

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Band2\_EIRP

### 1.1.1 Test Result

Band: 2									
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict	
	Network	Subset				Result	Limit		
NTNV	RMC	12.2kbps RMC	1852.4	21.60	-1.88	19.72	<=33.01	Pass	
			1880	21.32	-1.88	19.44	<=33.01	Pass	
			1907.6	21.02	-1.88	19.14	<=33.01	Pass	
	HSDPA	Subtest 1	1852.4	19.16	-1.88	17.28	<=33.01	Pass	
		Subtest 2	1852.4	19.15	-1.88	17.27	<=33.01	Pass	
		Subtest 3	1852.4	19.19	-1.88	17.31	<=33.01	Pass	
		Subtest 4	1852.4	19.09	-1.88	17.21	<=33.01	Pass	
		Subtest 1	1880	18.96	-1.88	17.08	<=33.01	Pass	
		Subtest 2	1880	18.93	-1.88	17.05	<=33.01	Pass	
		Subtest 3	1880	18.90	-1.88	17.02	<=33.01	Pass	
		Subtest 4	1880	18.92	-1.88	17.04	<=33.01	Pass	
		Subtest 1	1907.6	18.75	-1.88	16.87	<=33.01	Pass	
		Subtest 2	1907.6	18.64	-1.88	16.76	<=33.01	Pass	
		Subtest 3	1907.6	18.63	-1.88	16.75	<=33.01	Pass	
		Subtest 4	1907.6	18.67	-1.88	16.79	<=33.01	Pass	
		HSUPA	Subtest 1	1852.4	17.14	-1.88	15.26	<=33.01	Pass
			Subtest 2	1852.4	17.02	-1.88	15.14	<=33.01	Pass
			Subtest 3	1852.4	17.07	-1.88	15.19	<=33.01	Pass
	Subtest 4		1852.4	16.62	-1.88	14.74	<=33.01	Pass	
	Subtest 5		1852.4	16.91	-1.88	15.03	<=33.01	Pass	
	Subtest 1		1880	16.85	-1.88	14.97	<=33.01	Pass	
	Subtest 2		1880	16.62	-1.88	14.74	<=33.01	Pass	
	Subtest 3		1880	16.35	-1.88	14.47	<=33.01	Pass	
	Subtest 4		1880	16.74	-1.88	14.86	<=33.01	Pass	
	Subtest 5		1880	16.36	-1.88	14.48	<=33.01	Pass	
	Subtest 1		1907.6	16.68	-1.88	14.80	<=33.01	Pass	
	Subtest 2		1907.6	16.56	-1.88	14.68	<=33.01	Pass	
	Subtest 3		1907.6	16.06	-1.88	14.18	<=33.01	Pass	
	Subtest 4		1907.6	16.57	-1.88	14.69	<=33.01	Pass	
	Subtest 5		1907.6	16.09	-1.88	14.21	<=33.01	Pass	

Note1: EIRP=Conducted Power+Antenna Gain

## 2. Frequency Stability

### 2.1 Band2

#### 2.1.1 Test Result

Band: 2							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	1852.4	20	3.27	-10.142	-0.0055	-2.5 to 2.5	Pass
			3.85	-9.177	-0.0050	-2.5 to 2.5	Pass
			4.43	-8.111	-0.0044	-2.5 to 2.5	Pass
		-30	3.85	-10.722	-0.0058	-2.5 to 2.5	Pass
		-20	3.85	-11.423	-0.0062	-2.5 to 2.5	Pass

