

1. Effective (Isotropic) Radiated Power Output Data

1.1 Band4_EIRP

1.1.1 Test Result

Band: 4											
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dbi)	EIRP (dBm)		Verdict			
	Network	Subset				Result	Limit				
NTNV	RMC	12.2kbps RMC	1712.4	22.92	0.35	23.27	<=30	Pass			
			1732.6	22.85	0.35	23.20	<=30	Pass			
			1752.6	22.67	0.35	23.02	<=30	Pass			
	HSDPA		Subtest 1	1712.4	20.90	0.35	21.25	<=30	Pass		
			Subtest 2	1712.4	20.79	0.35	21.14	<=30	Pass		
			Subtest 3	1712.4	20.79	0.35	21.14	<=30	Pass		
			Subtest 4	1712.4	20.82	0.35	21.17	<=30	Pass		
			Subtest 1	1732.6	20.94	0.35	21.29	<=30	Pass		
			Subtest 2	1732.6	20.93	0.35	21.28	<=30	Pass		
			Subtest 3	1732.6	20.86	0.35	21.21	<=30	Pass		
			Subtest 4	1732.6	20.90	0.35	21.25	<=30	Pass		
			Subtest 1	1752.6	20.55	0.35	20.90	<=30	Pass		
			Subtest 2	1752.6	20.54	0.35	20.89	<=30	Pass		
			Subtest 3	1752.6	20.54	0.35	20.89	<=30	Pass		
			Subtest 4	1752.6	20.53	0.35	20.88	<=30	Pass		
			HSUPA		Subtest 1	1712.4	18.67	0.35	19.02	<=30	Pass
					Subtest 2	1712.4	18.50	0.35	18.85	<=30	Pass
					Subtest 3	1712.4	18.88	0.35	19.23	<=30	Pass
	Subtest 4	1712.4			18.40	0.35	18.75	<=30	Pass		
	Subtest 5	1712.4			18.74	0.35	19.09	<=30	Pass		
	Subtest 1	1732.6			18.71	0.35	19.06	<=30	Pass		
	Subtest 2	1732.6			18.63	0.35	18.98	<=30	Pass		
	Subtest 3	1732.6			18.40	0.35	18.75	<=30	Pass		
	Subtest 4	1732.6			18.68	0.35	19.03	<=30	Pass		
	Subtest 5	1732.6			18.93	0.35	19.28	<=30	Pass		
	Subtest 1	1752.6			18.32	0.35	18.67	<=30	Pass		
	Subtest 2	1752.6			18.60	0.35	18.95	<=30	Pass		
	Subtest 3	1752.6			18.01	0.35	18.36	<=30	Pass		
	Subtest 4	1752.6			18.47	0.35	18.82	<=30	Pass		
	Subtest 5	1752.6			18.60	0.35	18.95	<=30	Pass		

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Band4

2.1.1 Test Result

Band: 4							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	1712.4	20	3.27	4.349	0.0025	-2.5 to 2.5	Pass
			3.85	3.719	0.0022	-2.5 to 2.5	Pass
			4.43	3.533	0.0021	-2.5 to 2.5	Pass

		-30	3.85	2.761	0.0016	-2.5 to 2.5	Pass	
		-20	3.85	4.227	0.0025	-2.5 to 2.5	Pass	
		-10	3.85	3.312	0.0019	-2.5 to 2.5	Pass	
		0	3.85	3.448	0.0020	-2.5 to 2.5	Pass	
		10	3.85	3.748	0.0022	-2.5 to 2.5	Pass	
		30	3.85	3.555	0.0021	-2.5 to 2.5	Pass	
		40	3.85	3.934	0.0023	-2.5 to 2.5	Pass	
	1732.6	20	3.85	2.782	0.0016	-2.5 to 2.5	Pass	
			3.27	0.615	0.0004	-2.5 to 2.5	Pass	
			3.85	0.923	0.0005	-2.5 to 2.5	Pass	
		4.43	0.744	0.0004	-2.5 to 2.5	Pass		
		-30	3.85	0.987	0.0006	-2.5 to 2.5	Pass	
		-20	3.85	0.279	0.0002	-2.5 to 2.5	Pass	
		-10	3.85	-0.358	-0.0002	-2.5 to 2.5	Pass	
		0	3.85	0.043	0.0000	-2.5 to 2.5	Pass	
		10	3.85	0.000	0.0000	-2.5 to 2.5	Pass	
		30	3.85	0.808	0.0005	-2.5 to 2.5	Pass	
		40	3.85	0.701	0.0004	-2.5 to 2.5	Pass	
		50	3.85	0.458	0.0003	-2.5 to 2.5	Pass	
		1752.6	20	3.27	-1.867	-0.0011	-2.5 to 2.5	Pass
				3.85	-0.930	-0.0005	-2.5 to 2.5	Pass
	4.43			-1.981	-0.0011	-2.5 to 2.5	Pass	
	-30		3.85	-1.810	-0.0010	-2.5 to 2.5	Pass	
	-20		3.85	-1.516	-0.0009	-2.5 to 2.5	Pass	
	-10		3.85	-1.345	-0.0008	-2.5 to 2.5	Pass	
	0		3.85	-2.382	-0.0014	-2.5 to 2.5	Pass	
	10		3.85	-2.332	-0.0013	-2.5 to 2.5	Pass	
	30		3.85	-2.403	-0.0014	-2.5 to 2.5	Pass	
40	3.85		-1.895	-0.0011	-2.5 to 2.5	Pass		
50	3.85		-1.731	-0.0010	-2.5 to 2.5	Pass		
HSDPA	1712.4	20	3.27	4.220	0.0025	-2.5 to 2.5	Pass	
			3.85	3.591	0.0021	-2.5 to 2.5	Pass	
			4.43	3.684	0.0022	-2.5 to 2.5	Pass	
		-30	3.85	3.726	0.0022	-2.5 to 2.5	Pass	
		-20	3.85	3.462	0.0020	-2.5 to 2.5	Pass	
		-10	3.85	3.247	0.0019	-2.5 to 2.5	Pass	
		0	3.85	3.104	0.0018	-2.5 to 2.5	Pass	
		10	3.85	3.183	0.0019	-2.5 to 2.5	Pass	
		30	3.85	3.347	0.0020	-2.5 to 2.5	Pass	
		40	3.85	3.490	0.0020	-2.5 to 2.5	Pass	
		50	3.85	2.768	0.0016	-2.5 to 2.5	Pass	
	1732.6	20	3.27	-0.143	-0.0001	-2.5 to 2.5	Pass	
			3.85	-0.565	-0.0003	-2.5 to 2.5	Pass	
			4.43	0.386	0.0002	-2.5 to 2.5	Pass	
		-30	3.85	0.458	0.0003	-2.5 to 2.5	Pass	
		-20	3.85	-0.250	-0.0001	-2.5 to 2.5	Pass	
		-10	3.85	-0.472	-0.0003	-2.5 to 2.5	Pass	
		0	3.85	-0.486	-0.0003	-2.5 to 2.5	Pass	
		10	3.85	0.007	0.0000	-2.5 to 2.5	Pass	
		30	3.85	-0.615	-0.0004	-2.5 to 2.5	Pass	
		40	3.85	-0.322	-0.0002	-2.5 to 2.5	Pass	
		50	3.85	-0.679	-0.0004	-2.5 to 2.5	Pass	
	1752.6	20	3.27	-1.903	-0.0011	-2.5 to 2.5	Pass	
			3.85	-1.853	-0.0011	-2.5 to 2.5	Pass	
			4.43	-2.367	-0.0014	-2.5 to 2.5	Pass	
		-30	3.85	-2.160	-0.0012	-2.5 to 2.5	Pass	
		-20	3.85	-1.459	-0.0008	-2.5 to 2.5	Pass	

		-10	3.85	-2.418	-0.0014	-2.5 to 2.5	Pass
		0	3.85	-2.031	-0.0012	-2.5 to 2.5	Pass
		10	3.85	-2.067	-0.0012	-2.5 to 2.5	Pass
		30	3.85	-1.824	-0.0010	-2.5 to 2.5	Pass
		40	3.85	-3.133	-0.0018	-2.5 to 2.5	Pass
		50	3.85	-1.316	-0.0008	-2.5 to 2.5	Pass
HSUPA	1712.4	20	3.27	5.529	0.0032	-2.5 to 2.5	Pass
			3.85	5.586	0.0033	-2.5 to 2.5	Pass
			4.43	5.379	0.0031	-2.5 to 2.5	Pass
		-30	3.85	6.058	0.0035	-2.5 to 2.5	Pass
		-20	3.85	5.622	0.0033	-2.5 to 2.5	Pass
		-10	3.85	6.273	0.0037	-2.5 to 2.5	Pass
		0	3.85	4.992	0.0029	-2.5 to 2.5	Pass
		10	3.85	5.908	0.0035	-2.5 to 2.5	Pass
		30	3.85	5.937	0.0035	-2.5 to 2.5	Pass
		40	3.85	5.150	0.0030	-2.5 to 2.5	Pass
	50	3.85	4.642	0.0027	-2.5 to 2.5	Pass	
	1732.6	20	3.27	4.005	0.0023	-2.5 to 2.5	Pass
			3.85	3.569	0.0021	-2.5 to 2.5	Pass
			4.43	4.041	0.0023	-2.5 to 2.5	Pass
		-30	3.85	3.483	0.0020	-2.5 to 2.5	Pass
		-20	3.85	1.988	0.0011	-2.5 to 2.5	Pass
		-10	3.85	3.247	0.0019	-2.5 to 2.5	Pass
		0	3.85	3.619	0.0021	-2.5 to 2.5	Pass
		10	3.85	3.891	0.0022	-2.5 to 2.5	Pass
		30	3.85	3.619	0.0021	-2.5 to 2.5	Pass
		40	3.85	3.390	0.0020	-2.5 to 2.5	Pass
	50	3.85	3.591	0.0021	-2.5 to 2.5	Pass	
	1752.6	20	3.27	0.114	0.0001	-2.5 to 2.5	Pass
			3.85	0.093	0.0001	-2.5 to 2.5	Pass
			4.43	0.708	0.0004	-2.5 to 2.5	Pass
		-30	3.85	0.622	0.0004	-2.5 to 2.5	Pass
		-20	3.85	0.830	0.0005	-2.5 to 2.5	Pass
		-10	3.85	1.795	0.0010	-2.5 to 2.5	Pass
		0	3.85	0.851	0.0005	-2.5 to 2.5	Pass
		10	3.85	1.559	0.0009	-2.5 to 2.5	Pass
30		3.85	-0.257	-0.0001	-2.5 to 2.5	Pass	
40		3.85	-0.229	-0.0001	-2.5 to 2.5	Pass	
50	3.85	0.165	0.0001	-2.5 to 2.5	Pass		

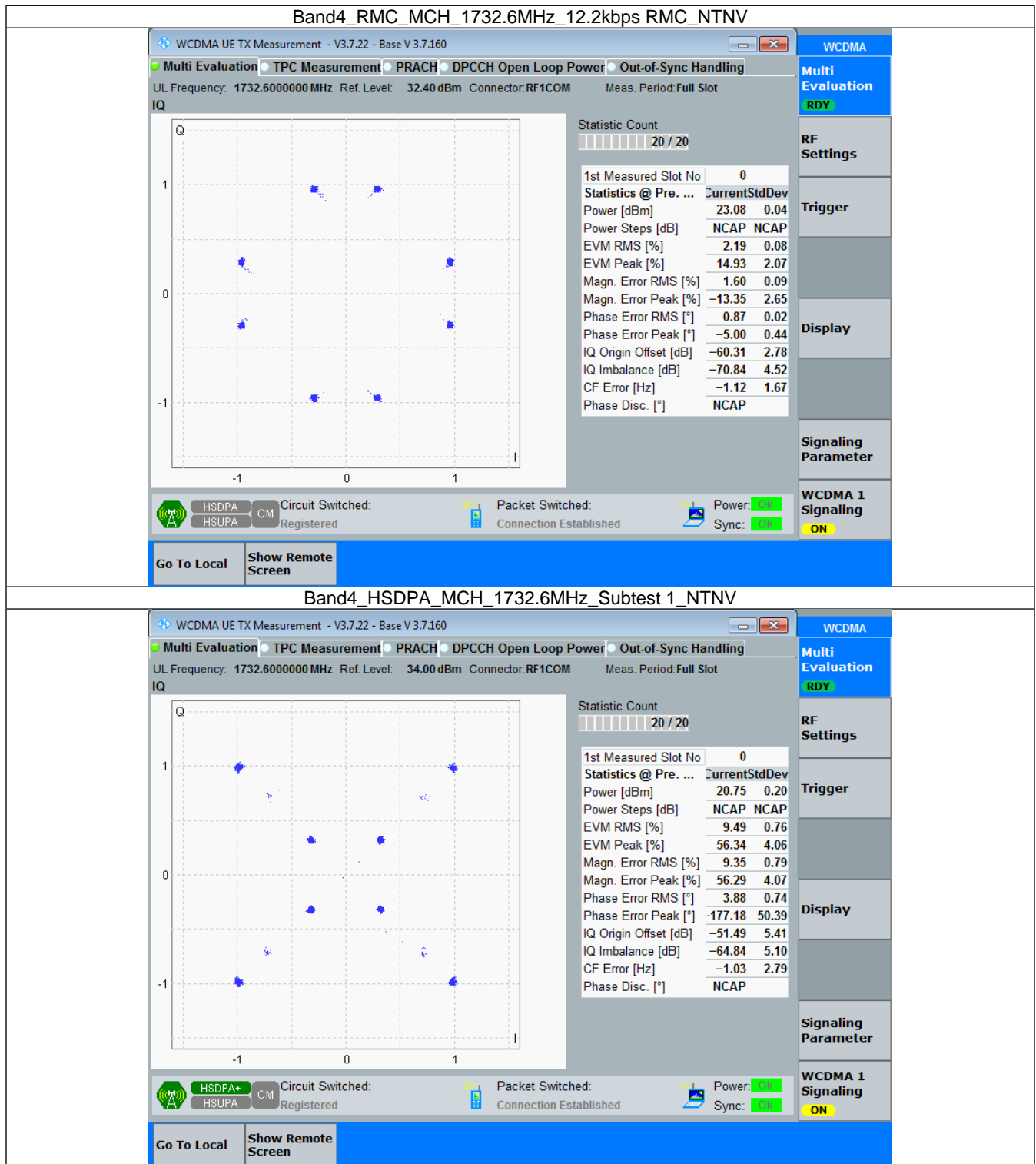
3. Modulation Characteristics

3.1 Band4

3.1.1 Test Result

Band: 4						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1732.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	1732.6	Refer To Test Graph		Pass
	HSUPA	Subtest 1	1732.6	Refer To Test Graph		Pass

3.1.2 Test Graph



Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.160

WCDMA

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

Multi Evaluation
RDY

UL Frequency: 1732.600000 MHz Ref. Level: 34.00 dBm Connector: RF1COM
Meas. Period: Full Slot

