

# 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	0.6	23.52	<=30	Pass	
			1732.6	22.85	0.6	23.45	<=30	Pass	
			1752.6	22.67	0.6	23.27	<=30	Pass	
	HSDPA	Subtest 1	1712.4	20.90	0.6	21.5	<=30	Pass	
		Subtest 2	1712.4	20.79	0.6	21.39	<=30	Pass	
		Subtest 3	1712.4	20.79	0.6	21.39	<=30	Pass	
		Subtest 4	1712.4	20.82	0.6	21.42	<=30	Pass	
		Subtest 1	1732.6	20.94	0.6	21.54	<=30	Pass	
		Subtest 2	1732.6	20.93	0.6	21.53	<=30	Pass	
		Subtest 3	1732.6	20.86	0.6	21.46	<=30	Pass	
		Subtest 4	1732.6	20.90	0.6	21.5	<=30	Pass	
		Subtest 1	1752.6	20.55	0.6	21.15	<=30	Pass	
		Subtest 2	1752.6	20.54	0.6	21.14	<=30	Pass	
		Subtest 3	1752.6	20.54	0.6	21.14	<=30	Pass	
		Subtest 4	1752.6	20.53	0.6	21.13	<=30	Pass	
		HSUPA	Subtest 1	1712.4	18.67	0.6	19.27	<=30	Pass
			Subtest 2	1712.4	18.50	0.6	19.1	<=30	Pass
			Subtest 3	1712.4	18.88	0.6	19.48	<=30	Pass
			Subtest 4	1712.4	18.40	0.6	19	<=30	Pass
			Subtest 5	1712.4	18.74	0.6	19.34	<=30	Pass
	Subtest 1		1732.6	18.71	0.6	19.31	<=30	Pass	
	Subtest 2		1732.6	18.63	0.6	19.23	<=30	Pass	
	Subtest 3		1732.6	18.40	0.6	19	<=30	Pass	
	Subtest 4		1732.6	18.68	0.6	19.28	<=30	Pass	
	Subtest 5		1732.6	18.93	0.6	19.53	<=30	Pass	
	Subtest 1		1752.6	18.32	0.6	18.92	<=30	Pass	
	Subtest 2		1752.6	18.60	0.6	19.2	<=30	Pass	
	Subtest 3		1752.6	18.01	0.6	18.61	<=30	Pass	
	Subtest 4	1752.6	18.47	0.6	19.07	<=30	Pass		
	Subtest 5	1752.6	18.60	0.6	19.2	<=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	3.827	0.0022	-2.5 to 2.5	Pass
			3.85	2.031	0.0012	-2.5 to 2.5	Pass
			4.43	2.460	0.0014	-2.5 to 2.5	Pass
		-30	3.85	2.117	0.0012	-2.5 to 2.5	Pass
		-20	3.85	2.103	0.0012	-2.5 to 2.5	Pass
		-10	3.85	2.732	0.0016	-2.5 to 2.5	Pass
		0	3.85	3.340	0.0020	-2.5 to 2.5	Pass
		10	3.85	2.296	0.0013	-2.5 to 2.5	Pass
		30	3.85	2.868	0.0017	-2.5 to 2.5	Pass
		40	3.85	3.469	0.0020	-2.5 to 2.5	Pass
	50	3.85	4.835	0.0028	-2.5 to 2.5	Pass	
	1732.6	20	3.27	-1.616	-0.0009	-2.5 to 2.5	Pass
			3.85	-0.901	-0.0005	-2.5 to 2.5	Pass
			4.43	-0.966	-0.0006	-2.5 to 2.5	Pass
		-30	3.85	-0.322	-0.0002	-2.5 to 2.5	Pass
		-20	3.85	-1.917	-0.0011	-2.5 to 2.5	Pass
		-10	3.85	-1.202	-0.0007	-2.5 to 2.5	Pass
		0	3.85	-1.280	-0.0007	-2.5 to 2.5	Pass
		10	3.85	-1.001	-0.0006	-2.5 to 2.5	Pass
		30	3.85	-1.152	-0.0007	-2.5 to 2.5	Pass
		40	3.85	-0.215	-0.0001	-2.5 to 2.5	Pass
	50	3.85	-0.172	-0.0001	-2.5 to 2.5	Pass	
	1752.6	20	3.27	-7.925	-0.0045	-2.5 to 2.5	Pass
			3.85	-7.746	-0.0044	-2.5 to 2.5	Pass
			4.43	-6.037	-0.0034	-2.5 to 2.5	Pass
		-30	3.85	-6.974	-0.0040	-2.5 to 2.5	Pass
		-20	3.85	-6.180	-0.0035	-2.5 to 2.5	Pass
		-10	3.85	-6.530	-0.0037	-2.5 to 2.5	Pass
		0	3.85	-6.516	-0.0037	-2.5 to 2.5	Pass
		10	3.85	-6.123	-0.0035	-2.5 to 2.5	Pass
30		3.85	-5.865	-0.0033	-2.5 to 2.5	Pass	
40		3.85	-6.323	-0.0036	-2.5 to 2.5	Pass	
50	3.85	-5.736	-0.0033	-2.5 to 2.5	Pass		
HSDPA	1712.4	20	3.27	3.276	0.0019	-2.5 to 2.5	Pass
			3.85	3.719	0.0022	-2.5 to 2.5	Pass
			4.43	2.568	0.0015	-2.5 to 2.5	Pass
		-30	3.85	2.189	0.0013	-2.5 to 2.5	Pass
		-20	3.85	2.224	0.0013	-2.5 to 2.5	Pass
		-10	3.85	2.167	0.0013	-2.5 to 2.5	Pass
		0	3.85	1.502	0.0009	-2.5 to 2.5	Pass
		10	3.85	1.895	0.0011	-2.5 to 2.5	Pass
		30	3.85	1.802	0.0011	-2.5 to 2.5	Pass
		40	3.85	1.438	0.0008	-2.5 to 2.5	Pass
	50	3.85	1.681	0.0010	-2.5 to 2.5	Pass	
	1732.6	20	3.27	5.171	0.0030	-2.5 to 2.5	Pass
			3.85	4.871	0.0028	-2.5 to 2.5	Pass
			4.43	4.649	0.0027	-2.5 to 2.5	Pass
		-30	3.85	4.492	0.0026	-2.5 to 2.5	Pass
		-20	3.85	3.898	0.0022	-2.5 to 2.5	Pass
		-10	3.85	4.470	0.0026	-2.5 to 2.5	Pass
		0	3.85	4.134	0.0024	-2.5 to 2.5	Pass
		10	3.85	3.777	0.0022	-2.5 to 2.5	Pass
		30	3.85	4.599	0.0027	-2.5 to 2.5	Pass
40		3.85	4.478	0.0026	-2.5 to 2.5	Pass	
50	3.85	4.377	0.0025	-2.5 to 2.5	Pass		

	1752.6	20	3.27	-7.360	-0.0042	-2.5 to 2.5	Pass
			3.85	-9.055	-0.0052	-2.5 to 2.5	Pass
			4.43	-8.526	-0.0049	-2.5 to 2.5	Pass
		-30	3.85	-8.633	-0.0049	-2.5 to 2.5	Pass
		-20	3.85	-8.712	-0.0050	-2.5 to 2.5	Pass
		-10	3.85	-8.640	-0.0049	-2.5 to 2.5	Pass
		0	3.85	-8.125	-0.0046	-2.5 to 2.5	Pass
		10	3.85	-8.461	-0.0048	-2.5 to 2.5	Pass
		30	3.85	-8.440	-0.0048	-2.5 to 2.5	Pass
		40	3.85	-7.346	-0.0042	-2.5 to 2.5	Pass
50	3.85	-8.211	-0.0047	-2.5 to 2.5	Pass		
HSUPA	1712.4	20	3.27	10.765	0.0063	-2.5 to 2.5	Pass
			3.85	10.114	0.0059	-2.5 to 2.5	Pass
			4.43	10.729	0.0063	-2.5 to 2.5	Pass
		-30	3.85	10.715	0.0063	-2.5 to 2.5	Pass
		-20	3.85	12.059	0.0070	-2.5 to 2.5	Pass
		-10	3.85	10.936	0.0064	-2.5 to 2.5	Pass
		0	3.85	9.778	0.0057	-2.5 to 2.5	Pass
		10	3.85	9.692	0.0057	-2.5 to 2.5	Pass
		30	3.85	9.649	0.0056	-2.5 to 2.5	Pass
		40	3.85	11.344	0.0066	-2.5 to 2.5	Pass
	50	3.85	9.363	0.0055	-2.5 to 2.5	Pass	
	1732.6	20	3.27	-6.702	-0.0039	-2.5 to 2.5	Pass
			3.85	-7.939	-0.0046	-2.5 to 2.5	Pass
			4.43	-5.608	-0.0032	-2.5 to 2.5	Pass
		-30	3.85	-5.901	-0.0034	-2.5 to 2.5	Pass
		-20	3.85	-5.722	-0.0033	-2.5 to 2.5	Pass
		-10	3.85	-5.779	-0.0033	-2.5 to 2.5	Pass
		0	3.85	-6.058	-0.0035	-2.5 to 2.5	Pass
		10	3.85	-7.832	-0.0045	-2.5 to 2.5	Pass
		30	3.85	-6.452	-0.0037	-2.5 to 2.5	Pass
		40	3.85	-7.339	-0.0042	-2.5 to 2.5	Pass
	50	3.85	-5.522	-0.0032	-2.5 to 2.5	Pass	
	1752.6	20	3.27	-3.211	-0.0018	-2.5 to 2.5	Pass
			3.85	-1.981	-0.0011	-2.5 to 2.5	Pass
			4.43	-2.503	-0.0014	-2.5 to 2.5	Pass
		-30	3.85	-1.431	-0.0008	-2.5 to 2.5	Pass
		-20	3.85	-0.315	-0.0002	-2.5 to 2.5	Pass
		-10	3.85	-1.194	-0.0007	-2.5 to 2.5	Pass
		0	3.85	-0.744	-0.0004	-2.5 to 2.5	Pass
		10	3.85	0.072	0.0000	-2.5 to 2.5	Pass
30		3.85	-0.858	-0.0005	-2.5 to 2.5	Pass	
40		3.85	-0.672	-0.0004	-2.5 to 2.5	Pass	
50	3.85	0.458	0.0003	-2.5 to 2.5	Pass		

