

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

Test Band: 2											
Test Mode		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict
		LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
HSUPA	Subtest 1	17.93	18.70	18.23	/	2.00	19.93	20.7	20.23	33.01	PASS
	Subtest 2	18.14	18.67	18.18	/	2.00	20.14	20.67	20.18	33.01	PASS
	Subtest 3	17.92	17.98	17.55	/	2.00	19.92	19.98	19.55	33.01	PASS
	Subtest 4	17.91	18.48	18.54	/	2.00	19.91	20.48	20.54	33.01	PASS
	Subtest 5	17.79	18.13	17.70	/	2.00	19.79	20.13	19.7	33.01	PASS
HSDPA	Subtest 1	18.84	17.84	18.15	/	2.00	20.84	19.84	20.15	33.01	PASS
	Subtest 2	18.36	18.02	18.07	/	2.00	20.36	20.02	20.07	33.01	PASS
	Subtest 3	17.87	18.17	18.04	/	2.00	19.87	20.17	20.04	33.01	PASS
	Subtest 4	18.16	17.86	17.71	/	2.00	20.16	19.86	19.71	33.01	PASS
RMC	12.2kbps RMC	22.25	22.24	22.27	/	2.00	24.25	24.24	24.27	33.01	PASS

Note:  
 1) dBd = dBi - 2.15  
 2) EIRP = Conducted output power + Antenna gain (dBi)

Test Band: 4											
Test Mode		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict
		LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
HSUPA	Subtest 1	18.06	18.65	18.13	/	4.03	22.09	22.68	22.16	30.00	PASS
	Subtest 2	18.32	18.30	17.57	/	4.03	22.35	22.33	21.6	30.00	PASS
	Subtest 3	19.01	19.01	18.13	/	4.03	23.04	23.04	22.16	30.00	PASS
	Subtest 4	18.44	18.70	17.97	/	4.03	22.47	22.73	22	30.00	PASS
	Subtest 5	17.61	18.45	18.39	/	4.03	21.64	22.48	22.42	30.00	PASS
HSDPA	Subtest 1	17.66	17.96	18.22	/	4.03	21.69	21.99	22.25	30.00	PASS
	Subtest 2	18.62	18.31	18.45	/	4.03	22.65	22.34	22.48	30.00	PASS
	Subtest 3	17.93	18.12	17.88	/	4.03	21.96	22.15	21.91	30.00	PASS
	Subtest 4	17.82	18.11	17.81	/	4.03	21.85	22.14	21.84	30.00	PASS
RMC	12.2kbps RMC	22.56	22.41	22.14	/	4.03	26.59	26.44	26.17	30.00	PASS

Note:  
 1) dBd = dBi - 2.15  
 2) EIRP = Conducted output power + Antenna gain (dBi)

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	18.22	17.99	17.83	-1.25	0.9	16.97	16.74	16.58	38.45	PASS
	Subtest 2	17.85	18.71	18.43	-1.25	0.9	16.60	17.46	17.18	38.45	PASS
	Subtest 3	18.05	18.12	18.17	-1.25	0.9	16.80	16.87	16.92	38.45	PASS
	Subtest 4	18.27	18.16	18.19	-1.25	0.9	17.02	16.91	16.94	38.45	PASS
	Subtest 5	18.65	16.94	18.09	-1.25	0.9	17.40	15.69	16.84	38.45	PASS
HSDPA	Subtest 1	18.21	18.20	18.66	-1.25	0.9	16.96	16.95	17.41	38.45	PASS
	Subtest 2	18.15	18.04	18.47	-1.25	0.9	16.90	16.79	17.22	38.45	PASS
	Subtest 3	18.18	17.74	18.07	-1.25	0.9	16.93	16.49	16.82	38.45	PASS
	Subtest 4	17.91	17.81	17.80	-1.25	0.9	16.66	16.56	16.55	38.45	PASS
RMC	12.2kbps RMC	22.37	22.37	22.48	-1.25	0.9	21.12	21.12	21.23	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)

## 2. Frequency stability

### 2.1 Test Result

Test Band: 2 (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	4.6846	5.5221	14.8833	0.0025	0.0029	0.0078	2.50	PASS
		NV	9.6215	3.8052	1.7578	0.0052	0.002	0.0009	2.50	PASS
		HV	13.8915	10.5198	13.8022	0.0075	0.0056	0.0072	2.50	PASS
HSDPA	NT	LV	5.2784	13.6830	12.6863	0.0028	0.0073	0.0067	2.50	PASS
		NV	2.4024	3.5169	9.9224	0.0013	0.0019	0.0052	2.50	PASS
		HV	1.4618	10.5659	0.3398	0.0008	0.0056	0.0002	2.50	PASS
RMC	NT	LV	1.8403	7.5653	0.0456	0.001	0.004	0	2.50	PASS
		NV	11.2228	14.4893	7.9641	0.0061	0.0077	0.0042	2.50	PASS
		HV	8.7039	6.6714	12.2477	0.0047	0.0035	0.0064	2.50	PASS

Test Band: 2 (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	5.4185	0.1708	4.5334	0.0029	0.0001	0.0024	2.50	PASS
		-20.00	13.2783	3.1640	13.2037	0.0072	0.0017	0.0069	2.50	PASS
		-10.00	11.2097	8.8386	6.7659	0.0061	0.0047	0.0035	2.50	PASS
		0.00	13.0119	11.5104	12.0859	0.007	0.0061	0.0063	2.50	PASS
		10.00	6.5195	12.2363	5.4187	0.0035	0.0065	0.0028	2.50	PASS
		20.00	12.8697	4.2671	5.3847	0.0069	0.0023	0.0028	2.50	PASS
		30.00	10.0386	8.8309	2.2409	0.0054	0.0047	0.0012	2.50	PASS
		40.00	5.9612	10.7453	8.5819	0.0032	0.0057	0.0045	2.50	PASS
HSDPA	NV	50.00	14.6765	6.6736	14.2975	0.0079	0.0035	0.0075	2.50	PASS
		-30.00	13.2778	6.3323	6.7117	0.0072	0.0034	0.0035	2.50	PASS
		-20.00	13.1798	8.6912	7.4677	0.0071	0.0046	0.0039	2.50	PASS
		-10.00	3.2175	0.5606	7.7560	0.0017	0.0003	0.0041	2.50	PASS
		0.00	13.6436	3.4228	3.8244	0.0074	0.0018	0.002	2.50	PASS
		10.00	4.8817	8.5244	7.6964	0.0026	0.0045	0.004	2.50	PASS
		20.00	8.1990	9.8109	6.3720	0.0044	0.0052	0.0033	2.50	PASS
		30.00	5.2790	12.9965	3.5124	0.0028	0.0069	0.0018	2.50	PASS
RMC	NV	40.00	8.9055	8.0978	11.5451	0.0048	0.0043	0.0061	2.50	PASS
		50.00	4.9659	14.1382	9.5285	0.0027	0.0075	0.005	2.50	PASS
		-30.00	3.4636	10.6960	13.3917	0.0019	0.0057	0.007	2.50	PASS
		-20.00	6.9683	13.2378	10.7765	0.0038	0.007	0.0056	2.50	PASS
		-10.00	14.3998	12.7757	12.6492	0.0078	0.0068	0.0066	2.50	PASS
		0.00	14.8815	8.8063	12.7085	0.008	0.0047	0.0067	2.50	PASS
		10.00	11.6447	4.5380	3.2717	0.0063	0.0024	0.0017	2.50	PASS
		20.00	14.6536	4.7853	11.0041	0.0079	0.0025	0.0058	2.50	PASS
RMC	NV	30.00	8.5888	8.3413	12.6459	0.0046	0.0044	0.0066	2.50	PASS
		40.00	7.8249	5.6007	10.6385	0.0042	0.003	0.0056	2.50	PASS
		50.00	1.9927	5.3089	0.1626	0.0011	0.0028	0.0001	2.50	PASS

Test Band: 4 (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	13.1699	13.4897	13.4866	0.0077	0.0078	0.0077	2.50	PASS
		NV	9.6890	6.2583	12.5495	0.0057	0.0036	0.0072	2.50	PASS
		HV	7.9151	13.5112	4.3520	0.0046	0.0078	0.0025	2.50	PASS
HSDPA	NT	LV	9.4936	13.5548	10.6823	0.0055	0.0078	0.0061	2.50	PASS
		NV	1.5568	10.5279	4.5200	0.0009	0.0061	0.0026	2.50	PASS
		HV	5.9654	6.5083	12.8613	0.0035	0.0038	0.0073	2.50	PASS
RMC	NT	LV	6.4144	7.9336	1.2866	0.0037	0.0046	0.0007	2.50	PASS
		NV	3.7679	3.9372	3.0026	0.0022	0.0023	0.0017	2.50	PASS
		HV	10.9292	0.8608	7.6170	0.0064	0.0005	0.0043	2.50	PASS

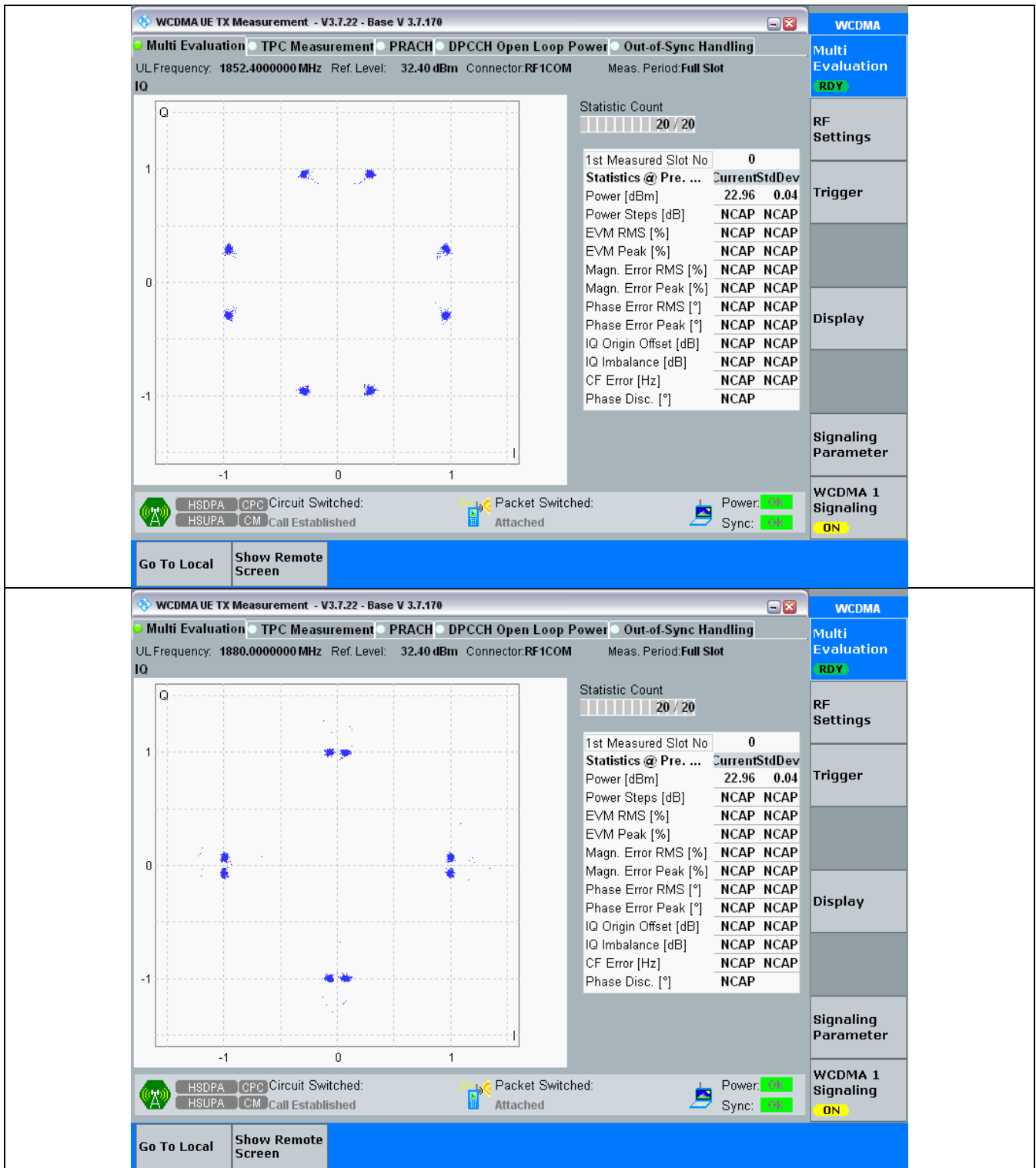
Test Band: 4 (Frequency Error VS. Temperature)										
Test Mode	Test Volt.	Test Temp.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
			LCH	MCH	HCH	LCH	MCH	HCH		
HSUPA	NV	-30.00	14.1300	13.3974	8.7392	0.0083	0.0077	0.005	2.50	PASS
		-20.00	8.3979	0.6195	6.8956	0.0049	0.0004	0.0039	2.50	PASS
		-10.00	14.7639	3.6644	3.4097	0.0086	0.0021	0.0019	2.50	PASS
		0.00	5.3767	13.8202	3.6595	0.0031	0.008	0.0021	2.50	PASS
		10.00	8.6438	5.7667	3.6918	0.005	0.0033	0.0021	2.50	PASS
		20.00	7.6673	2.2791	12.8783	0.0045	0.0013	0.0073	2.50	PASS
		30.00	1.1509	7.9092	8.3082	0.0007	0.0046	0.0047	2.50	PASS
		40.00	5.1318	3.1927	4.9960	0.003	0.0018	0.0029	2.50	PASS
		50.00	13.0568	13.6673	14.1984	0.0076	0.0079	0.0081	2.50	PASS
HSDPA	NV	-30.00	7.4695	13.6064	13.0011	0.0044	0.0079	0.0074	2.50	PASS
		-20.00	7.1086	2.9285	10.2921	0.0042	0.0017	0.0059	2.50	PASS
		-10.00	3.4468	2.2606	4.5841	0.002	0.0013	0.0026	2.50	PASS
		0.00	4.7599	2.6904	4.9461	0.0028	0.0016	0.0028	2.50	PASS
		10.00	11.7862	8.2152	3.3810	0.0069	0.0047	0.0019	2.50	PASS
		20.00	9.3532	10.4702	6.1171	0.0055	0.006	0.0035	2.50	PASS
		30.00	13.0974	14.8288	11.3471	0.0076	0.0086	0.0065	2.50	PASS
		40.00	6.6999	13.6008	13.5536	0.0039	0.0078	0.0077	2.50	PASS
		50.00	1.7041	4.1889	8.9142	0.001	0.0024	0.0051	2.50	PASS
RMC	NV	-30.00	2.9784	0.3800	3.8224	0.0017	0.0002	0.0022	2.50	PASS
		-20.00	5.4477	11.6741	6.3215	0.0032	0.0067	0.0036	2.50	PASS
		-10.00	11.6565	10.4170	6.9907	0.0068	0.006	0.004	2.50	PASS
		0.00	0.2029	1.5280	2.0770	0.0001	0.0009	0.0012	2.50	PASS
		10.00	4.0692	8.6214	11.0813	0.0024	0.005	0.0063	2.50	PASS
		20.00	2.3271	4.2143	2.6475	0.0014	0.0024	0.0015	2.50	PASS
		30.00	9.7786	1.3920	6.7911	0.0057	0.0008	0.0039	2.50	PASS
		40.00	9.9298	12.5437	9.5429	0.0058	0.0072	0.0054	2.50	PASS
		50.00	2.0657	5.6741	10.6810	0.0012	0.0033	0.0061	2.50	PASS

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	6.2534	8.7362	10.3016	0.0076	0.0104	0.0122	2.50	PASS
		NV	1.2390	6.3452	11.9947	0.0015	0.0076	0.0142	2.50	PASS
		HV	7.1049	4.5265	8.2179	0.0086	0.0054	0.0097	2.50	PASS
HSDPA	NT	LV	13.8614	12.0210	0.6094	0.0168	0.0144	0.0007	2.50	PASS
		NV	4.6057	2.5602	6.8937	0.0056	0.0031	0.0081	2.50	PASS
		HV	6.7818	1.0032	4.8373	0.0082	0.0012	0.0057	2.50	PASS
RMC	NT	LV	14.5754	14.6065	14.6226	0.0176	0.0175	0.0173	2.50	PASS
		NV	6.8297	12.5656	0.7291	0.0083	0.015	0.0009	2.50	PASS
		HV	8.5651	0.9019	4.0143	0.0104	0.0011	0.0047	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	9.8265	6.5738	14.1739	0.0119	0.0079	0.0167	2.50	PASS
		-20.00	14.5448	13.4015	14.0948	0.0176	0.016	0.0166	2.50	PASS
		-10.00	1.0540	4.6884	8.6555	0.0013	0.0056	0.0102	2.50	PASS
		0.00	14.5860	8.4521	13.3003	0.0177	0.0101	0.0157	2.50	PASS
		10.00	1.6420	0.8929	3.4646	0.002	0.0011	0.0041	2.50	PASS
		20.00	3.8328	0.9697	2.0521	0.0046	0.0012	0.0024	2.50	PASS
		30.00	4.5983	11.3603	7.3977	0.0056	0.0136	0.0087	2.50	PASS
		40.00	0.9695	1.1436	4.0861	0.0012	0.0014	0.0048	2.50	PASS
HSDPA	NV	50.00	11.7311	11.2166	6.6143	0.0142	0.0134	0.0078	2.50	PASS
		-30.00	2.3085	9.3568	1.0762	0.0028	0.0112	0.0013	2.50	PASS
		-20.00	4.4252	11.2955	3.1470	0.0054	0.0135	0.0037	2.50	PASS
		-10.00	9.8315	14.1631	9.4189	0.0119	0.0169	0.0111	2.50	PASS
		0.00	6.4169	12.0579	13.0038	0.0078	0.0144	0.0154	2.50	PASS
		10.00	6.4657	11.6018	14.7969	0.0078	0.0139	0.0175	2.50	PASS
		20.00	7.4256	10.4873	1.1974	0.009	0.0125	0.0014	2.50	PASS
		30.00	6.8279	6.1359	13.2427	0.0083	0.0073	0.0156	2.50	PASS
RMC	NV	40.00	1.6894	14.8470	12.4364	0.002	0.0177	0.0147	2.50	PASS
		50.00	3.6732	6.8519	1.2104	0.0044	0.0082	0.0014	2.50	PASS
		-30.00	6.8386	12.2362	1.1179	0.0083	0.0146	0.0013	2.50	PASS
		-20.00	5.7567	14.9302	10.9277	0.007	0.0178	0.0129	2.50	PASS
		-10.00	5.8576	10.6293	3.6794	0.0071	0.0127	0.0043	2.50	PASS
		0.00	5.5731	3.7371	11.5931	0.0067	0.0045	0.0137	2.50	PASS
		10.00	7.6011	11.8837	3.0748	0.0092	0.0142	0.0036	2.50	PASS
		20.00	8.0952	8.2131	3.6699	0.0098	0.0098	0.0043	2.50	PASS
RMC	NV	30.00	9.3994	7.9260	6.4996	0.0114	0.0095	0.0077	2.50	PASS
		40.00	0.0361	10.3268	2.0143	0	0.0123	0.0024	2.50	PASS
		50.00	13.0261	0.9432	9.2583	0.0158	0.0011	0.0109	2.50	PASS

### 3. Modulation Characteristics

#### 3.1 Test Graph



WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.170

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

UL Frequency: 1907.600000 MHz    Ref. Level: 32.40 dBm    Connector: RF1COM    Meas. Period: Full Slot

IQ

Statistic Count: 20 / 20

1st Measured Slot No: 0

Statistics @ Pre. ...	Current	StdDev
Power [dBm]	22.98	0.05
Power Steps [dB]	NCAP	NCAP
EVM RMS [%]	NCAP	NCAP
EVM Peak [%]	NCAP	NCAP
Magn. Error RMS [%]	NCAP	NCAP
Magn. Error Peak [%]	NCAP	NCAP
Phase Error RMS [°]	NCAP	NCAP
Phase Error Peak [°]	NCAP	NCAP
IQ Origin Offset [dB]	NCAP	NCAP
IQ Imbalance [dB]	NCAP	NCAP
CF Error [Hz]	NCAP	NCAP
Phase Disc. [°]	NCAP	

HSDPA     CPC Circuit Switched:     Packet Switched:     Power: ON  
 HSUPA     CM Call Established     Attached     Sync: ON

**WCDMA**  
**Multi Evaluation**  
**RDY**  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
**WCDMA 1 Signaling**  
**ON**

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.170

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

UL Frequency: 1712.4000000 MHz Ref. Level: 32.40 dBm Connector: RF1COM Meas. Period: Full Slot

IQ

Statistic Count: 20 / 20

1st Measured Slot No: 0

Statistics @ Pre. ...		Current	StdDev
Power [dBm]	23.12	0.64	
Power Steps [dB]	NCAP	NCAP	
EVM RMS [%]	NCAP	NCAP	
EVM Peak [%]	NCAP	NCAP	
Magn. Error RMS [%]	NCAP	NCAP	
Magn. Error Peak [%]	NCAP	NCAP	
Phase Error RMS [°]	NCAP	NCAP	
Phase Error Peak [°]	NCAP	NCAP	
IQ Origin Offset [dB]	NCAP	NCAP	
IQ Imbalance [dB]	NCAP	NCAP	
CF Error [Hz]	NCAP	NCAP	
Phase Disc. [°]	NCAP		

HSDPA CPC Circuit Switched: Packet Switched: Power: ON  
 HSUPA CM Call Established Attached Sync: ON

Go To Local Show Remote Screen

WCDMA

Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

WCDMA 1 Signaling ON

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.170

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

UL Frequency: 1732.6000000 MHz Ref. Level: 32.40 dBm Connector: RF1COM Meas. Period: Full Slot

IQ

Statistic Count: 20 / 20

1st Measured Slot No: 0

Statistics @ Pre. ...		Current	StdDev
Power [dBm]	23.03	0.69	
Power Steps [dB]	NCAP	NCAP	
EVM RMS [%]	NCAP	NCAP	
EVM Peak [%]	NCAP	NCAP	
Magn. Error RMS [%]	NCAP	NCAP	
Magn. Error Peak [%]	NCAP	NCAP	
Phase Error RMS [°]	NCAP	NCAP	
Phase Error Peak [°]	NCAP	NCAP	
IQ Origin Offset [dB]	NCAP	NCAP	
IQ Imbalance [dB]	NCAP	NCAP	
CF Error [Hz]	NCAP	NCAP	
Phase Disc. [°]	NCAP		

HSDPA CPC Circuit Switched: Packet Switched: Power: ON  
 HSUPA CM Call Established Attached Sync: ON

Go To Local Show Remote Screen

WCDMA

Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

WCDMA 1 Signaling ON

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.170

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

UL Frequency: 1752.600000 MHz Ref. Level: 32.40 dBm Connector:RF1COM Meas. Period:Full Slot

IQ

Statistic Count: 20 / 20

1st Measured Slot No: 0

Statistics @ Pre. ...	Current	StdDev
Power [dBm]	22.86	0.92
Power Steps [dB]	NCAP	NCAP
EVM RMS [%]	NCAP	NCAP
EVM Peak [%]	NCAP	NCAP
Magn. Error RMS [%]	NCAP	NCAP
Magn. Error Peak [%]	NCAP	NCAP
Phase Error RMS [°]	NCAP	NCAP
Phase Error Peak [°]	NCAP	NCAP
IQ Origin Offset [dB]	NCAP	NCAP
IQ Imbalance [dB]	NCAP	NCAP
CF Error [Hz]	NCAP	NCAP
Phase Disc. [°]	NCAP	

HSDPA  CPC Circuit Switched:  Packet Switched:  Power: ON  
 HSUPA  CM Call Established  Attached  Sync: ON

**WCDMA**  
**Multi Evaluation**  
**RDY**  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
**WCDMA 1 Signaling**  
**ON**



WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.170

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

UL Frequency: 826.4000000 MHz Ref. Level: 32.40 dBm Connector:RF1COM Meas. Period:Full Slot

IQ

Statistic Count: 20 / 20

1st Measured Slot No: 0

Statistics @ Pre. ...	Current	StdDev
Power [dBm]	23.78	0.64
Power Steps [dB]	NCAP	NCAP
EVM RMS [%]	NCAP	NCAP
EVM Peak [%]	NCAP	NCAP
Magn. Error RMS [%]	NCAP	NCAP
Magn. Error Peak [%]	NCAP	NCAP
Phase Error RMS [°]	NCAP	NCAP
Phase Error Peak [°]	NCAP	NCAP
IQ Origin Offset [dB]	NCAP	NCAP
IQ Imbalance [dB]	NCAP	NCAP
CF Error [Hz]	NCAP	NCAP
Phase Disc. [°]	NCAP	NCAP

HSDPA CPC Circuit Switched: Packet Switched: Power: ON  
 HSUPA CM Call Established Attached Sync: ON

Go To Local Show Remote Screen

WCDMA

Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

WCDMA 1 Signaling ON

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.170

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

UL Frequency: 836.6000000 MHz Ref. Level: 32.40 dBm Connector:RF1COM Meas. Period:Full Slot

IQ

Statistic Count: 20 / 20

1st Measured Slot No: 0

Statistics @ Pre. ...	Current	StdDev
Power [dBm]	22.69	0.63
Power Steps [dB]	NCAP	NCAP
EVM RMS [%]	NCAP	NCAP
EVM Peak [%]	NCAP	NCAP
Magn. Error RMS [%]	NCAP	NCAP
Magn. Error Peak [%]	NCAP	NCAP
Phase Error RMS [°]	NCAP	NCAP
Phase Error Peak [°]	NCAP	NCAP
IQ Origin Offset [dB]	NCAP	NCAP
IQ Imbalance [dB]	NCAP	NCAP
CF Error [Hz]	NCAP	NCAP
Phase Disc. [°]	NCAP	NCAP

HSDPA CPC Circuit Switched: Packet Switched: Power: ON  
 HSUPA CM Call Established Attached Sync: ON

Go To Local Show Remote Screen

WCDMA

Multi Evaluation RDY

RF Settings

Trigger

Display

Signaling Parameter

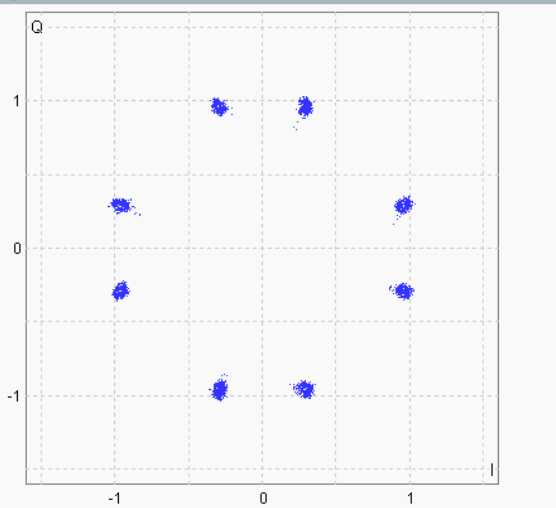
WCDMA 1 Signaling ON

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.170

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

UL Frequency: 846.600000 MHz Ref. Level: 32.40 dBm Connector:RF1COM Meas. Period:Full Slot

IQ



Statistic Count: 20 / 20

1st Measured Slot No: 0

Statistics @ Pre. ...	Current	StdDev
Power [dBm]	22.87	0.61
Power Steps [dB]	NCAP	NCAP
EVM RMS [%]	NCAP	NCAP
EVM Peak [%]	NCAP	NCAP
Magn. Error RMS [%]	NCAP	NCAP
Magn. Error Peak [%]	NCAP	NCAP
Phase Error RMS [°]	NCAP	NCAP
Phase Error Peak [°]	NCAP	NCAP
IQ Origin Offset [dB]	NCAP	NCAP
IQ Imbalance [dB]	NCAP	NCAP
CF Error [Hz]	NCAP	NCAP
Phase Disc. [°]	NCAP	

HSDPA  CPC Circuit Switched:  Packet Switched:  Power: ON  
 HSUPA  CM Call Established  Attached  Sync: ON

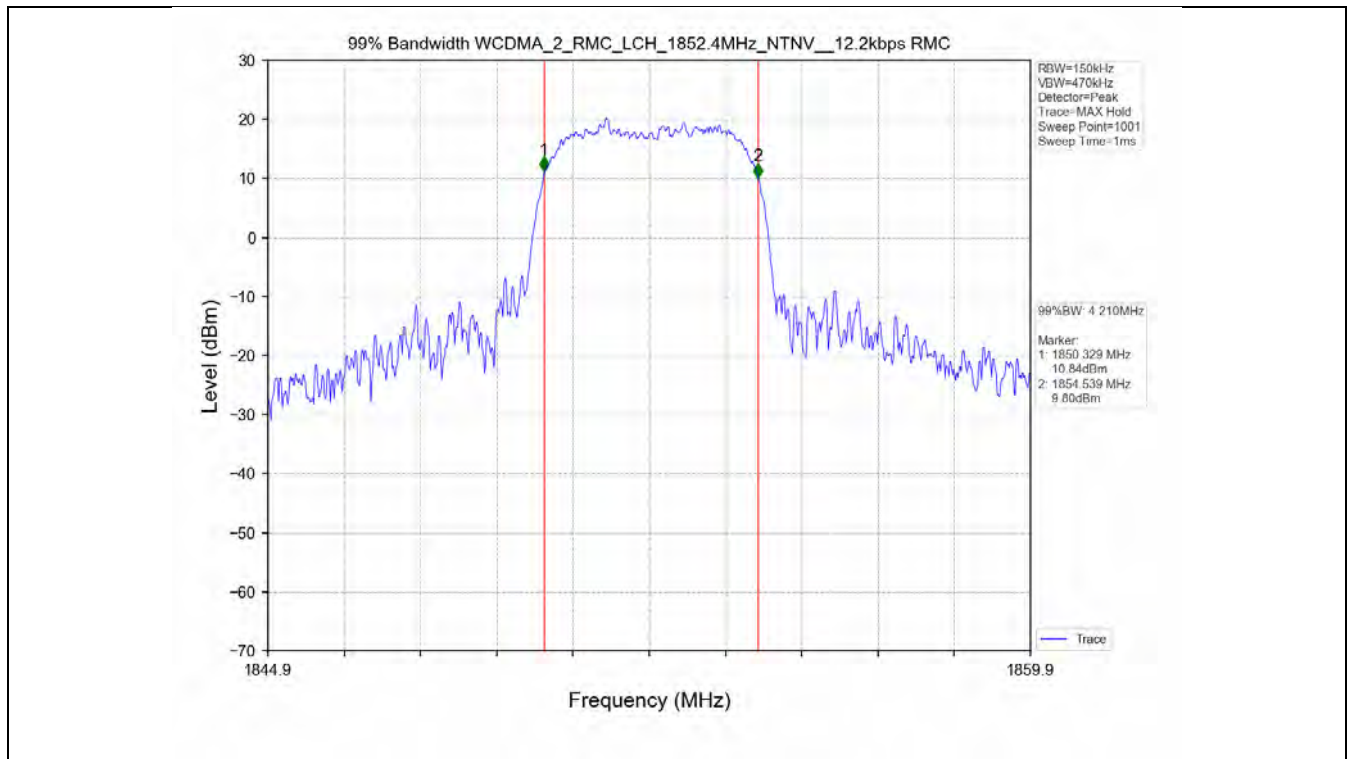
**WCDMA**  
**Multi Evaluation**  
**RDY**  
 RF Settings  
 Trigger  
 Display  
 Signaling Parameter  
**WCDMA 1 Signaling**  
**ON**

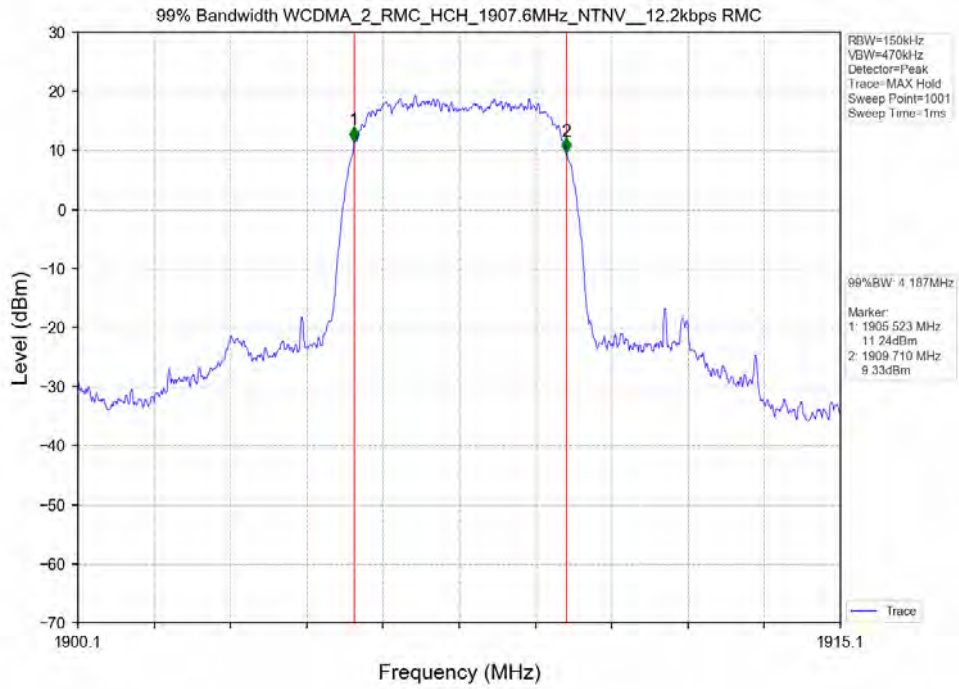
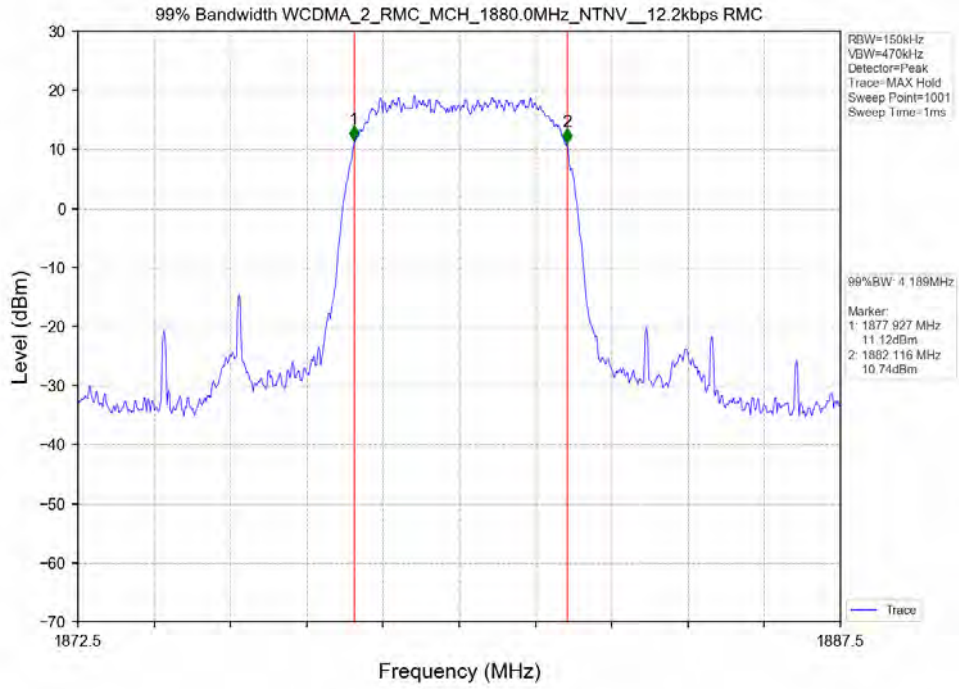
## 4. 99% & 26dB Bandwidth

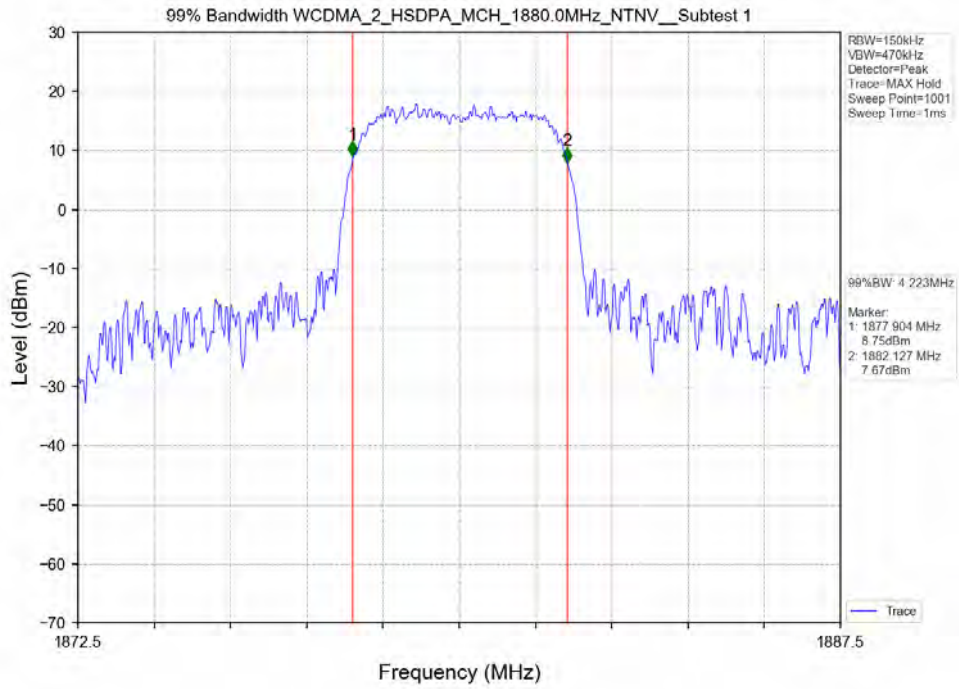
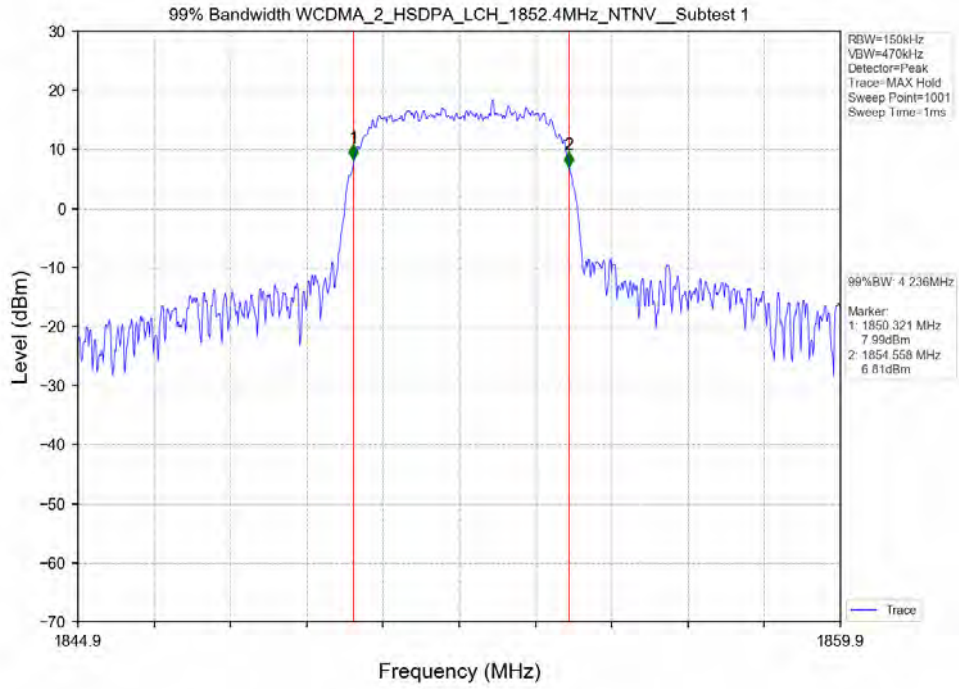
### 4.1 Test Result

