/	Pass
			846.6	4.731	/	Pass

4.2 Test Graph

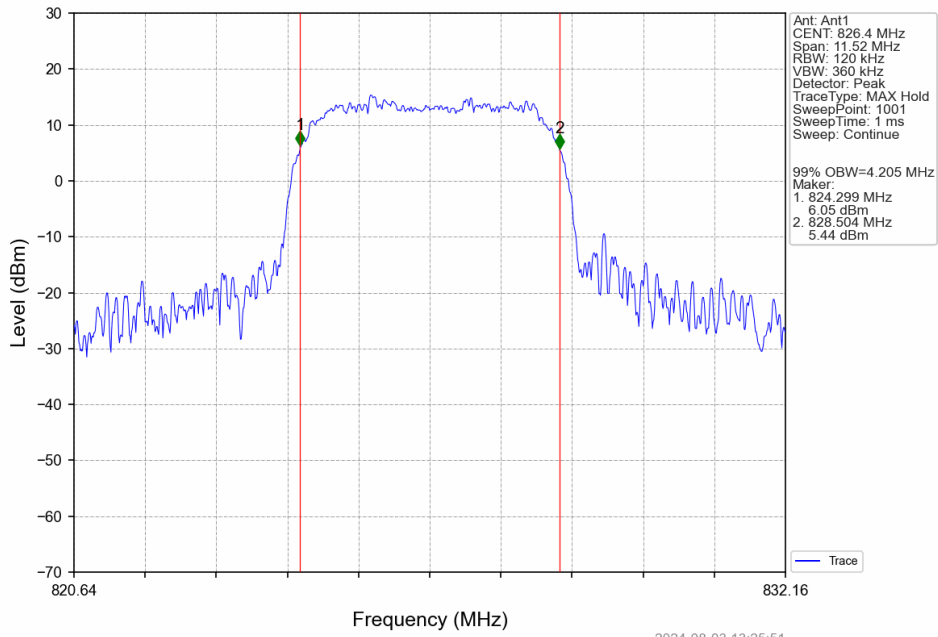
4.2.1 Band5_OBW



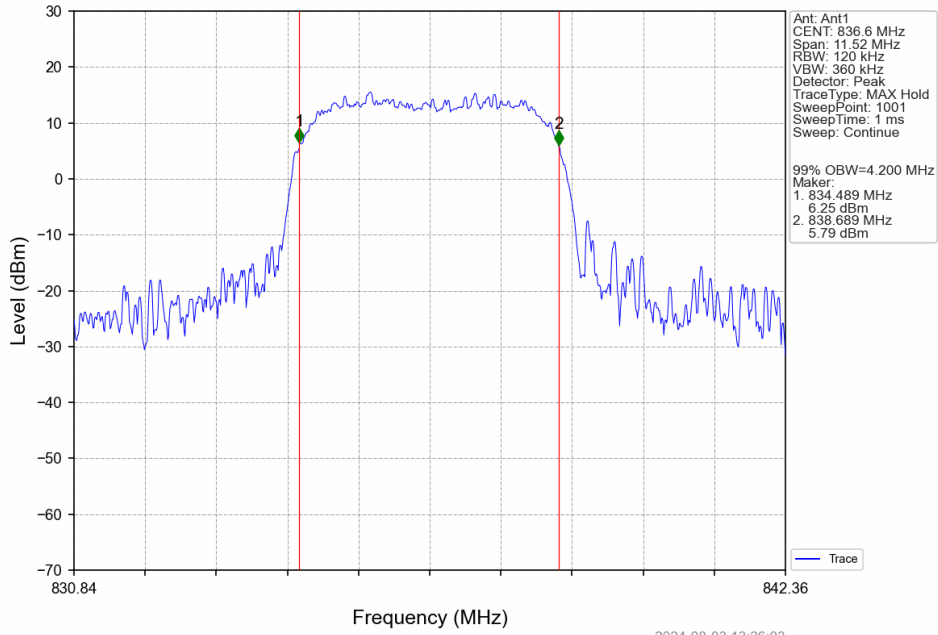
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



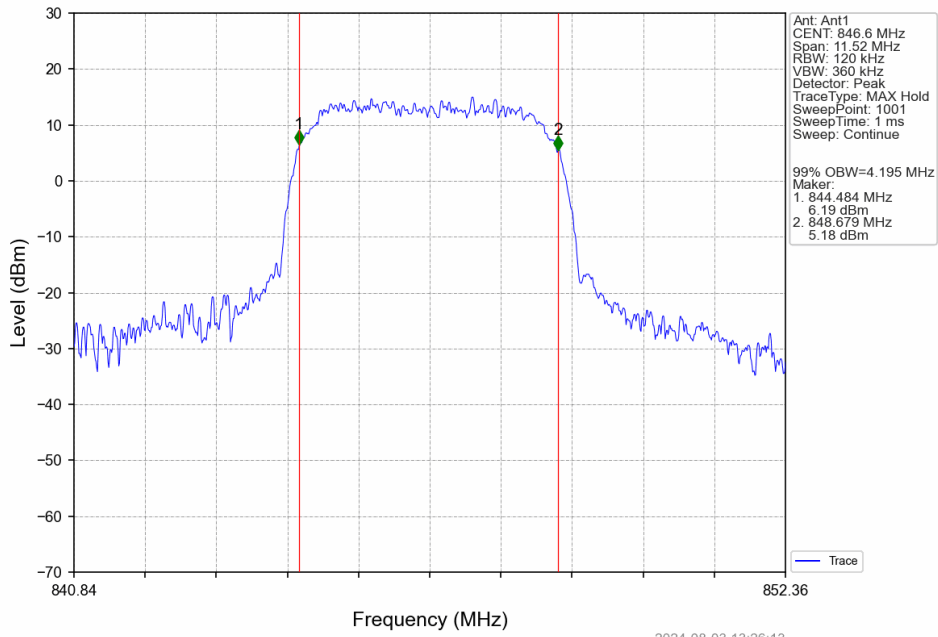
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



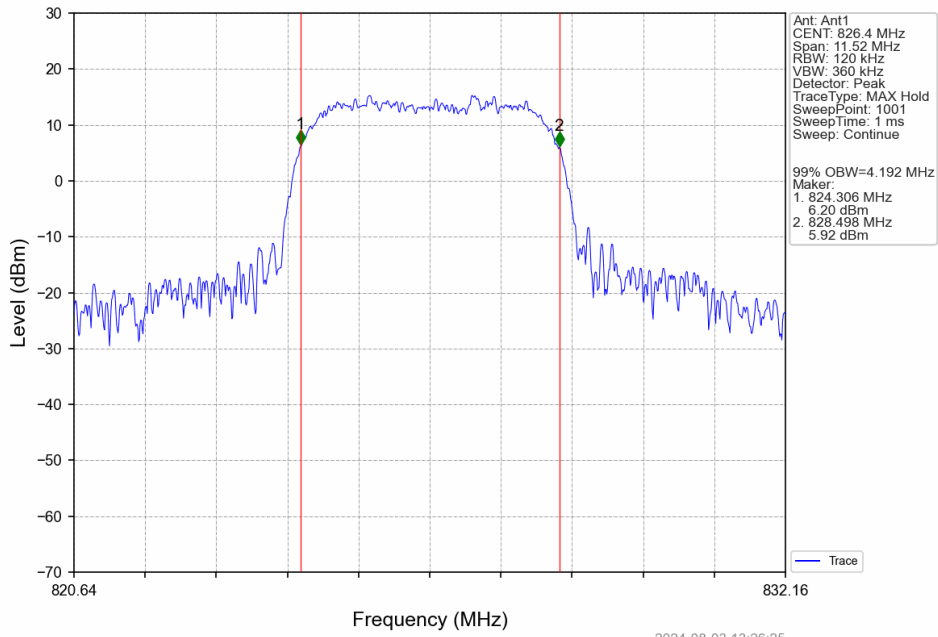
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



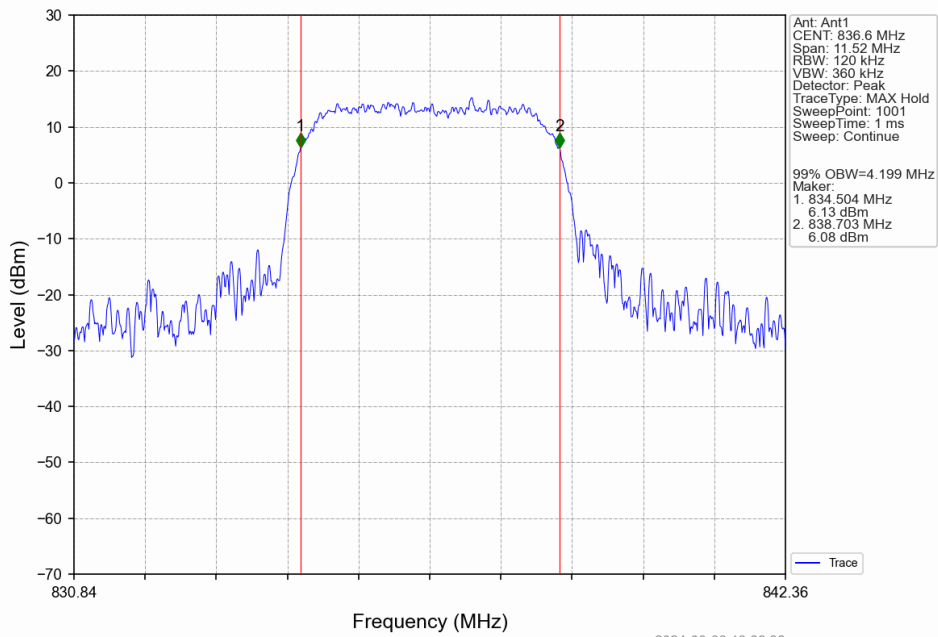
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



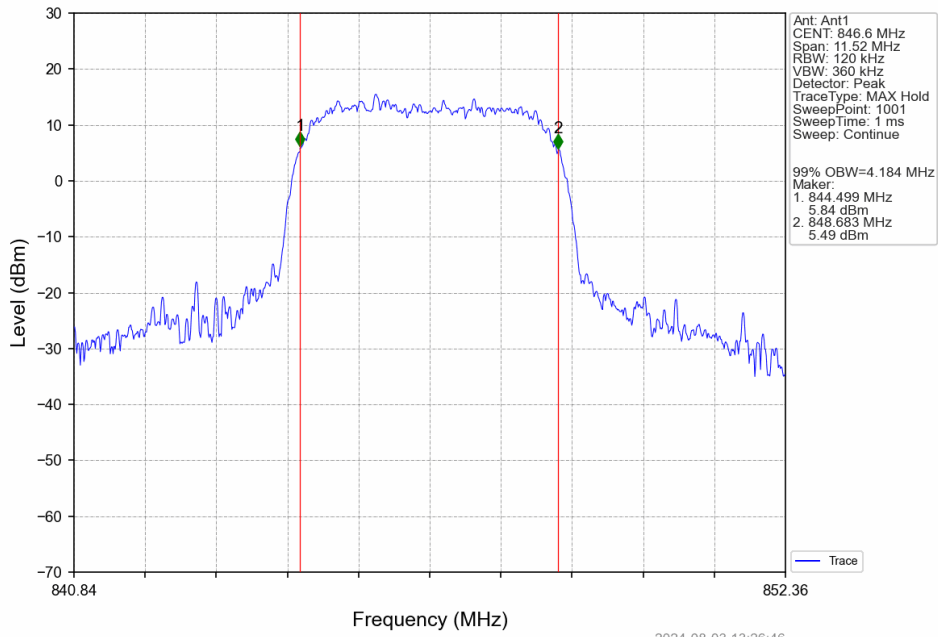
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV

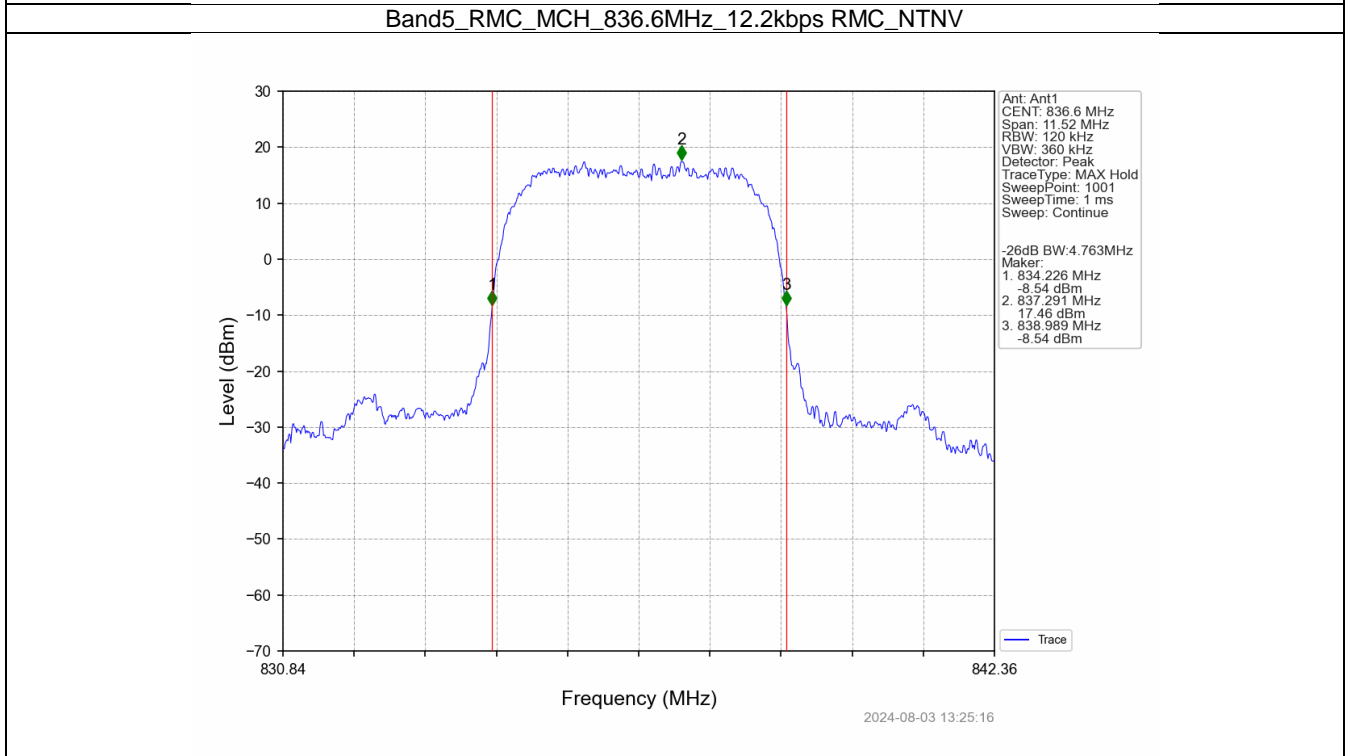
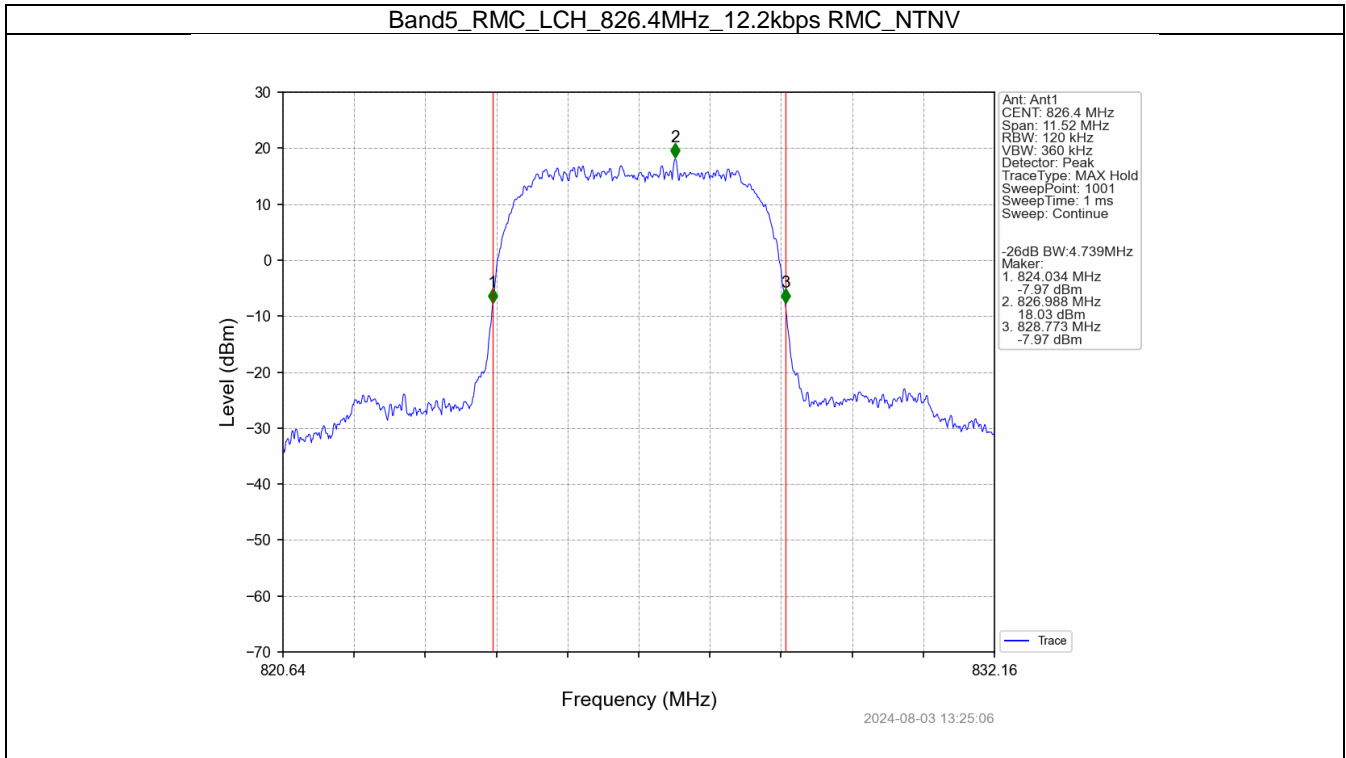


Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV

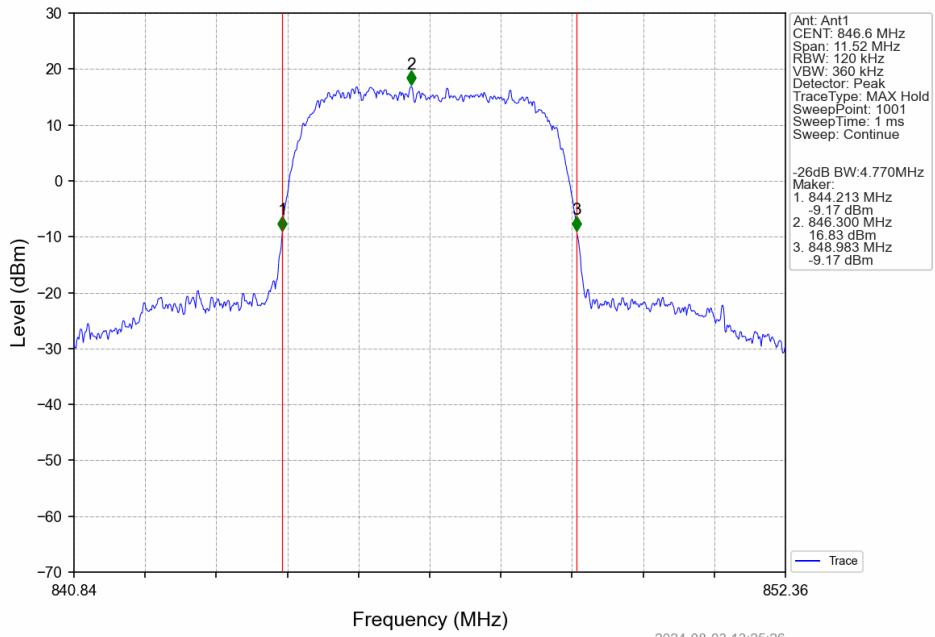


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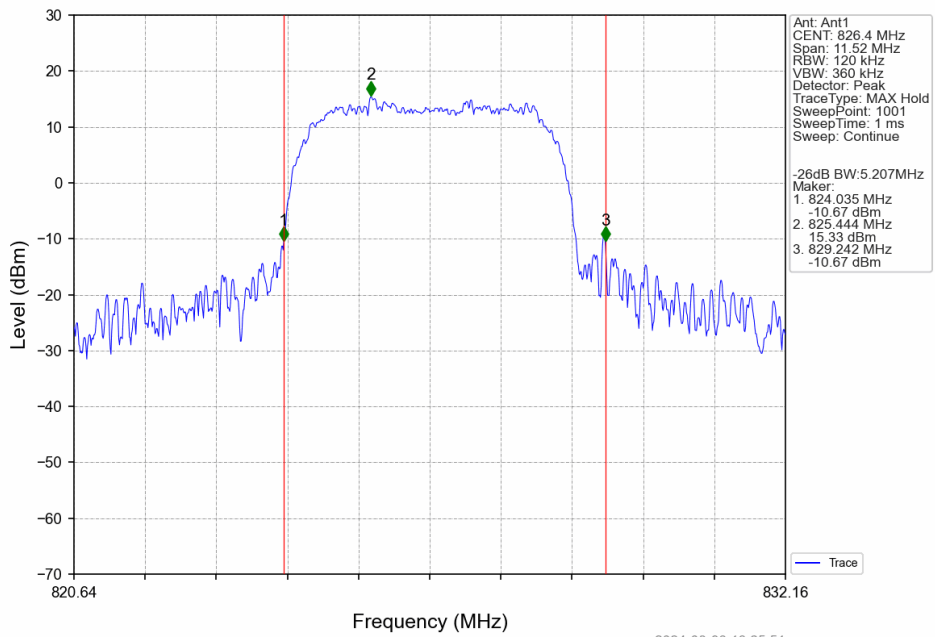
4.2.2 Band5_XDB