### 3. Modulation Characteristics

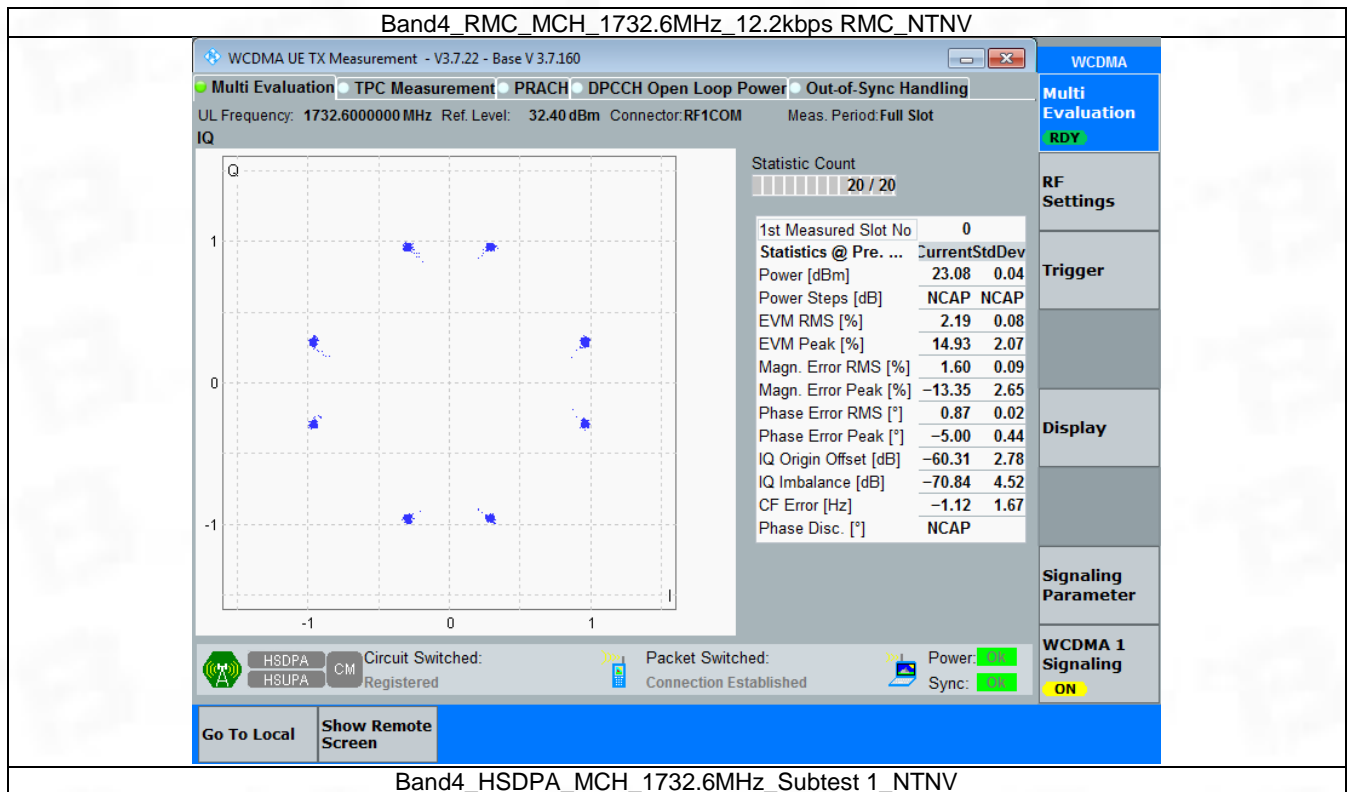
#### 3.1 Band4

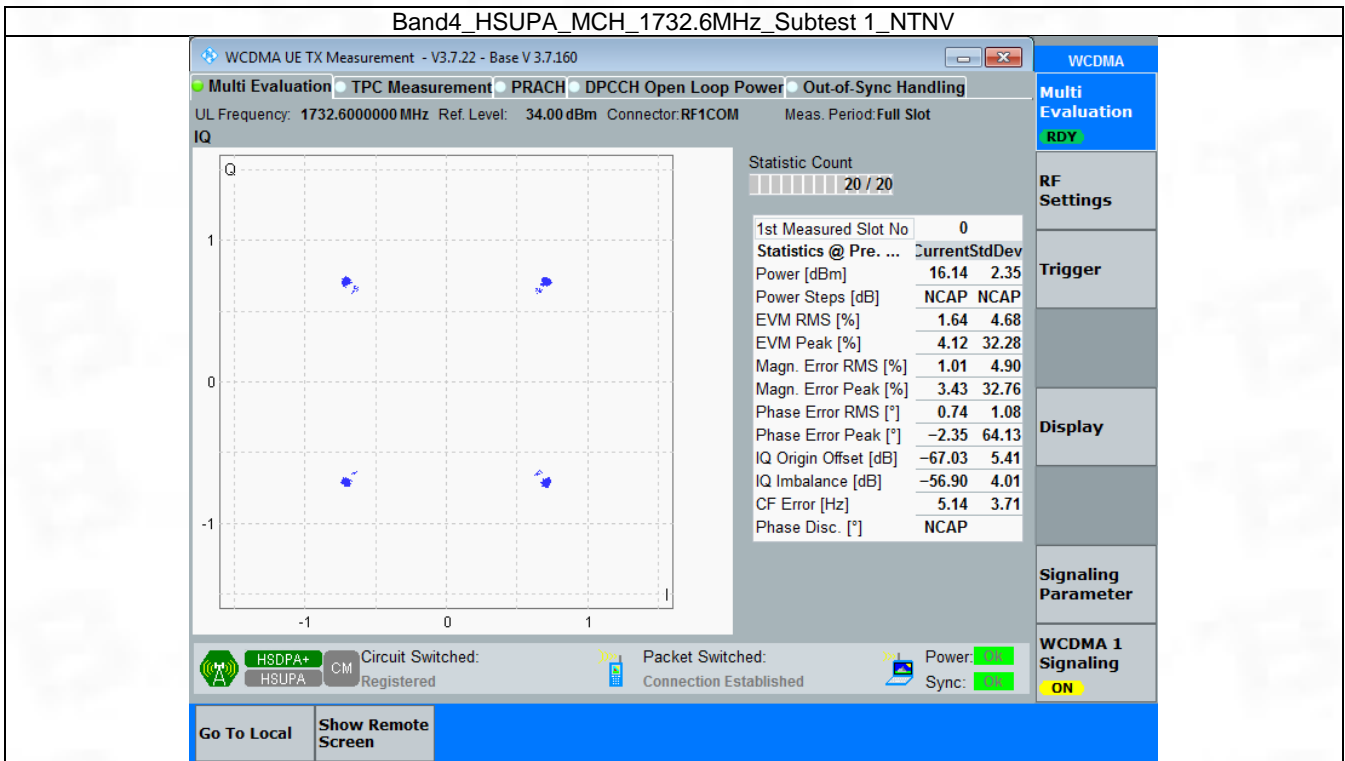
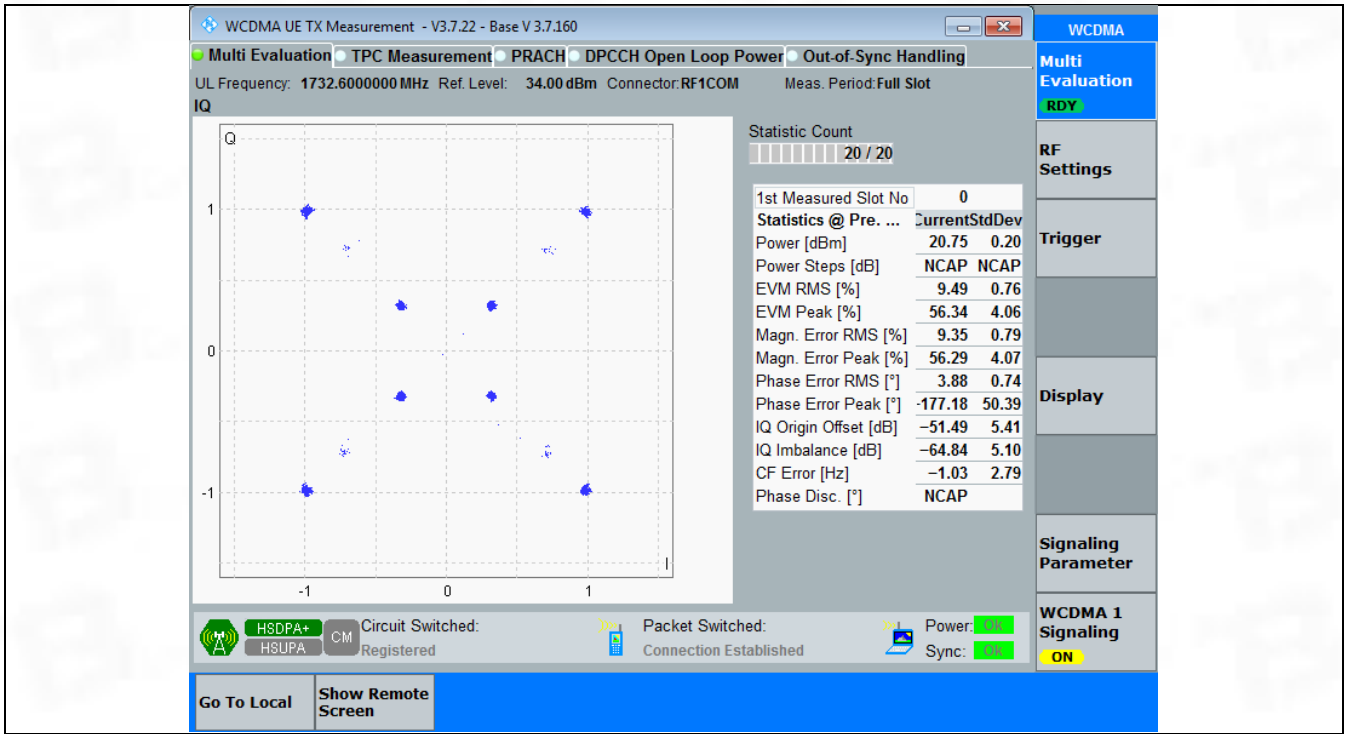
##### 3.1.1 Test Result

Band: 4
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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





## 4. 99% & 26dB Bandwidth

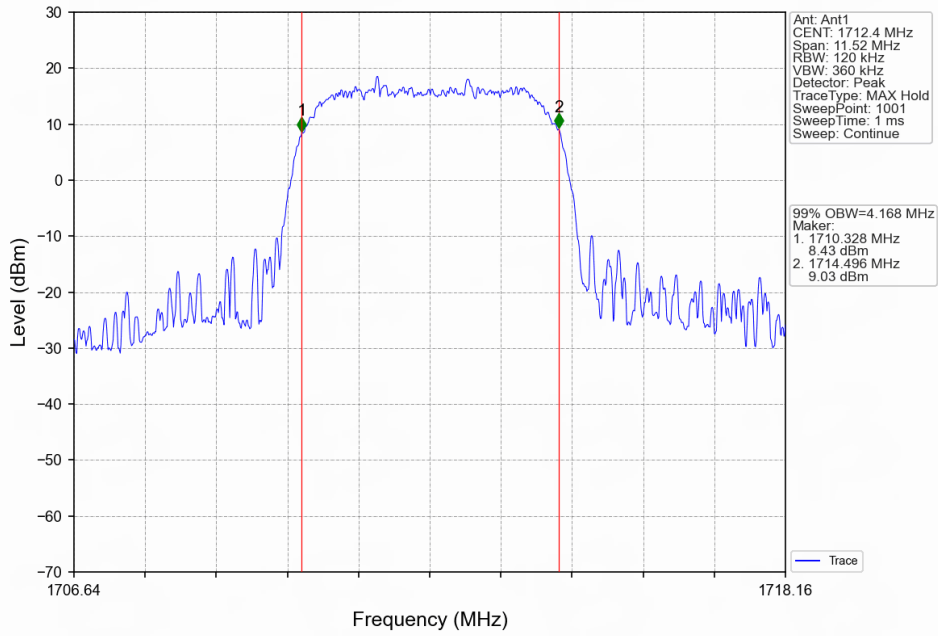
### 4.1 Band4\_OBW

#### 4.1.1 Test Result

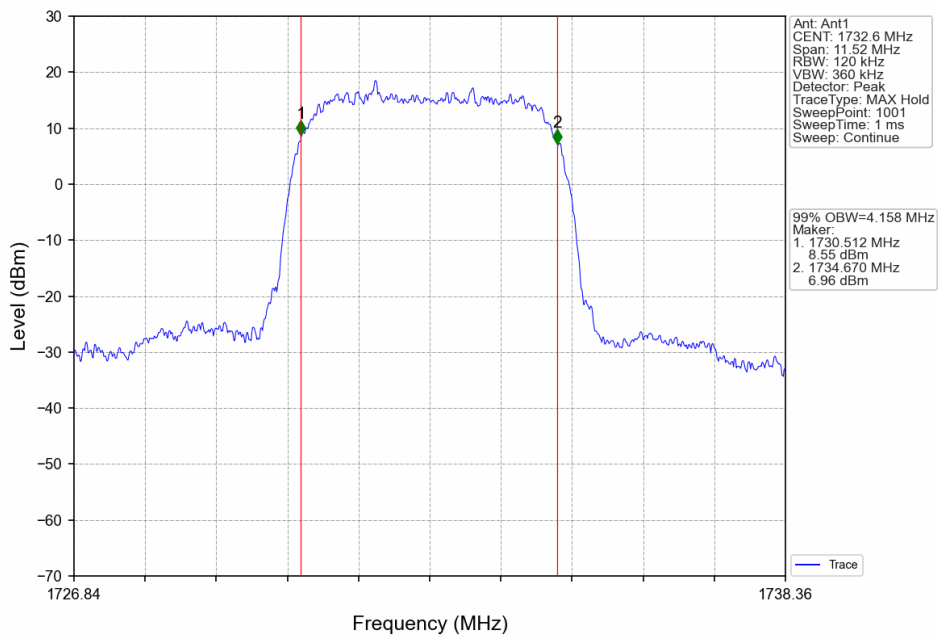
Band: 4						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	4.168	/	Pass
			1732.6	4.158	/	Pass
			1752.6	4.176	/	Pass
	HSDPA	Subtest 1	1712.4	4.213	/	Pass
			1732.6	4.182	/	Pass
			1752.6	4.210	/	Pass
	HSUPA	Subtest 1	1712.4	4.229	/	Pass
			1732.6	4.189	/	Pass
			1752.6	4.196	/	Pass

#### 4.1.2 Test Graph

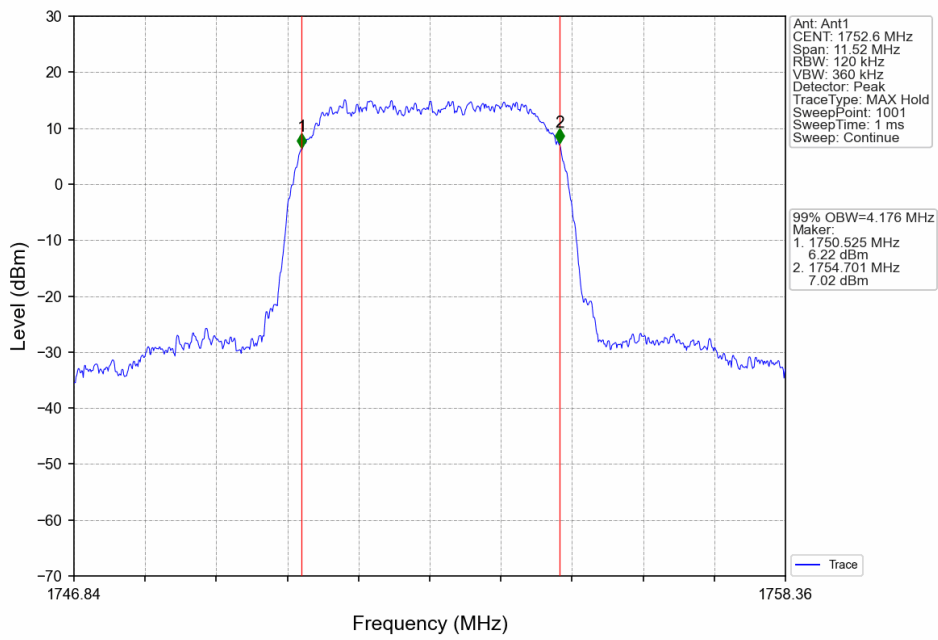
Band4_RMC_LCH_1712.4MHz_12.2kbps RMC_NTNV
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Band4\_RMC\_MCH\_1732.6MHz\_12.2kbps RMC\_NTNV

