

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 Band IV_EIRP (ANT13)

Band IV								
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict
	Network	Subset				Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	23.97	-0.85	23.12	<=30	Pass
			1732.6	23.86	-0.85	23.01	<=30	Pass
			1752.6	23.77	-0.85	22.92	<=30	Pass
	HSDPA	Subtest 1	1712.4	22.15	-0.85	21.30	<=30	Pass
		Subtest 2	1712.4	22.11	-0.85	21.26	<=30	Pass
		Subtest 3	1712.4	22.14	-0.85	21.29	<=30	Pass
		Subtest 4	1712.4	22.12	-0.85	21.27	<=30	Pass
		Subtest 1	1732.6	22.15	-0.85	21.30	<=30	Pass
		Subtest 2	1732.6	22.15	-0.85	21.30	<=30	Pass
		Subtest 3	1732.6	22.11	-0.85	21.26	<=30	Pass
		Subtest 4	1732.6	22.11	-0.85	21.26	<=30	Pass
		Subtest 1	1752.6	22.05	-0.85	21.20	<=30	Pass
		Subtest 2	1752.6	22.07	-0.85	21.22	<=30	Pass
		Subtest 3	1752.6	22.01	-0.85	21.16	<=30	Pass
		Subtest 4	1752.6	22.03	-0.85	21.18	<=30	Pass
	HSUPA	Subtest 1	1712.4	21.03	-0.85	20.18	<=30	Pass
		Subtest 2	1712.4	21.32	-0.85	20.47	<=30	Pass
		Subtest 3	1712.4	21.26	-0.85	20.41	<=30	Pass
		Subtest 4	1712.4	20.31	-0.85	19.46	<=30	Pass
		Subtest 5	1712.4	19.85	-0.85	19.00	<=30	Pass
		Subtest 1	1732.6	19.89	-0.85	19.04	<=30	Pass
		Subtest 2	1732.6	21.09	-0.85	20.24	<=30	Pass
		Subtest 3	1732.6	21.21	-0.85	20.36	<=30	Pass
		Subtest 4	1732.6	20.08	-0.85	19.23	<=30	Pass
		Subtest 5	1732.6	19.99	-0.85	19.14	<=30	Pass
		Subtest 1	1752.6	21.15	-0.85	20.30	<=30	Pass
		Subtest 2	1752.6	21.01	-0.85	20.16	<=30	Pass
		Subtest 3	1752.6	20.98	-0.85	20.13	<=30	Pass
		Subtest 4	1752.6	21.00	-0.85	20.15	<=30	Pass
		Subtest 5	1752.6	20.97	-0.85	20.12	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 Band IV

Band IV							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	1712.4	20	3.7	-3.610	-0.0021	/	Pass
			3.91	-2.948	-0.0017	/	Pass
			4.4	-3.126	-0.0018	/	Pass
		-30	3.91	-3.385	-0.0020	/	Pass
		-20	3.91	-3.239	-0.0019	/	Pass

		-10	3.91	-2.769	-0.0016	/	Pass
		0	3.91	-2.941	-0.0017	/	Pass
		10	3.91	-3.360	-0.0020	/	Pass
		30	3.91	-2.807	-0.0016	/	Pass
		40	3.91	-3.080	-0.0018	/	Pass
		50	3.91	-2.660	-0.0016	/	Pass
	1732.6	20	3.7	1.742	0.0010	/	Pass
			3.91	1.347	0.0008	/	Pass
			4.4	1.700	0.0010	/	Pass
		-30	3.91	1.526	0.0009	/	Pass
		-20	3.91	1.377	0.0008	/	Pass
		-10	3.91	1.501	0.0009	/	Pass
		0	3.91	1.615	0.0009	/	Pass
		10	3.91	1.832	0.0011	/	Pass
		30	3.91	1.229	0.0007	/	Pass
		40	3.91	1.558	0.0009	/	Pass
		50	3.91	1.481	0.0009	/	Pass
	1752.6	20	3.7	1.178	0.0007	/	Pass
			3.91	0.622	0.0004	/	Pass
			4.4	0.966	0.0006	/	Pass
		-30	3.91	1.266	0.0007	/	Pass
		-20	3.91	1.272	0.0007	/	Pass
		-10	3.91	1.200	0.0007	/	Pass
		0	3.91	0.816	0.0005	/	Pass
		10	3.91	1.089	0.0006	/	Pass
		30	3.91	0.939	0.0005	/	Pass
		40	3.91	1.211	0.0007	/	Pass
		50	3.91	0.891	0.0005	/	Pass
HSDPA	1712.4	20	3.7	-2.625	-0.0015	/	Pass
			3.91	-2.606	-0.0015	/	Pass
			4.4	-2.512	-0.0015	/	Pass
		-30	3.91	-2.006	-0.0012	/	Pass
		-20	3.91	-2.686	-0.0016	/	Pass
		-10	3.91	-2.046	-0.0012	/	Pass
		0	3.91	-2.141	-0.0013	/	Pass
		10	3.91	-2.783	-0.0016	/	Pass
		30	3.91	-1.540	-0.0009	/	Pass
		40	3.91	-2.428	-0.0014	/	Pass
		50	3.91	-2.240	-0.0013	/	Pass
	1732.6	20	3.7	0.669	0.0004	/	Pass
			3.91	0.555	0.0003	/	Pass
			4.4	0.974	0.0006	/	Pass
		-30	3.91	1.111	0.0006	/	Pass
		-20	3.91	1.280	0.0007	/	Pass
		-10	3.91	1.424	0.0008	/	Pass
		0	3.91	0.925	0.0005	/	Pass
		10	3.91	0.961	0.0006	/	Pass
		30	3.91	1.305	0.0008	/	Pass
		40	3.91	0.648	0.0004	/	Pass
		50	3.91	1.352	0.0008	/	Pass
	1752.6	20	3.7	0.194	0.0001	/	Pass
			3.91	0.213	0.0001	/	Pass
			4.4	0.525	0.0003	/	Pass
		-30	3.91	0.419	0.0002	/	Pass
		-20	3.91	0.322	0.0002	/	Pass
		-10	3.91	-0.653	-0.0004	/	Pass
		0	3.91	0.375	0.0002	/	Pass
		10	3.91	0.068	0.0000	/	Pass
		30	3.91	0.386	0.0002	/	Pass

HSUPA		40	3.91	0.180	0.0001	/	Pass
		50	3.91	0.286	0.0002	/	Pass
	1712.4	20	3.7	-1.740	-0.0010	/	Pass
			3.91	0.218	0.0001	/	Pass
			4.4	-1.295	-0.0008	/	Pass
		-30	3.91	-0.680	-0.0004	/	Pass
		-20	3.91	-1.340	-0.0008	/	Pass
		-10	3.91	0.135	0.0001	/	Pass
		0	3.91	0.402	0.0002	/	Pass
		10	3.91	-0.083	0.0000	/	Pass
		30	3.91	0.113	0.0001	/	Pass
		40	3.91	-0.895	-0.0005	/	Pass
		50	3.91	0.272	0.0002	/	Pass
	1732.6	20	3.7	2.997	0.0017	/	Pass
			3.91	2.527	0.0015	/	Pass
			4.4	1.914	0.0011	/	Pass
		-30	3.91	1.324	0.0008	/	Pass
		-20	3.91	3.407	0.0020	/	Pass
		-10	3.91	2.316	0.0013	/	Pass
		0	3.91	2.617	0.0015	/	Pass
		10	3.91	2.005	0.0012	/	Pass
		30	3.91	1.690	0.0010	/	Pass
		40	3.91	2.597	0.0015	/	Pass
		50	3.91	1.483	0.0009	/	Pass
	1752.6	20	3.7	0.564	0.0003	/	Pass
			3.91	0.867	0.0005	/	Pass
			4.4	1.422	0.0008	/	Pass
		-30	3.91	1.043	0.0006	/	Pass
		-20	3.91	1.756	0.0010	/	Pass
		-10	3.91	1.849	0.0011	/	Pass
		0	3.91	1.344	0.0008	/	Pass
		10	3.91	1.111	0.0006	/	Pass
		30	3.91	0.380	0.0002	/	Pass
		40	3.91	1.645	0.0009	/	Pass
		50	3.91	1.603	0.0009	/	Pass

4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band IV_OBW

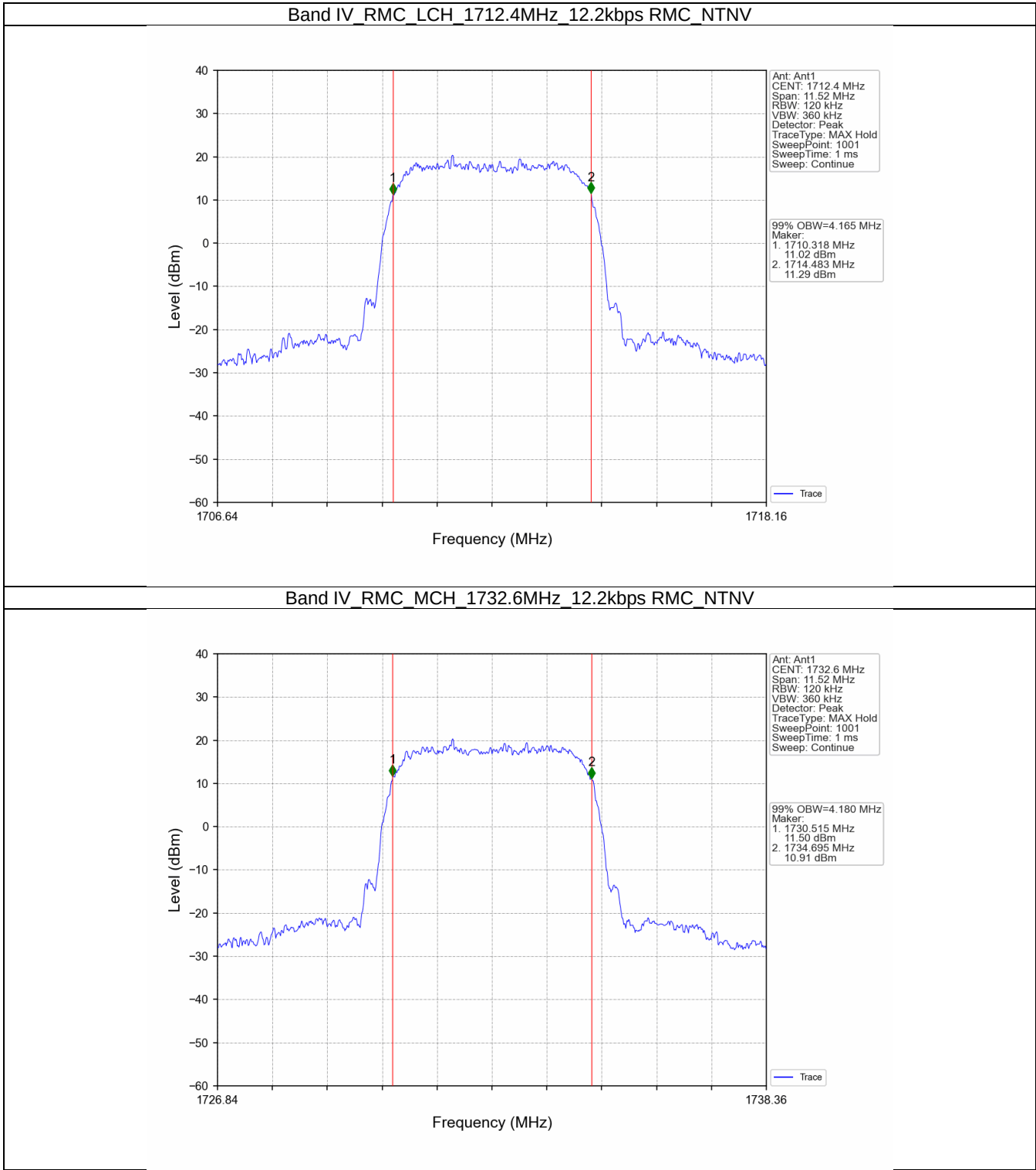
Band IV						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	4.165	/	Pass
			1732.6	4.180	/	Pass
			1752.6	4.172	/	Pass
	HSDPA	Subtest 1	1712.4	4.186	/	Pass
			1732.6	4.183	/	Pass
			1752.6	4.180	/	Pass
	HSUPA	Subtest 1	1712.4	4.172	/	Pass
			1732.6	4.170	/	Pass
			1752.6	4.165	/	Pass

4.1.2 Band IV_XDB

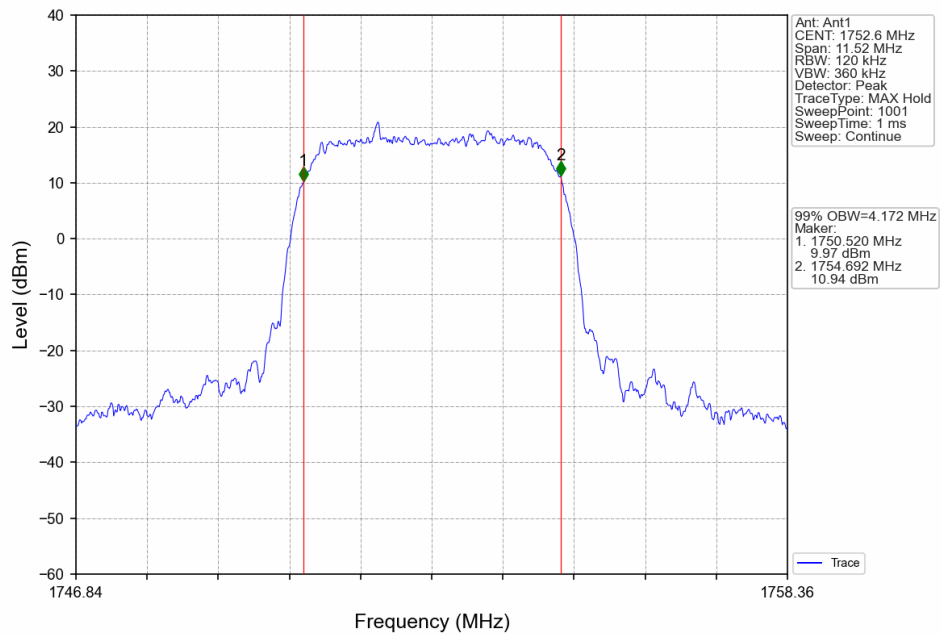
Band IV						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	4.729	/	Pass
			1732.6	4.726	/	Pass
			1752.6	4.734	/	Pass
	HSDPA	Subtest 1	1712.4	4.778	/	Pass
			1732.6	4.749	/	Pass
			1752.6	4.783	/	Pass
	HSUPA	Subtest 1	1712.4	4.775	/	Pass
			1732.6	4.774	/	Pass
			1752.6	4.765	/	Pass

