

Appendix C: Test Data for WCDMA Band 5

Product Name: TD0301 LTE Wi-Fi Hotspot

Test Model: TD0301

C1. Effective (Isotropic) Radiated Power Output Data

C1.1 Test Result

Test Band: 5											
Test Mode		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
		LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
HSUPA	Subtest 1	19.02	18.85	19.56	-1.15	1.00	17.87	17.70	18.41	38.45	PASS
	Subtest 2	18.80	19.51	19.59	-1.15	1.00	17.65	18.36	18.44	38.45	PASS
	Subtest 3	18.74	19.02	19.84	-1.15	1.00	17.59	17.87	18.69	38.45	PASS
	Subtest 4	18.99	19.31	19.63	-1.15	1.00	17.84	18.16	18.48	38.45	PASS
	Subtest 5	18.77	19.02	19.57	-1.15	1.00	17.62	17.87	18.42	38.45	PASS
HSDPA	Subtest 1	18.82	19.18	19.69	-1.15	1.00	17.67	18.03	18.54	38.45	PASS
	Subtest 2	19.27	19.64	20.02	-1.15	1.00	18.12	18.49	18.87	38.45	PASS
	Subtest 3	18.84	19.28	19.78	-1.15	1.00	17.69	18.13	18.63	38.45	PASS
	Subtest 4	18.87	19.16	19.21	-1.15	1.00	17.72	18.01	18.06	38.45	PASS
RMC	12.2kbps RMC	22.71	22.97	23.48	-1.15	1.00	21.56	21.82	22.33	38.45	PASS

Note:

1) dBd = dBi - 2.15

2) EIRP = Conducted output power + Antenna gain (dBi)

3) ERP = Conducted output power + Antenna gain (dBd)

C2. Frequency stability

C2.1 Test Result

Test Band: 5 (Frequency Error VS. Voltage)										
Test Mode	Test Temp.	Test Volt.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
			LCH	MCH	HCH	LCH	MCH	HCH		
HSUPA	NT	LV	1.5879	-3.6335	-6.0725	0.0019	-0.0043	-0.0072	2.50	PASS
		NV	2.4033	-4.2701	-5.9795	0.0029	-0.0051	-0.0071	2.50	PASS
		HV	2.3460	-3.8910	-6.1440	0.0028	-0.0047	-0.0073	2.50	PASS
HSDPA	NT	LV	2.2531	-2.8038	-6.6948	0.0027	-0.0034	-0.0079	2.50	PASS
		NV	2.7037	-3.7909	-6.3944	0.0033	-0.0045	-0.0076	2.50	PASS
		HV	2.4462	-3.1042	-6.7377	0.0030	-0.0037	-0.0080	2.50	PASS
RMC	NT	LV	2.0242	-1.7381	-3.8838	0.0024	-0.0021	-0.0046	2.50	PASS
		NV	2.1172	-1.3304	-4.0770	0.0026	-0.0016	-0.0048	2.50	PASS
		HV	1.7238	-1.2231	-3.7408	0.0021	-0.0015	-0.0044	2.50	PASS

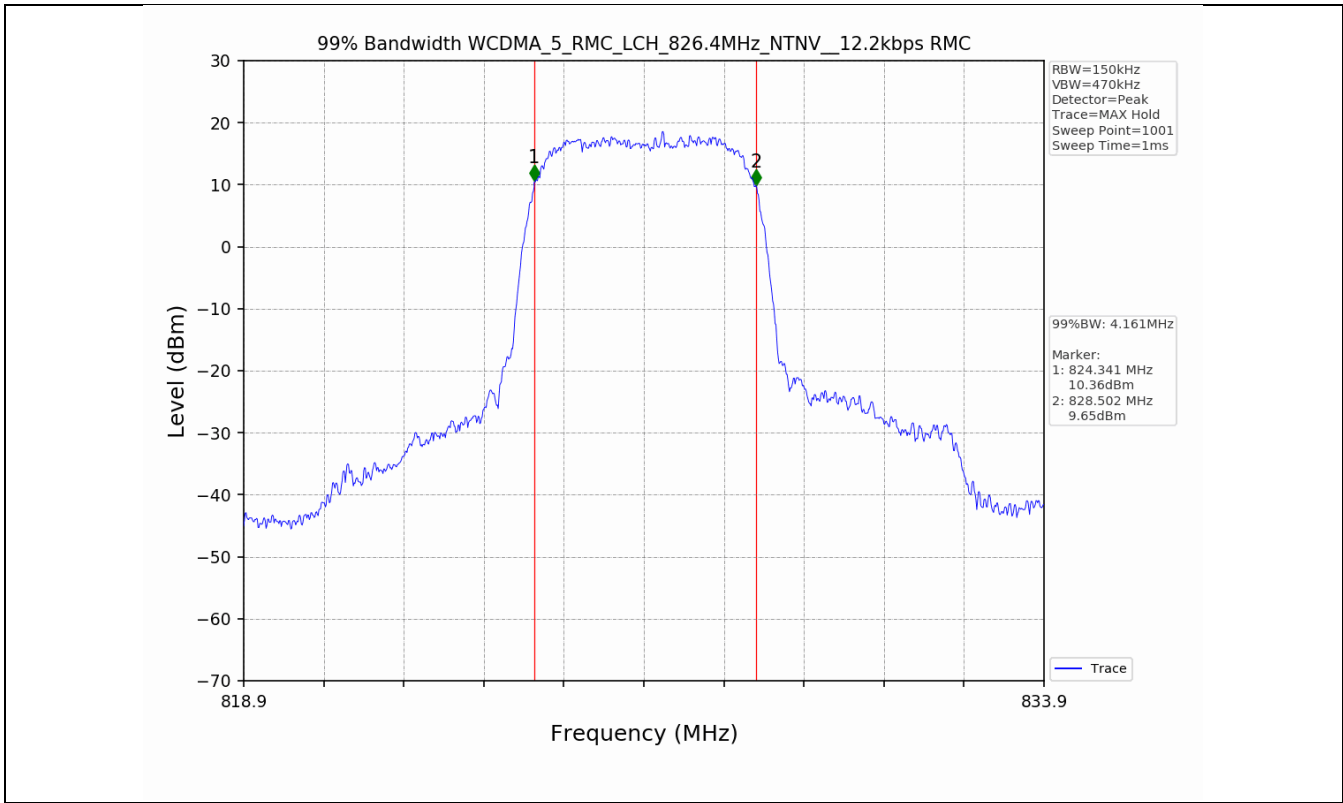
Test Band: 5 (Frequency Error VS. Temperature)										
Test Mode	Test Volt.	Test Temp.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
			LCH	MCH	HCH	LCH	MCH	HCH		
HSUPA	NV	-30.00	1.9598	-2.9397	-5.8079	0.0024	-0.0035	-0.0069	2.50	PASS
		-20.00	2.2388	-4.2844	-6.6161	0.0027	-0.0051	-0.0078	2.50	PASS
		-10.00	2.4104	-4.0698	-6.5231	0.0029	-0.0049	-0.0077	2.50	PASS
		0.00	3.7479	-2.6608	-6.8235	0.0045	-0.0032	-0.0081	2.50	PASS
		10.00	3.9411	-3.1829	-5.7650	0.0048	-0.0038	-0.0068	2.50	PASS
		20.00	2.2817	-2.8110	-6.3515	0.0028	-0.0034	-0.0075	2.50	PASS
		30.00	2.0385	-3.2759	-6.1870	0.0025	-0.0039	-0.0073	2.50	PASS
		40.00	2.3675	-2.9540	-6.8307	0.0029	-0.0035	-0.0081	2.50	PASS
	50.00	2.8753	-2.6107	-5.9009	0.0035	-0.0031	-0.0070	2.50	PASS	
HSDPA	NV	-30.00	2.3460	-2.5105	-6.7663	0.0028	-0.0030	-0.0080	2.50	PASS
		-20.00	2.5964	-4.1914	-5.8794	0.0031	-0.0050	-0.0069	2.50	PASS
		-10.00	1.7452	-4.0126	-5.6148	0.0021	-0.0048	-0.0066	2.50	PASS
		0.00	2.0099	-2.4962	-6.0081	0.0024	-0.0030	-0.0071	2.50	PASS
		10.00	2.6107	-3.7122	-6.4015	0.0032	-0.0044	-0.0076	2.50	PASS
		20.00	1.8811	-3.1257	-5.6863	0.0023	-0.0037	-0.0067	2.50	PASS
		30.00	2.2531	-3.6693	-5.8508	0.0027	-0.0044	-0.0069	2.50	PASS
		40.00	2.2745	-2.7609	-6.0439	0.0028	-0.0033	-0.0071	2.50	PASS
	50.00	1.6308	-2.7609	-6.3372	0.0020	-0.0033	-0.0075	2.50	PASS	
RMC	NV	-30.00	1.8883	-1.0657	-3.9411	0.0023	-0.0013	-0.0047	2.50	PASS
		-20.00	1.8454	-1.0014	-4.1986	0.0022	-0.0012	-0.0050	2.50	PASS
		-10.00	1.1516	-1.6594	-4.2343	0.0014	-0.0020	-0.0050	2.50	PASS
		0.00	1.1230	-0.8941	-3.7622	0.0014	-0.0011	-0.0044	2.50	PASS
		10.00	1.5950	-1.0085	-4.1413	0.0019	-0.0012	-0.0049	2.50	PASS
		20.00	1.5378	-1.1659	-4.4346	0.0019	-0.0014	-0.0052	2.50	PASS
		30.00	1.6165	-1.1802	-4.0483	0.0020	-0.0014	-0.0048	2.50	PASS
		40.00	1.5378	-0.5150	-3.7766	0.0019	-0.0006	-0.0045	2.50	PASS
	50.00	0.9871	-0.8297	-4.1127	0.0012	-0.0010	-0.0049	2.50	PASS	