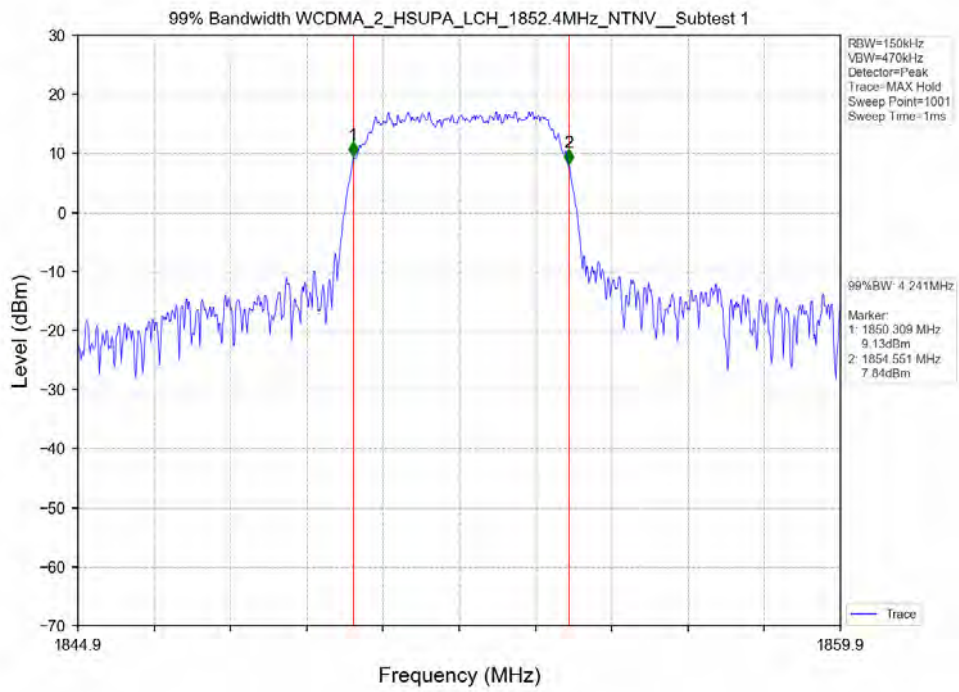
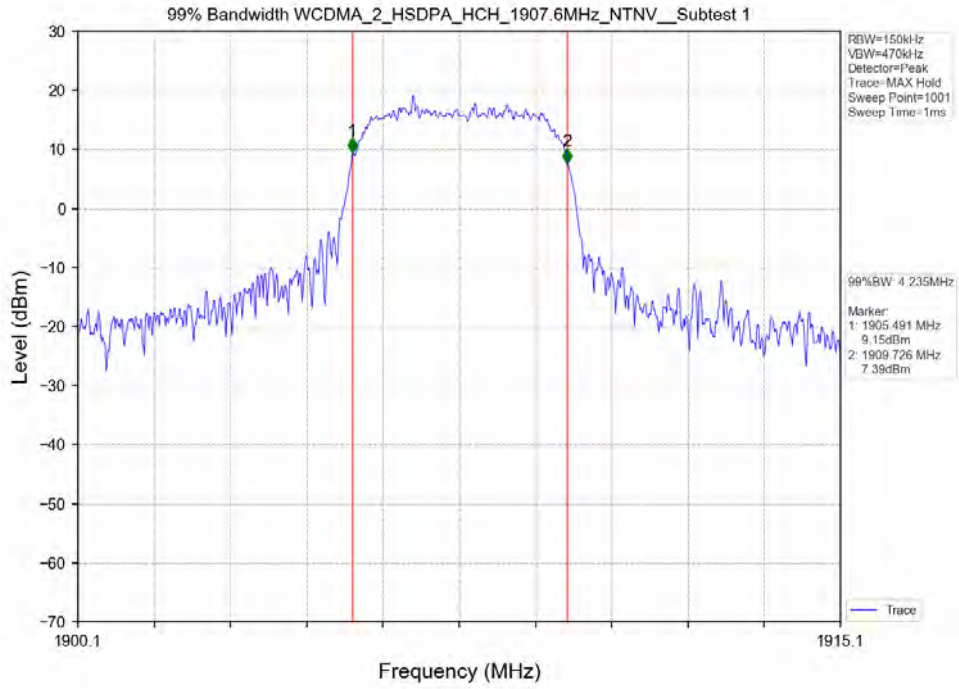
Test Band: 2					
Test Mode	99% Occupied Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
HSUPA	4.241	4.214	4.258	N/A	PASS
HSDPA	4.236	4.223	4.235	N/A	PASS
RMC	4.210	4.189	4.187	N/A	PASS

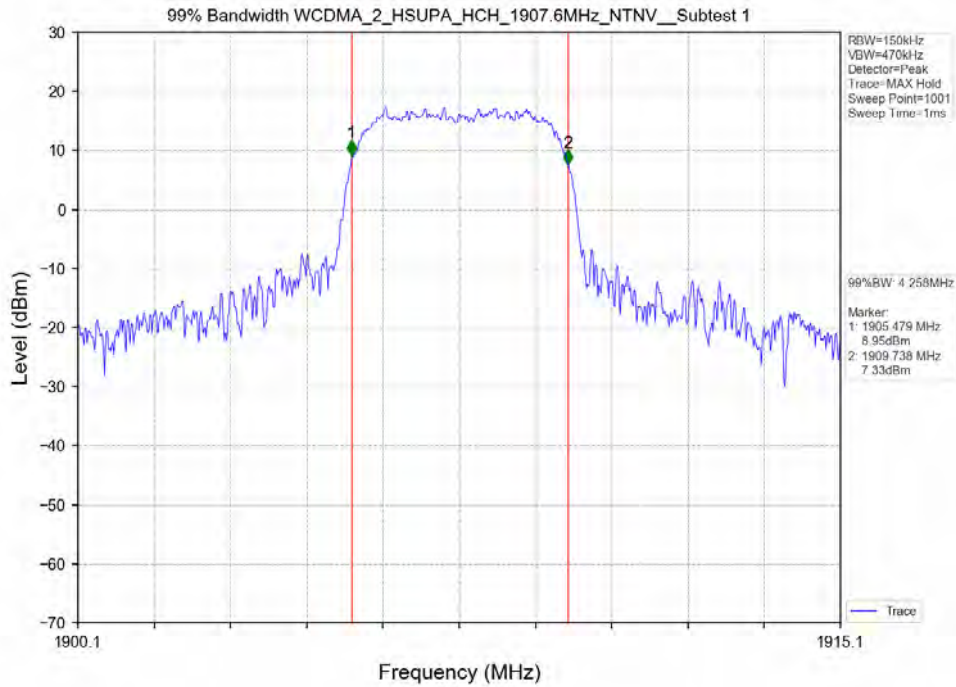
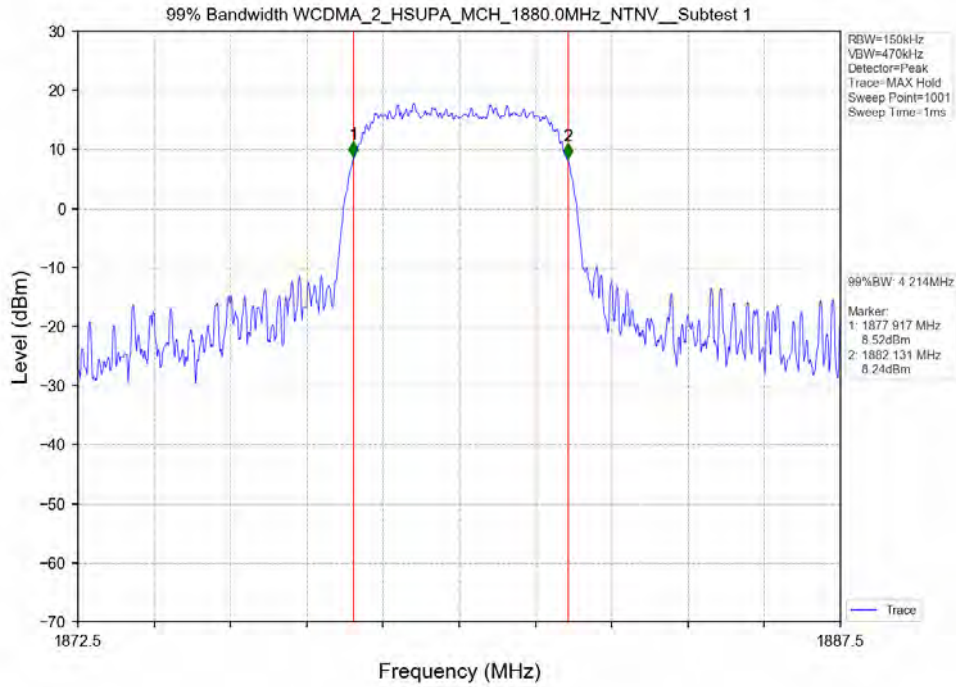
### 4.2 Test Graph





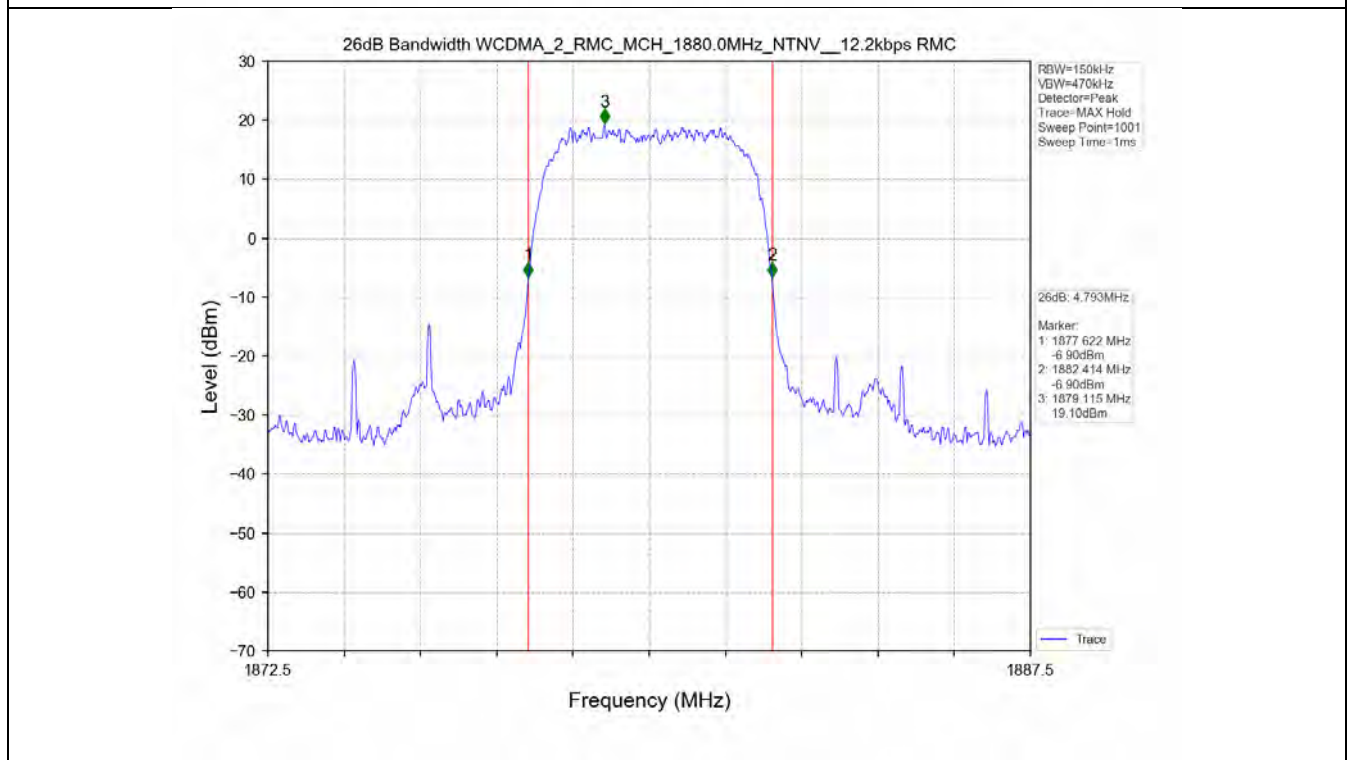
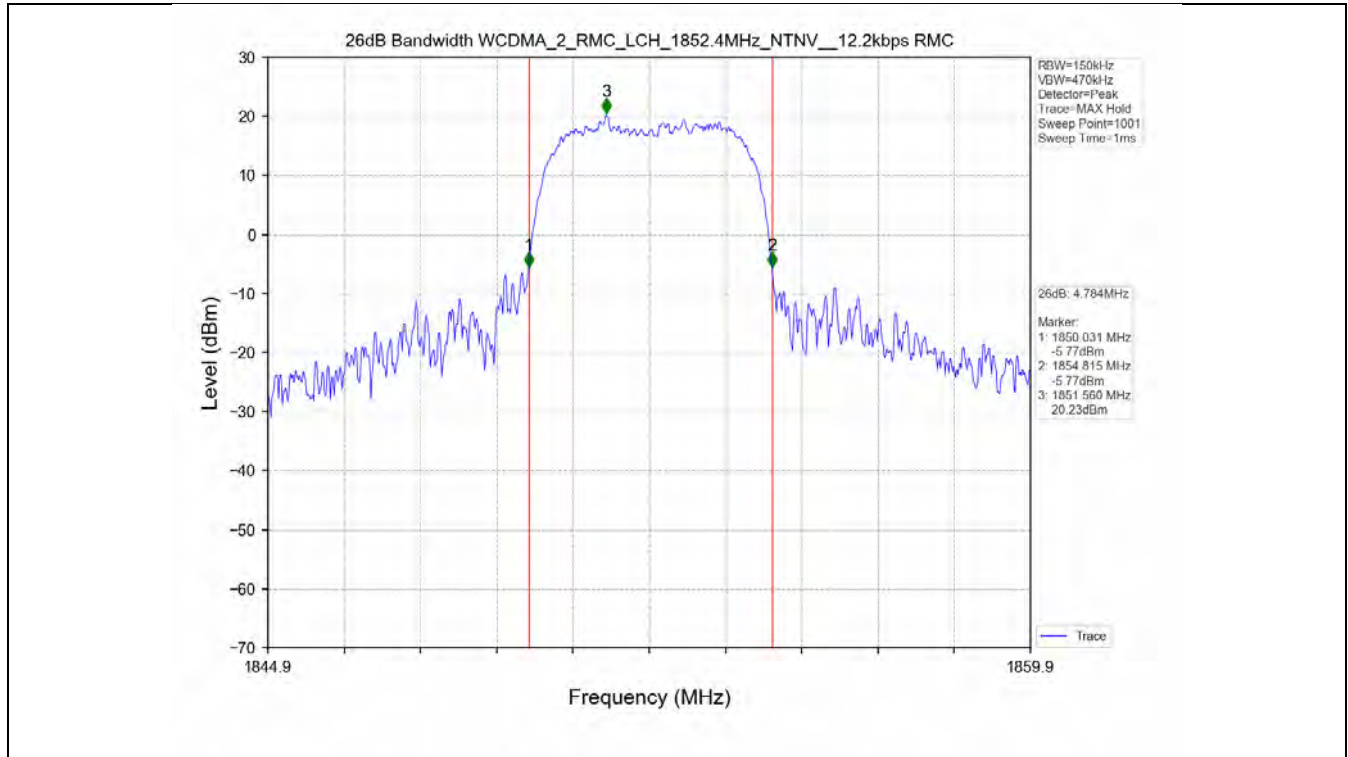




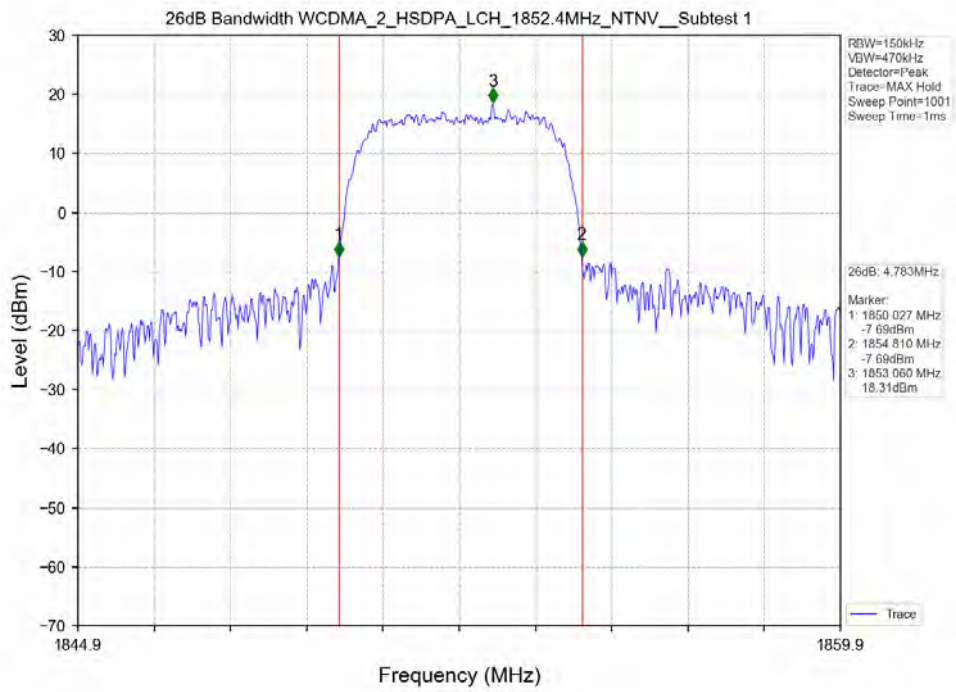
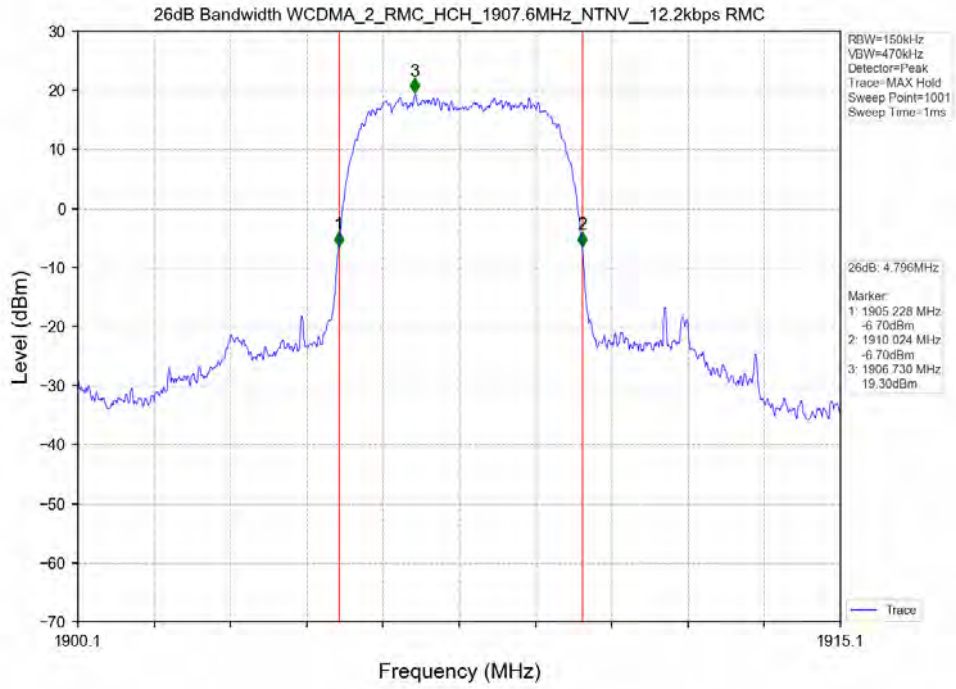


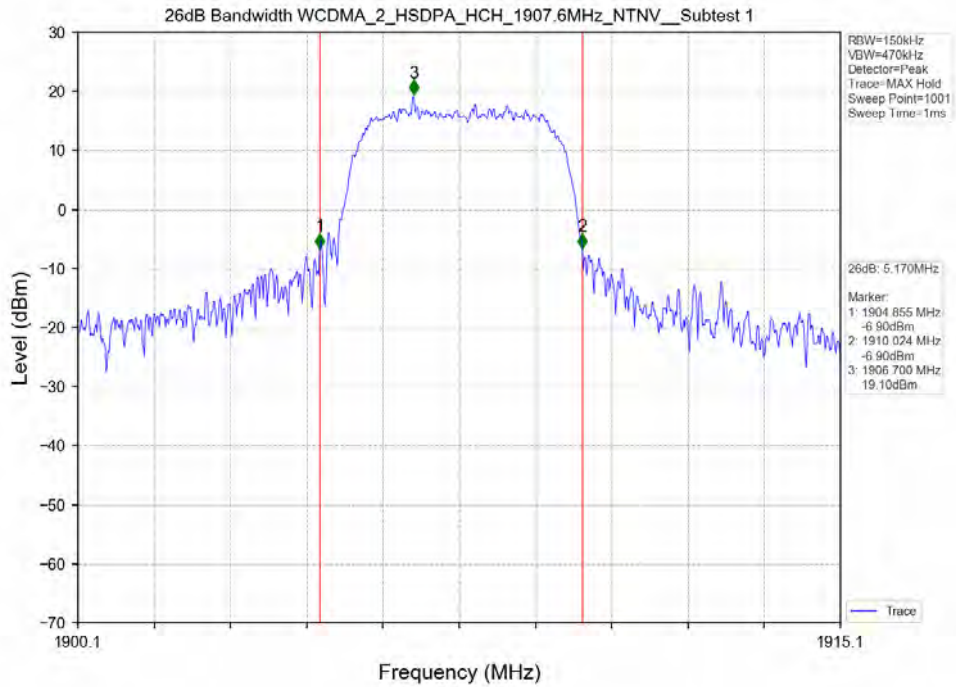
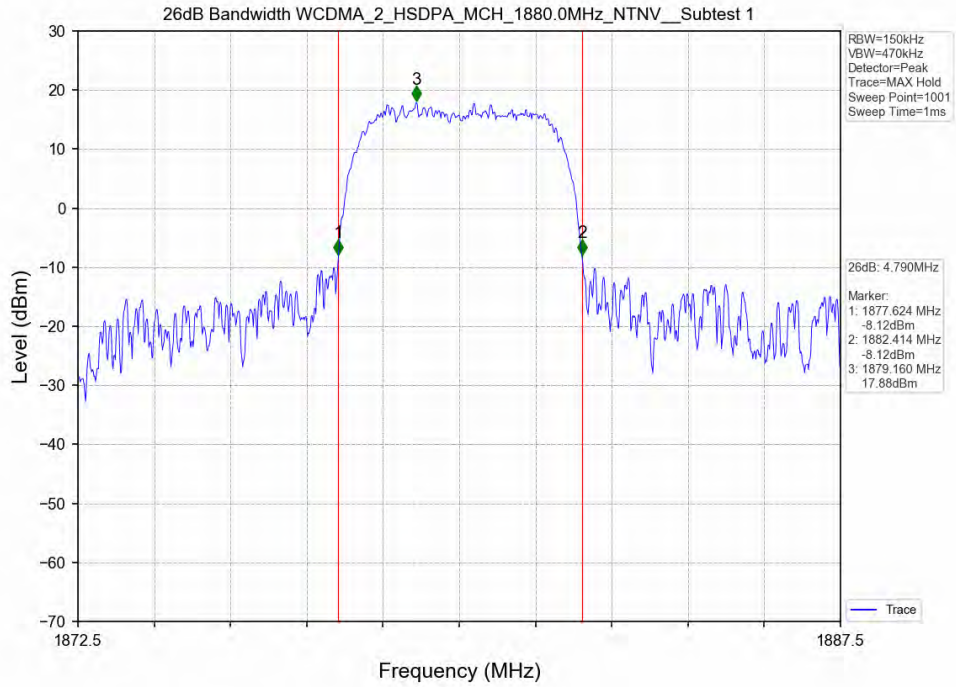
Test Band: 2					
Test Mode	26dB Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
HSUPA	5.225	4.782	5.750	N/A	PASS
HSDPA	4.783	4.790	5.170	N/A	PASS
RMC	4.784	4.793	4.796	N/A	PASS

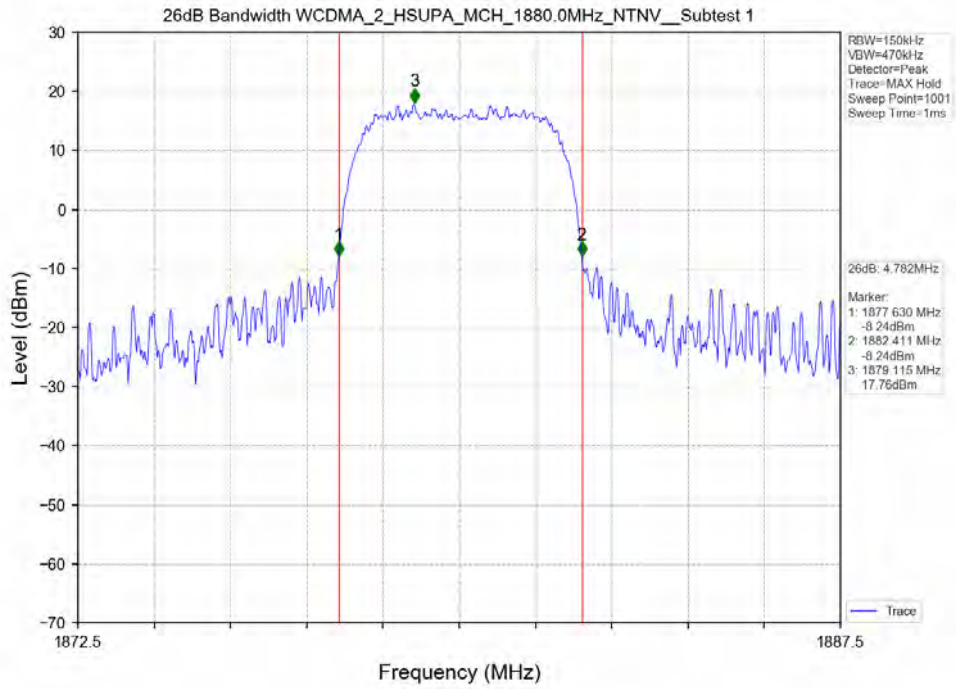
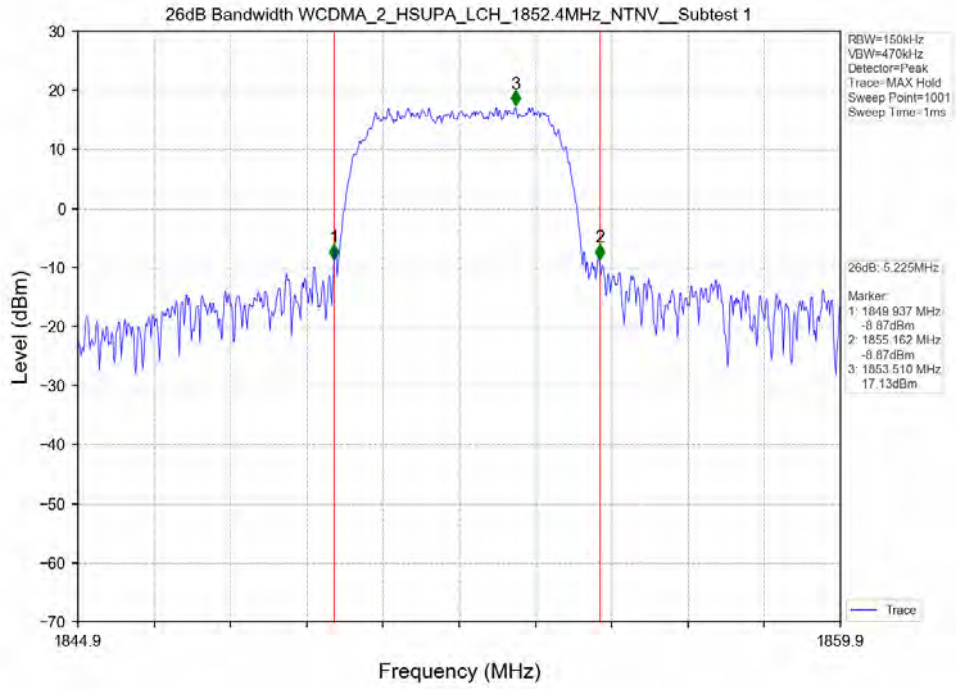
## 4.2 Test Graph



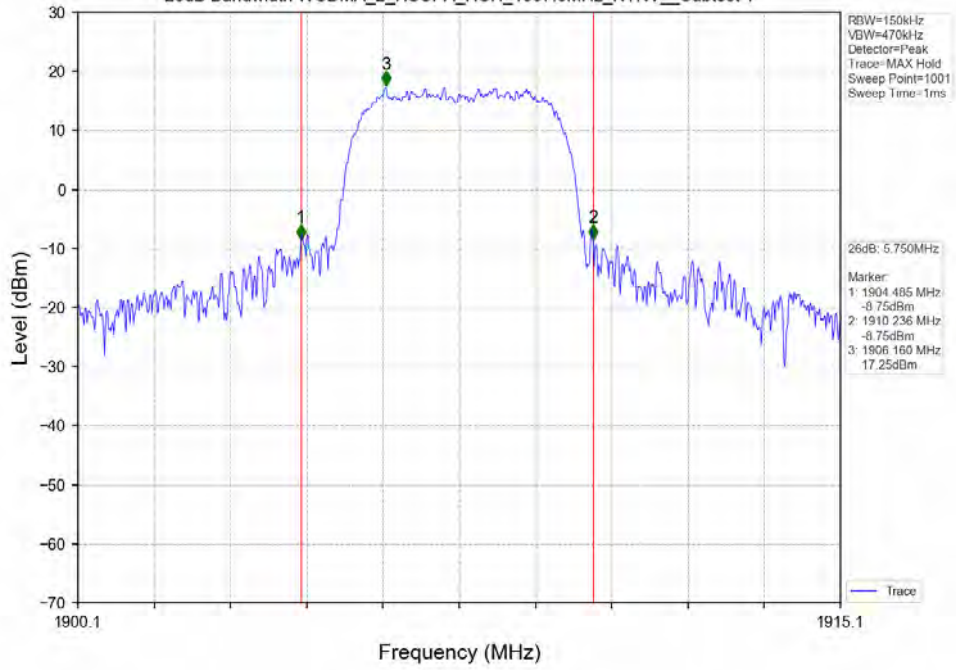






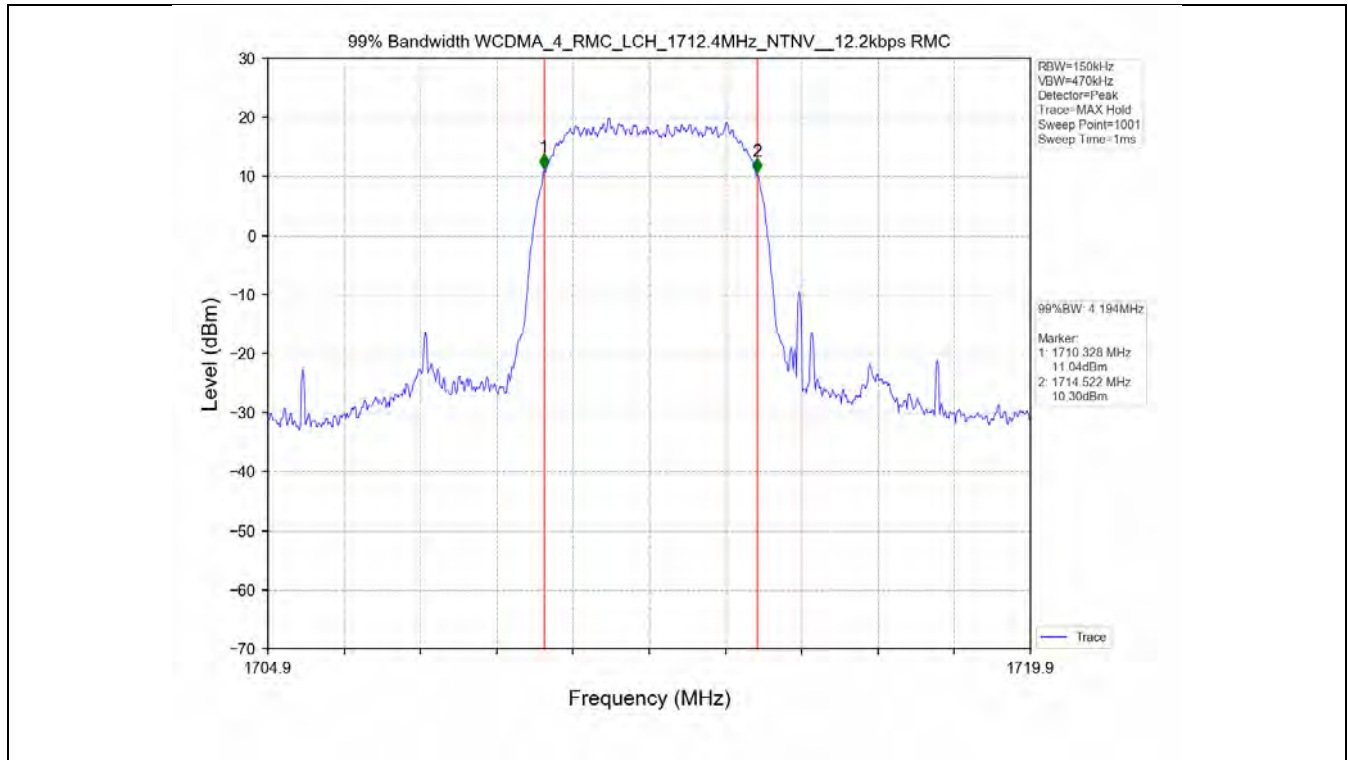


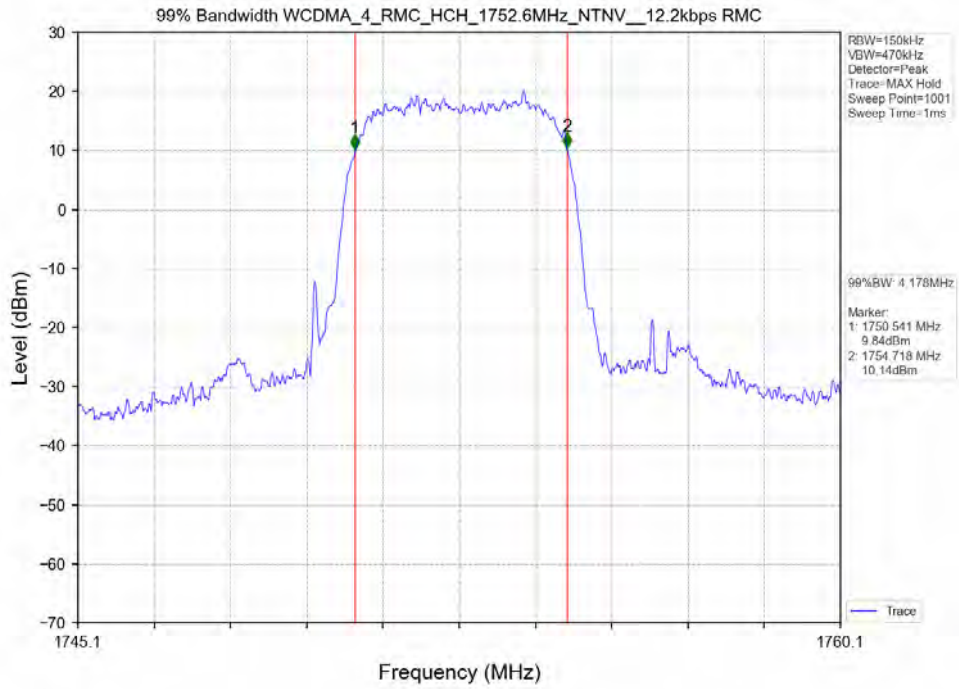
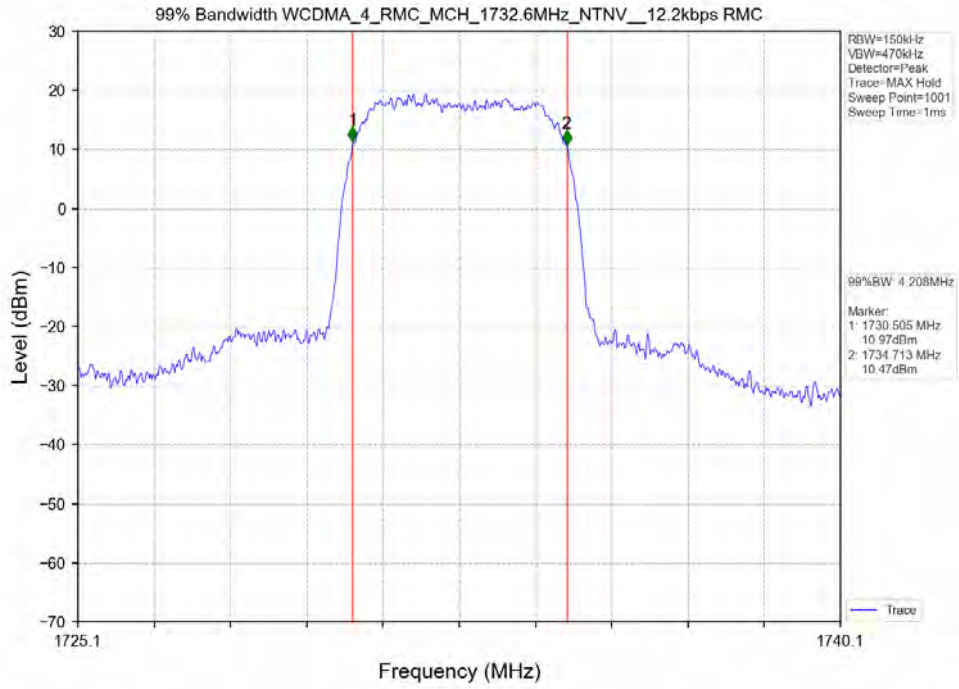
26dB Bandwidth WCDMA\_2\_HSUPA\_HCH\_1907.6MHz\_NTNV\_Subtest 1