Statistic Count
 20 / 20

1st Measured Slot No	0
Statistics @ Pre. ...	CurrentStdDev
Power [dBm]	16.14 2.35
Power Steps [dB]	NCAP NCAP
EVM RMS [%]	1.64 4.68
EVM Peak [%]	4.12 32.28
Magn. Error RMS [%]	1.01 4.90
Magn. Error Peak [%]	3.43 32.76
Phase Error RMS [°]	0.74 1.08
Phase Error Peak [°]	-2.35 64.13
IQ Origin Offset [dB]	-67.03 5.41
IQ Imbalance [dB]	-56.90 4.01
CF Error [Hz]	5.14 3.71
Phase Disc. [°]	NCAP

HSDPA+ CM

Circuit Switched: Registered

Packet Switched: Connection Established

Power: ON
Sync: ON

Go To Local

Show Remote Screen

WCDMA 1 Signaling
ON

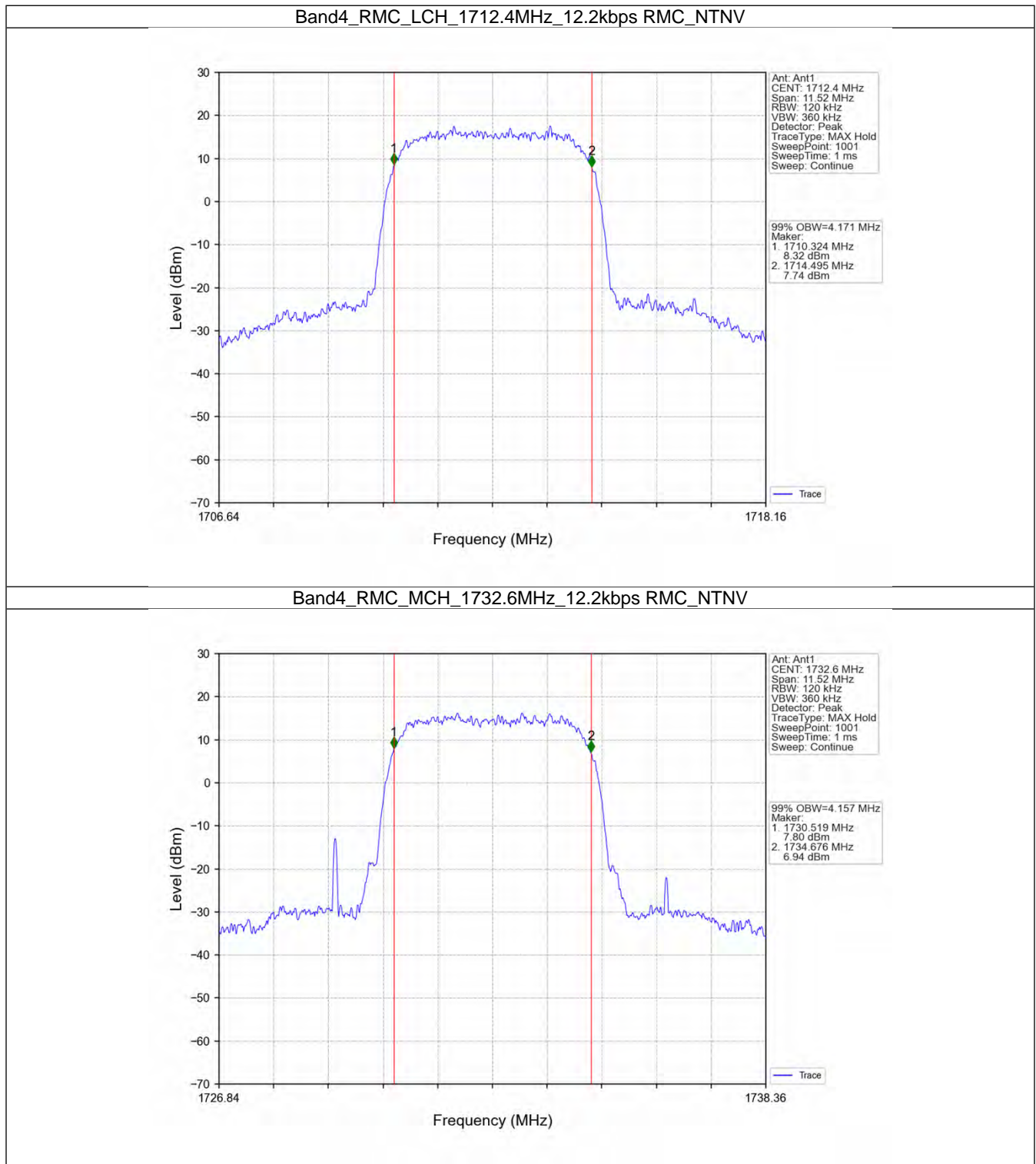
4. 99% & 26dB Bandwidth

4.1 Band4_OBW

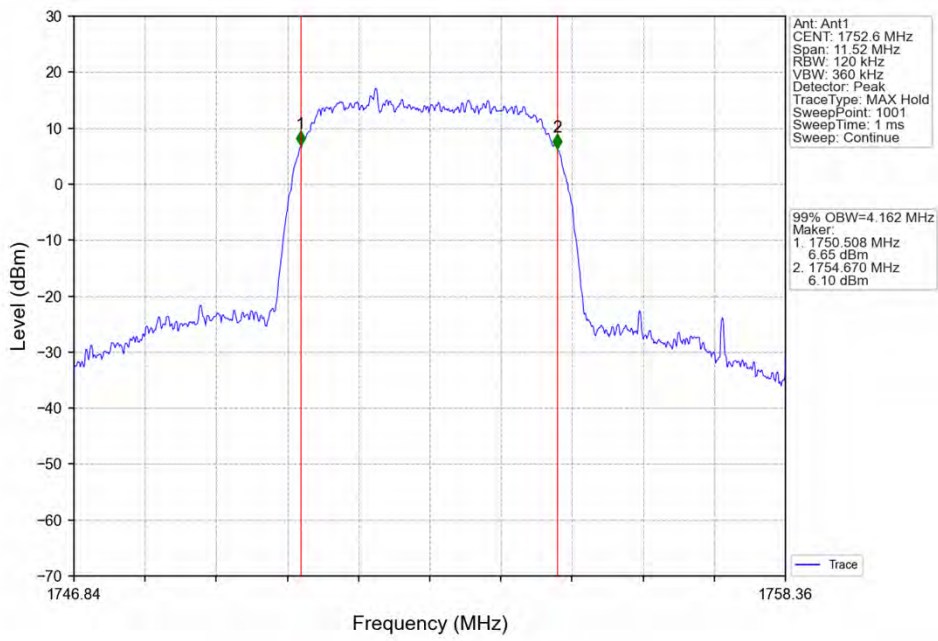
4.1.1 Test Result

Band: 4					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	RMC	12.2kbps RMC	1712.4	4.171	Pass
			1732.6	4.157	Pass
			1752.6	4.162	Pass
	HSDPA	Subtest 1	1712.4	4.184	Pass
			1732.6	4.188	Pass
			1752.6	4.194	Pass
	HSUPA	Subtest 1	1712.4	4.199	Pass
			1732.6	4.180	Pass
			1752.6	4.182	Pass

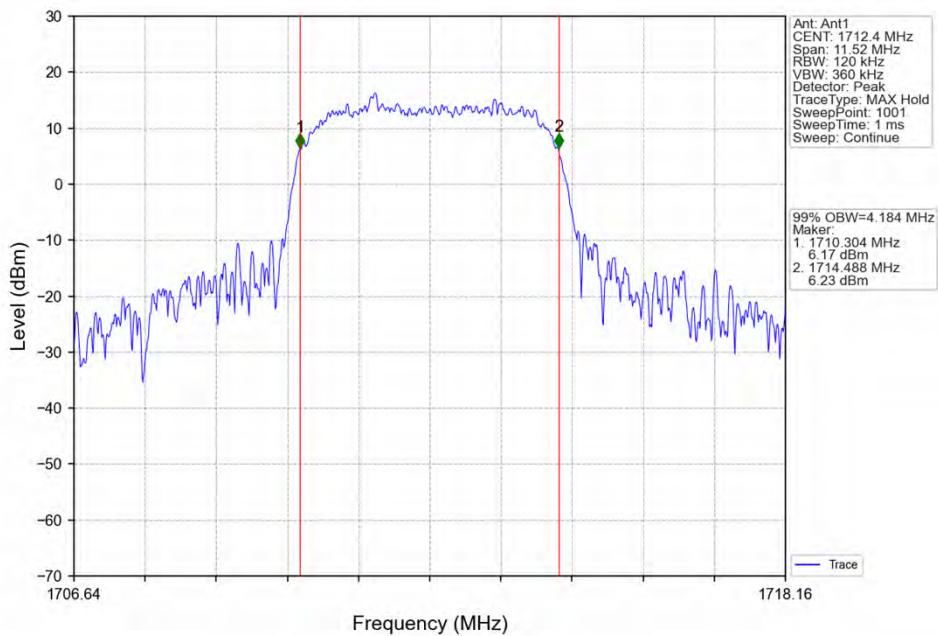
4.1.2 Test Graph



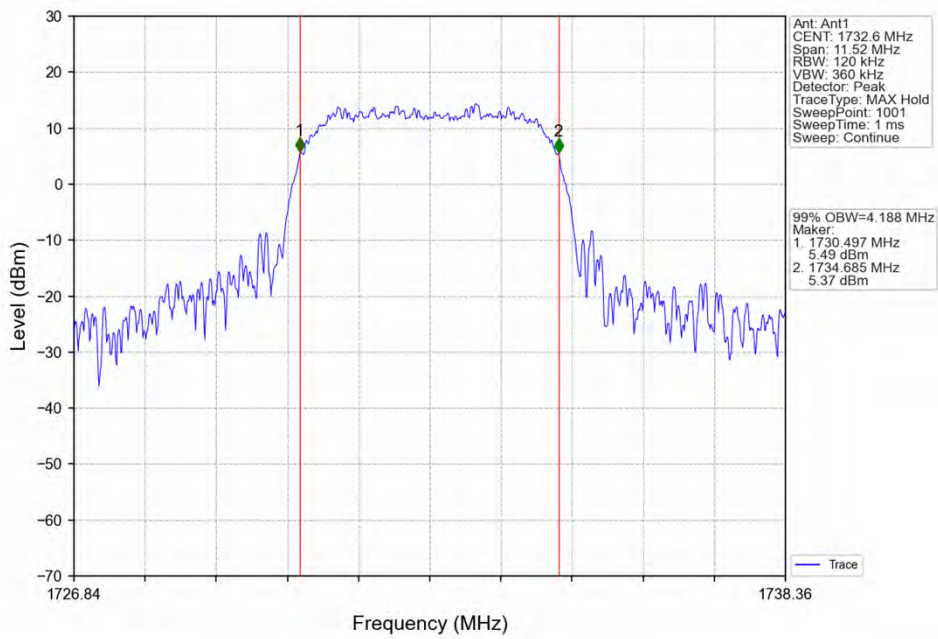
Band4_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



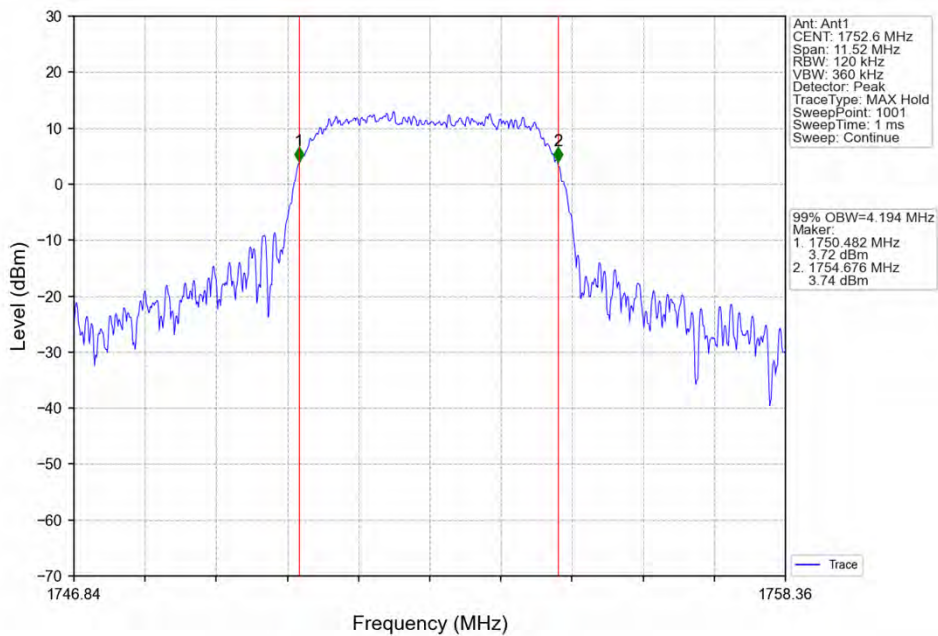
Band4_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



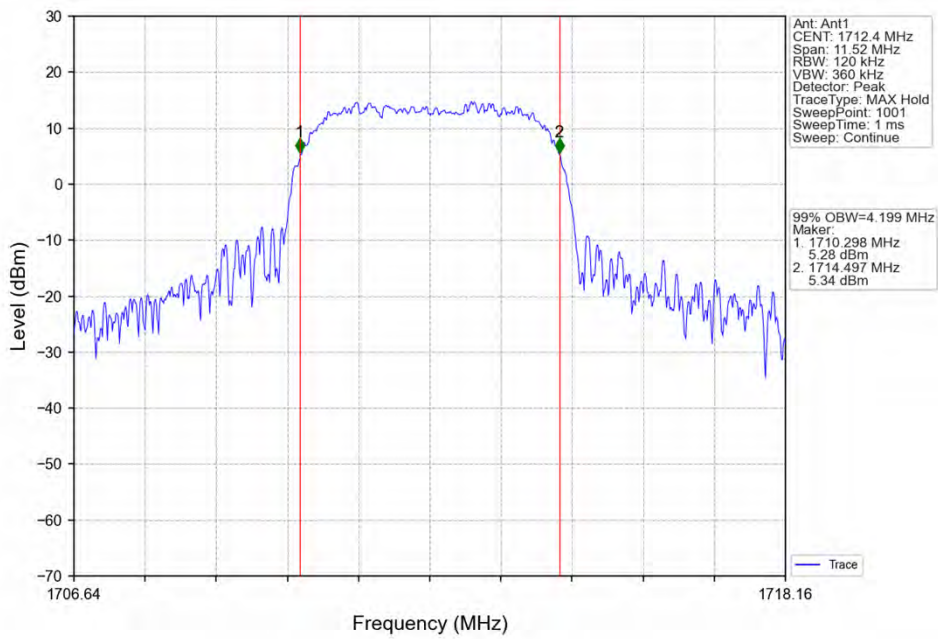
Band4_HSDPA_MCH_1732.6MHz_Subtest 1_NTNV