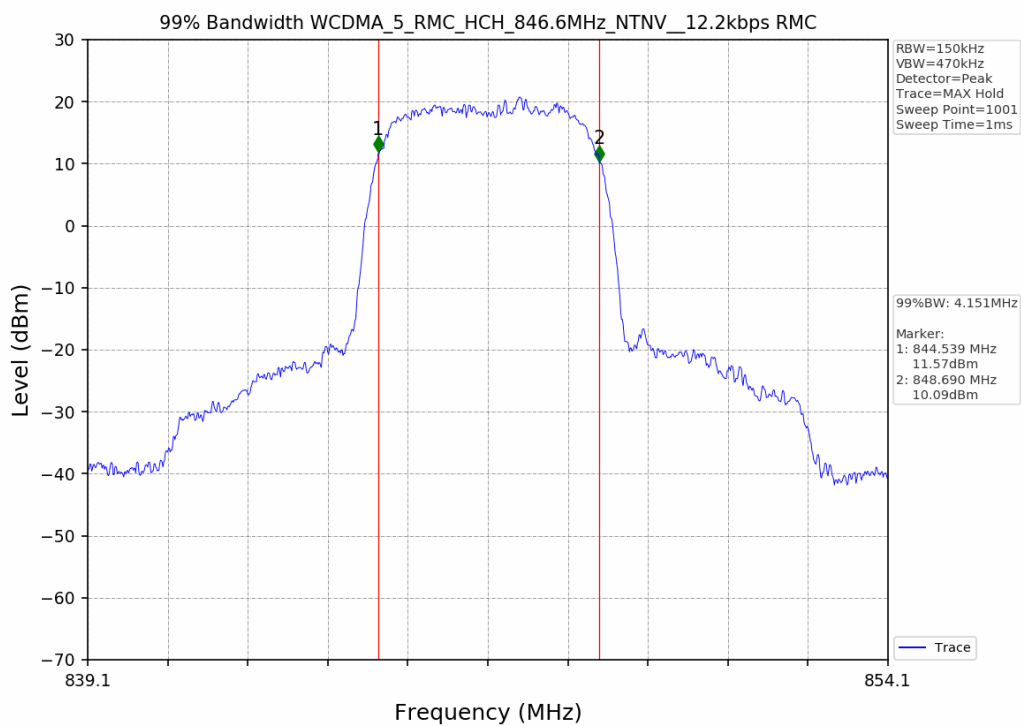
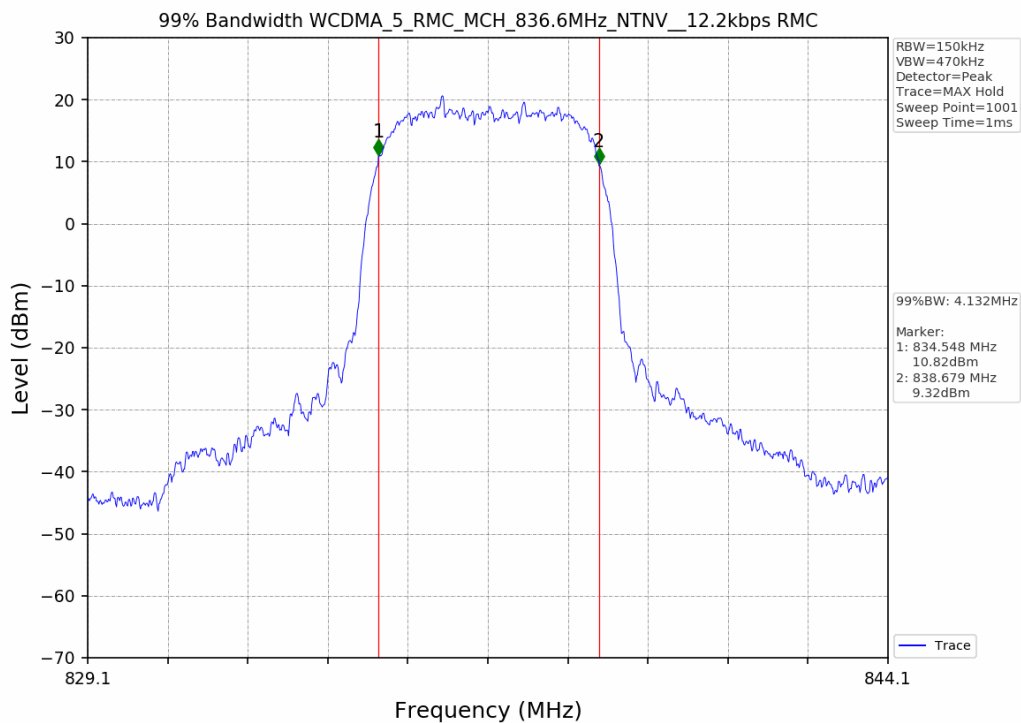
C3. 99% & 26dB Bandwidth

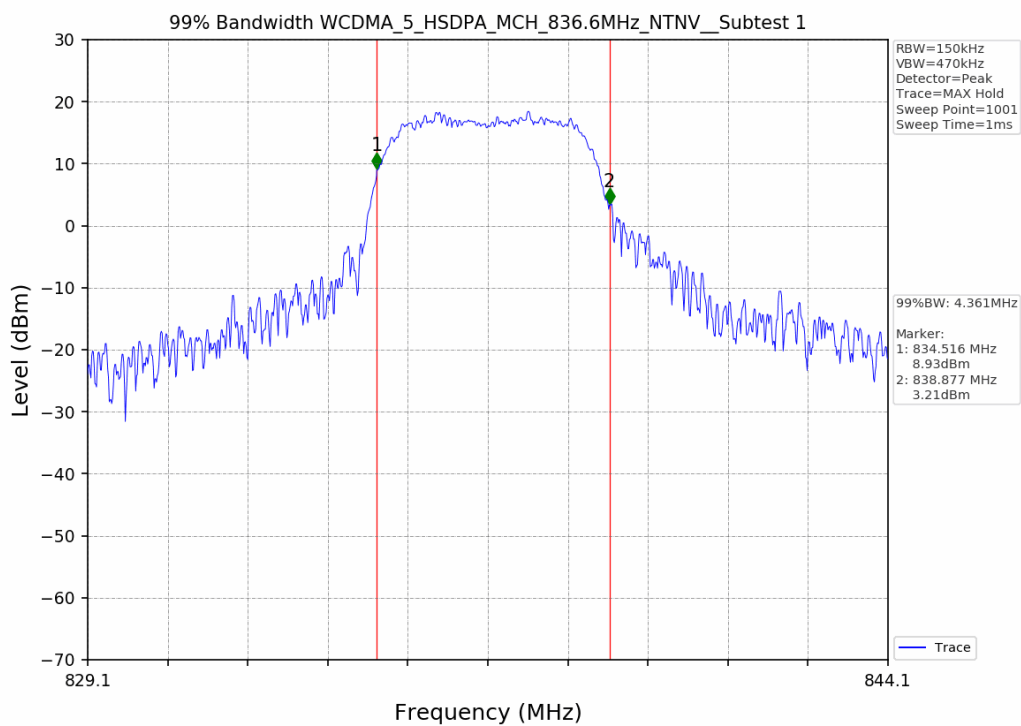
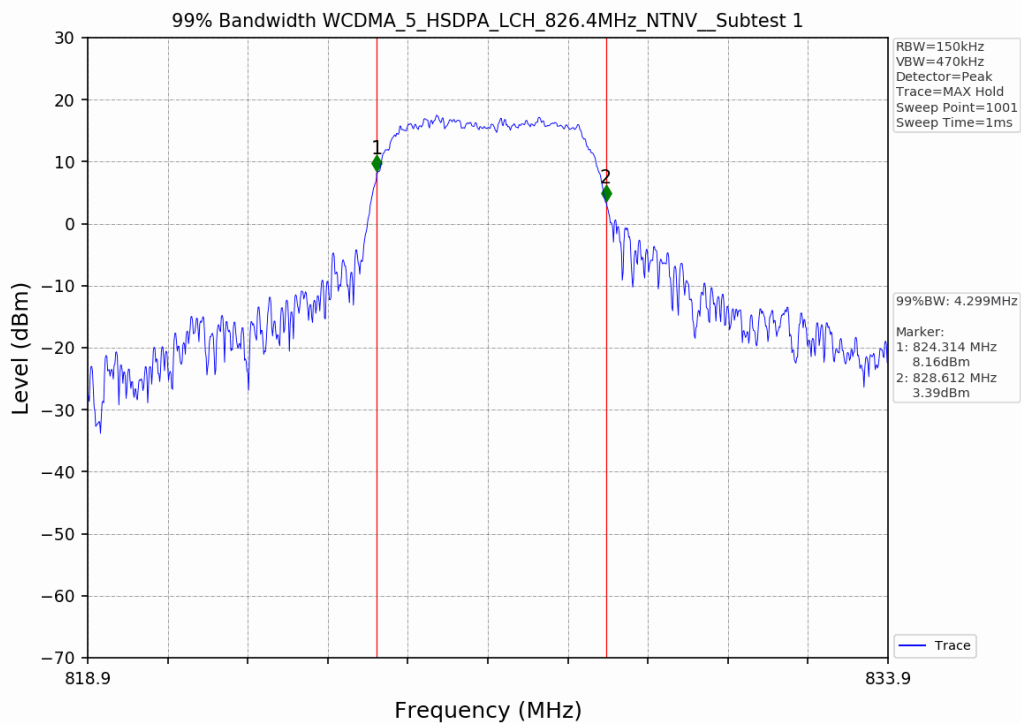
C3.1 Test Result

