

Appendix Test Data for WCDMA_band_4

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 Band4_EIRP

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	22.87	0.87	23.74	<=30	Pass
			1732.6	22.80	0.87	23.67	<=30	Pass
			1752.6	22.24	0.87	23.11	<=30	Pass
	HSDPA	Subtest 1	1712.4	20.79	0.87	21.66	<=30	Pass
		Subtest 2	1712.4	20.80	0.87	21.67	<=30	Pass
		Subtest 3	1712.4	20.80	0.87	21.67	<=30	Pass
		Subtest 4	1712.4	20.79	0.87	21.66	<=30	Pass
		Subtest 1	1732.6	20.70	0.87	21.57	<=30	Pass
		Subtest 2	1732.6	20.72	0.87	21.59	<=30	Pass
		Subtest 3	1732.6	20.69	0.87	21.56	<=30	Pass
		Subtest 4	1732.6	20.75	0.87	21.62	<=30	Pass
		Subtest 1	1752.6	20.47	0.87	21.34	<=30	Pass
		Subtest 2	1752.6	20.50	0.87	21.37	<=30	Pass
		Subtest 3	1752.6	20.47	0.87	21.34	<=30	Pass
		Subtest 4	1752.6	20.43	0.87	21.30	<=30	Pass
	HSUPA	Subtest 1	1712.4	18.80	0.87	19.67	<=30	Pass
		Subtest 2	1712.4	18.01	0.87	18.88	<=30	Pass
		Subtest 3	1712.4	18.69	0.87	19.56	<=30	Pass
		Subtest 4	1712.4	18.70	0.87	19.57	<=30	Pass
		Subtest 5	1712.4	19.19	0.87	20.06	<=30	Pass
		Subtest 1	1732.6	18.01	0.87	18.88	<=30	Pass
		Subtest 2	1732.6	18.16	0.87	19.03	<=30	Pass
		Subtest 3	1732.6	18.13	0.87	19.00	<=30	Pass
		Subtest 4	1732.6	18.06	0.87	18.93	<=30	Pass
		Subtest 5	1732.6	19.00	0.87	19.87	<=30	Pass
		Subtest 1	1752.6	17.77	0.87	18.64	<=30	Pass
		Subtest 2	1752.6	17.73	0.87	18.60	<=30	Pass
		Subtest 3	1752.6	18.49	0.87	19.36	<=30	Pass
		Subtest 4	1752.6	17.84	0.87	18.71	<=30	Pass
		Subtest 5	1752.6	18.66	0.87	19.53	<=30	Pass

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 Band4

Band: 4							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	1712.4	20	3.15	3.848	0.0022	-2.5 to 2.5	Pass
			3.80	3.533	0.0021	-2.5 to 2.5	Pass
			4.26	3.734	0.0022	-2.5 to 2.5	Pass
		-30	3.80	4.134	0.0024	-2.5 to 2.5	Pass
		-20	3.80	4.520	0.0026	-2.5 to 2.5	Pass
		-10	3.80	4.342	0.0025	-2.5 to 2.5	Pass
		0	3.80	4.570	0.0027	-2.5 to 2.5	Pass
		10	3.80	4.778	0.0028	-2.5 to 2.5	Pass
		30	3.80	5.608	0.0033	-2.5 to 2.5	Pass
		40	3.80	4.470	0.0026	-2.5 to 2.5	Pass
		50	3.80	4.964	0.0029	-2.5 to 2.5	Pass
	1732.6	20	3.15	1.774	0.0010	-2.5 to 2.5	Pass
			3.80	0.994	0.0006	-2.5 to 2.5	Pass
			4.26	0.966	0.0006	-2.5 to 2.5	Pass
		-30	3.80	1.588	0.0009	-2.5 to 2.5	Pass
		-20	3.80	0.322	0.0002	-2.5 to 2.5	Pass
		-10	3.80	0.987	0.0006	-2.5 to 2.5	Pass
		0	3.80	0.043	0.0000	-2.5 to 2.5	Pass
		10	3.80	1.931	0.0011	-2.5 to 2.5	Pass
		30	3.80	0.987	0.0006	-2.5 to 2.5	Pass
		40	3.80	0.322	0.0002	-2.5 to 2.5	Pass
		50	3.80	0.186	0.0001	-2.5 to 2.5	Pass
	1752.6	20	3.15	-1.881	-0.0011	-2.5 to 2.5	Pass
			3.80	-1.853	-0.0011	-2.5 to 2.5	Pass
			4.26	-1.395	-0.0008	-2.5 to 2.5	Pass
		-30	3.80	-1.552	-0.0009	-2.5 to 2.5	Pass
		-20	3.80	-1.237	-0.0007	-2.5 to 2.5	Pass
		-10	3.80	-0.908	-0.0005	-2.5 to 2.5	Pass
		0	3.80	-1.109	-0.0006	-2.5 to 2.5	Pass
		10	3.80	-0.923	-0.0005	-2.5 to 2.5	Pass
		30	3.80	-1.166	-0.0007	-2.5 to 2.5	Pass
		40	3.80	-1.516	-0.0009	-2.5 to 2.5	Pass
		50	3.80	-1.473	-0.0008	-2.5 to 2.5	Pass
HSDPA	1712.4	20	3.15	1.266	0.0007	-2.5 to 2.5	Pass
			3.80	1.566	0.0009	-2.5 to 2.5	Pass
			4.26	1.409	0.0008	-2.5 to 2.5	Pass
		-30	3.80	0.215	0.0001	-2.5 to 2.5	Pass
		-20	3.80	1.738	0.0010	-2.5 to 2.5	Pass
		-10	3.80	1.051	0.0006	-2.5 to 2.5	Pass
		0	3.80	1.717	0.0010	-2.5 to 2.5	Pass
		10	3.80	0.751	0.0004	-2.5 to 2.5	Pass
		30	3.80	1.159	0.0007	-2.5 to 2.5	Pass
		40	3.80	0.122	0.0001	-2.5 to 2.5	Pass
		50	3.80	2.017	0.0012	-2.5 to 2.5	Pass
	1732.6	20	3.15	-0.880	-0.0005	-2.5 to 2.5	Pass
			3.80	-1.159	-0.0007	-2.5 to 2.5	Pass
			4.26	-1.438	-0.0008	-2.5 to 2.5	Pass
		-30	3.80	-0.916	-0.0005	-2.5 to 2.5	Pass
		-20	3.80	-1.080	-0.0006	-2.5 to 2.5	Pass
		-10	3.80	-0.672	-0.0004	-2.5 to 2.5	Pass