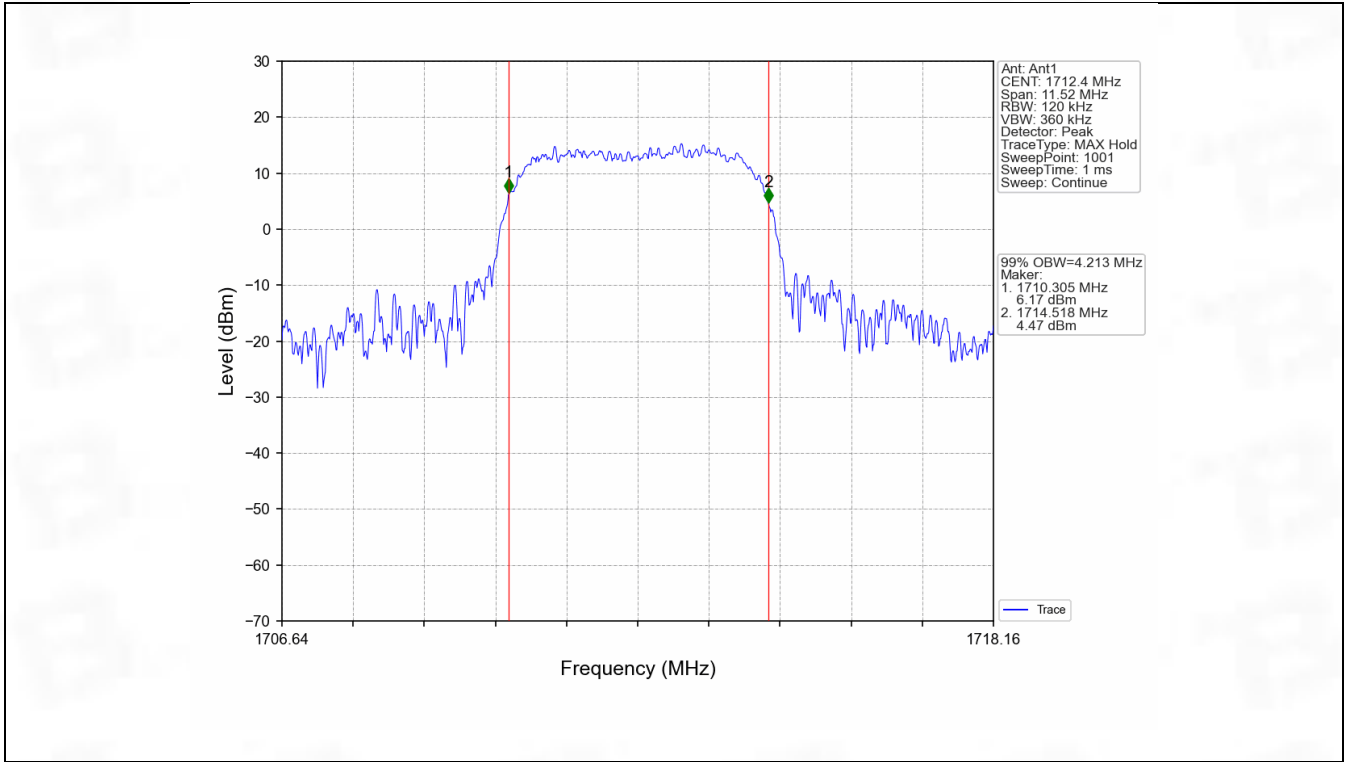


Band4\_RMC\_HCH\_1752.6MHz\_12.2kbps RMC\_NTNV

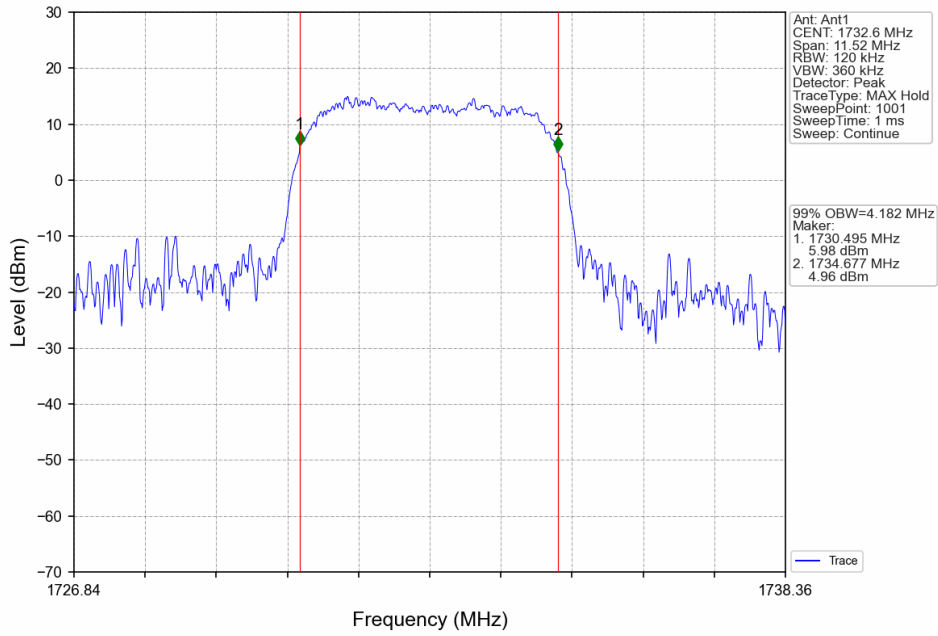


Band4\_HSDPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV

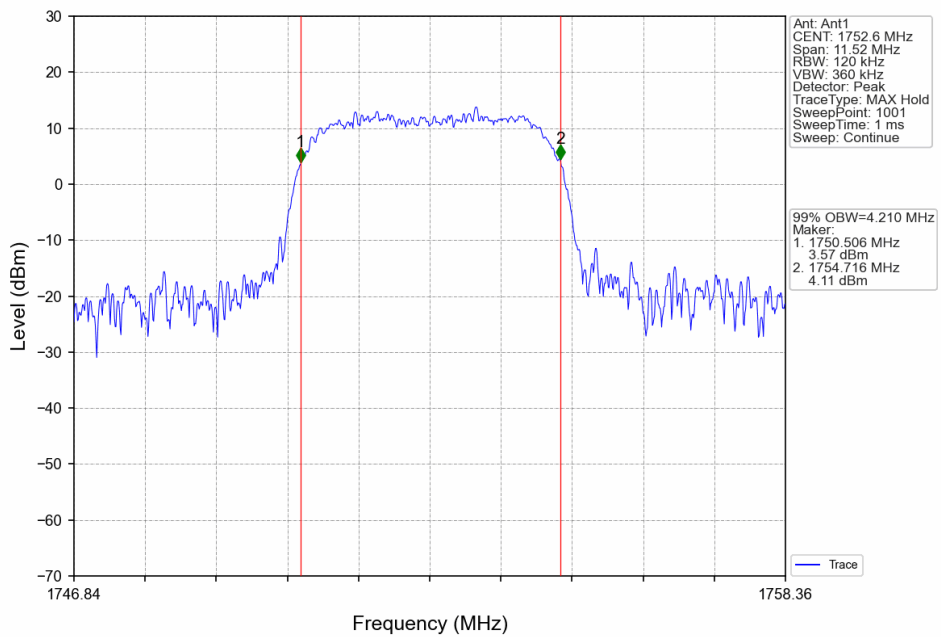




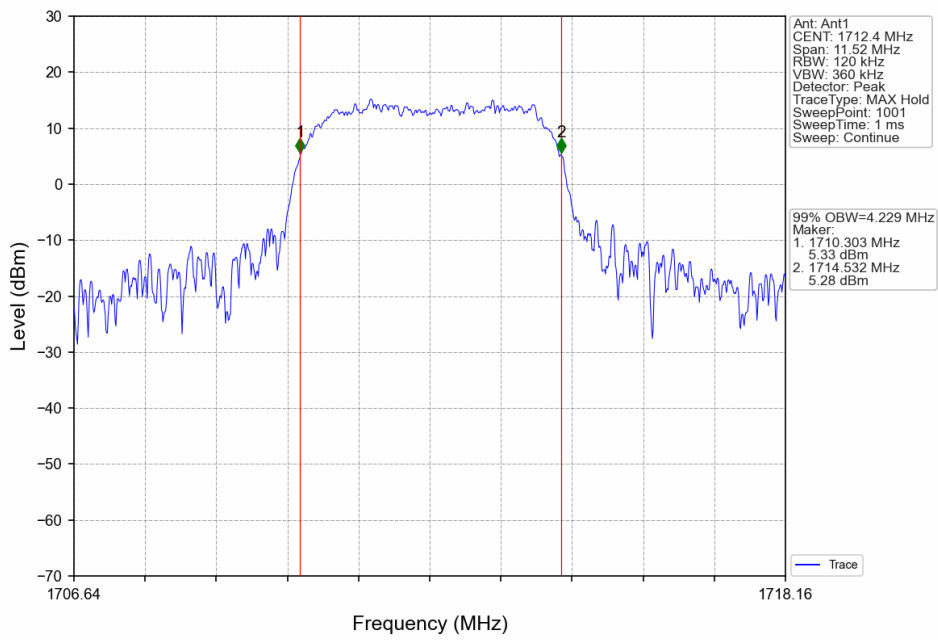
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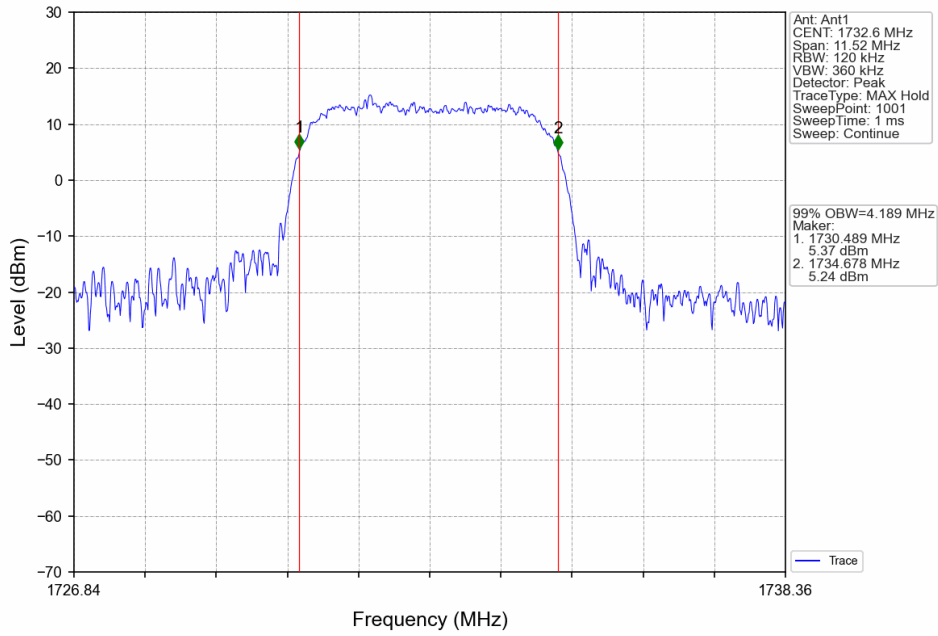
Band4\_HSDPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



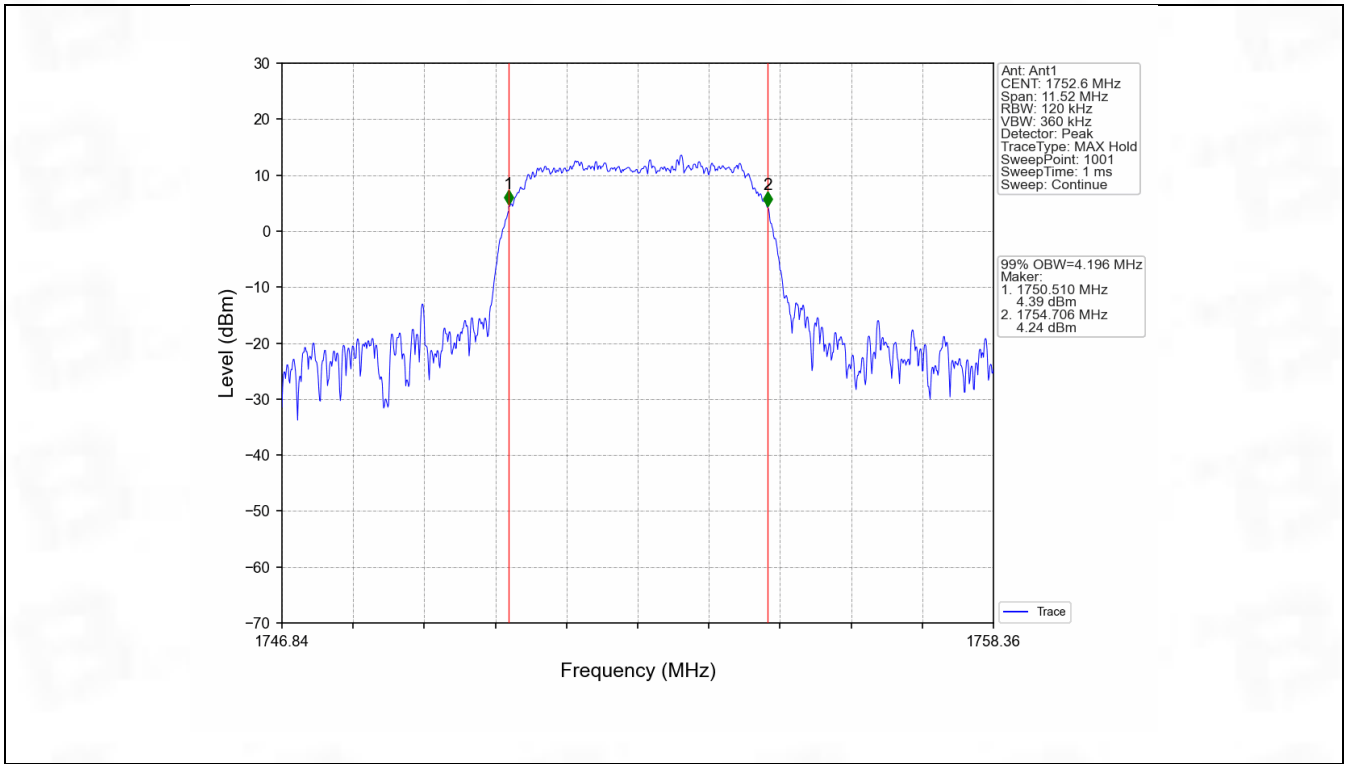
Band4\_HSUPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV



Band4\_HSUPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV



Band4\_HSUPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



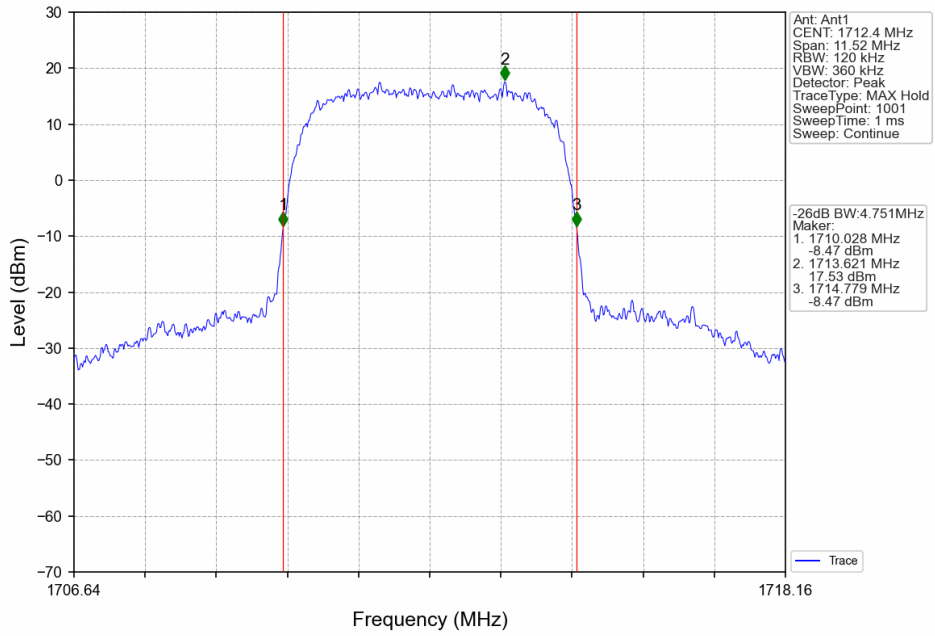
## 4.2 Band4\_XDB

### 4.2.1 Test Result

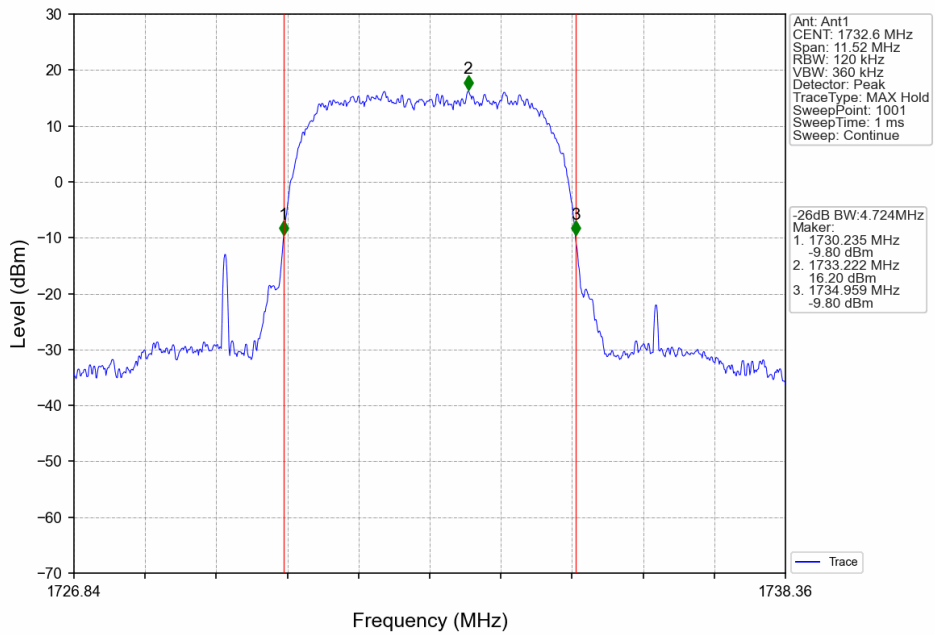
Band: 4					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	RMC	12.2kbps RMC	1712.4	4.751	Pass
			1732.6	4.724	Pass
			1752.6	4.715	Pass
	HSDPA	Subtest 1	1712.4	4.863	Pass
			1732.6	5.432	Pass
			1752.6	5.337	Pass
	HSUPA	Subtest 1	1712.4	6.044	Pass
			1732.6	5.328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

### 4.2.2 Test Graph

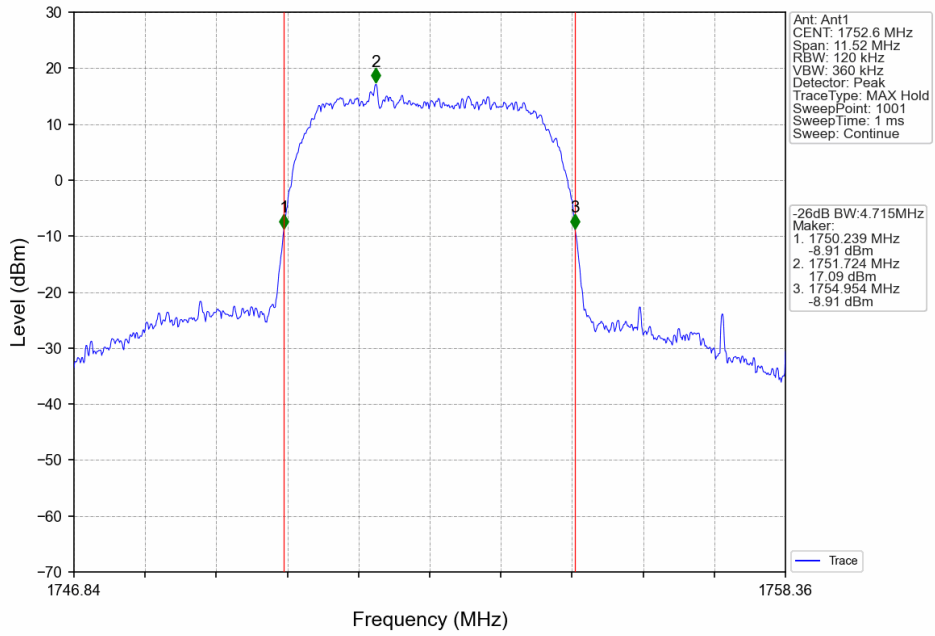
Band4\_RMC\_LCH\_1712.4MHz\_12.2kbps RMC\_NTNV