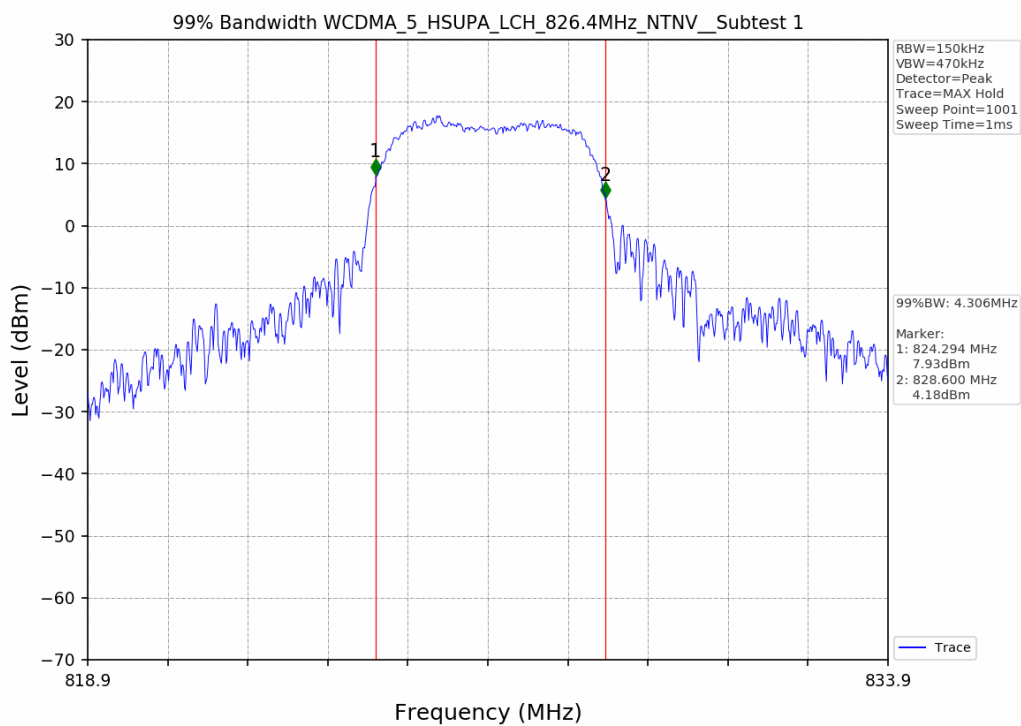
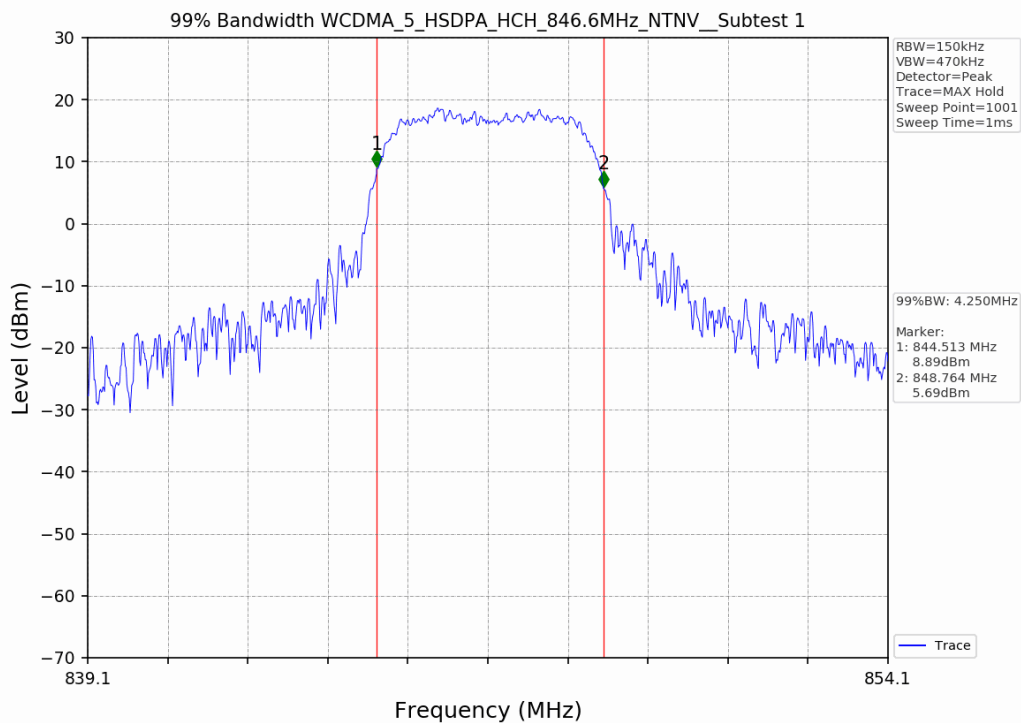
Test Band: 5					
Test Mode	99% Occupied Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
HSUPA	4.306	4.287	4.289	N/A	PASS
HSDPA	4.299	4.361	4.250	N/A	PASS
RMC	4.161	4.132	4.151	N/A	PASS

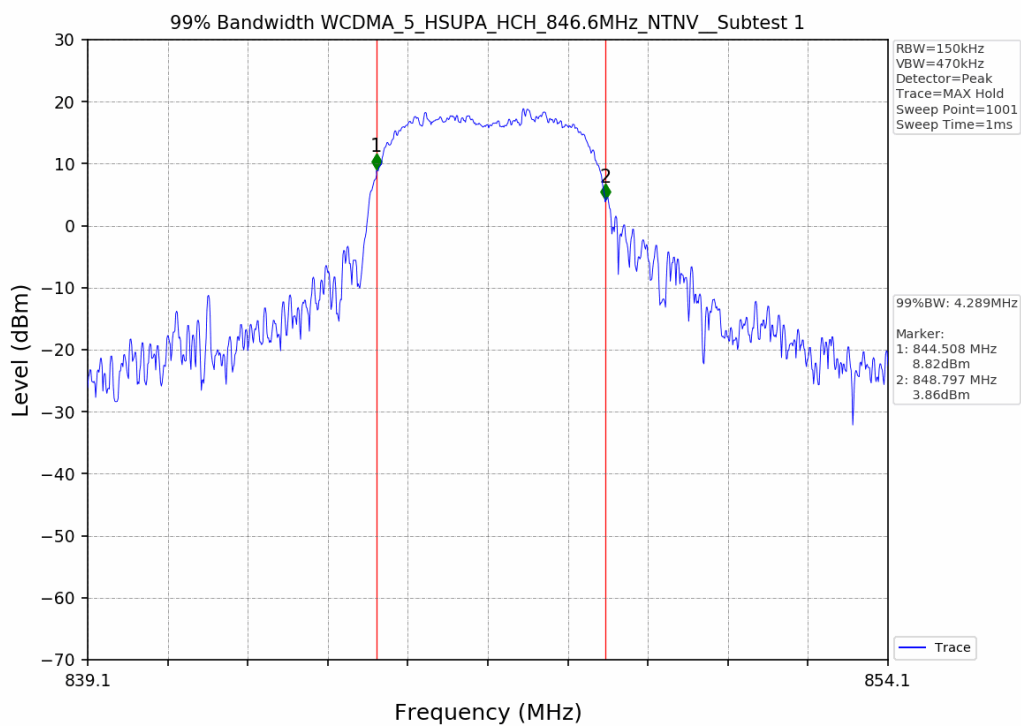
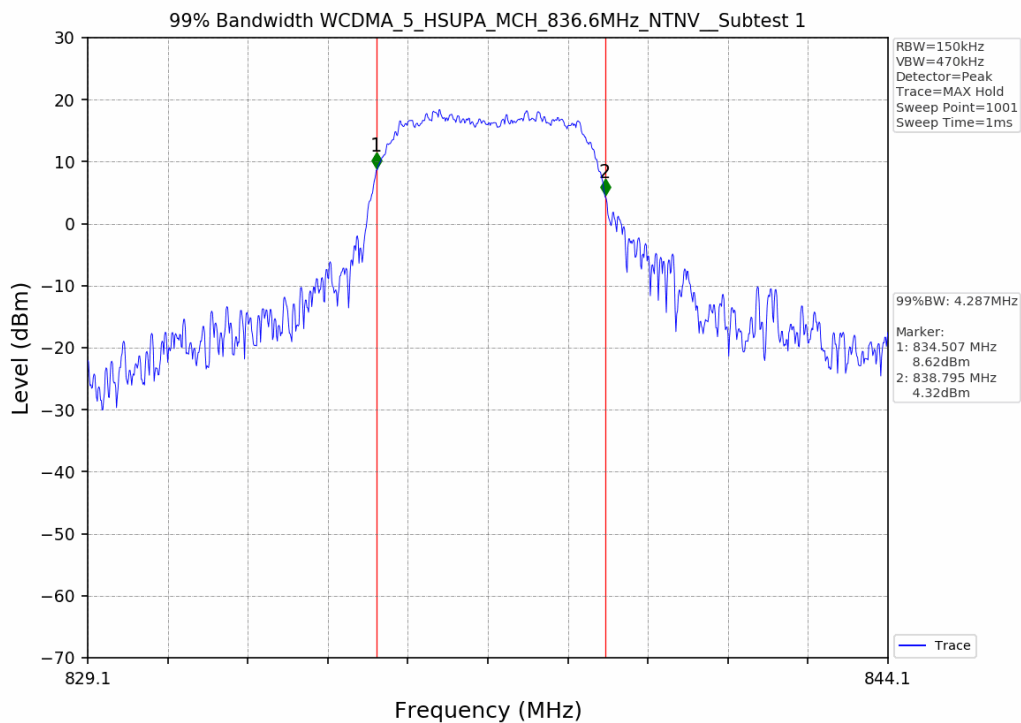
A3.2 Test Graph