		0	3.80	-1.016	-0.0006	-2.5 to 2.5	Pass
		10	3.80	-0.093	-0.0001	-2.5 to 2.5	Pass
		30	3.80	-1.094	-0.0006	-2.5 to 2.5	Pass
		40	3.80	-1.044	-0.0006	-2.5 to 2.5	Pass
		50	3.80	-0.737	-0.0004	-2.5 to 2.5	Pass
	1752.6	20	3.15	-4.013	-0.0023	-2.5 to 2.5	Pass
			3.80	-4.563	-0.0026	-2.5 to 2.5	Pass
			4.26	-4.656	-0.0027	-2.5 to 2.5	Pass
		-30	3.80	-3.741	-0.0021	-2.5 to 2.5	Pass
		-20	3.80	-4.563	-0.0026	-2.5 to 2.5	Pass
		-10	3.80	-3.755	-0.0021	-2.5 to 2.5	Pass
		0	3.80	-3.641	-0.0021	-2.5 to 2.5	Pass
		10	3.80	-4.499	-0.0026	-2.5 to 2.5	Pass
		30	3.80	-3.576	-0.0020	-2.5 to 2.5	Pass
		40	3.80	-4.220	-0.0024	-2.5 to 2.5	Pass
		50	3.80	-4.814	-0.0027	-2.5 to 2.5	Pass
HSUPA	1712.4	20	3.15	5.815	0.0034	-2.5 to 2.5	Pass
			3.80	7.703	0.0045	-2.5 to 2.5	Pass
			4.26	5.965	0.0035	-2.5 to 2.5	Pass
		-30	3.80	7.818	0.0046	-2.5 to 2.5	Pass
		-20	3.80	7.145	0.0042	-2.5 to 2.5	Pass
		-10	3.80	6.688	0.0039	-2.5 to 2.5	Pass
		0	3.80	7.961	0.0046	-2.5 to 2.5	Pass
		10	3.80	7.875	0.0046	-2.5 to 2.5	Pass
		30	3.80	5.450	0.0032	-2.5 to 2.5	Pass
		40	3.80	8.333	0.0049	-2.5 to 2.5	Pass
		50	3.80	6.638	0.0039	-2.5 to 2.5	Pass
	1732.6	20	3.15	4.857	0.0028	-2.5 to 2.5	Pass
			3.80	4.263	0.0025	-2.5 to 2.5	Pass
			4.26	4.277	0.0025	-2.5 to 2.5	Pass
		-30	3.80	5.593	0.0032	-2.5 to 2.5	Pass
		-20	3.80	5.629	0.0032	-2.5 to 2.5	Pass
		-10	3.80	4.399	0.0025	-2.5 to 2.5	Pass
		0	3.80	4.692	0.0027	-2.5 to 2.5	Pass
		10	3.80	4.606	0.0027	-2.5 to 2.5	Pass
		30	3.80	5.414	0.0031	-2.5 to 2.5	Pass
		40	3.80	5.028	0.0029	-2.5 to 2.5	Pass
		50	3.80	5.307	0.0031	-2.5 to 2.5	Pass
	1752.6	20	3.15	2.518	0.0014	-2.5 to 2.5	Pass
			3.80	2.761	0.0016	-2.5 to 2.5	Pass
			4.26	1.853	0.0011	-2.5 to 2.5	Pass
		-30	3.80	3.498	0.0020	-2.5 to 2.5	Pass
		-20	3.80	1.516	0.0009	-2.5 to 2.5	Pass
		-10	3.80	3.433	0.0020	-2.5 to 2.5	Pass
		0	3.80	2.332	0.0013	-2.5 to 2.5	Pass
		10	3.80	3.777	0.0022	-2.5 to 2.5	Pass
		30	3.80	3.970	0.0023	-2.5 to 2.5	Pass
		40	3.80	2.382	0.0014	-2.5 to 2.5	Pass
		50	3.80	3.462	0.0020	-2.5 to 2.5	Pass