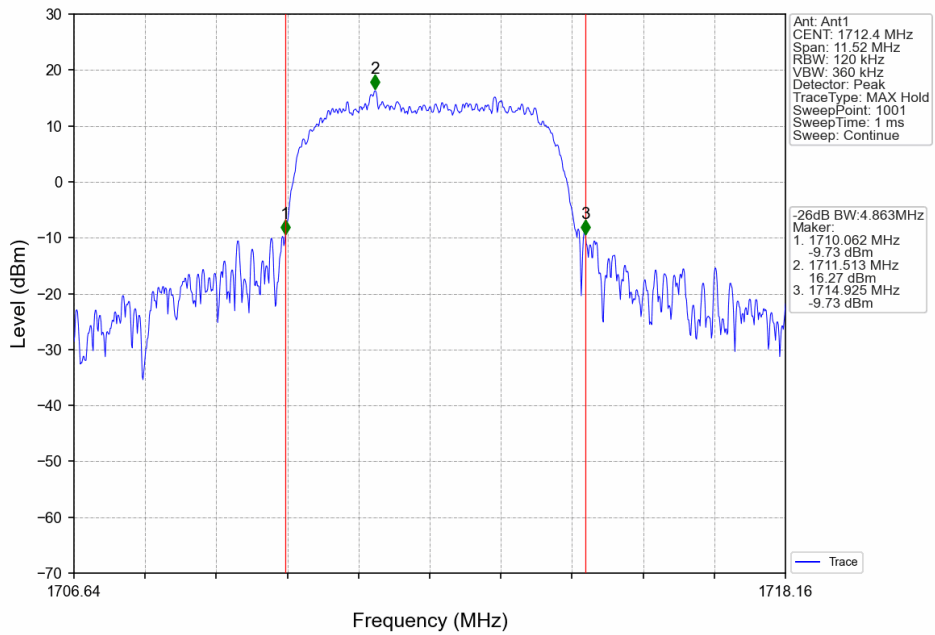
Band4\_RMC\_MCH\_1732.6MHz\_12.2kbps RMC\_NTNV



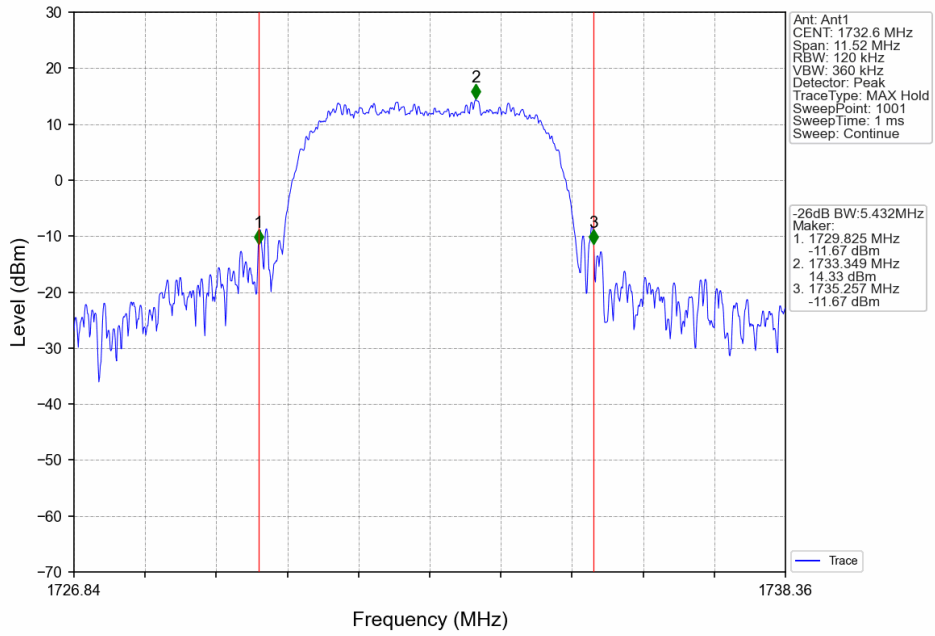
Band4\_RMC\_HCH\_1752.6MHz\_12.2kbps RMC\_NTNV



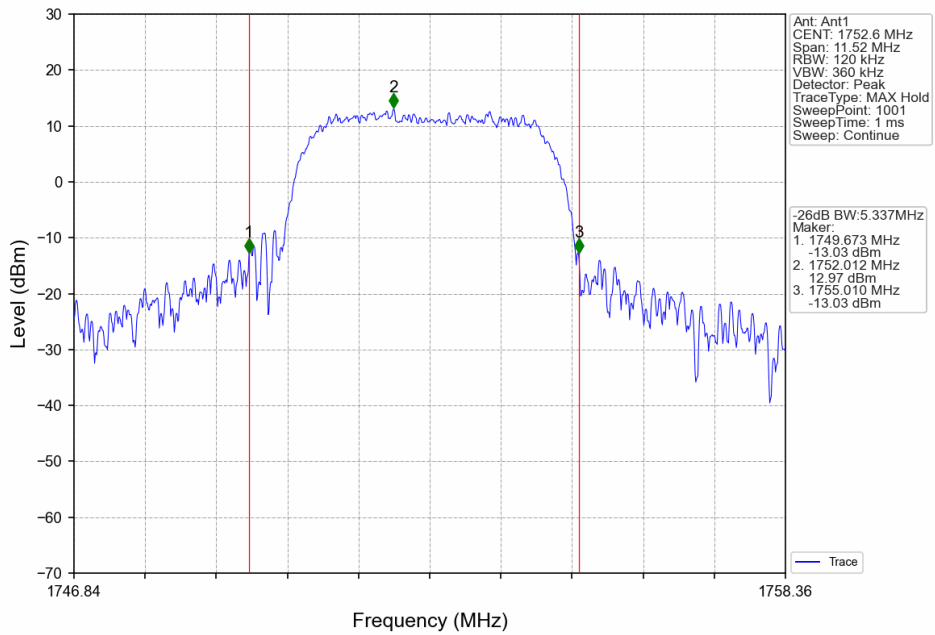
Band4\_HSDPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV



Band4\_HSDPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV

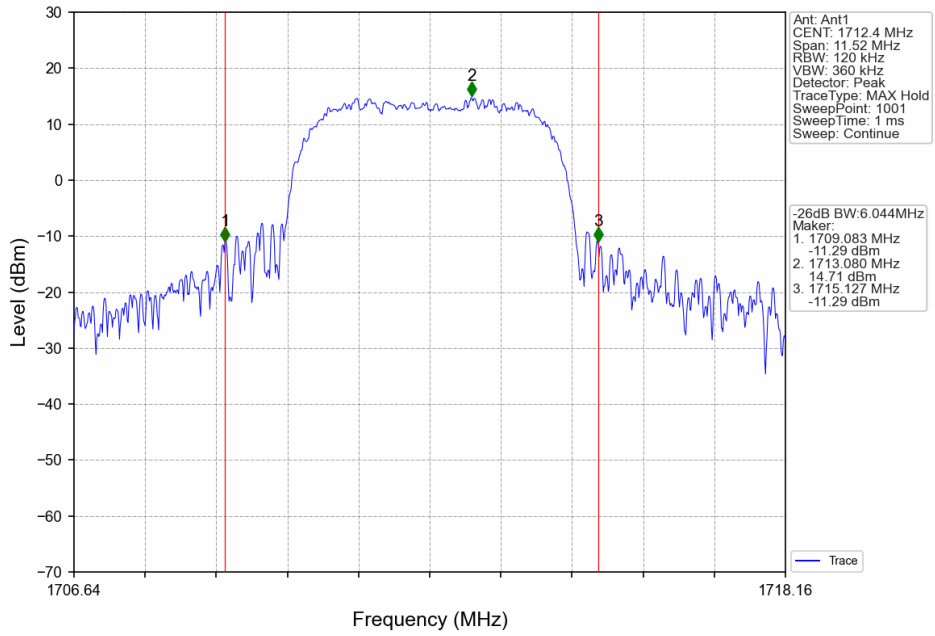


Band4\_HSDPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV

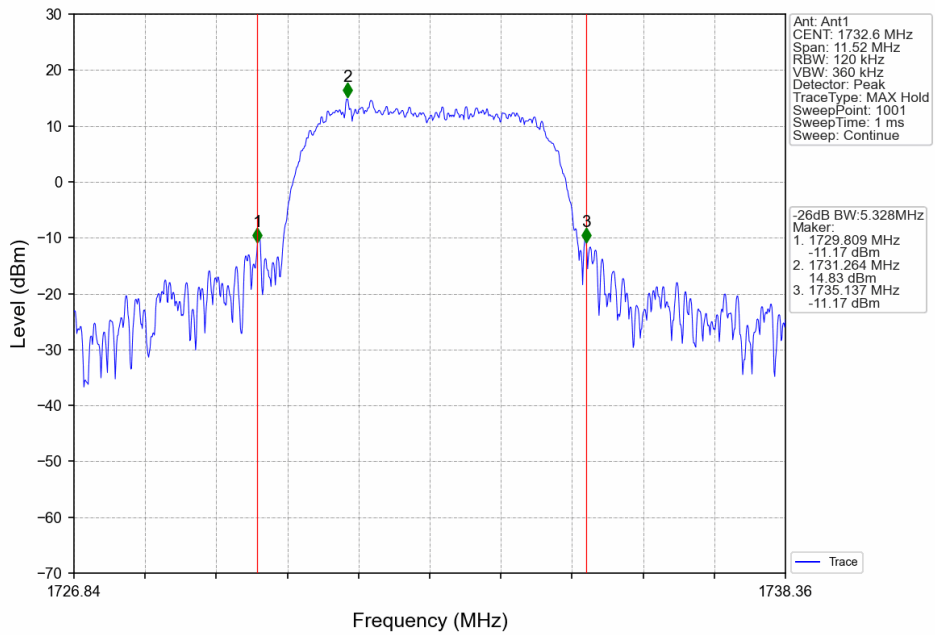


Band4\_HSDPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV

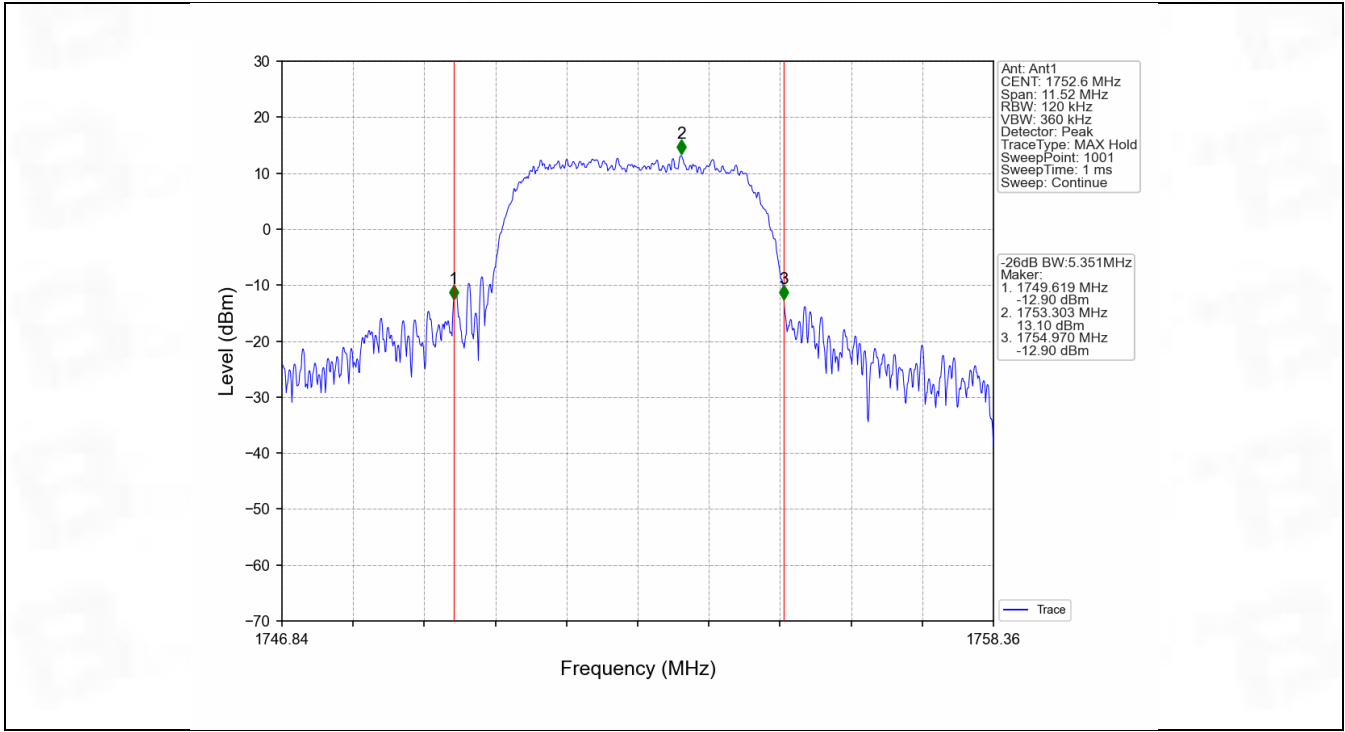




Band4\_HSUPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV



Band4\_HSUPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



## 5. Peak-Average Ratio

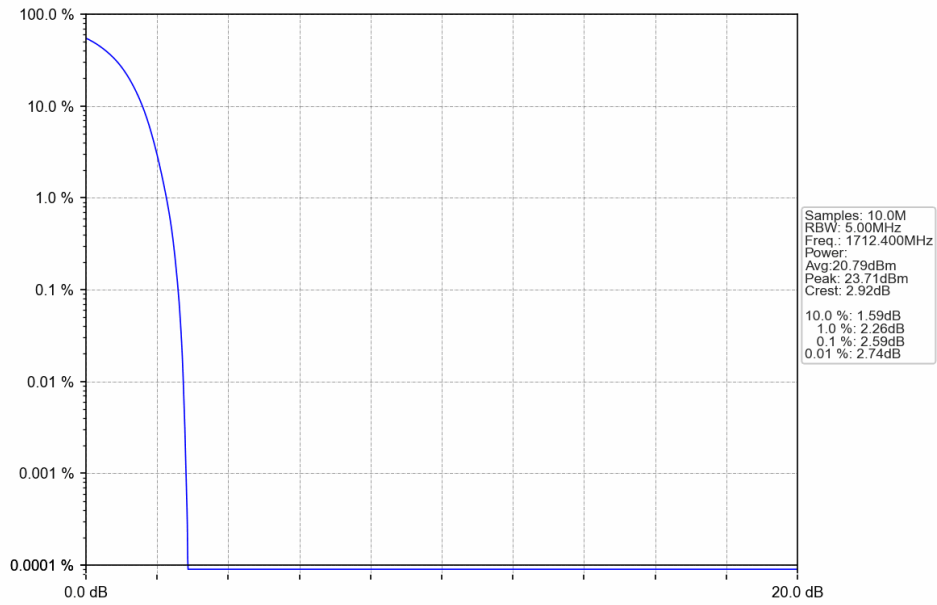
### 5.1 Band4

#### 5.1.1 Test Result

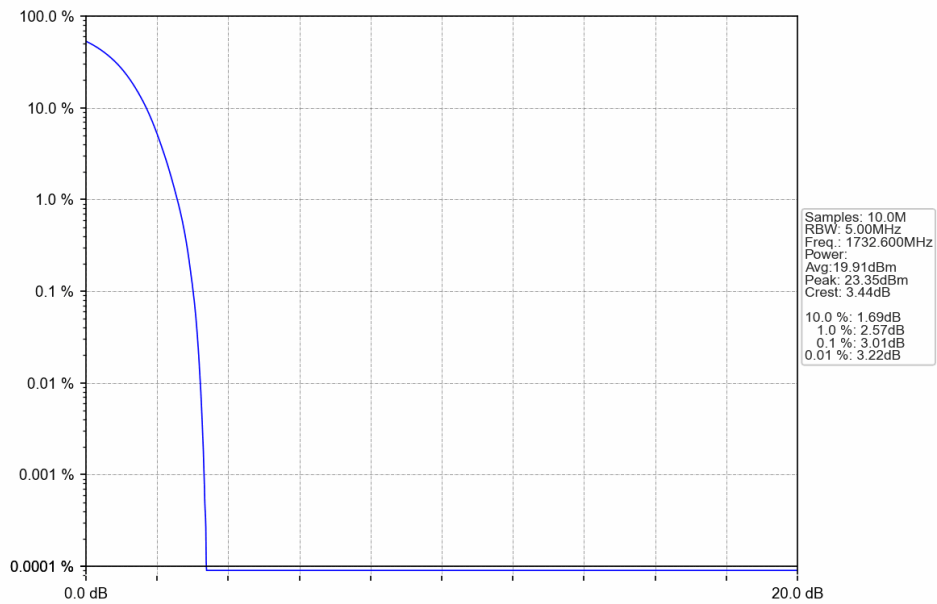
Band: 4						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	2.59	<=13	Pass
			1732.6	3.01	<=13	Pass
			1752.6	2.53	<=13	Pass
	HSDPA	Subtest 1	1712.4	5.67	<=13	Pass
			1732.6	5.79	<=13	Pass
			1752.6	5.57	<=13	Pass
	HSUPA	Subtest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