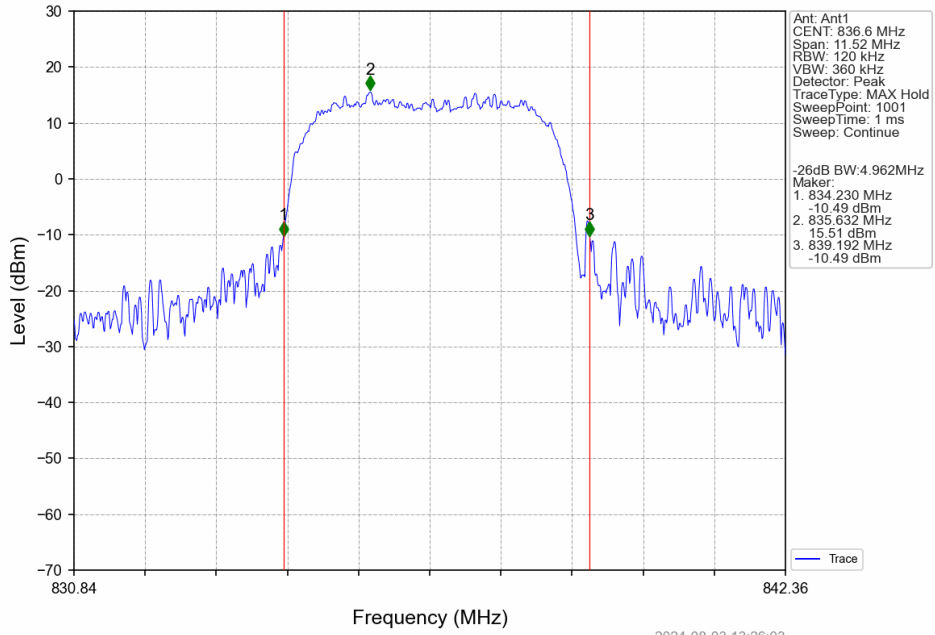
Band5_RMC_HCH_846.6MHz_12.2kbps_RMC_NTNV



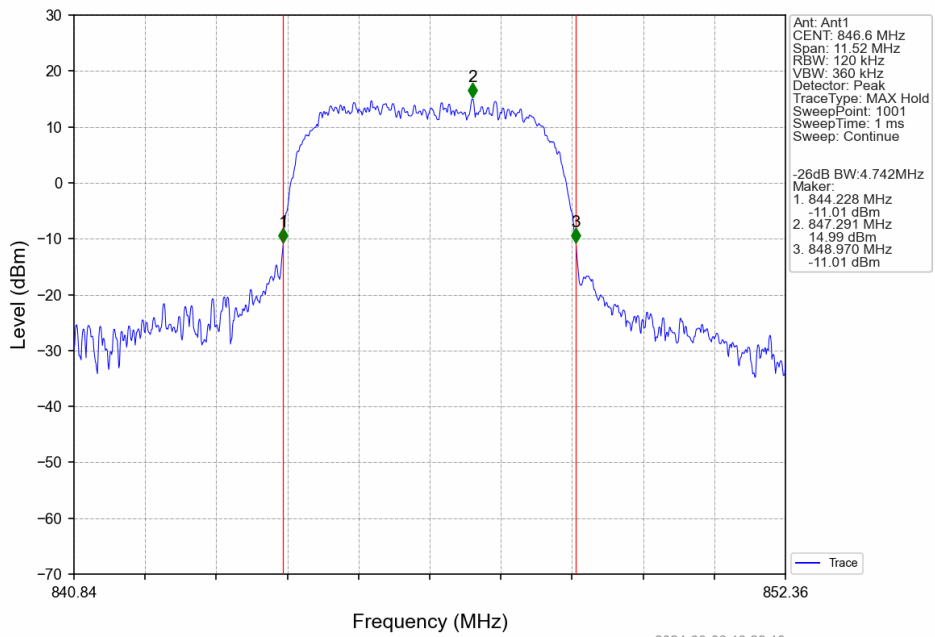
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



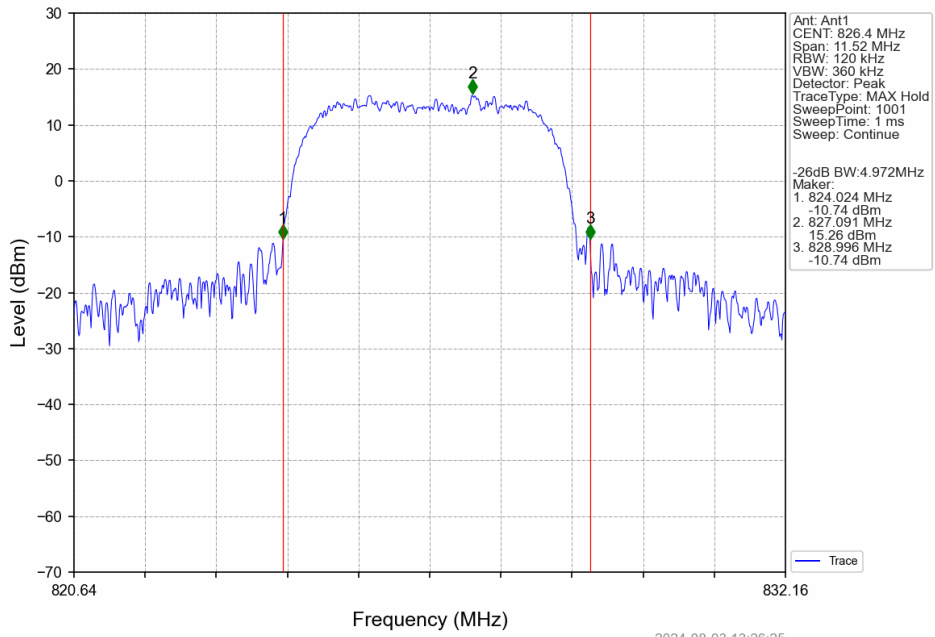
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



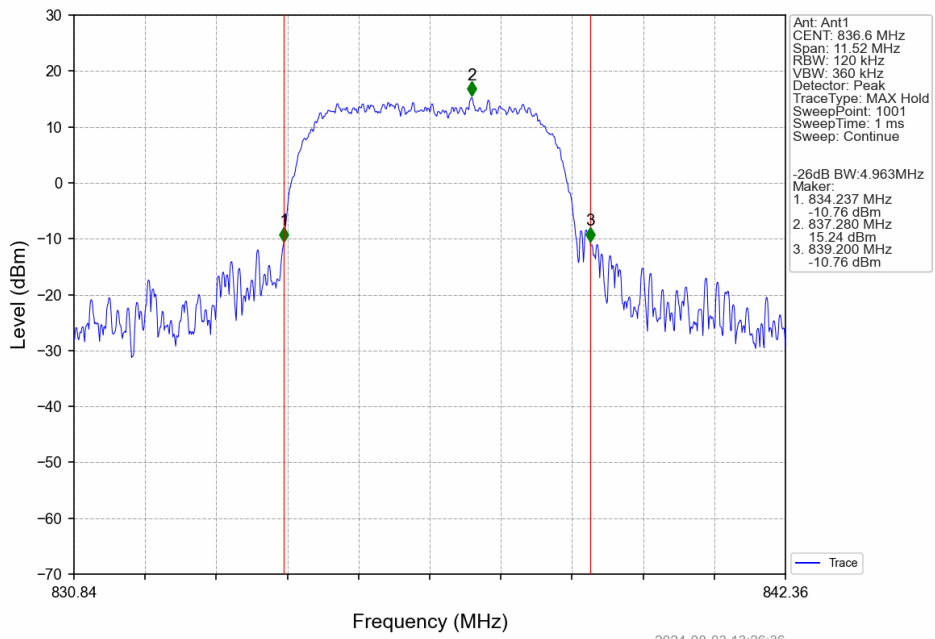
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



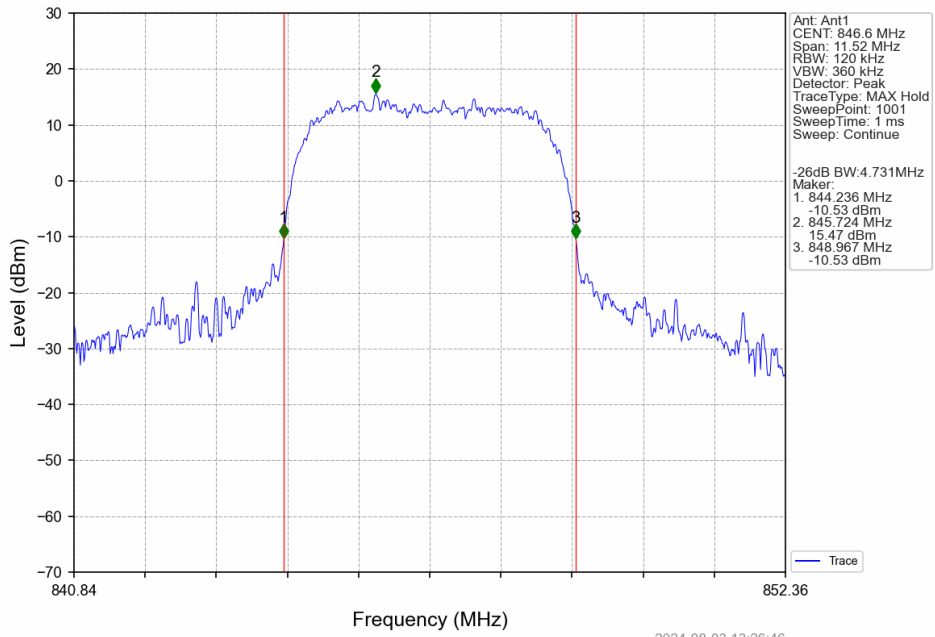
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



Ant: Ant1
CENT: 846.6 MHz
Span: 11.52 MHz
RBW: 120 kHz
VBW: 360 kHz
Detector: Peak
TraceType: MAX Hold
SweepPoint: 1001
SweepTime: 1 ms
Sweep: Continue

-26dB BW: 4.731MHz
Maker:
1. 844.236 MHz
-10.53 dBm
2. 845.724 MHz
15.47 dBm
3. 848.967 MHz
-10.53 dBm