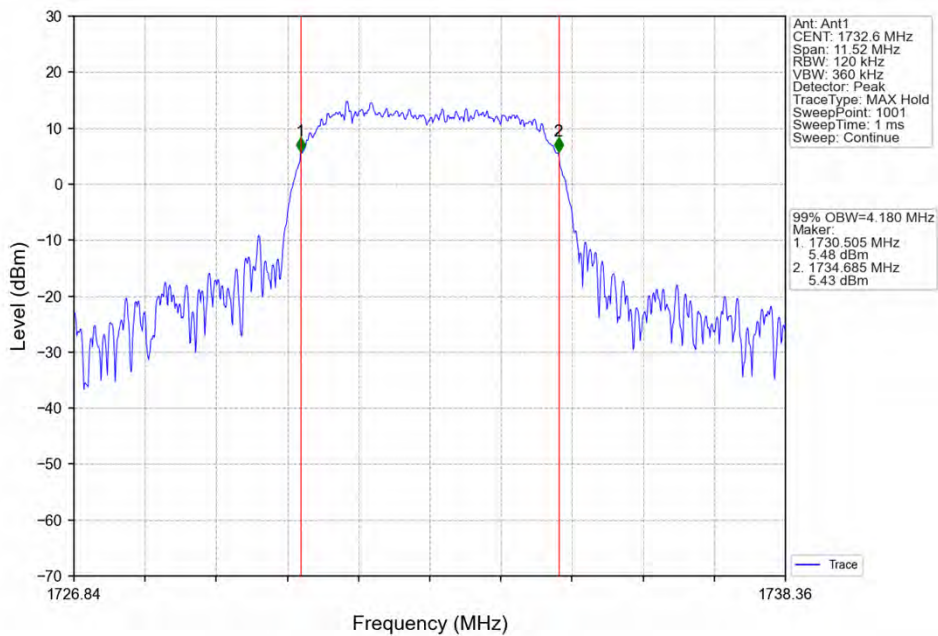
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



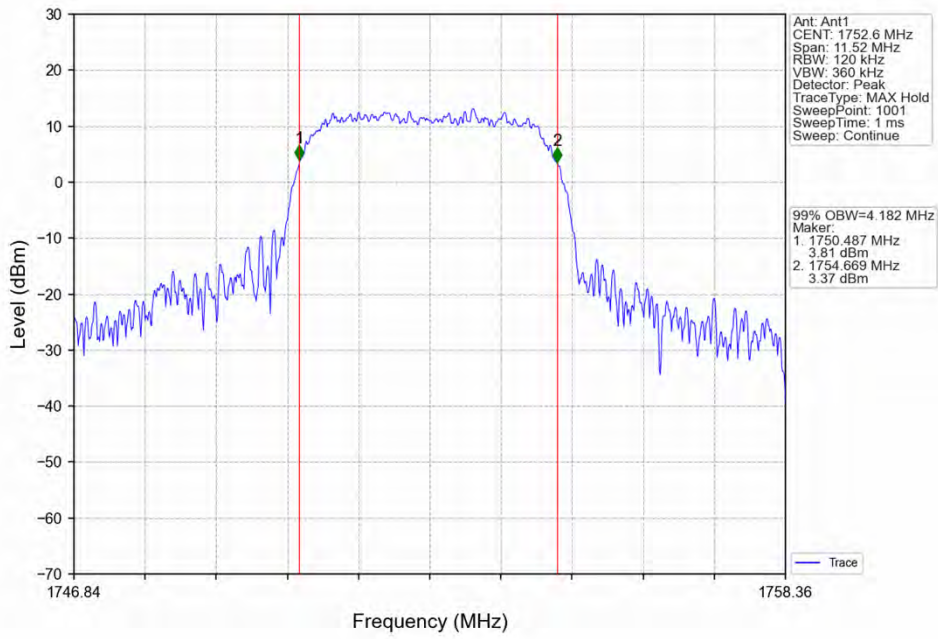
Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



Band4_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV

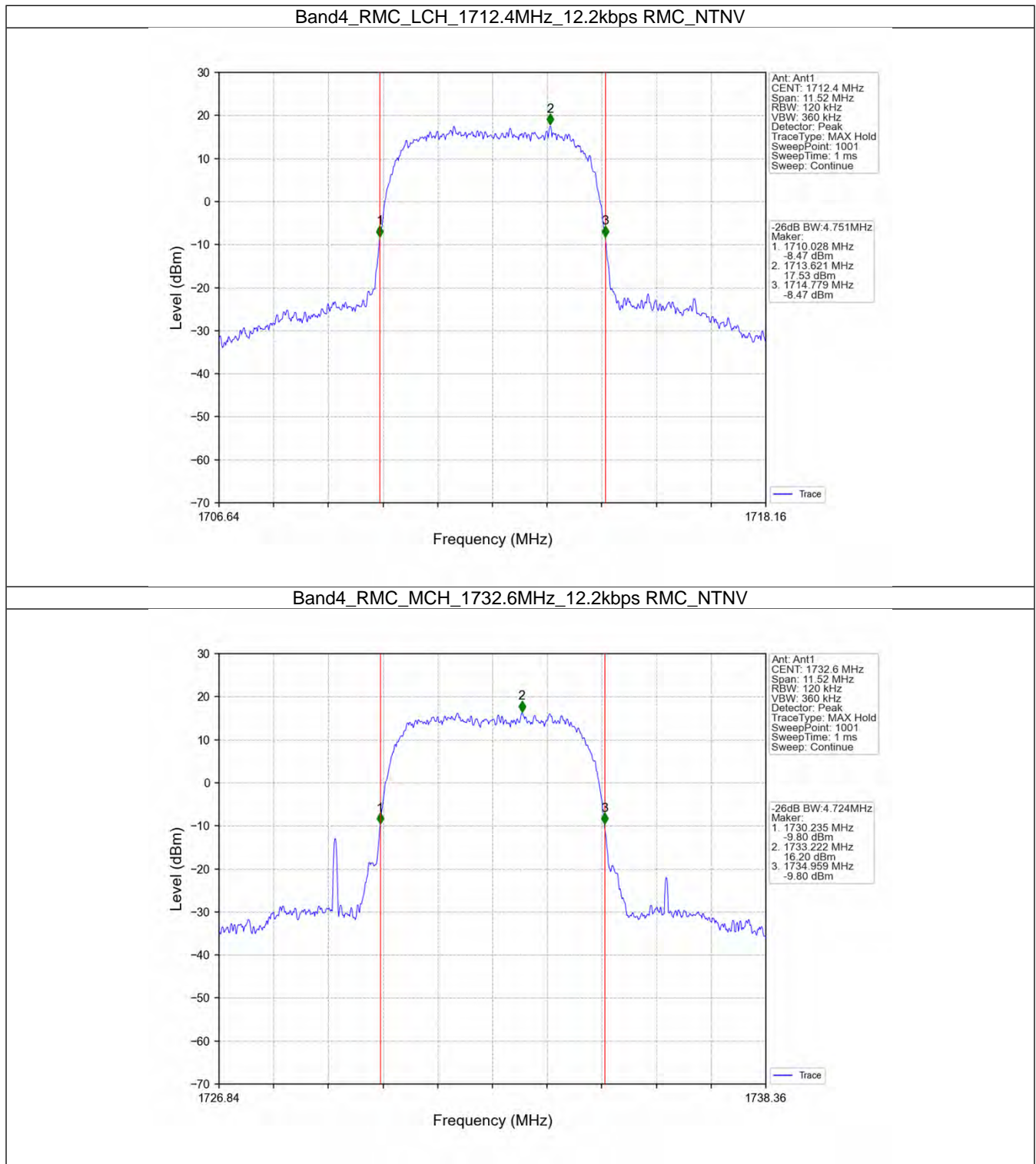


4.2 Band4_XDB

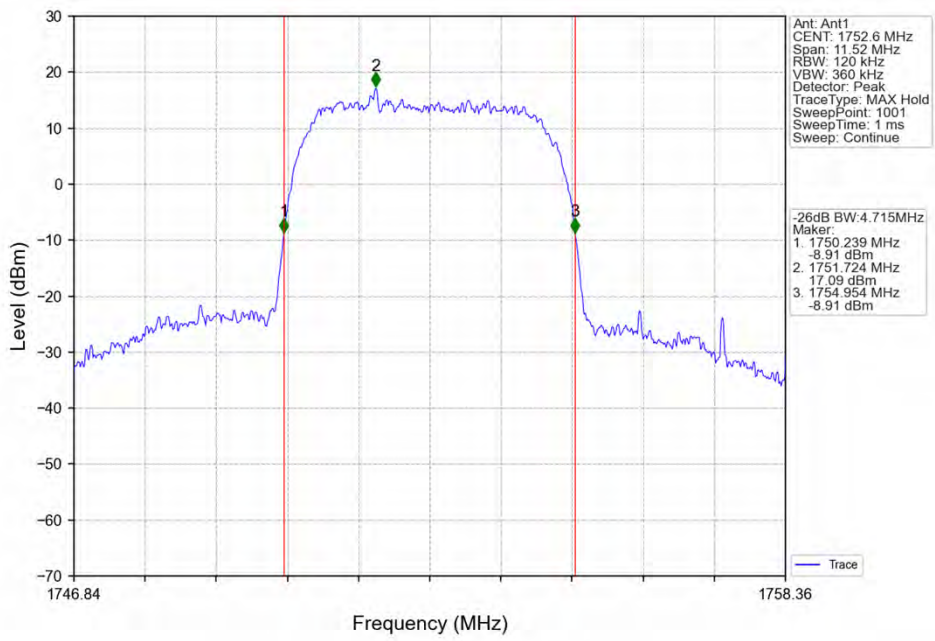
4.2.1 Test Result

Band: 4					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	RMC	12.2kbps RMC	1712.4	4.751	Pass
			1732.6	4.724	Pass
			1752.6	4.715	Pass
	HSDPA	Subtest 1	1712.4	4.863	Pass
			1732.6	5.432	Pass
			1752.6	5.337	Pass
	HSUPA	Subtest 1	1712.4	6.044	Pass
			1732.6	5.328	Pass
			1752.6	5.351	Pass

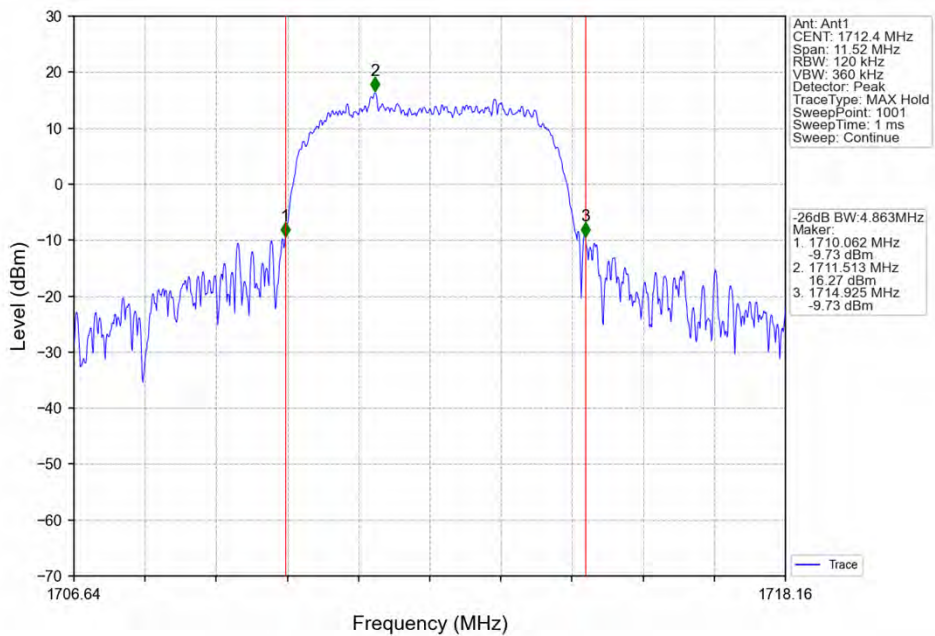
4.2.2 Test Graph



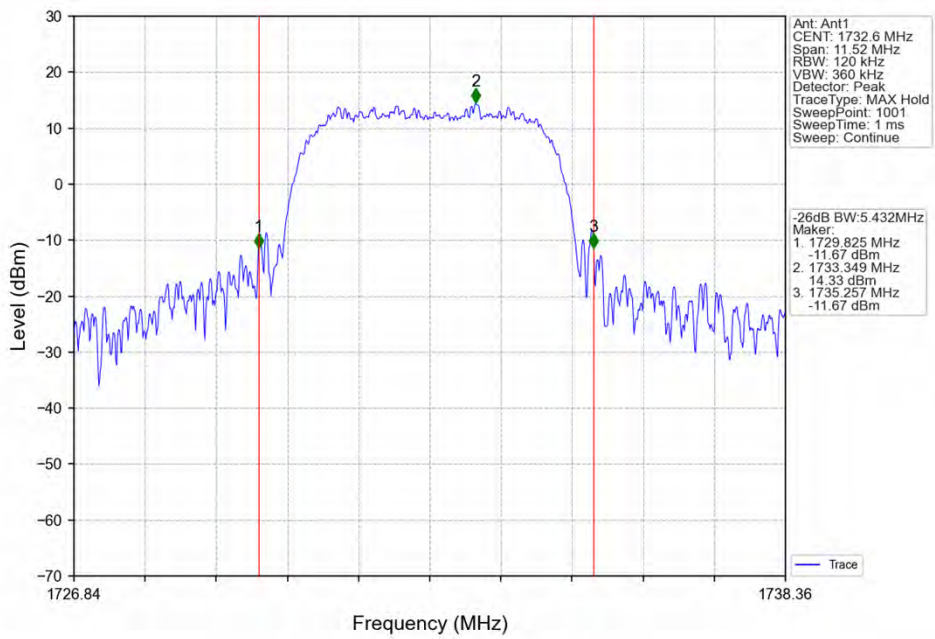
Band4_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



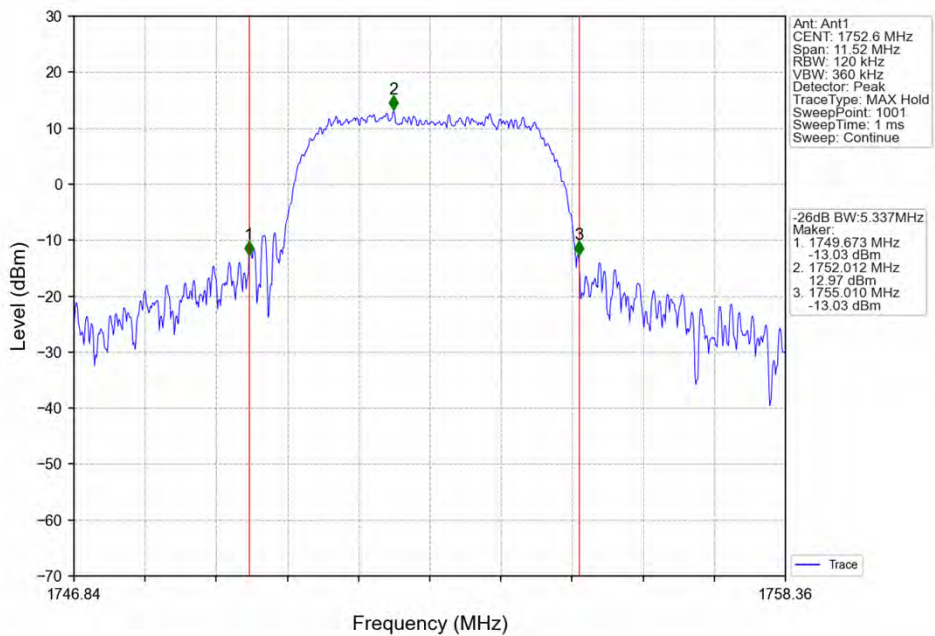
Band4_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