#### 5.1.2 Test Graph

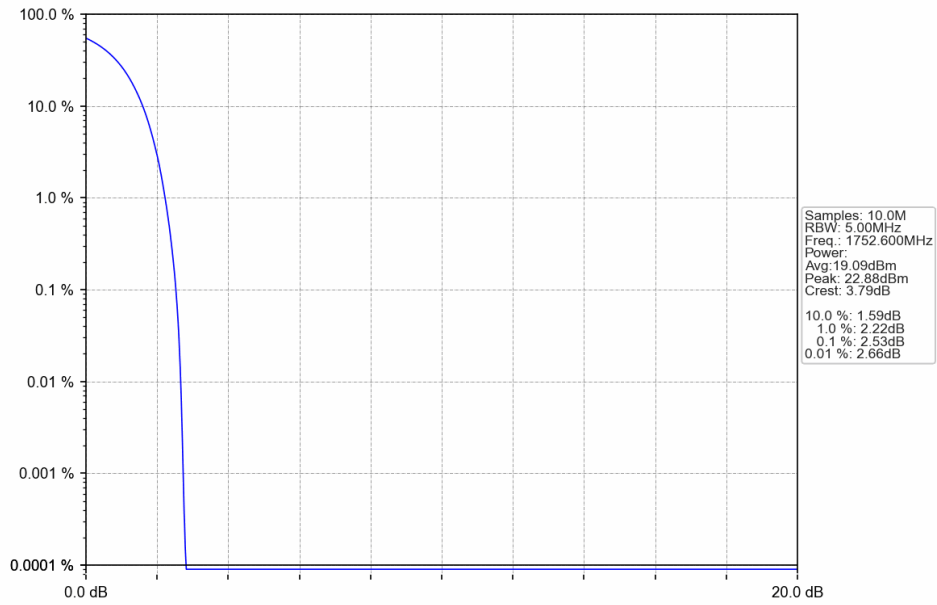
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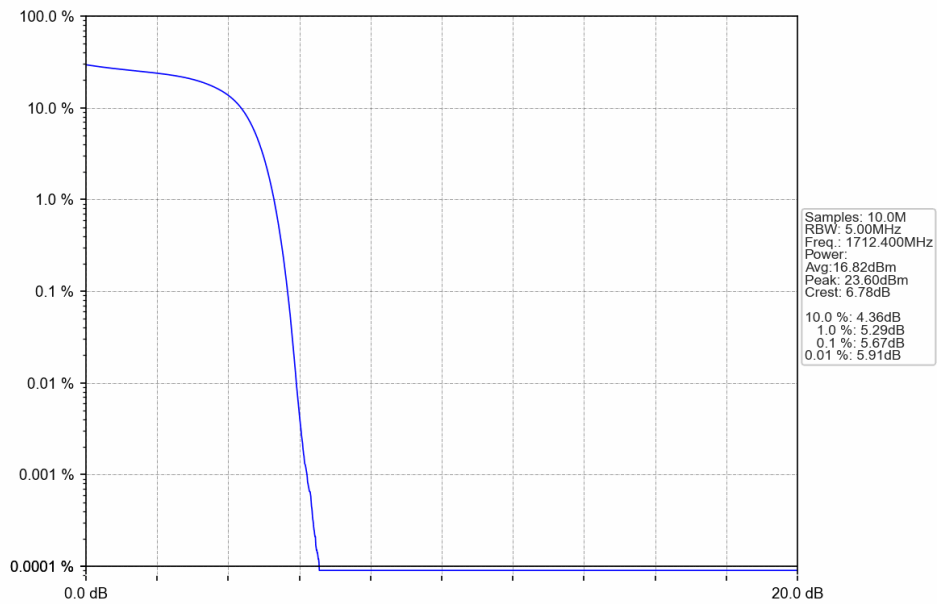
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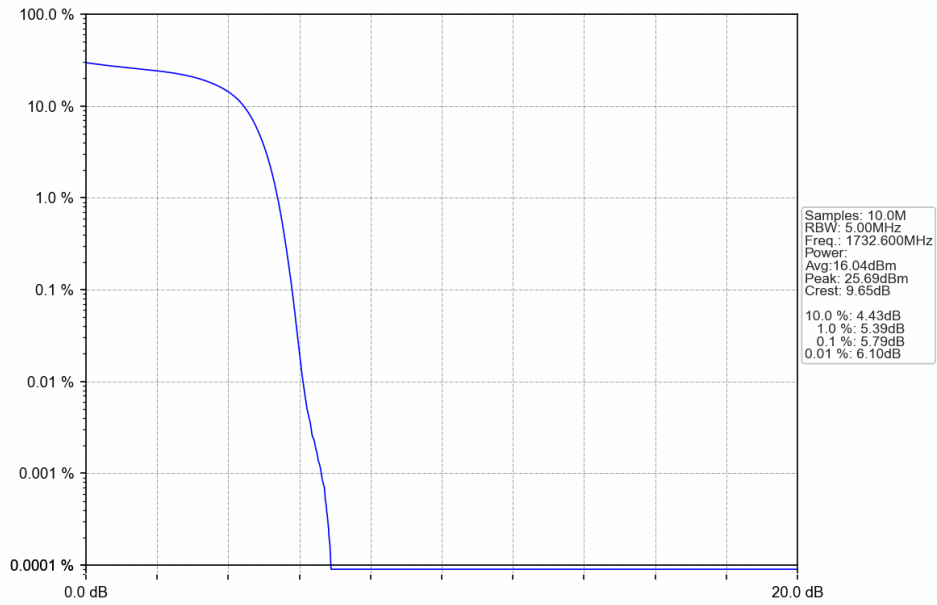
Band4\_RMC\_HCH\_1752.6MHz\_12.2kbps RMC\_NTNV



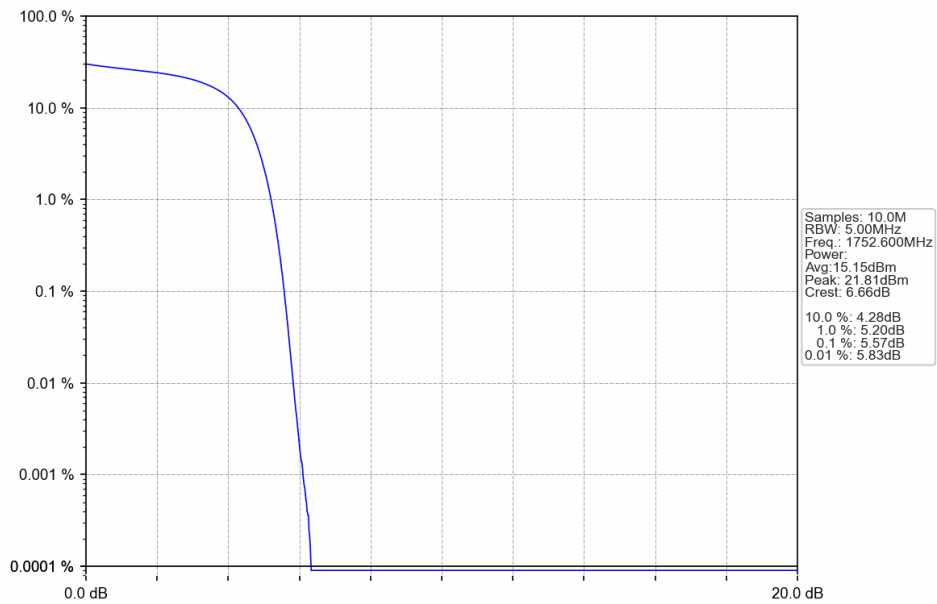
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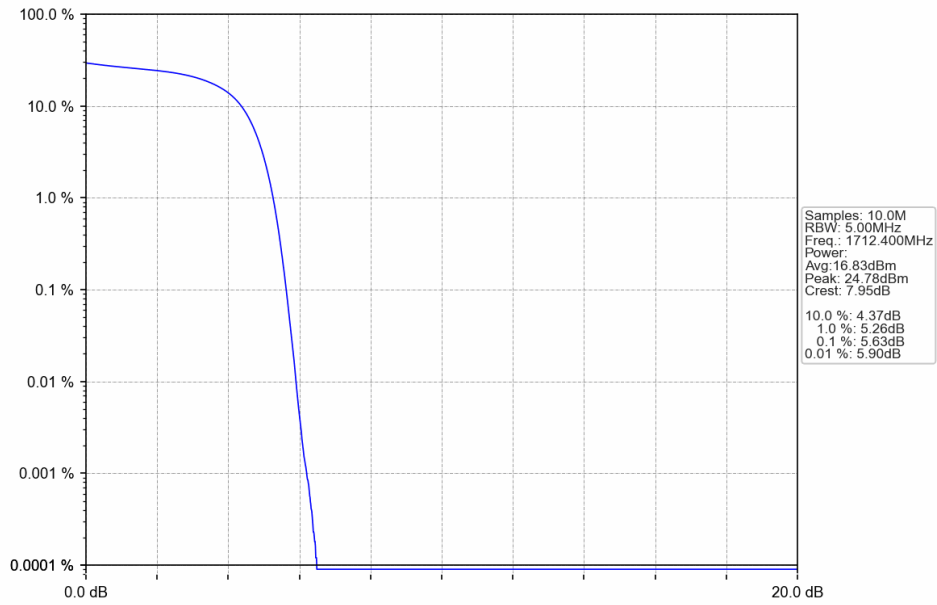
Band4\_HSDPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV



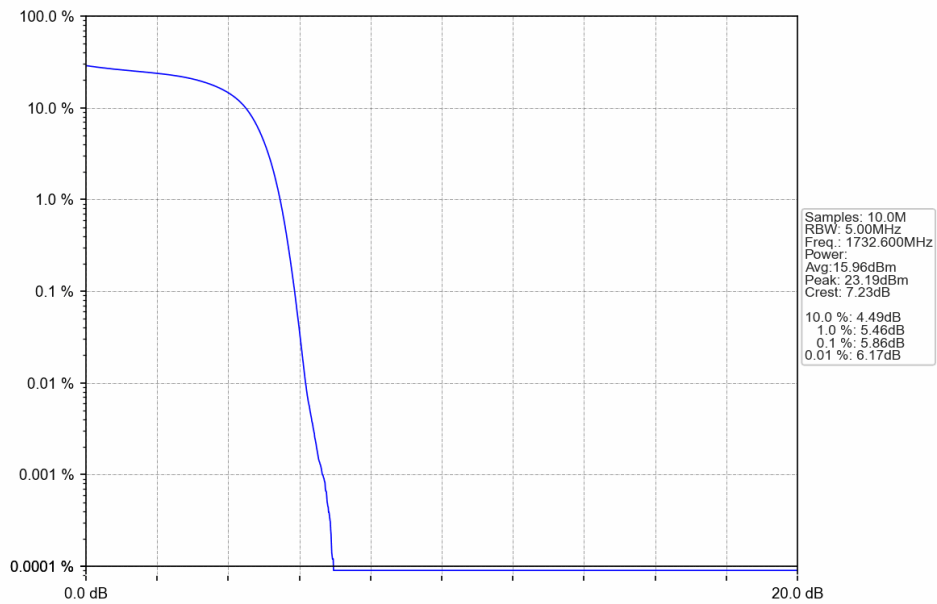
Band4\_HSDPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



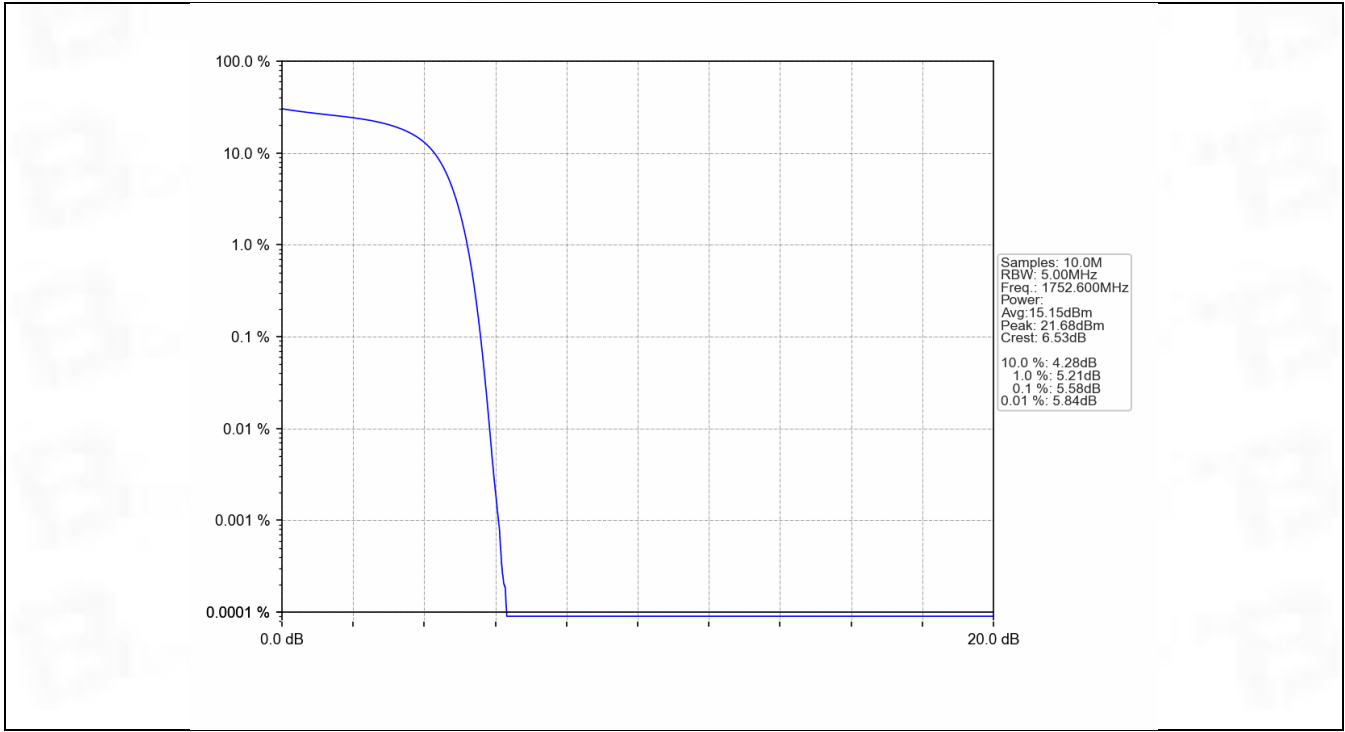
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Band4\_HSUPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV