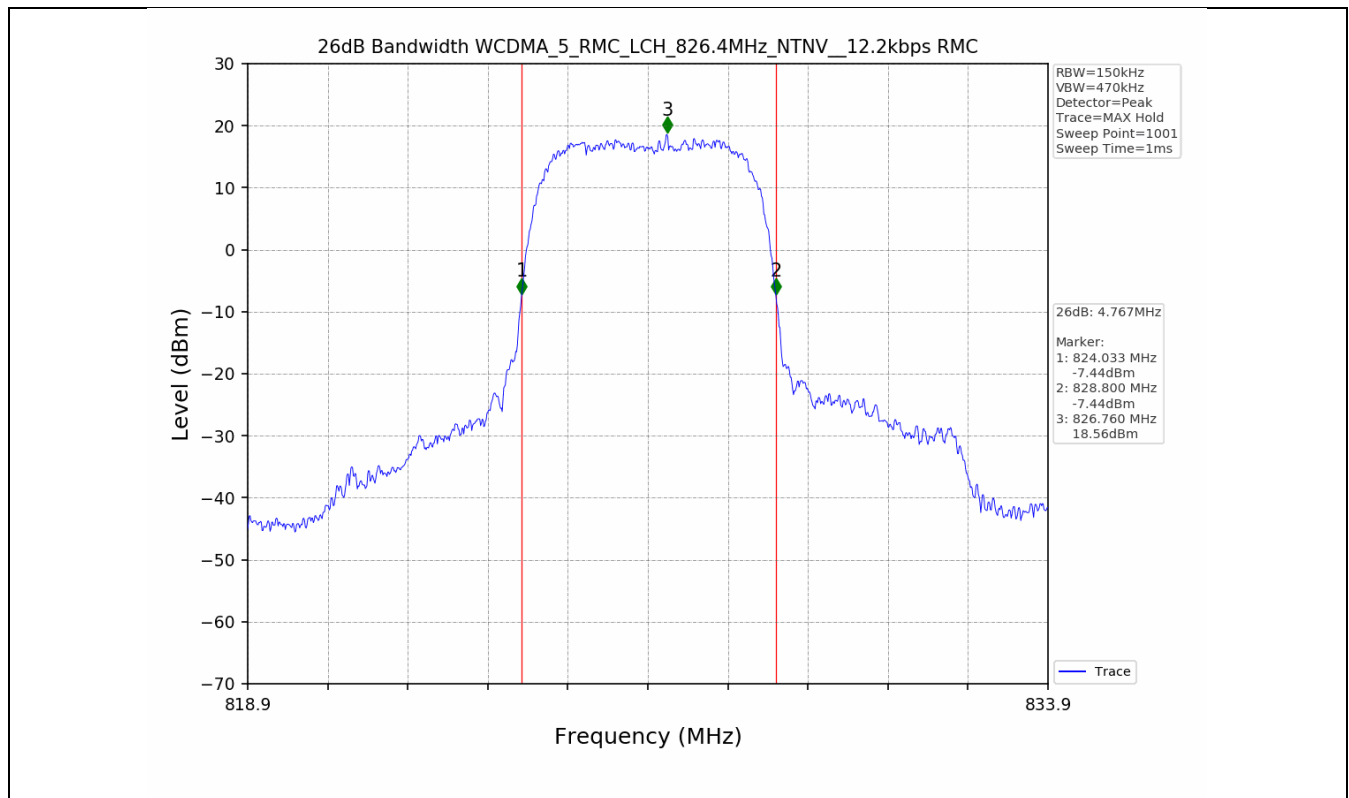


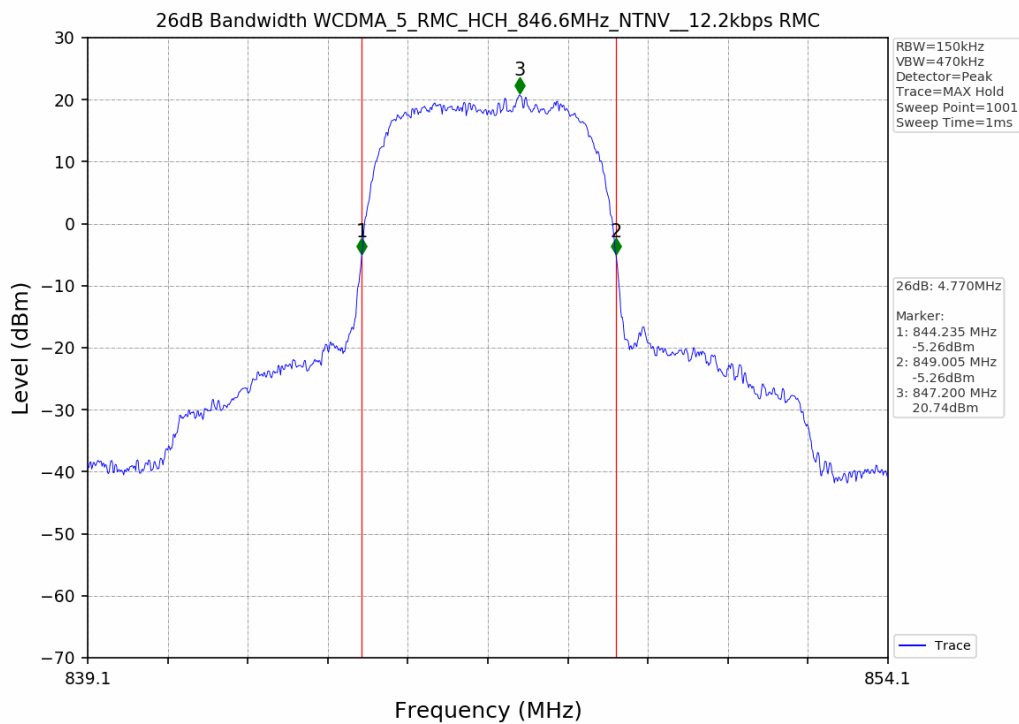
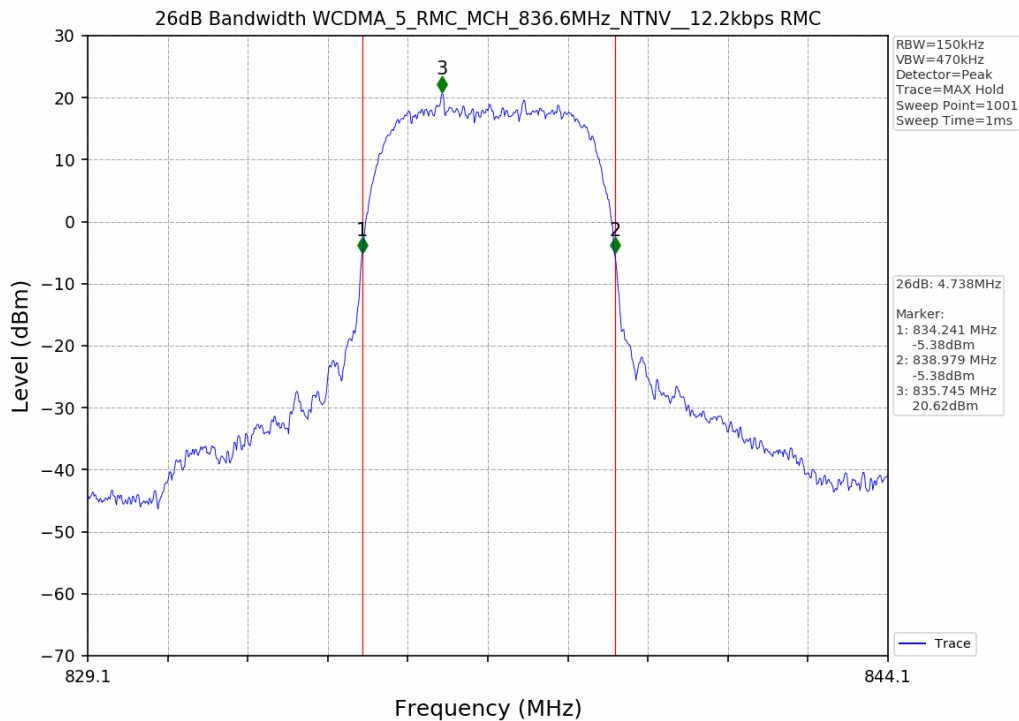