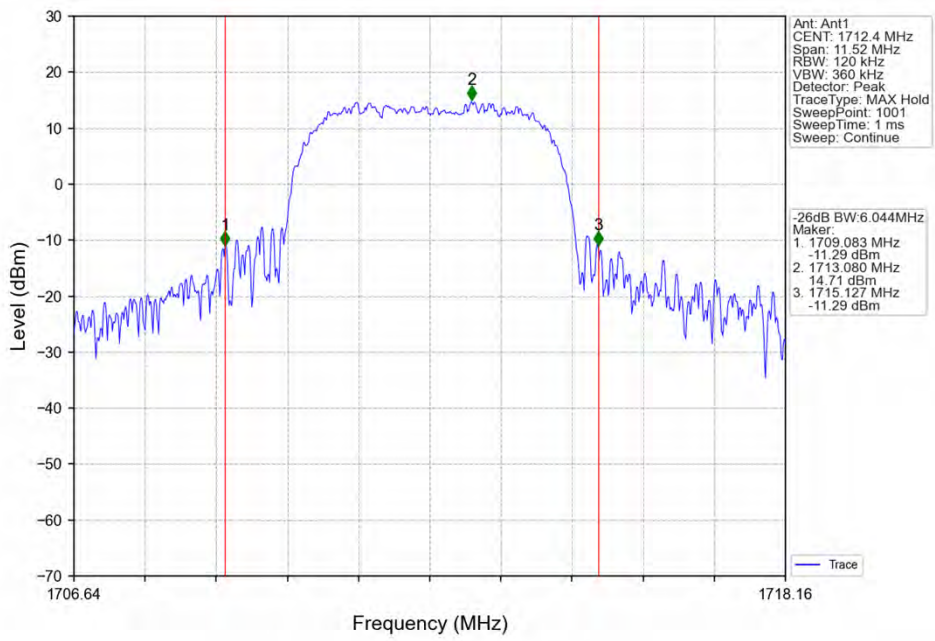
Band4_HSDPA_MCH_1732.6MHz_Subtest 1_NTNV



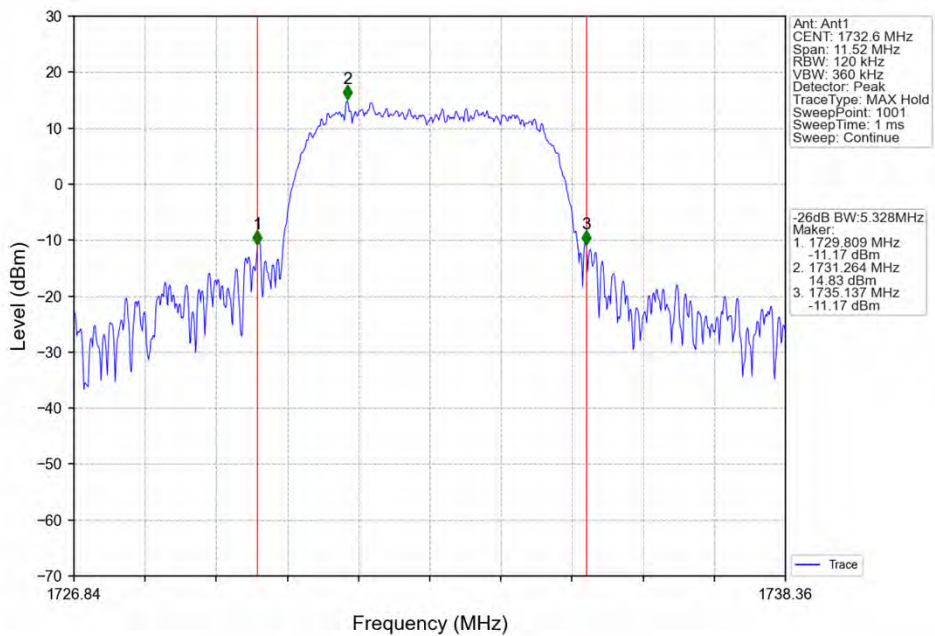
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



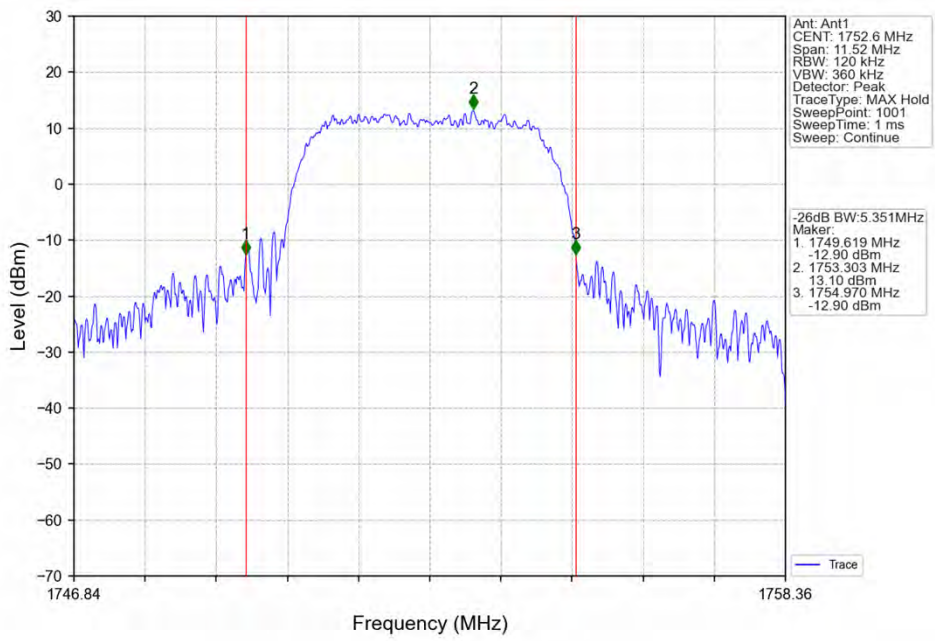
Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



Band4_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



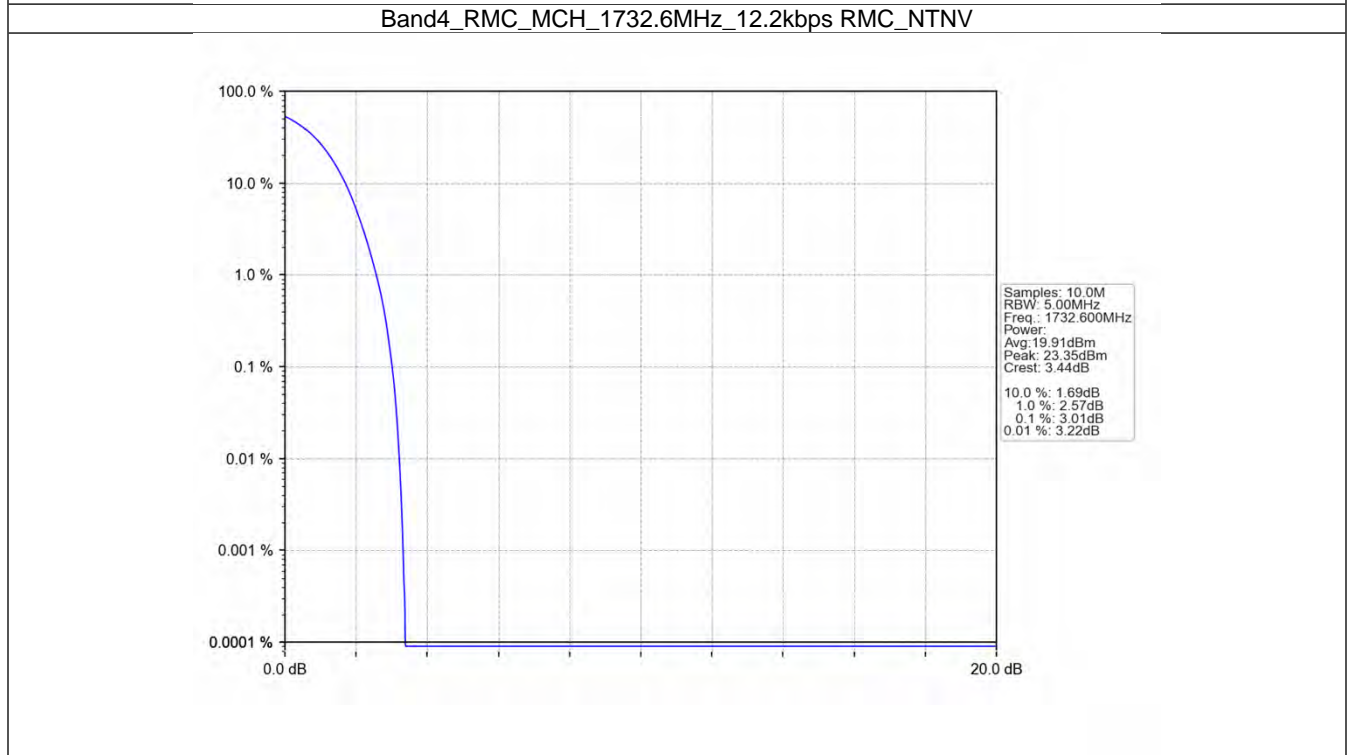
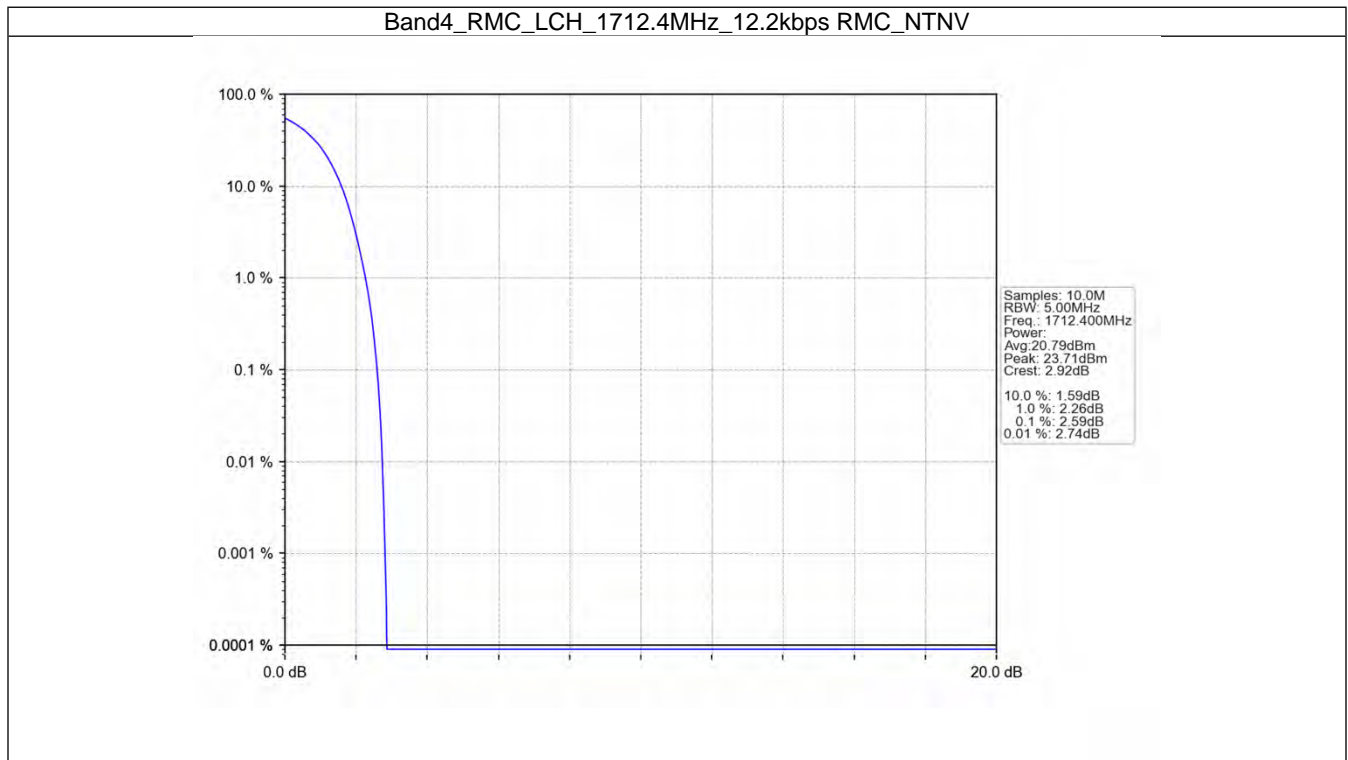
5. Peak-Average Ratio

5.1 Band4

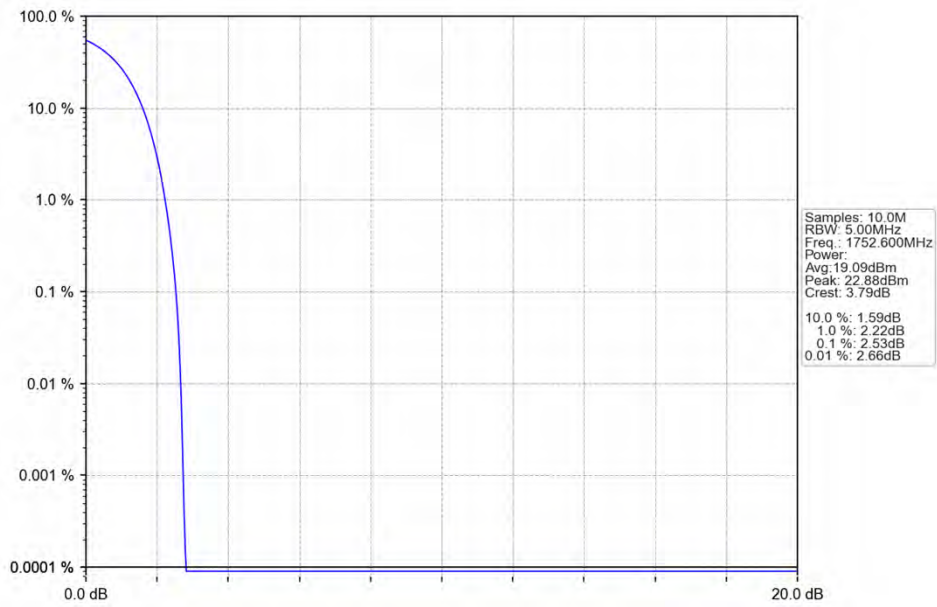
5.1.1 Test Result

Band: 4						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	2.59	<=13	Pass
			1732.6	3.01	<=13	Pass
			1752.6	2.53	<=13	Pass
	HSDPA	Subtest 1	1712.4	5.67	<=13	Pass
			1732.6	5.79	<=13	Pass
			1752.6	5.57	<=13	Pass
	HSUPA	Subtest 1	1712.4	5.63	<=13	Pass
			1732.6	5.86	<=13	Pass
			1752.6	5.58	<=13	Pass