4.2 Test Graph

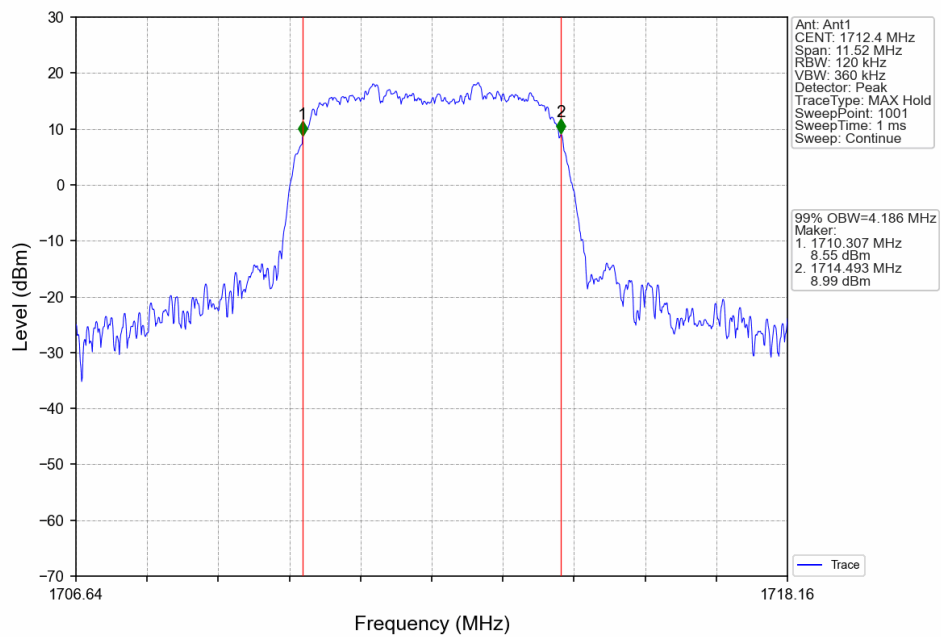
4.2.1 Band IV_OBW



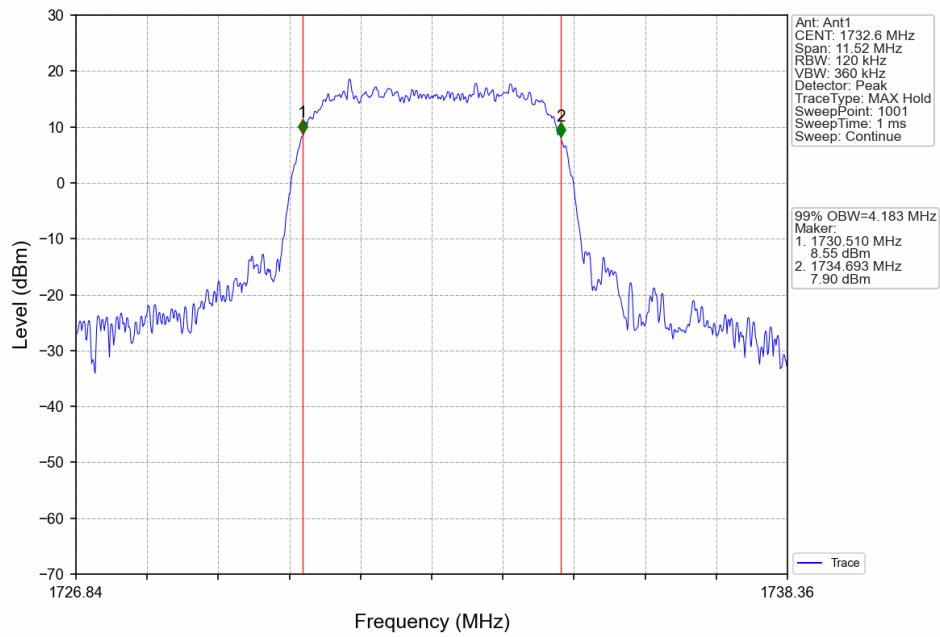
Band IV_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



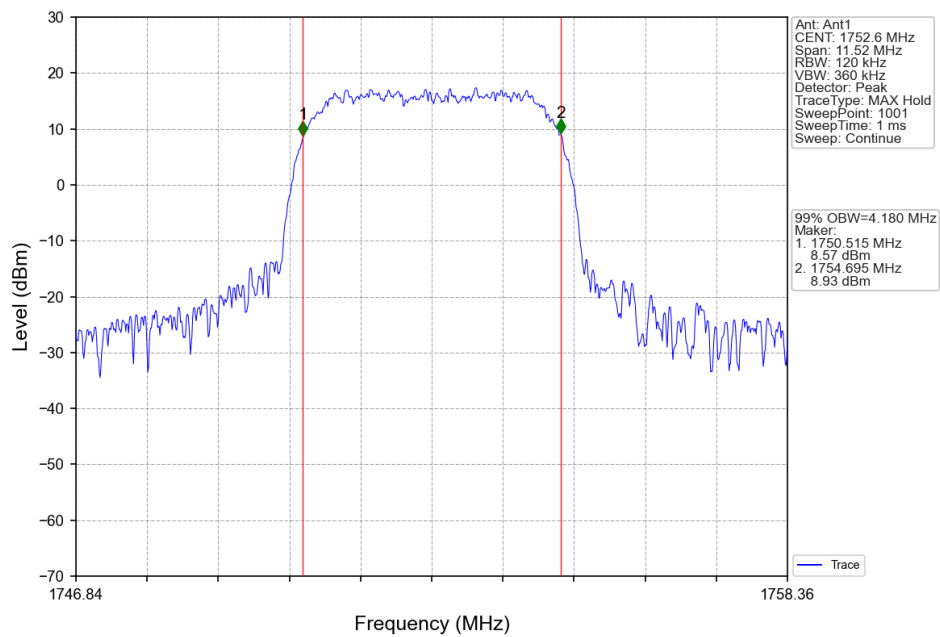
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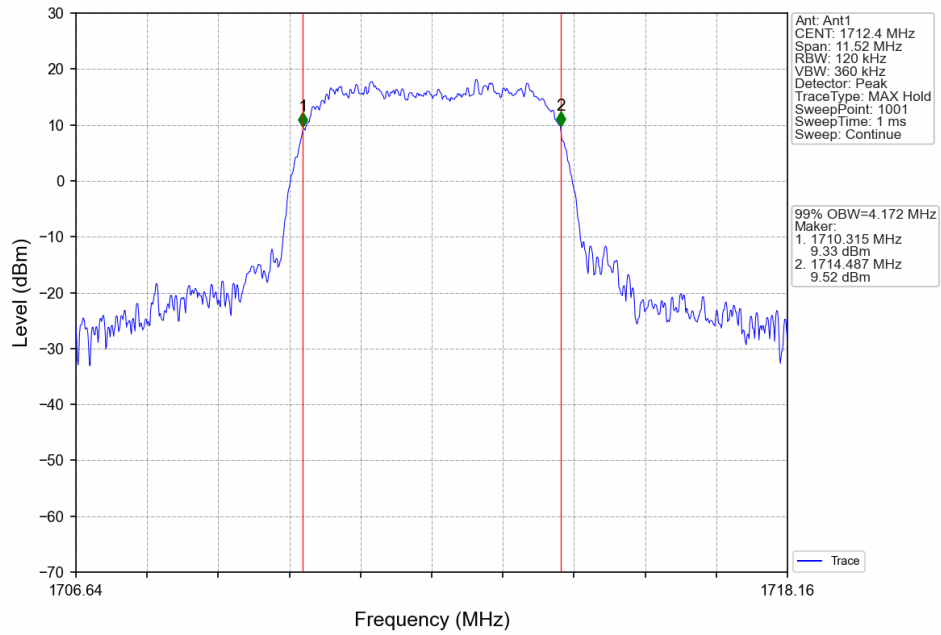
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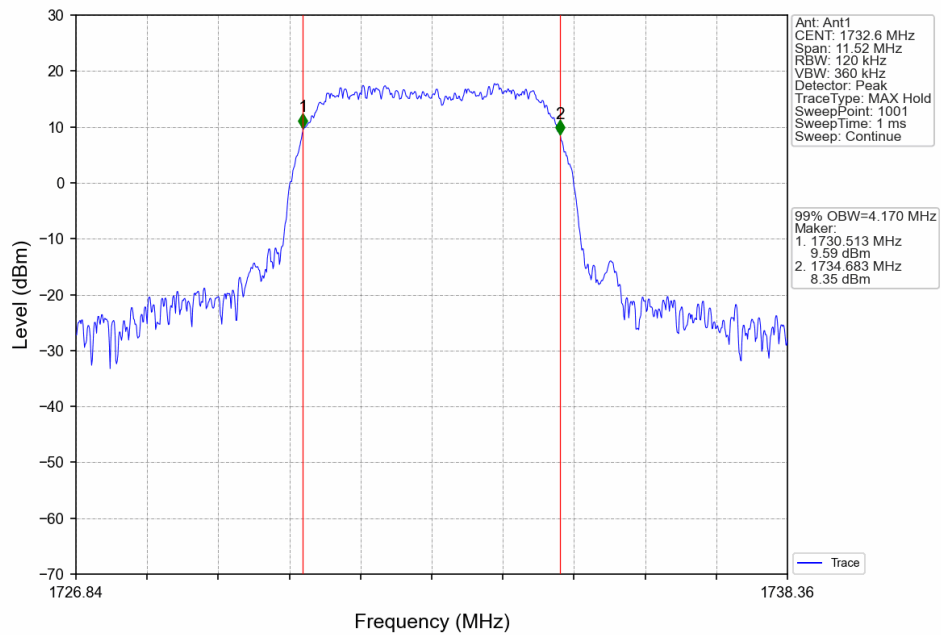
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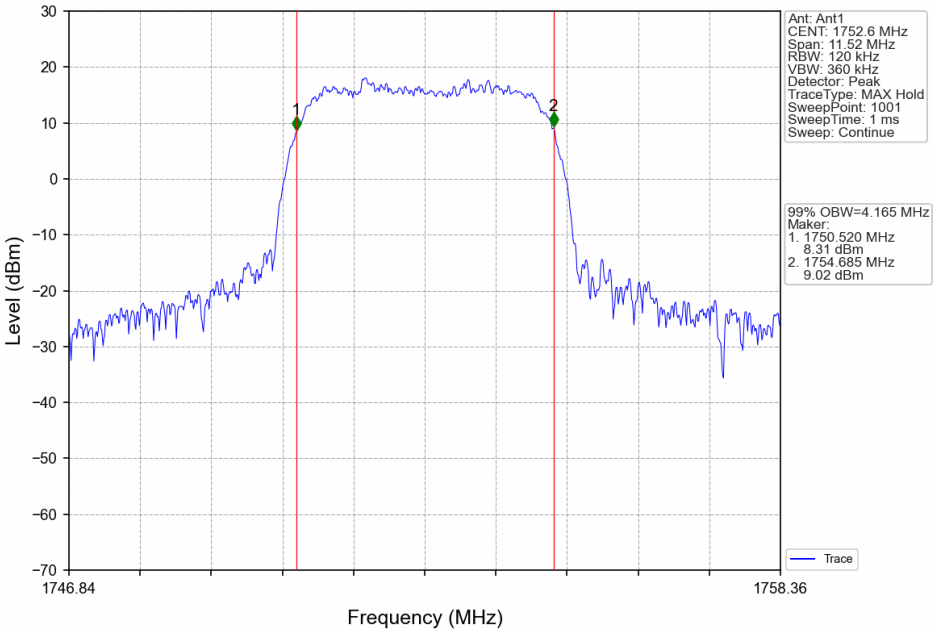
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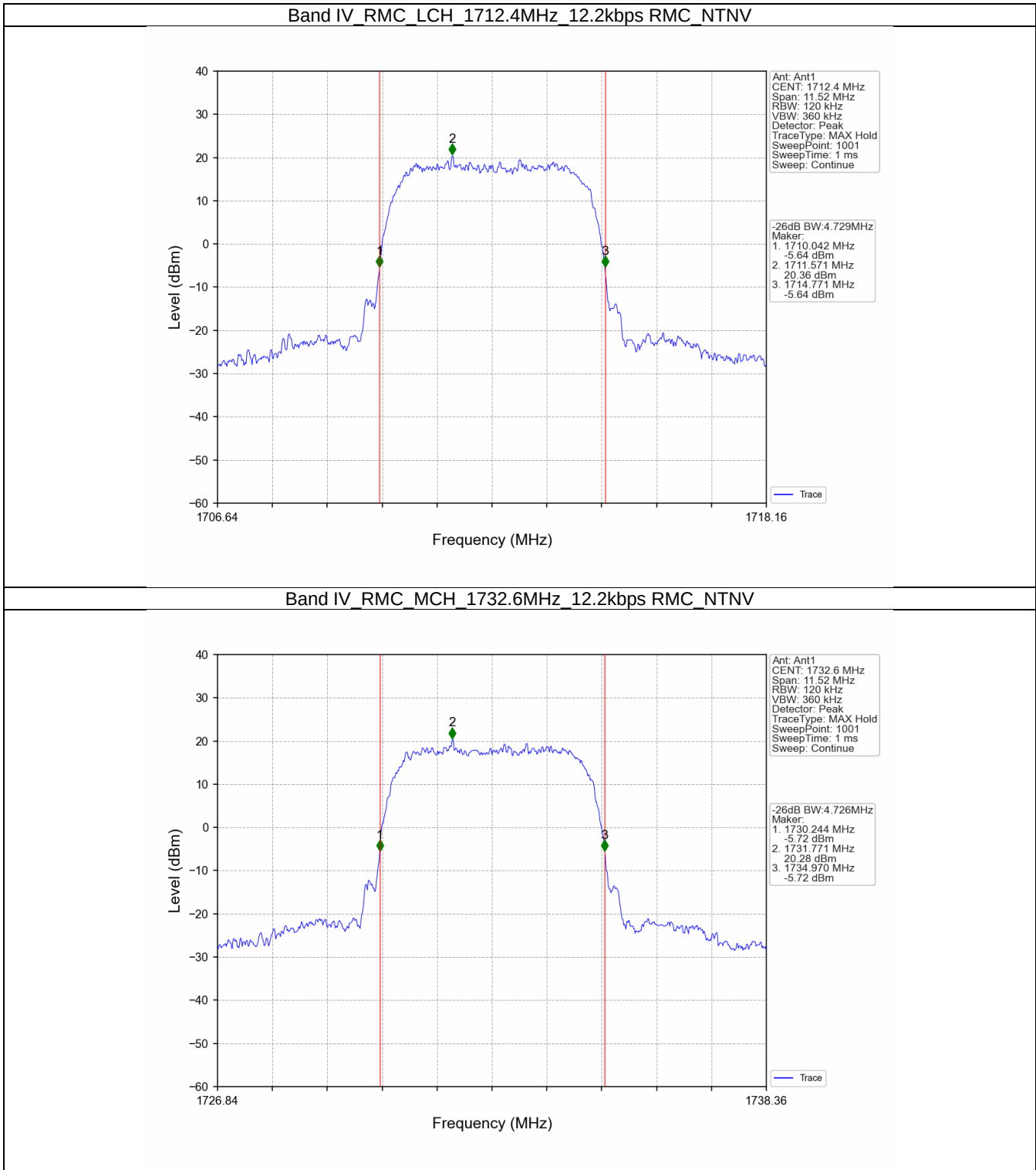
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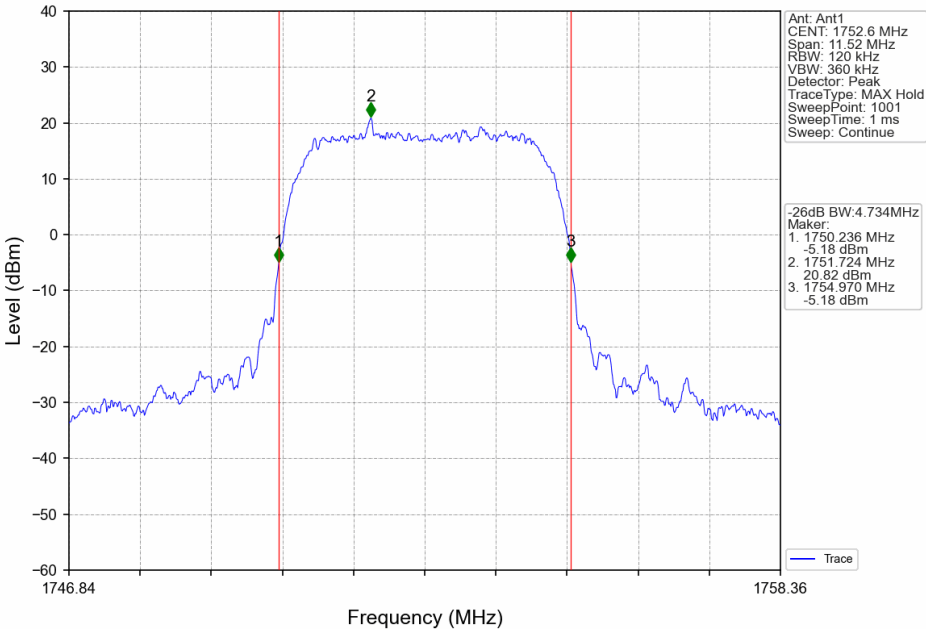
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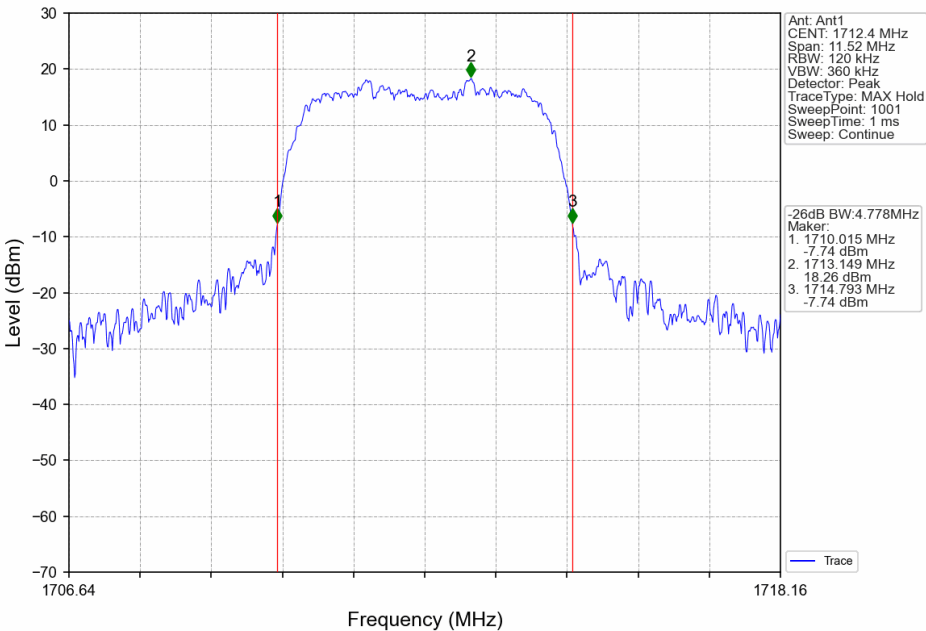
4.2.2 Band IV_XDB