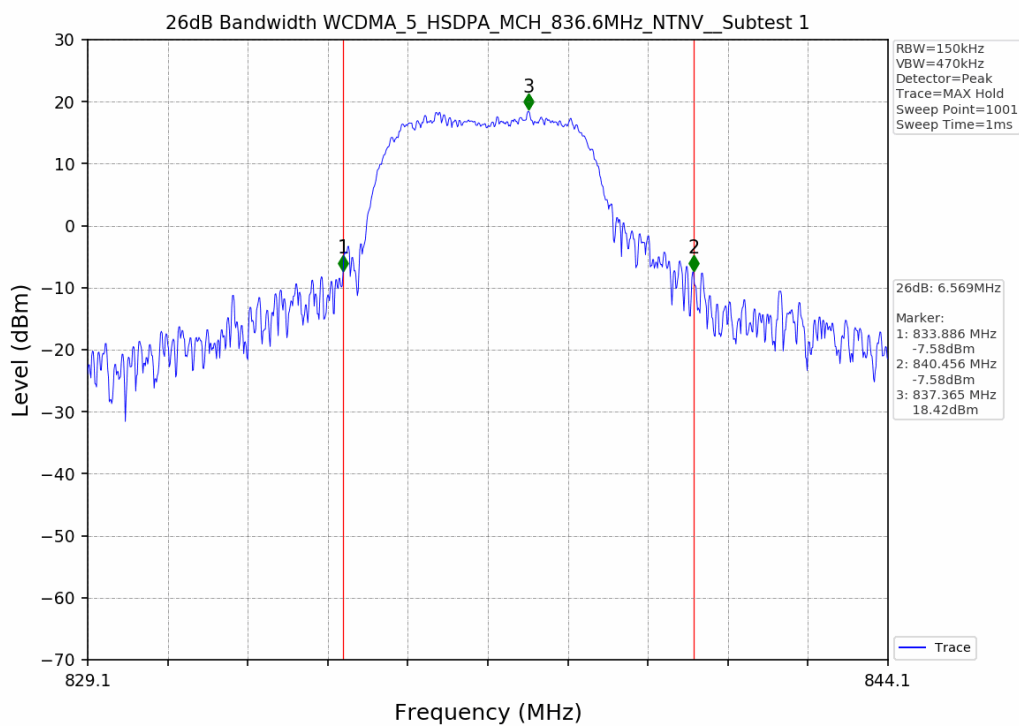
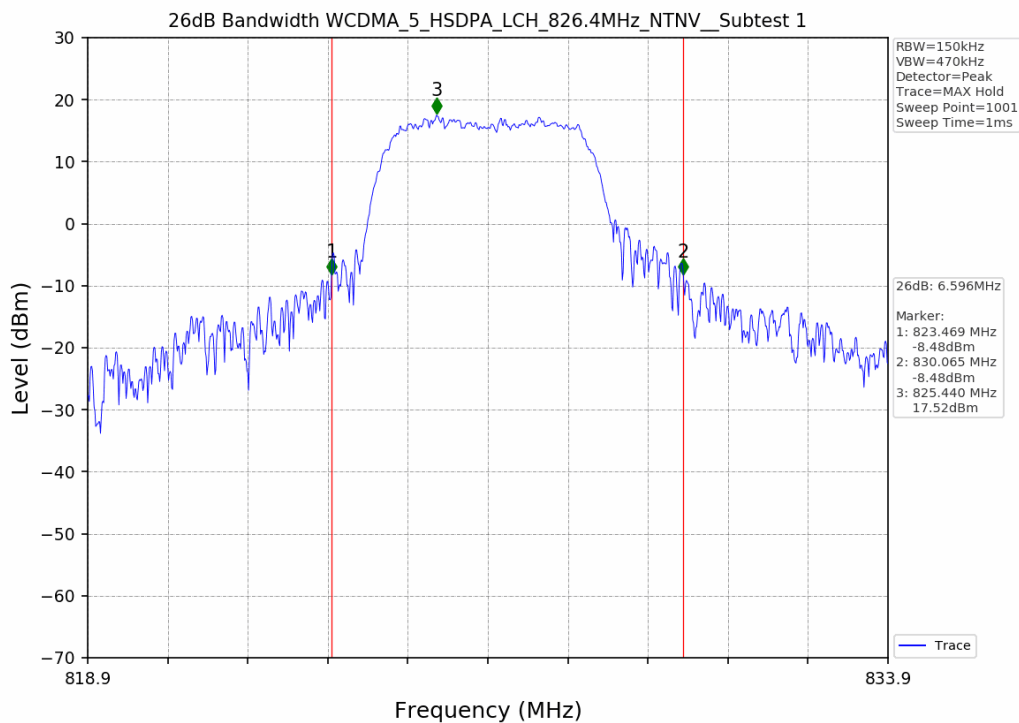


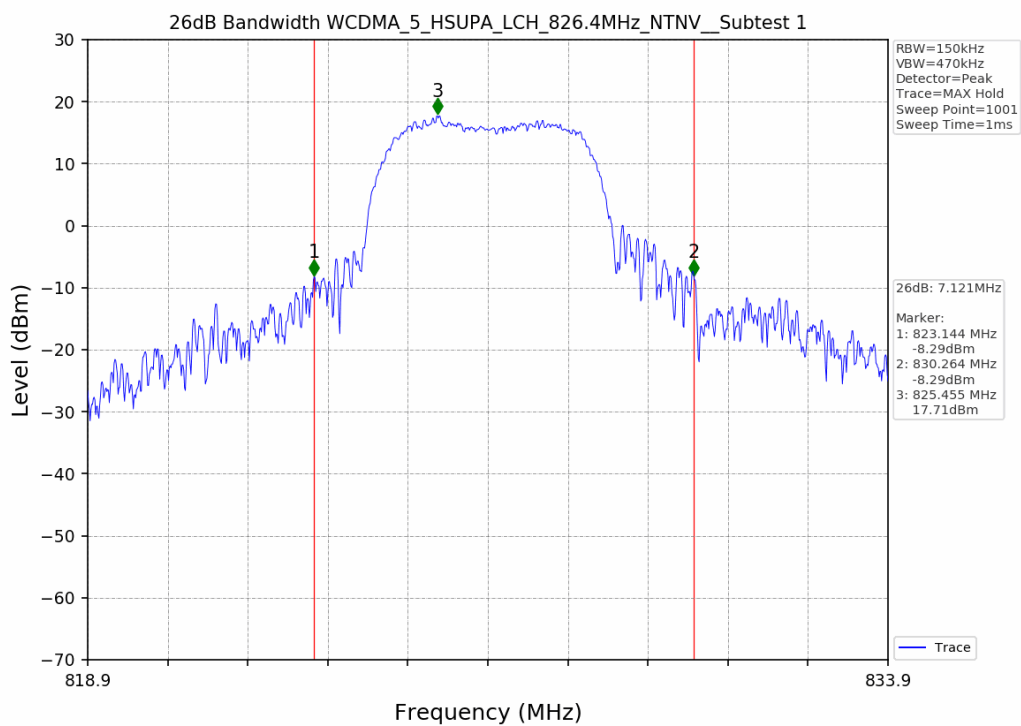
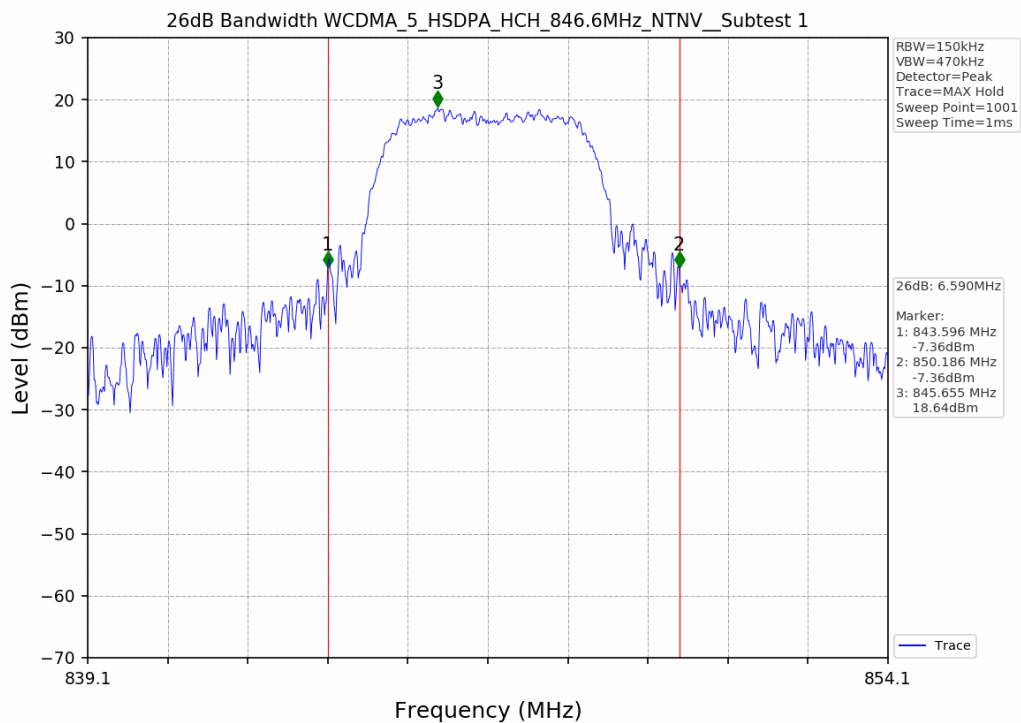
Test Band: 5					
Test Mode	26dB Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
HSUPA	7.121	6.739	6.882	N/A	PASS
HSDPA	6.596	6.569	6.590	N/A	PASS
RMC	4.767	4.738	4.770	N/A	PASS