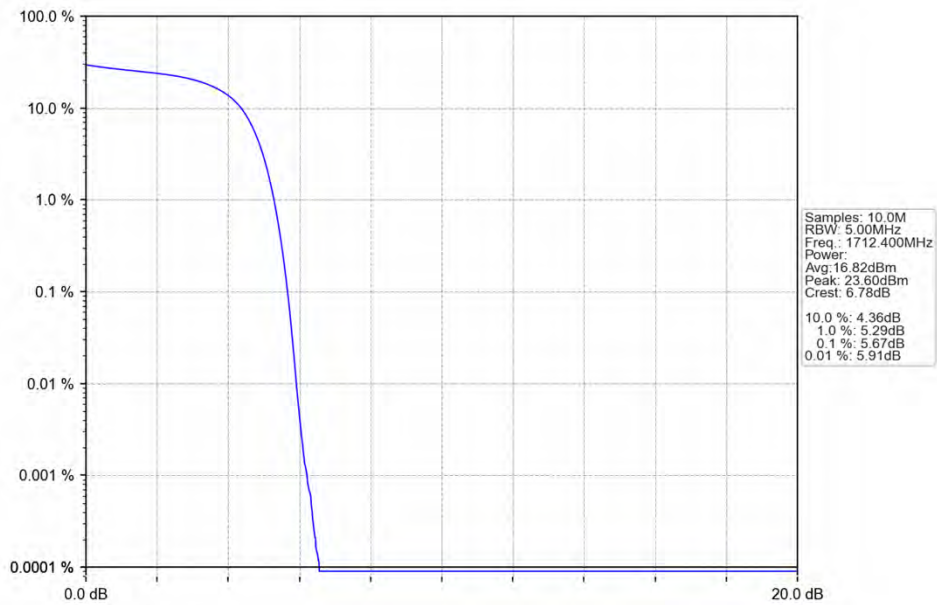
5.1.2 Test Graph



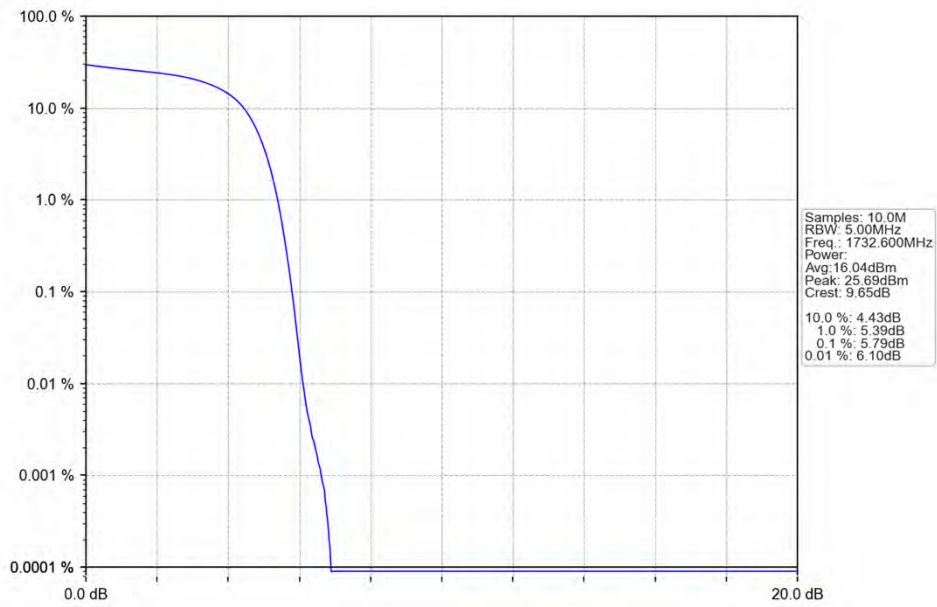
Band4_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



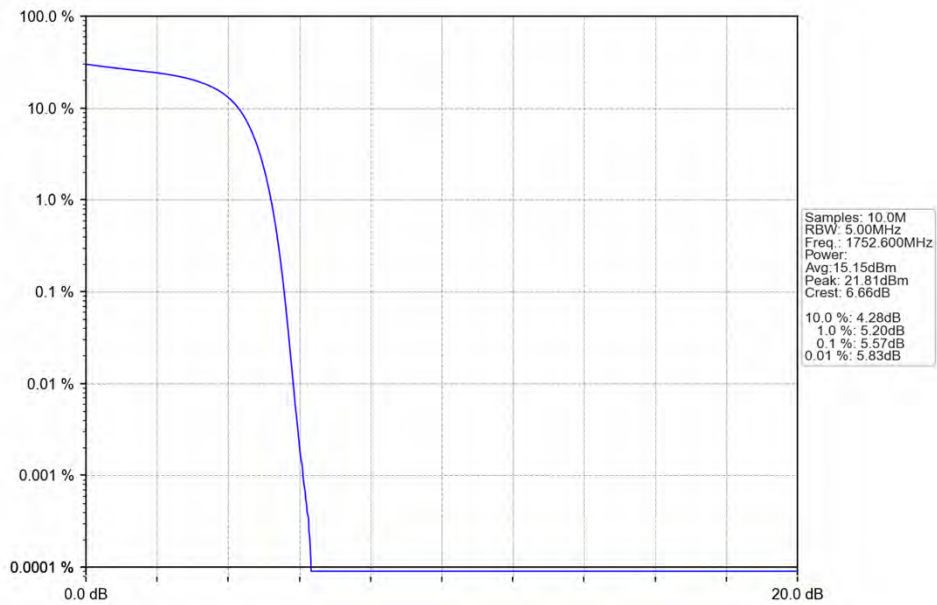
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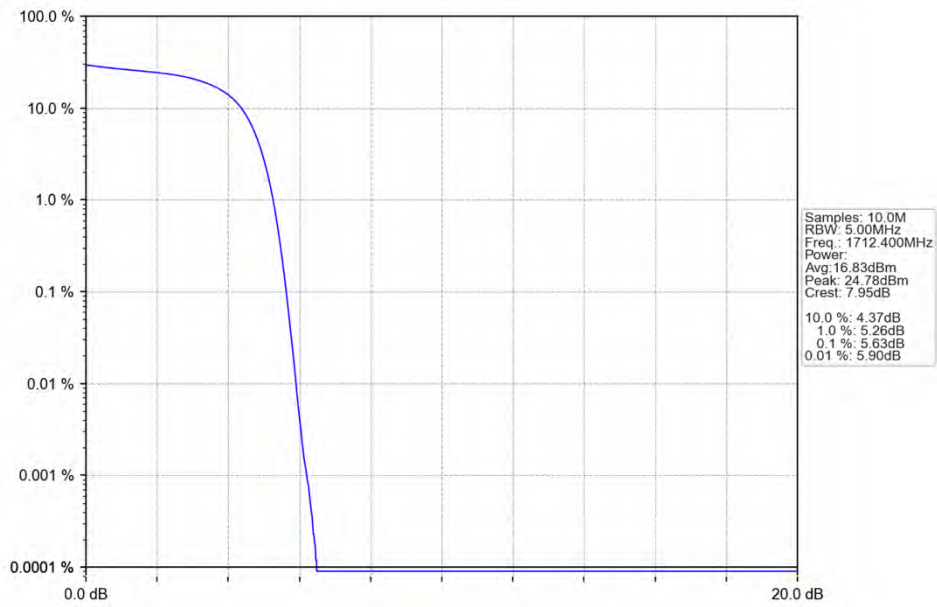
Band4_HSDPA_MCH_1732.6MHz_Subtest 1_NTNV



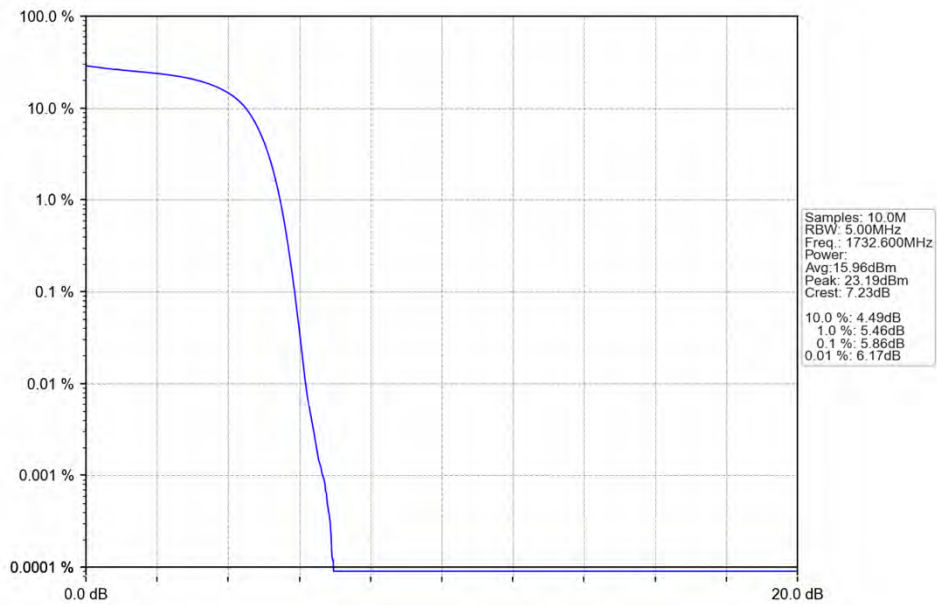
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



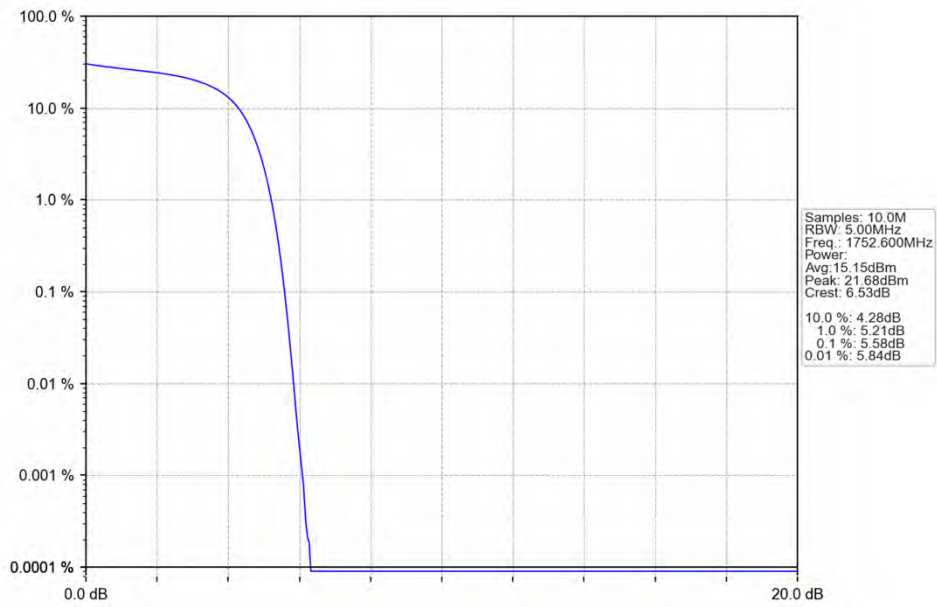
Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



Band4_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



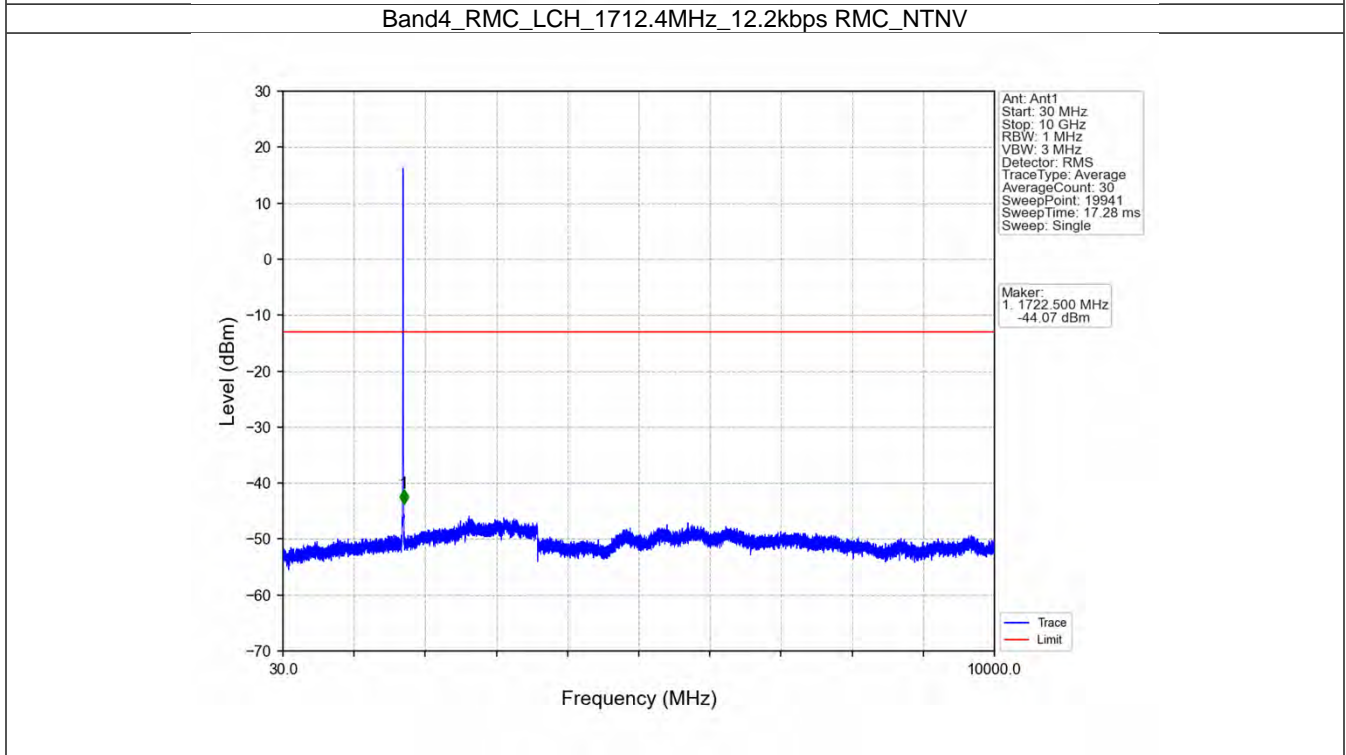
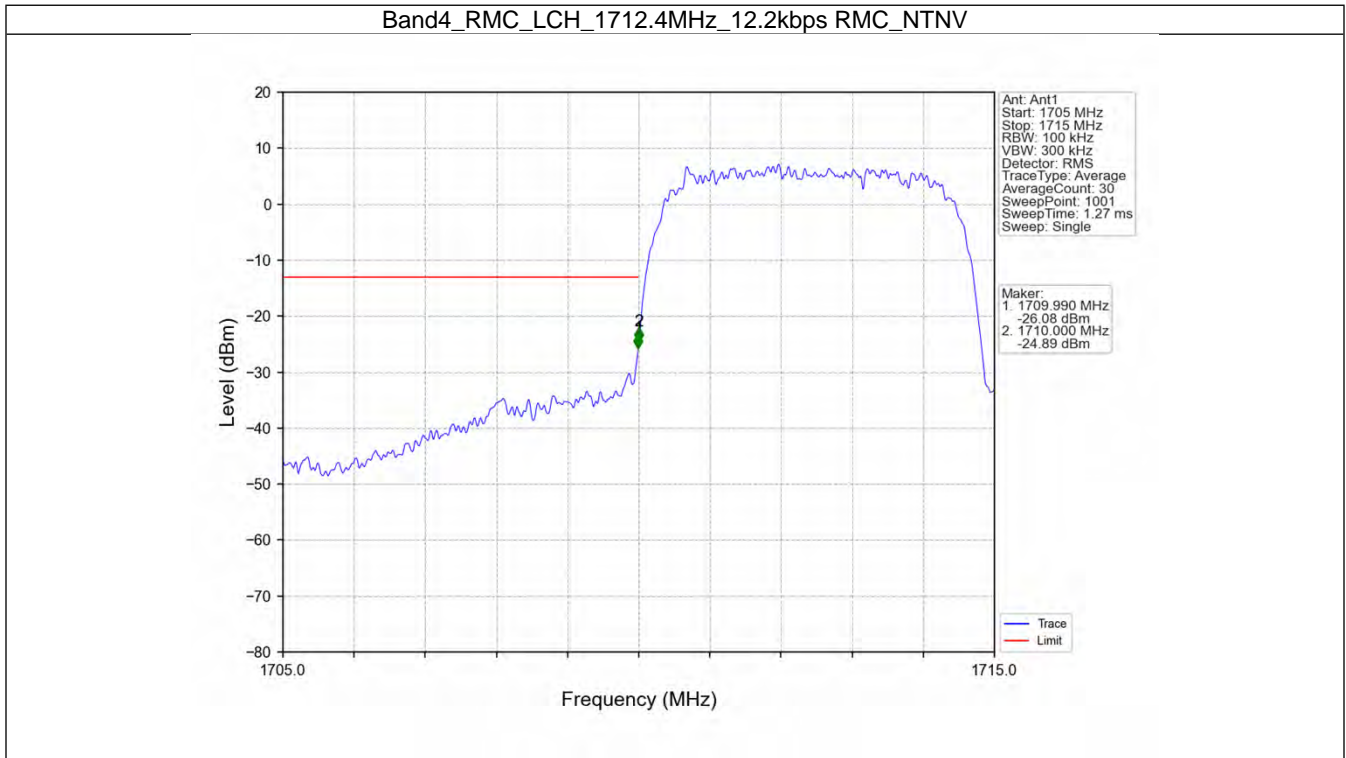
6. Spurious Emission