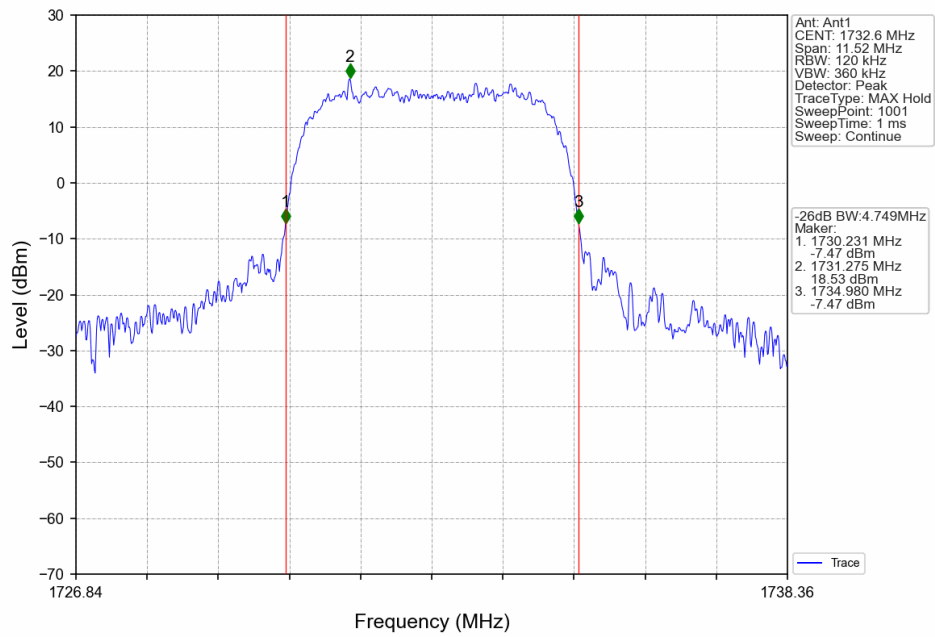
Band IV_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



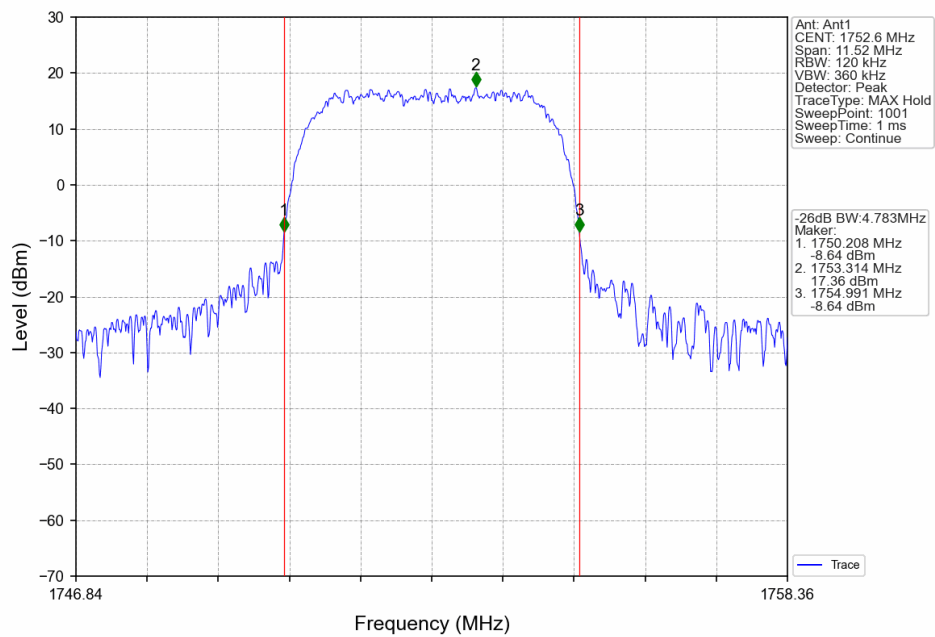
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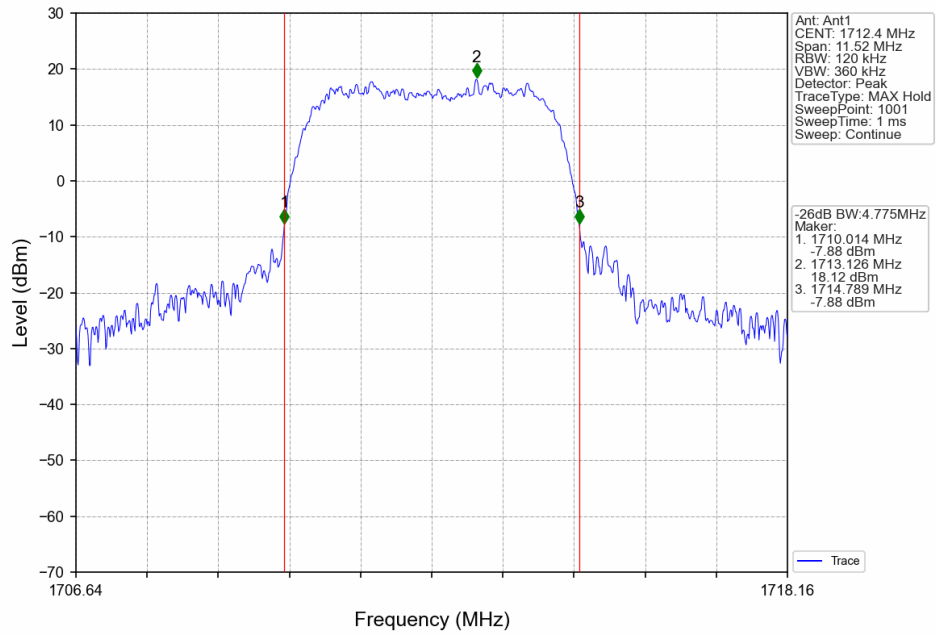
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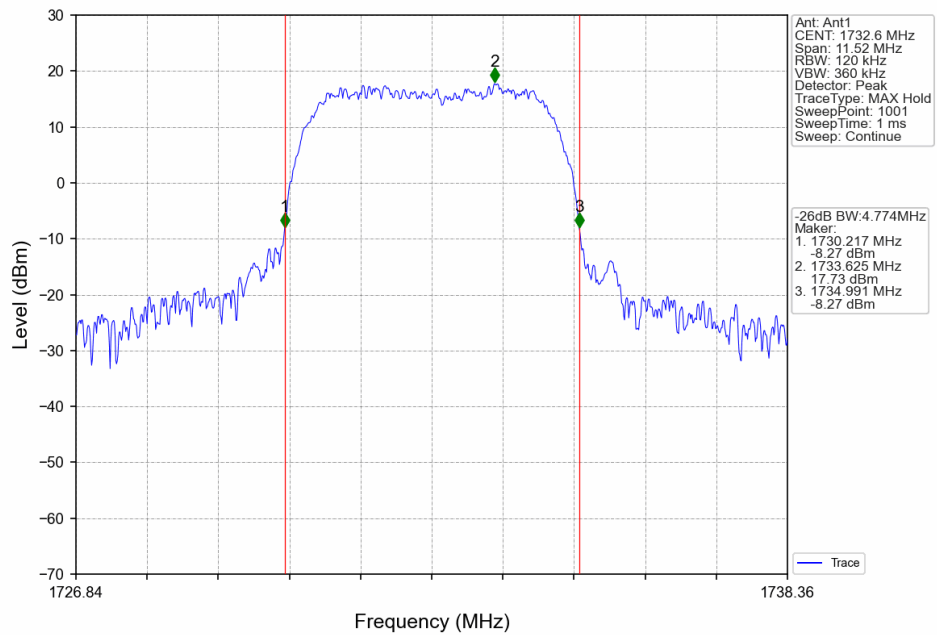
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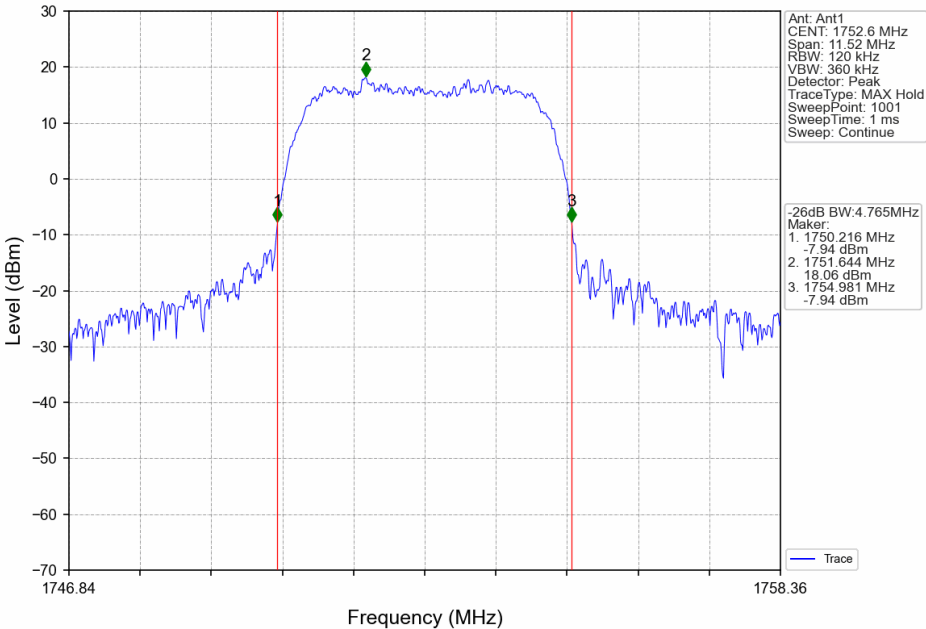
Band IV_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