Band4\_HSUPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



## 6. Spurious Emission

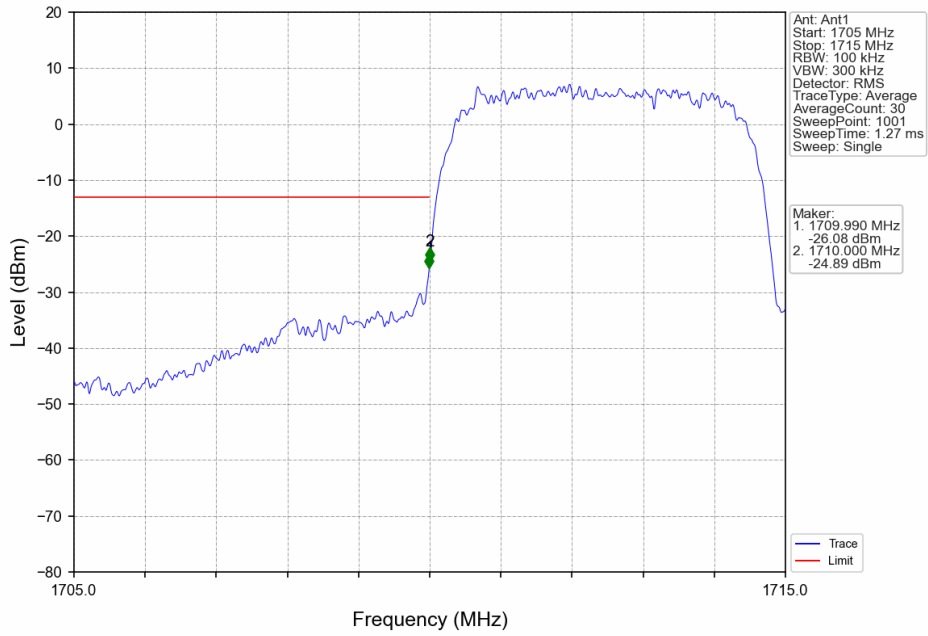
### 6.1 Band4

#### 6.1.1 Test Result

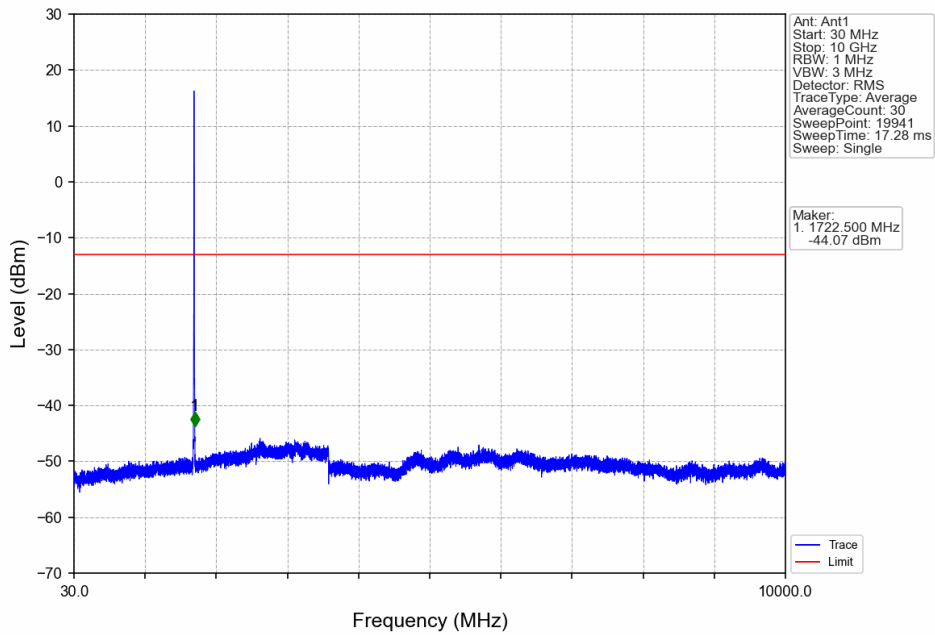
Band: 4						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	Refer To Test Graph		Pass
			1732.6	Refer To Test Graph		Pass
			1752.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	1712.4	Refer To Test Graph		Pass
			1732.6	Refer To Test Graph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

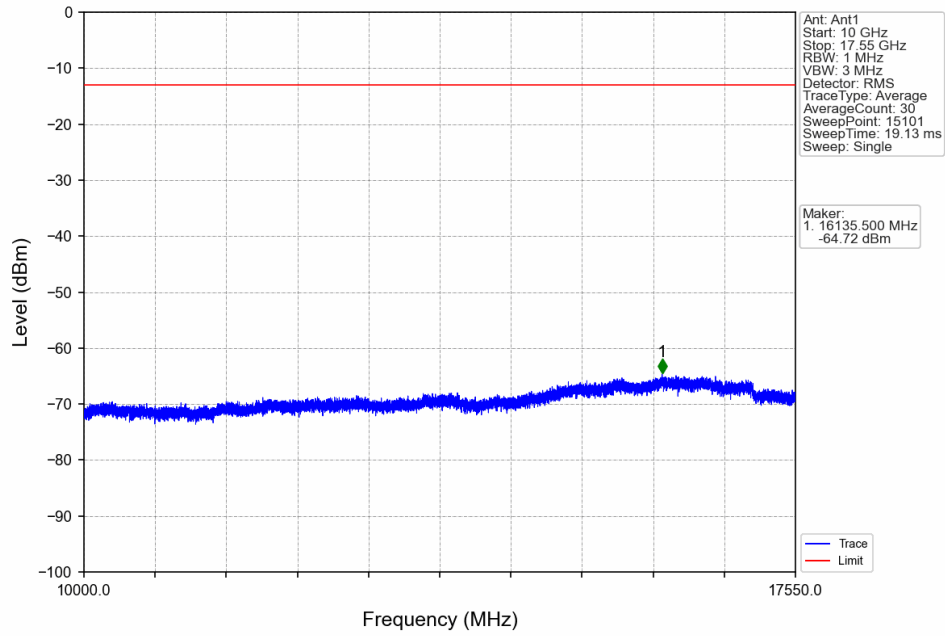


Band4\_RMC\_LCH\_1712.4MHz\_12.2kbps RMC\_NTNV

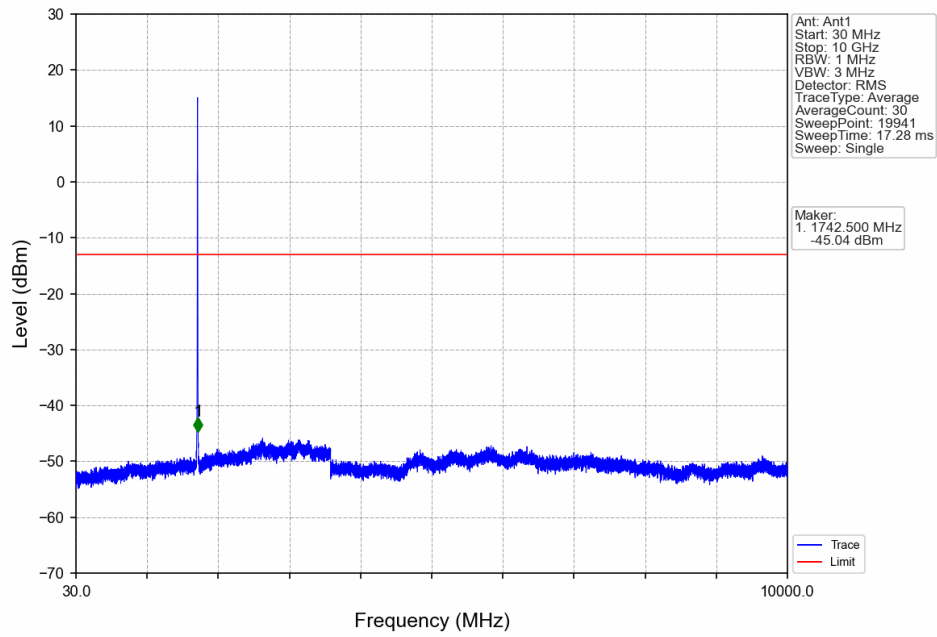


Band4\_RMC\_LCH\_1712.4MHz\_12.2kbps RMC\_NTNV

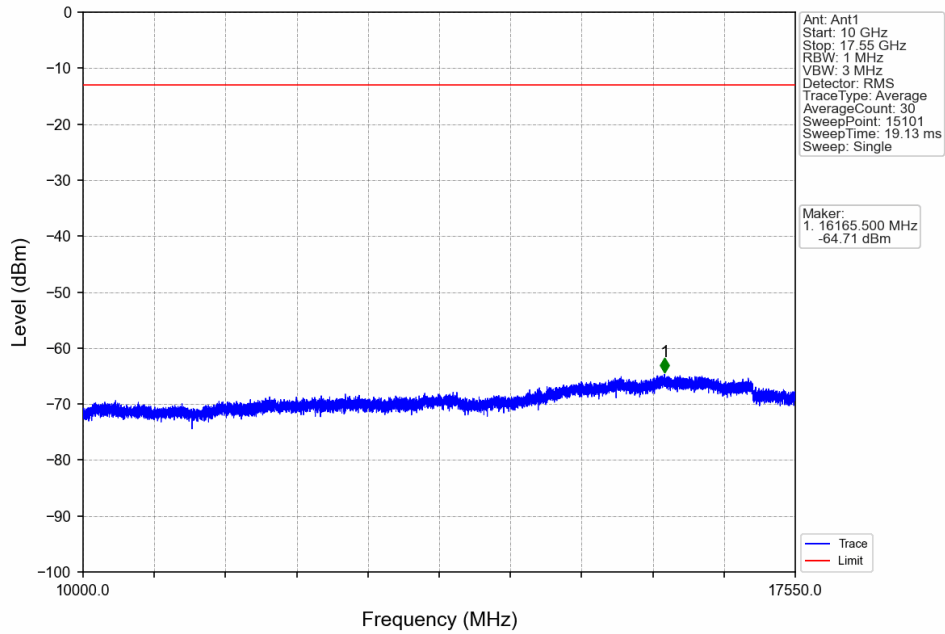




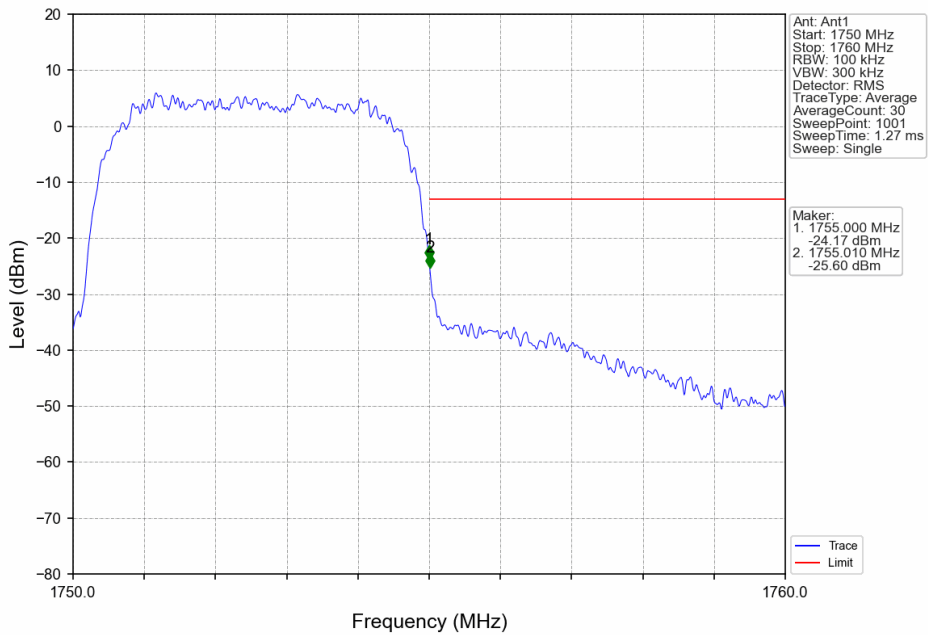
Band4\_RMC\_MCH\_1732.6MHz\_12.2kbps RMC\_NTNV



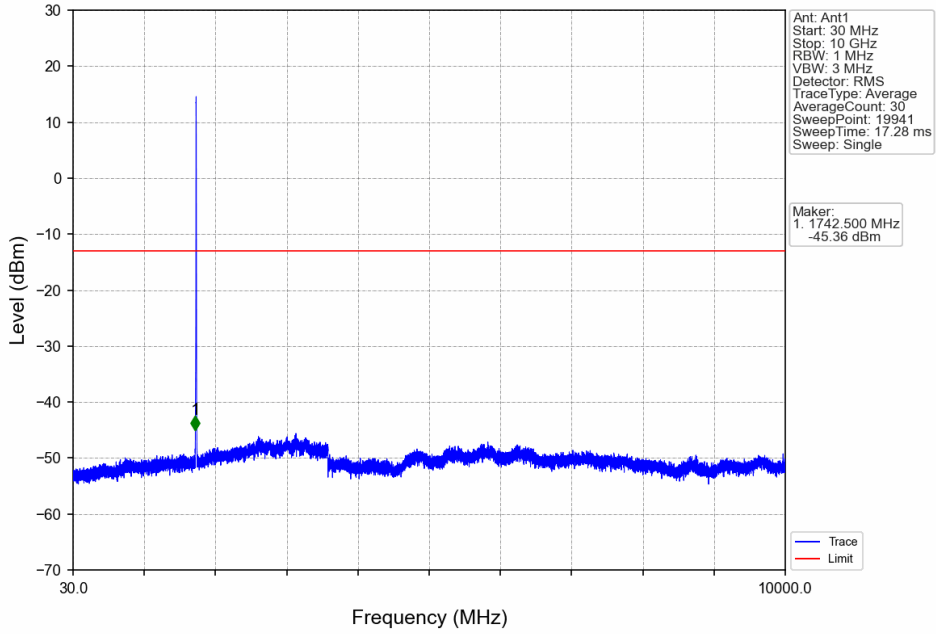
Band4\_RMC\_MCH\_1732.6MHz\_12.2kbps RMC\_NTNV



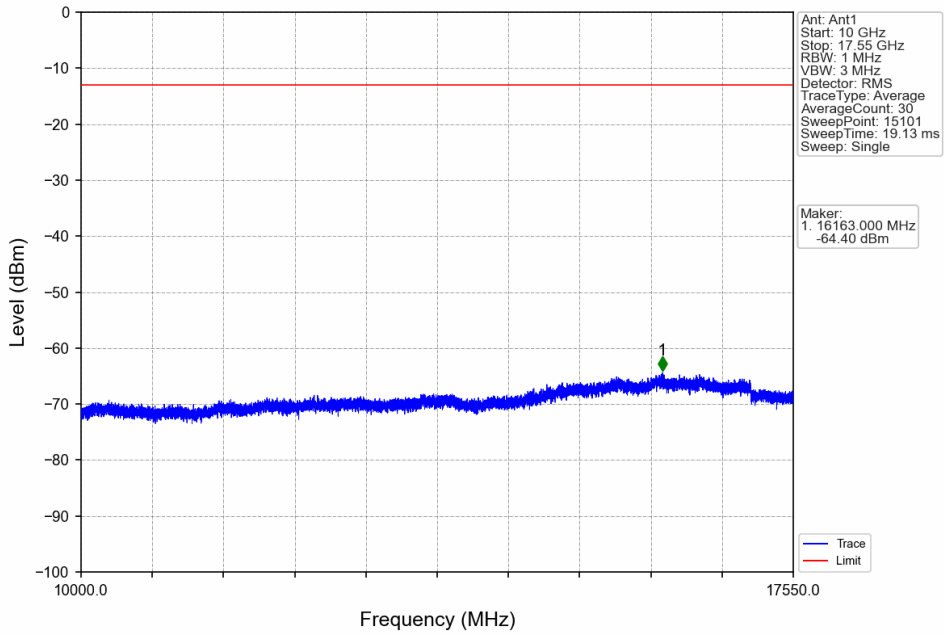
Band4\_RMC\_HCH\_1752.6MHz\_12.2kbps RMC\_NTNV