3. Modulation Characteristics

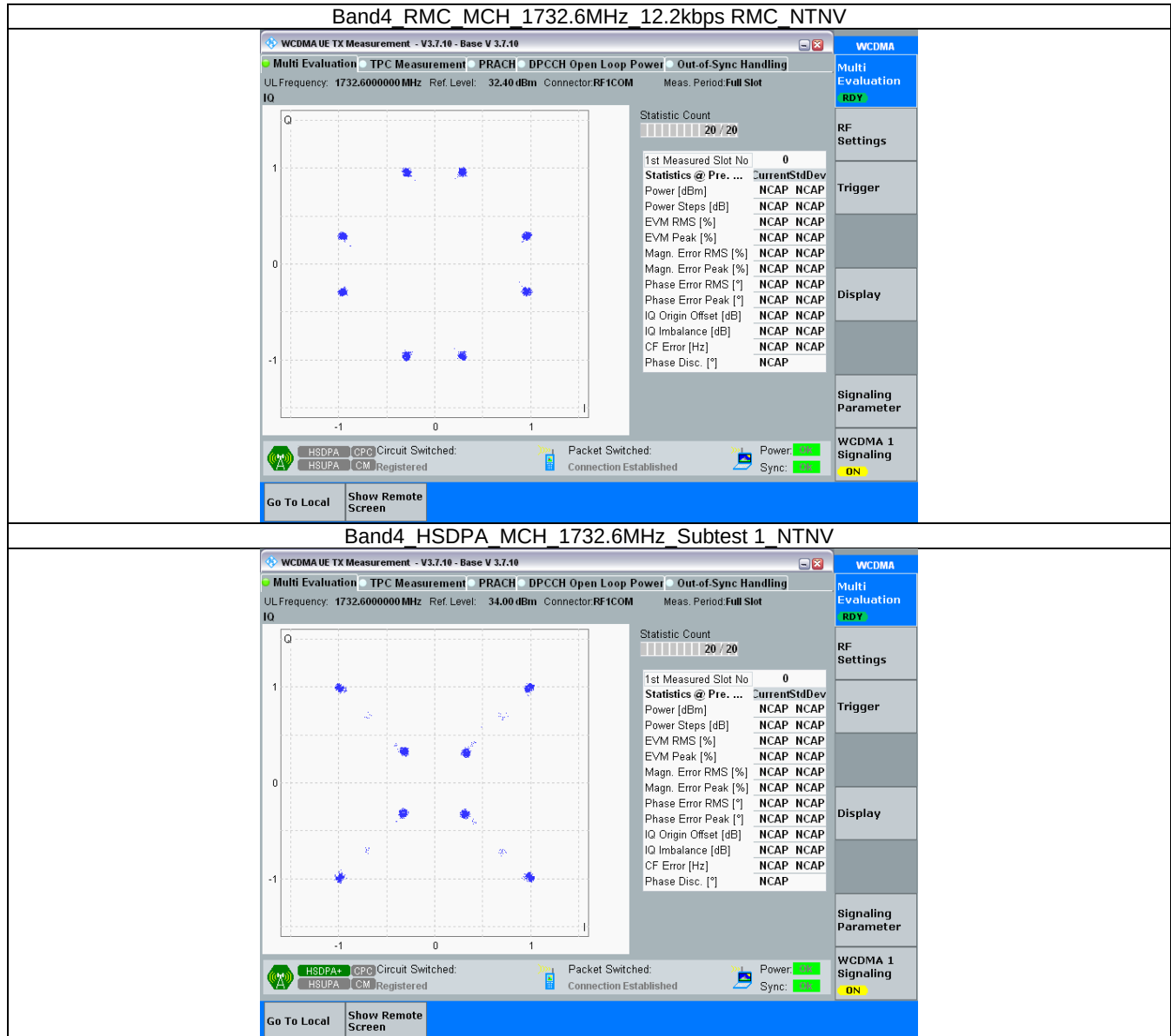
3.1 Test Result

3.1.1 Band4

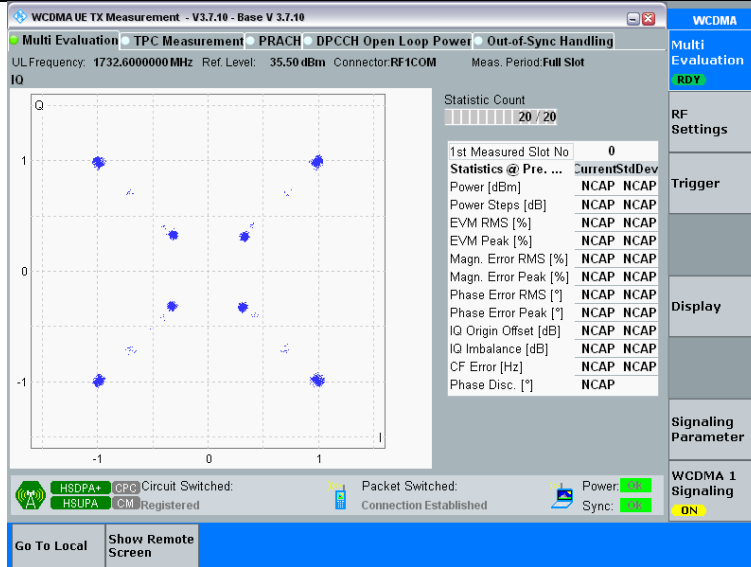
Band: 4						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1732.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	1732.6	Refer To Test Graph		Pass
	HSUPA	Subtest 1	1732.6	Refer To Test Graph		Pass

3.2 Test Graph

3.2.1 Band4



Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band4_OBW

Band: 4						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	4.183	/	Pass
			1732.6	4.198	/	Pass
			1752.6	4.182	/	Pass
	HSDPA	Subtest 1	1712.4	4.175	/	Pass
			1732.6	4.180	/	Pass
			1752.6	4.185	/	Pass
	HSUPA	Subtest 1	1712.4	4.195	/	Pass
			1732.6	4.221	/	Pass
			1752.6	4.193	/	Pass

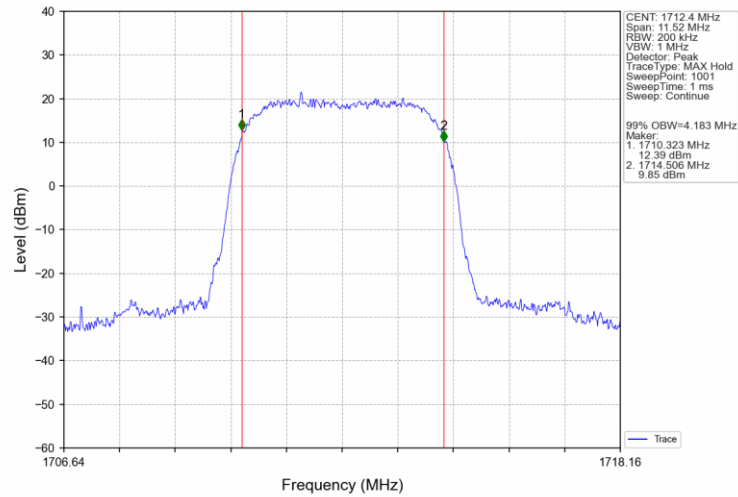
4.1.2 Band4_XDB

Band: 4						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	4.794	/	Pass
			1732.6	4.799	/	Pass
			1752.6	4.814	/	Pass
	HSDPA	Subtest 1	1712.4	4.806	/	Pass
			1732.6	4.814	/	Pass
			1752.6	4.806	/	Pass
	HSUPA	Subtest 1	1712.4	4.817	/	Pass
			1732.6	4.803	/	Pass
			1752.6	4.820	/	Pass