Band IV_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



Band IV_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



5. Peak-Average Ratio

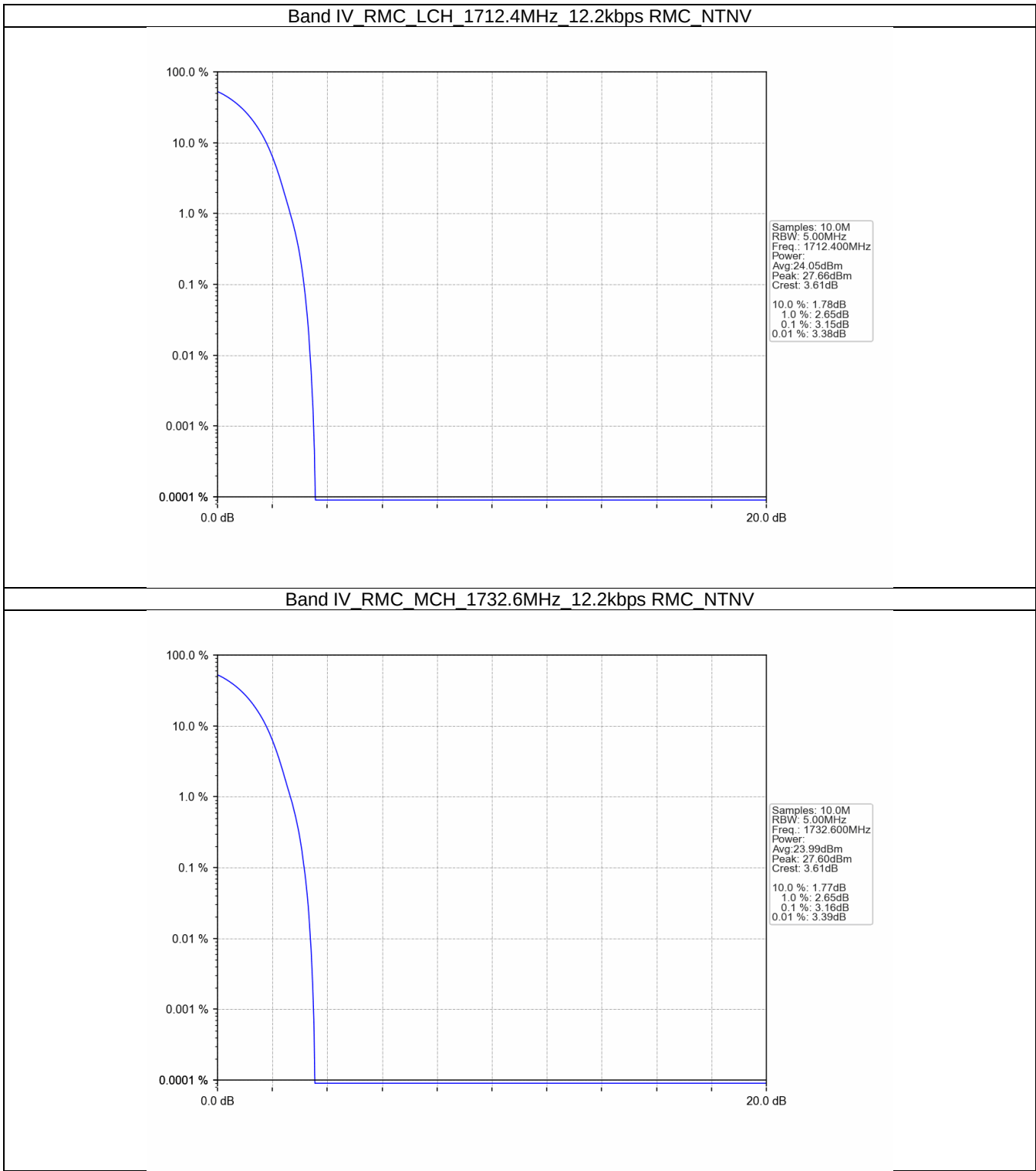
5.1 Test Result

5.1.1 Band IV

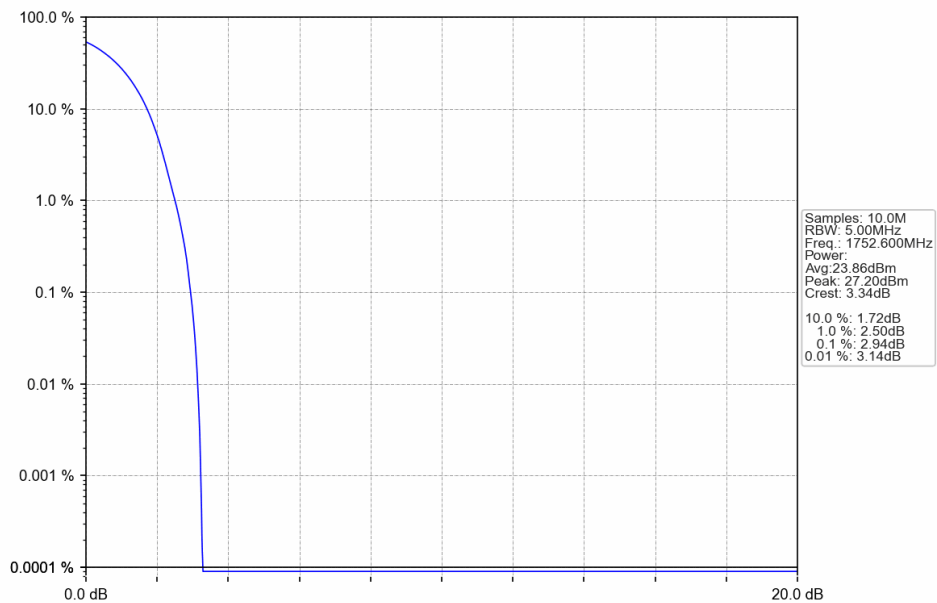
Band IV						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	3.15	<=13	Pass
			1732.6	3.16	<=13	Pass
			1752.6	2.94	<=13	Pass
	HSDPA	Subtest 1	1712.4	5.87	<=13	Pass
			1732.6	5.98	<=13	Pass
			1752.6	5.71	<=13	Pass
	HSUPA	Subtest 1	1712.4	5.96	<=13	Pass
			1732.6	5.99	<=13	Pass
			1752.6	5.84	<=13	Pass

5.2 Test Graph

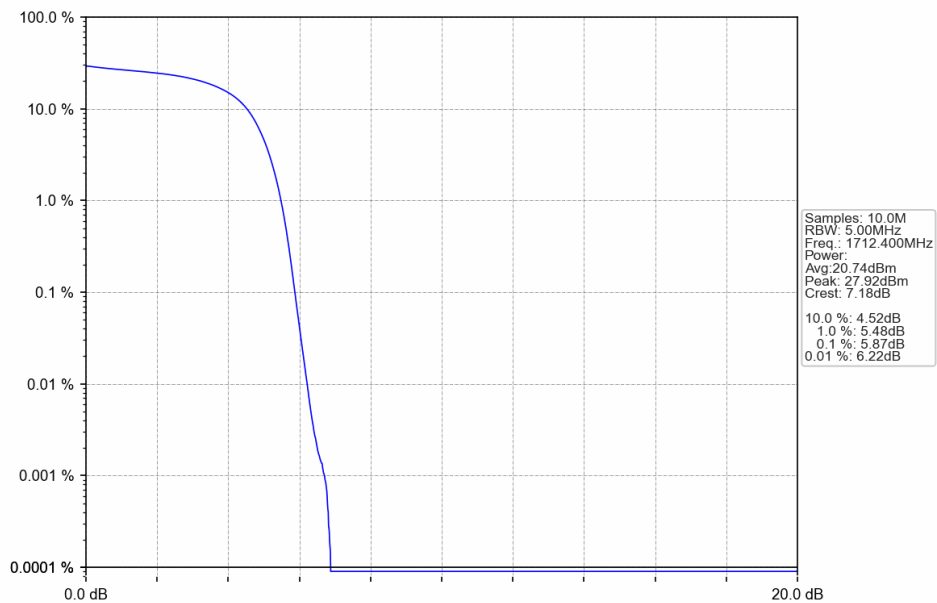
5.2.1 Band IV



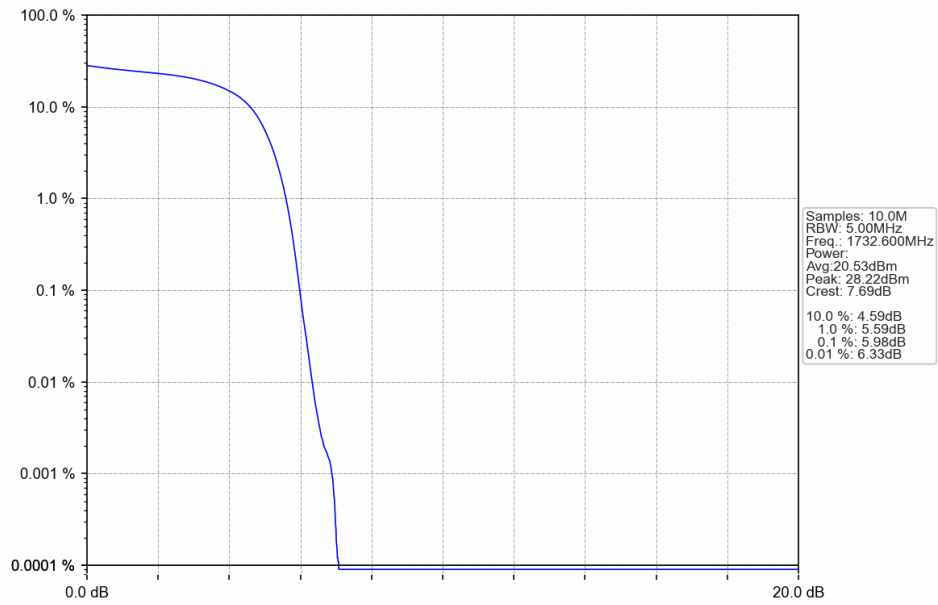
Band IV_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



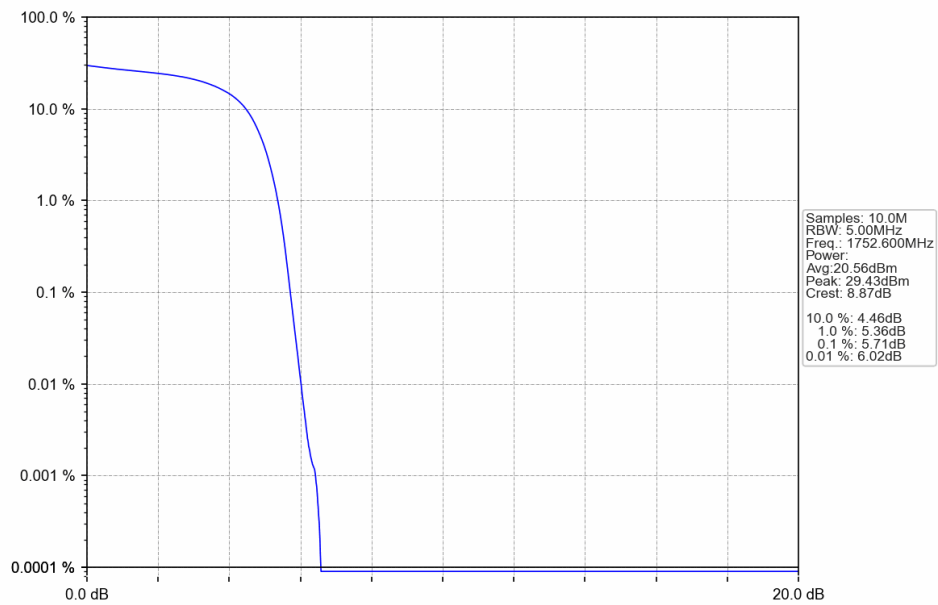
Band IV_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



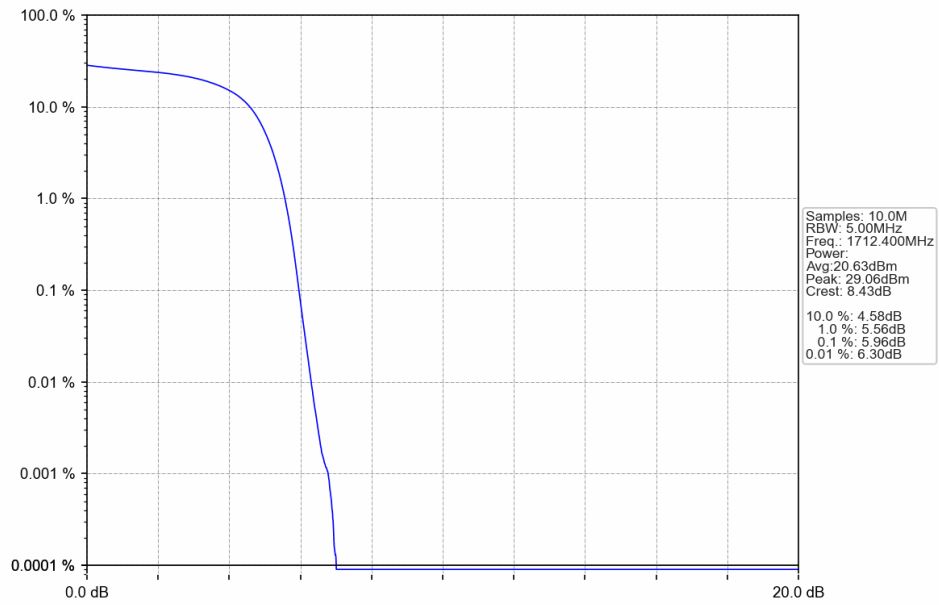
Band IV_HSDPA_MCH_1732.6MHz_Subtest 1_NTNV