2024-08-03 13:26:46

5. Peak-Average Ratio

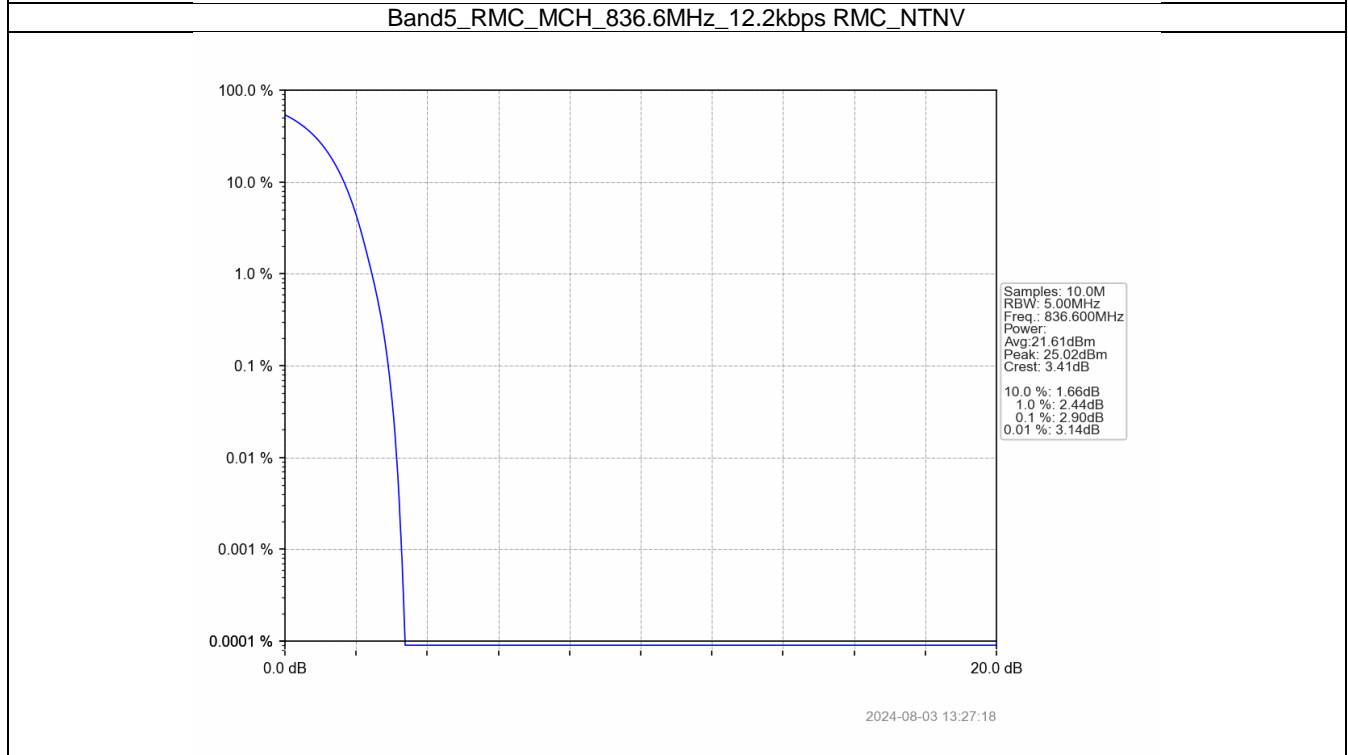
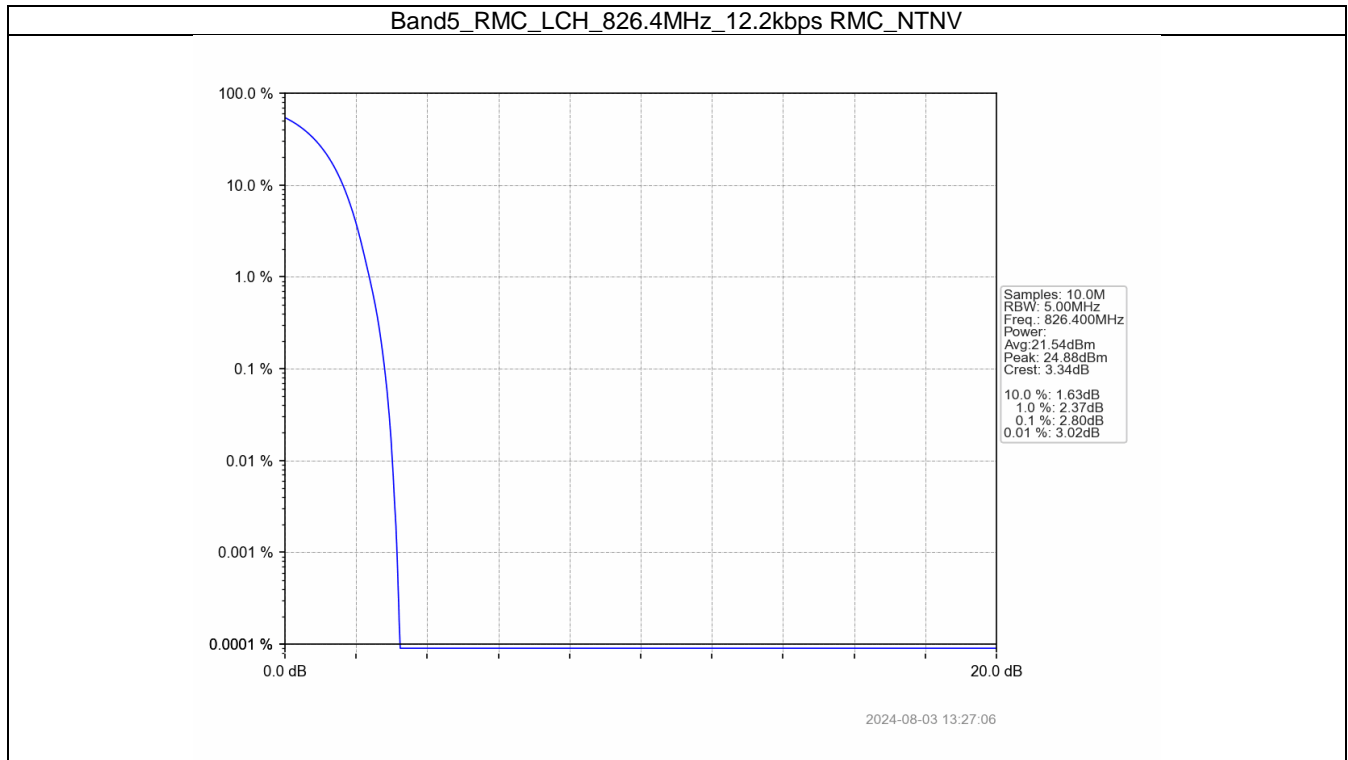
5.1 Test Result

5.1.1 Band5

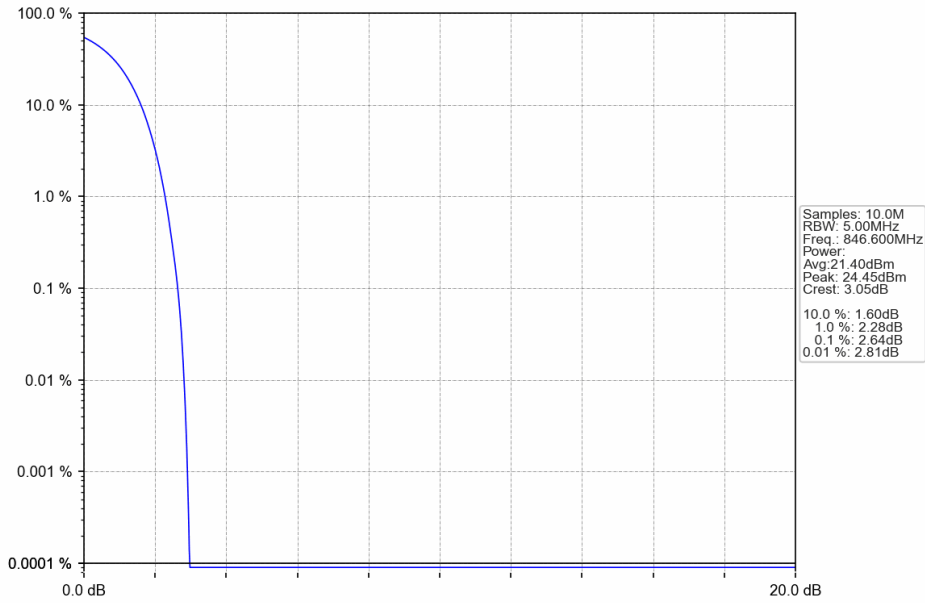
Band: 5						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.80	<=13	Pass
			836.6	2.90	<=13	Pass
			846.6	2.64	<=13	Pass
	HSDPA	Subtest 1	826.4	5.77	<=13	Pass
			836.6	5.87	<=13	Pass
			846.6	5.88	<=13	Pass
	HSUPA	Subtest 1	826.4	5.84	<=13	Pass
			836.6	5.82	<=13	Pass
			846.6	5.83	<=13	Pass