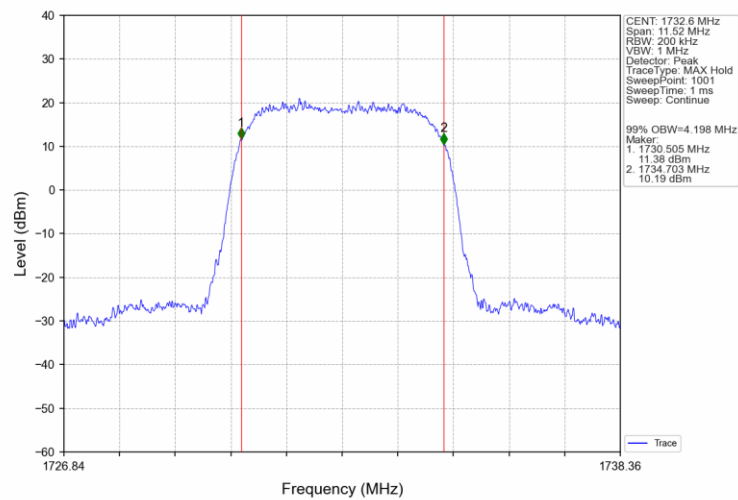
4.2 Test Graph

4.2.1 Band4_OBW

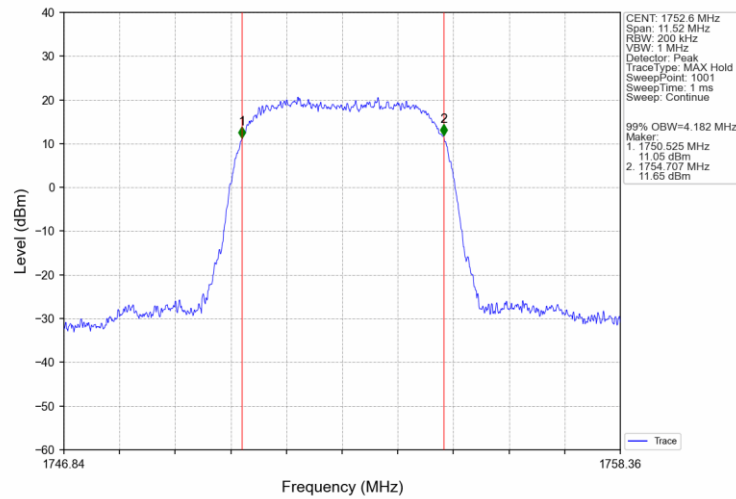
Band4_RMC_LCH_1712.4MHz_12.2kbps RMC_NTNV



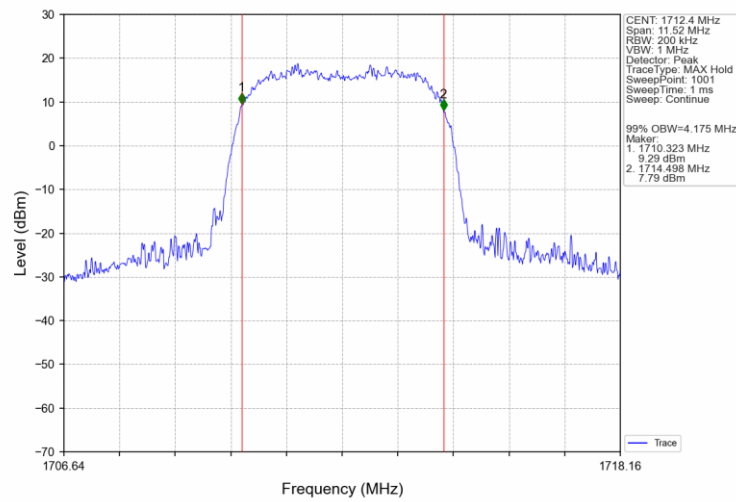
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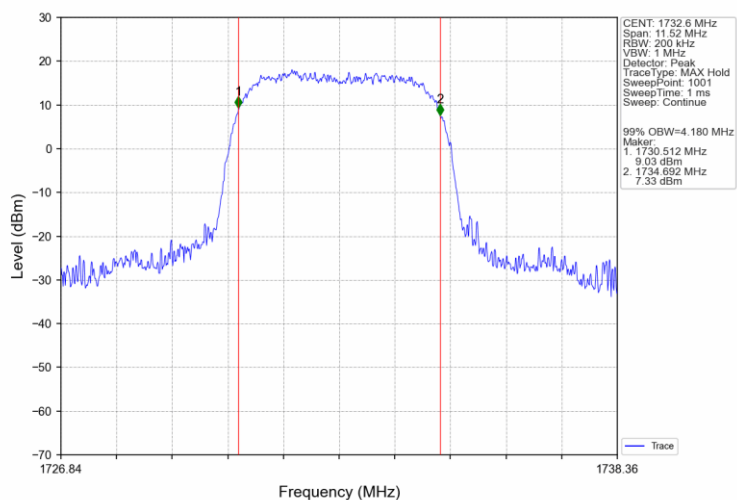
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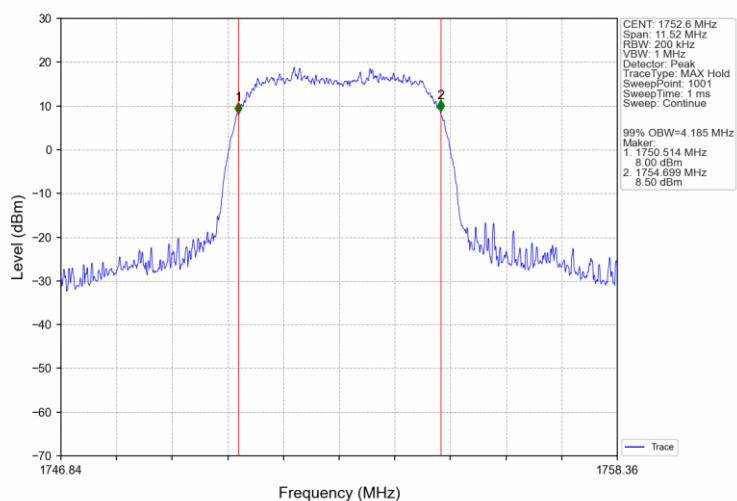
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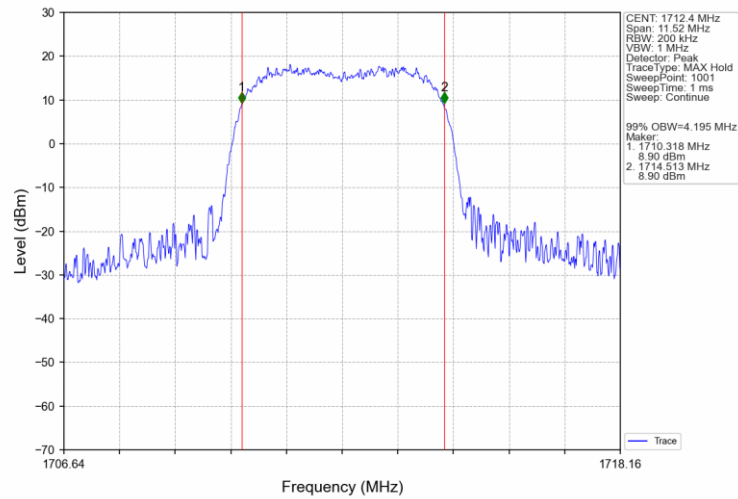
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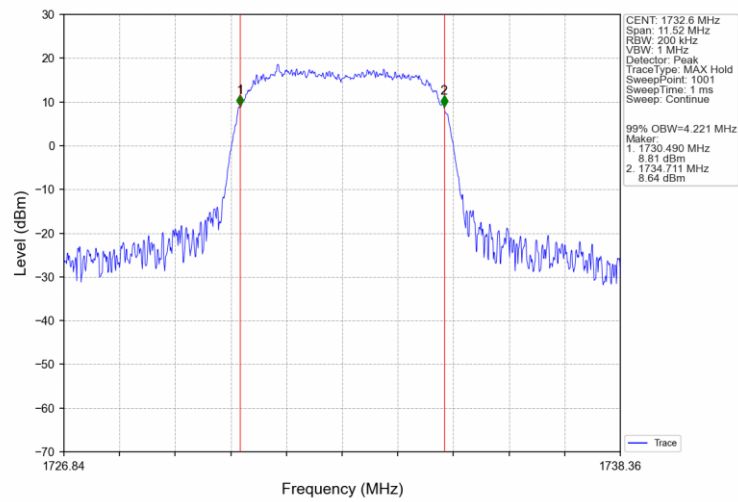
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