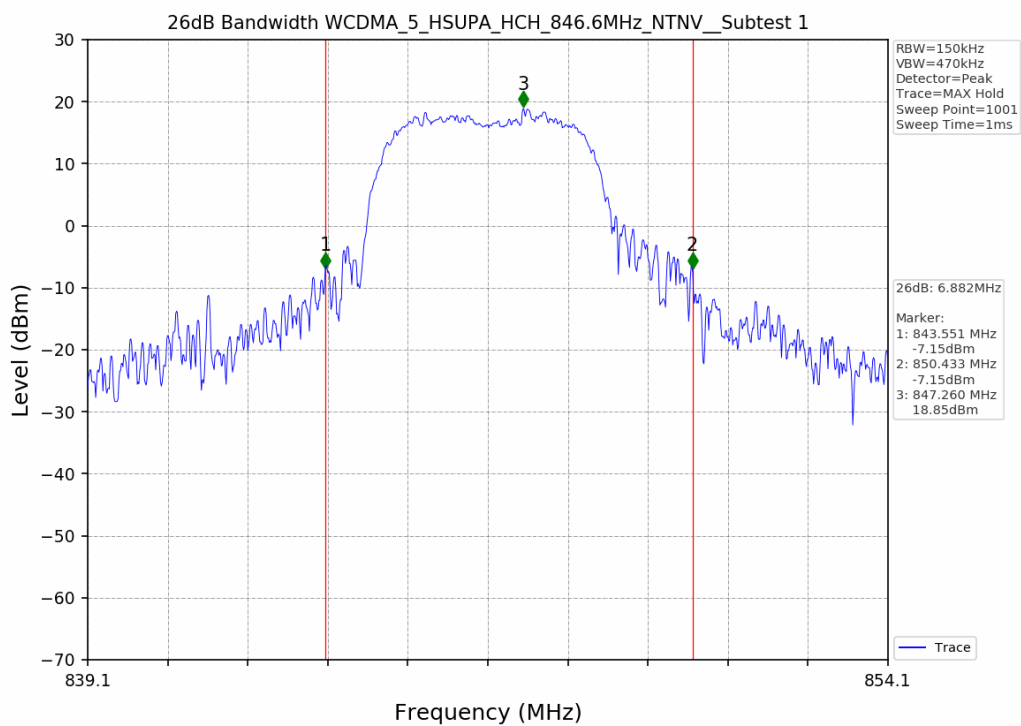
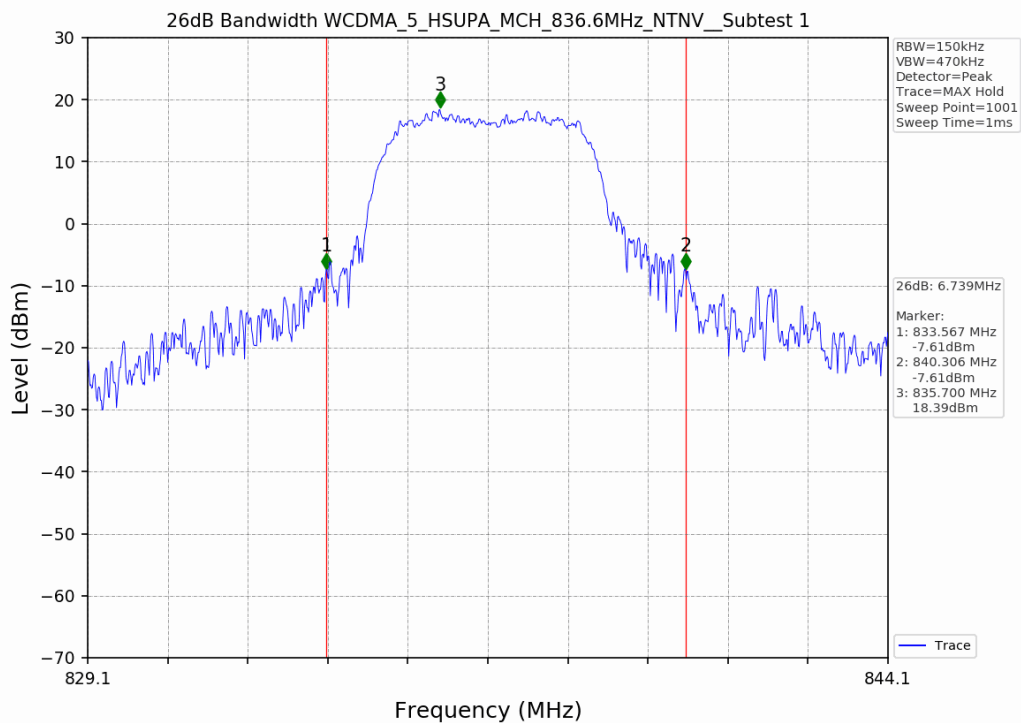
C3.2 Test Graph