5.2 Test Graph

5.2.1 Band5

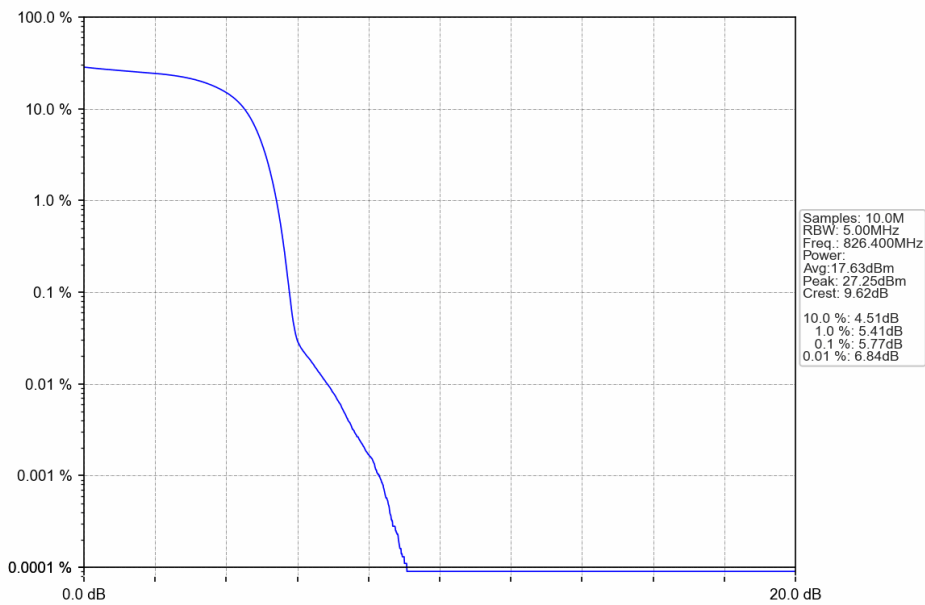


Band5_RMC_HCH_846.6MHz_12.2kbps_RMC_NTNV



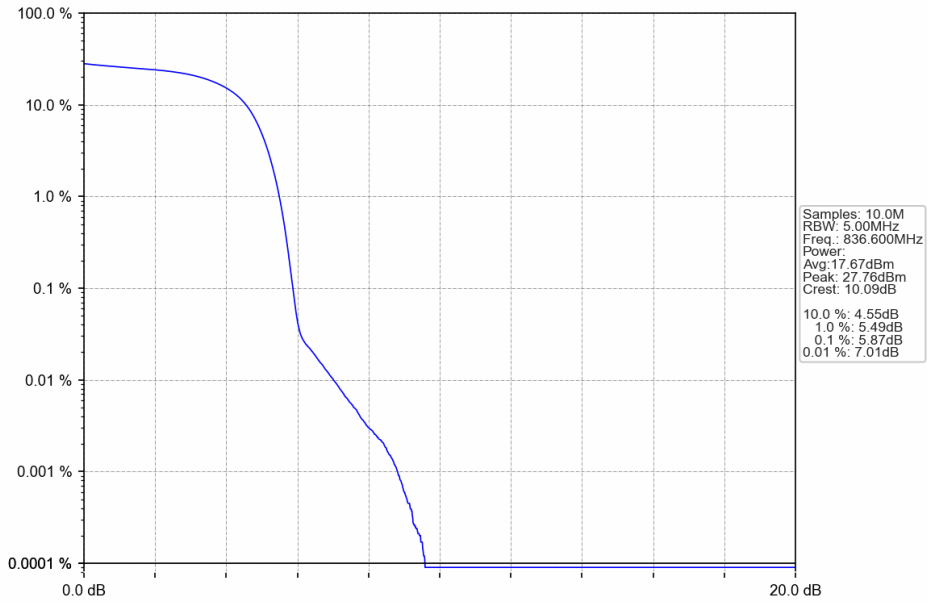
2024-08-03 13:27:28

Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



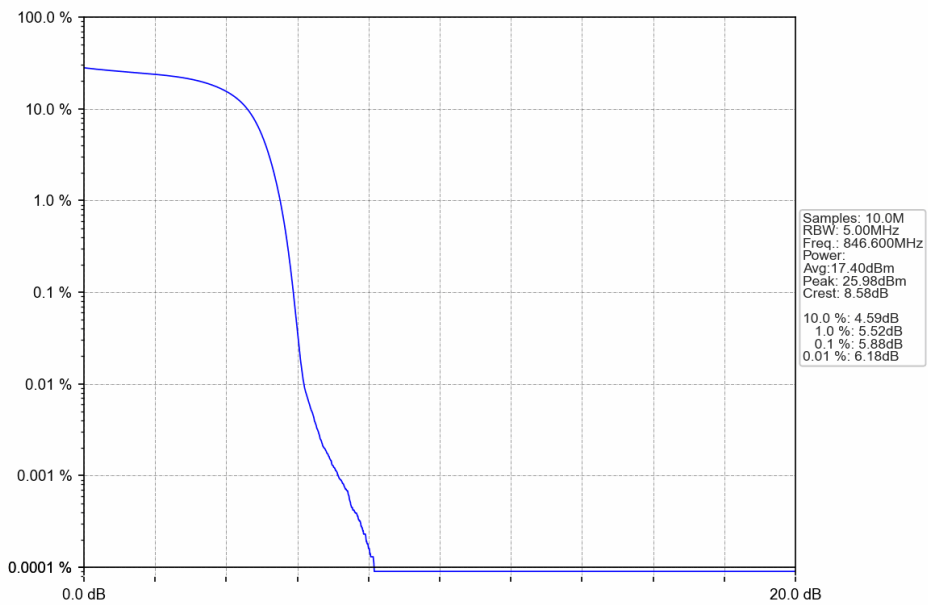
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Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



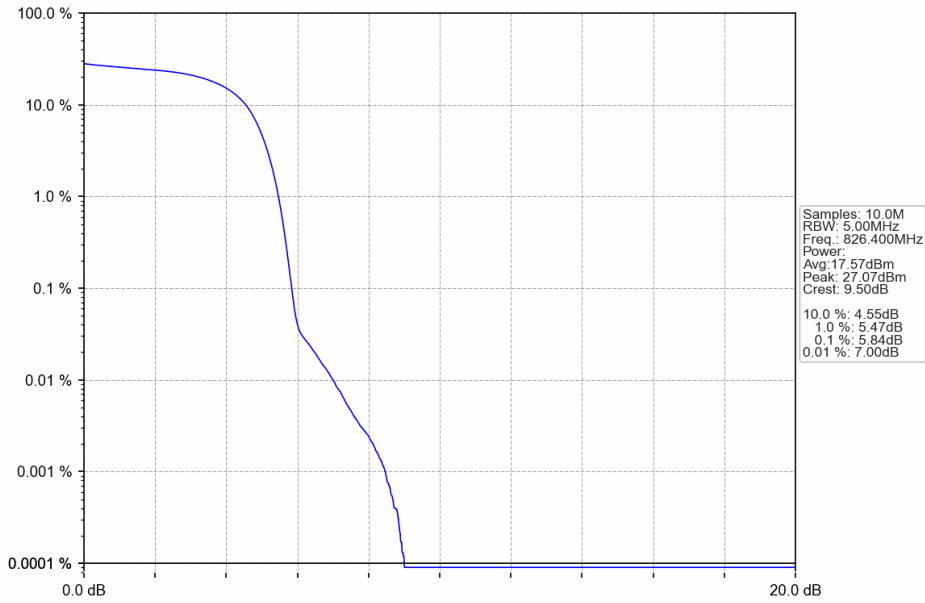
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Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



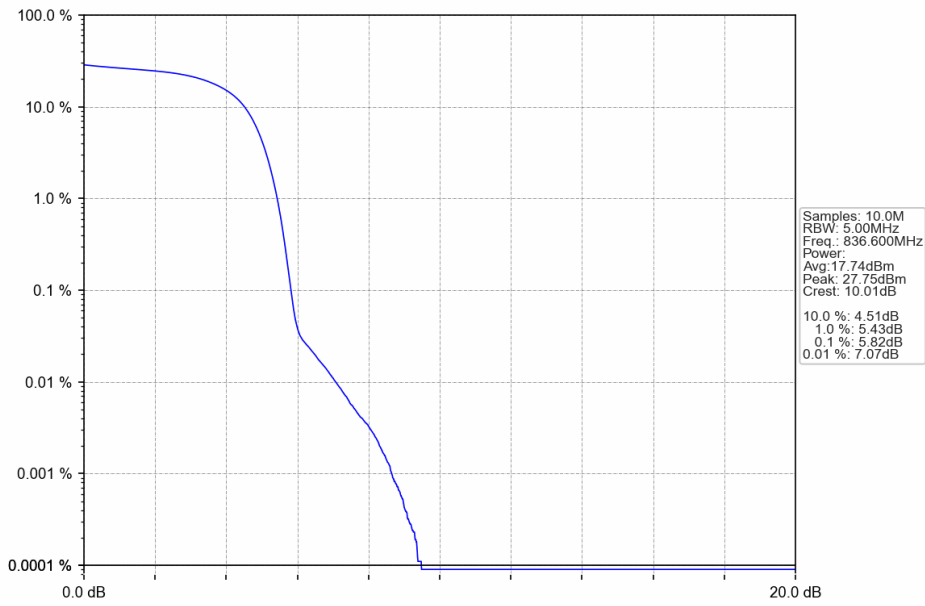
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Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



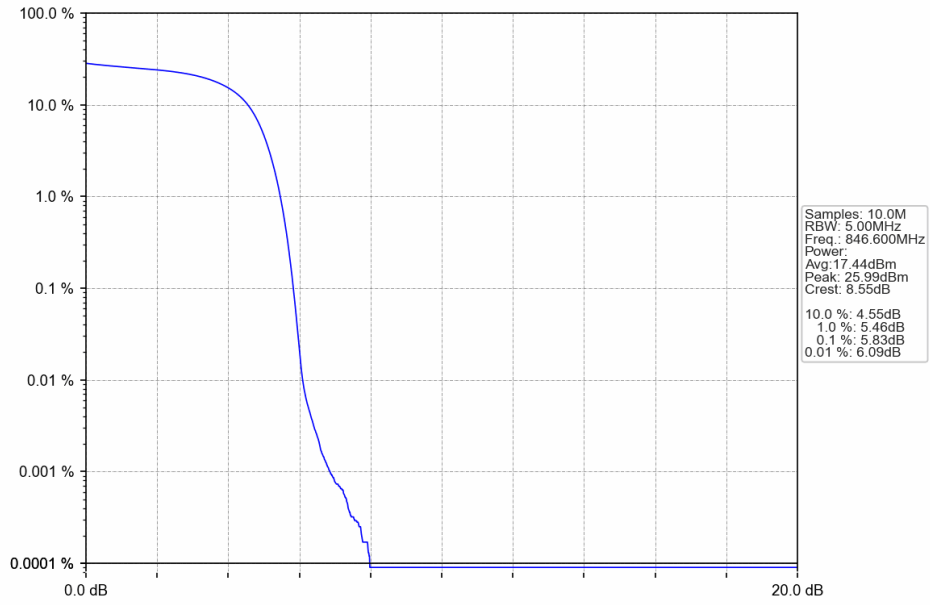
2024-08-03 13:28:39

Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



2024-08-03 13:28:56

Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



2024-08-03 13:29:10

6. Spurious Emission

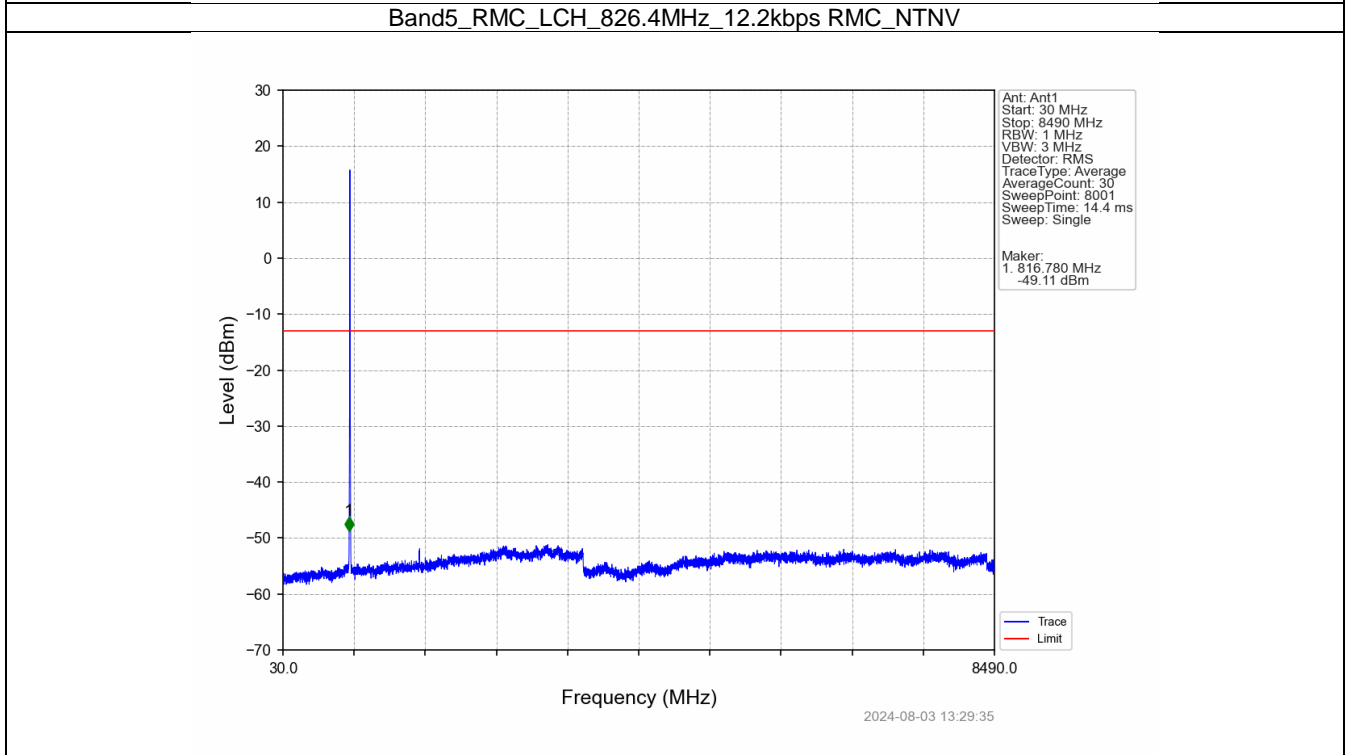
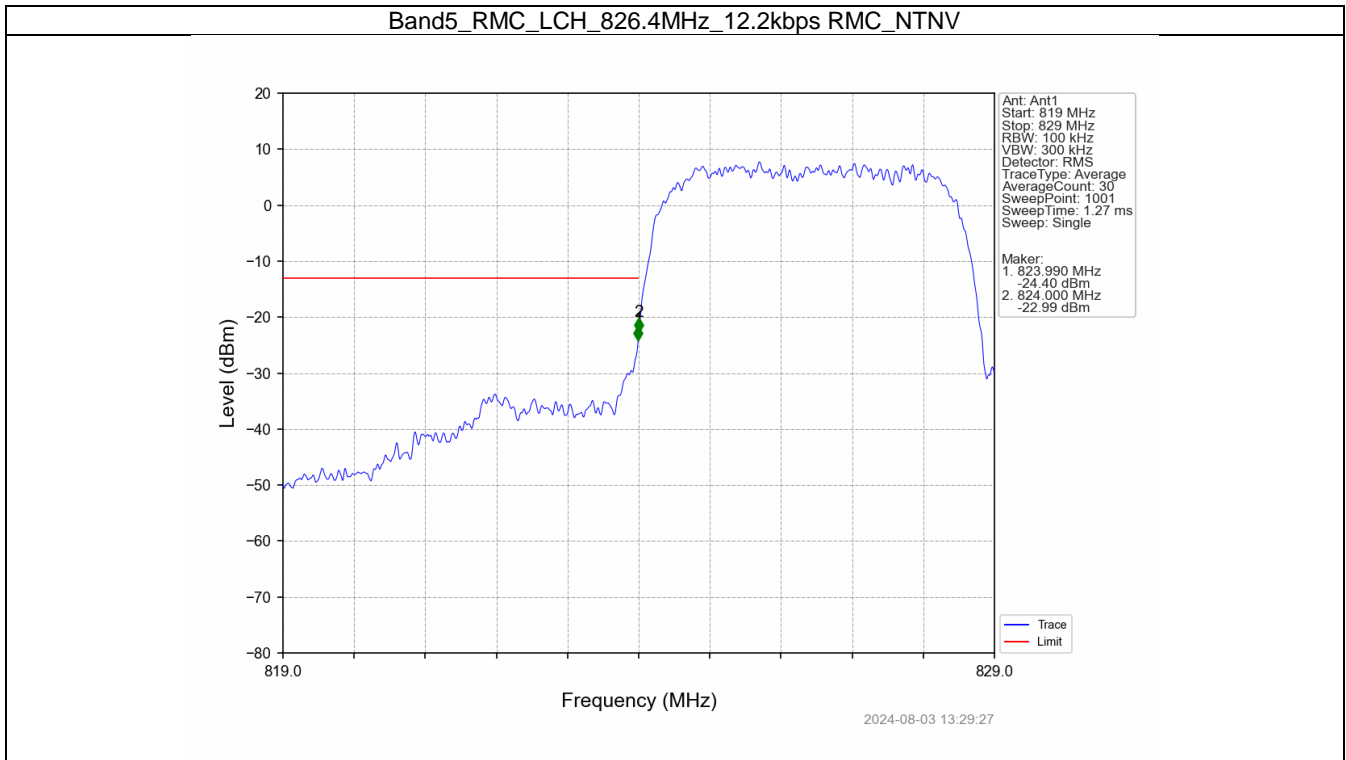
6.1 Test Result