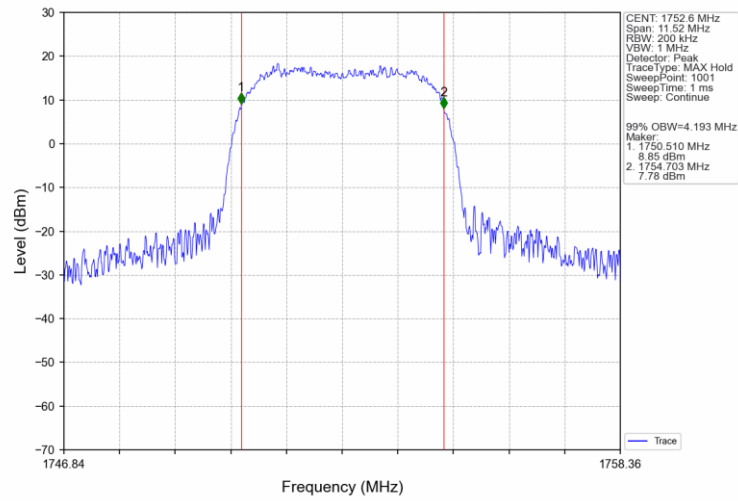
Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV

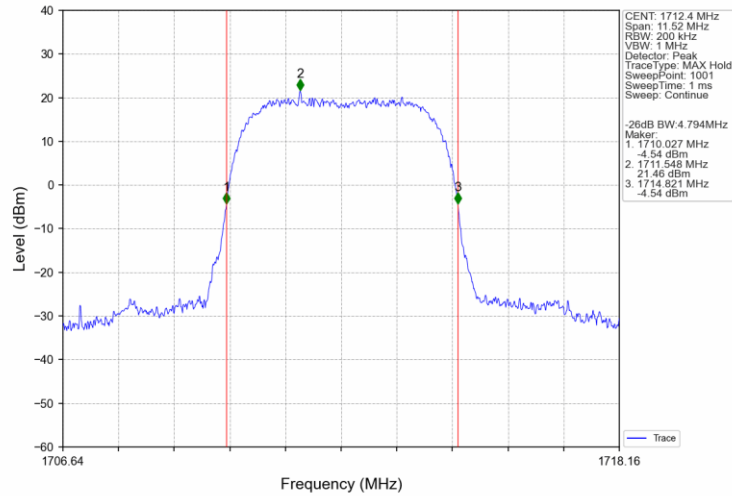


Band4_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV

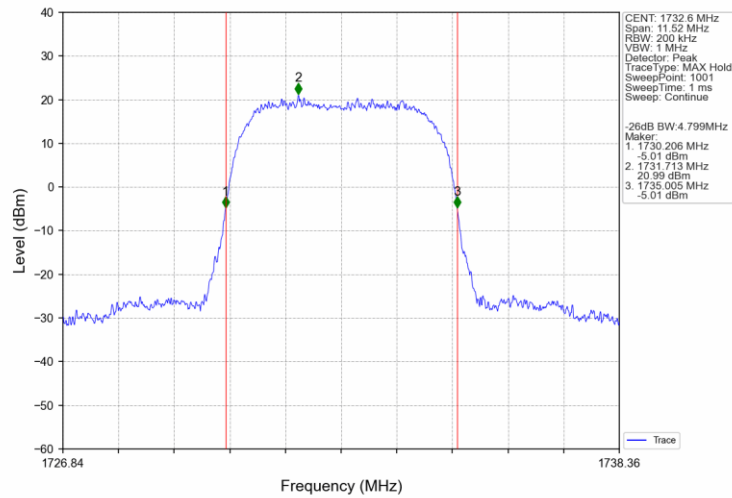


4.2.2 Band4_XDB

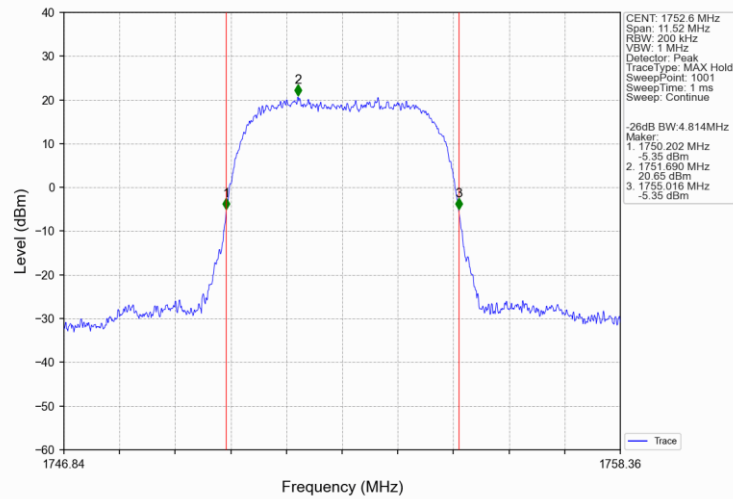
Band4_RMC_LCH_1712.4MHz_12.2kbps RMC_NTNV