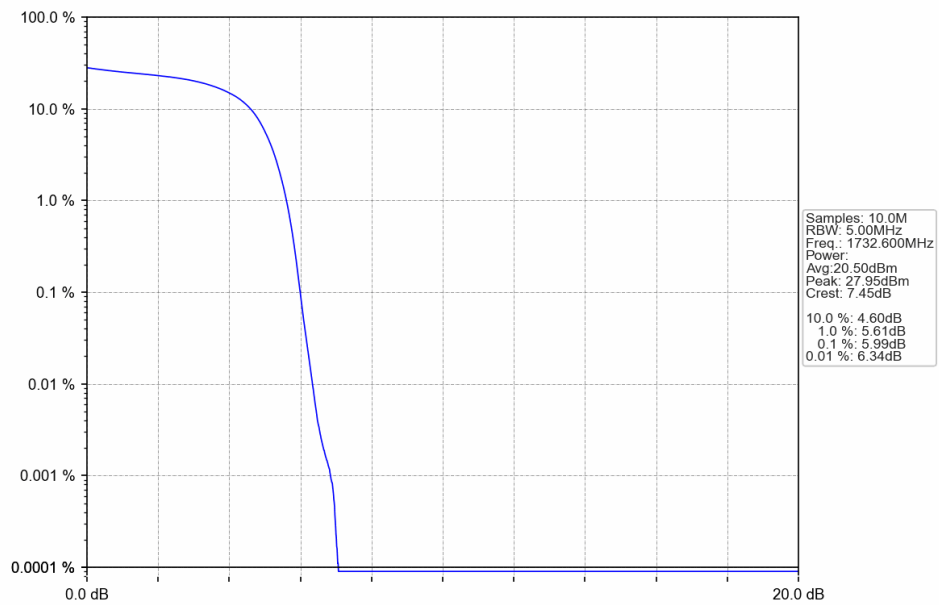
Band IV_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



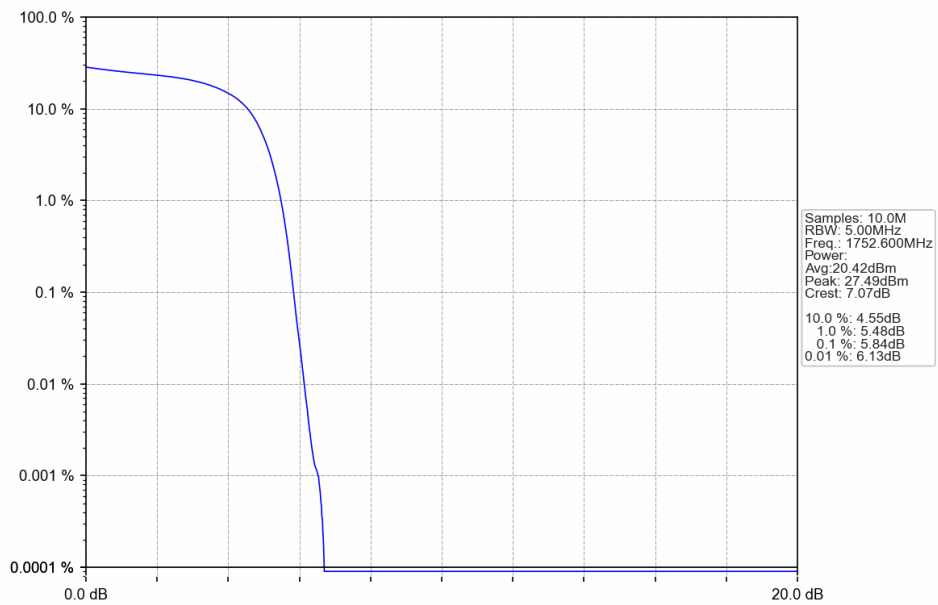
Band IV_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



Band IV_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



Band IV_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



6. Spurious Emission & Band Edges

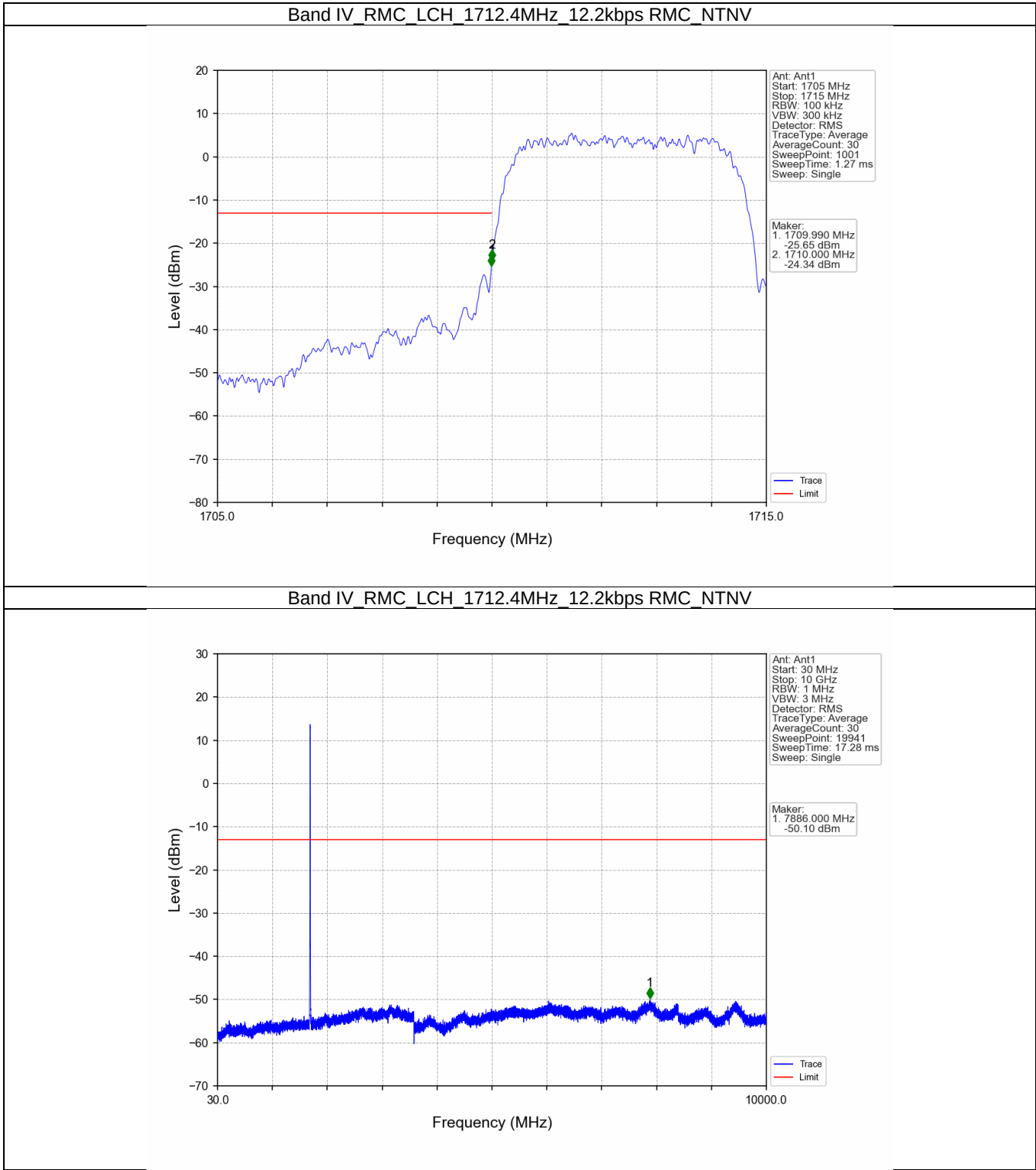
6.1 Test Result

6.1.1 Band IV

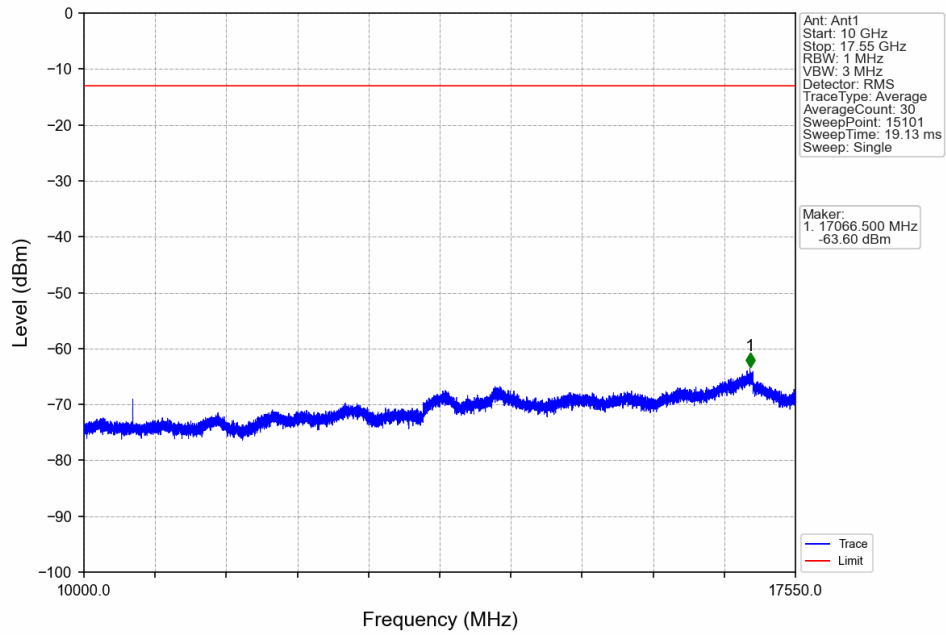
Band IV						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	Refer To Test Graph	Pass	
			1732.6	Refer To Test Graph	Pass	
			1752.6	Refer To Test Graph	Pass	
	HSDPA	Subtest 1	1712.4	Refer To Test Graph	Pass	
			1732.6	Refer To Test Graph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

6.2 Test Graph

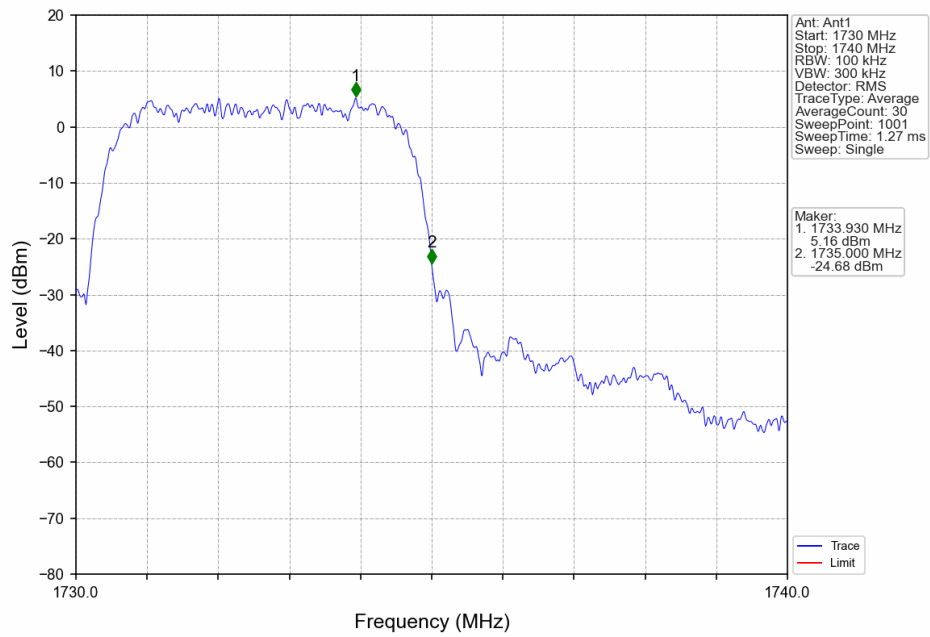
6.2.1 Band IV



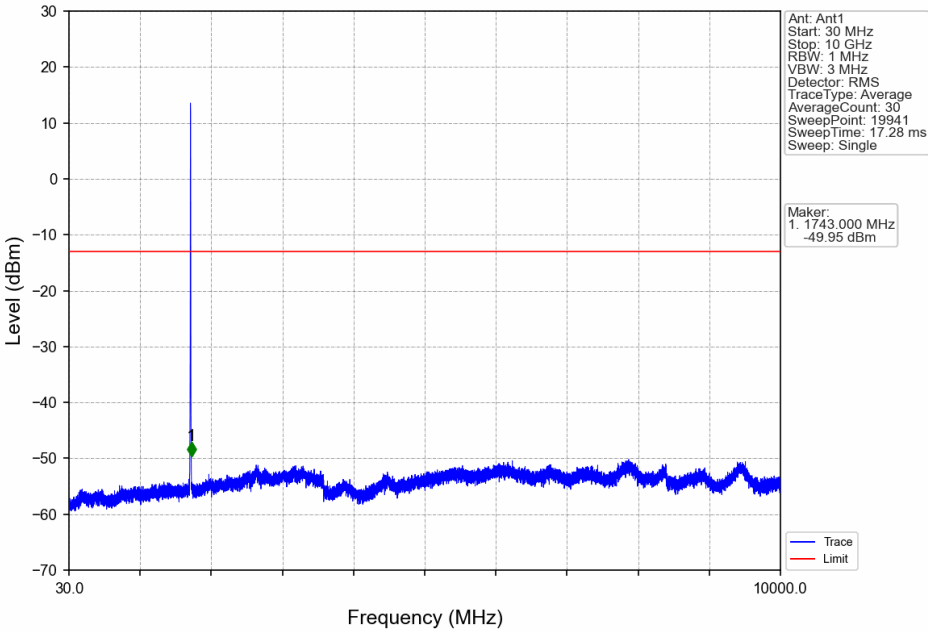
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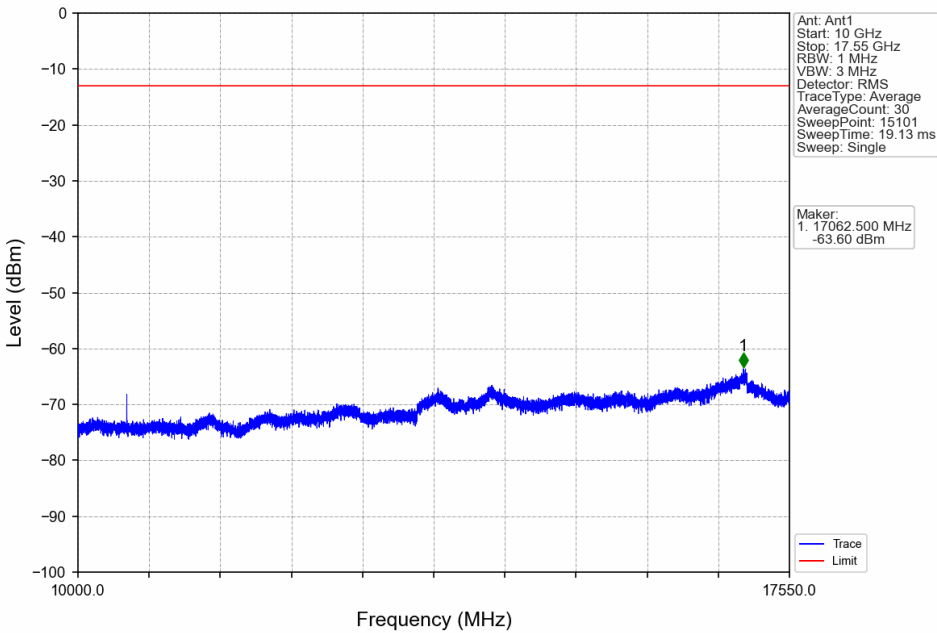
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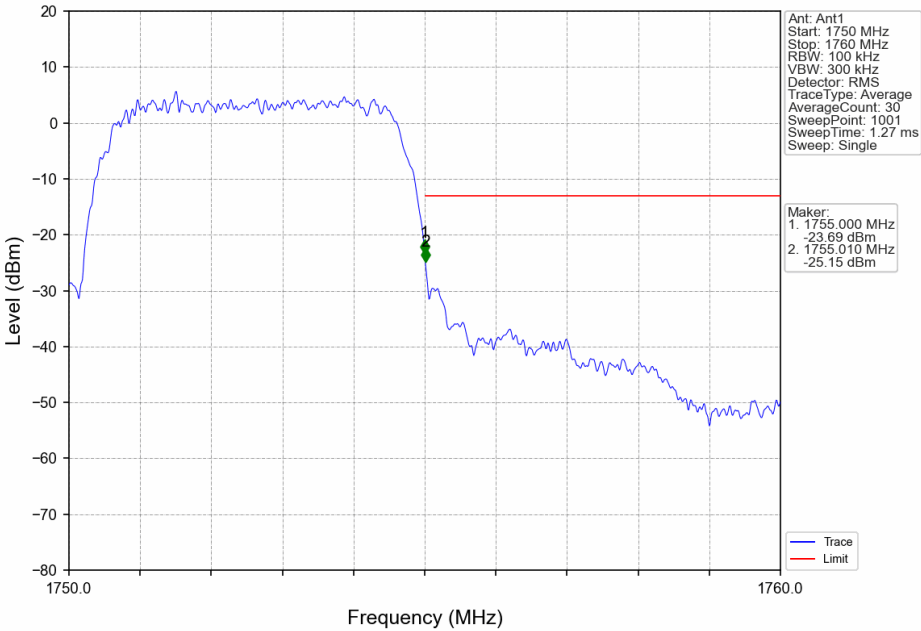
Band IV_RMC_MCH_1732.6MHz_12.2kbps RMC_NTNV