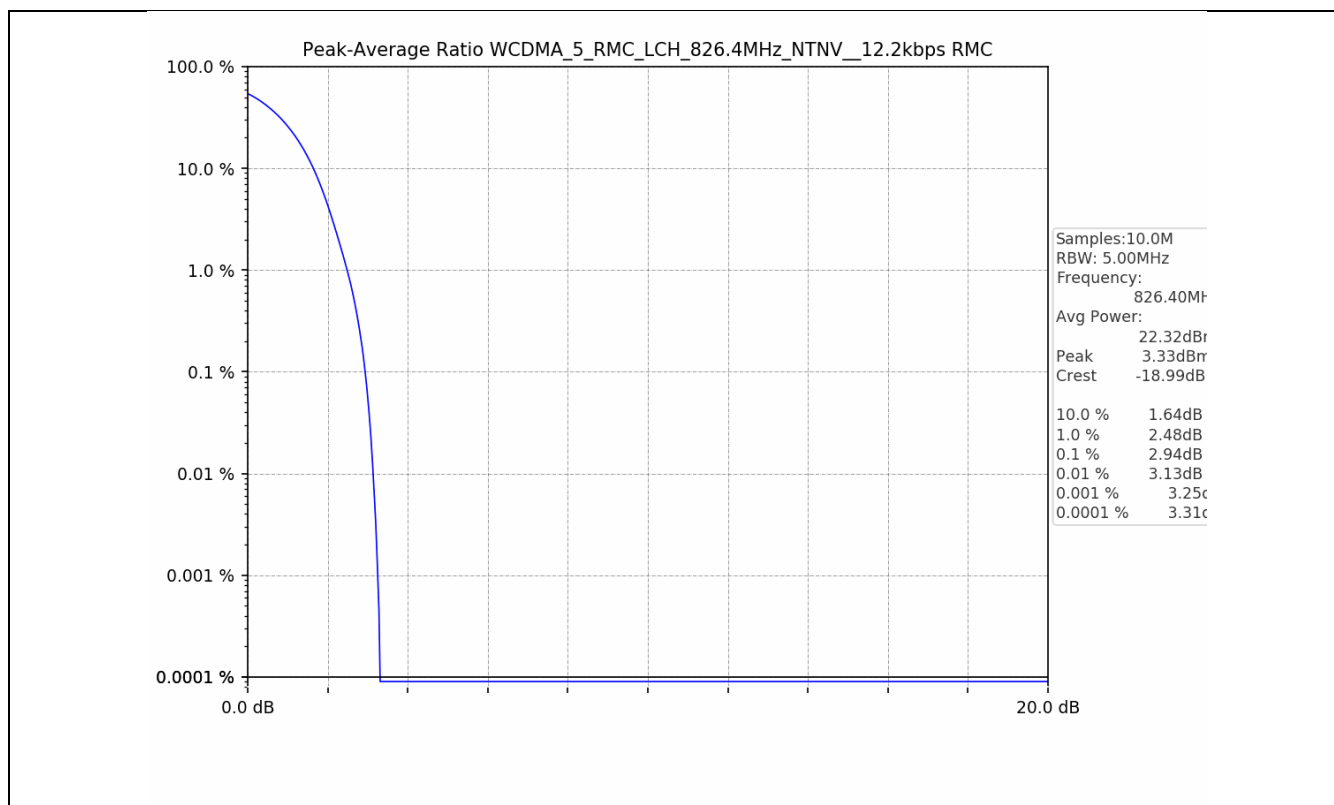


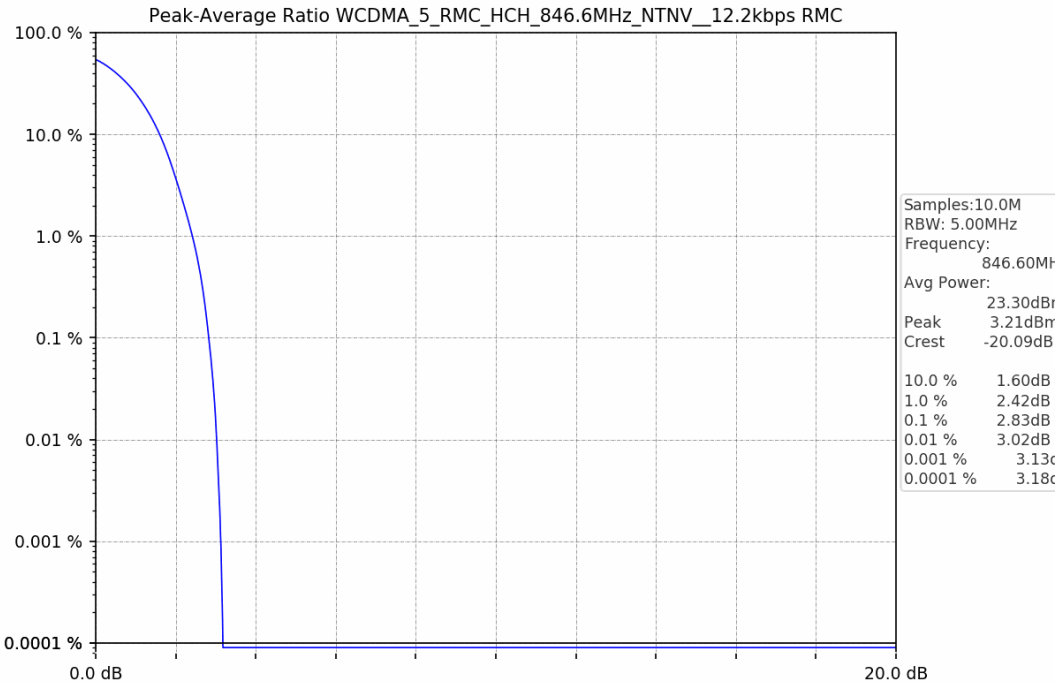
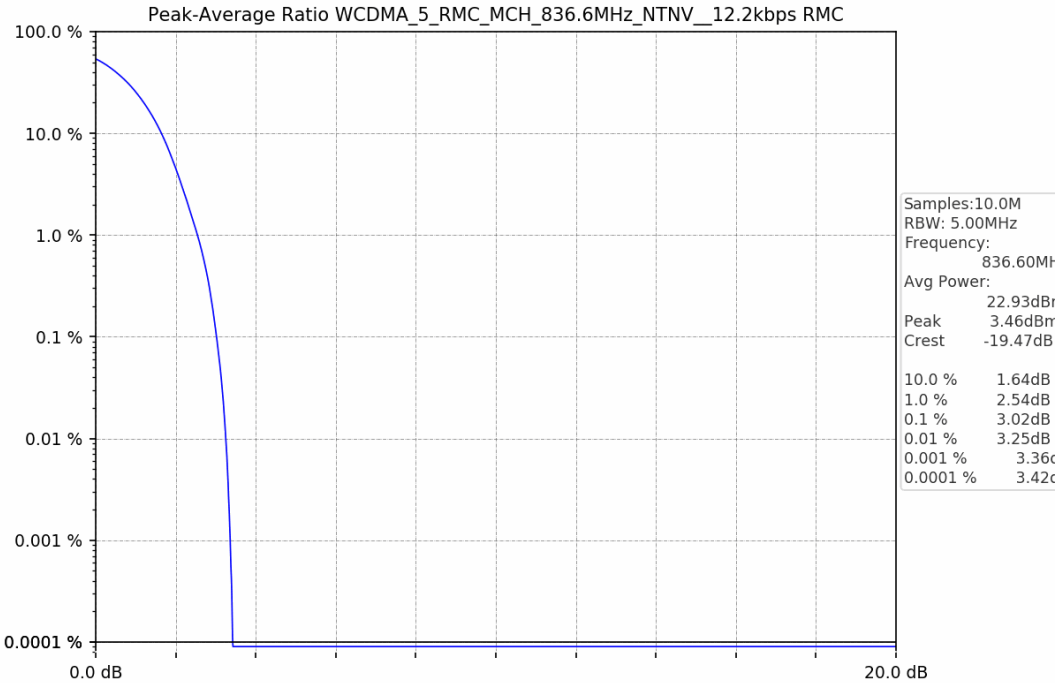
C4. Peak-Average Ratio

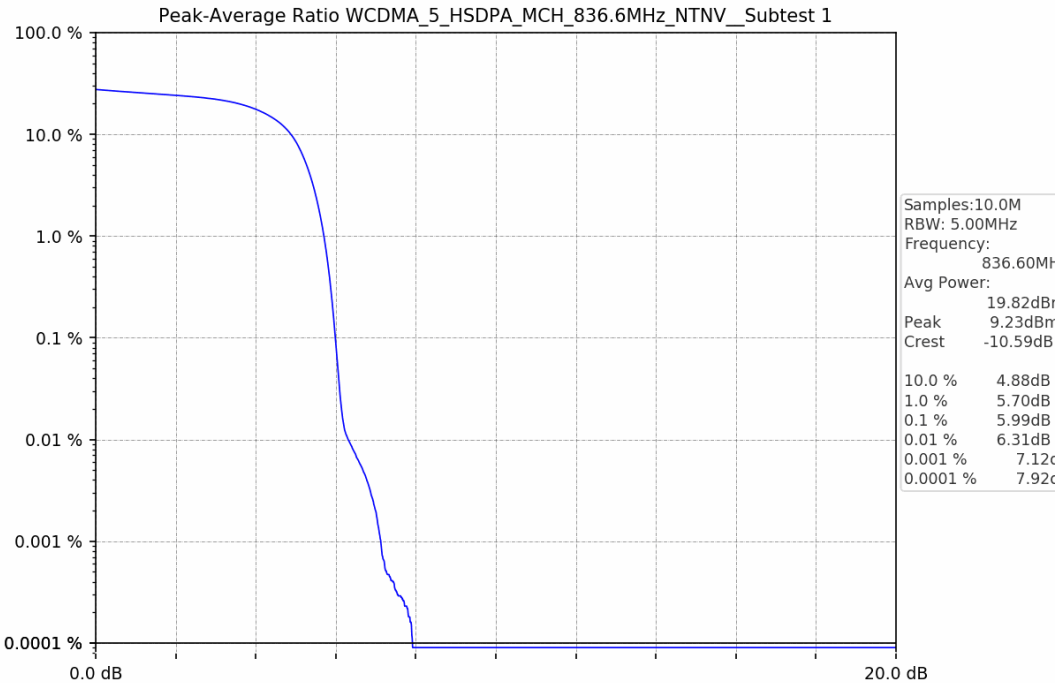
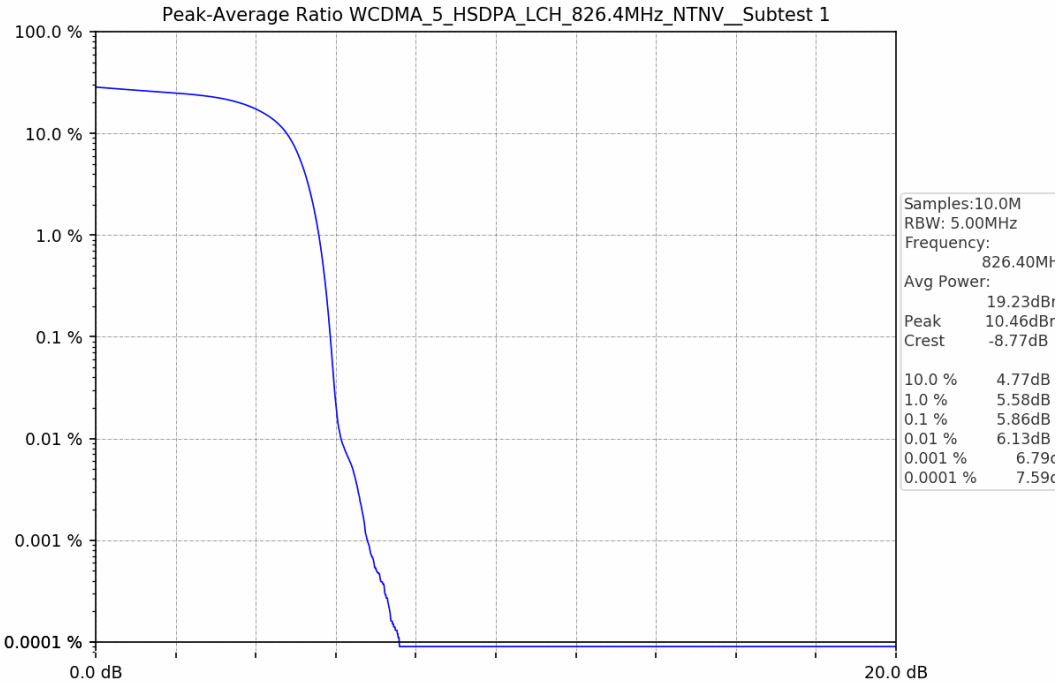
C4.1 Test Result