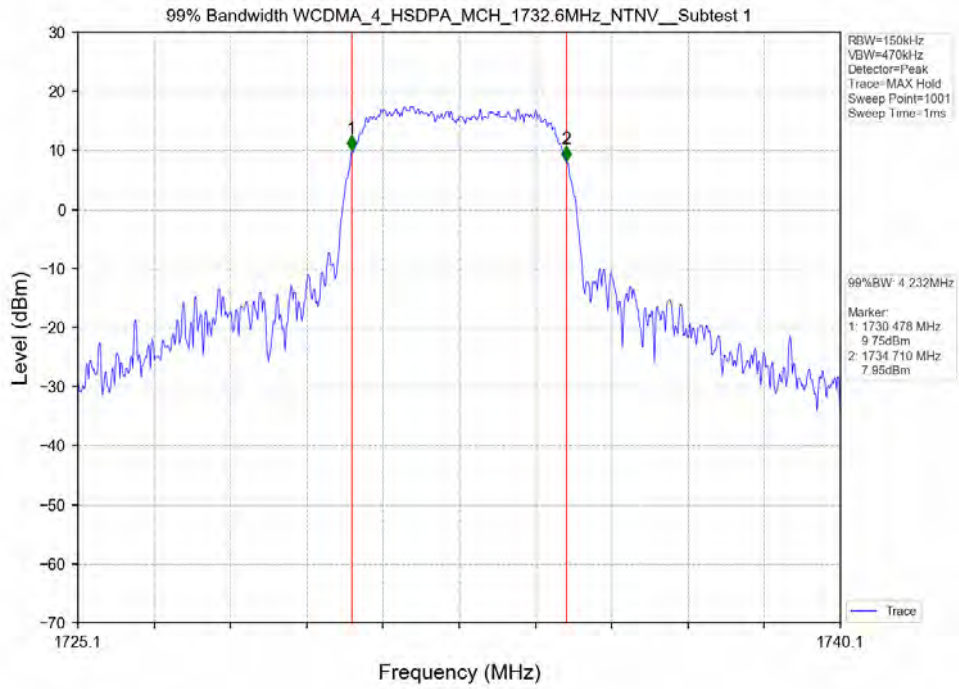
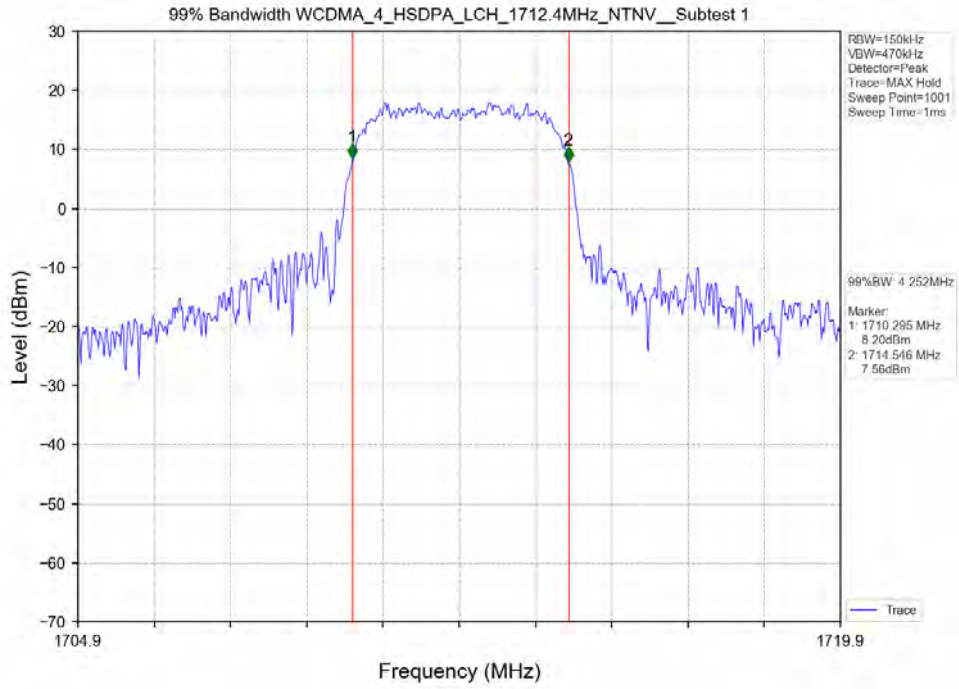


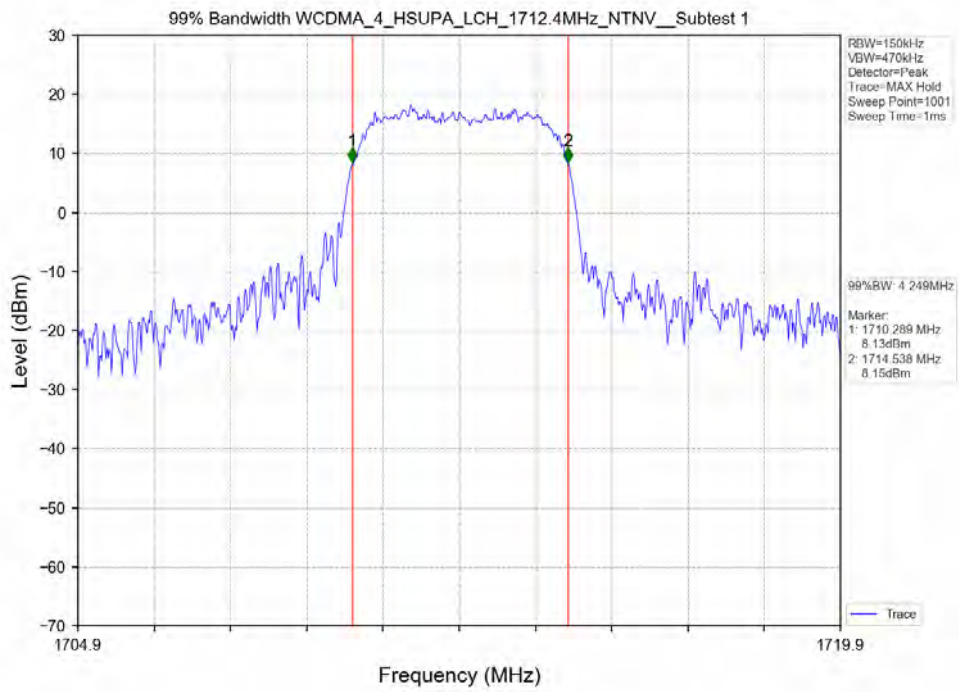
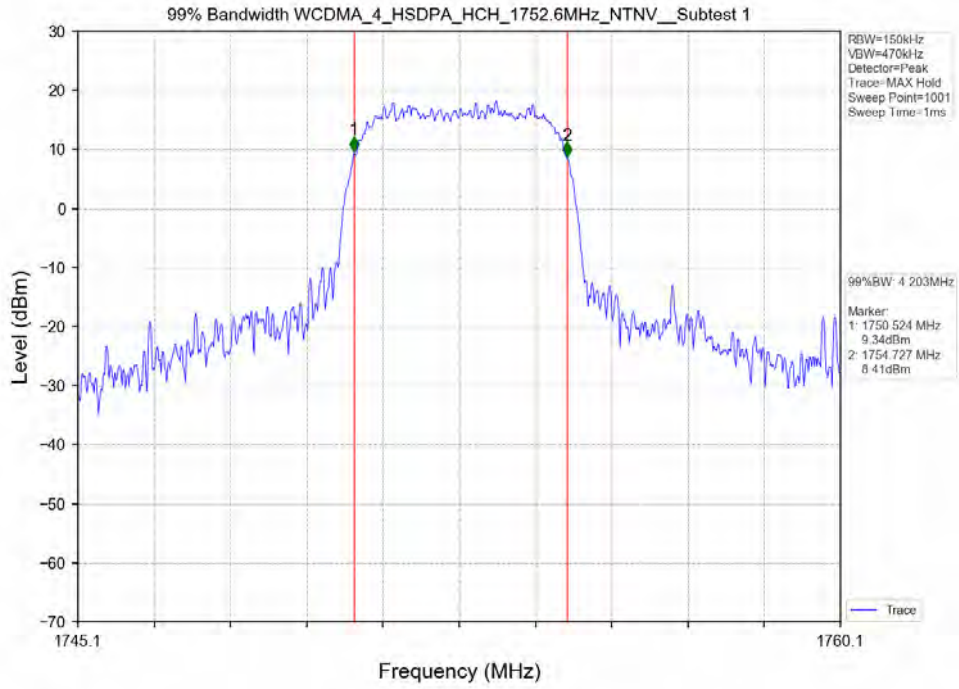
Test Band: 4					
Test Mode	99% Occupied Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
HSUPA	4.249	4.201	4.218	N/A	PASS
HSDPA	4.252	4.232	4.203	N/A	PASS
RMC	4.194	4.208	4.178	N/A	PASS

## 4.2 Test Graph

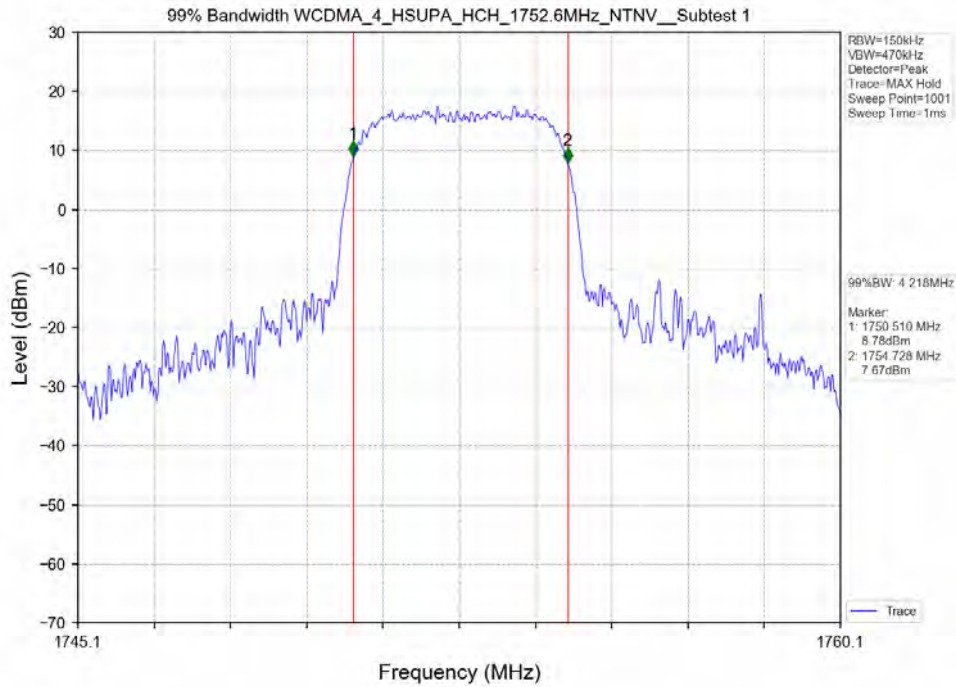
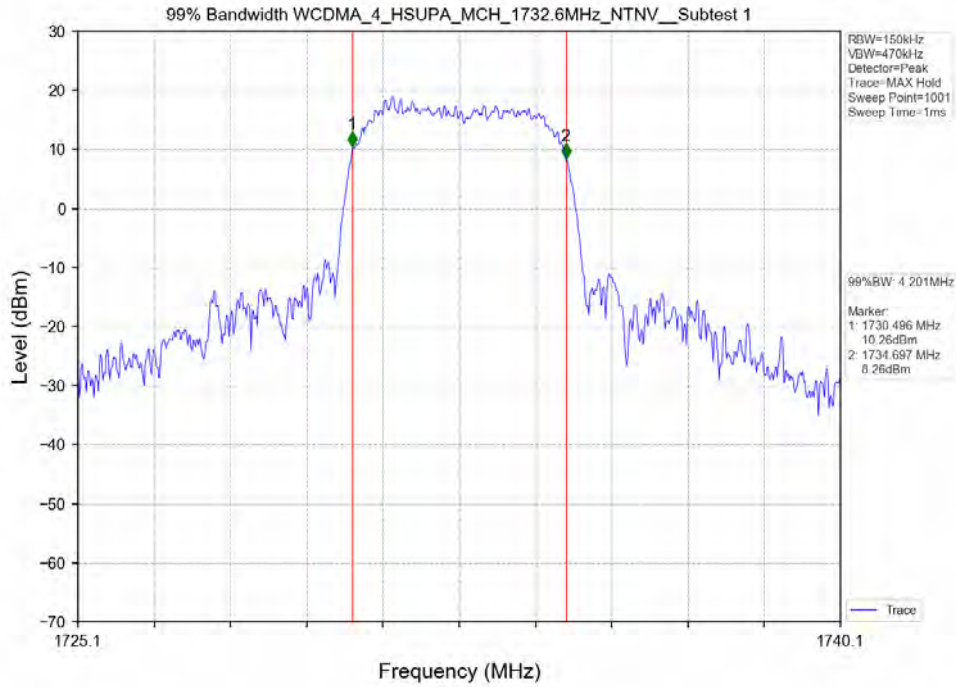






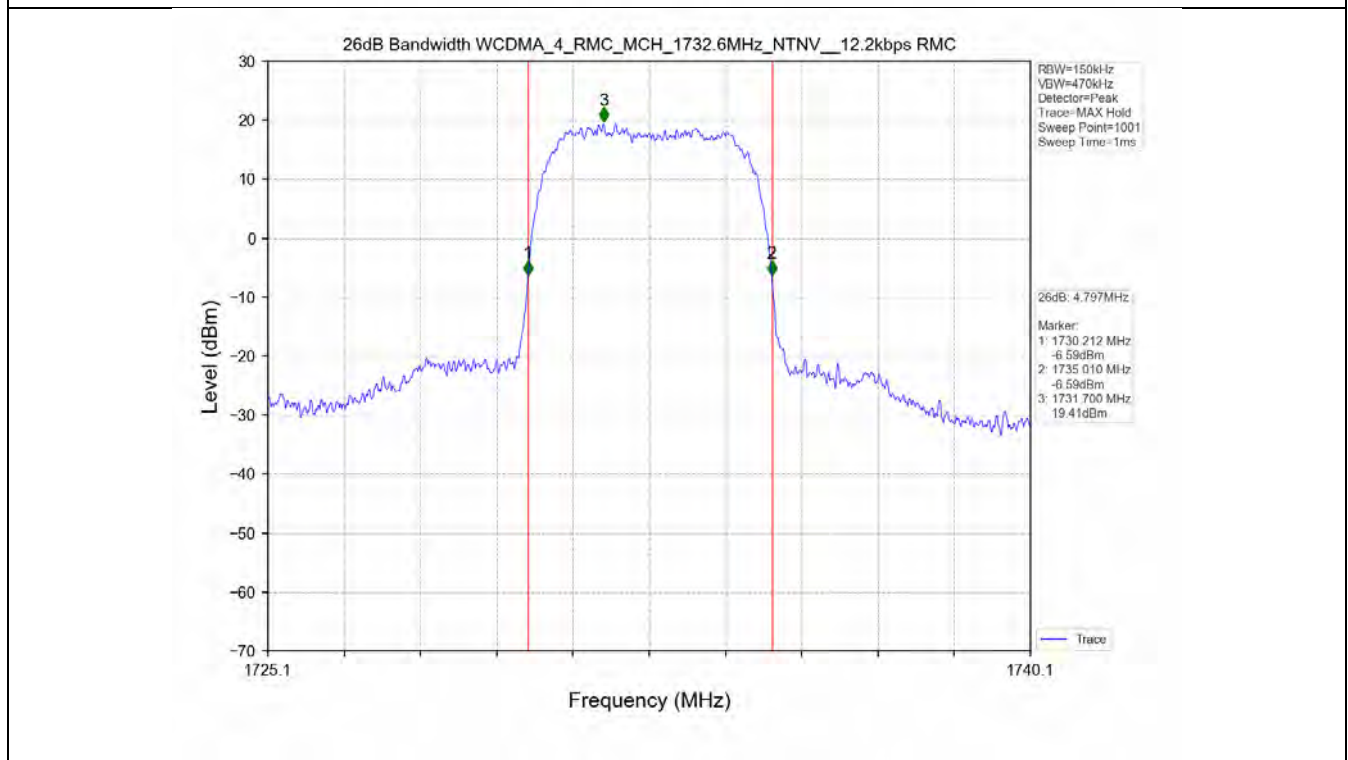
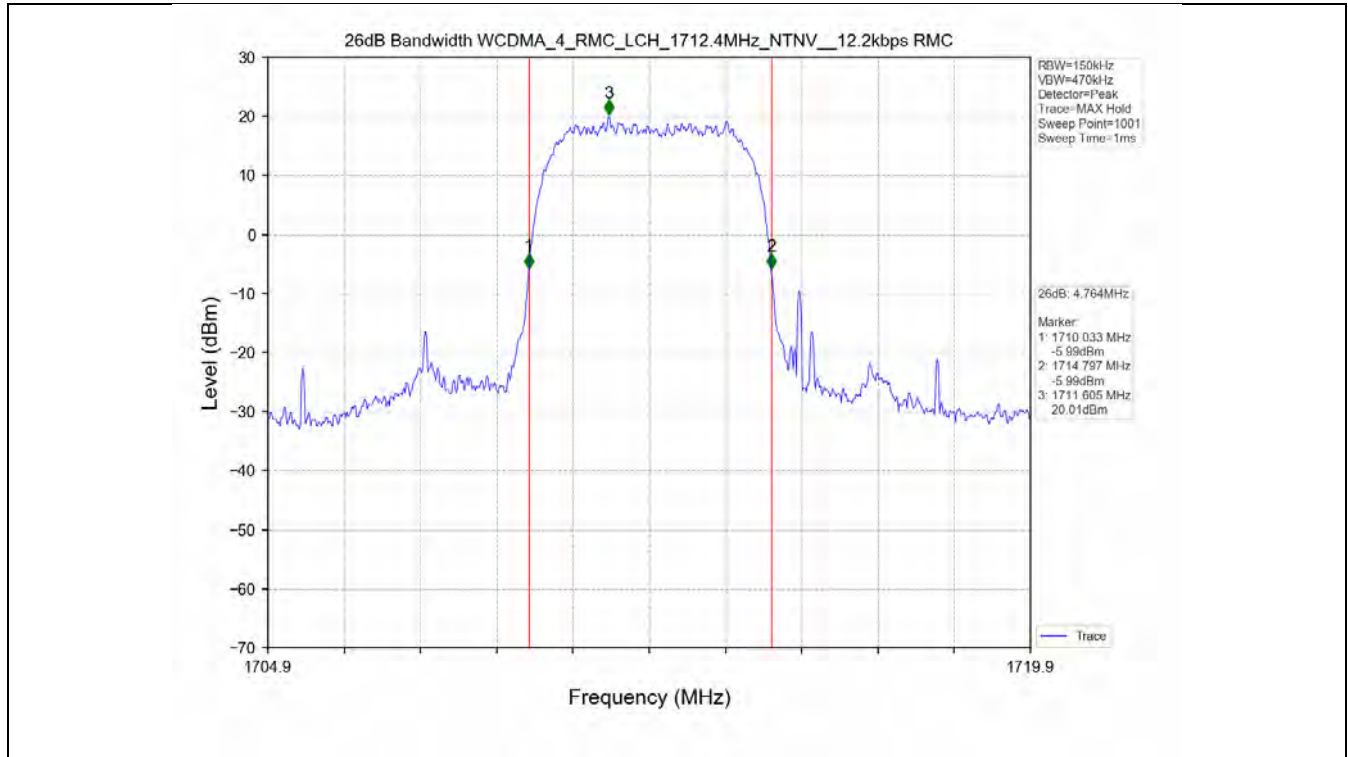


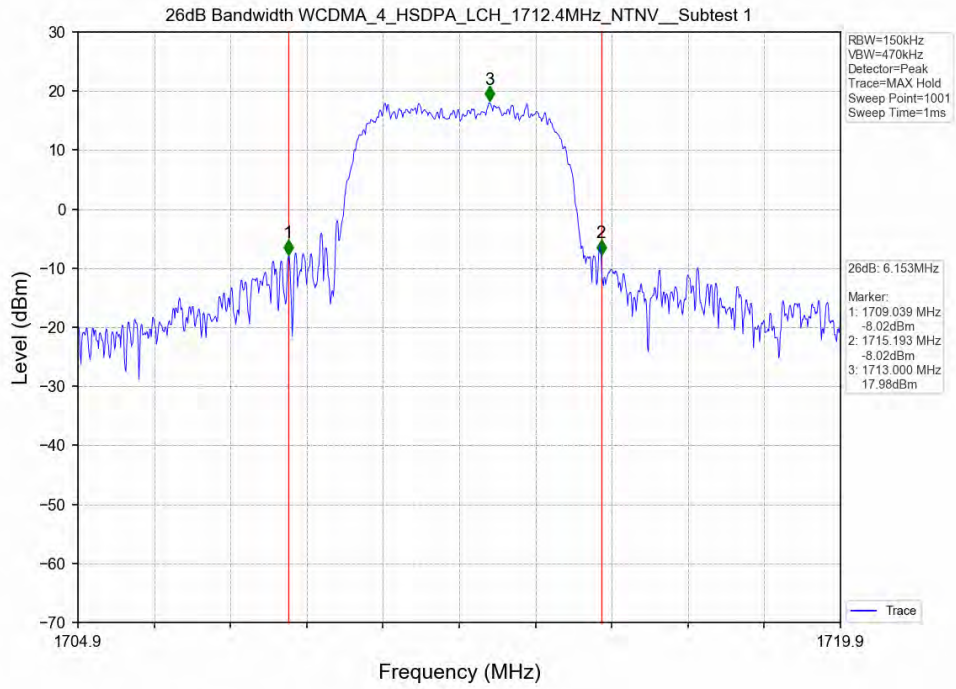
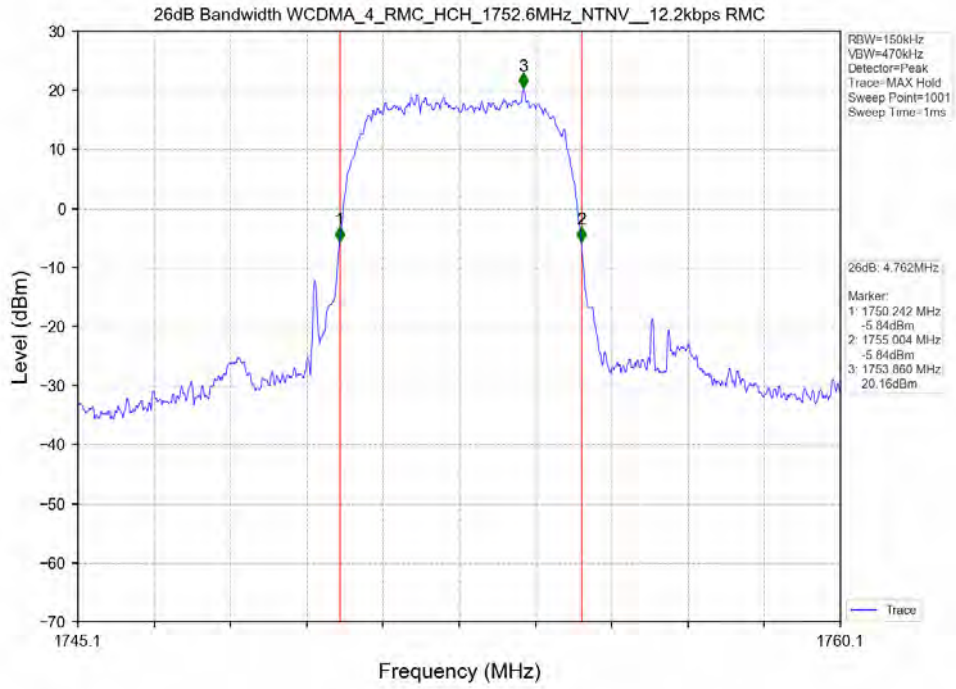


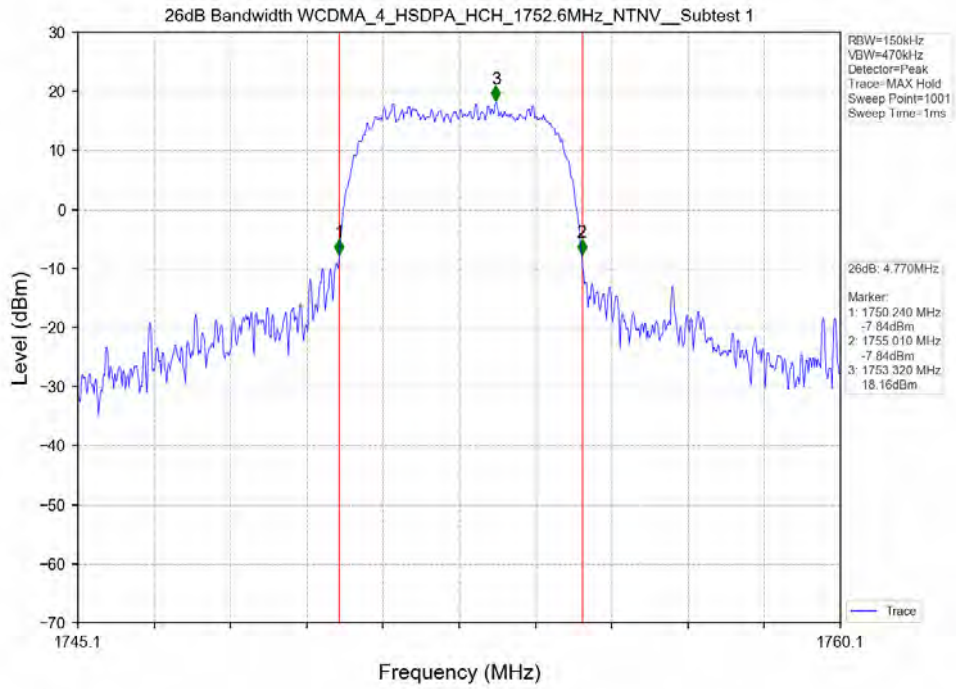
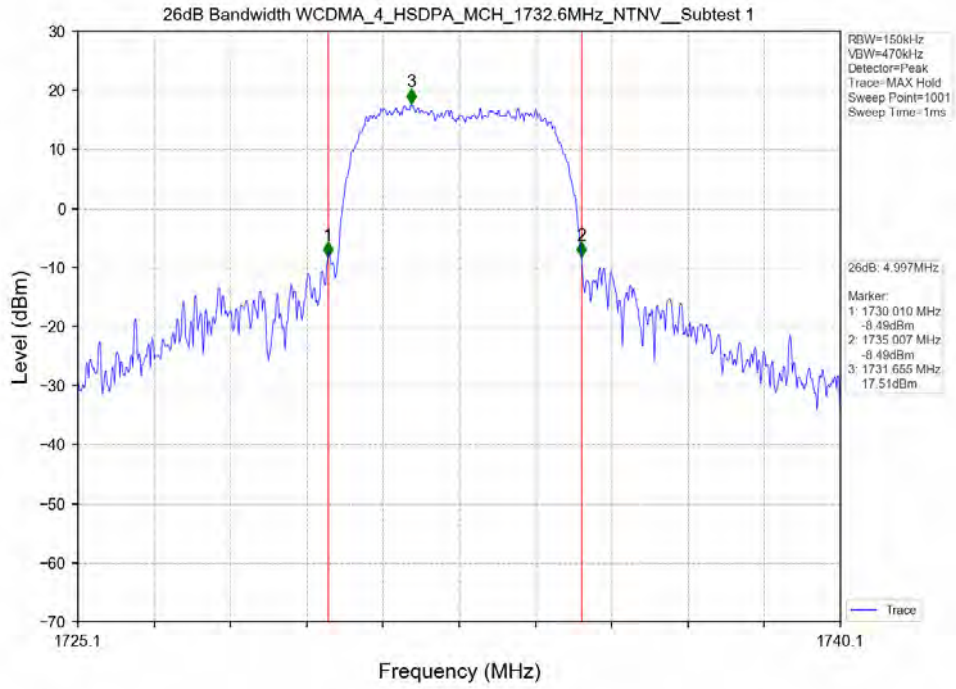


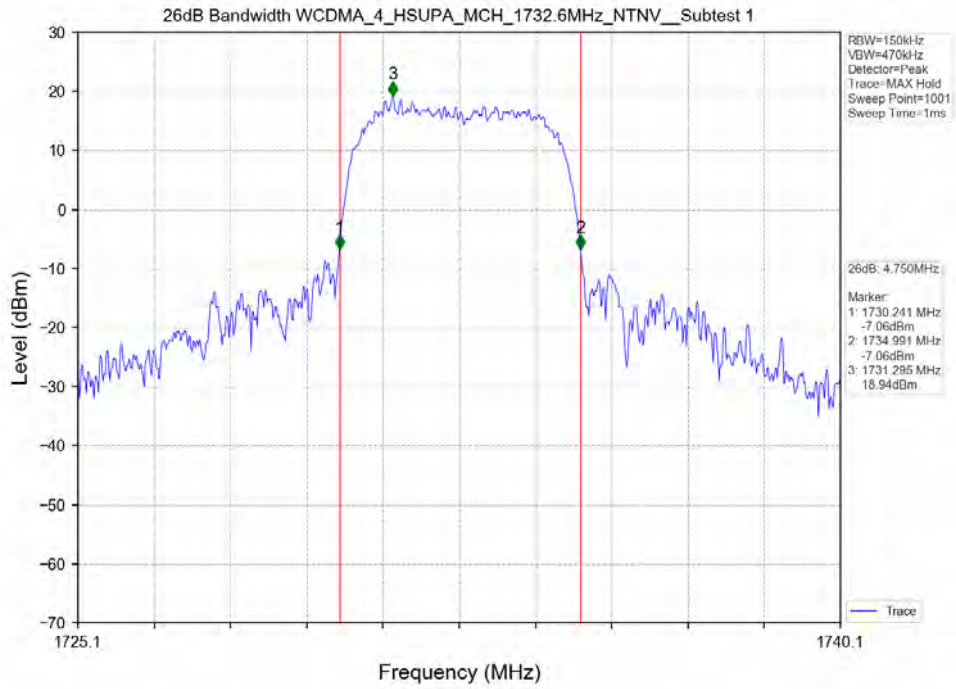
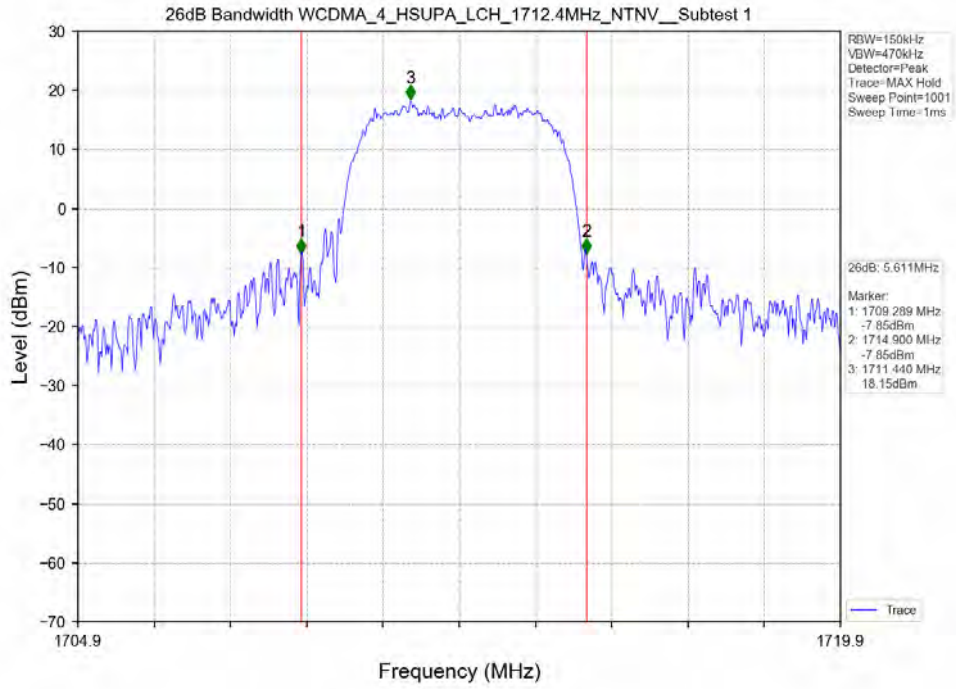
Test Band: 4					
Test Mode	26dB Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
HSUPA	5.611	4.750	4.786	N/A	PASS
HSDPA	6.153	4.997	4.770	N/A	PASS
RMC	4.764	4.797	4.762	N/A	PASS

## 4.2 Test Graph

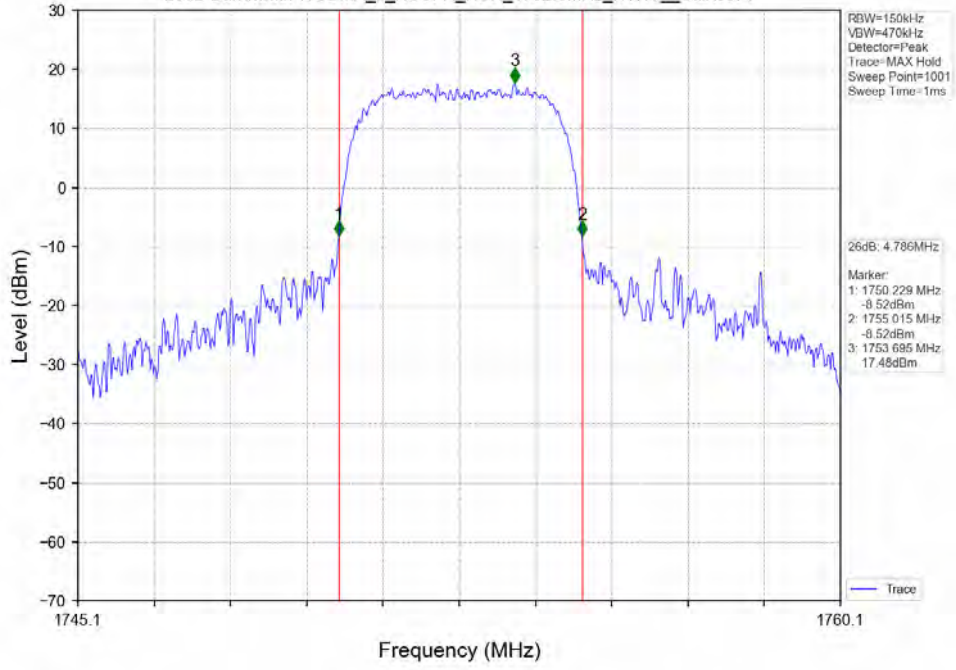






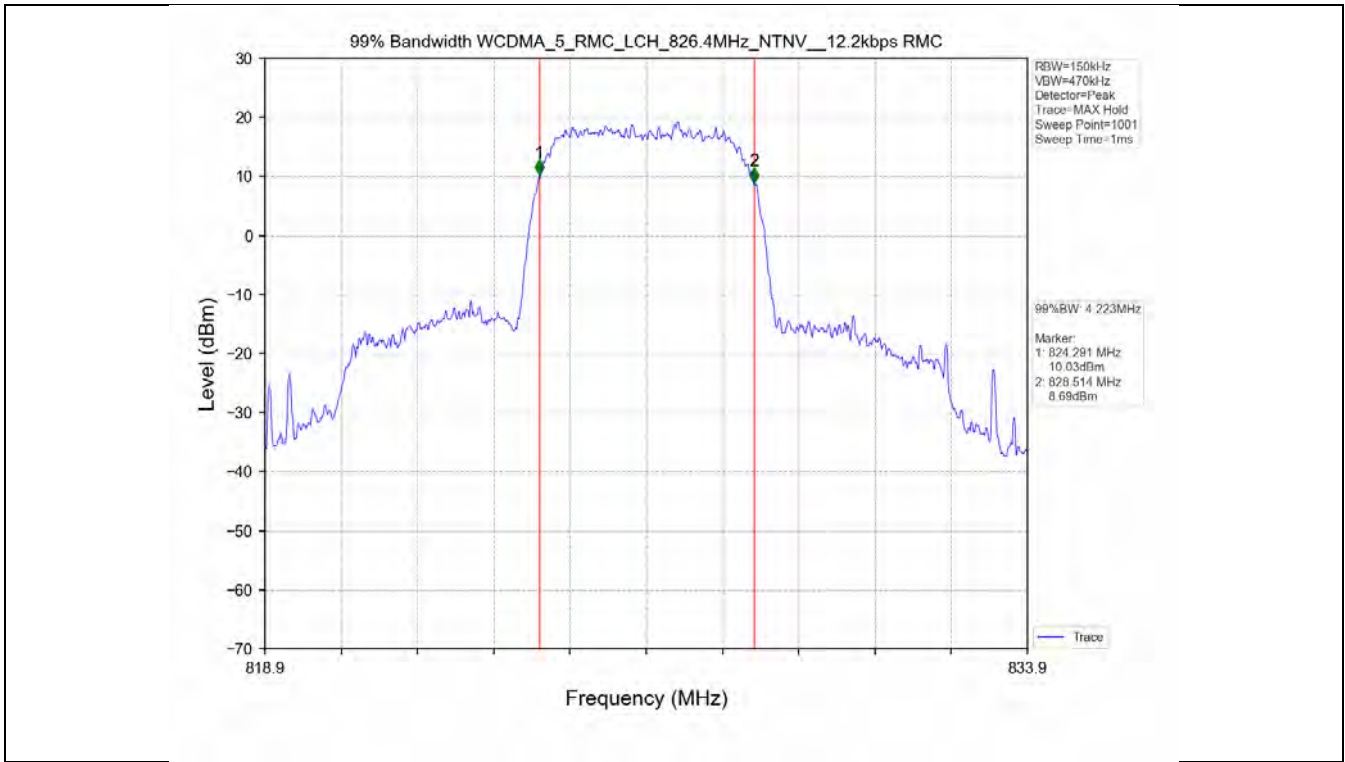


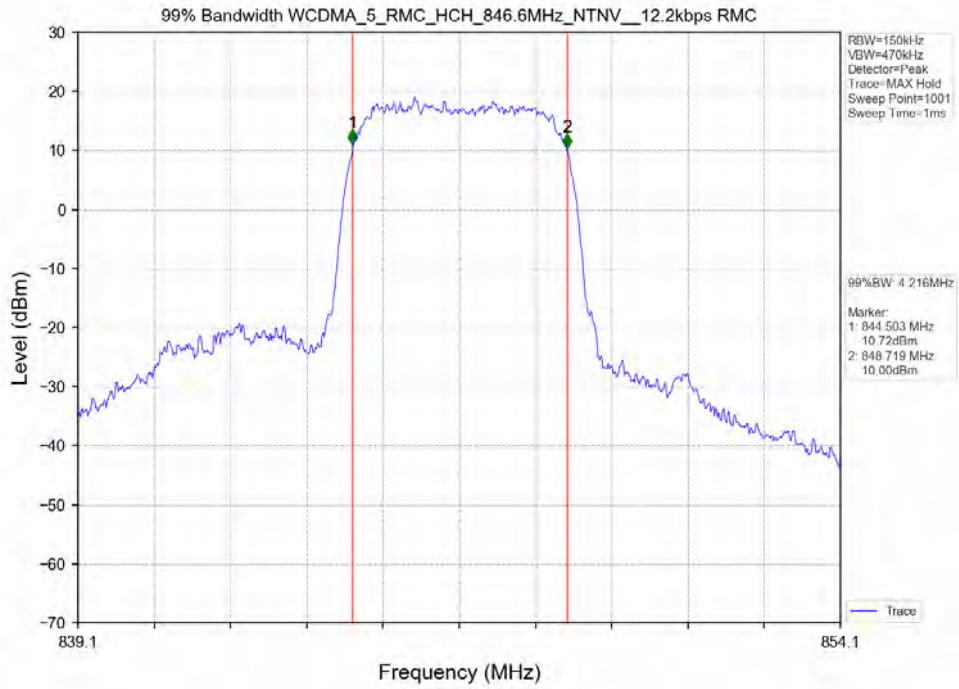
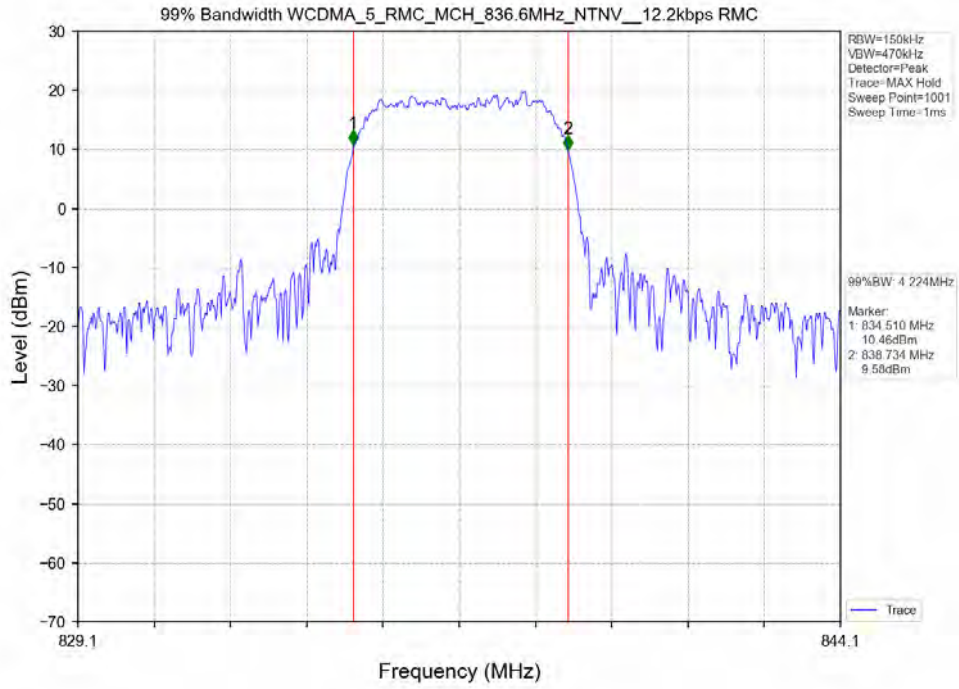
26dB Bandwidth WCDMA\_4\_HSUPA\_HCH\_1752.6MHz\_NTNV\_Subtest 1