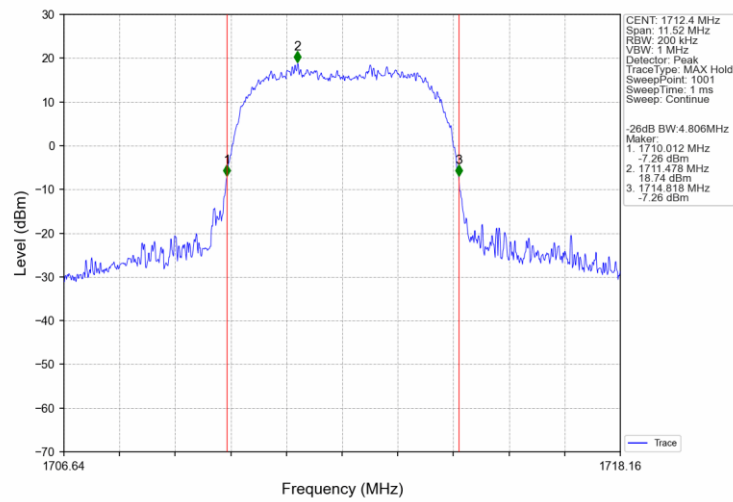
Band4_RMC_MCH_1732.6MHz_12.2kbps RMC_NTNV



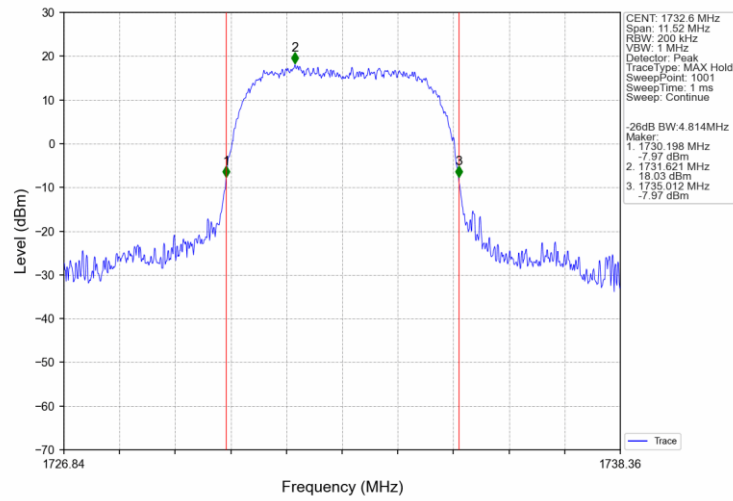
Band4_RMC_HCH_1752.6MHz_12.2kbps RMC_NTNV



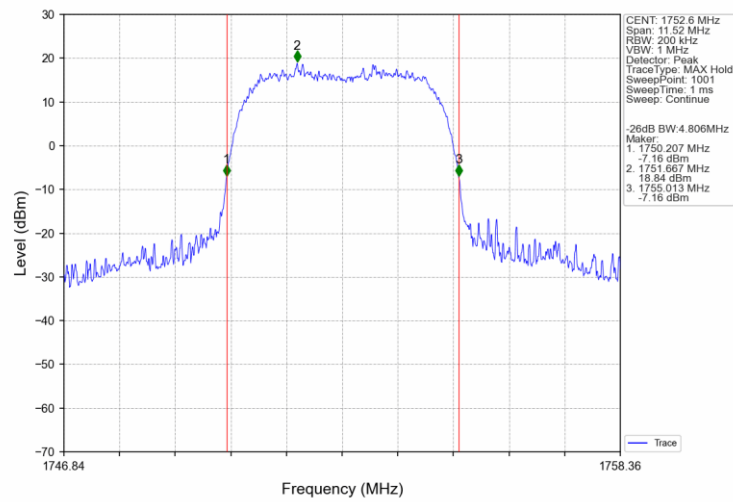
Band4_HSDPA_LCH_1712.4MHz_Subtest 1_NTNV



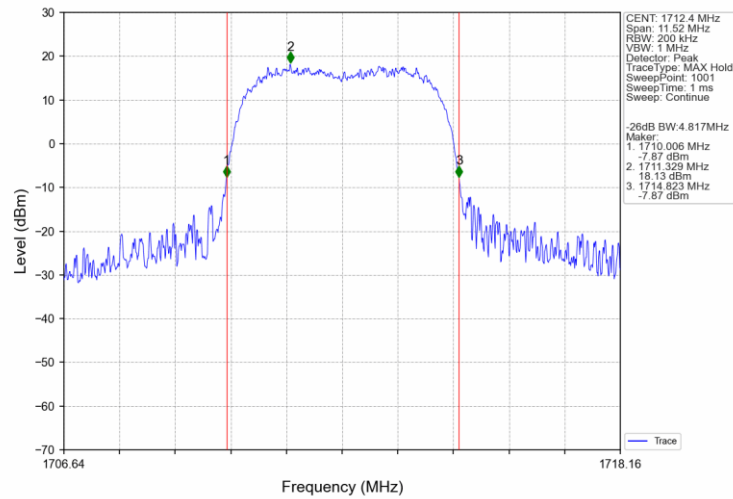
Band4_HSDPA_MCH_1732.6MHz_Subtest 1_NTNV