6.1.1 Band5

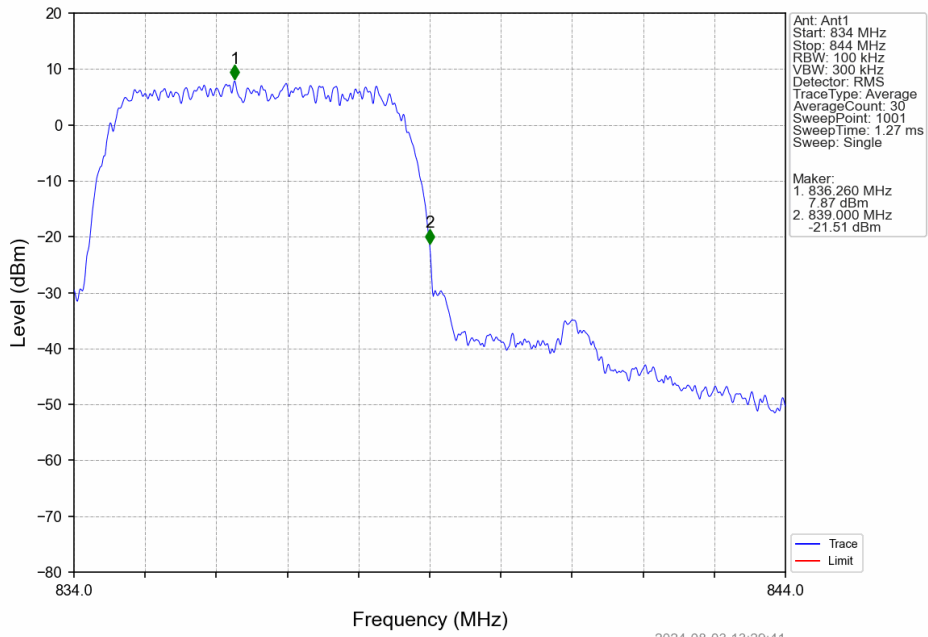
Band: 5						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph	Pass	
			846.6	Refer To Test Graph	Pass	
	HSDPA	Subtest 1	826.4	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph	Pass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

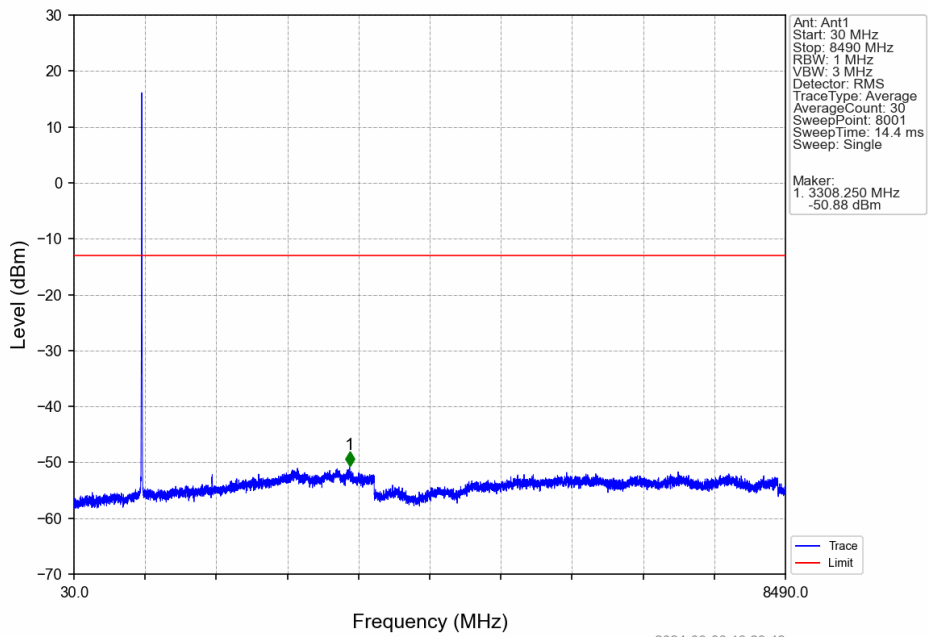
6.2.1 Band5



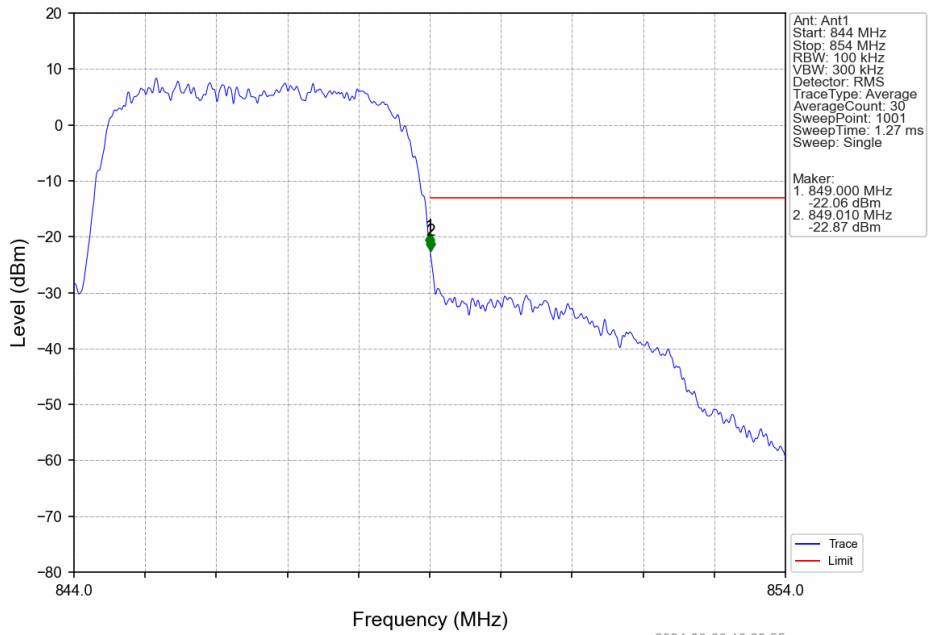
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



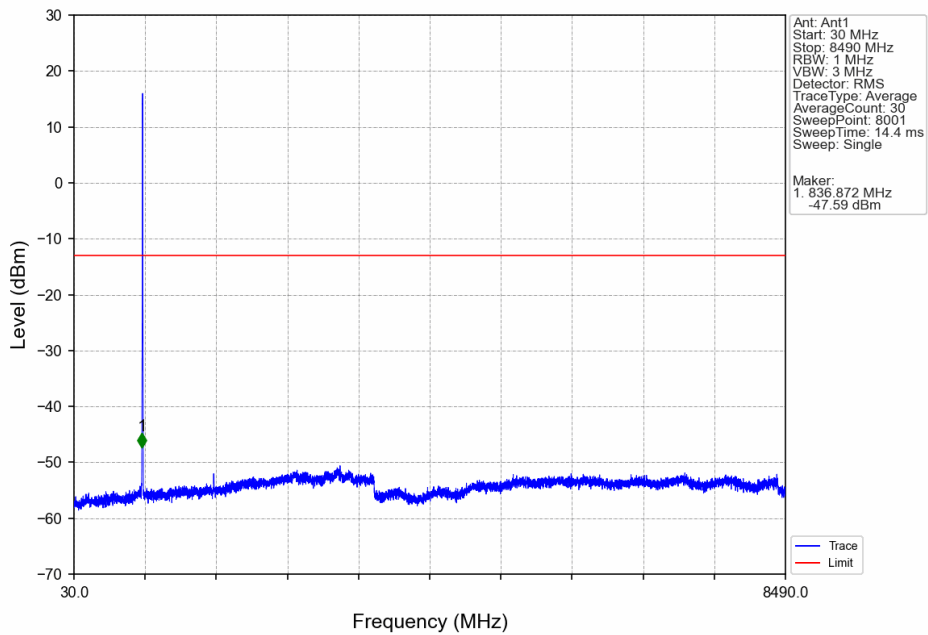
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