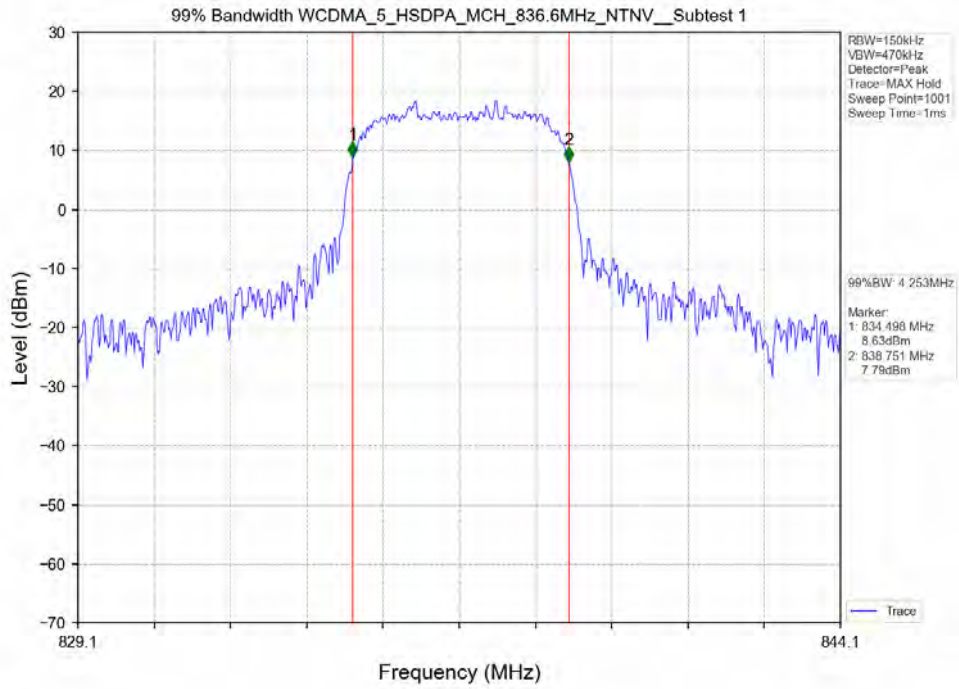
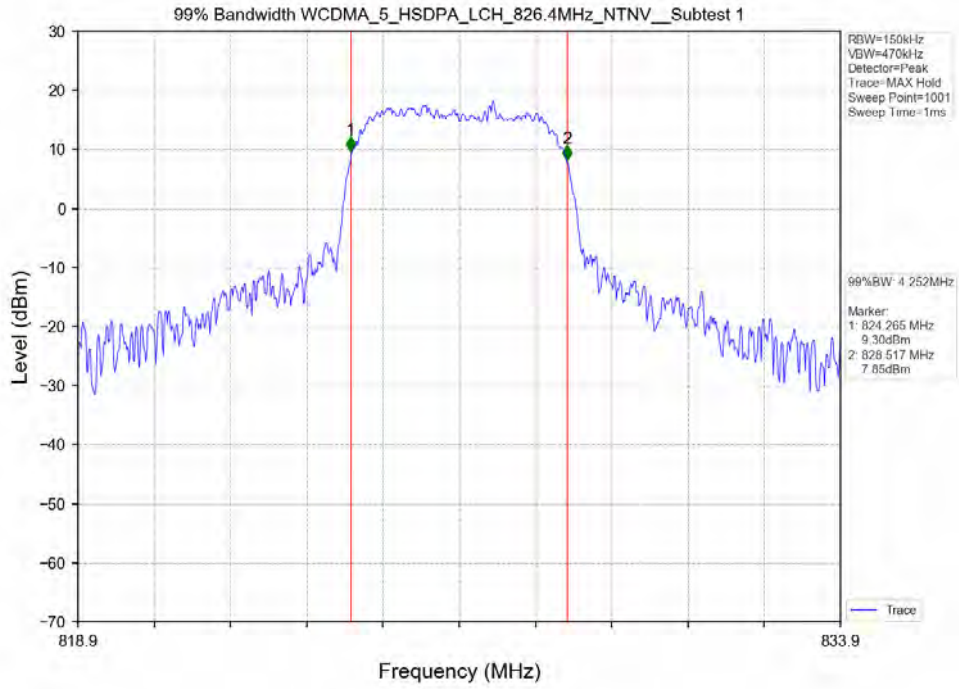
Test Band: 5					
Test Mode	99% Occupied Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
HSUPA	4.234	4.252	4.273	N/A	PASS
HSDPA	4.252	4.253	4.278	N/A	PASS
RMC	4.223	4.224	4.216	N/A	PASS

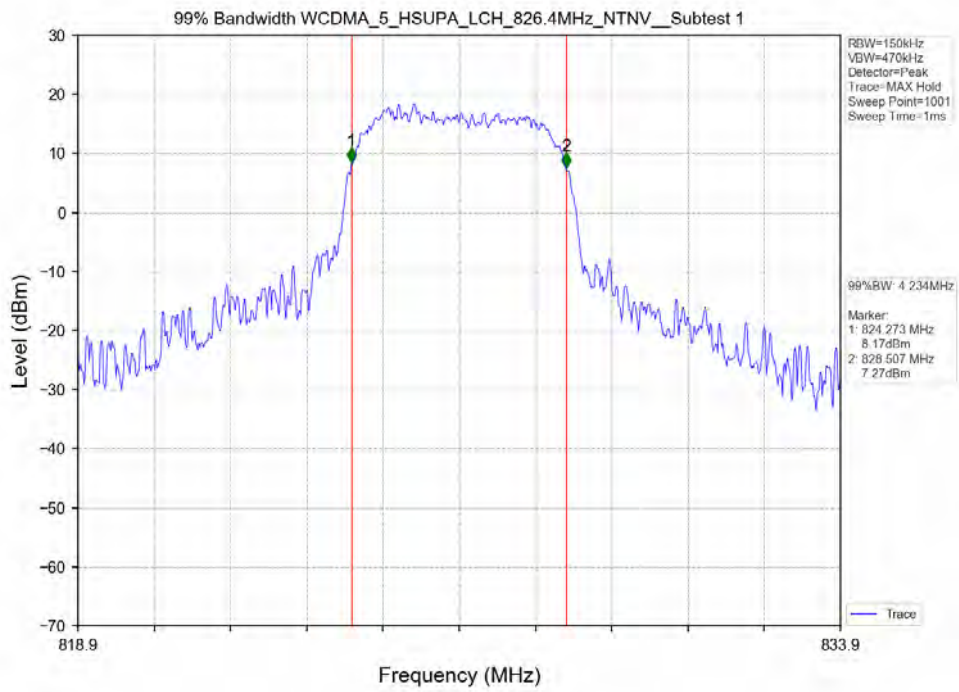
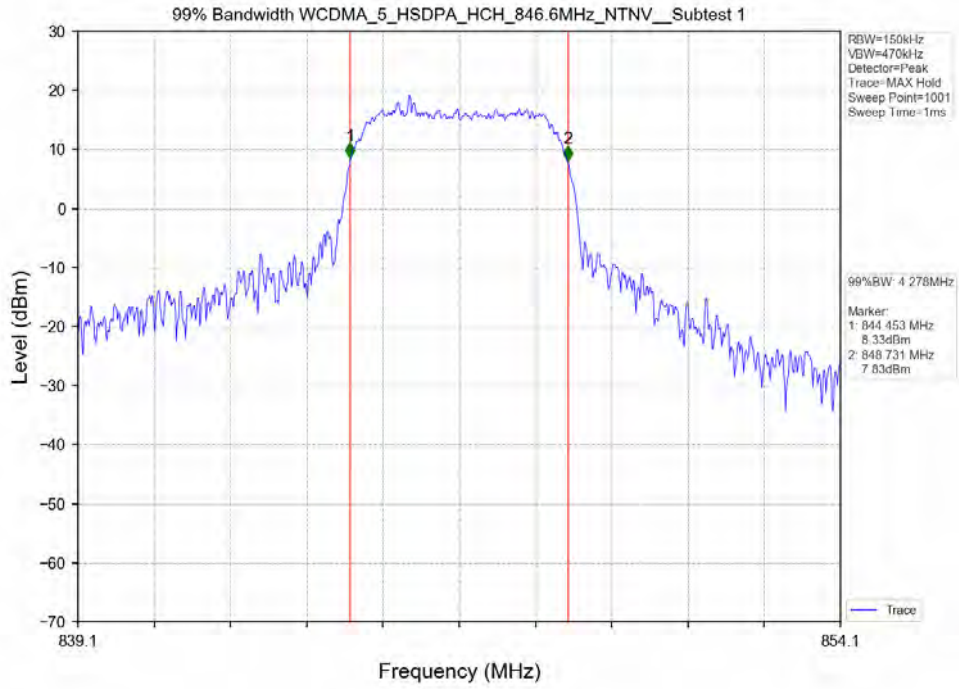
## 4.2 Test Graph

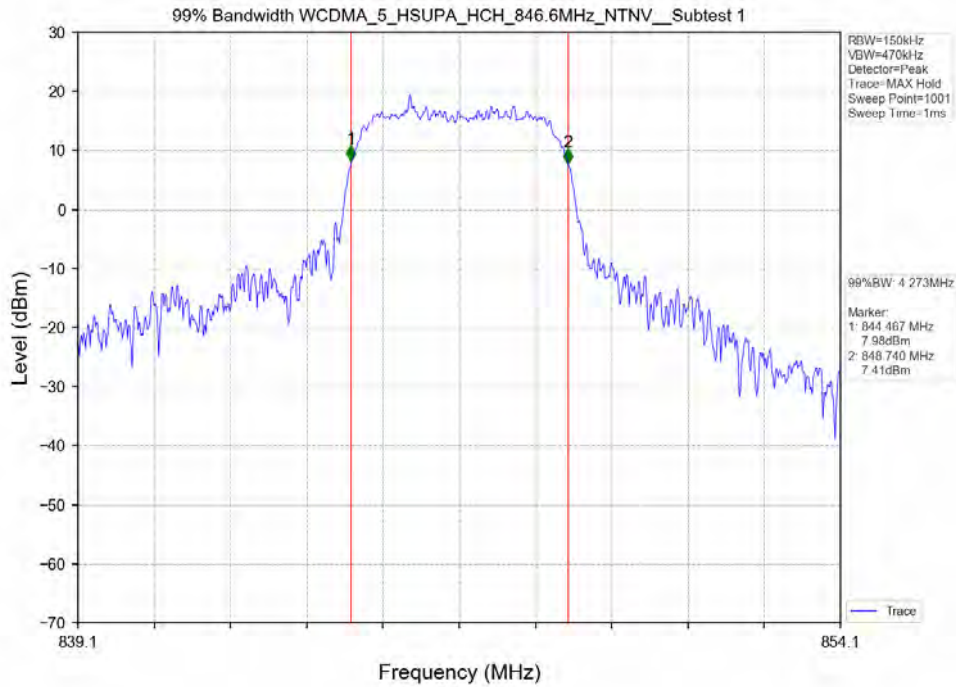
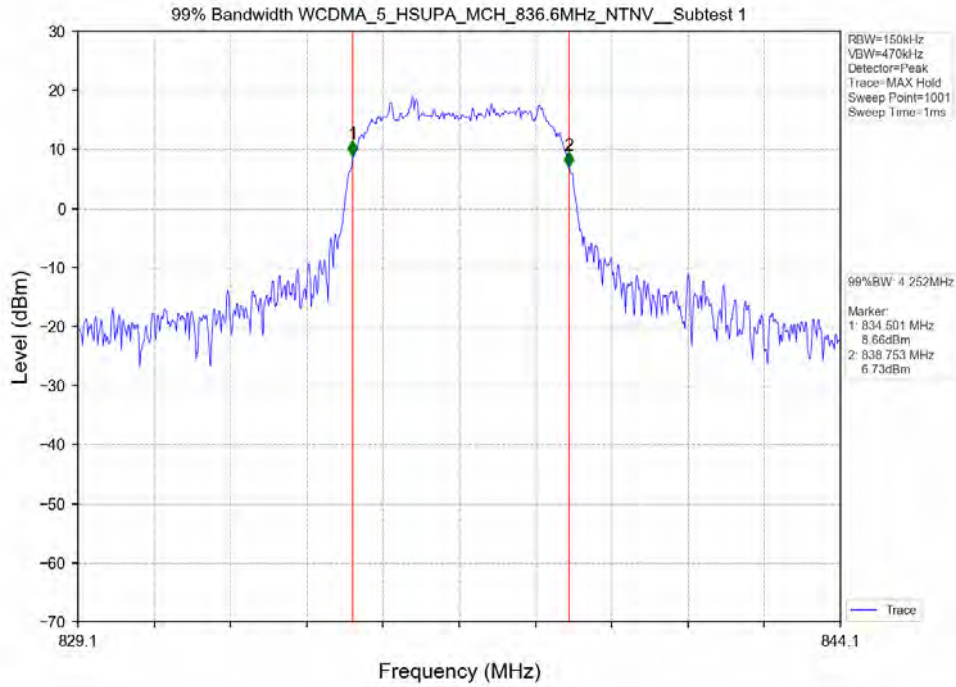








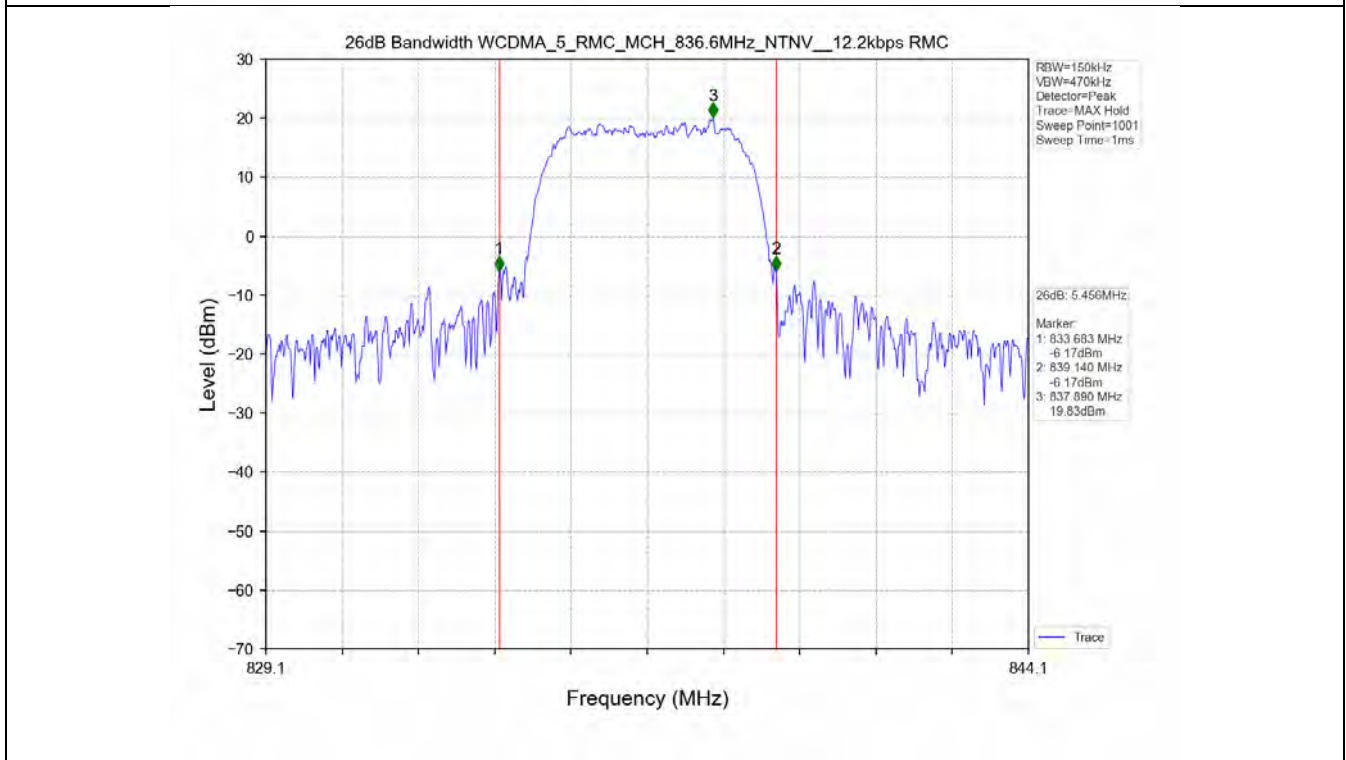
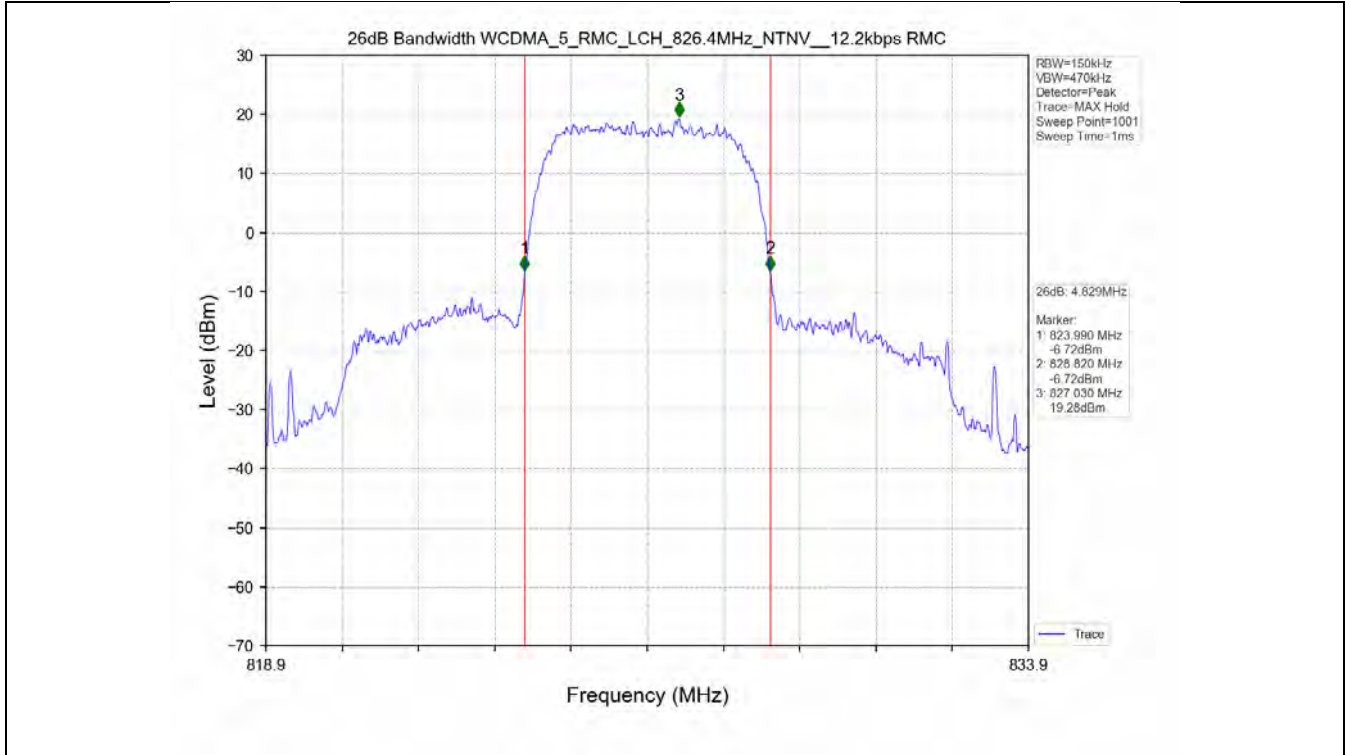


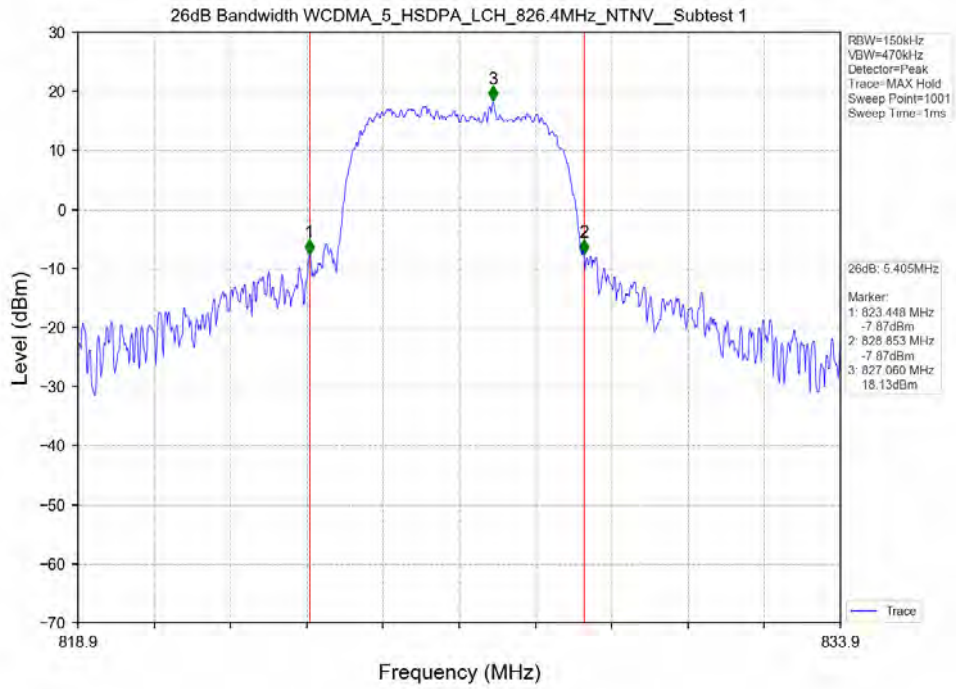
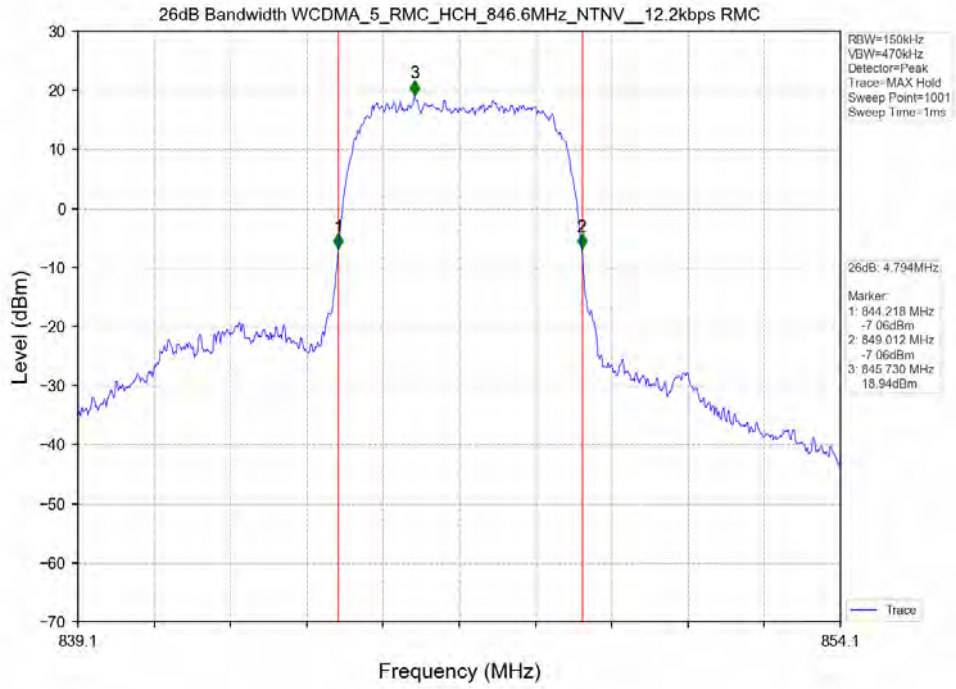


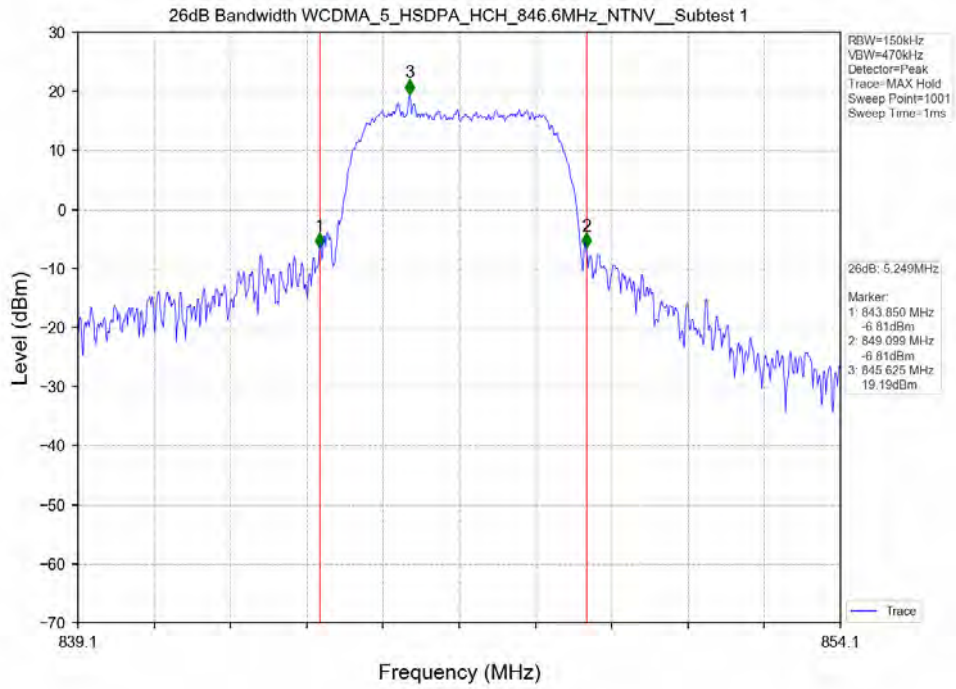
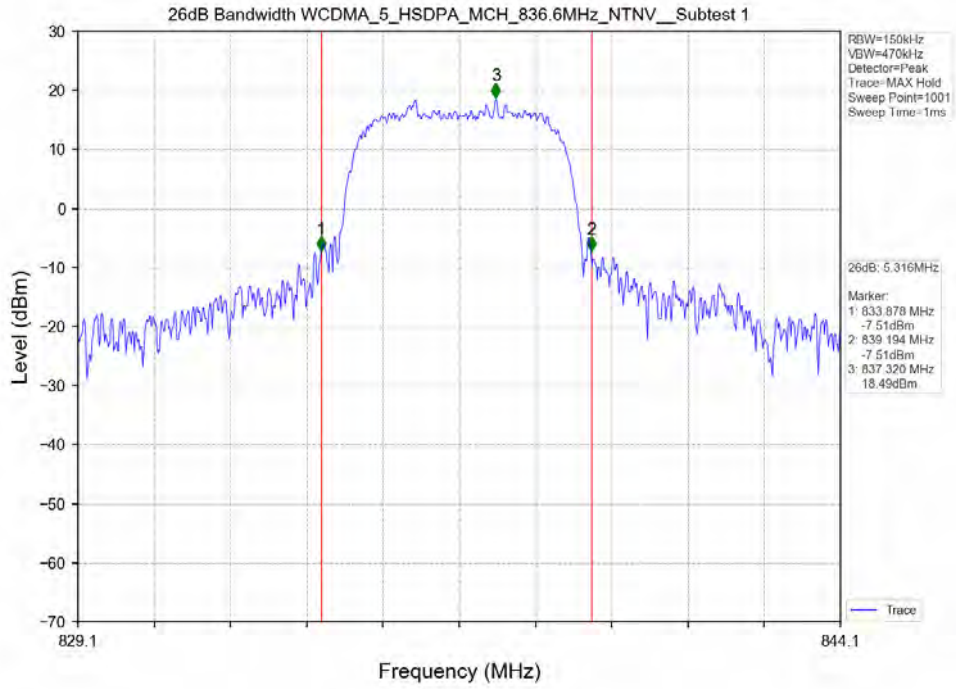
Test Band: 5

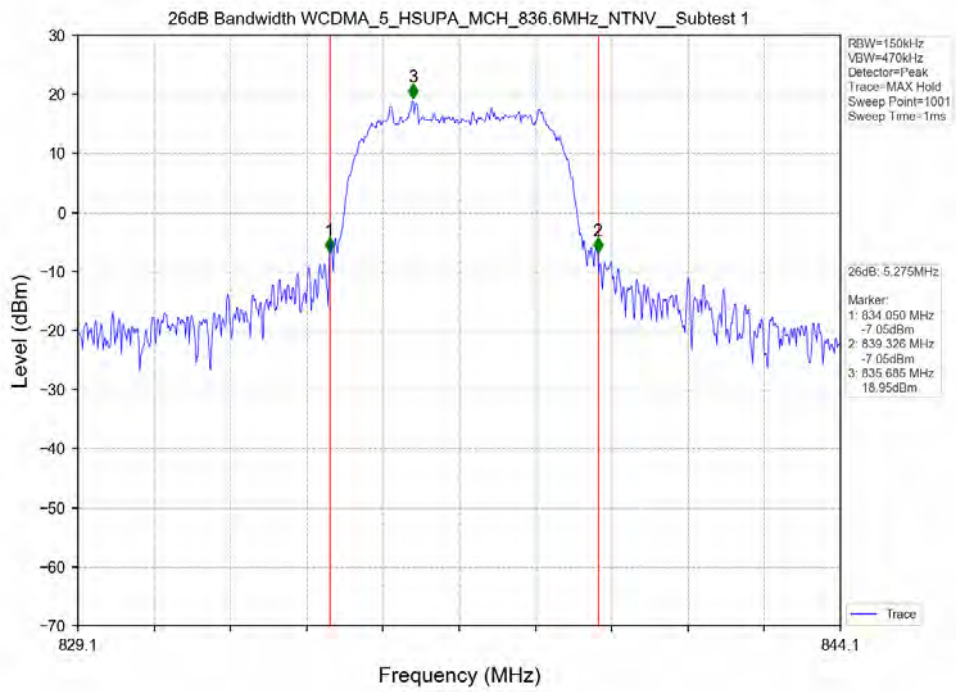
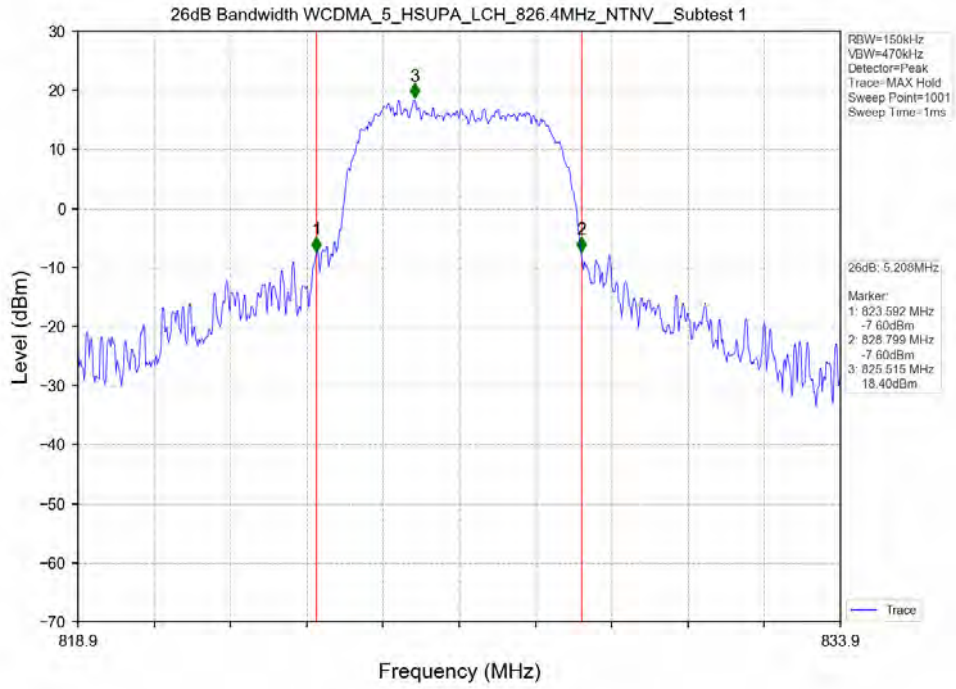
Test Mode	26dB Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
HSUPA	5.208	5.275	5.264	N/A	PASS
HSDPA	5.405	5.316	5.249	N/A	PASS
RMC	4.829	5.456	4.794	N/A	PASS