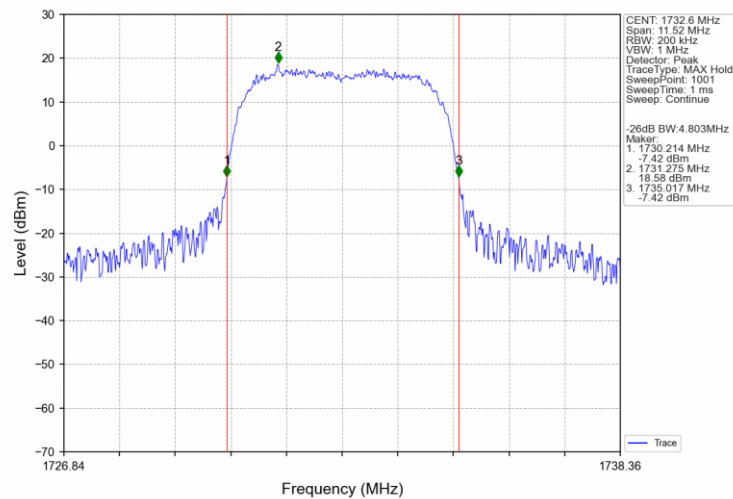
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV

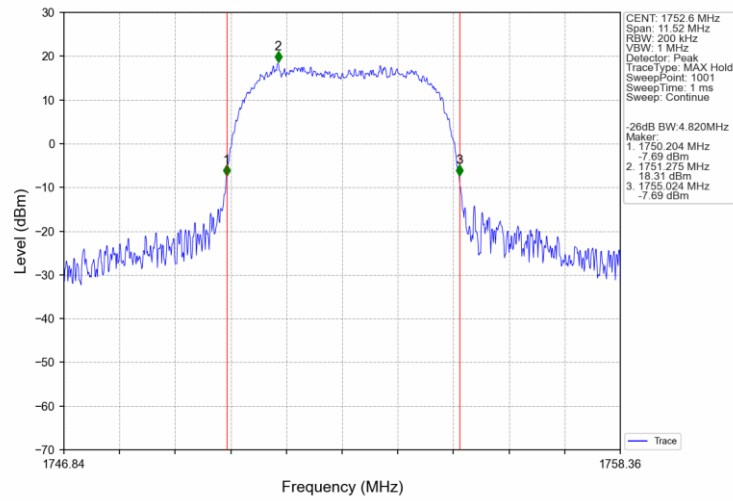


Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV





Band4_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV



5. Peak-Average Ratio

5.1 Test Result

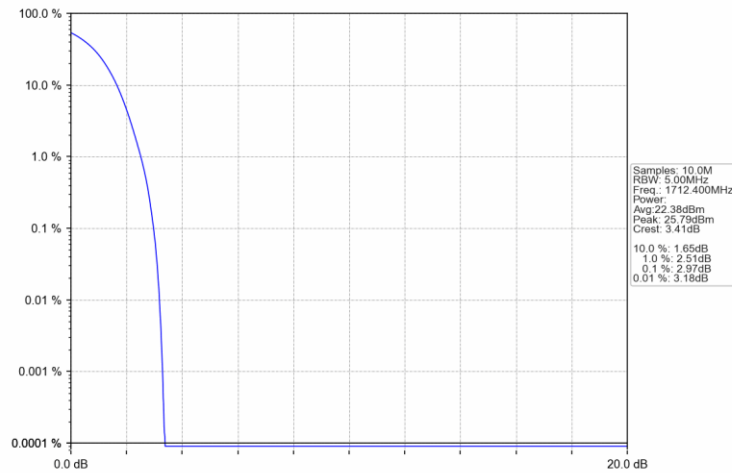
5.1.1 Band4

Band: 4						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1712.4	2.97	<=13	Pass
			1732.6	3.00	<=13	Pass
			1752.6	3.08	<=13	Pass
	HSDPA	Subtest 1	1712.4	5.68	<=13	Pass
			1732.6	5.75	<=13	Pass
			1752.6	5.70	<=13	Pass
	HSUPA	Subtest 1	1712.4	6.79	<=13	Pass
			1732.6	6.72	<=13	Pass
			1752.6	6.93	<=13	Pass

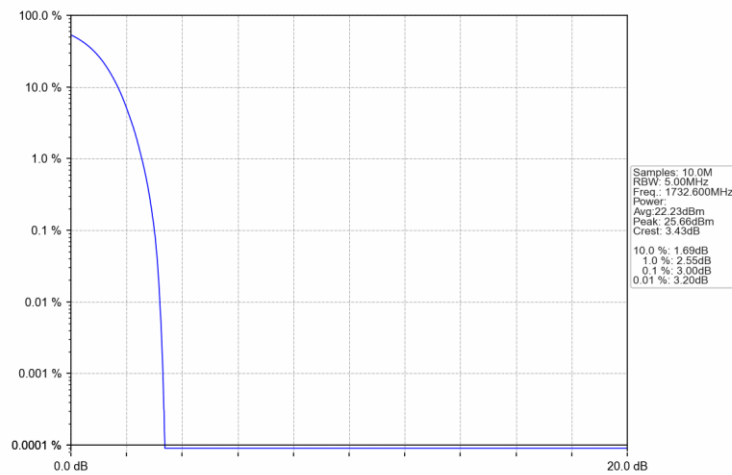
5.2 Test Graph

5.2.1 Band4

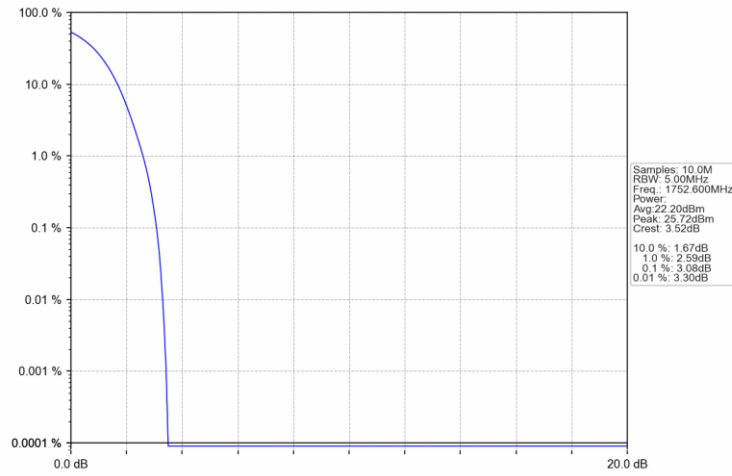
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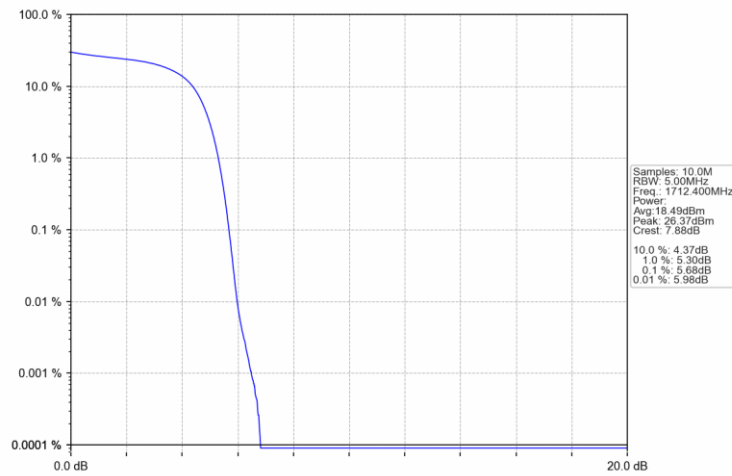
Band4_RMC_MCH_1732.6MHz_12.2kbps_RMC_NTNV