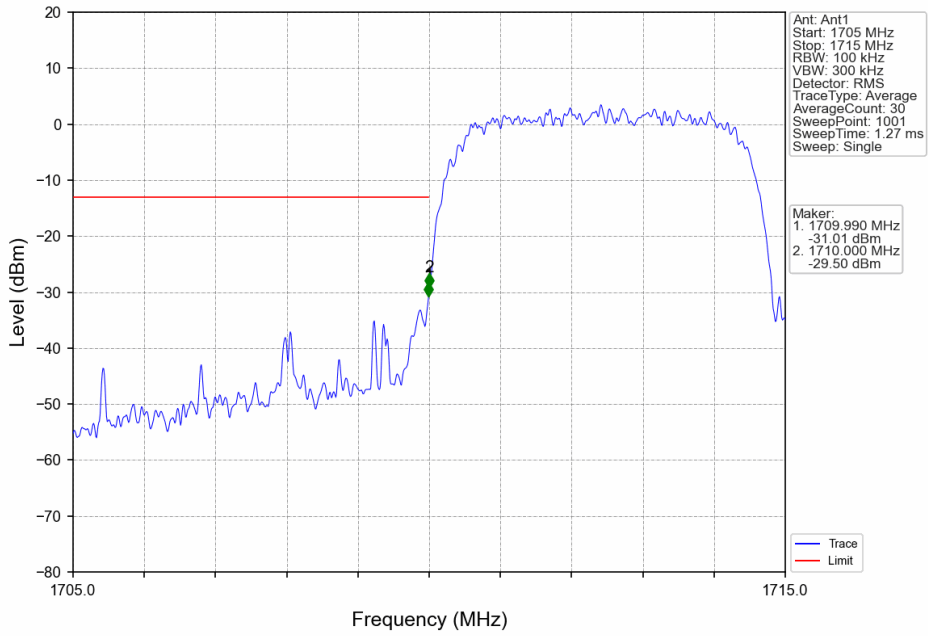
Band4\_RMC\_HCH\_1752.6MHz\_12.2kbps RMC\_NTNV



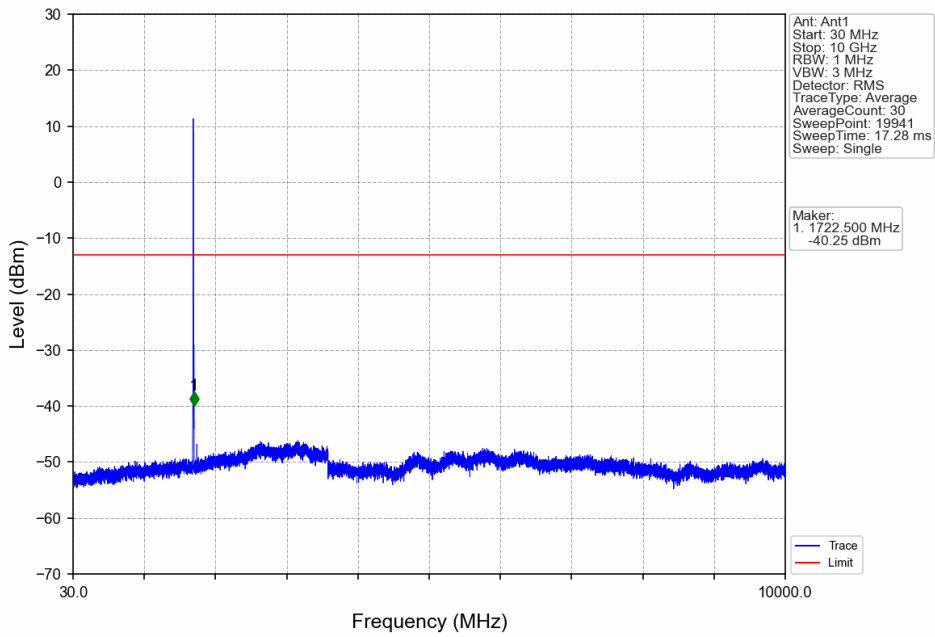
Band4\_RMC\_HCH\_1752.6MHz\_12.2kbps RMC\_NTNV



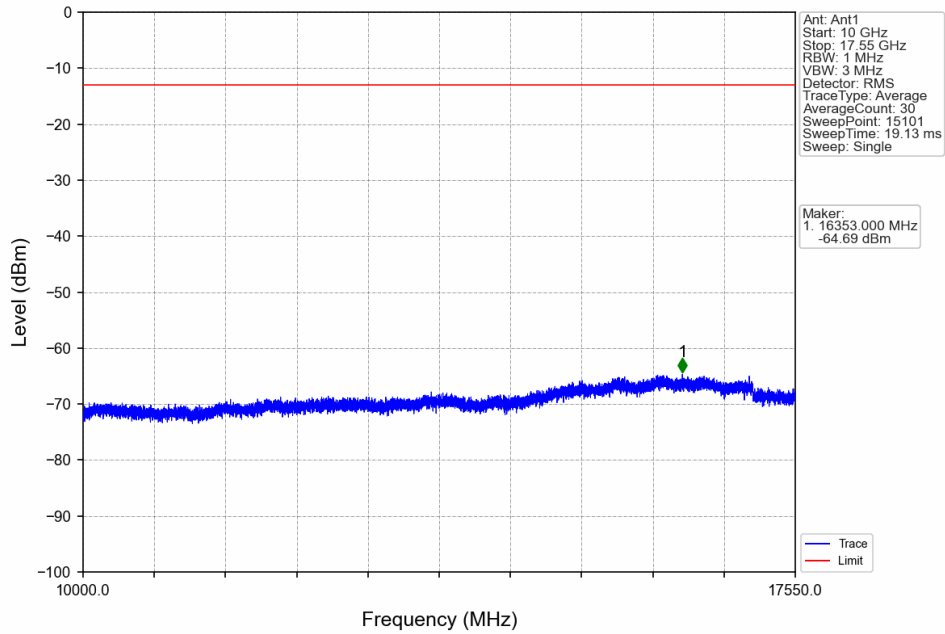
Band4\_HSDPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV



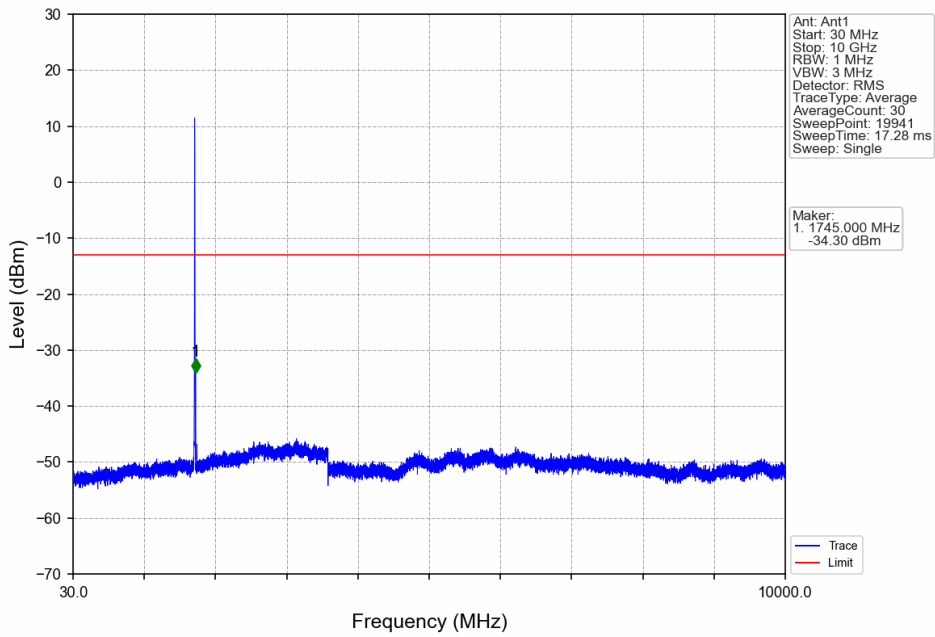
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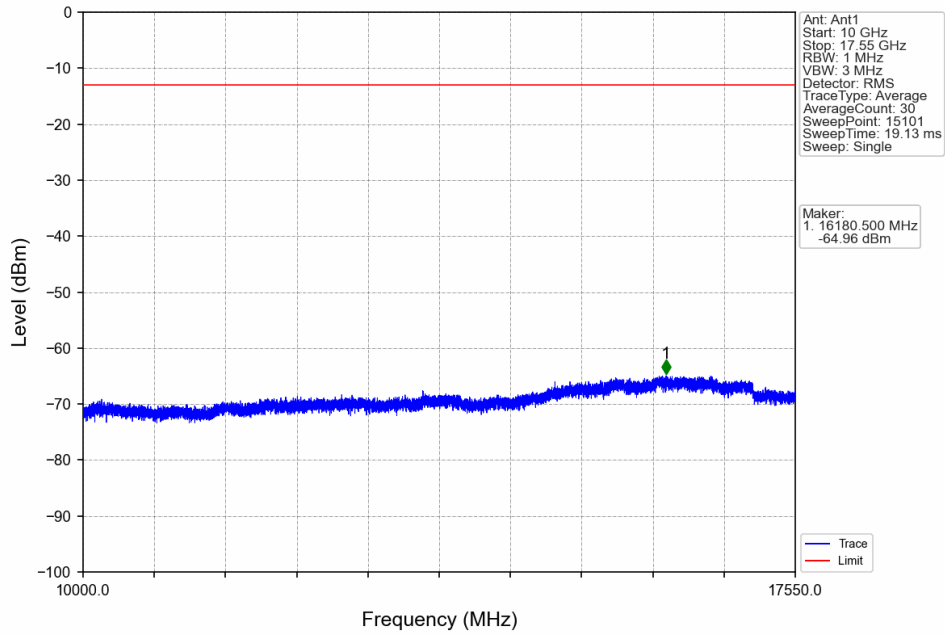
Band4\_HSDPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV



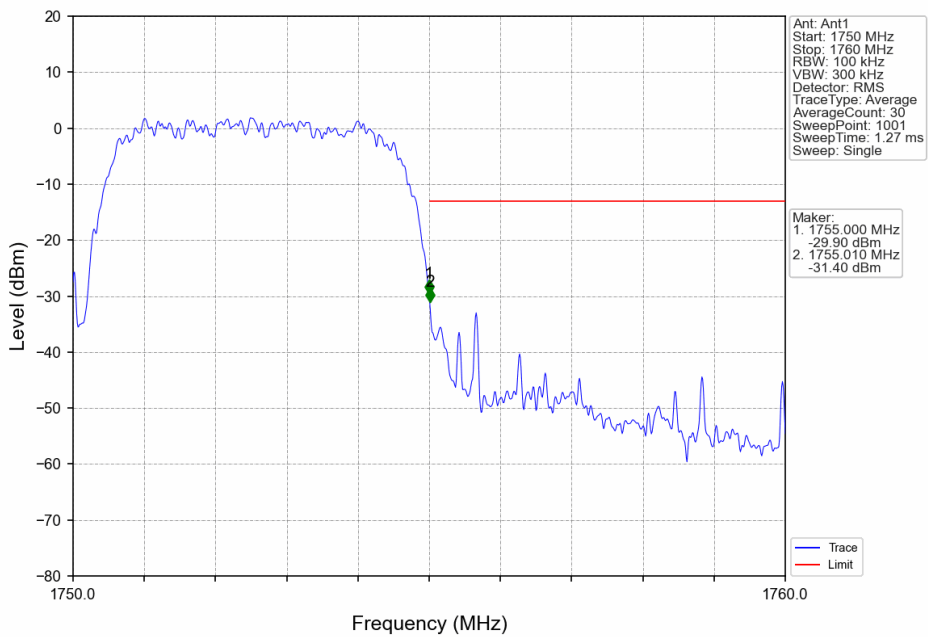
Band4\_HSDPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV



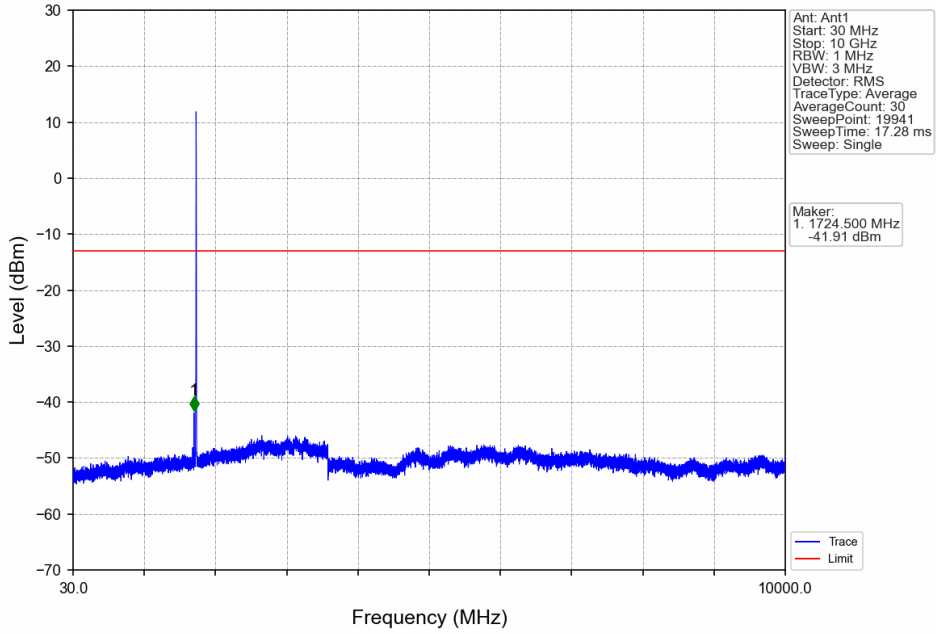
Band4\_HSDPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV



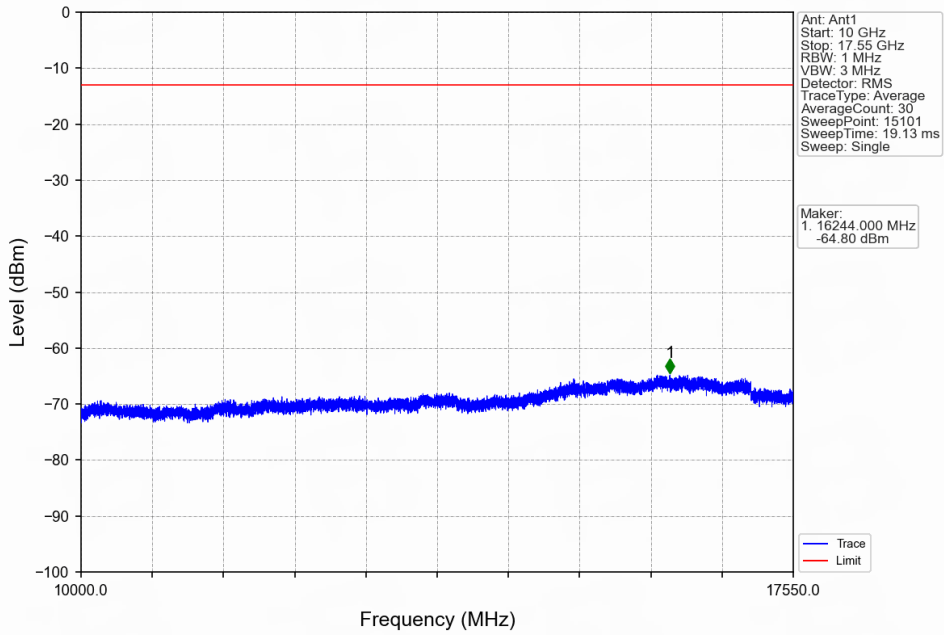
Band4\_HSDPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