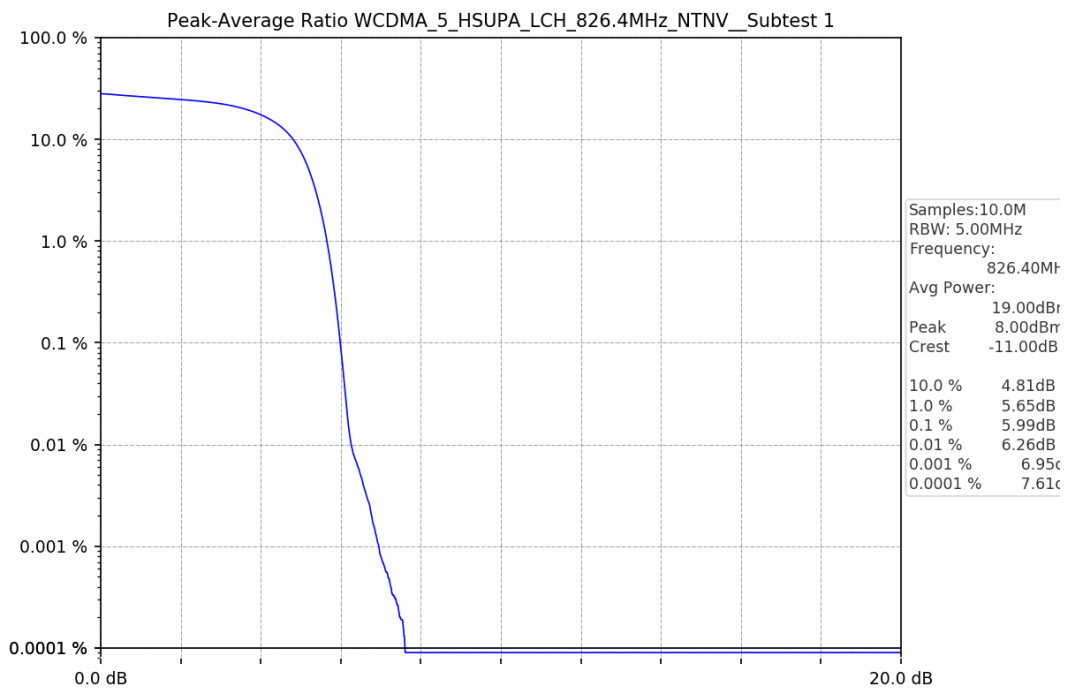
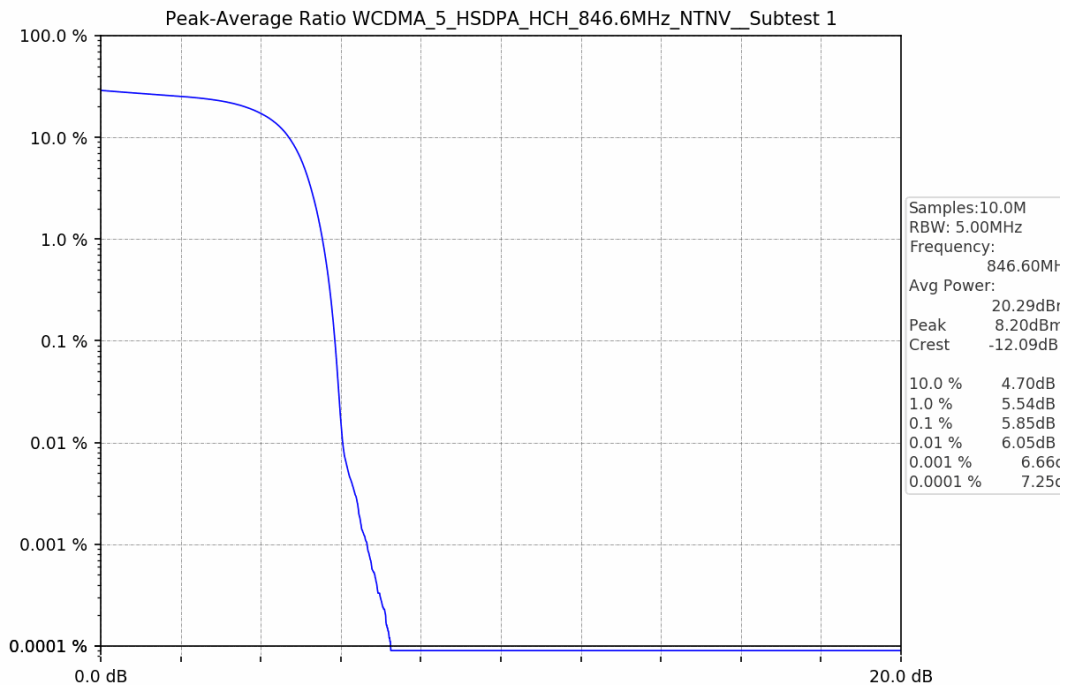
Test Band: 5					
Test Mode	Test result (dB)			Limit (dB)	Verdict
	LCH	MCH	HCH		
HSUPA	5.99	5.93	5.96	13	PASS
HSDPA	5.86	5.99	5.85	13	PASS
RMC	2.94	3.02	2.83	13	PASS

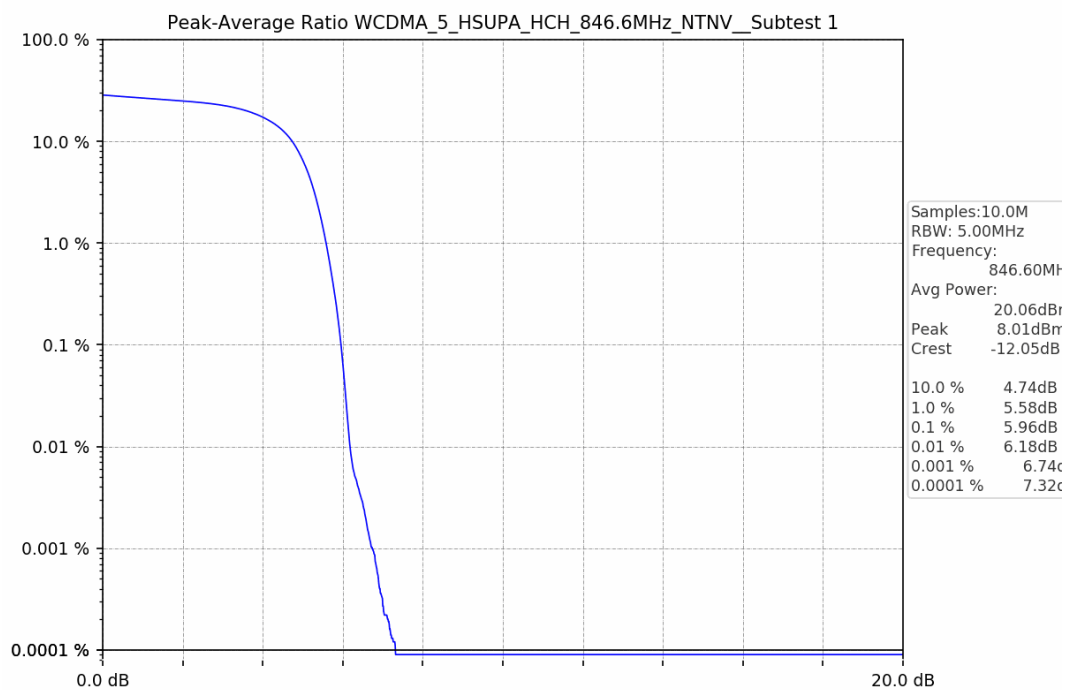
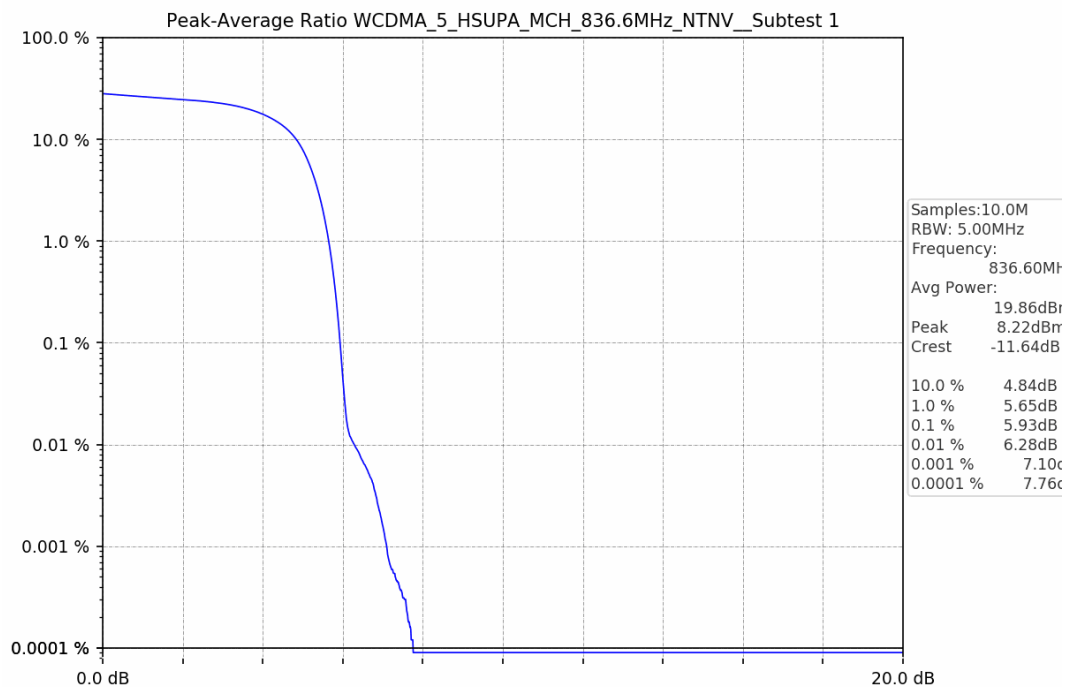
C4.2 Test Graph











C5. Spurious Emission

C5.1 Test Graph