6.1 Band4

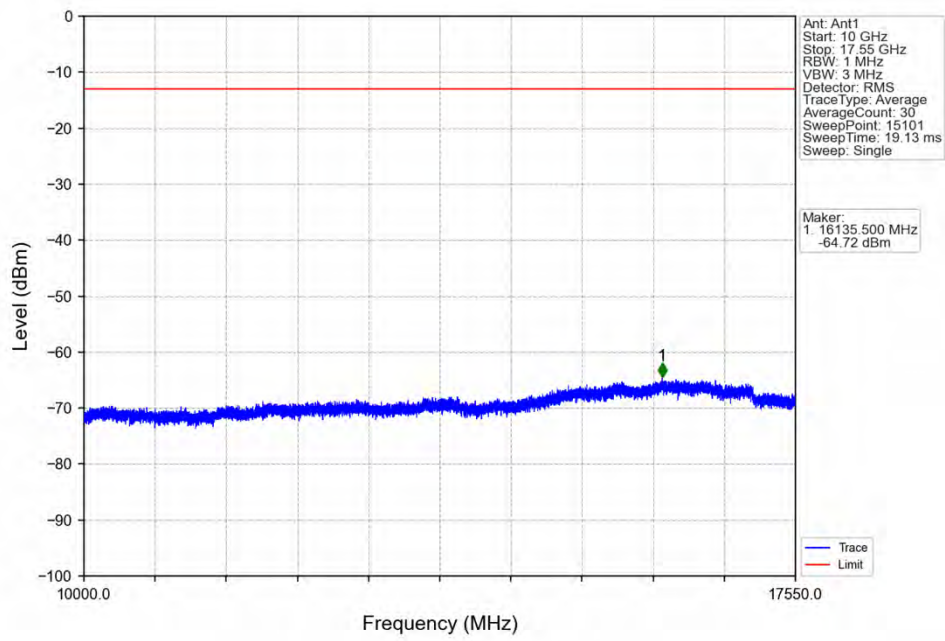
6.1.1 Test Result

Band: 4						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	Refer To Test Graph		Pass
			1732.6	Refer To Test Graph		Pass
			1752.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	1712.4	Refer To Test Graph		Pass
			1732.6	Refer To Test Graph		Pass
			1752.6	Refer To Test Graph		Pass
	HSUPA	Subtest 1	1712.4	Refer To Test Graph		Pass
			1732.6	Refer To Test Graph		Pass
			1752.6	Refer To Test Graph		Pass

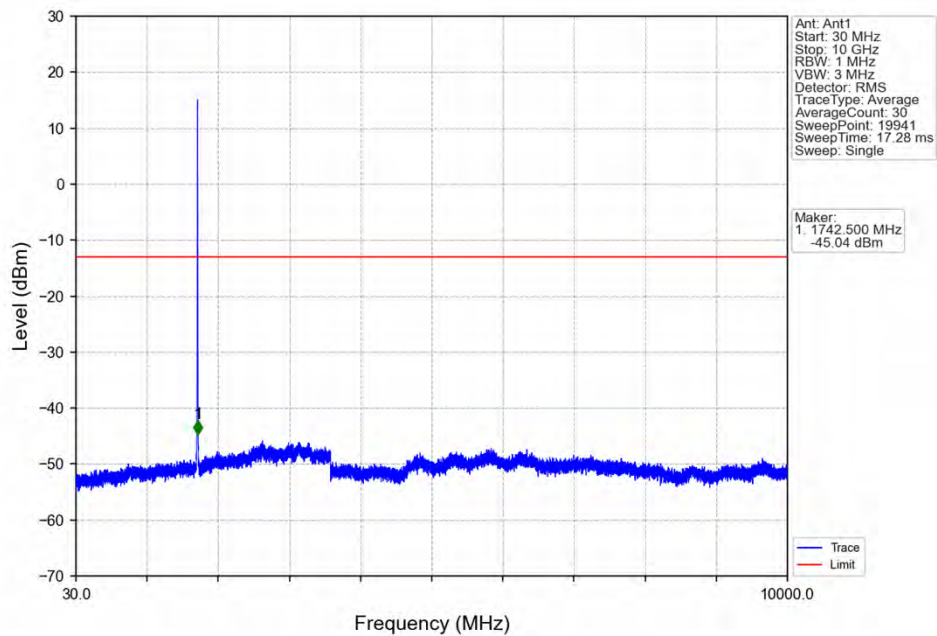
6.1.2 Test Graph



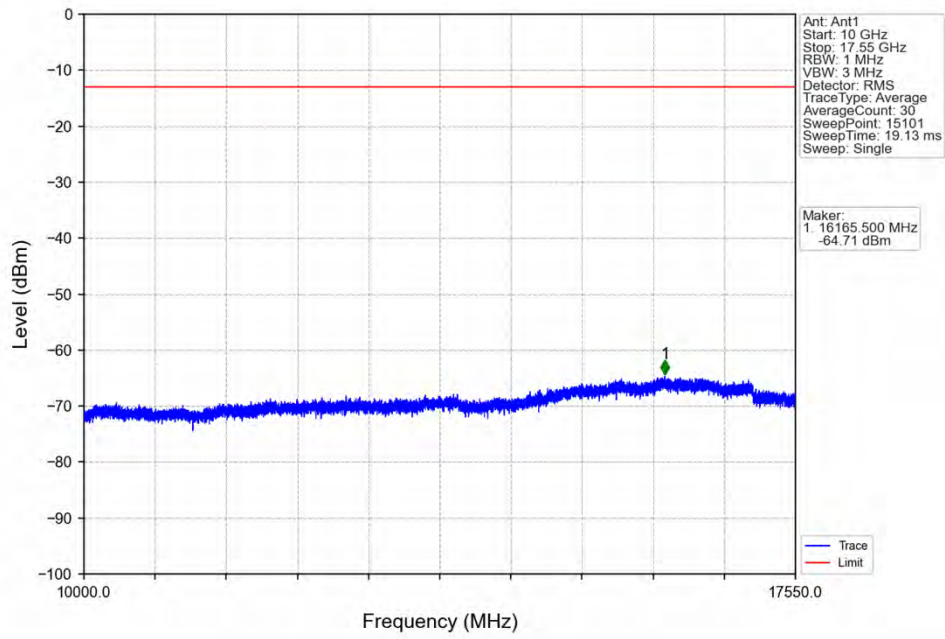
Band4_RMC_LCH_1712.4MHz_12.2kbps RMC_NTNV



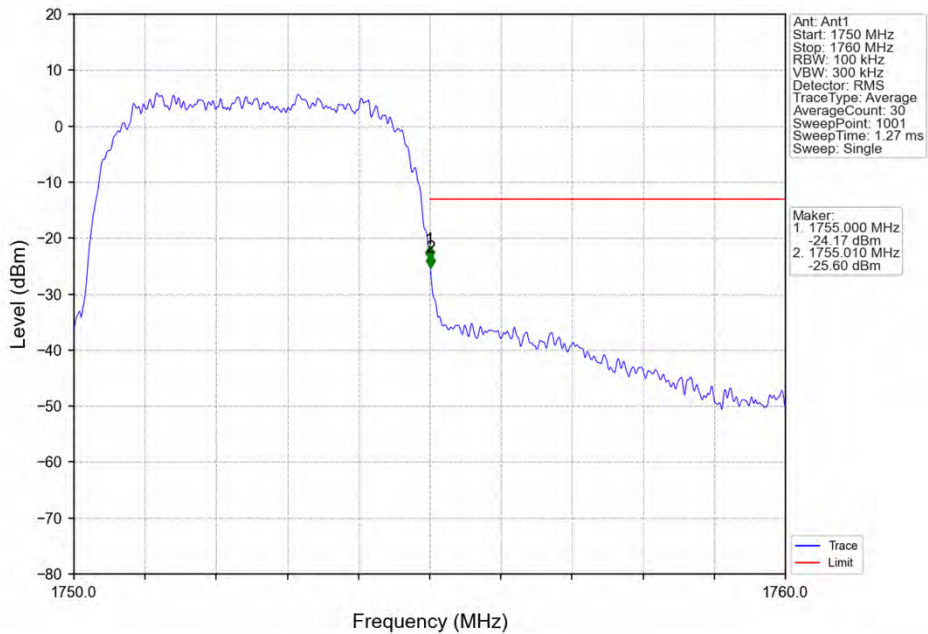
Band4_RMC_MCH_1732.6MHz_12.2kbps RMC_NTNV



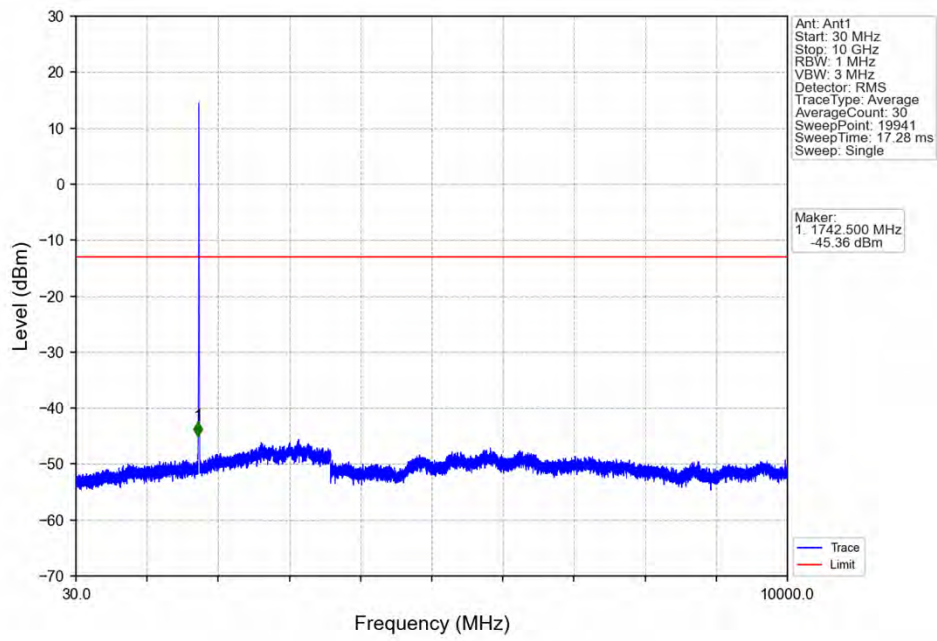
Band4_RMC_MCH_1732.6MHz_12.2kbps RMC_NTNV



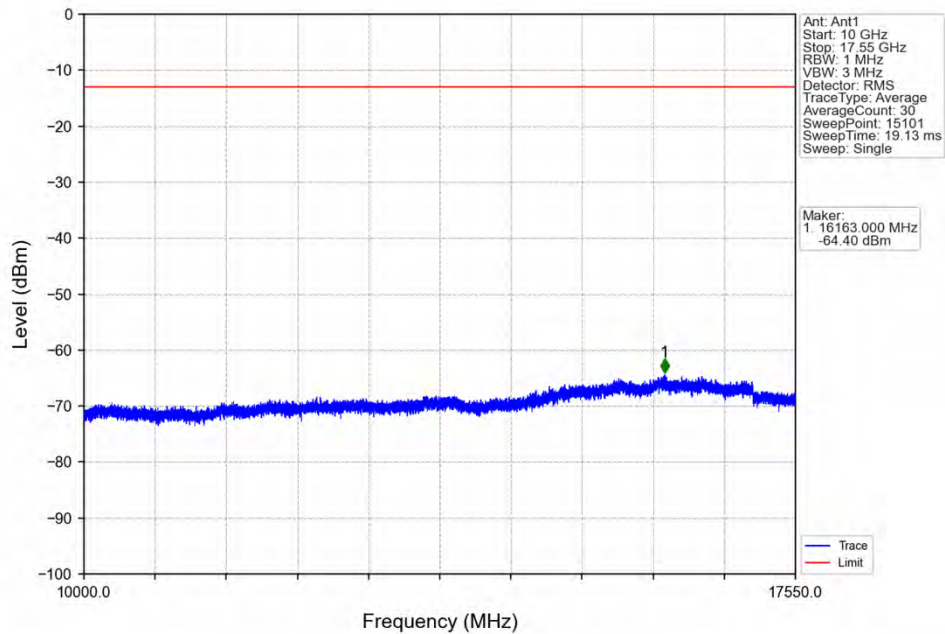
Band4_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