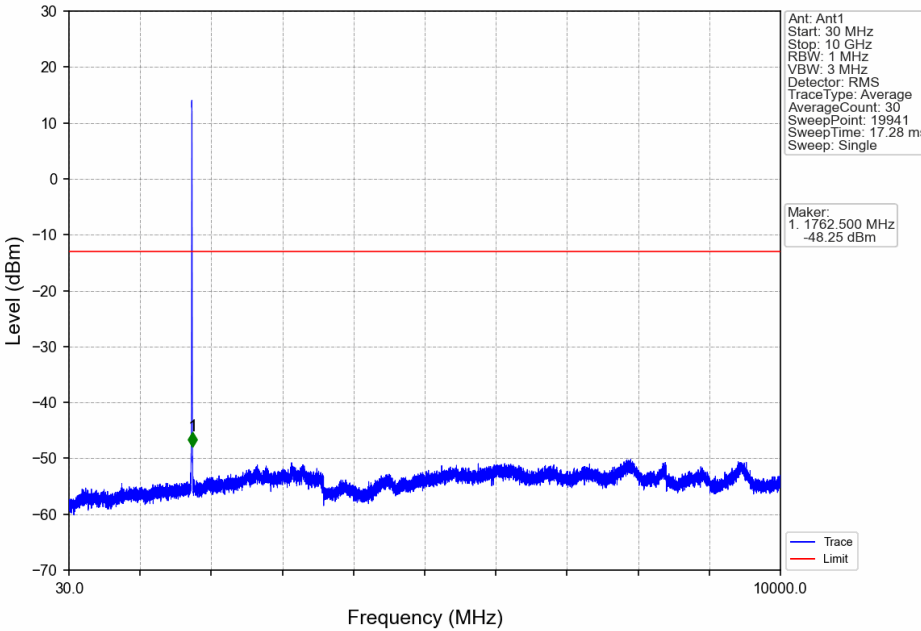
Band IV_RMC_MCH_1732.6MHz_12.2kbps RMC_NTNV



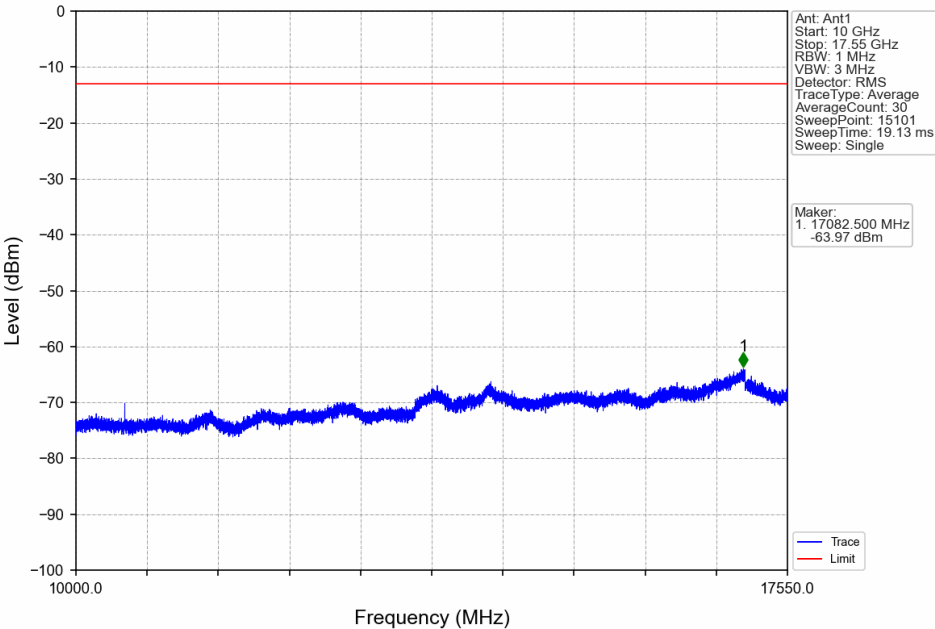
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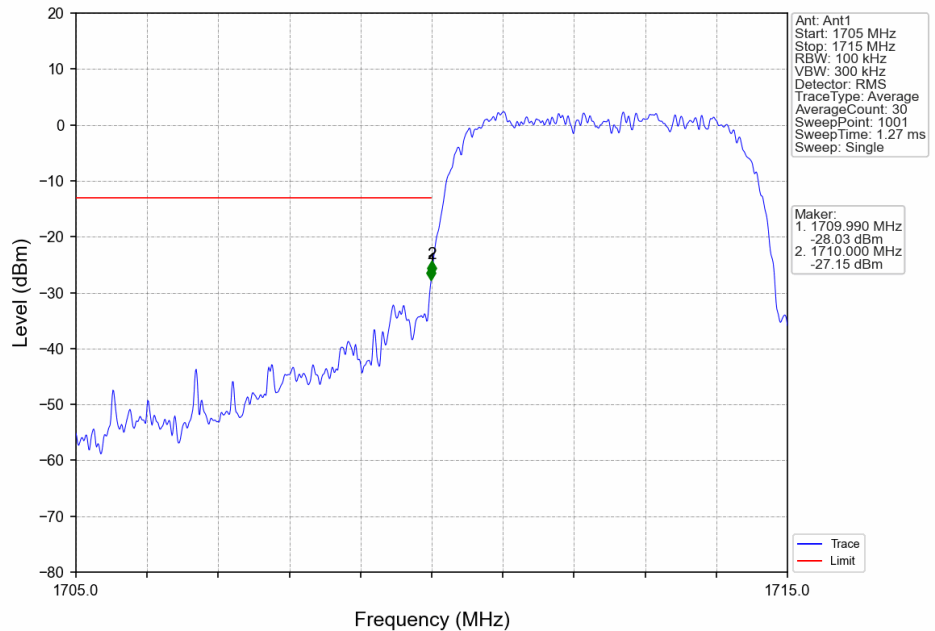
Band IV_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



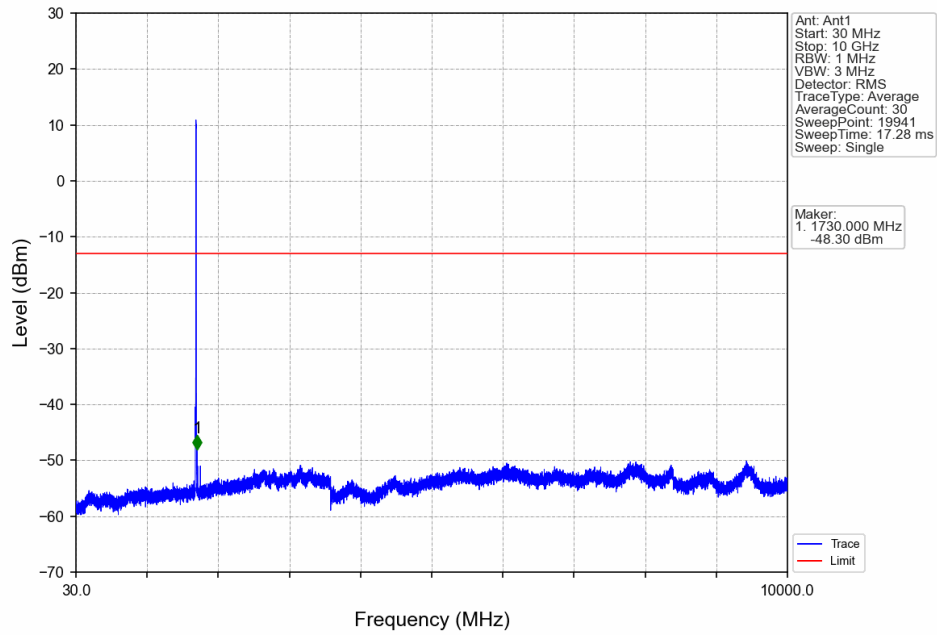
Band IV_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



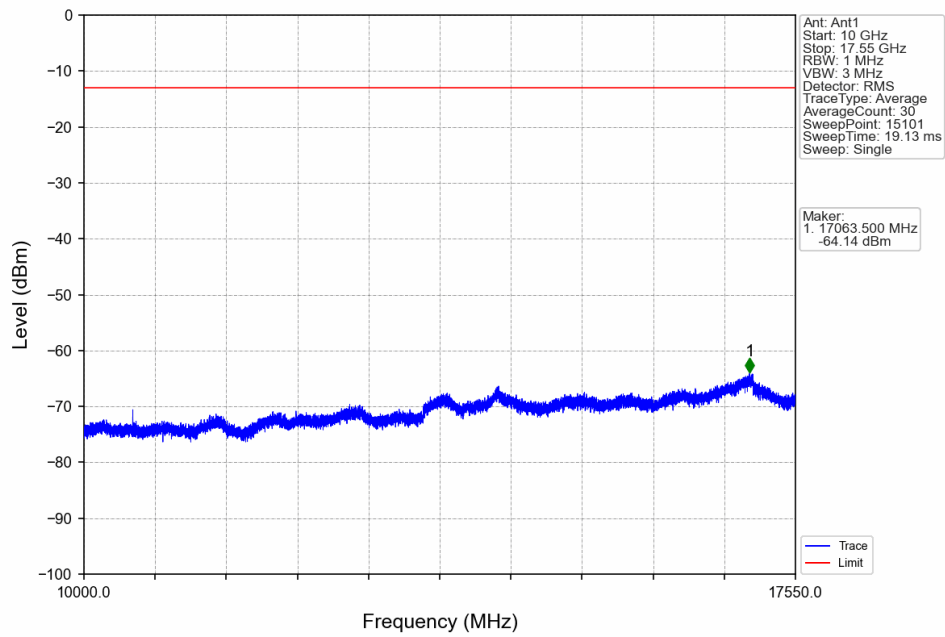
Band IV_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



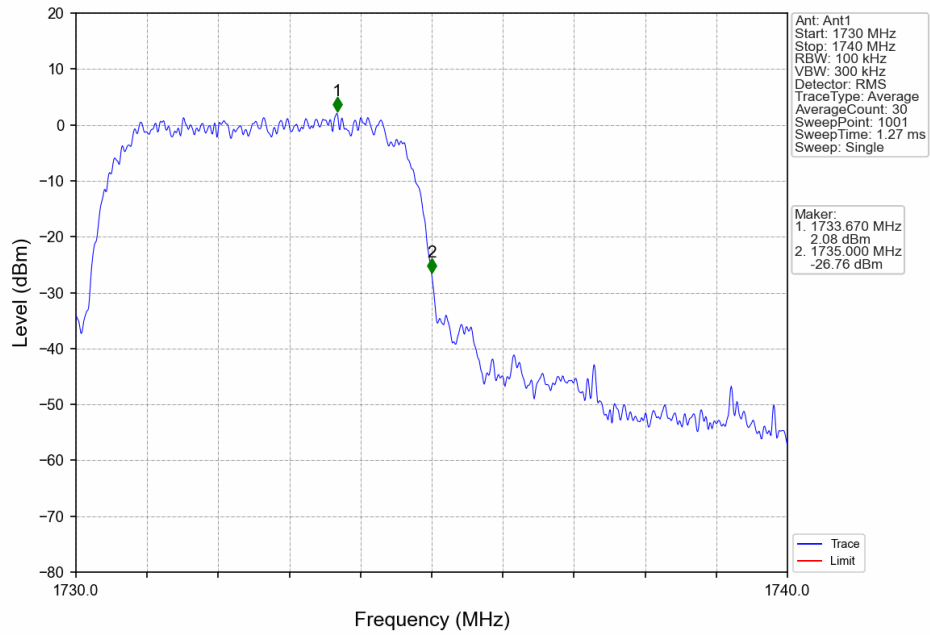
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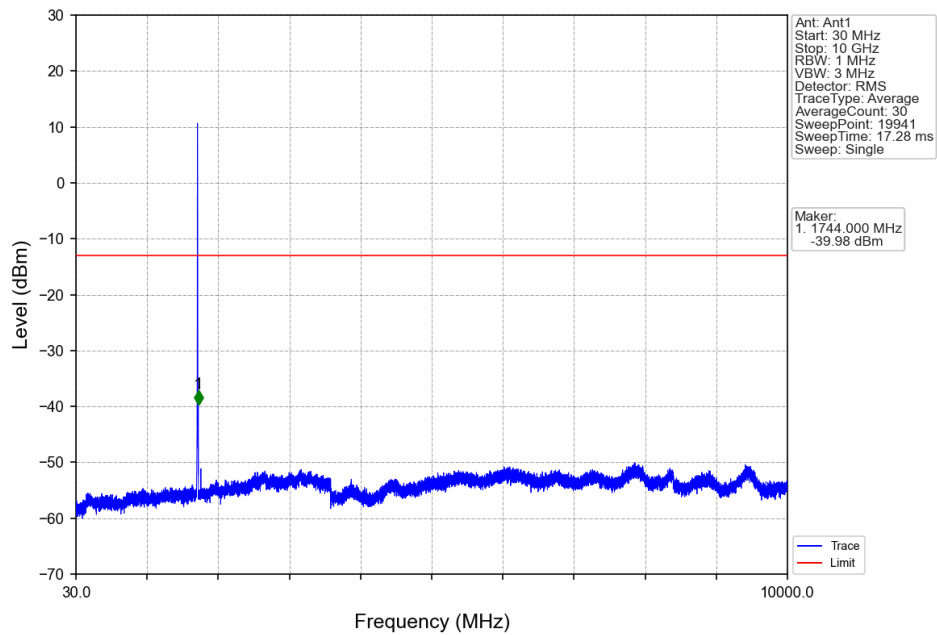
Band IV_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