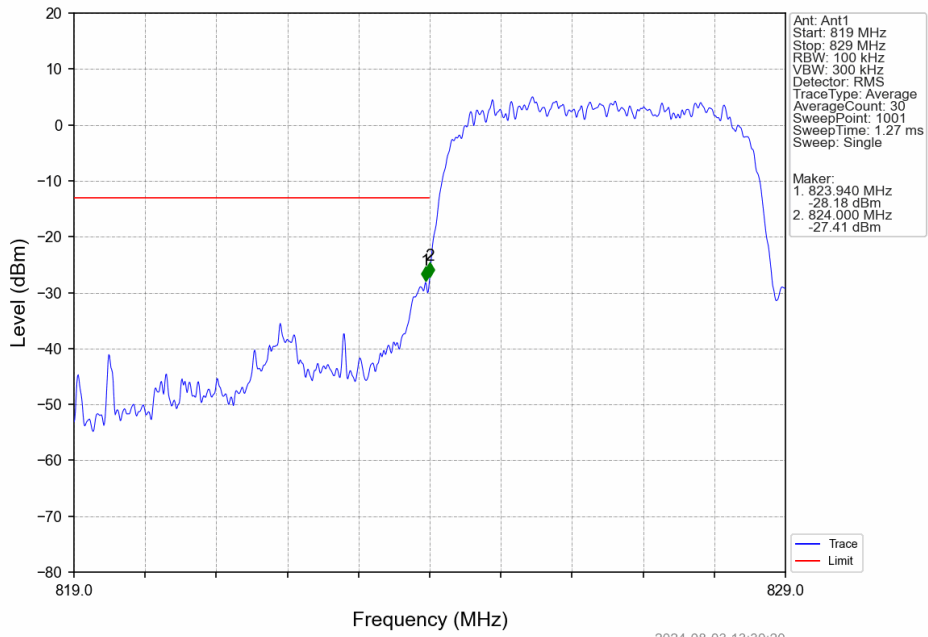
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



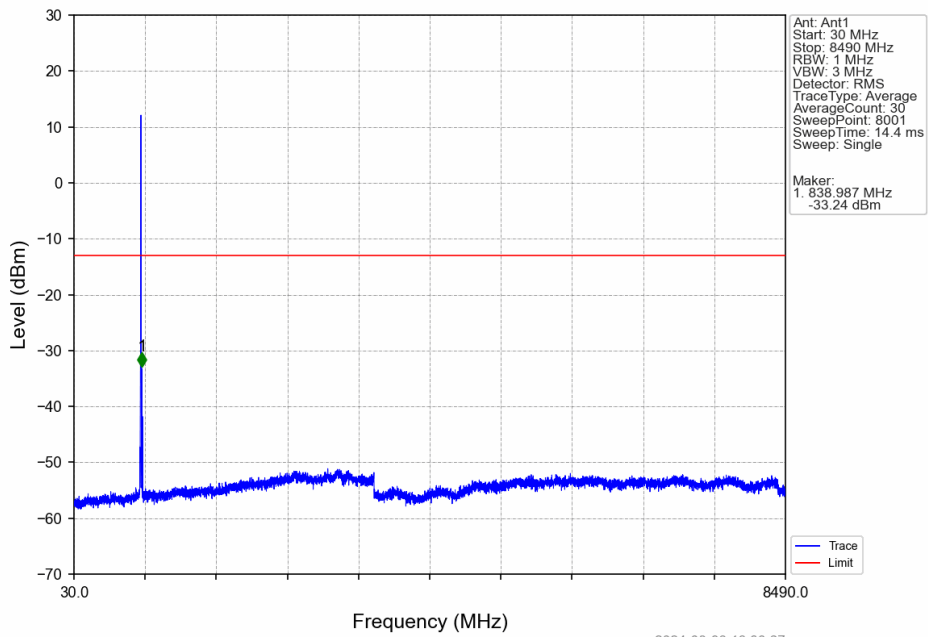
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



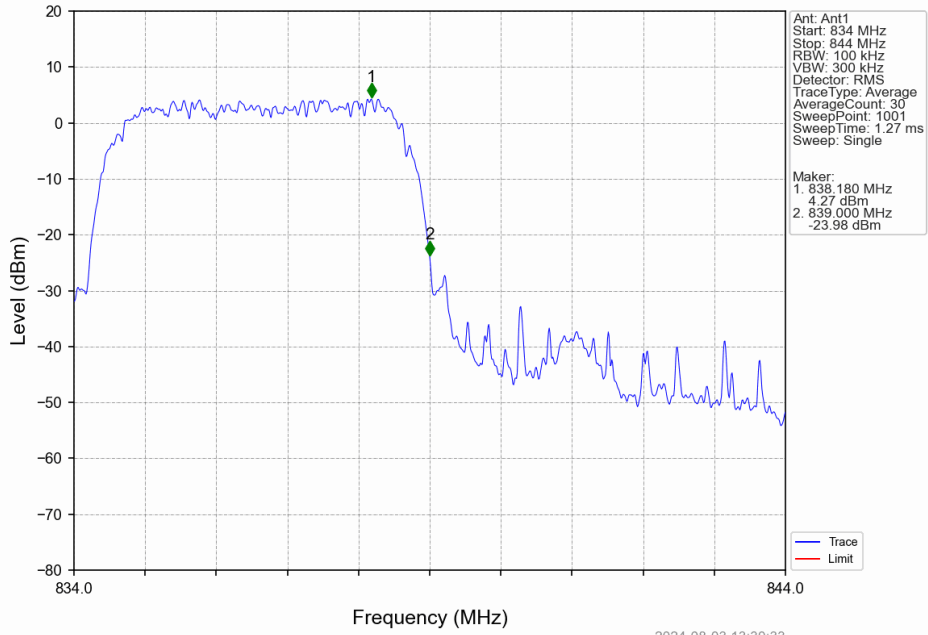
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



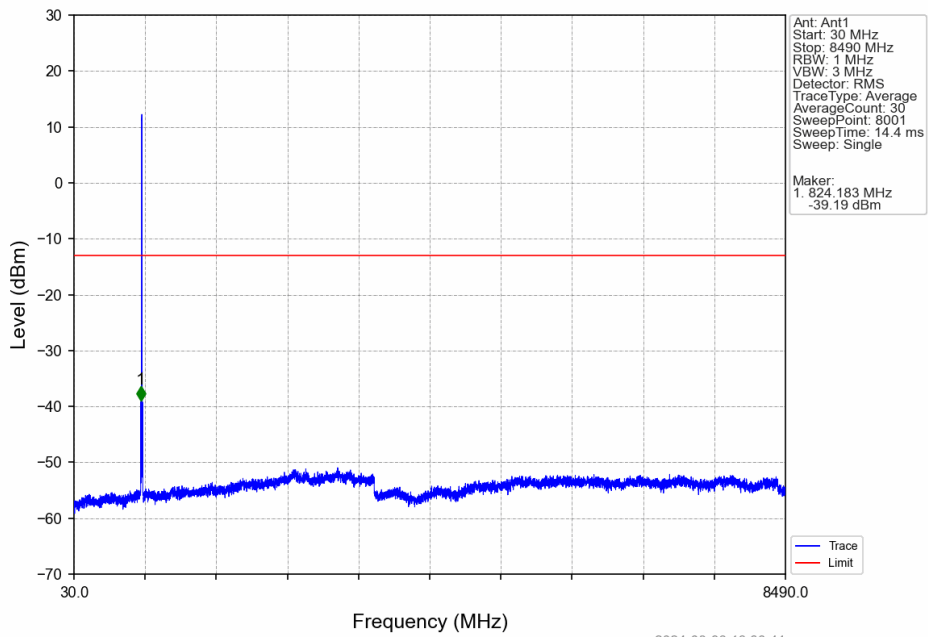
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



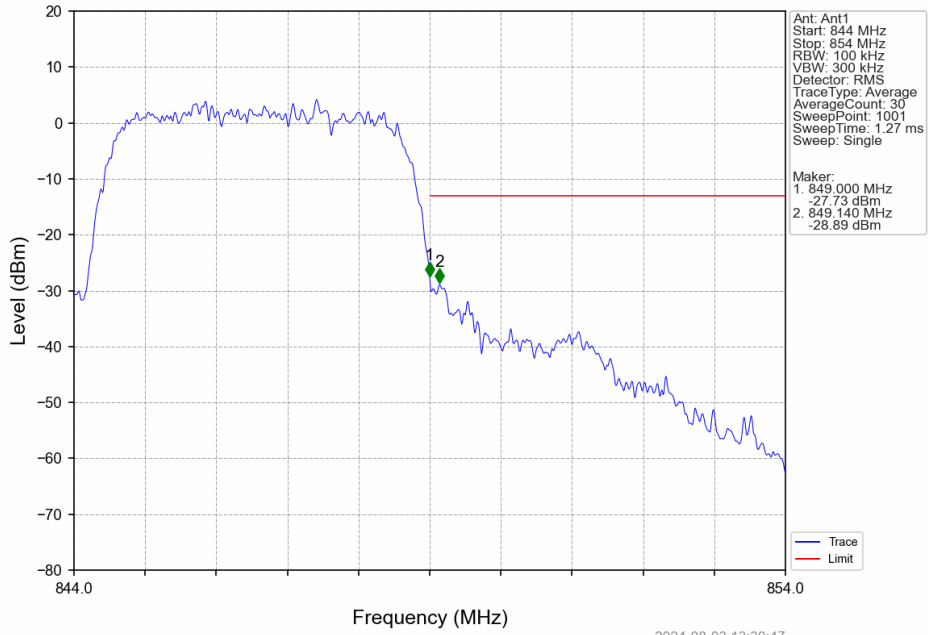
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



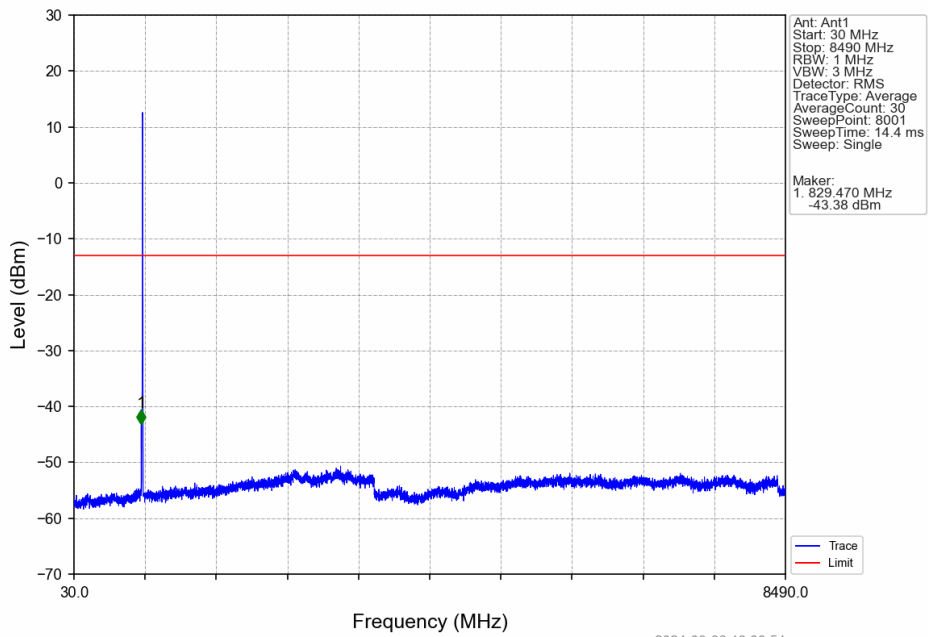
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