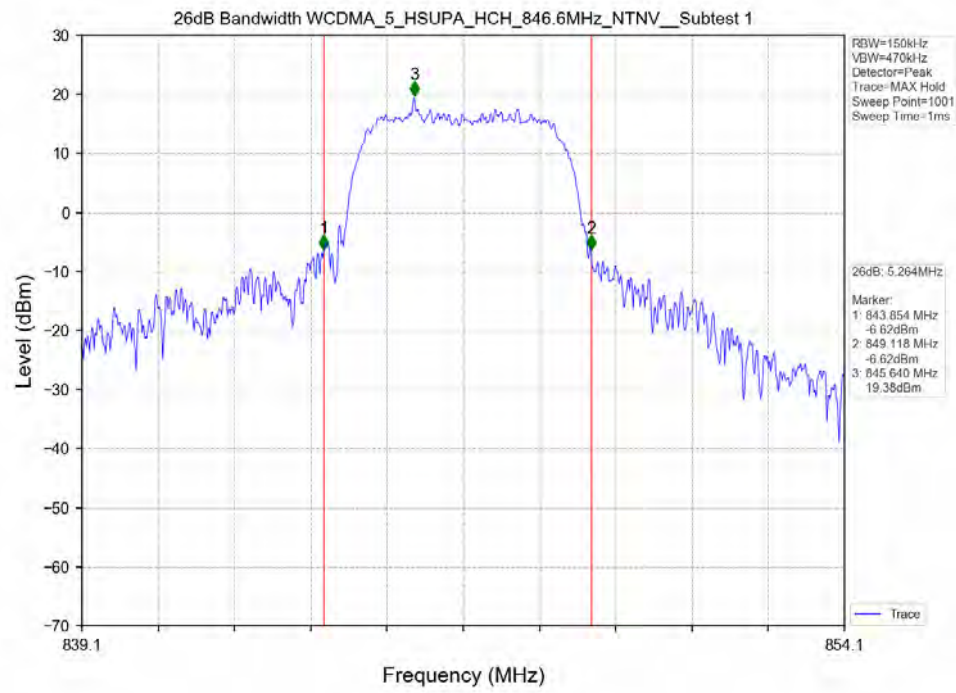
## 4.2 Test Graph











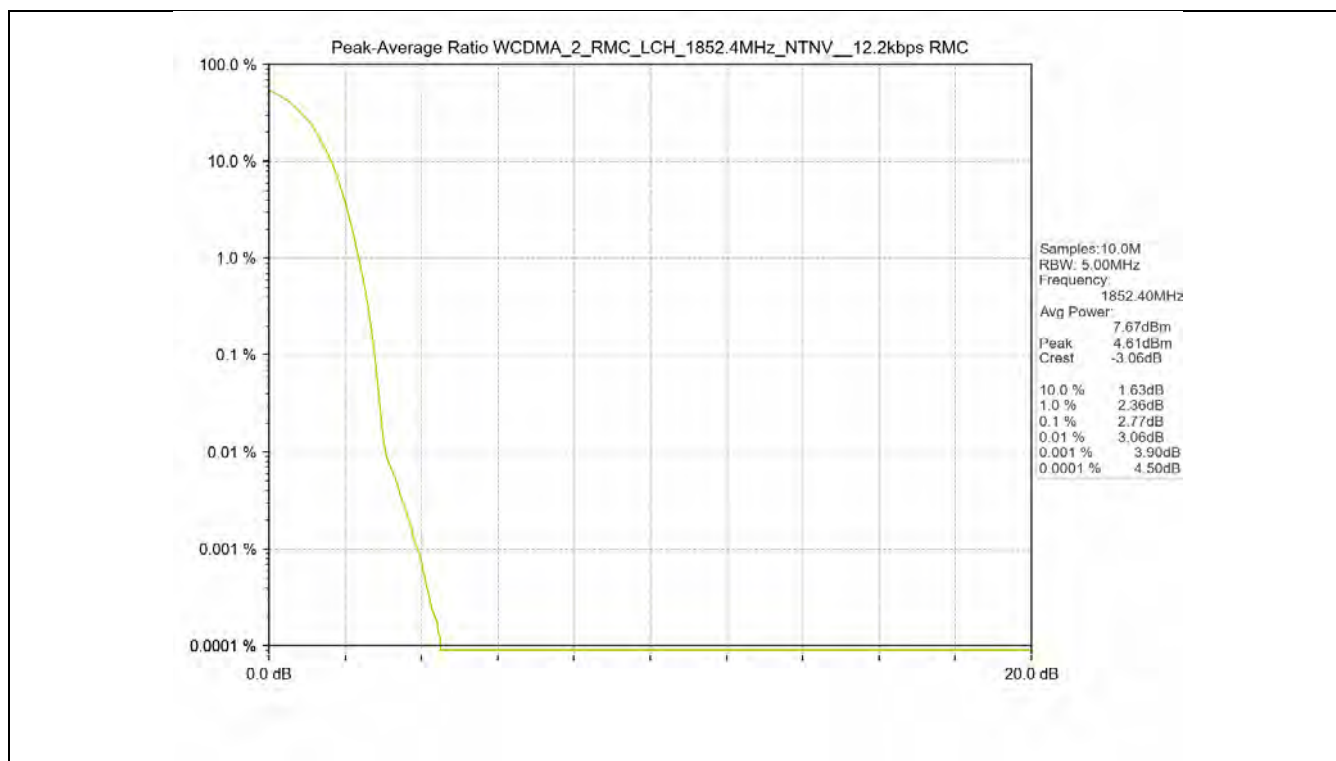


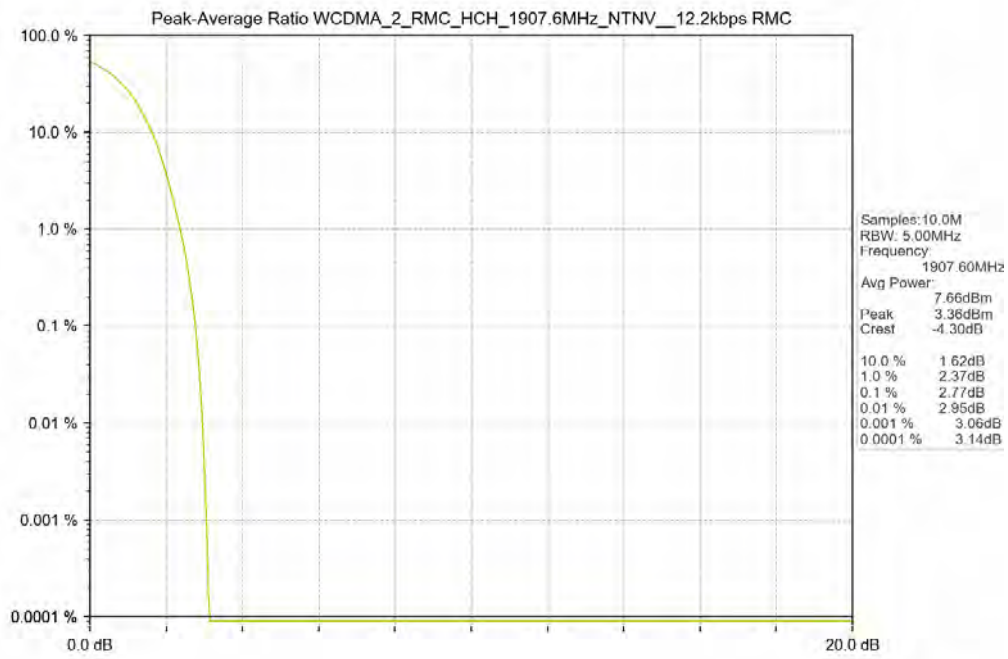
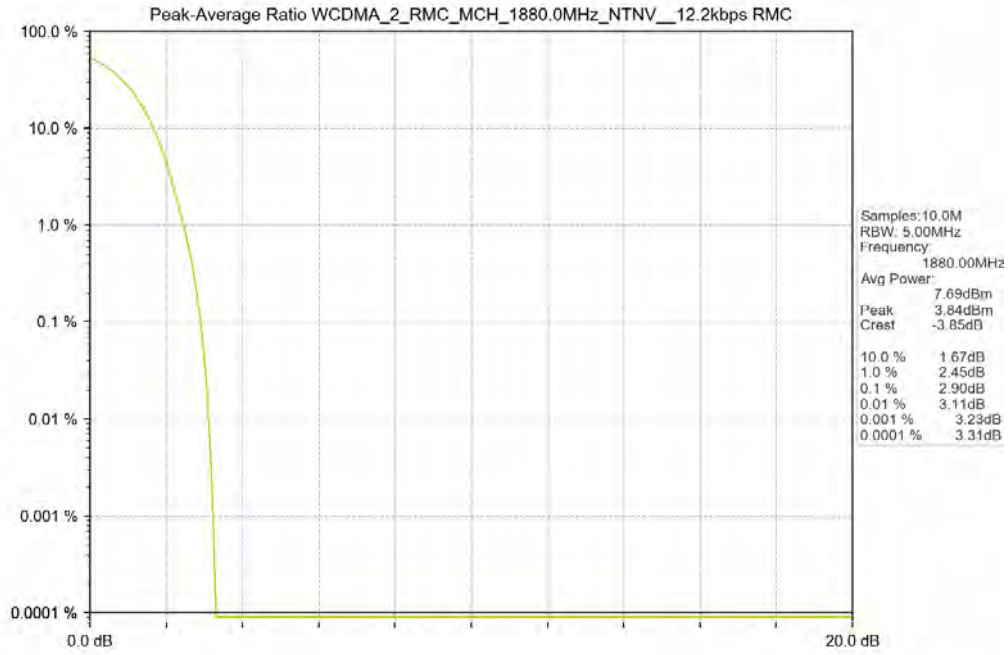
## 5. Peak-Average Ratio

### 5.1 Test Result

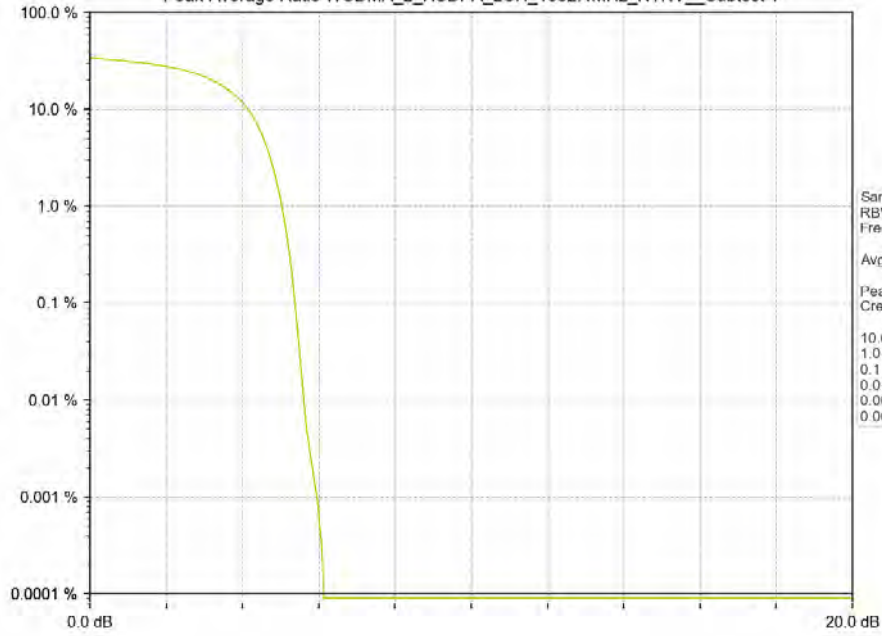
Test Band: 2					
Test Mode	Test result (dB)			Limit (dB)	Verdict
	LCH	MCH	HCH		
HSUPA	5.37	5.30	5.24	13	PASS
HSDPA	5.38	5.31	5.29	13	PASS
RMC	2.77	2.90	2.77	13	PASS

### 5.2 Test Graph

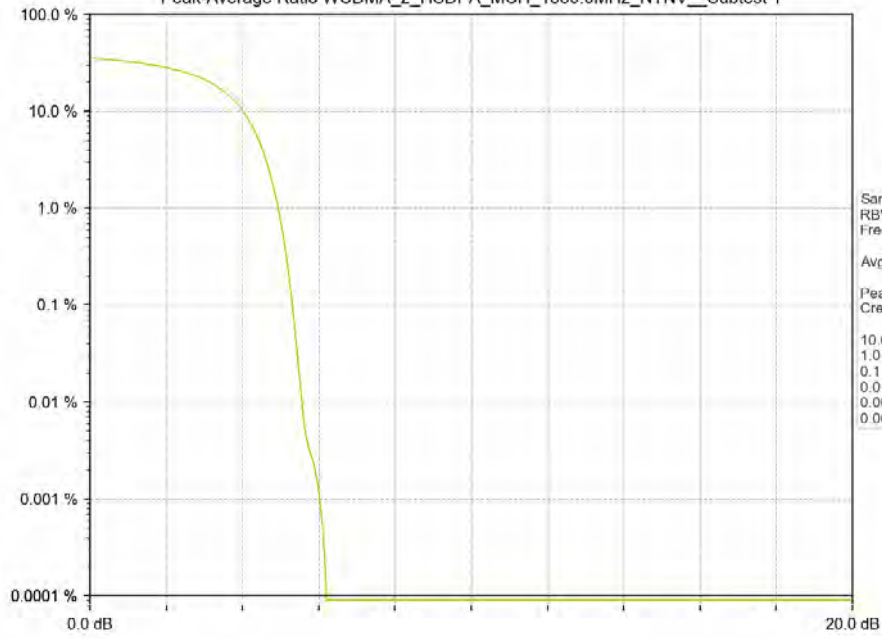




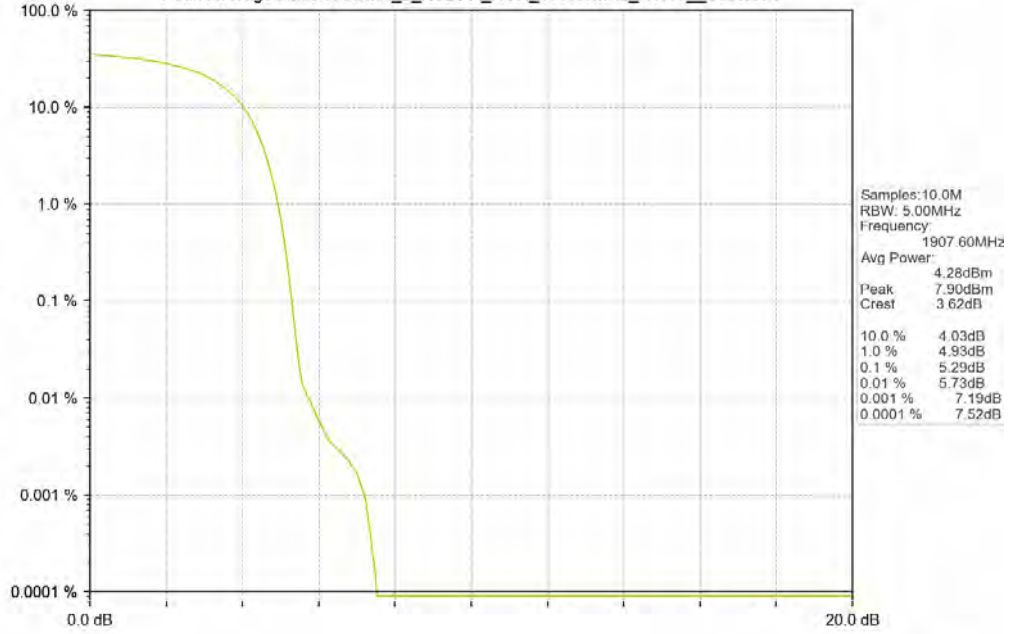
Peak-Average Ratio WCDMA\_2\_HSDPA\_LCH\_1852.4MHz\_NTNV\_\_Subtest 1



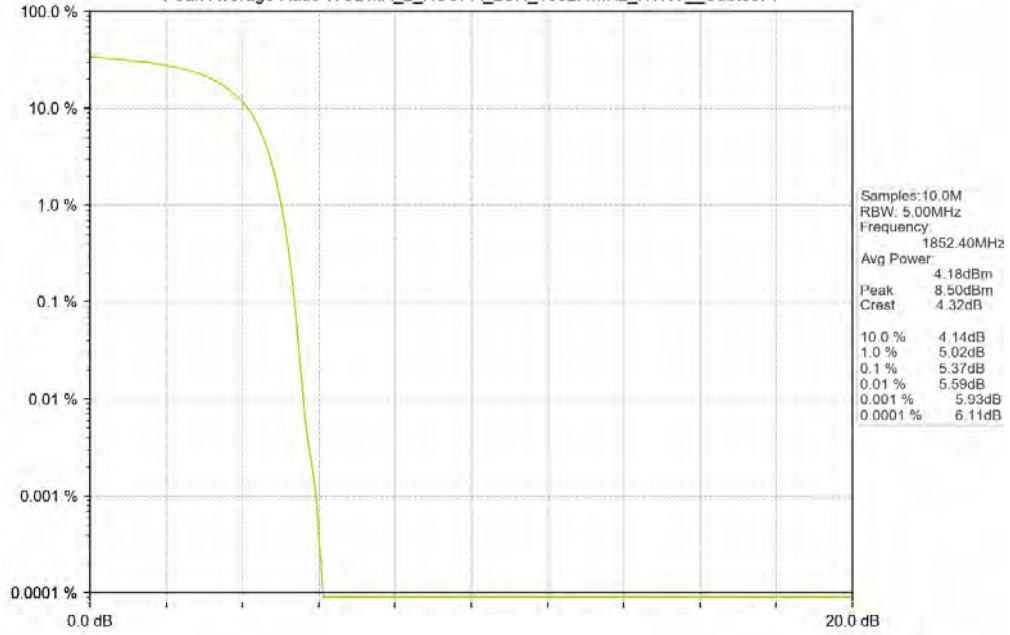
Peak-Average Ratio WCDMA\_2\_HSDPA\_MCH\_1880.0MHz\_NTNV\_\_Subtest 1



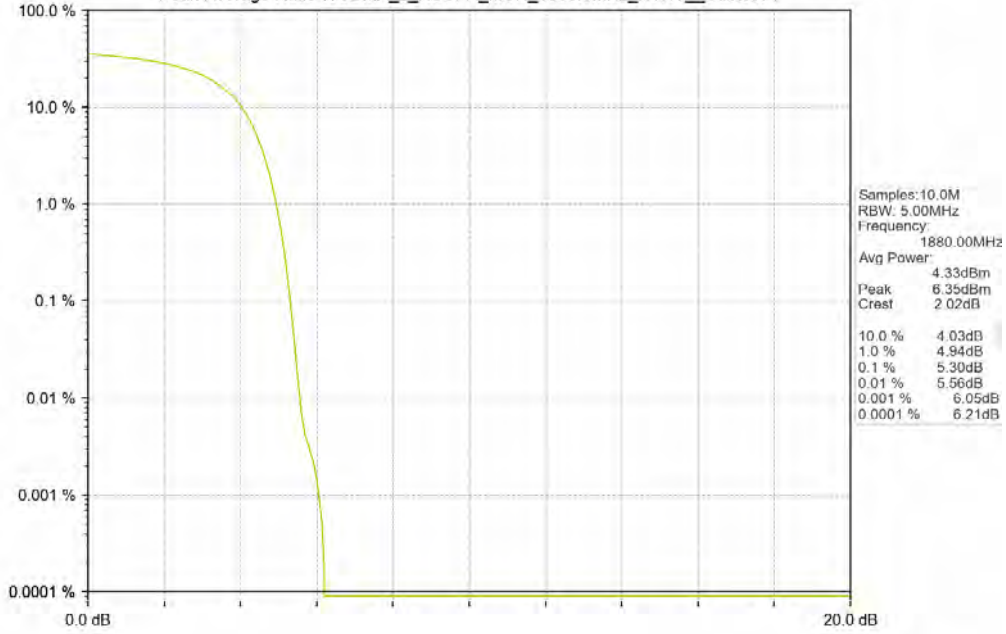
Peak-Average Ratio WCDMA\_2\_HSDPA\_HCH\_1907.6MHz\_NTNV\_\_Subtest 1



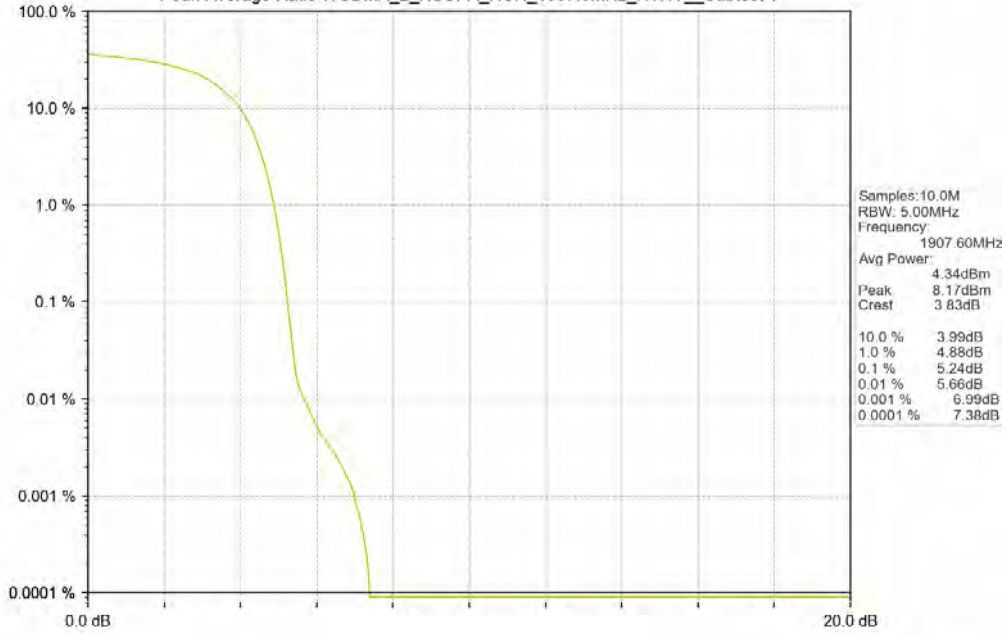
Peak-Average Ratio WCDMA\_2\_HSUPA\_LCH\_1852.4MHz\_NTNV\_\_Subtest 1



Peak-Average Ratio WCDMA\_2\_HSUPA\_MCH\_1880.0MHz\_NTNV\_\_Subtest 1

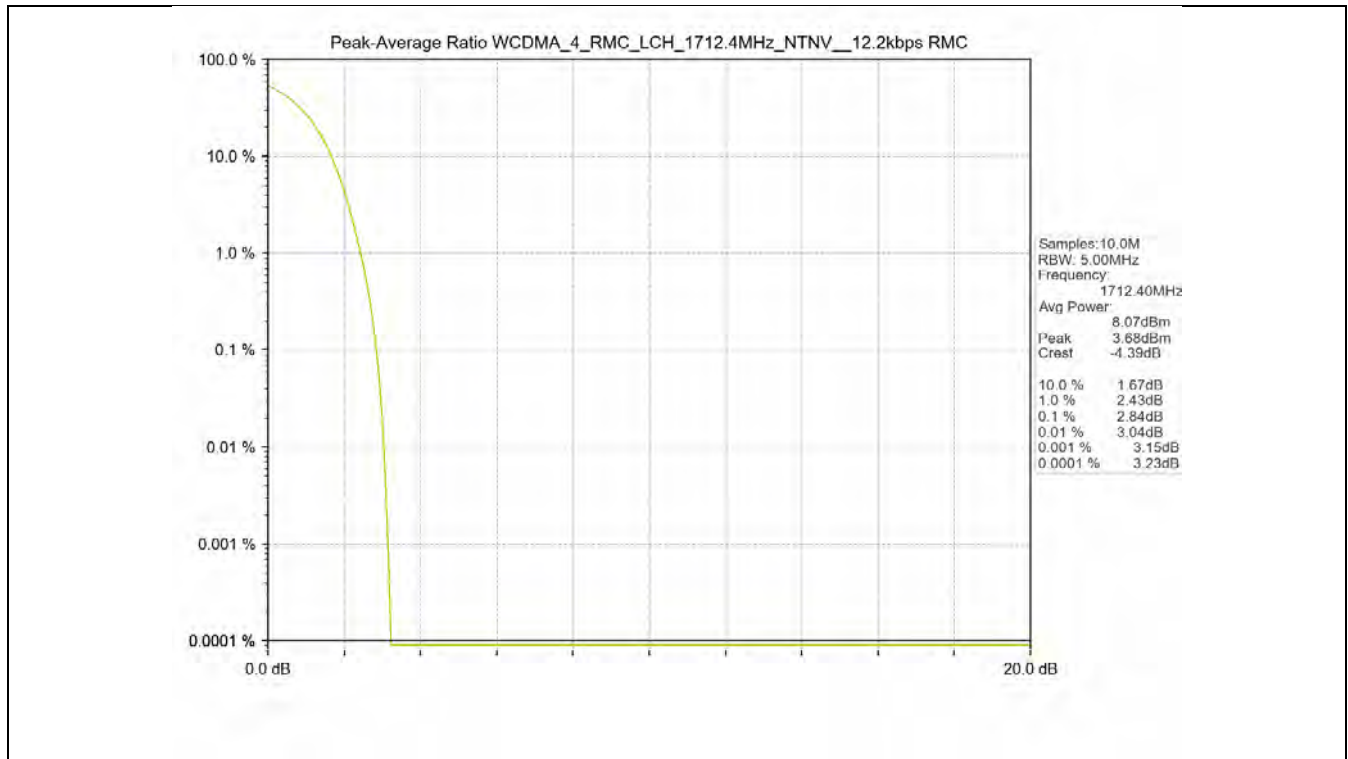


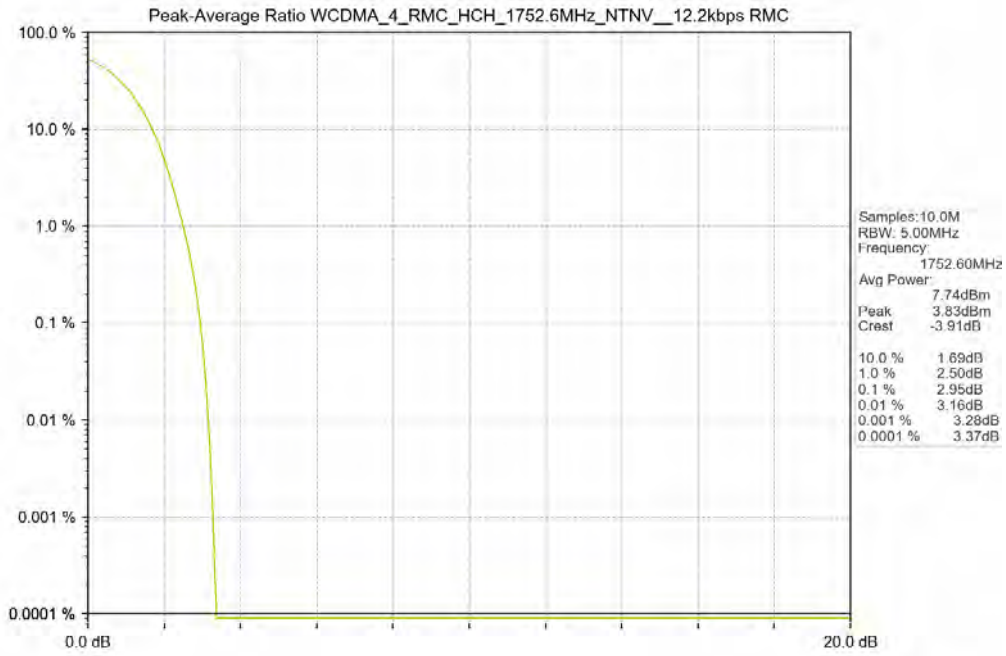
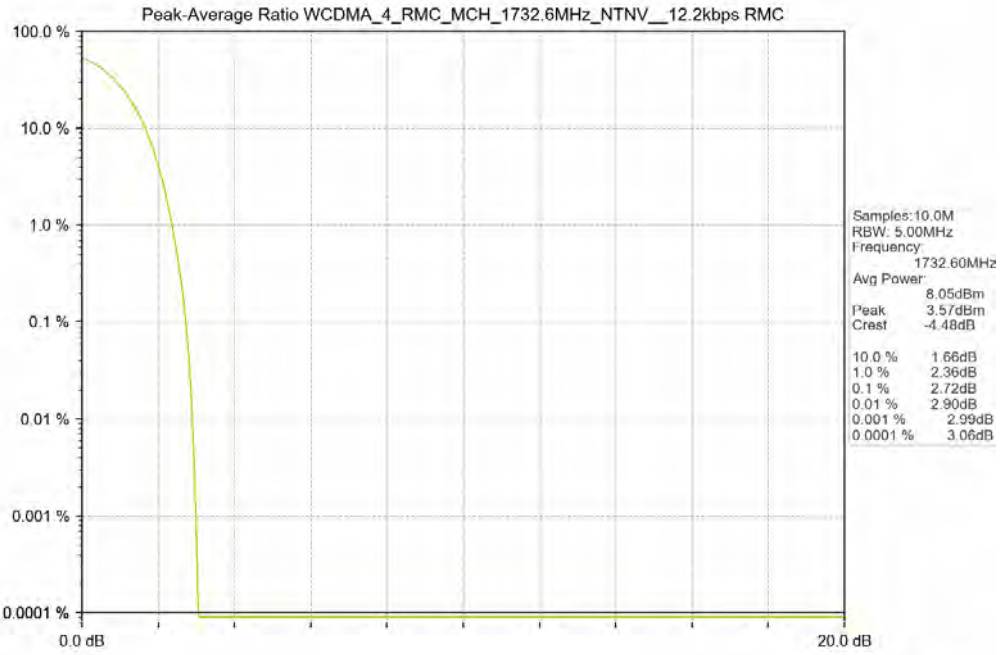
Peak-Average Ratio WCDMA\_2\_HSUPA\_HCH\_1907.6MHz\_NTNV\_\_Subtest 1



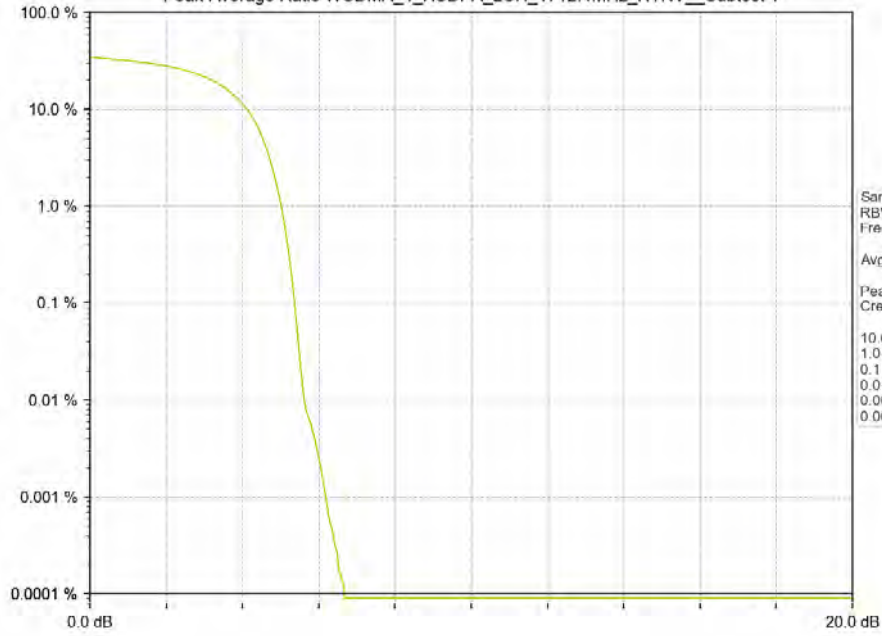
Test Band: 4					
Test Mode	Test result (dB)			Limit (dB)	Verdict
	LCH	MCH	HCH		
HSUPA	5.44	5.38	5.37	13	PASS
HSDPA	5.37	5.35	5.37	13	PASS
RMC	2.84	2.72	2.95	13	PASS

## 5.2 Test Graph



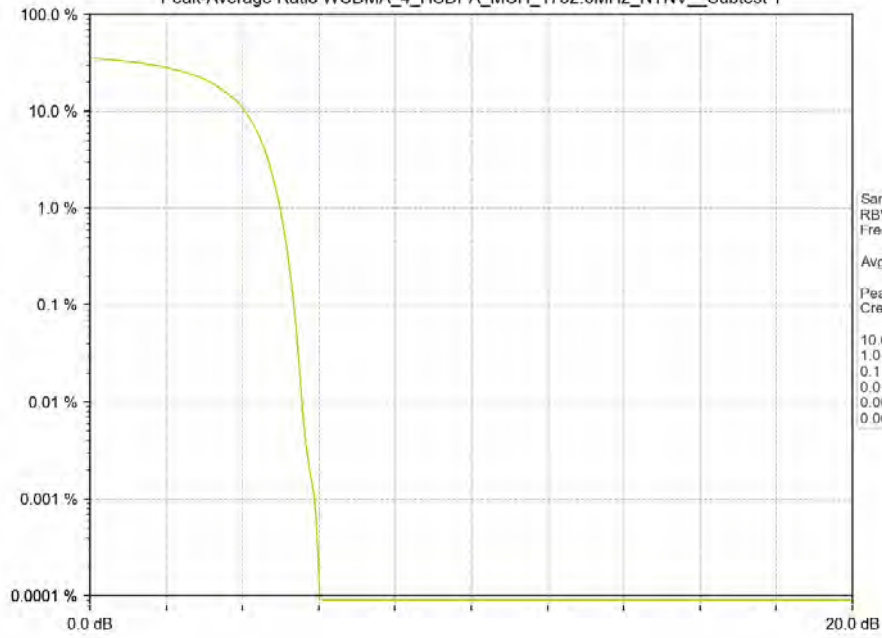


Peak-Average Ratio WCDMA\_4\_HSDPA\_LCH\_1712.4MHz\_NTNV\_\_Subtest 1



Samples: 10.0M  
 RBW: 5.00MHz  
 Frequency: 1712.40MHz  
 Avg Power: 4.70dBm  
 Peak: 7.80dBm  
 Crest: 2.90dB

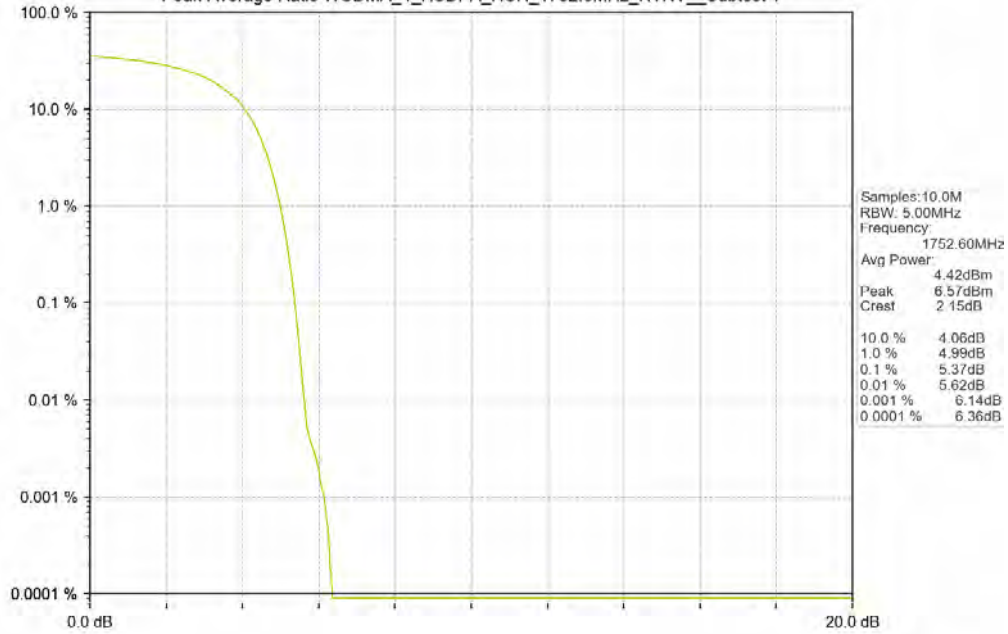
Peak-Average Ratio WCDMA\_4\_HSDPA\_MCH\_1732.6MHz\_NTNV\_\_Subtest 1



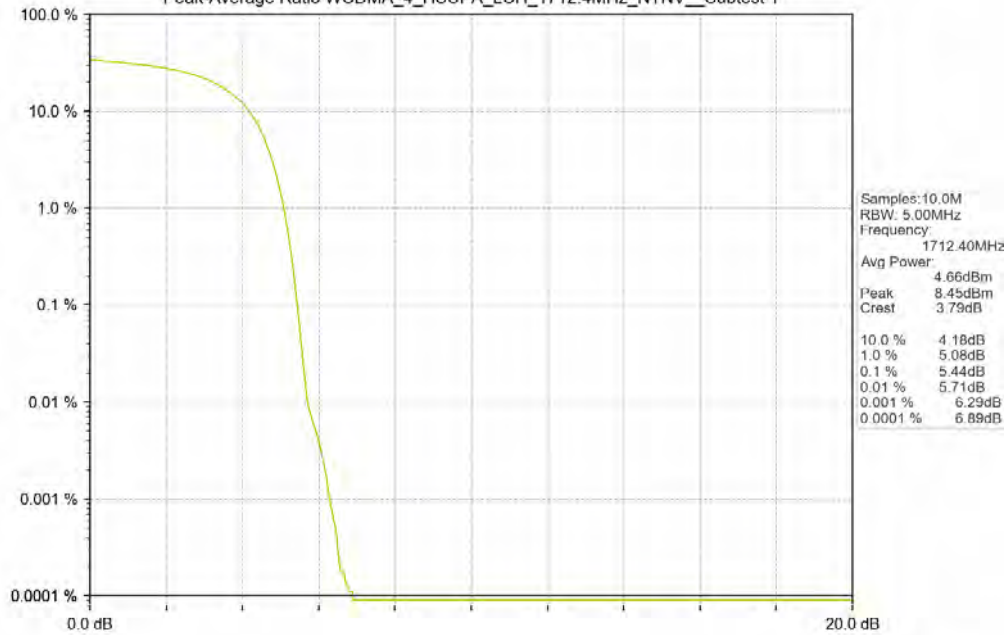
Samples: 10.0M  
 RBW: 5.00MHz  
 Frequency: 1732.60MHz  
 Avg Power: 4.73dBm  
 Peak: 6.23dBm  
 Crest: 1.50dB



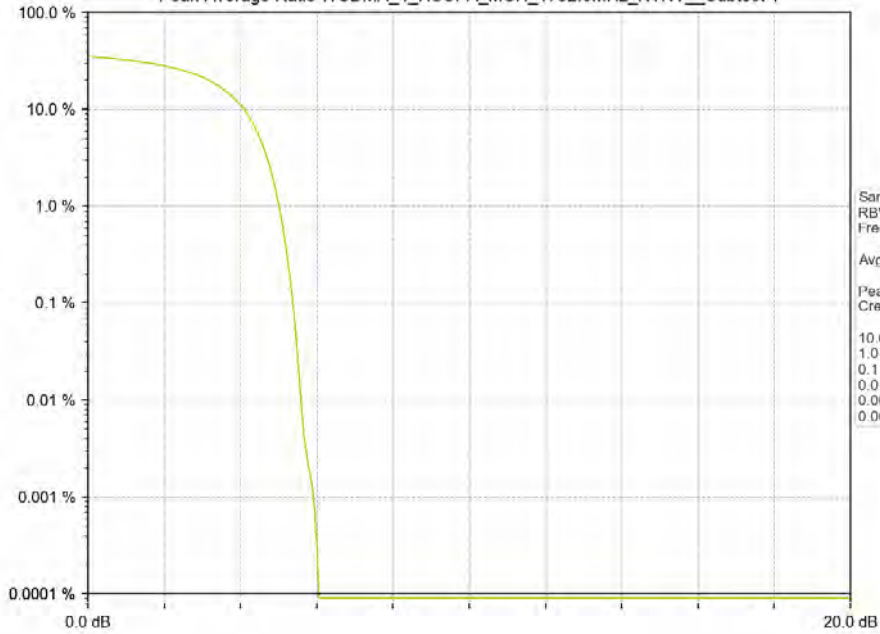
Peak-Average Ratio WCDMA\_4\_HSDPA\_HCH\_1752.6MHz\_NTNV\_\_Subtest 1