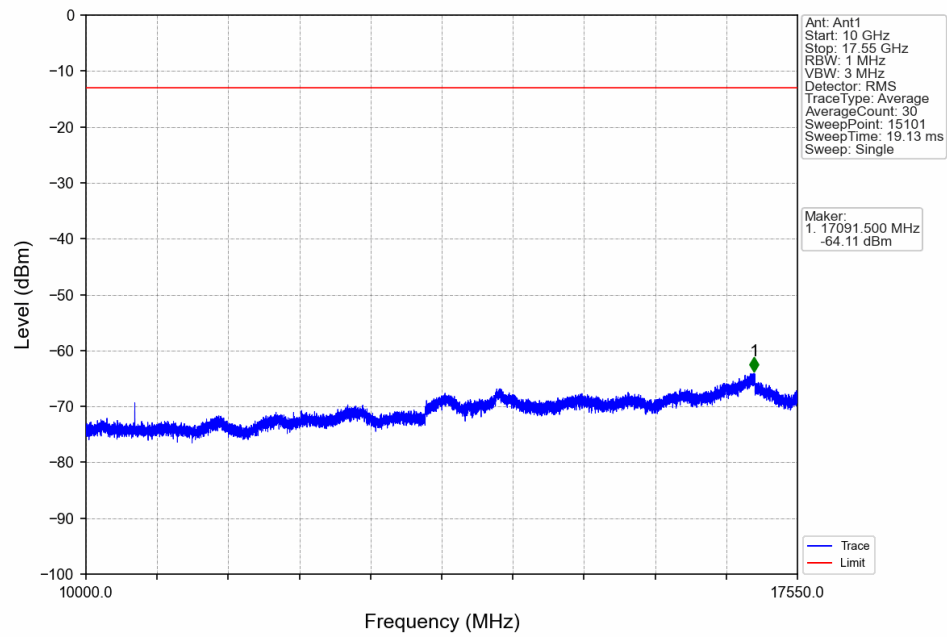
Band IV_HSDPA_MCH_1732.6MHz_Subtest 1_NTNV