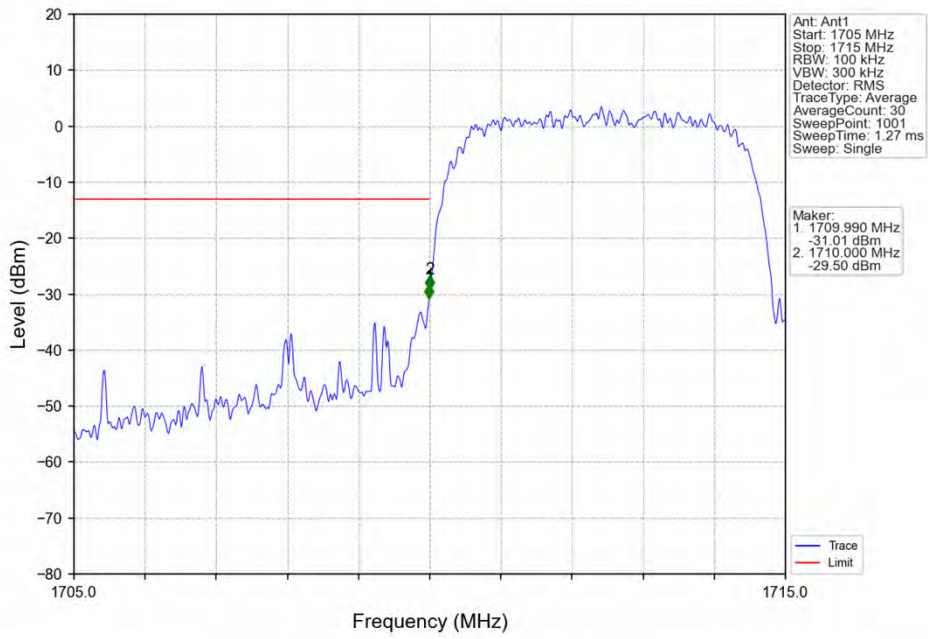
Band4_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



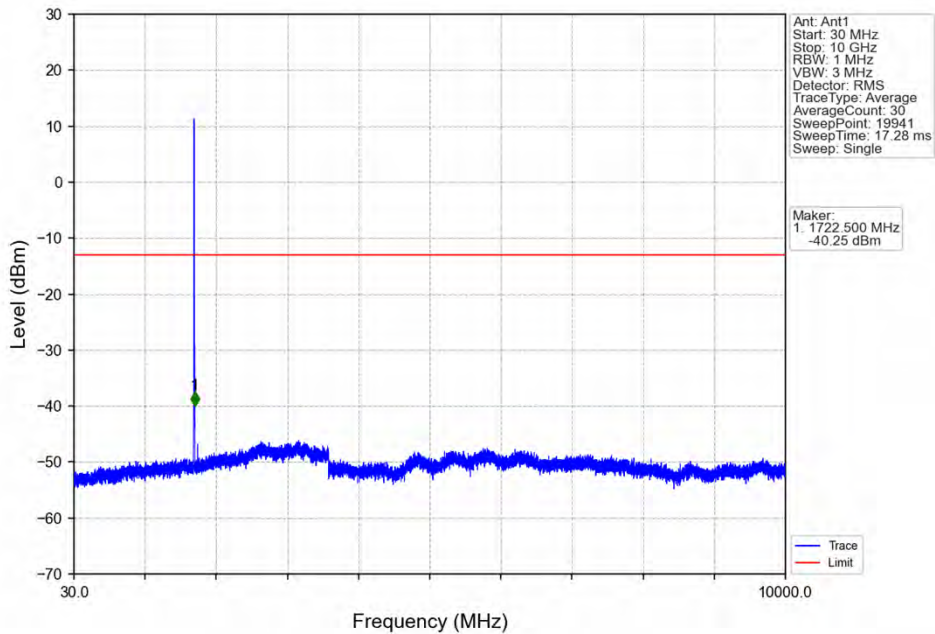
Band4_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



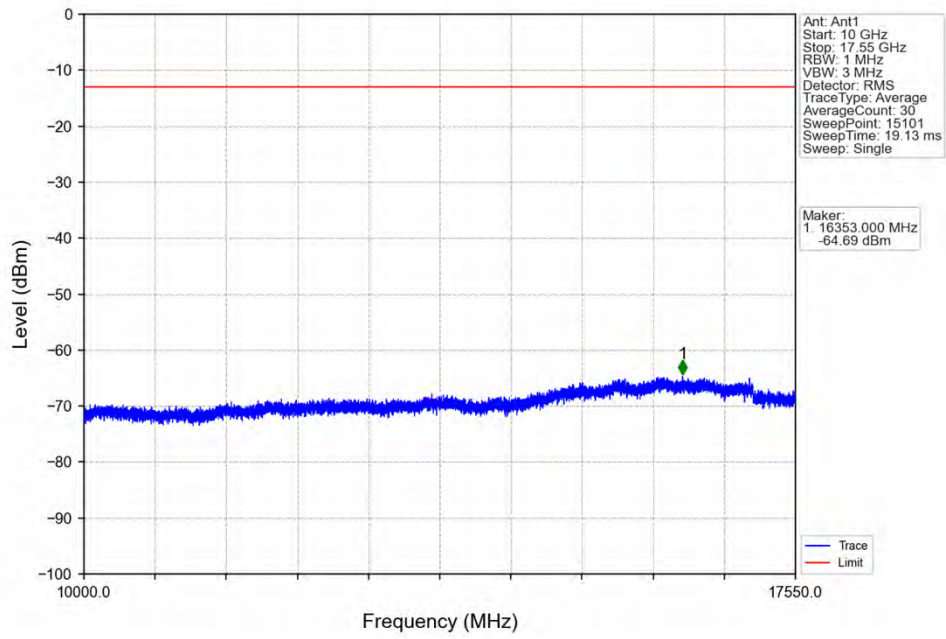
Band4_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



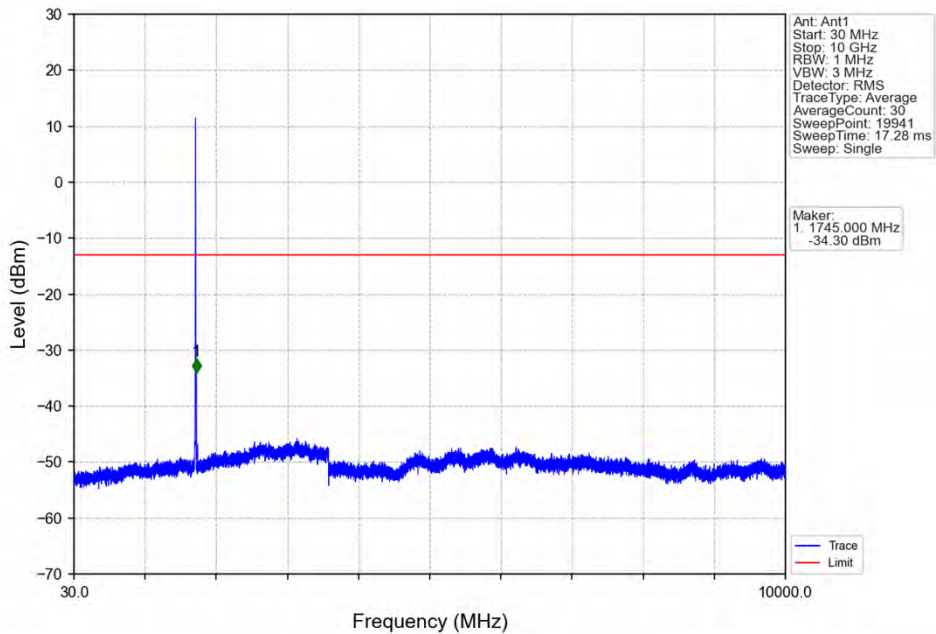
Band4_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



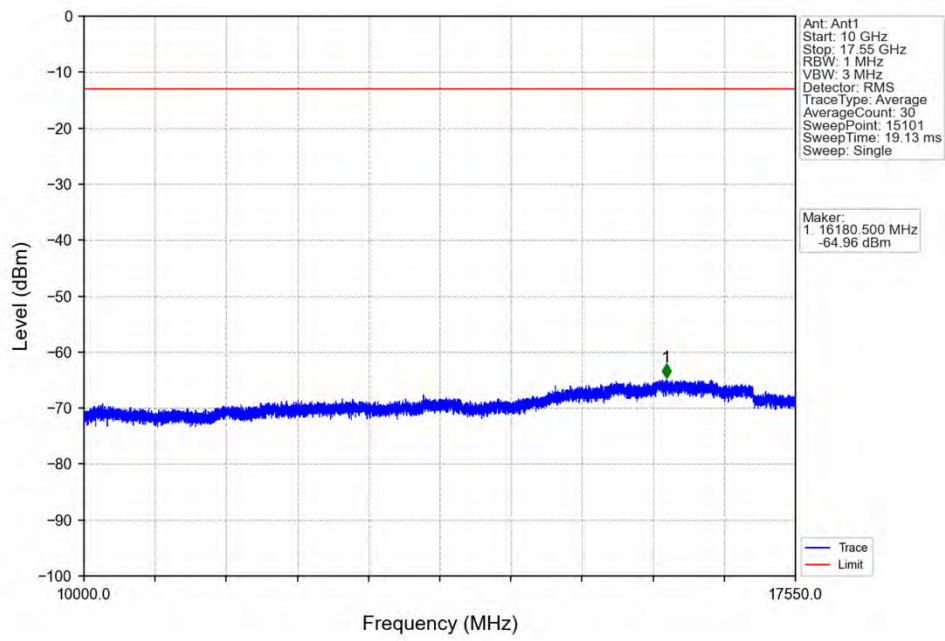
Band4_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



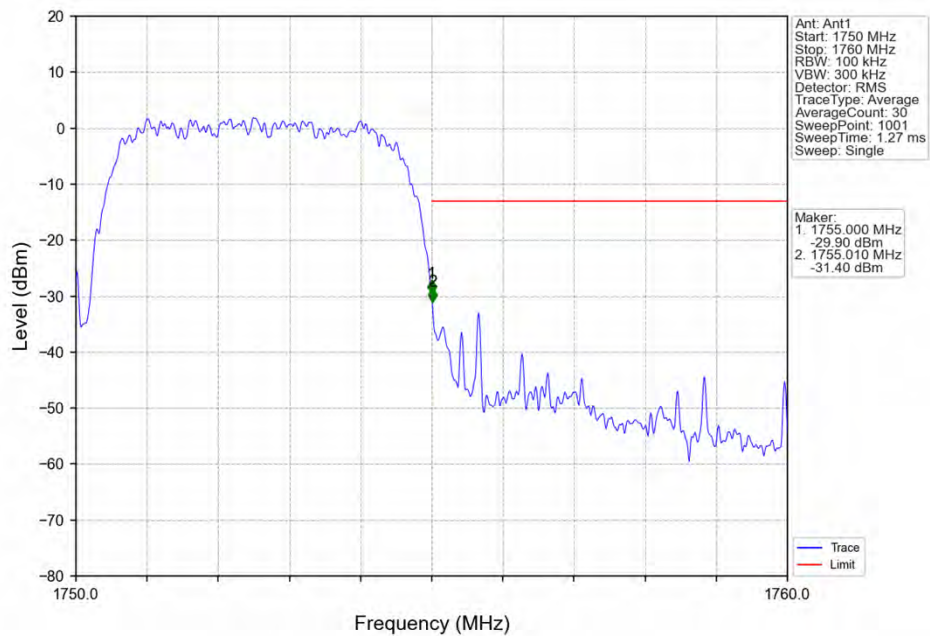
Band4_HSDPA_MCH_1732.6MHz_Subtest 1_NTNV



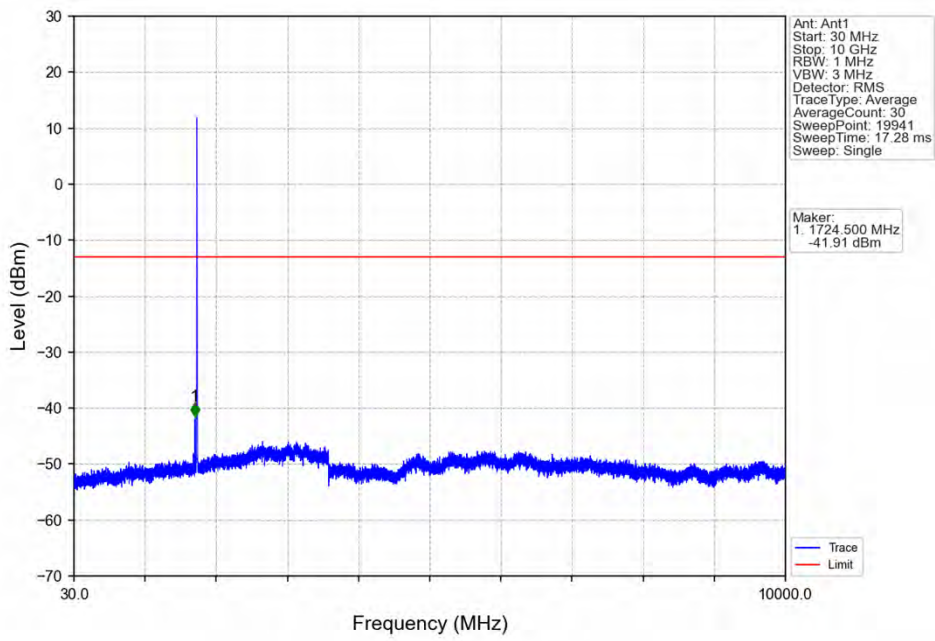
Band4_HSDPA_MCH_1732.6MHz_Subtest 1_NTNV



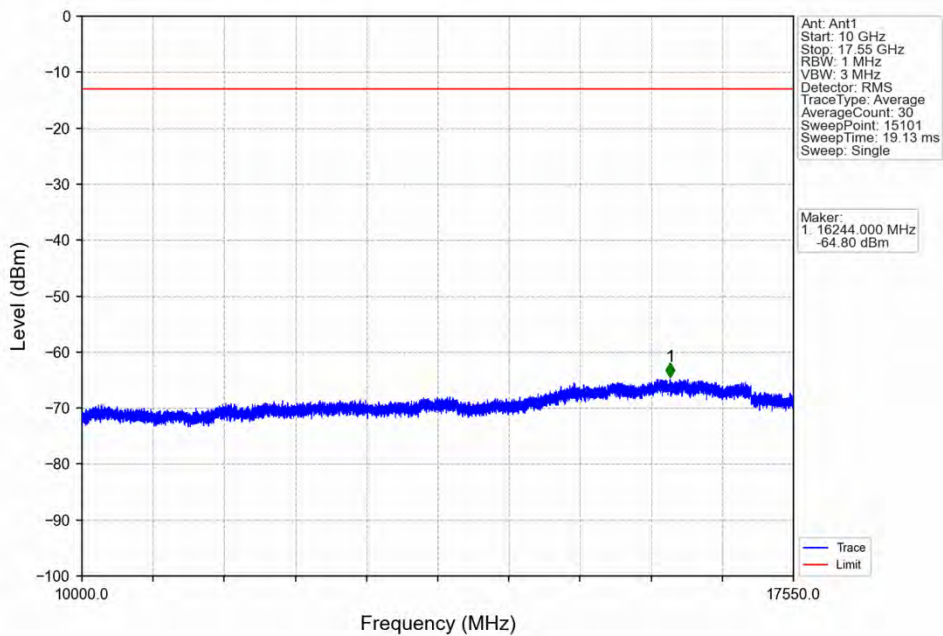
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