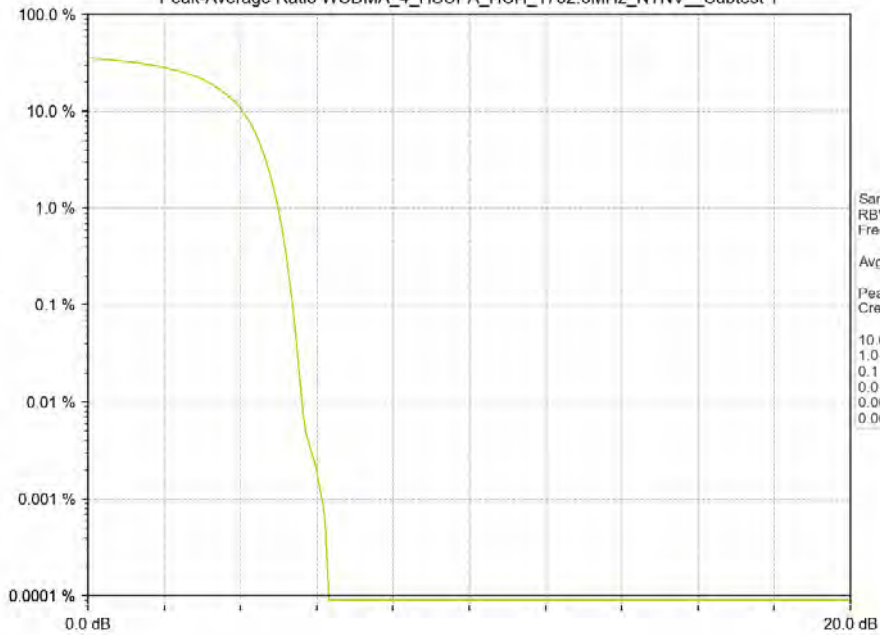
Peak-Average Ratio WCDMA\_4\_HSUPA\_LCH\_1712.4MHz\_NTNV\_\_Subtest 1



Peak-Average Ratio WCDMA\_4\_HSUPA\_MCH\_1732.6MHz\_NTNV\_\_Subtest 1

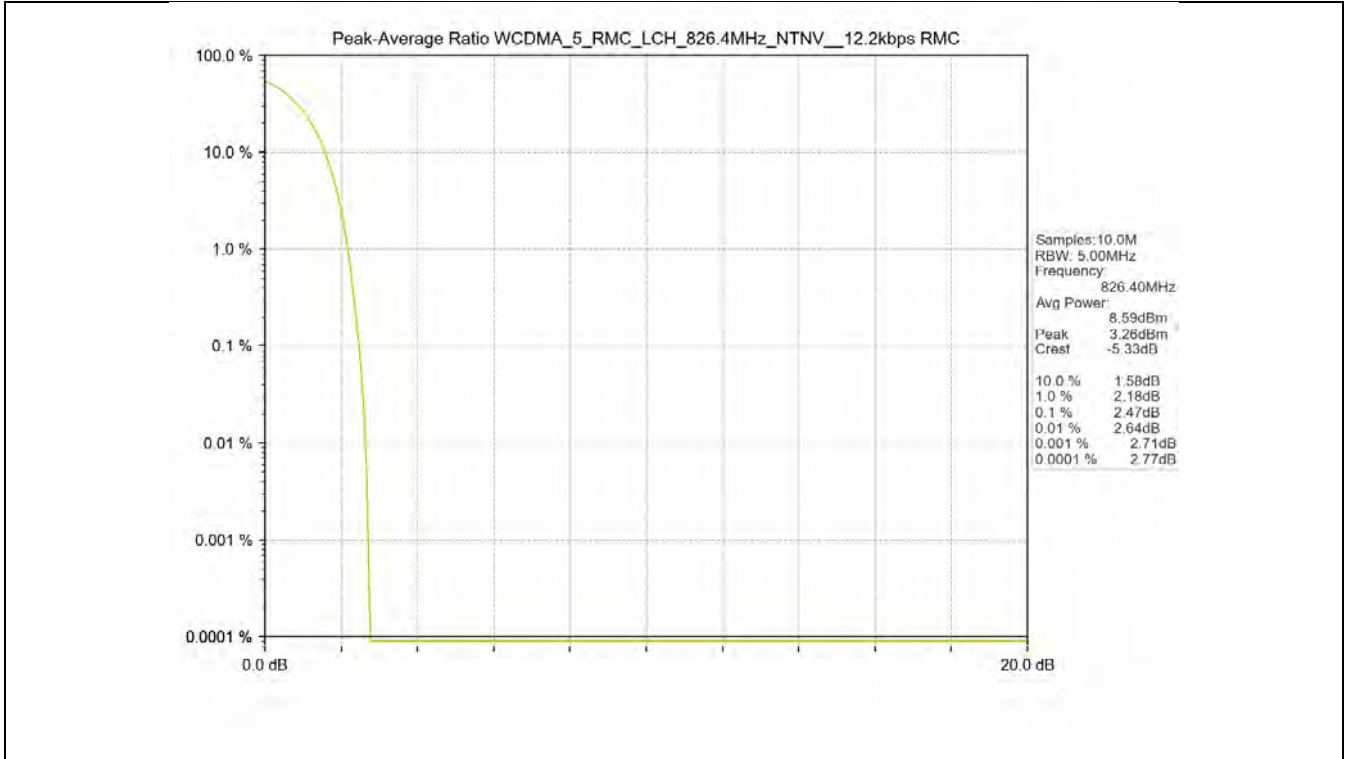


Peak-Average Ratio WCDMA\_4\_HSUPA\_HCH\_1752.6MHz\_NTNV\_\_Subtest 1

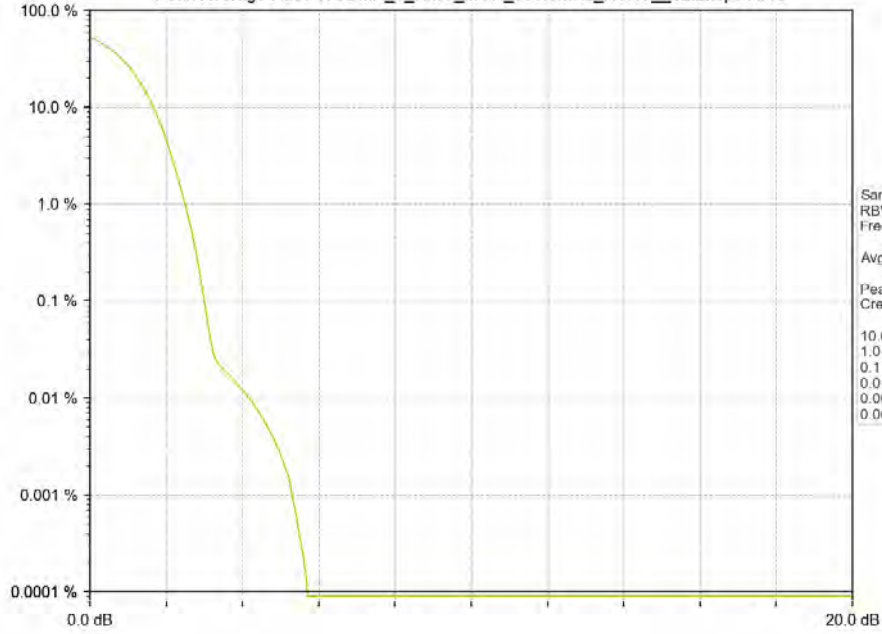


Test Band: 5					
Test Mode	Test result (dB)			Limit (dB)	Verdict
	LCH	MCH	HCH		
HSUPA	5.15	5.27	5.38	13	PASS
HSDPA	5.19	5.27	5.45	13	PASS
RMC	2.47	3.00	2.94	13	PASS

5.2 Test Graph



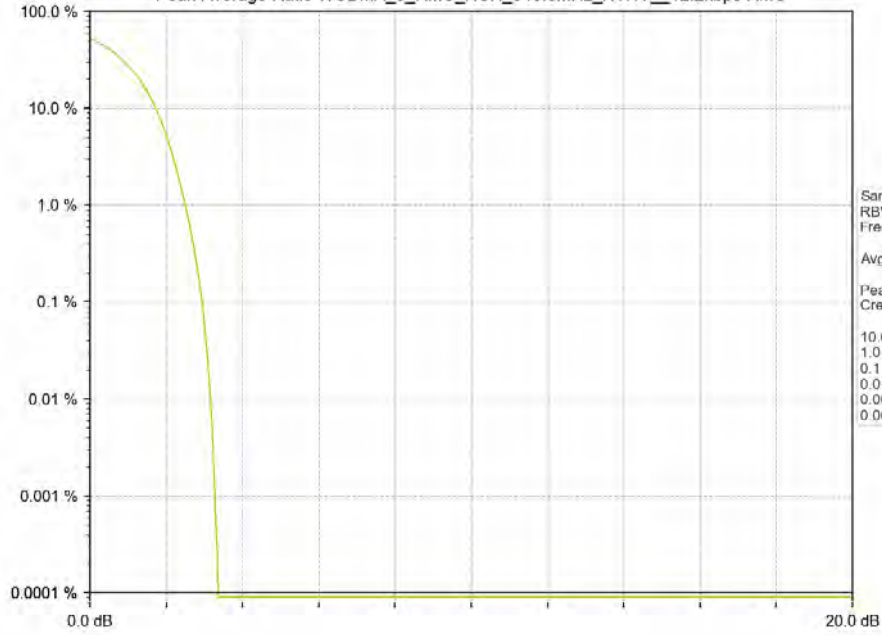
Peak-Average Ratio WCDMA\_5\_RMC\_MCH\_836.6MHz\_NTNV\_\_12.2kbps RMC



Samples: 10.0M  
RBW: 5.00MHz  
Frequency: 836.60MHz  
Avg Power: 8.63dBm  
Peak: 6.07dBm  
Crest: -2.56dB

10.0 %	1.67dB
1.0 %	2.49dB
0.1 %	3.00dB
0.01 %	4.16dB
0.001 %	5.30dB
0.0001 %	5.70dB

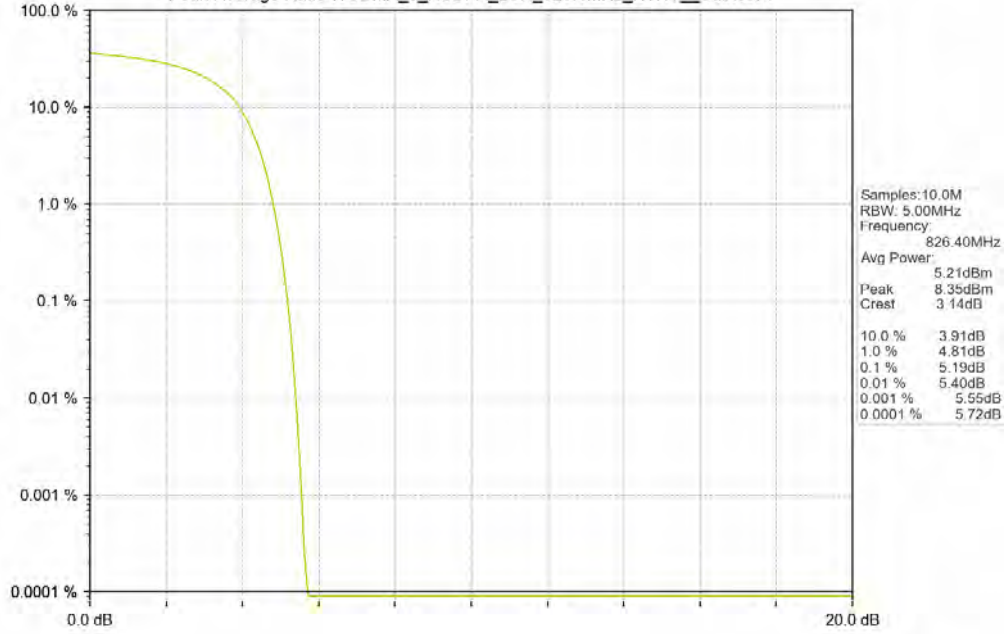
Peak-Average Ratio WCDMA\_5\_RMC\_HCH\_846.6MHz\_NTNV\_\_12.2kbps RMC



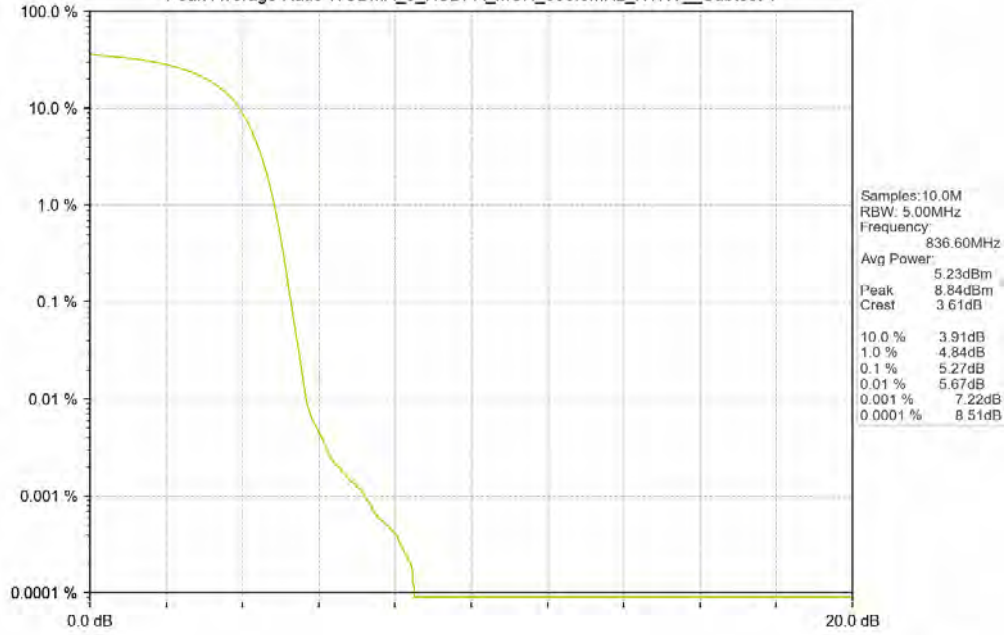
Samples: 10.0M  
RBW: 5.00MHz  
Frequency: 846.60MHz  
Avg Power: 8.68dBm  
Peak: 3.50dBm  
Crest: -5.16dB

10.0 %	1.72dB
1.0 %	2.50dB
0.1 %	2.94dB
0.01 %	3.16dB
0.001 %	3.28dB
0.0001 %	3.37dB

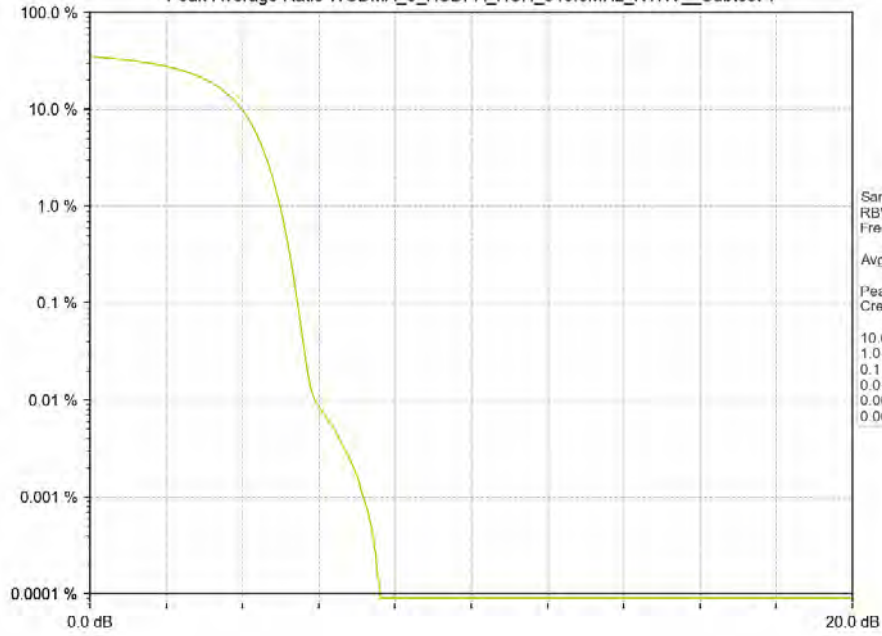
Peak-Average Ratio WCDMA\_5\_HSDPA\_LCH\_826.4MHz\_NTNV\_\_Subtest 1



Peak-Average Ratio WCDMA\_5\_HSDPA\_MCH\_836.6MHz\_NTNV\_\_Subtest 1

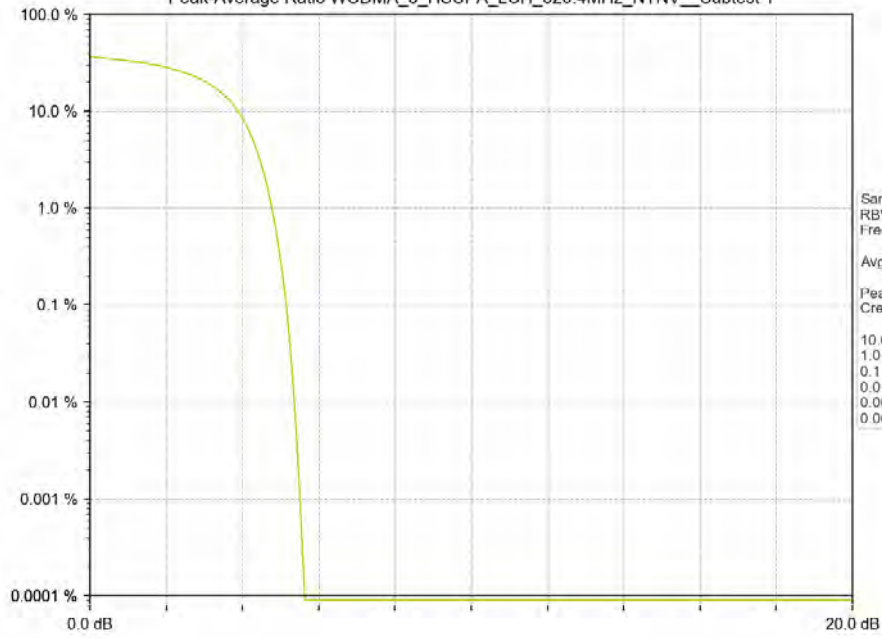


Peak-Average Ratio WCDMA\_5\_HSDPA\_HCH\_846.6MHz\_NTNV\_\_Subtest 1

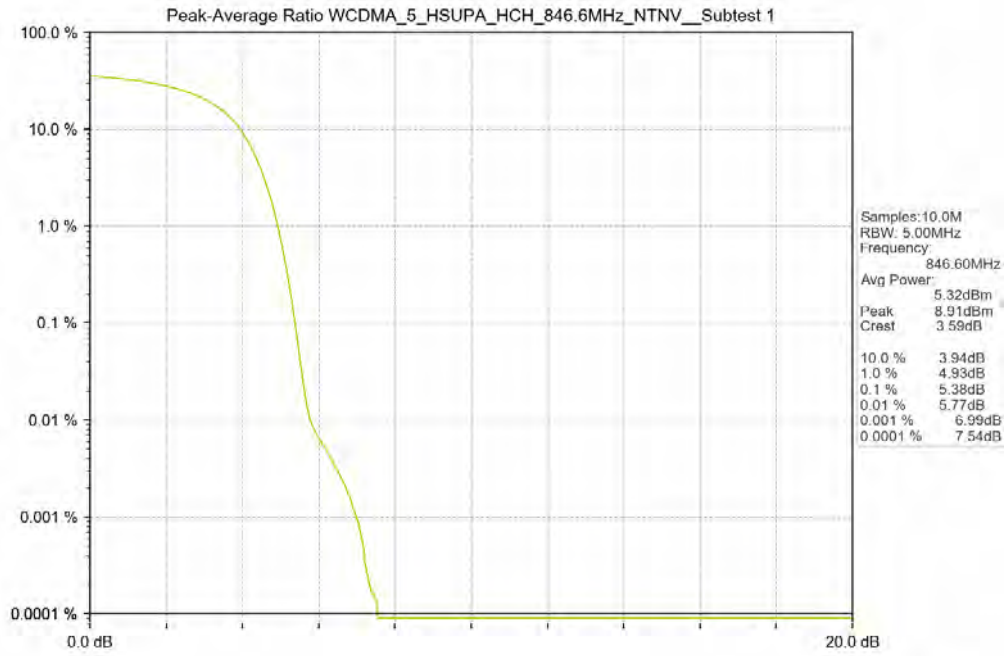
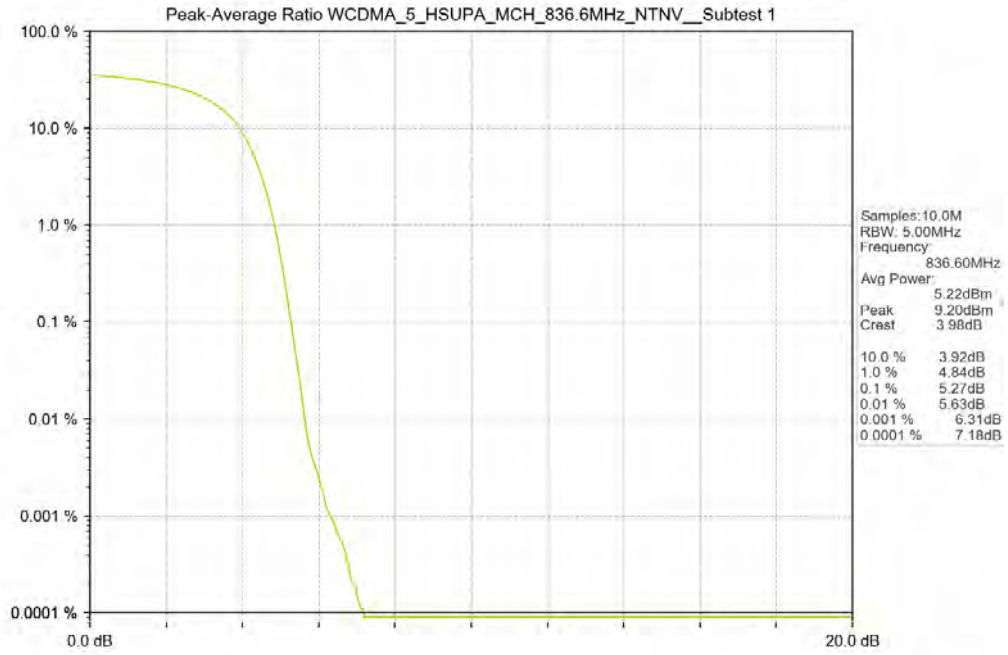


Samples: 10.0M  
 RBW: 5.00MHz  
 Frequency: 846.60MHz  
 Avg Power: 5.26dBm  
 Peak: 8.54dBm  
 Crest: 3.28dB

Peak-Average Ratio WCDMA\_5\_HSUPA\_LCH\_826.4MHz\_NTNV\_\_Subtest 1

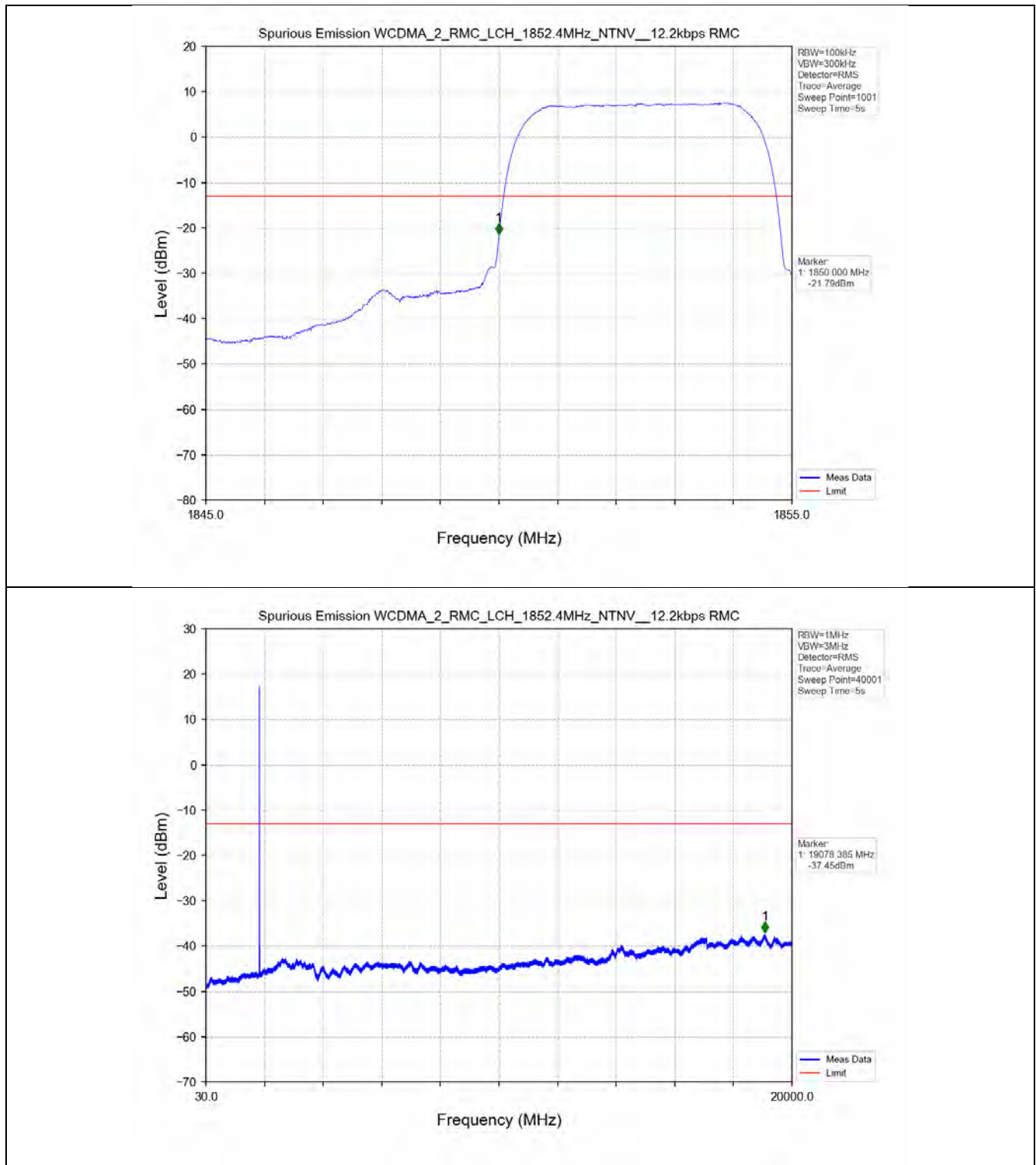


Samples: 10.0M  
 RBW: 5.00MHz  
 Frequency: 826.40MHz  
 Avg Power: 5.23dBm  
 Peak: 6.88dBm  
 Crest: 1.45dB

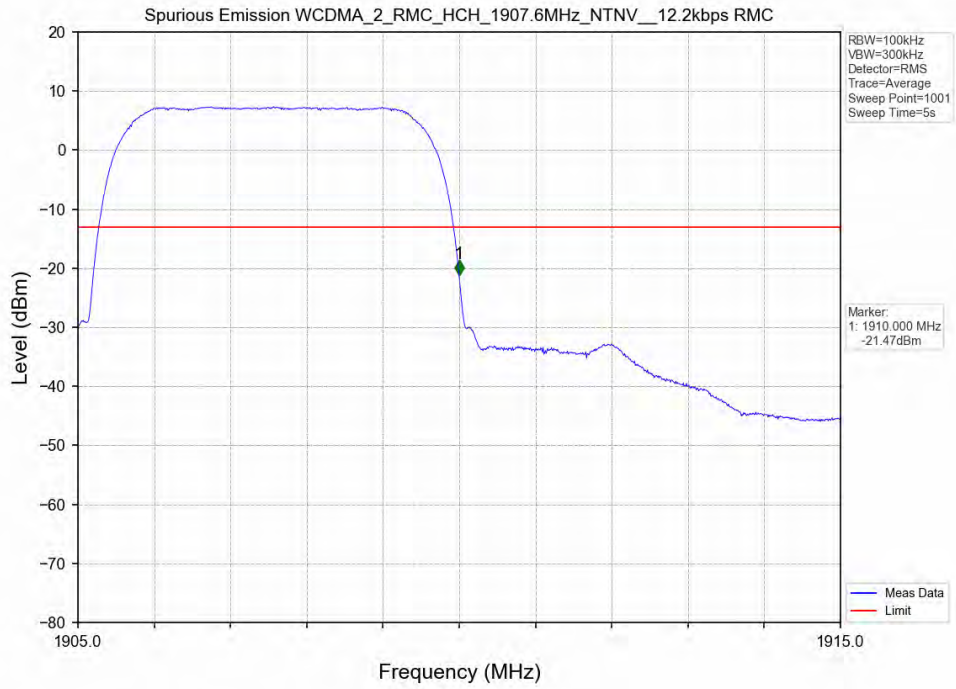
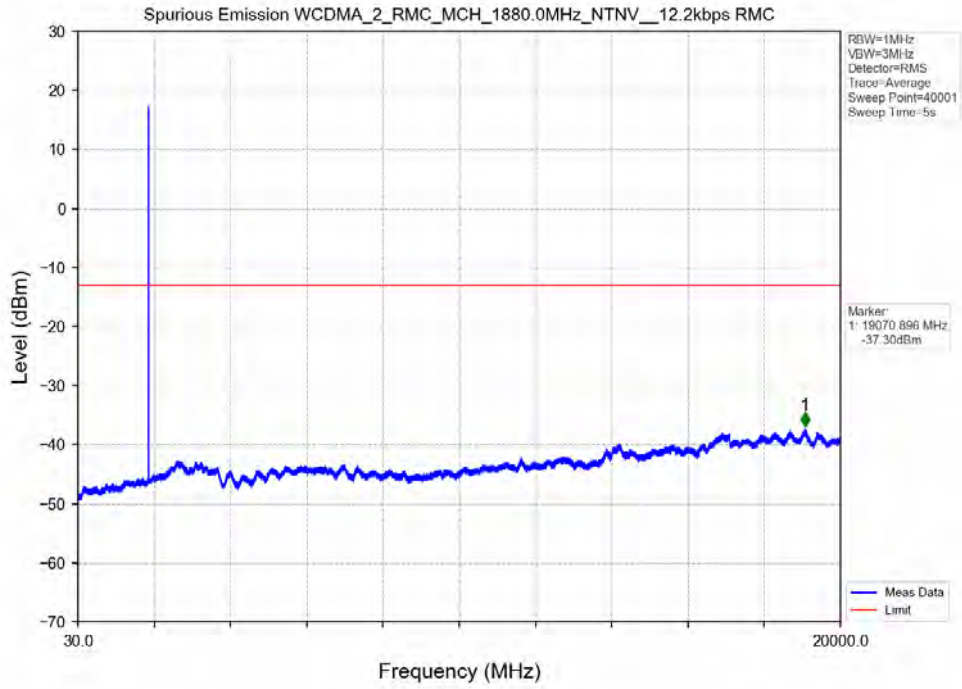


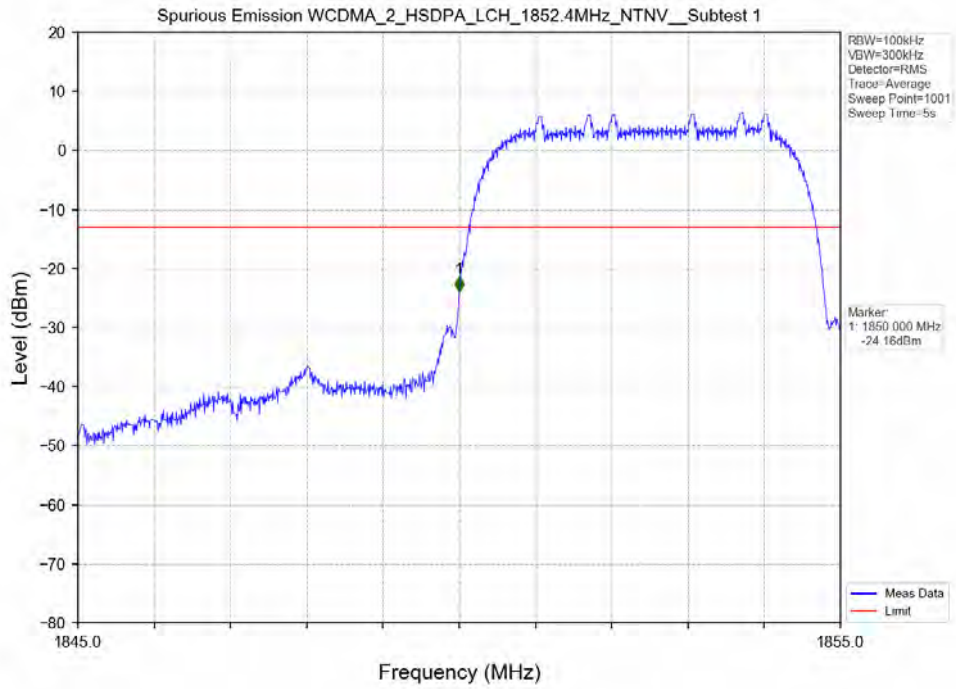
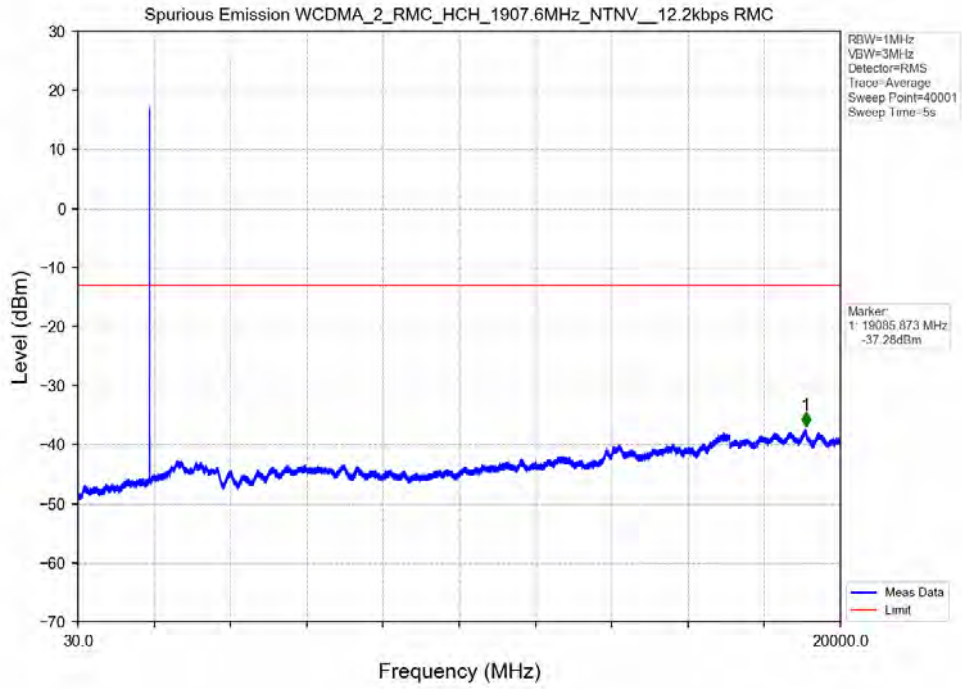
## 6. Spurious Emission

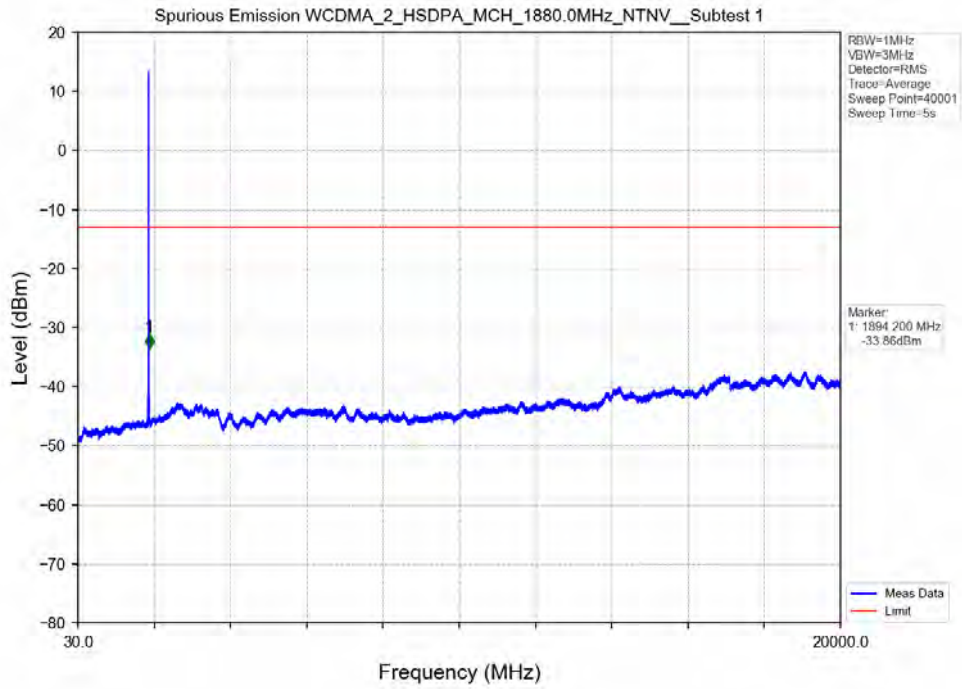
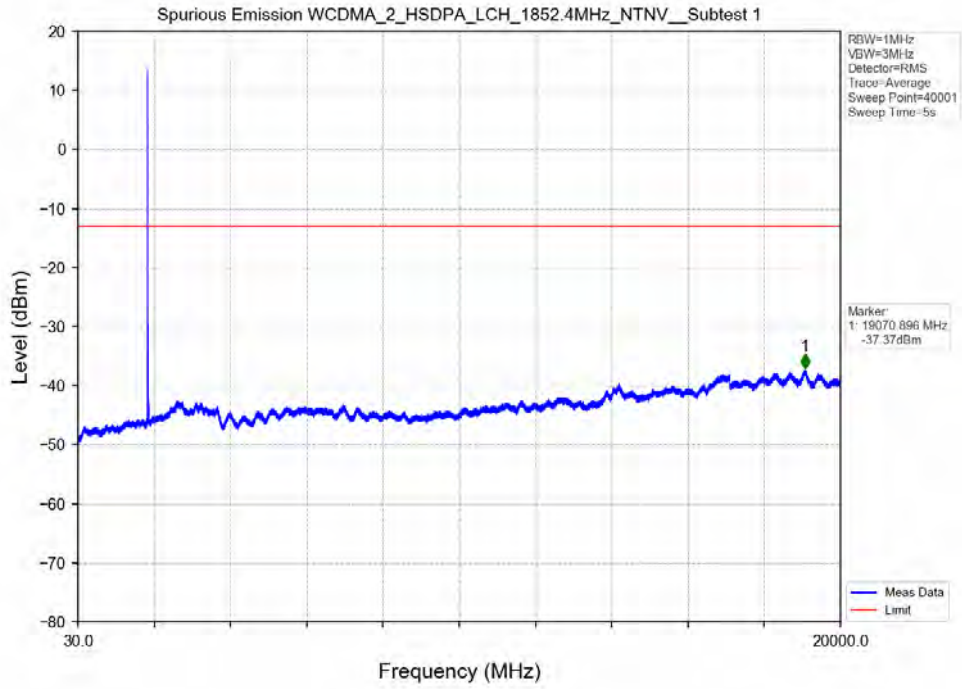
### 6.1 Test Graph