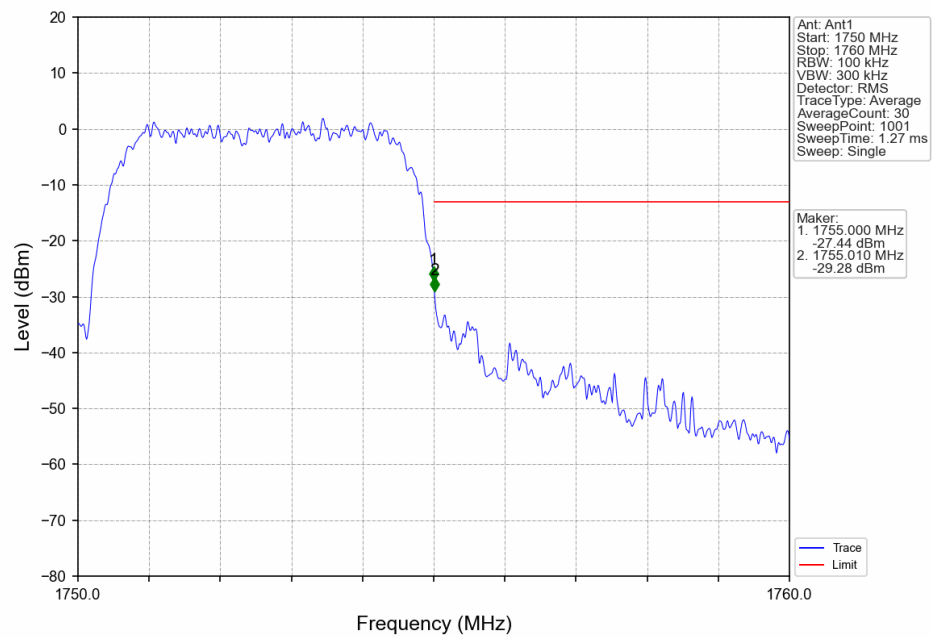
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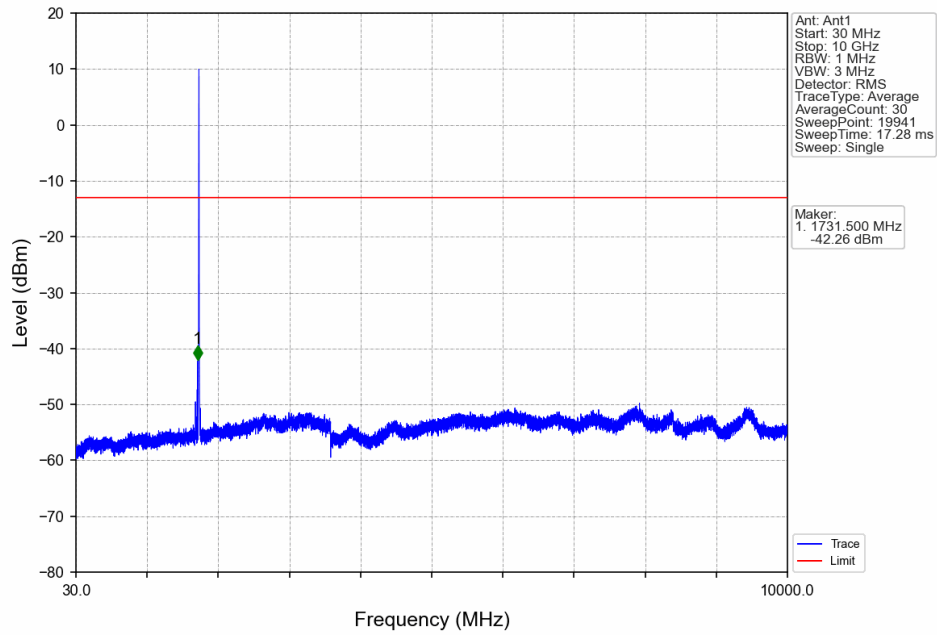
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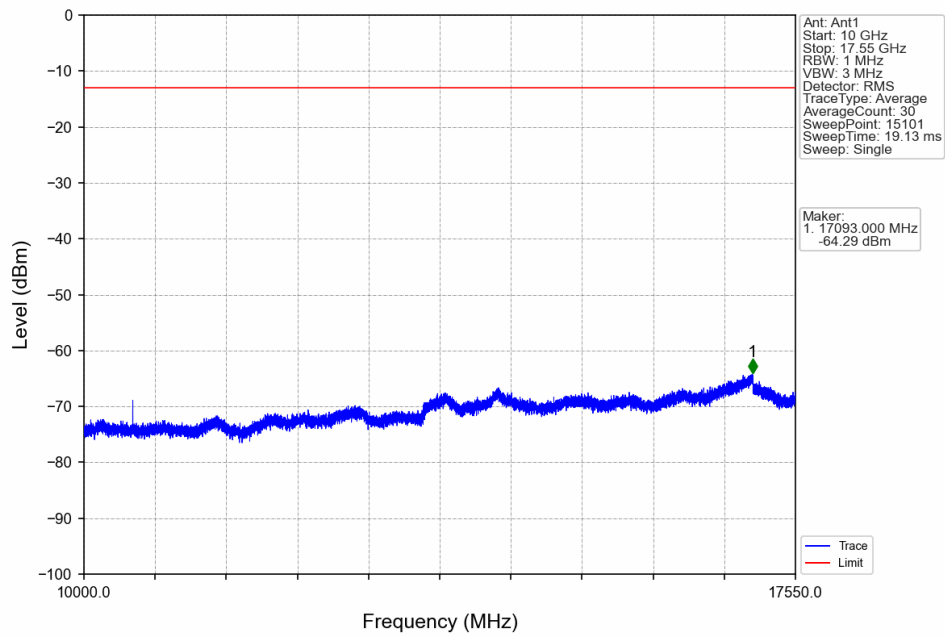
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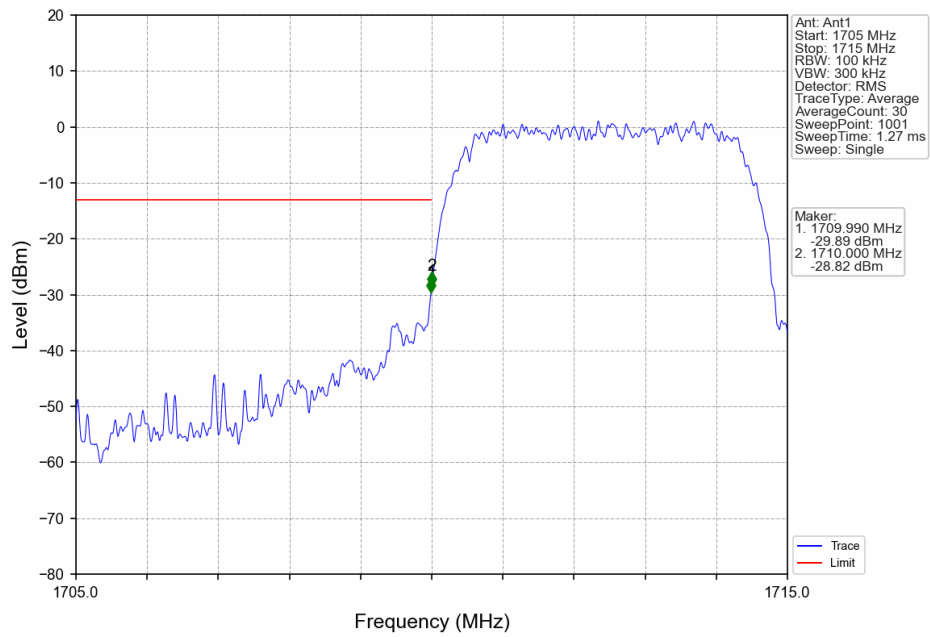
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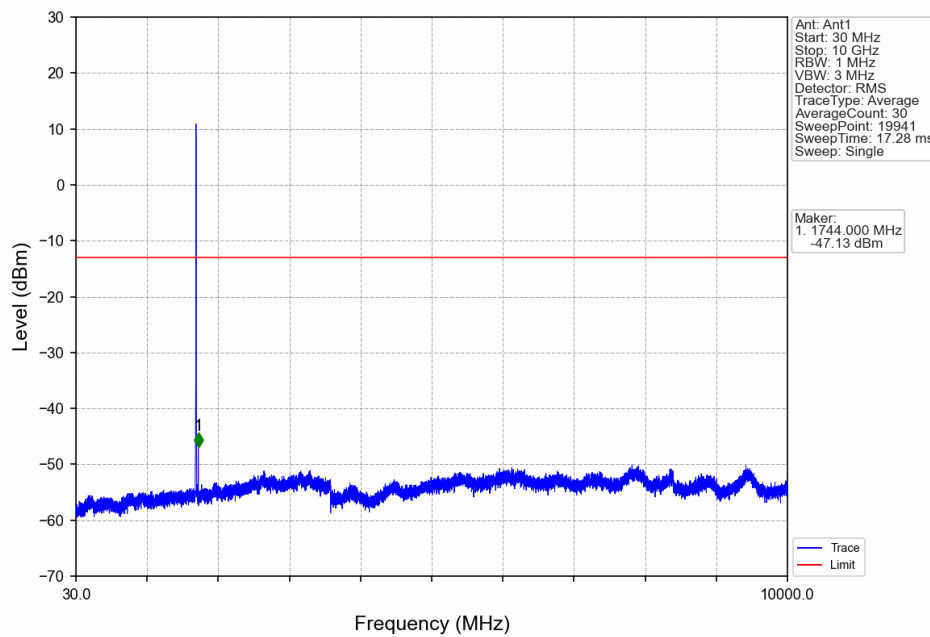
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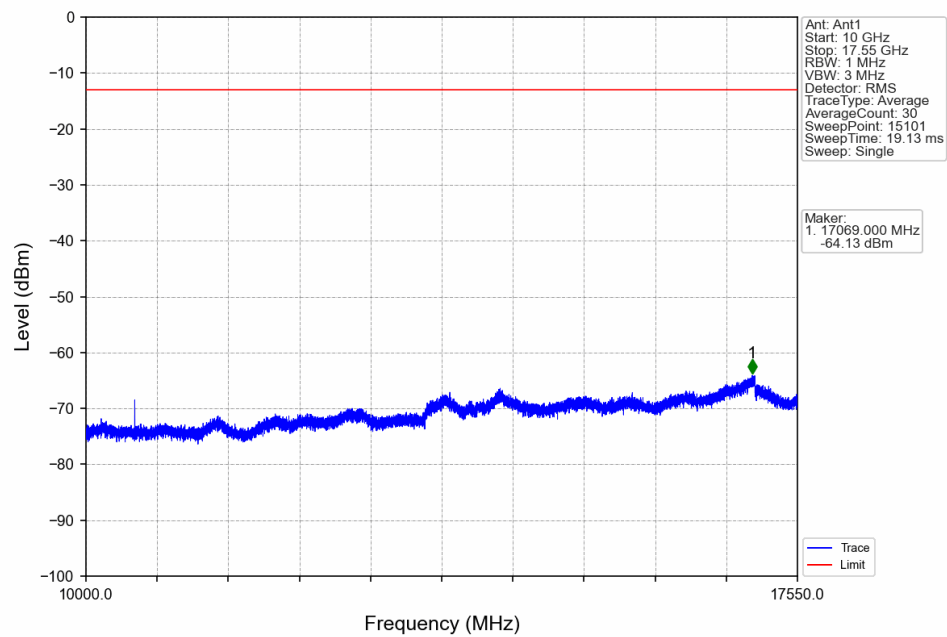
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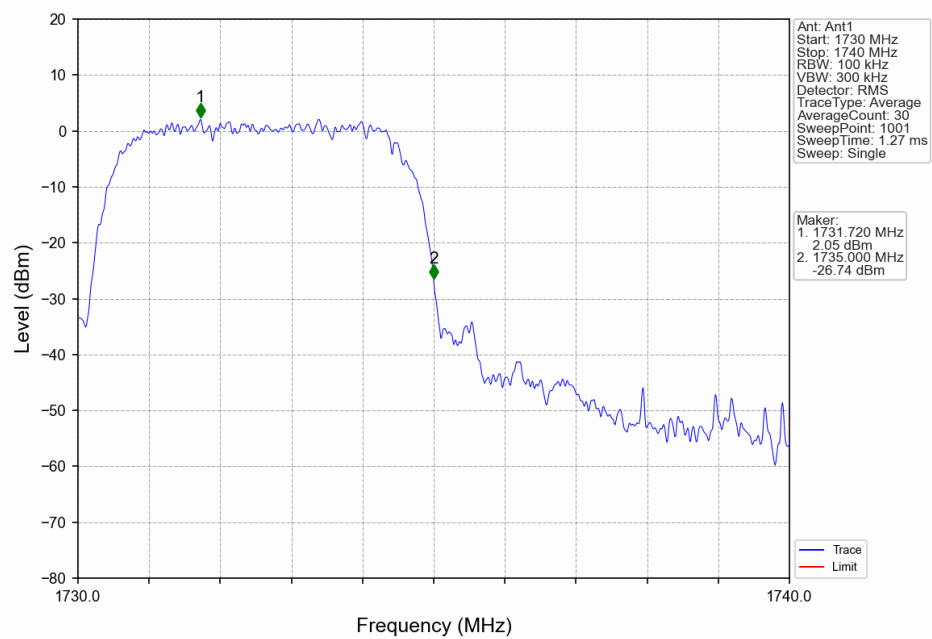
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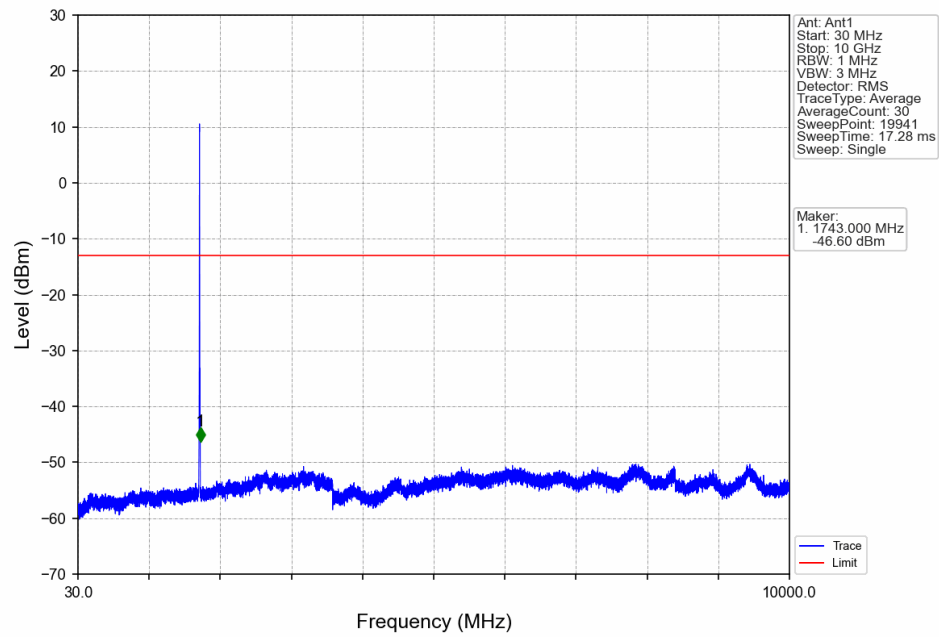
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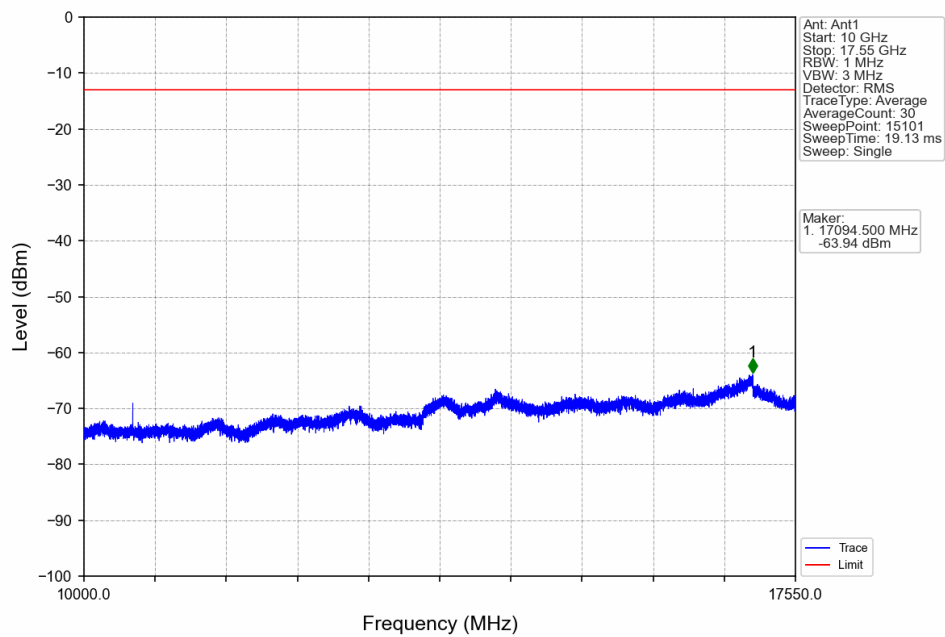
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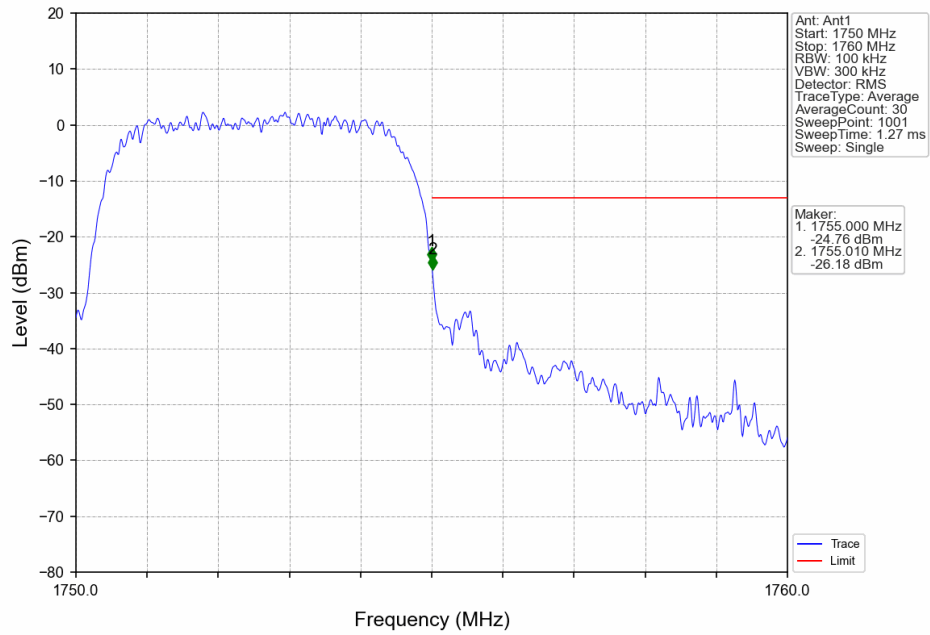
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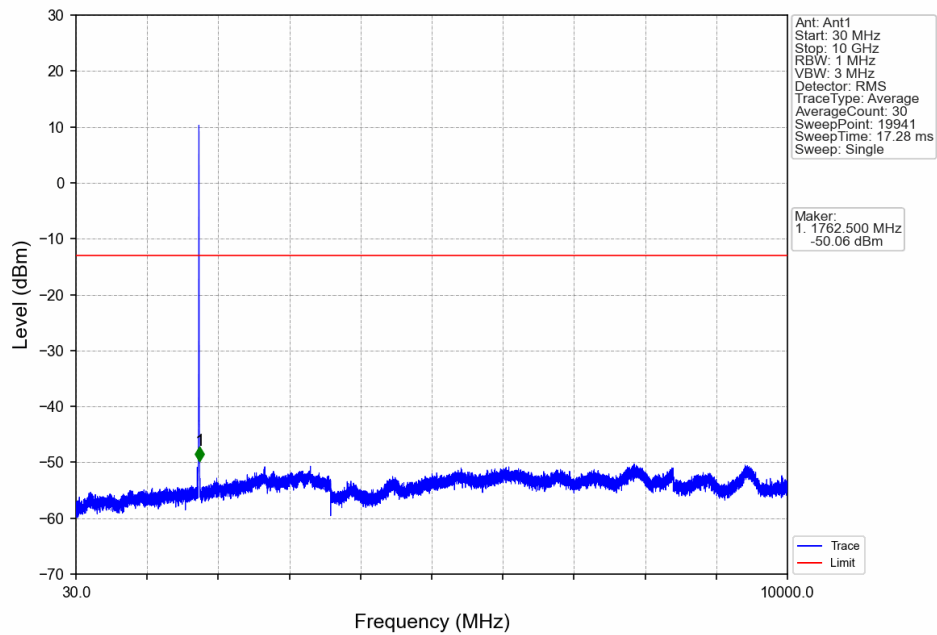
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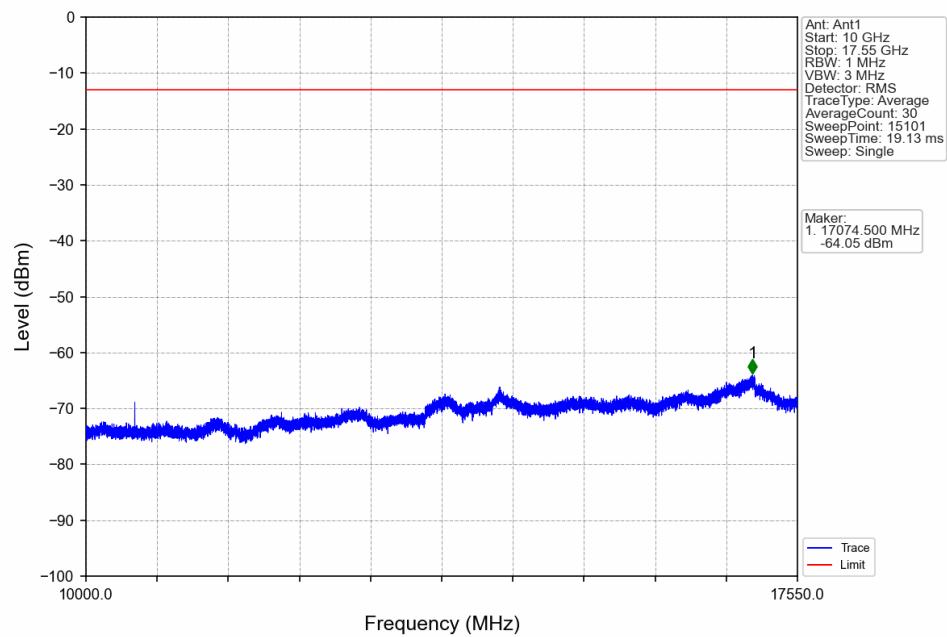
Band IV_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



Band IV_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



Band IV_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



Field Strength of Spurious Radiation

WCDMA Band IV ANT31-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3424.8	-65.29	-13	-52.29	-69.91	3.36	7.98	Horizontal	Pass
5137.2	-62.08	-13	-49.08	-67.7	4.61	10.23	Horizontal	Pass
6849.6	-61.13	-13	-48.13	-67.17	4.9	10.94	Horizontal	Pass
3424.8	-66.31	-13	-53.31	-70.93	3.36	7.98	Vertical	Pass
5137.2	-62.45	-13	-49.45	-68.07	4.61	10.23	Vertical	Pass
6849.6	-60.92	-13	-47.92	-66.96	4.9	10.94	Vertical	Pass

WCDMA Band IV ANT31-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3465.2	-66.57	-13	-53.57	-71.27	3.38	8.08	Horizontal	Pass
5197.8	-62.74	-13	-49.74	-68.37	4.63	10.26	Horizontal	Pass
6930.4	-61.05	-13	-48.05	-67.18	4.91	11.04	Horizontal	Pass
3465.2	-66.62	-13	-53.62	-71.32	3.38	8.08	Vertical	Pass
5197.8	-63.03	-13	-50.03	-68.66	4.63	10.26	Vertical	Pass
6930.4	-60.9	-13	-47.9	-67.03	4.91	11.04	Vertical	Pass

WCDMA Band IV ANT31-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3505.2	-66.37	-13	-53.37	-71.15	3.4	8.18	Horizontal	Pass
5257.8	-63.01	-13	-50.01	-68.66	4.65	10.3	Horizontal	Pass
7010.4	-60.84	-13	-47.84	-67.06	4.92	11.14	Horizontal	Pass
3505.2	-66.83	-13	-53.83	-71.61	3.4	8.18	Vertical	Pass
5257.8	-62.96	-13	-49.96	-68.61	4.65	10.3	Vertical	Pass
7010.4	-60.8	-13	-47.8	-67.02	4.92	11.14	Vertical	Pass

Remark:

- The field strength is calculated by adding the S.G.Power, Antenna Gain & Cable Loss. The basic equation with a sample calculation is as follows:

$$\text{EIRP} = \text{S.G.Power} + \text{Antenna Gain} - \text{Cable Loss}$$

$$\text{Over Limit} = \text{Limit} - \text{EIRP}$$
- All antennas of RSE are tested, and only the worst data is presented.

---End of Attachment---