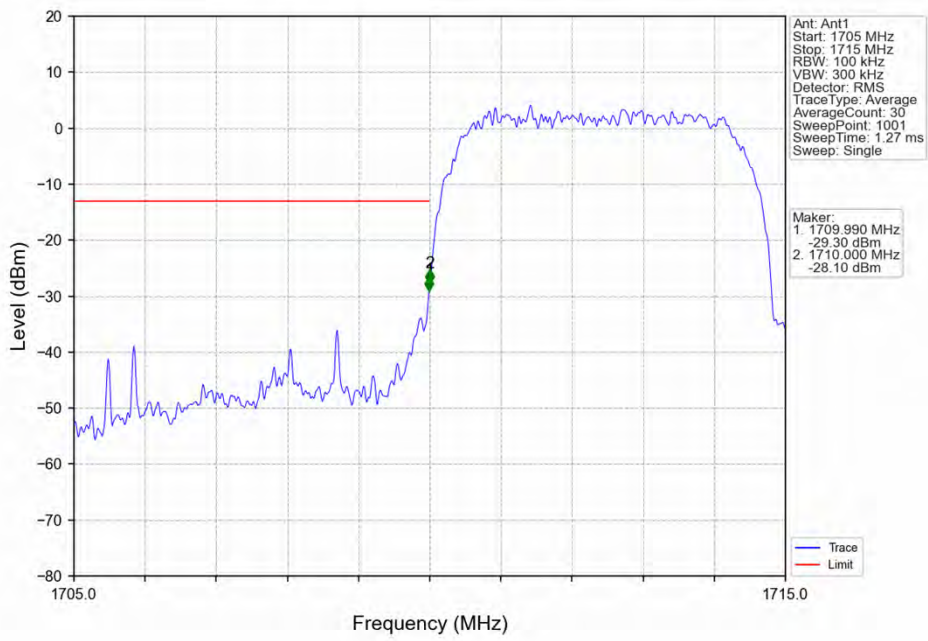
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



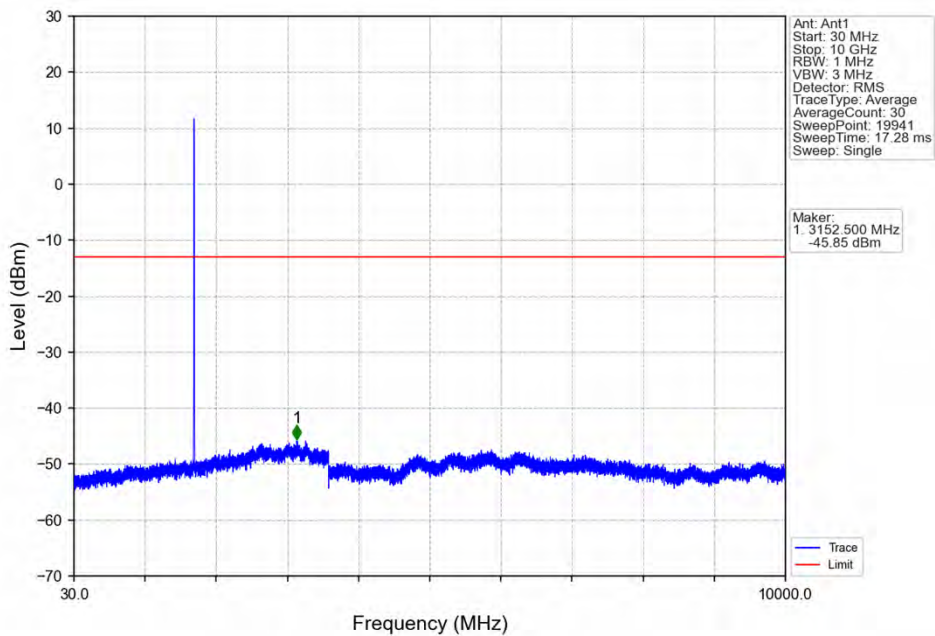
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



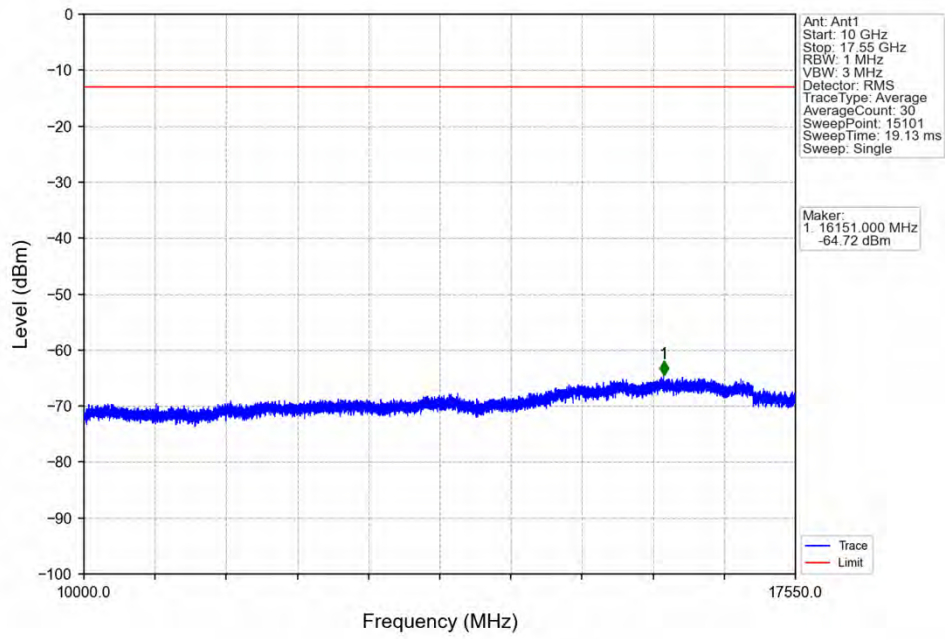
Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



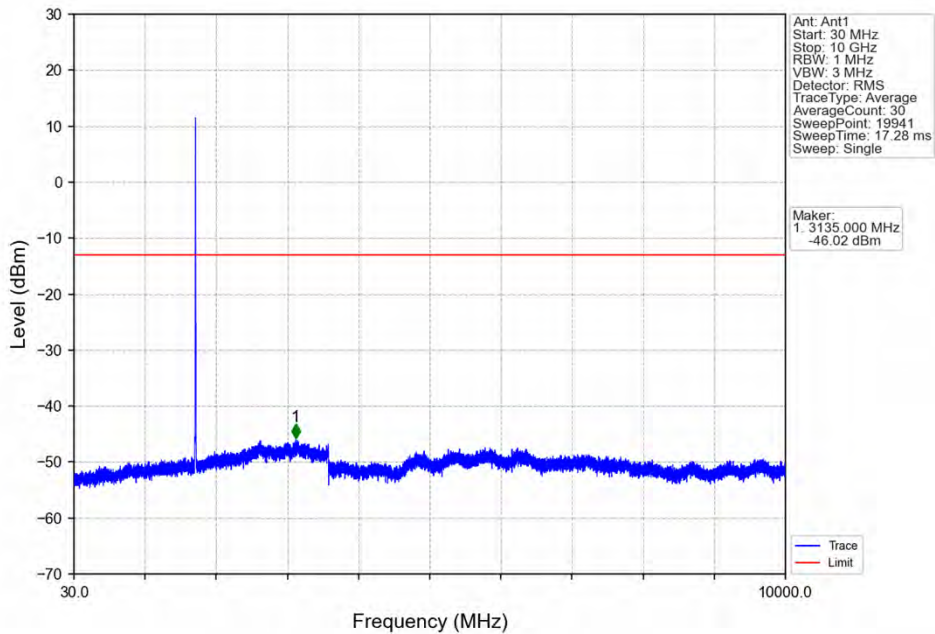
Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



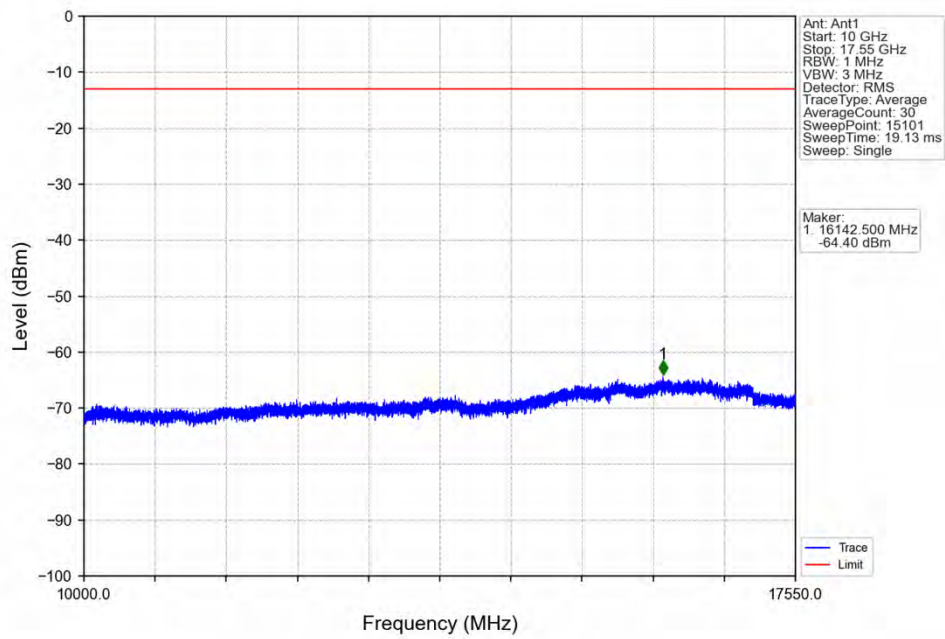
Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



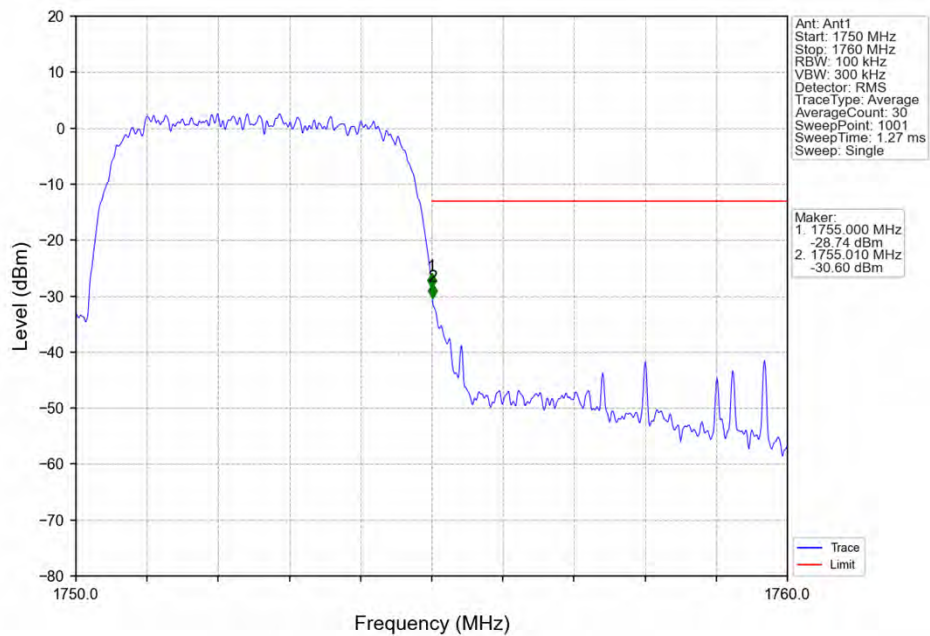
Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



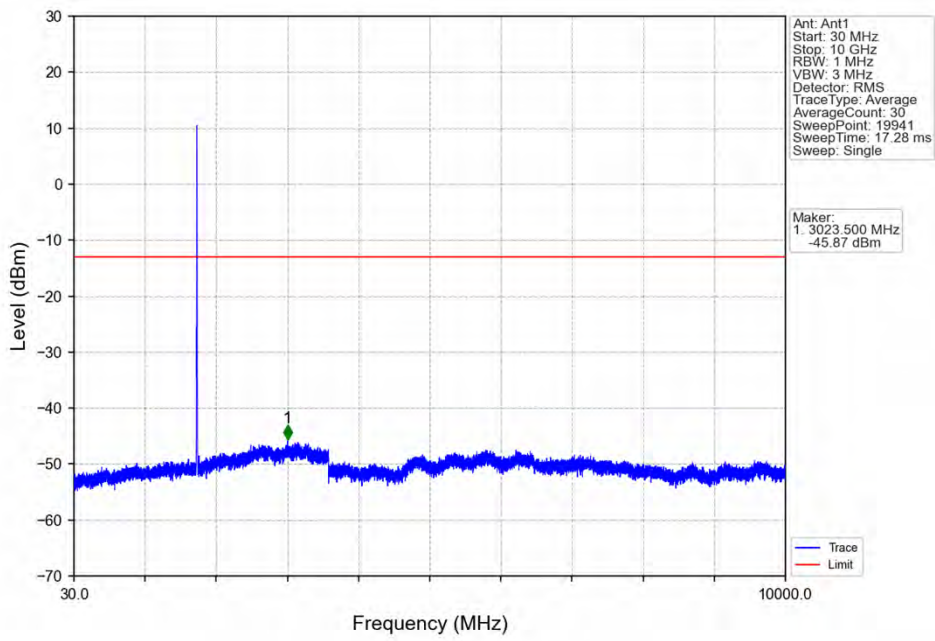
Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



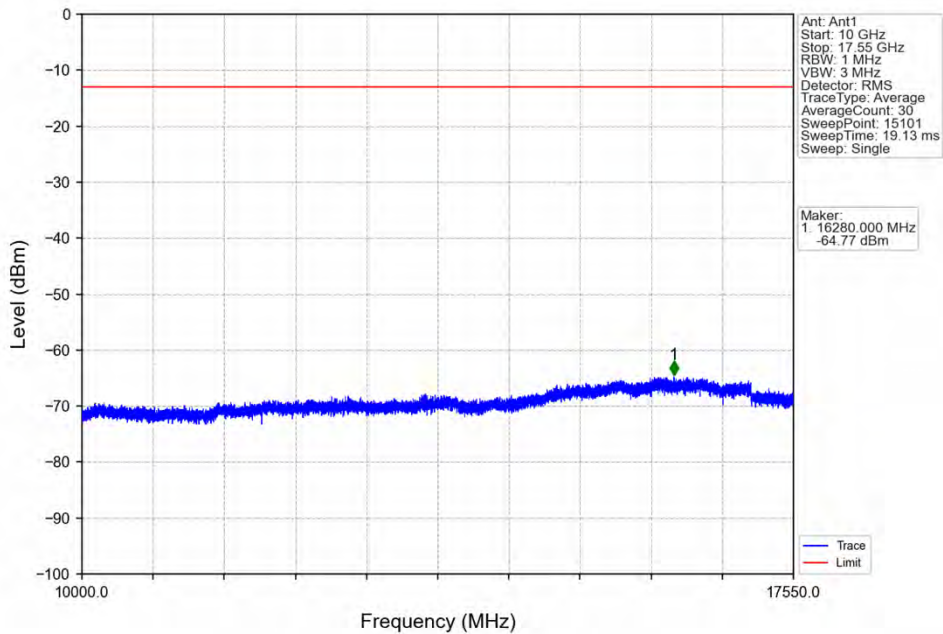
Band4_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



Band4_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



Band4_HSUPA_HCH_1752.6MHz_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)
4	3.84	1712.4	1752.6	0.1959	0.0037	ppm	4M20F9W	24E	22.92

7.2 Form731_EIRP

7.2.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
4	3.84	1712.4	1752.6	0.2123	0.0037	ppm	4M20F9W	24E	23.27