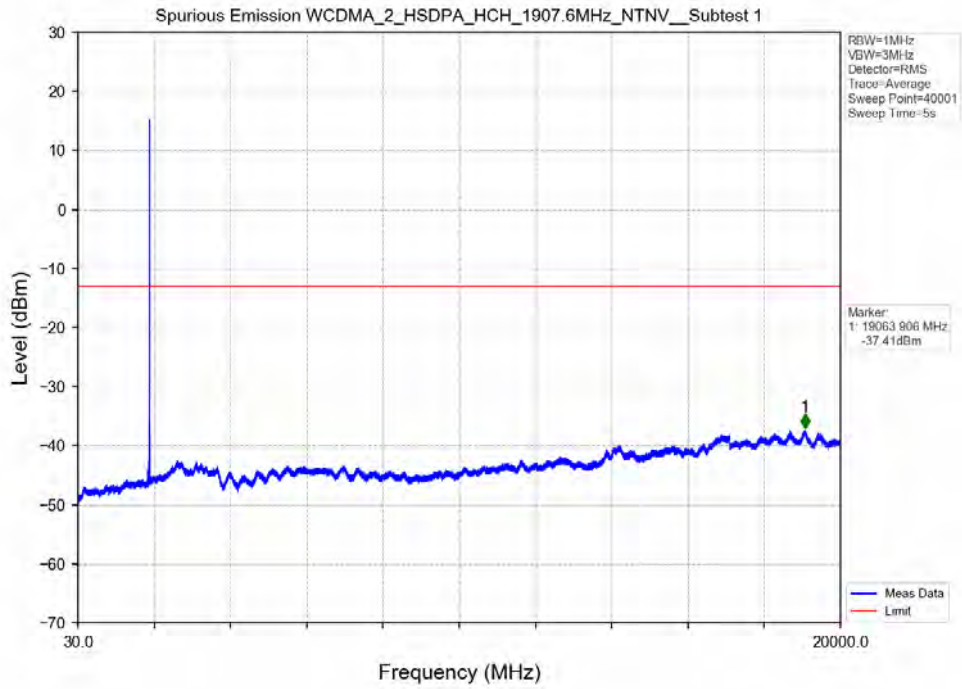
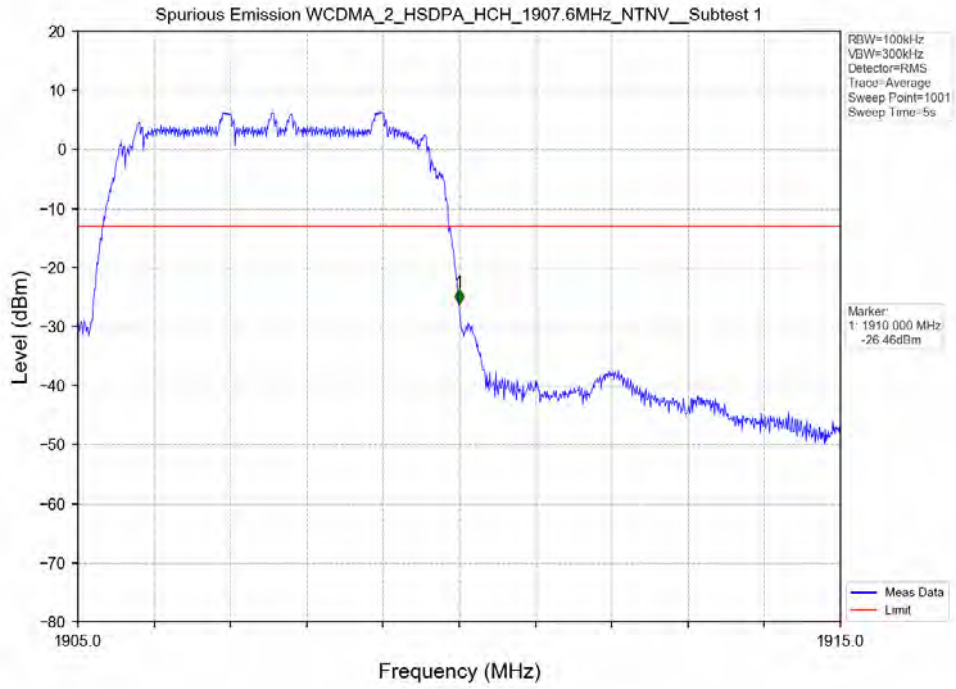


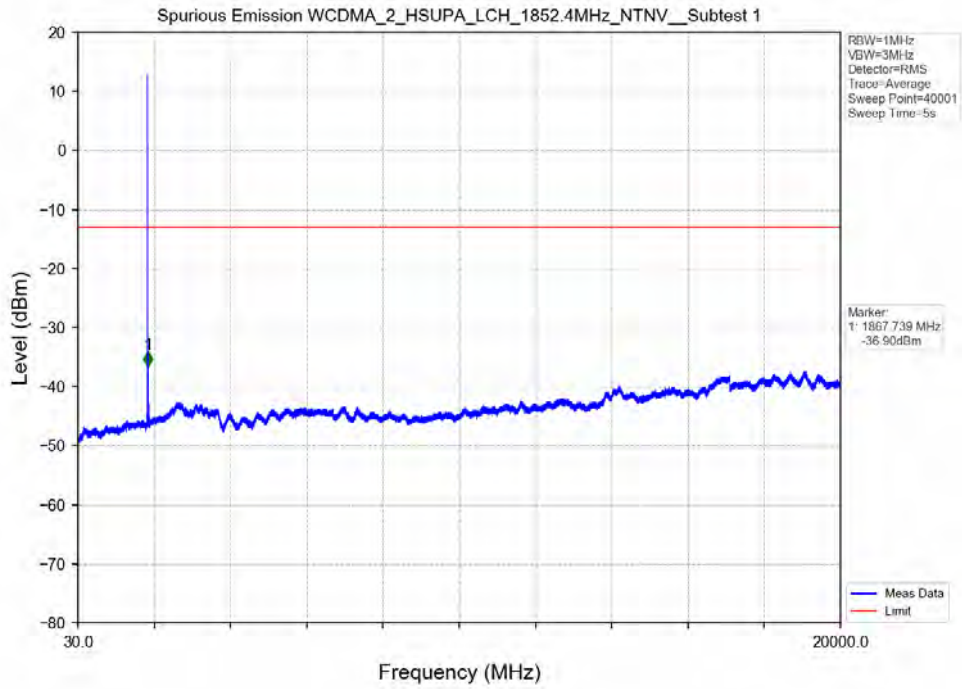
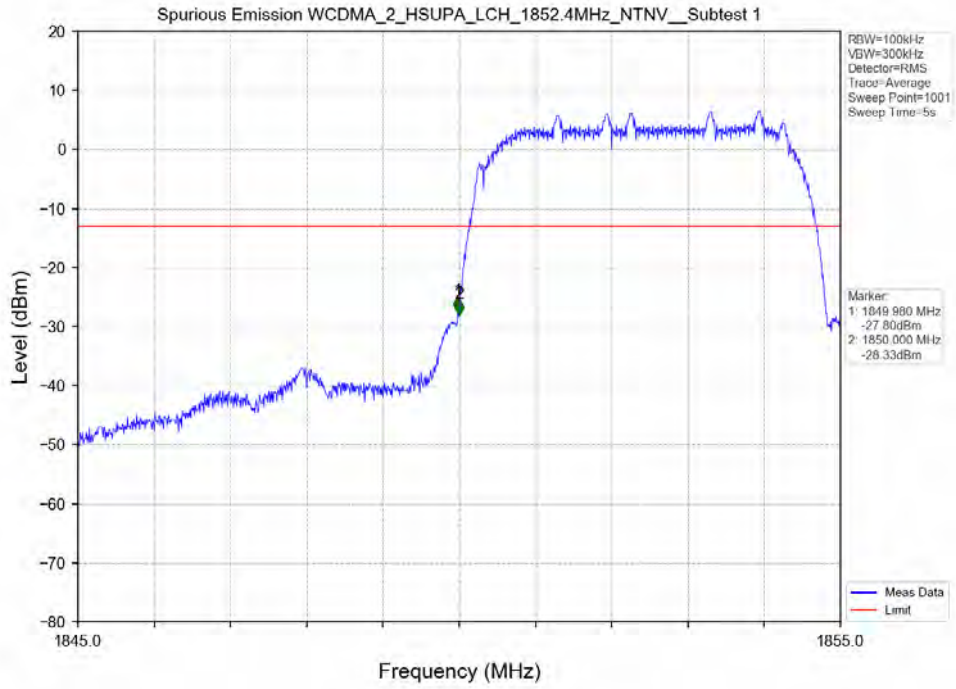


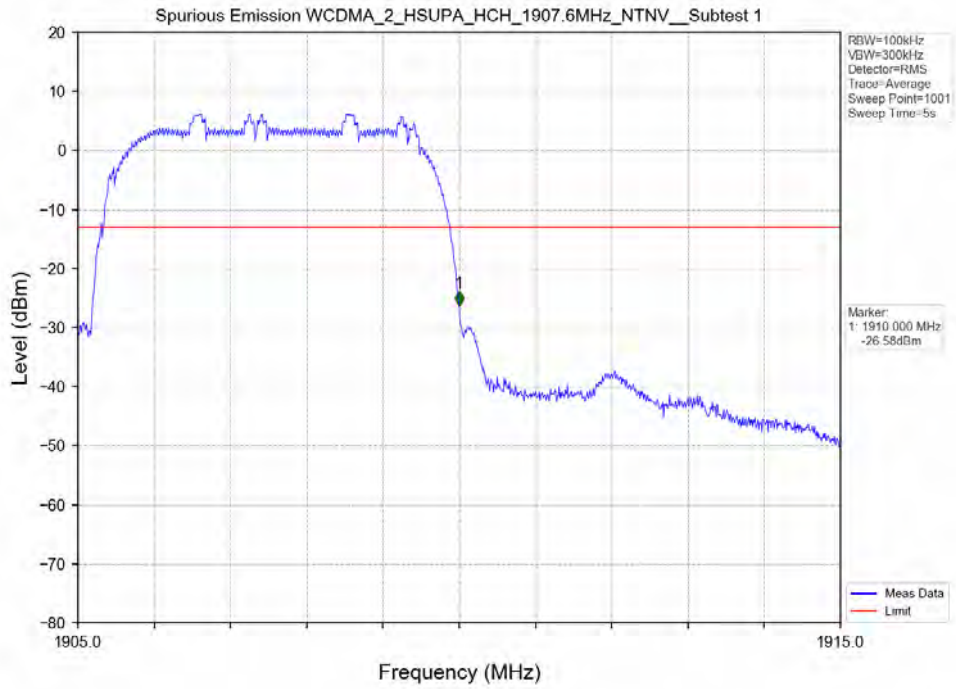
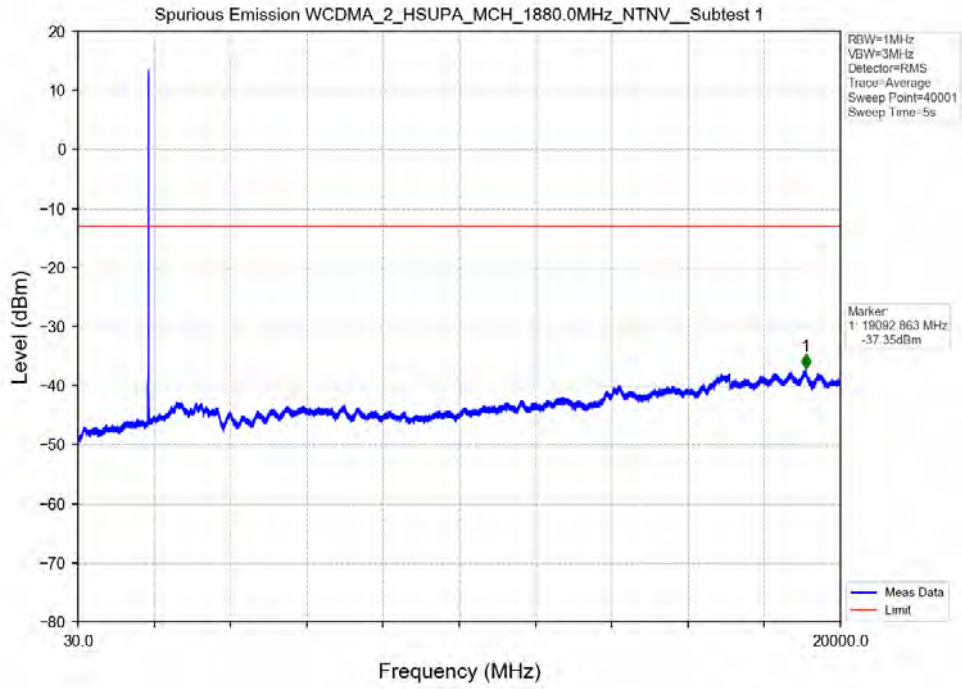




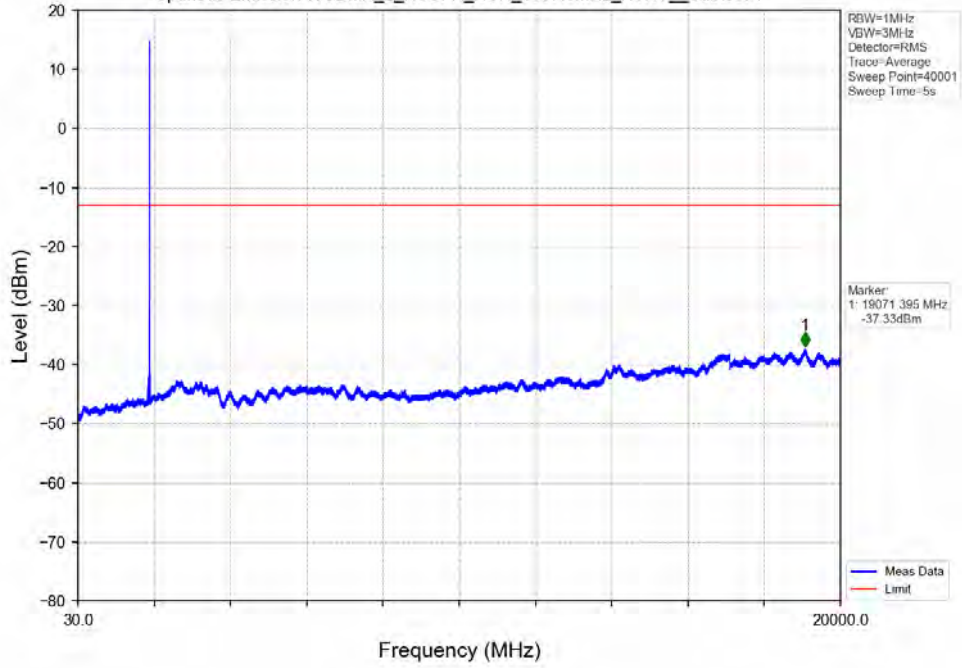


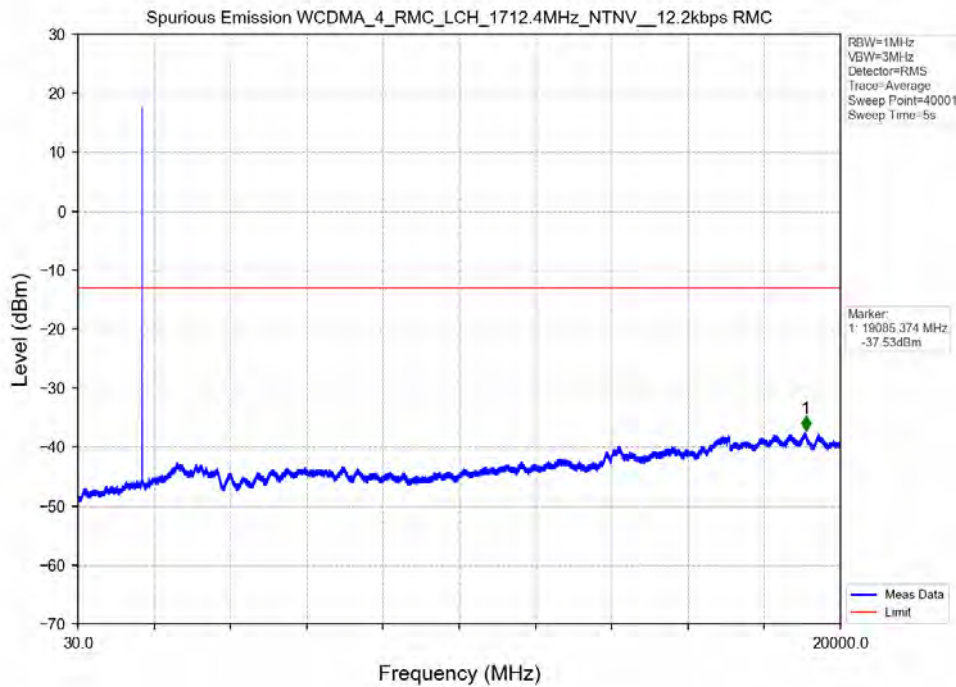
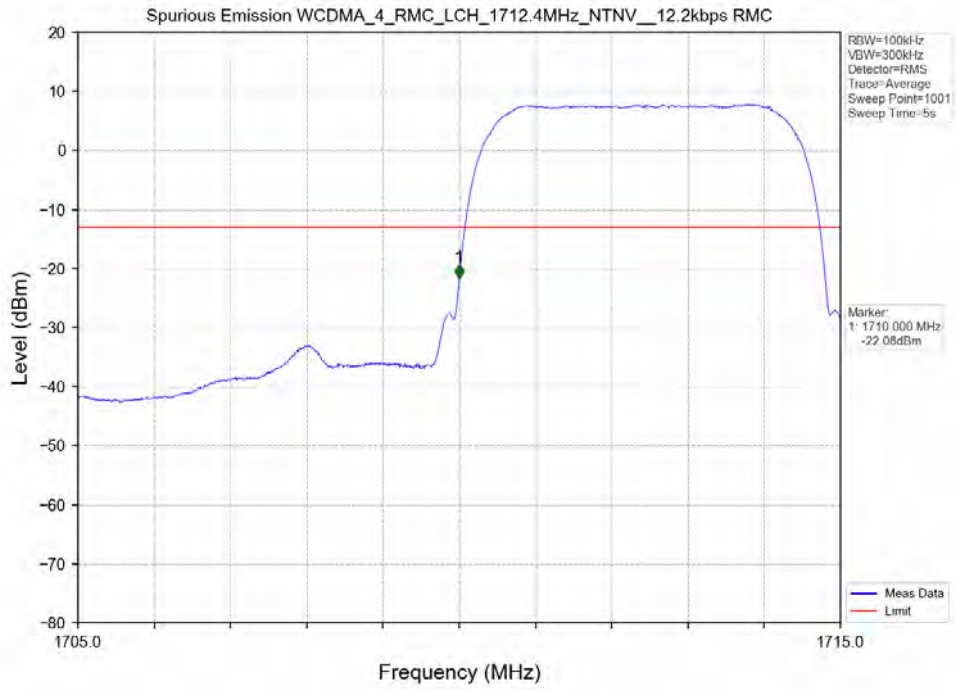




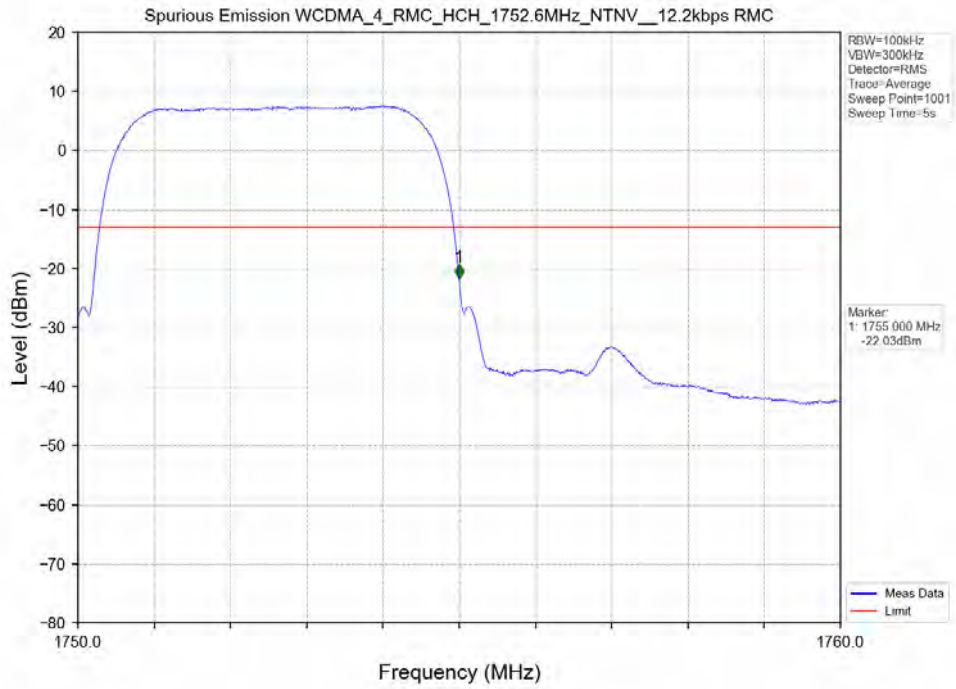
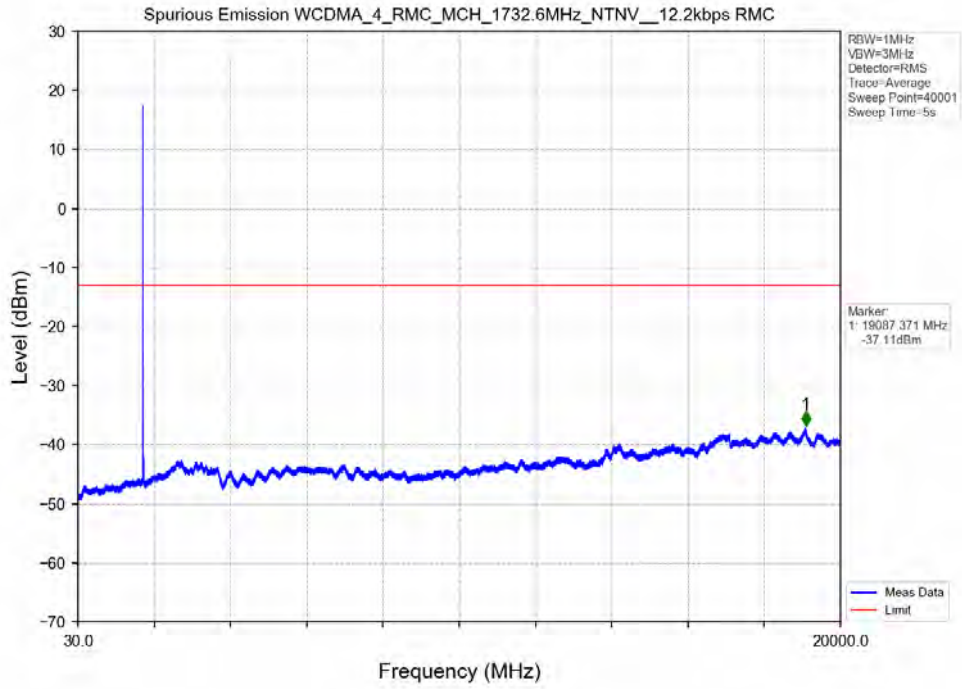


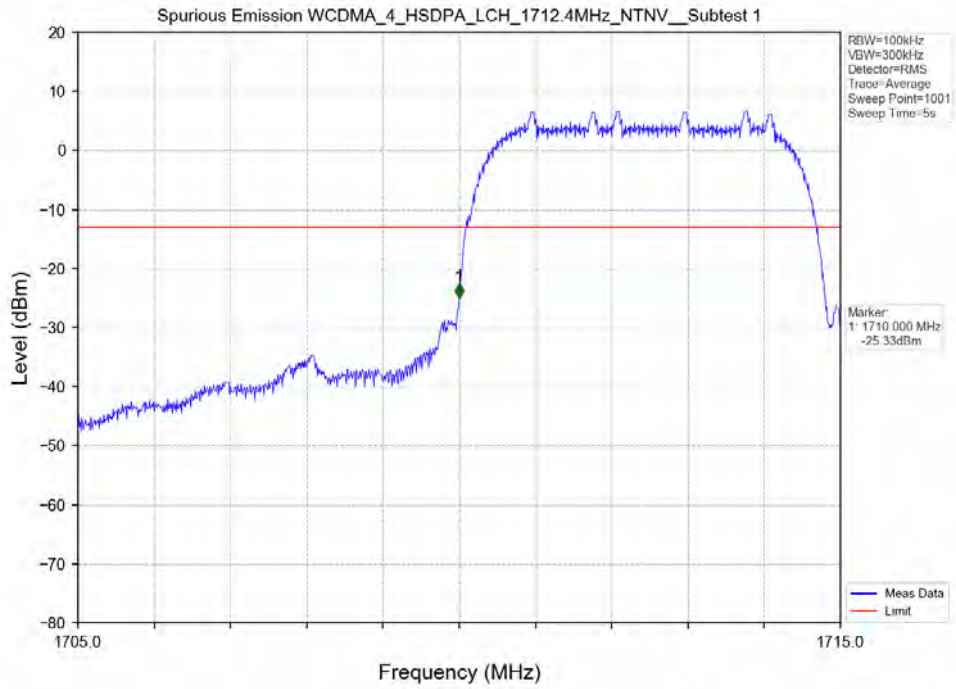
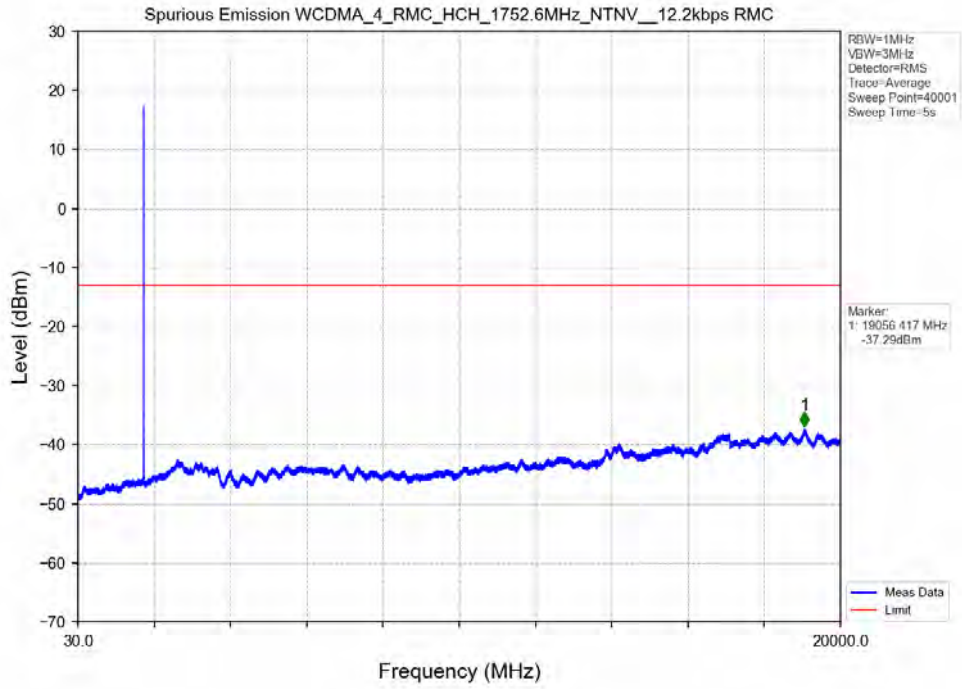
Spurious Emission WCDMA\_2\_HSUPA\_HCH\_1907.6MHz\_NTNV\_\_Subtest 1

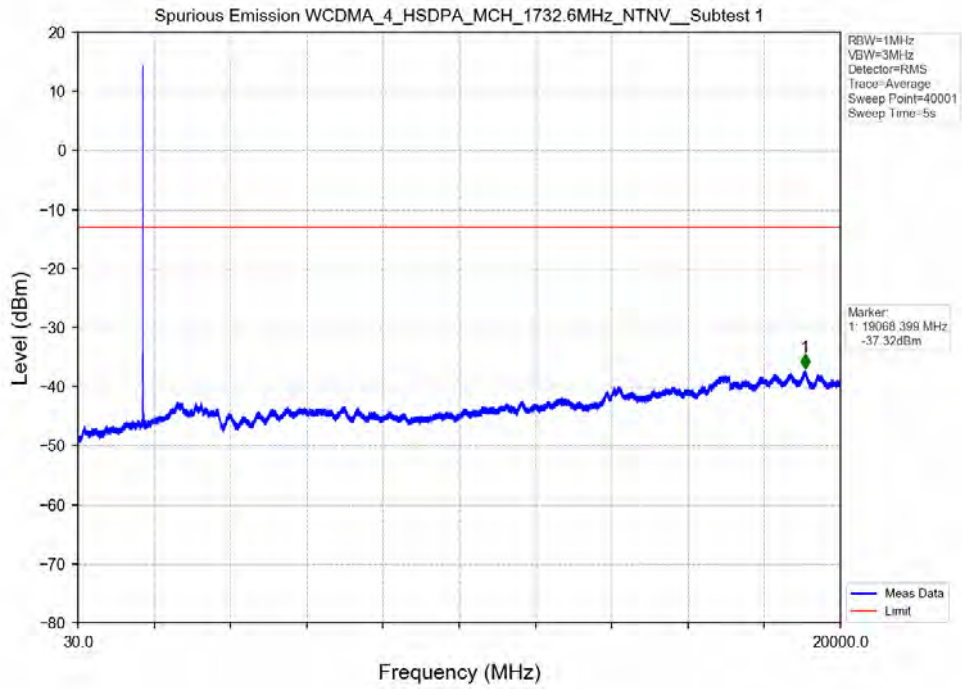
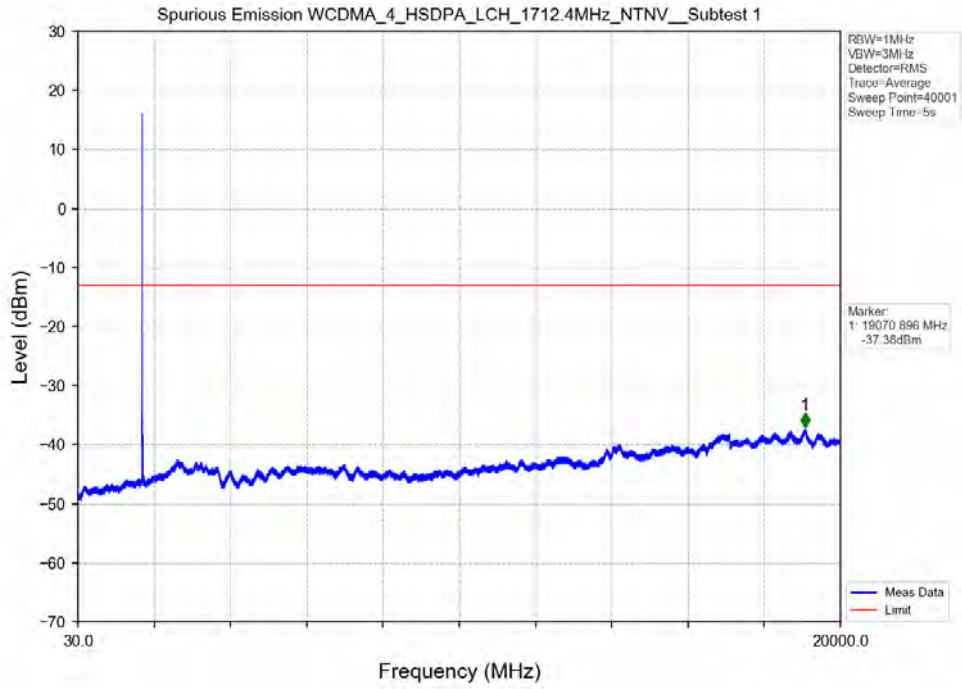


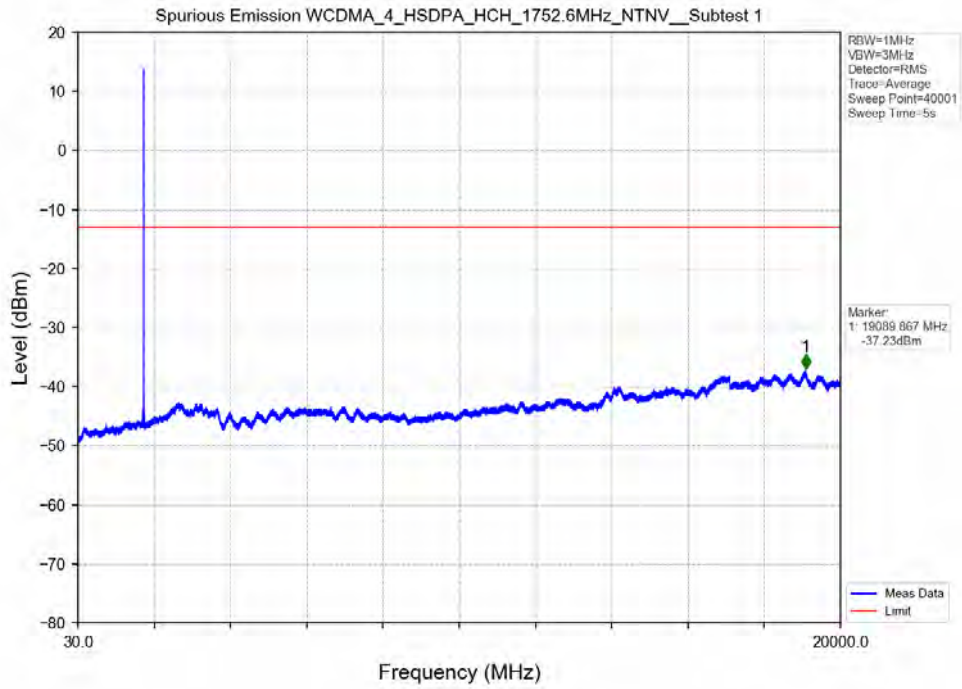
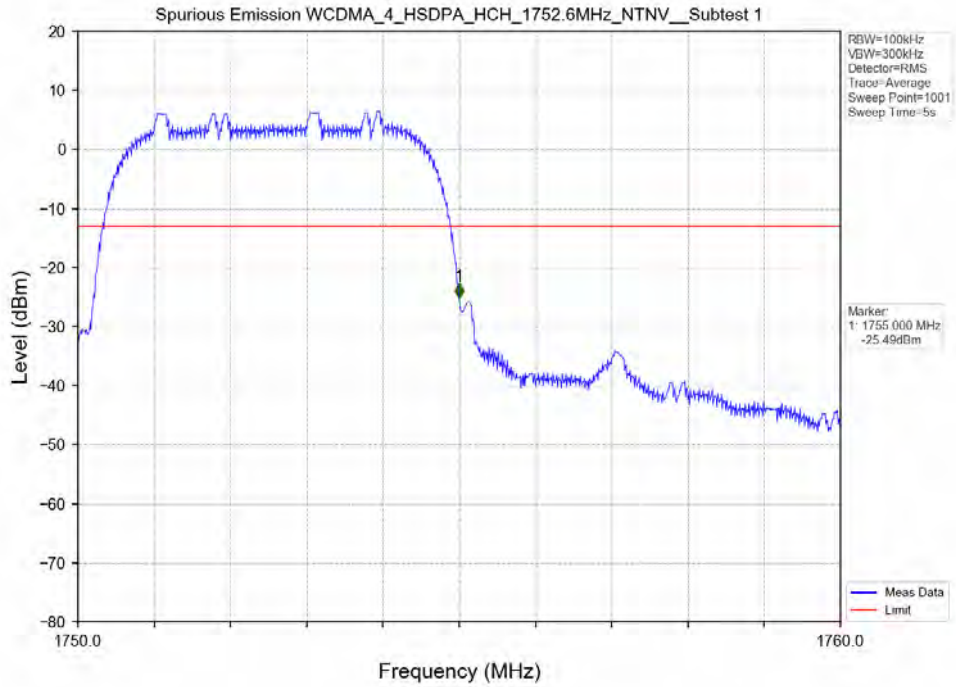