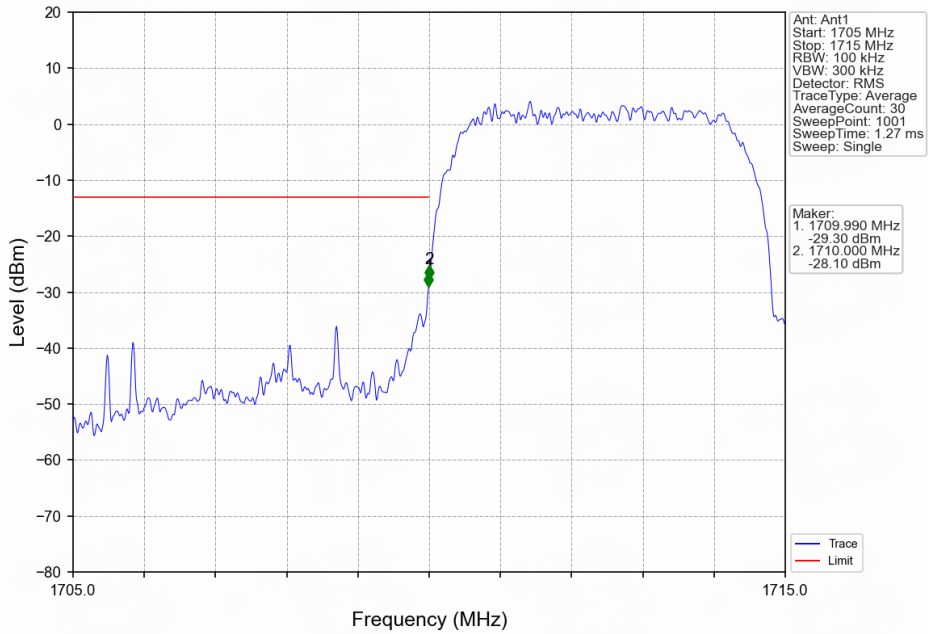
Band4\_HSDPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



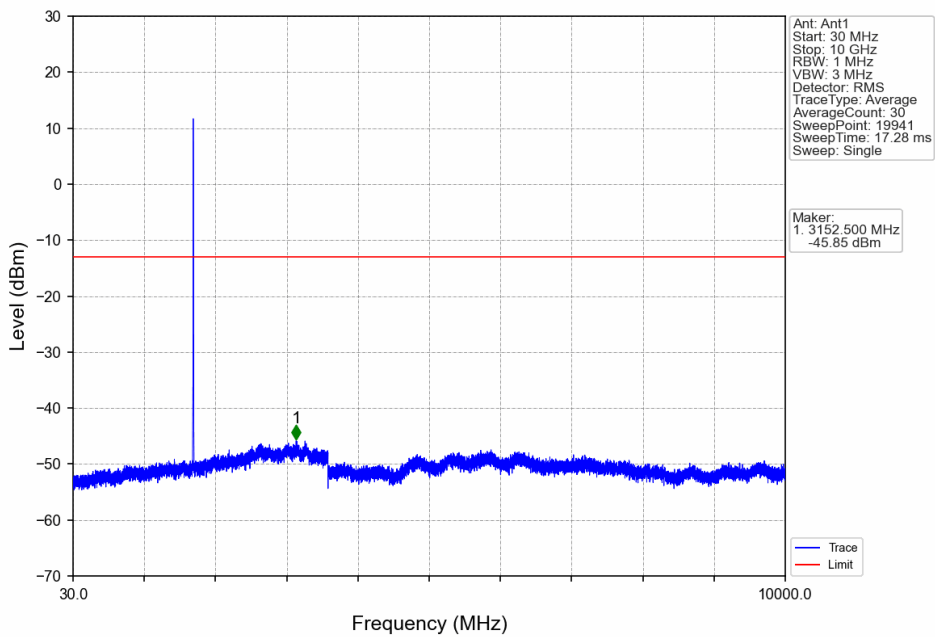
Band4\_HSDPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



Band4\_HSUPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV

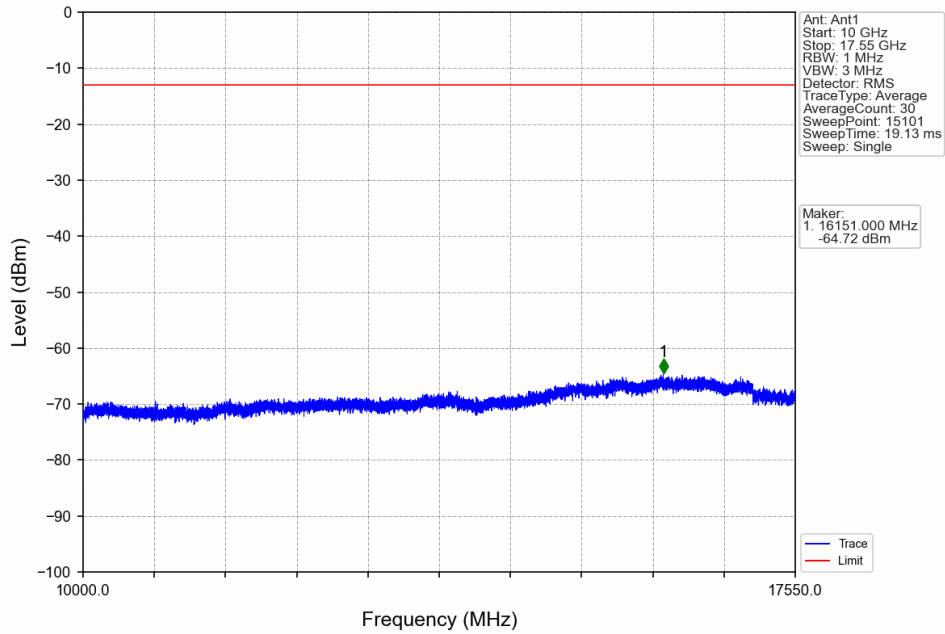


Band4\_HSUPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV

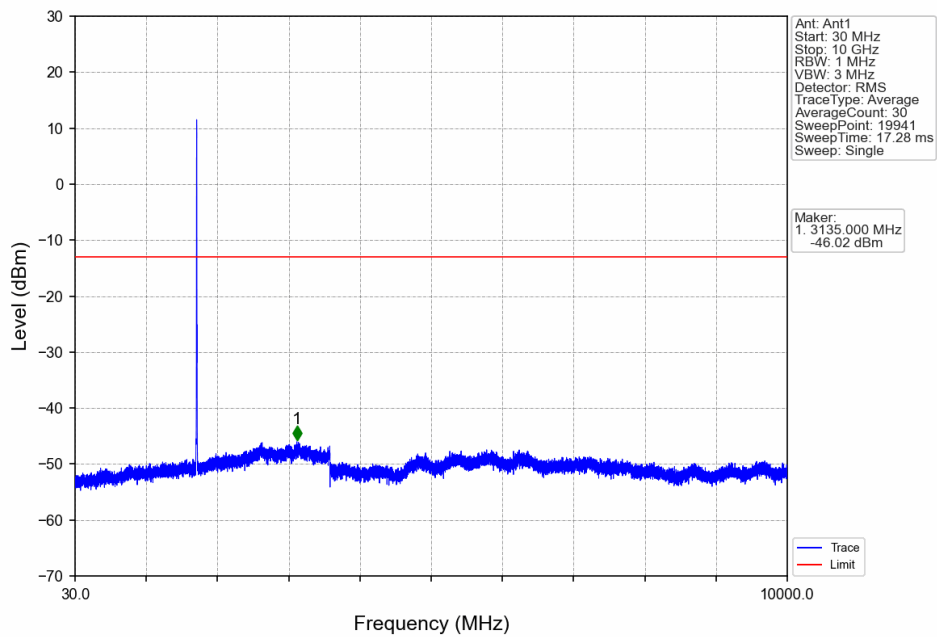


Band4\_HSUPA\_LCH\_1712.4MHz\_Subtest 1\_NTNV

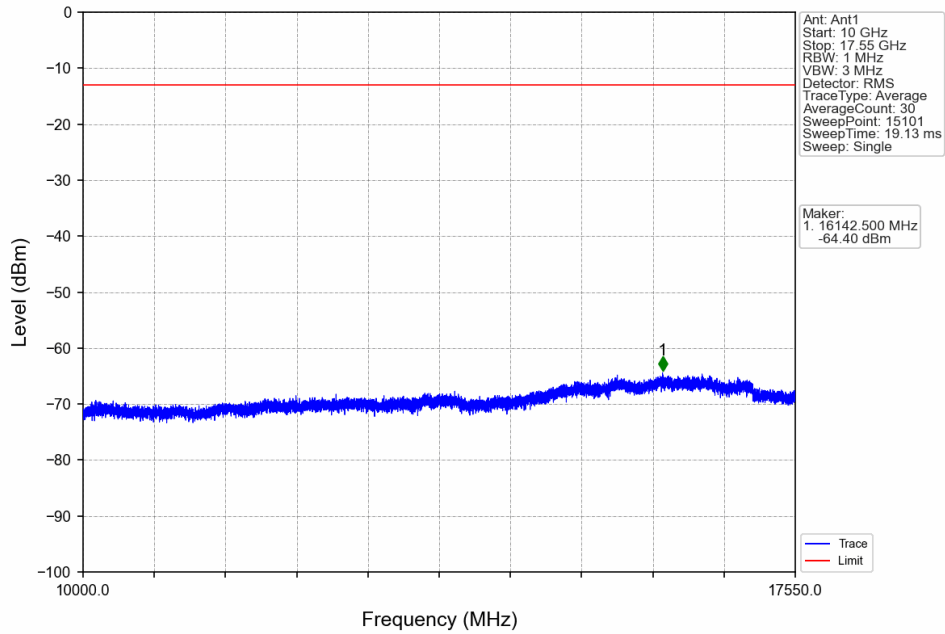




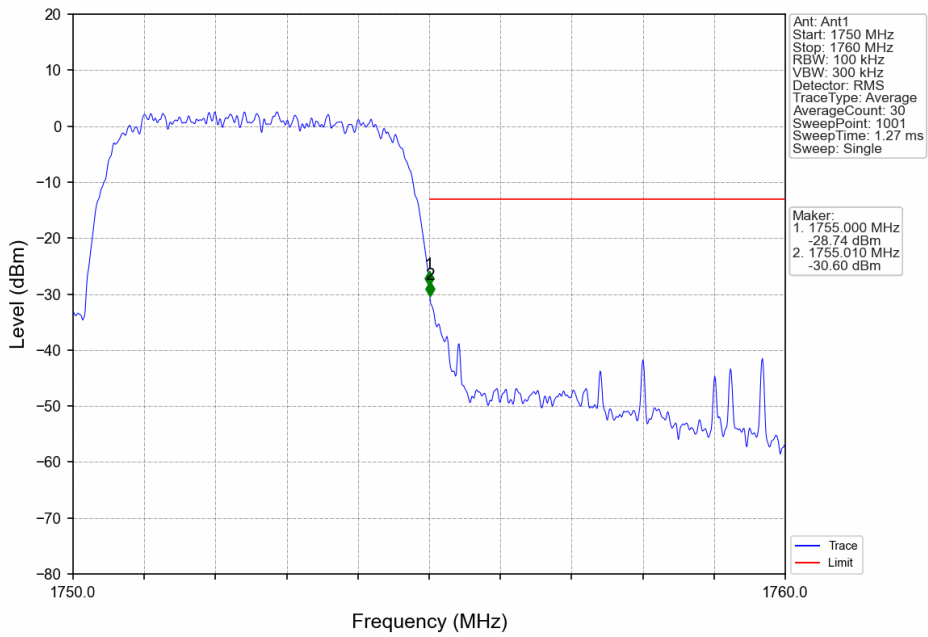
Band4\_HSUPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV



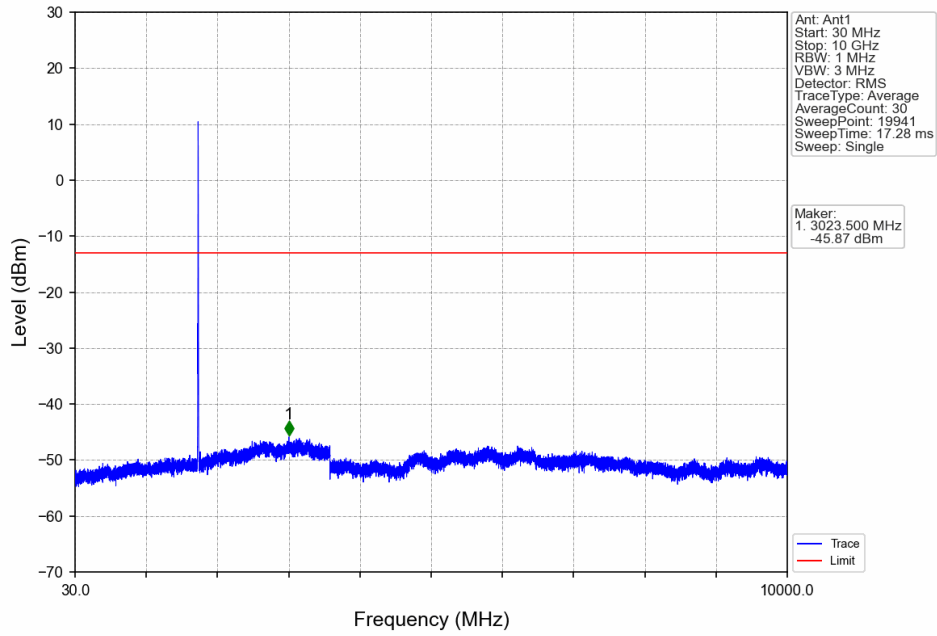
Band4\_HSUPA\_MCH\_1732.6MHz\_Subtest 1\_NTNV



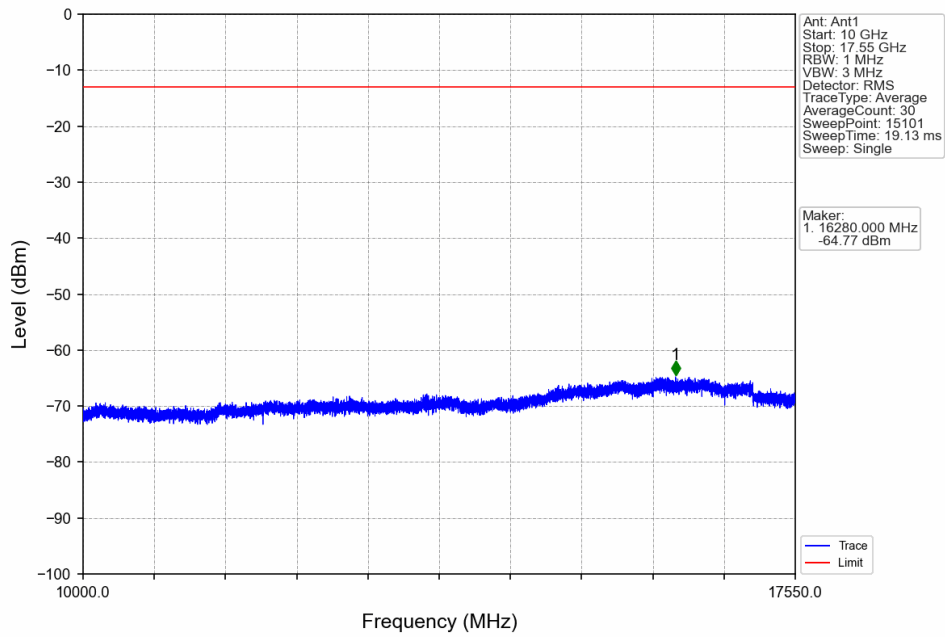
Band4\_HSUPA\_HCH\_1752.6MHz\_Subtest 1\_NTNV



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	0.0070	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	0.2249	0.0070	ppm	4M20F9W	24E	23.52