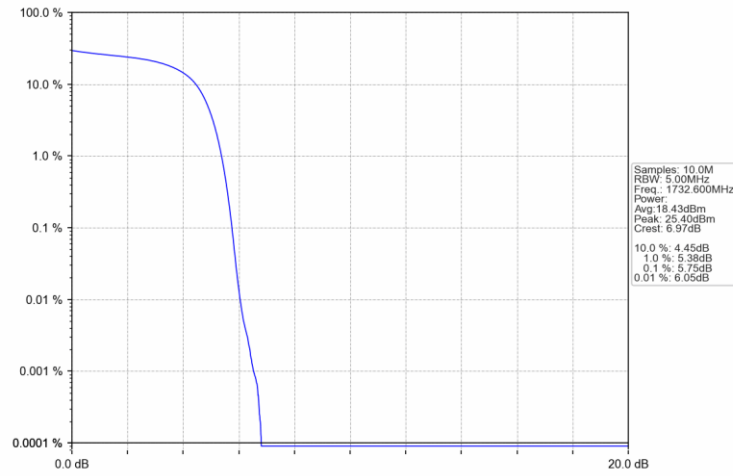
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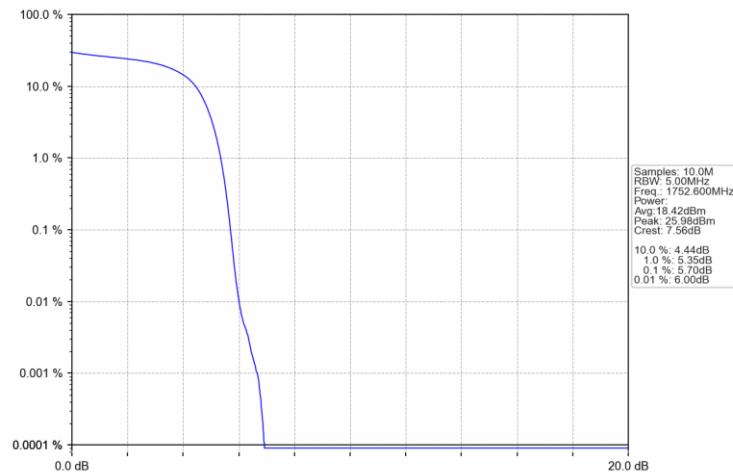
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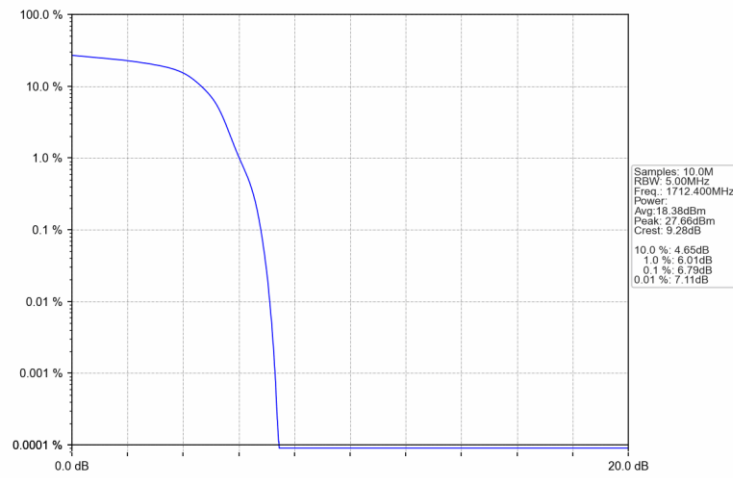
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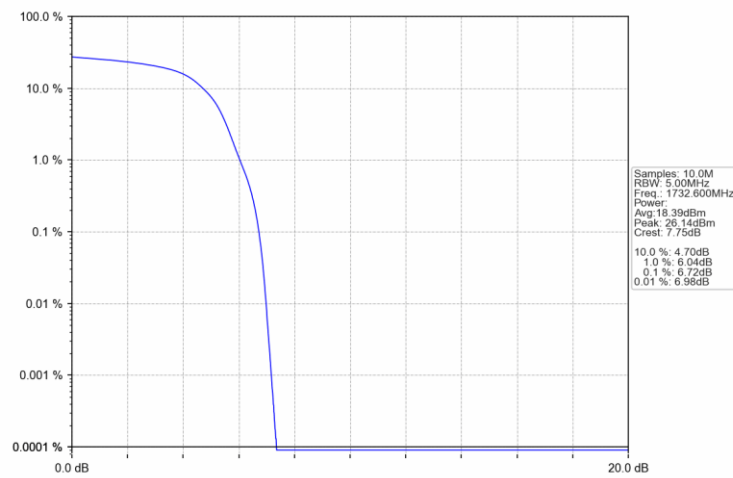
Band4_HSDPA_HCH_1752.6MHz_Subtest 1_NTNV



Band4_HSUPA_LCH_1712.4MHz_Subtest 1_NTNV



Band4_HSUPA_MCH_1732.6MHz_Subtest 1_NTNV



Band4_HSUPA_HCH_1752.6MHz_Subtest 1_NTNV