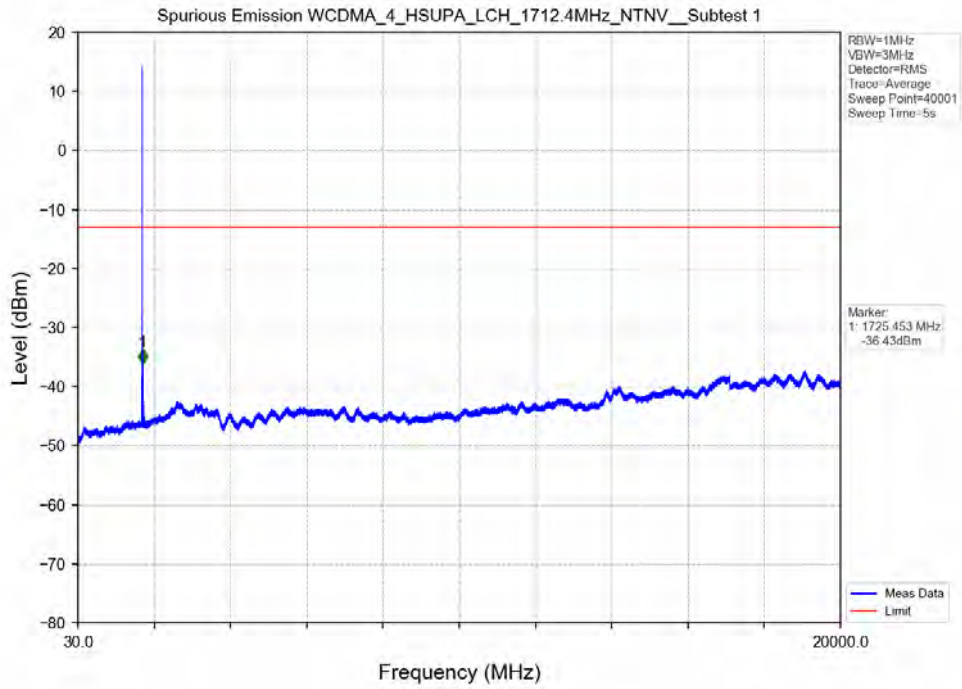
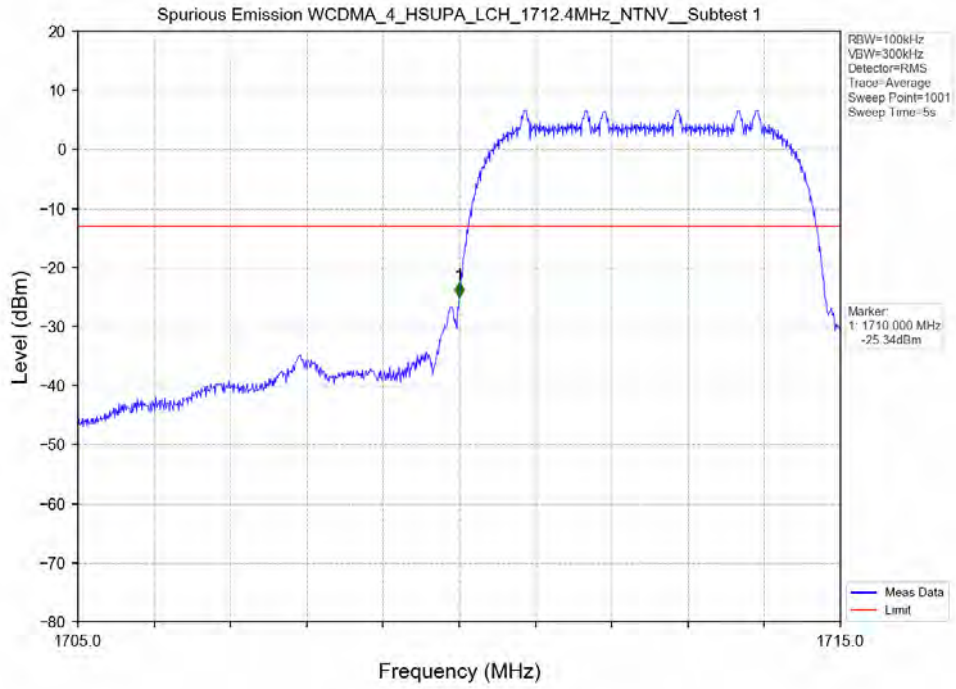


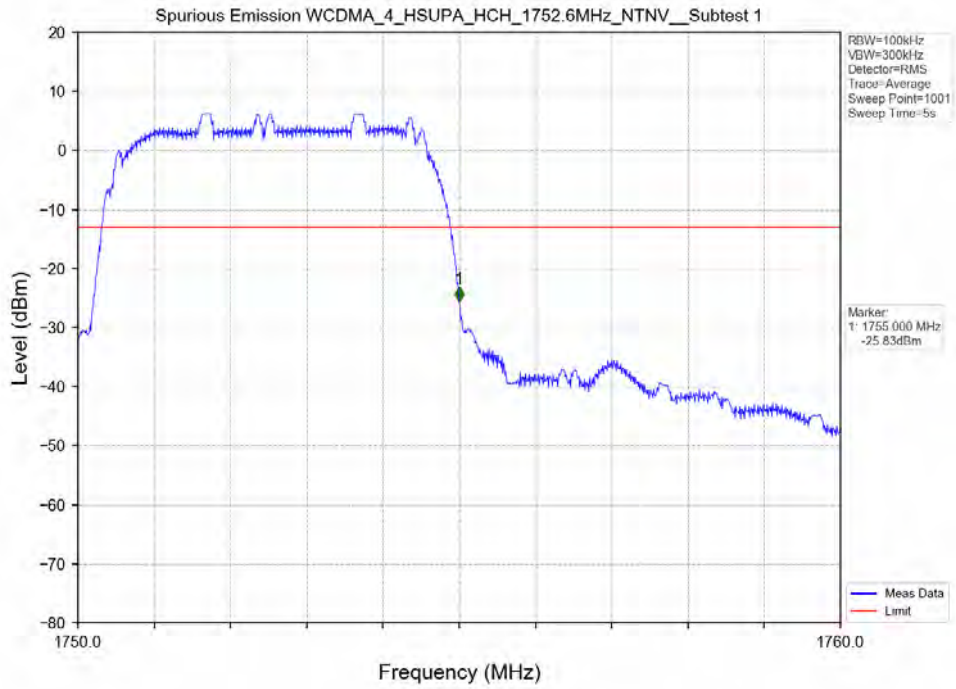
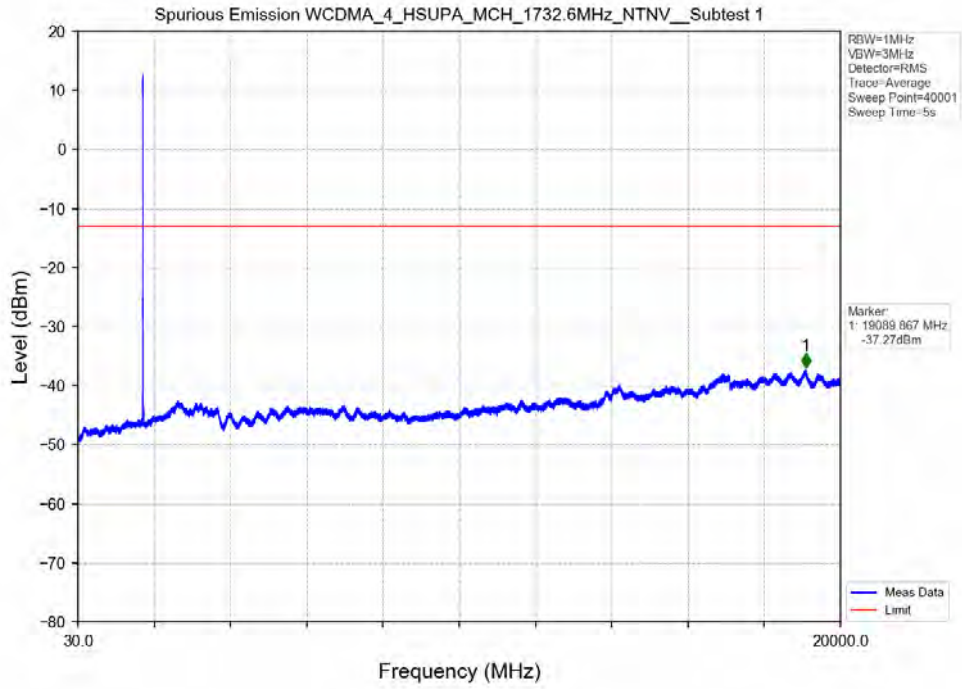




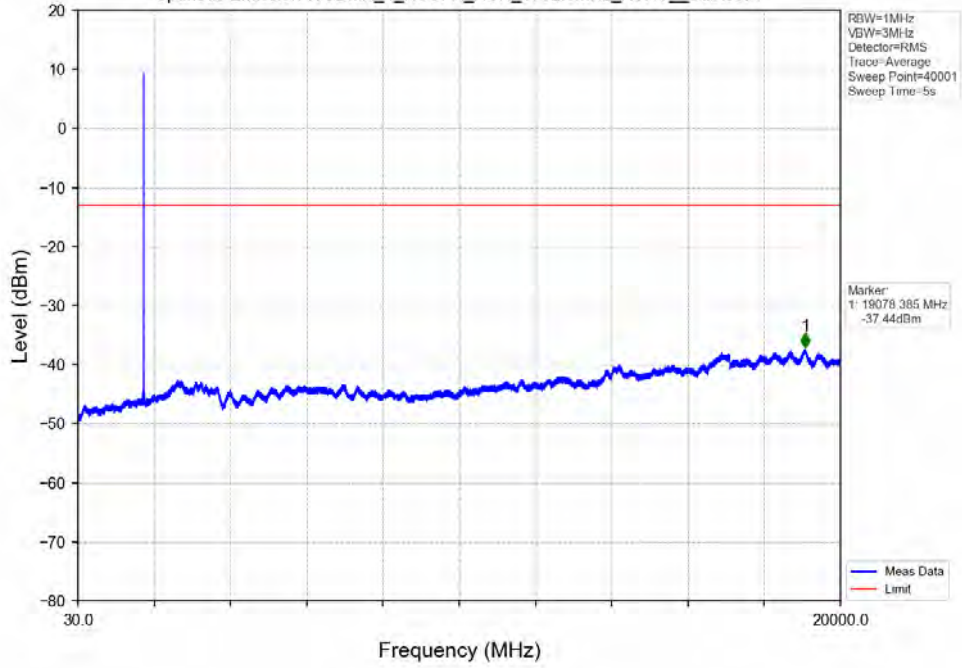


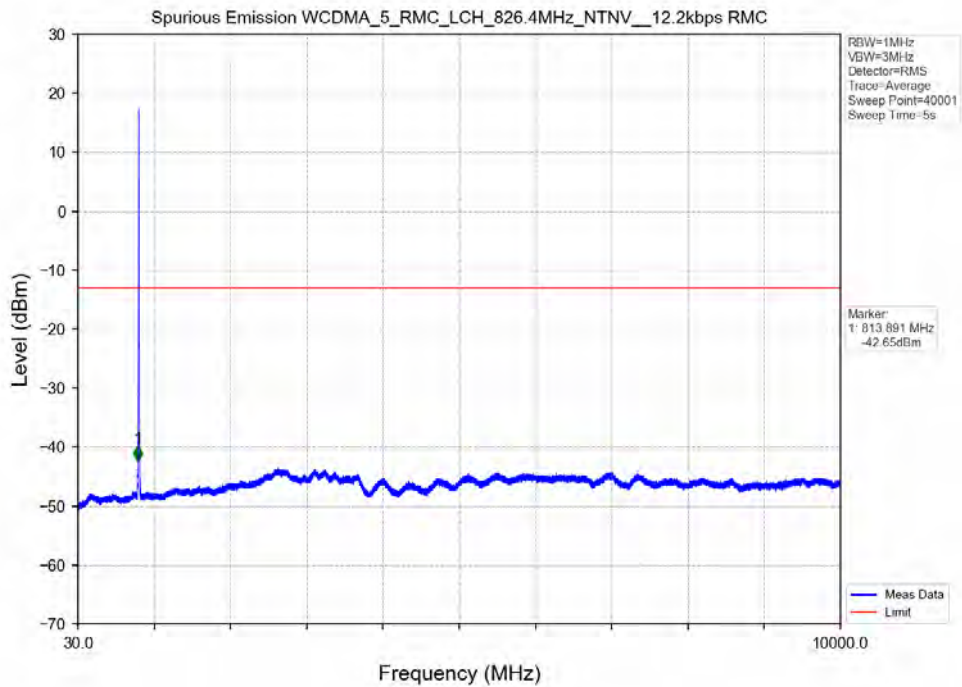
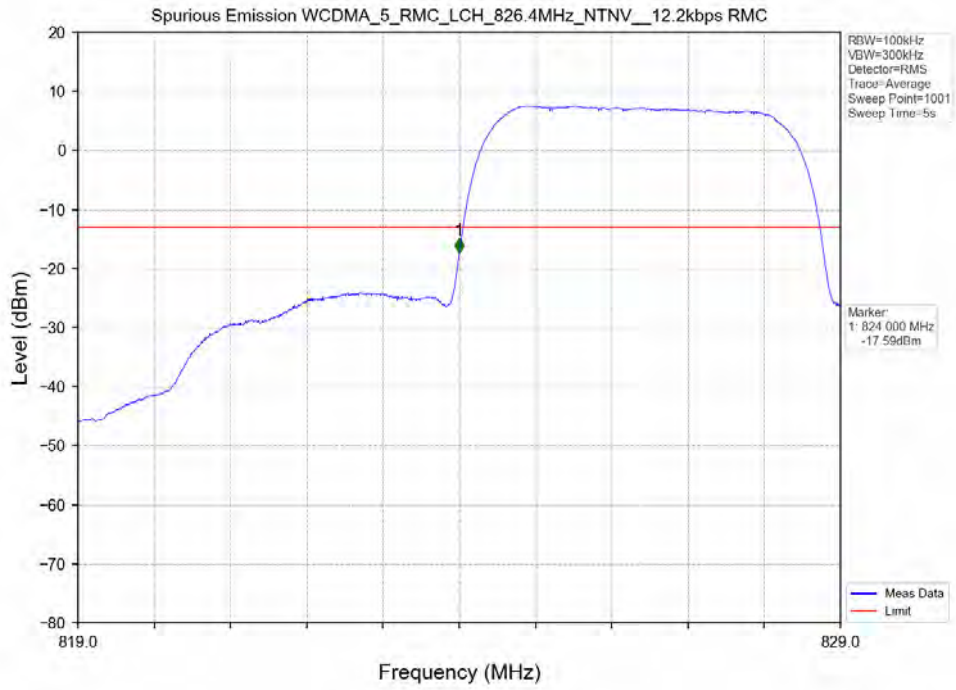




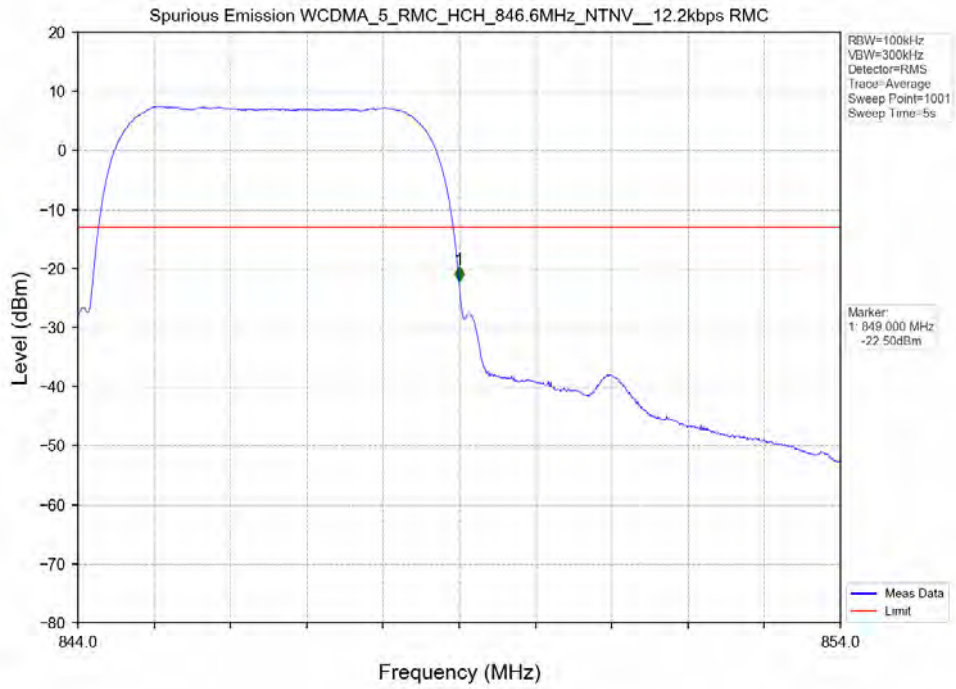
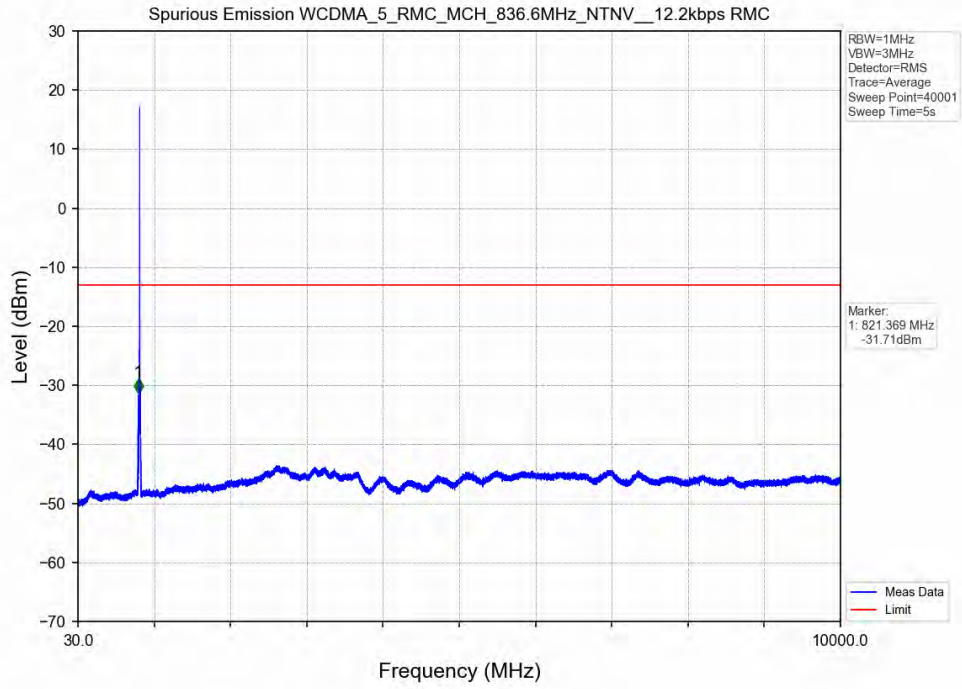


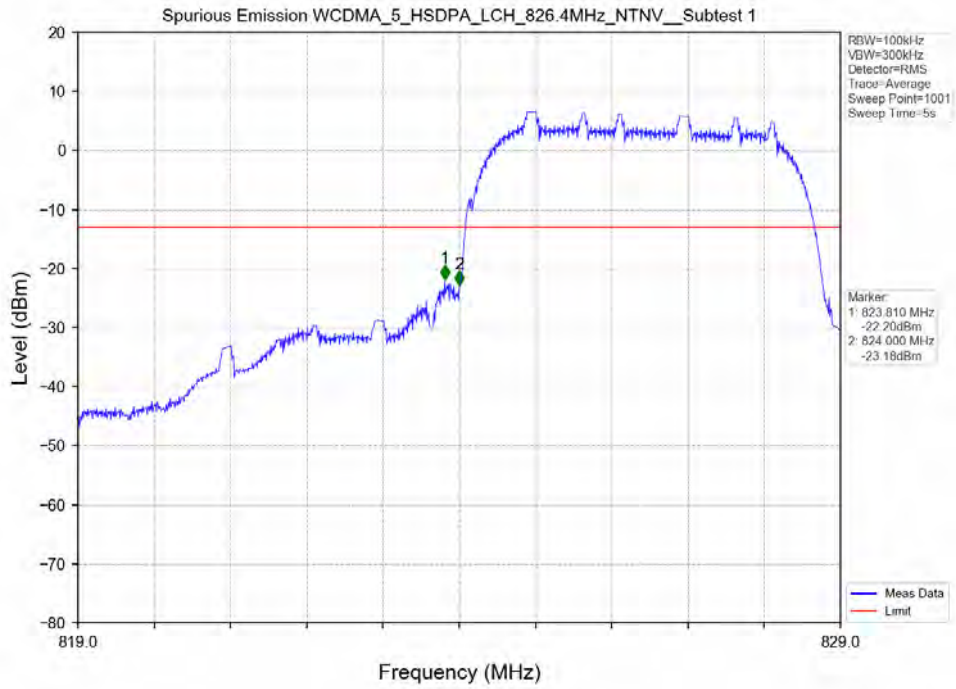
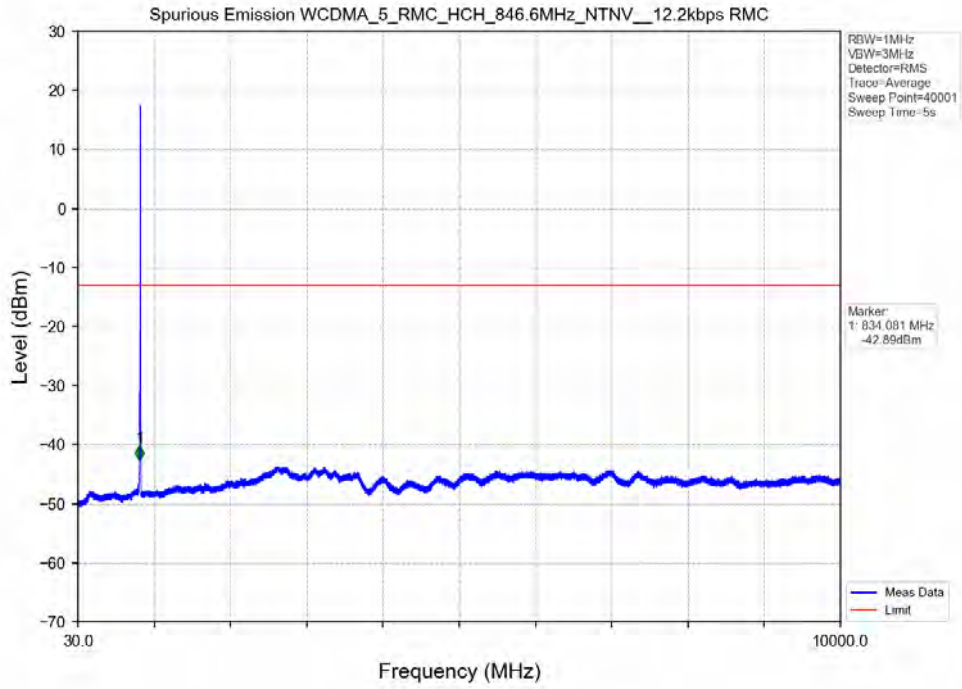
Spurious Emission WCDMA\_4\_HSUPA\_HCH\_1752.6MHz\_NTNV\_\_Subtest 1

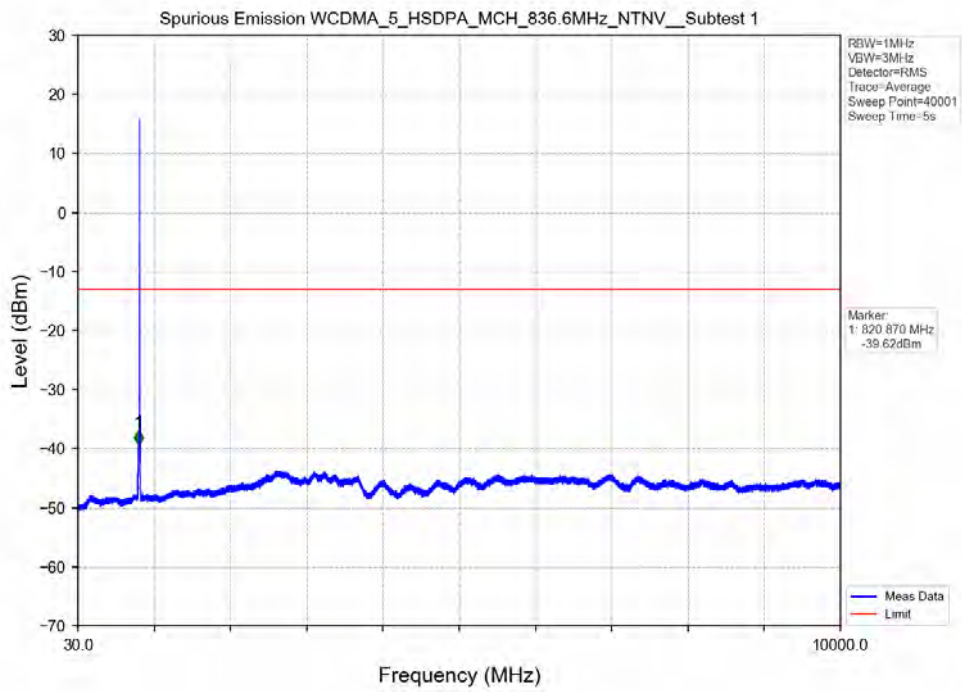
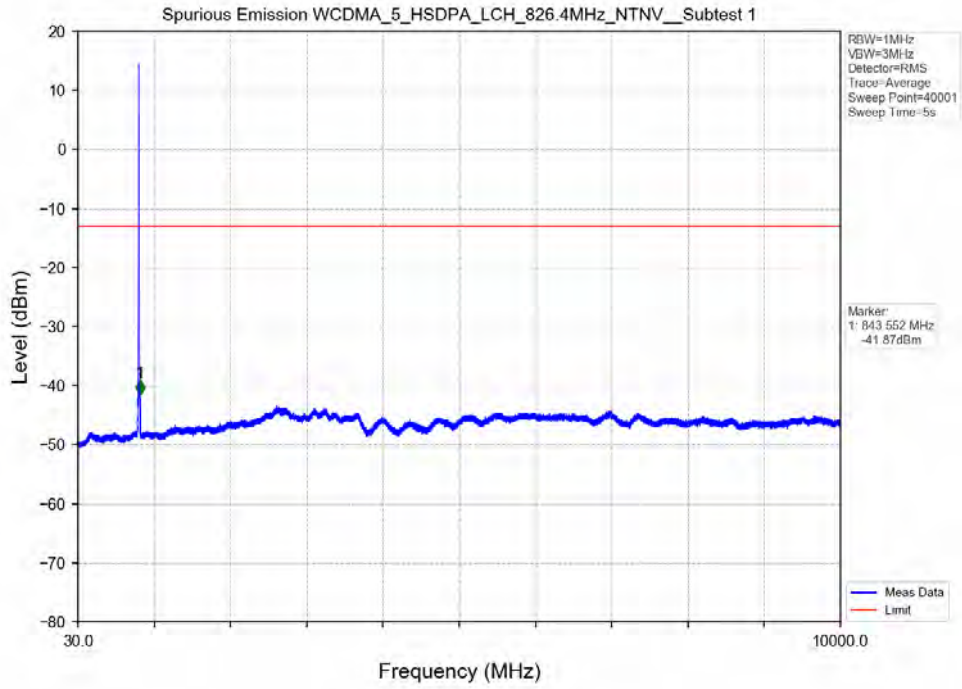


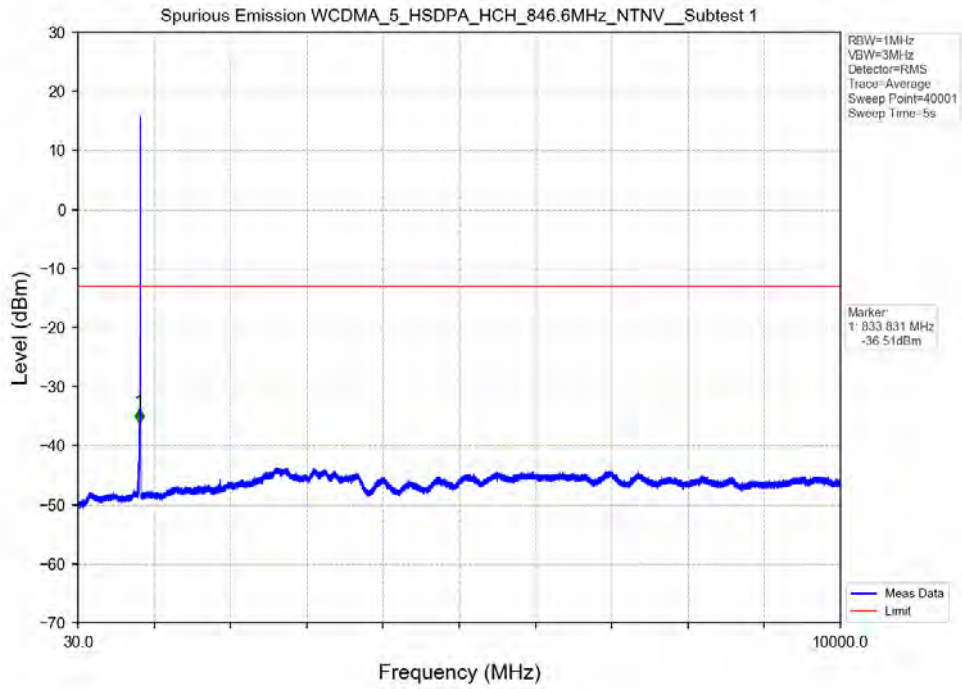
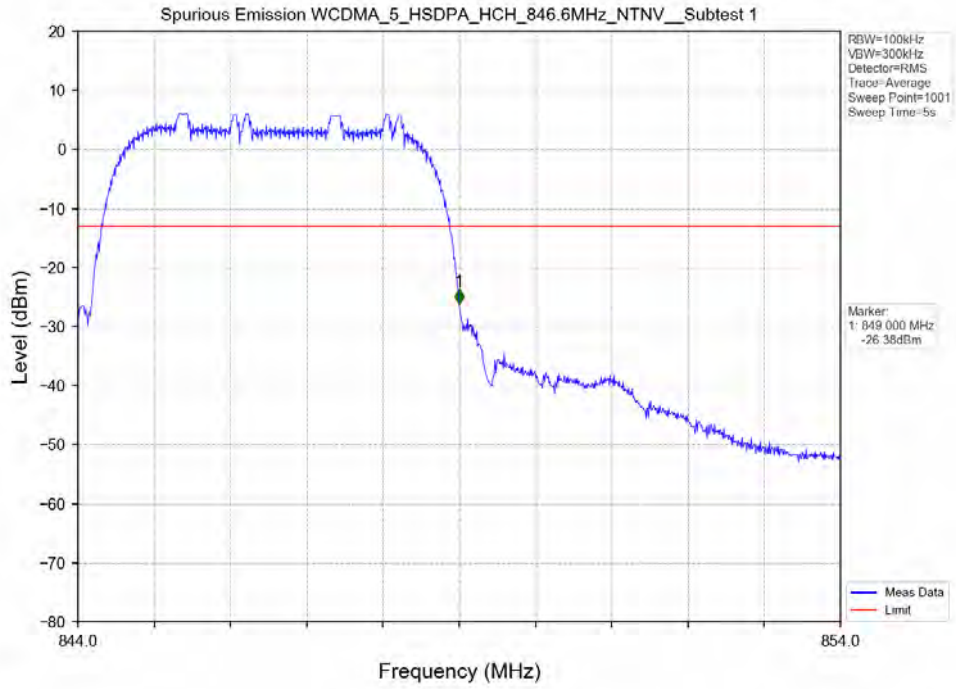


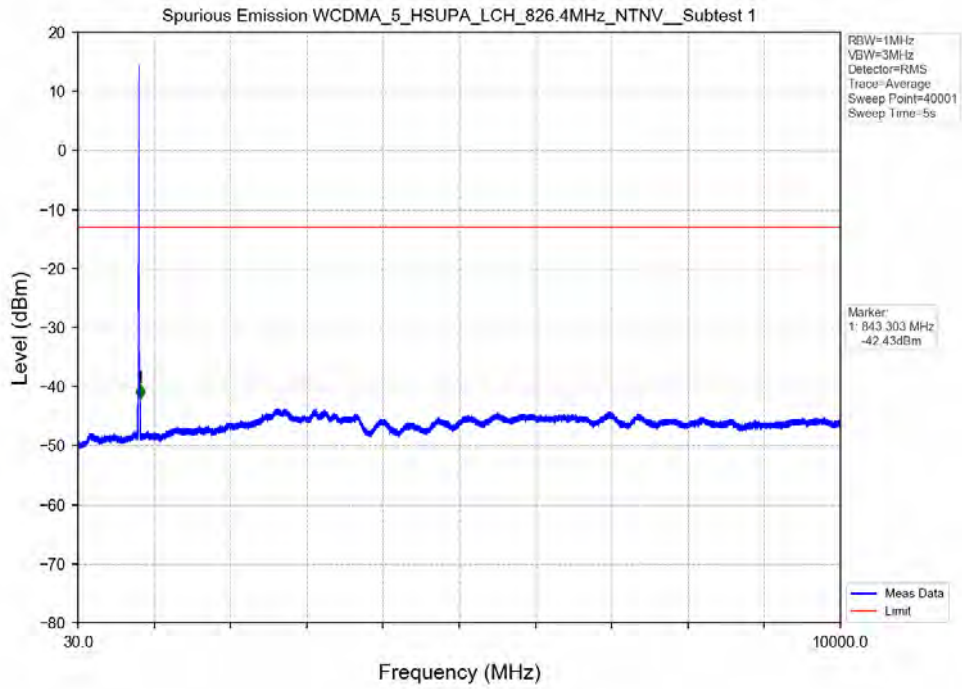
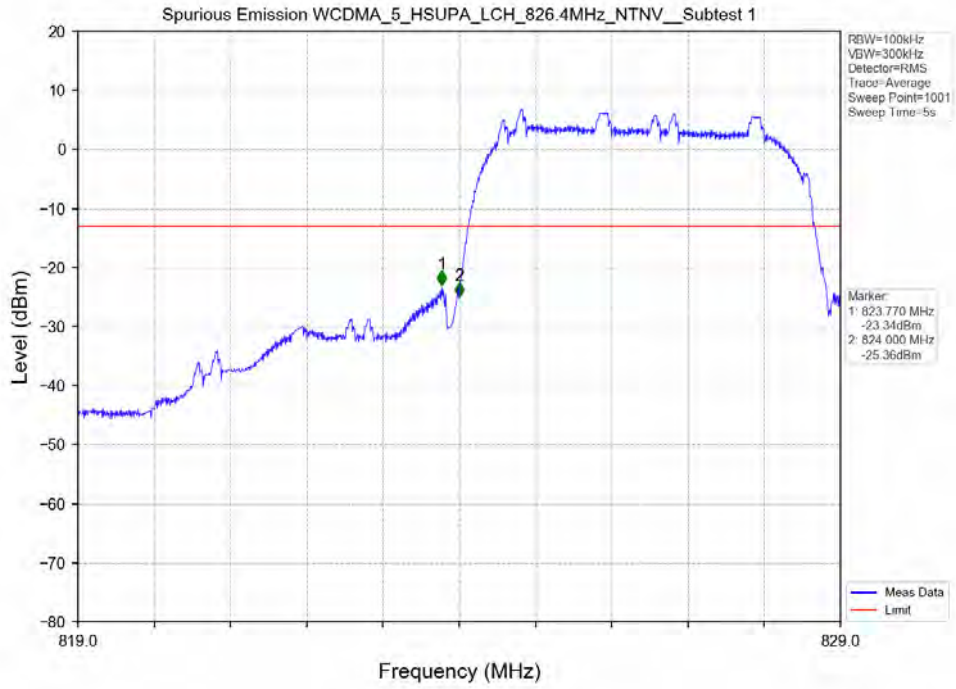


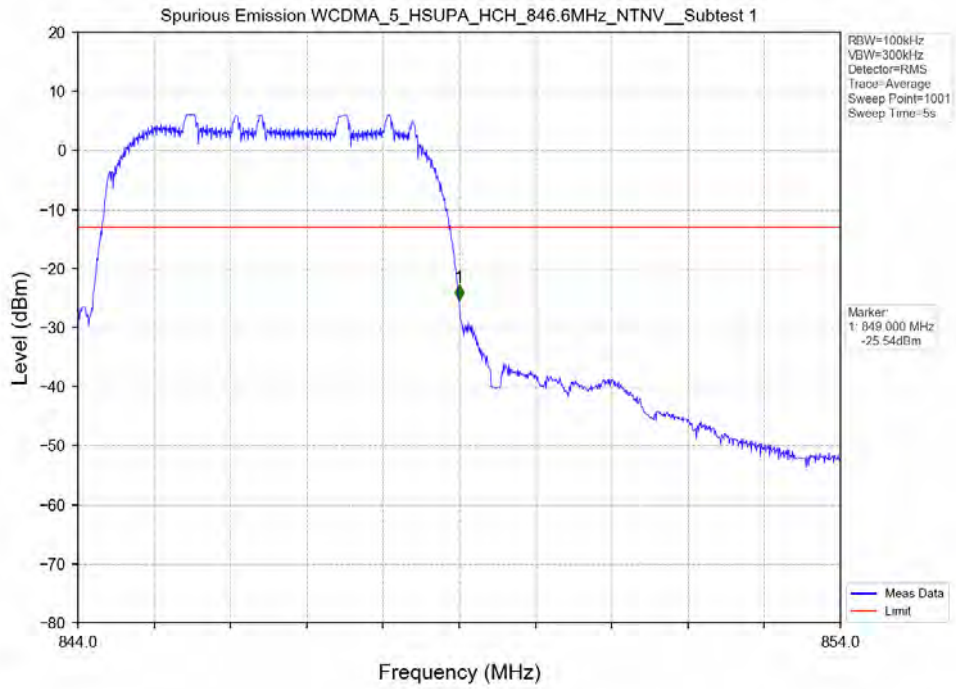
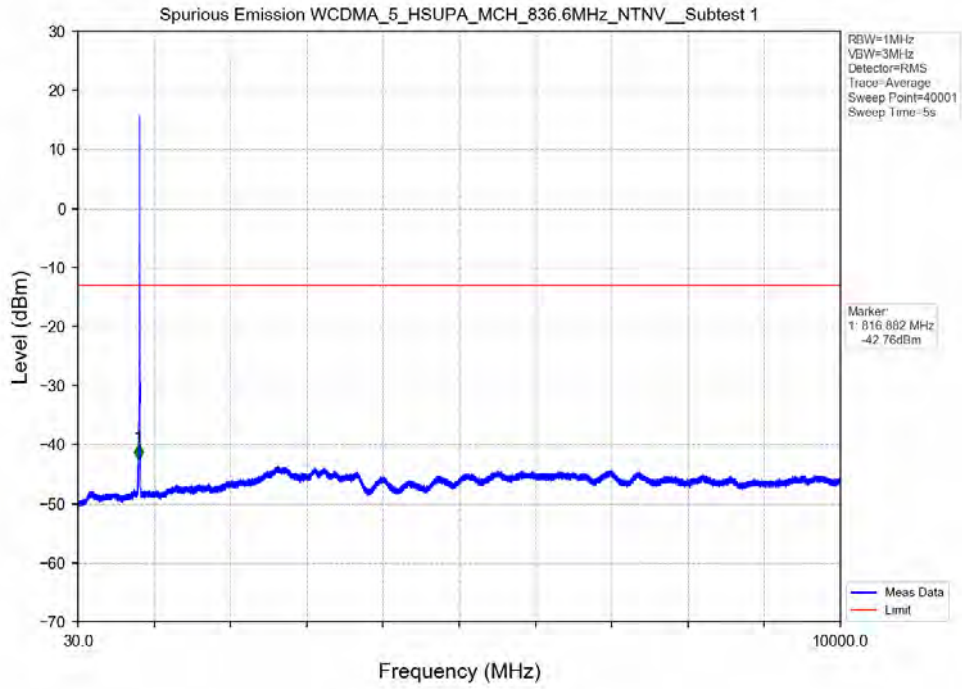












Spurious Emission WCDMA\_5\_HSUPA\_HCH\_846.6MHz\_NTNV\_Subtest 1