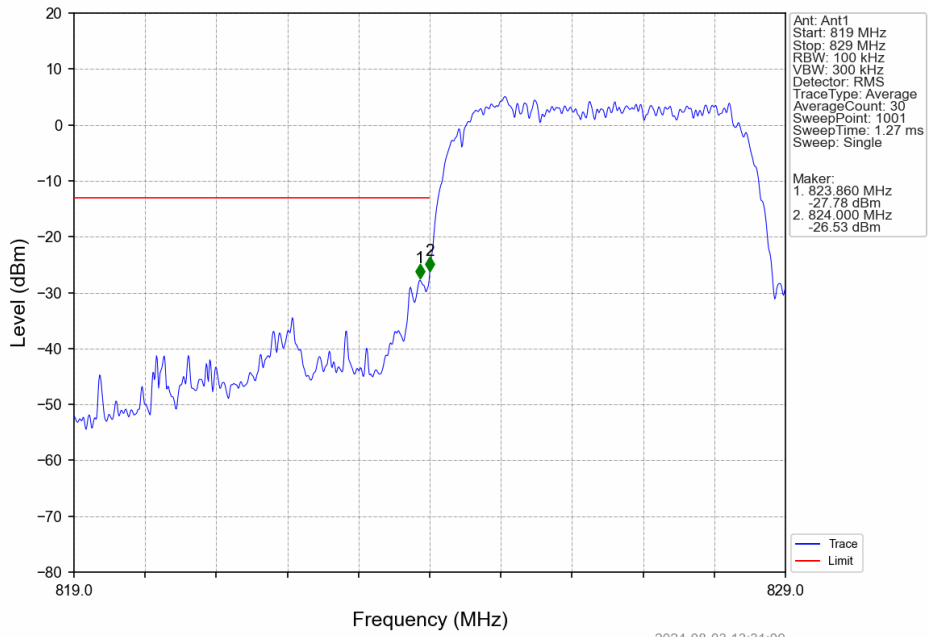
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



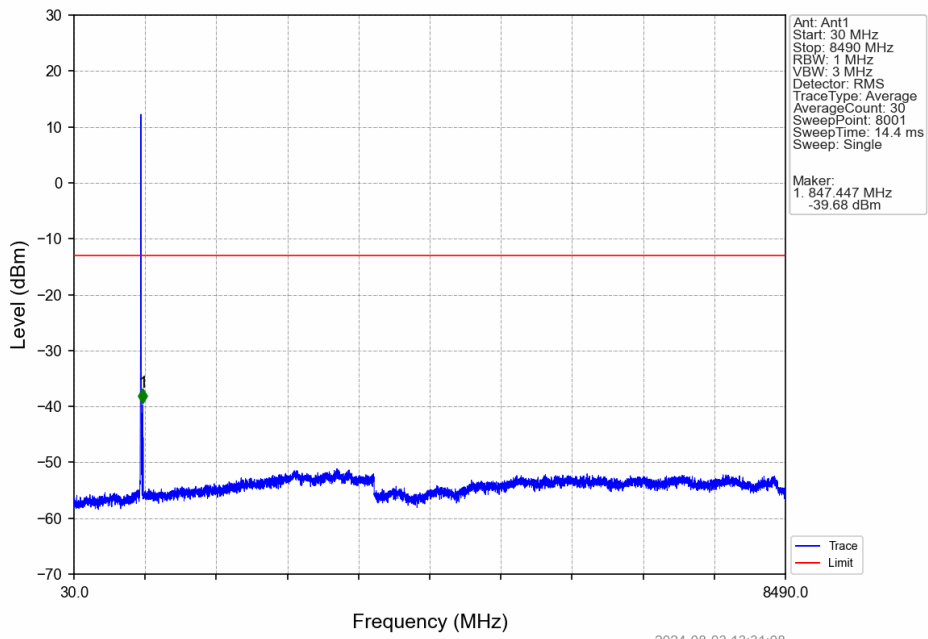
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



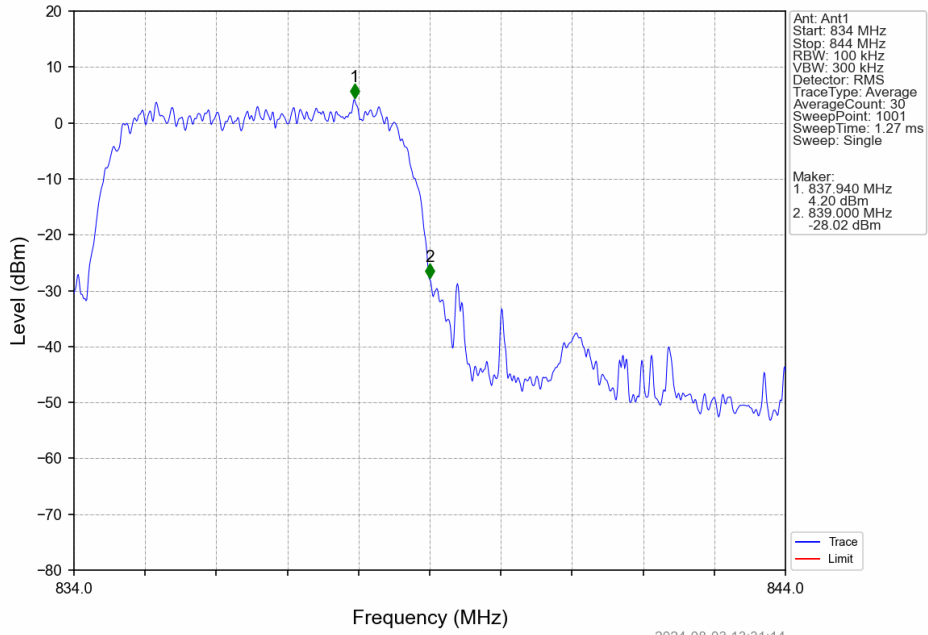
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



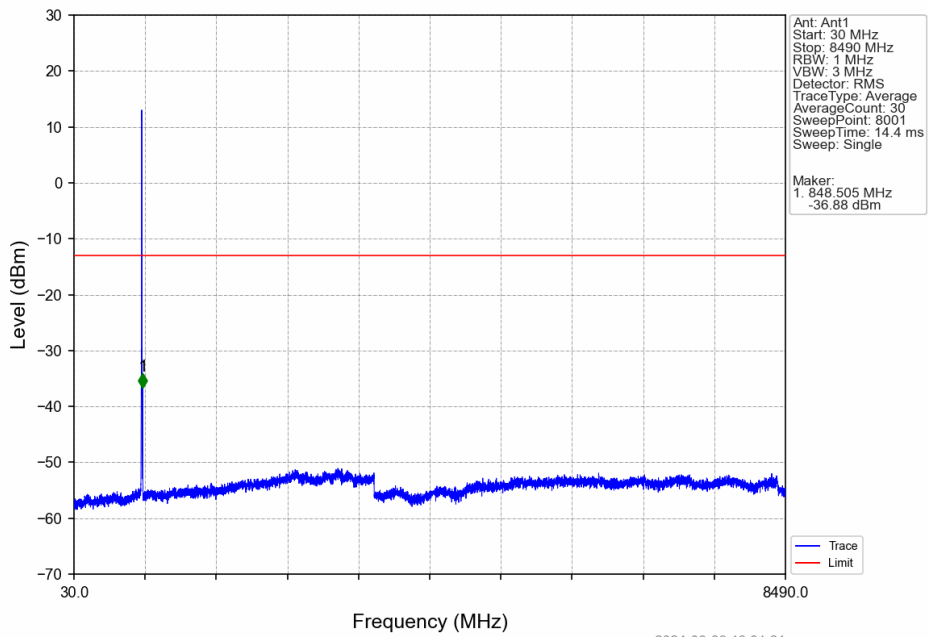
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



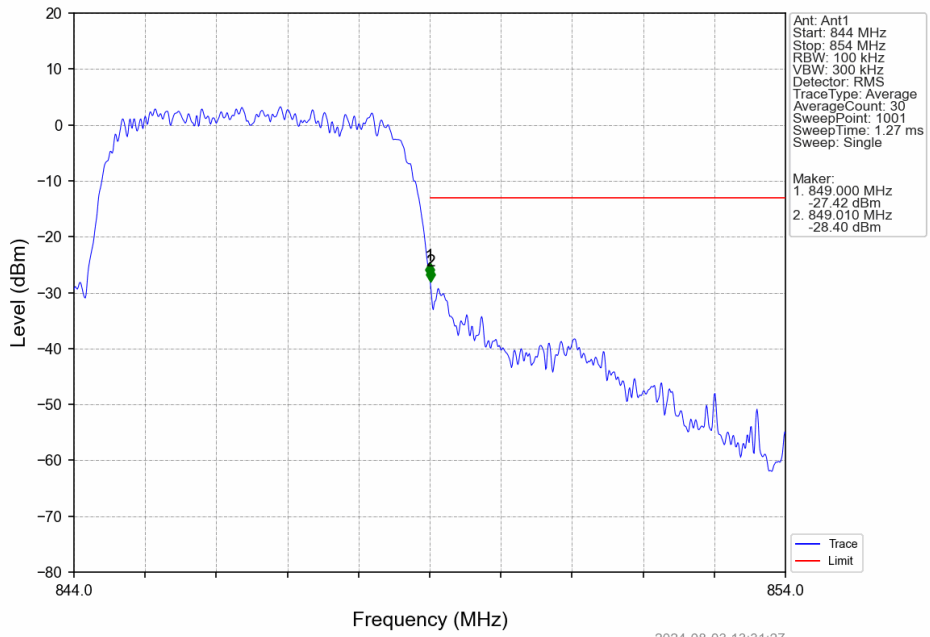
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



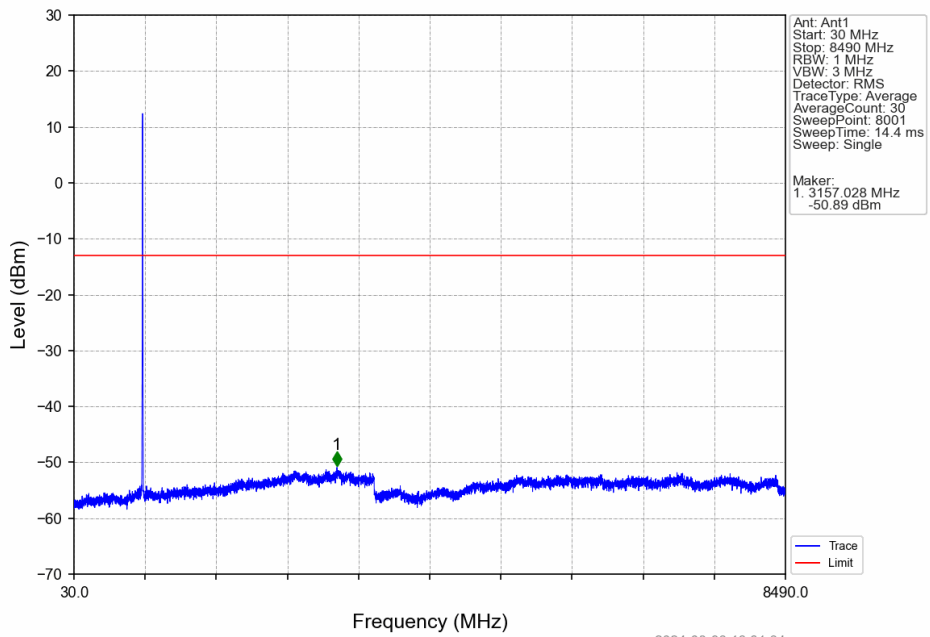
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



7. Form731

7.1 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	0.1346	0.0199	ppm	4M21F9W	22H	21.29

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	0.0630	0.0199	ppm	4M21F9W	22H	17.99