		-10	3.85	-7.703	-0.0042	-2.5 to 2.5	Pass		
		0	3.85	-9.692	-0.0052	-2.5 to 2.5	Pass		
		10	3.85	-13.955	-0.0075	-2.5 to 2.5	Pass		
		30	3.85	-12.302	-0.0066	-2.5 to 2.5	Pass		
		40	3.85	-15.464	-0.0083	-2.5 to 2.5	Pass		
	1880	20	50	3.85	-14.226	-0.0077	-2.5 to 2.5	Pass	
			3.27	-10.951	-0.0058	-2.5 to 2.5	Pass		
			3.85	-13.182	-0.0070	-2.5 to 2.5	Pass		
		4.43	-6.731	-0.0036	-2.5 to 2.5	Pass			
		-30	3.85	-11.487	-0.0061	-2.5 to 2.5	Pass		
		-20	3.85	-7.861	-0.0042	-2.5 to 2.5	Pass		
		-10	3.85	-12.438	-0.0066	-2.5 to 2.5	Pass		
		0	3.85	-11.652	-0.0062	-2.5 to 2.5	Pass		
		10	3.85	-13.490	-0.0072	-2.5 to 2.5	Pass		
		30	3.85	-10.743	-0.0057	-2.5 to 2.5	Pass		
		40	3.85	-16.179	-0.0086	-2.5 to 2.5	Pass		
		50	3.85	-12.646	-0.0067	-2.5 to 2.5	Pass		
		1907.6	20	3.27	-11.401	-0.0060	-2.5 to 2.5	Pass	
				3.85	-9.806	-0.0051	-2.5 to 2.5	Pass	
				4.43	-14.856	-0.0078	-2.5 to 2.5	Pass	
	-30		3.85	-13.533	-0.0071	-2.5 to 2.5	Pass		
	-20		3.85	-17.045	-0.0089	-2.5 to 2.5	Pass		
	-10		3.85	-15.106	-0.0079	-2.5 to 2.5	Pass		
	0		3.85	-12.038	-0.0063	-2.5 to 2.5	Pass		
	10		3.85	-14.770	-0.0077	-2.5 to 2.5	Pass		
	30		3.85	-17.216	-0.0090	-2.5 to 2.5	Pass		
	40		3.85	-9.942	-0.0052	-2.5 to 2.5	Pass		
	50		3.85	-11.873	-0.0062	-2.5 to 2.5	Pass		
	HSDPA		1852.4	20	3.27	-13.969	-0.0075	-2.5 to 2.5	Pass
					3.85	-14.849	-0.0080	-2.5 to 2.5	Pass
4.43					-16.637	-0.0090	-2.5 to 2.5	Pass	
-30				3.85	-12.746	-0.0069	-2.5 to 2.5	Pass	
-20		3.85		-12.038	-0.0065	-2.5 to 2.5	Pass		
-10		3.85		-12.825	-0.0069	-2.5 to 2.5	Pass		
0		3.85		-14.341	-0.0077	-2.5 to 2.5	Pass		
10		3.85		-14.019	-0.0076	-2.5 to 2.5	Pass		
30		3.85		-16.172	-0.0087	-2.5 to 2.5	Pass		
40		3.85		-17.803	-0.0096	-2.5 to 2.5	Pass		
50		3.85		-18.067	-0.0098	-2.5 to 2.5	Pass		
1880		20		3.27	-15.171	-0.0081	-2.5 to 2.5	Pass	
				3.85	-17.903	-0.0095	-2.5 to 2.5	Pass	
				4.43	-14.777	-0.0079	-2.5 to 2.5	Pass	
		-30		3.85	-14.241	-0.0076	-2.5 to 2.5	Pass	
		-20	3.85	-19.369	-0.0103	-2.5 to 2.5	Pass		
		-10	3.85	-15.399	-0.0082	-2.5 to 2.5	Pass		
		0	3.85	-16.215	-0.0086	-2.5 to 2.5	Pass		
		10	3.85	-13.089	-0.0070	-2.5 to 2.5	Pass		
		30	3.85	-12.610	-0.0067	-2.5 to 2.5	Pass		
		40	3.85	-15.929	-0.0085	-2.5 to 2.5	Pass		
		50	3.85	-20.192	-0.0107	-2.5 to 2.5	Pass		
		1907.6	20	3.27	-15.078	-0.0079	-2.5 to 2.5	Pass	
				3.85	-15.521	-0.0081	-2.5 to 2.5	Pass	
				4.43	-16.465	-0.0086	-2.5 to 2.5	Pass	
			-30	3.85	-17.860	-0.0094	-2.5 to 2.5	Pass	
-20			3.85	-20.335	-0.0107	-2.5 to 2.5	Pass		
-10			3.85	-14.277	-0.0075	-2.5 to 2.5	Pass		
0			3.85	-17.145	-0.0090	-2.5 to 2.5	Pass		
10			3.85	-21.694	-0.0114	-2.5 to 2.5	Pass		
30	3.85		-15.678	-0.0082	-2.5 to 2.5	Pass			

		40	3.85	-14.985	-0.0079	-2.5 to 2.5	Pass
		50	3.85	-18.482	-0.0097	-2.5 to 2.5	Pass
HSUPA	1852.4	20	3.27	-12.403	-0.0067	-2.5 to 2.5	Pass
			3.85	-13.397	-0.0072	-2.5 to 2.5	Pass
			4.43	-14.827	-0.0080	-2.5 to 2.5	Pass
		-30	3.85	-16.043	-0.0087	-2.5 to 2.5	Pass
		-20	3.85	-11.723	-0.0063	-2.5 to 2.5	Pass
		-10	3.85	-11.952	-0.0065	-2.5 to 2.5	Pass
		0	3.85	-12.681	-0.0068	-2.5 to 2.5	Pass
		10	3.85	-14.005	-0.0076	-2.5 to 2.5	Pass
		30	3.85	-9.277	-0.0050	-2.5 to 2.5	Pass
		40	3.85	-15.600	-0.0084	-2.5 to 2.5	Pass
		50	3.85	-14.234	-0.0077	-2.5 to 2.5	Pass
	1880	20	3.27	-15.686	-0.0083	-2.5 to 2.5	Pass
			3.85	-9.928	-0.0053	-2.5 to 2.5	Pass
			4.43	-17.188	-0.0091	-2.5 to 2.5	Pass
		-30	3.85	-17.052	-0.0091	-2.5 to 2.5	Pass
		-20	3.85	-14.484	-0.0077	-2.5 to 2.5	Pass
		-10	3.85	-12.882	-0.0069	-2.5 to 2.5	Pass
		0	3.85	-15.736	-0.0084	-2.5 to 2.5	Pass
		10	3.85	-16.165	-0.0086	-2.5 to 2.5	Pass
		30	3.85	-16.065	-0.0085	-2.5 to 2.5	Pass
		40	3.85	-14.141	-0.0075	-2.5 to 2.5	Pass
		50	3.85	-15.507	-0.0082	-2.5 to 2.5	Pass
	1907.6	20	3.27	-16.136	-0.0085	-2.5 to 2.5	Pass
			3.85	-21.150	-0.0111	-2.5 to 2.5	Pass
			4.43	-13.361	-0.0070	-2.5 to 2.5	Pass
		-30	3.85	-11.959	-0.0063	-2.5 to 2.5	Pass
		-20	3.85	-16.437	-0.0086	-2.5 to 2.5	Pass
		-10	3.85	-18.260	-0.0096	-2.5 to 2.5	Pass
		0	3.85	-13.790	-0.0072	-2.5 to 2.5	Pass
		10	3.85	-13.175	-0.0069	-2.5 to 2.5	Pass
		30	3.85	-18.325	-0.0096	-2.5 to 2.5	Pass
		40	3.85	-20.149	-0.0106	-2.5 to 2.5	Pass
		50	3.85	-12.603	-0.0066	-2.5 to 2.5	Pass

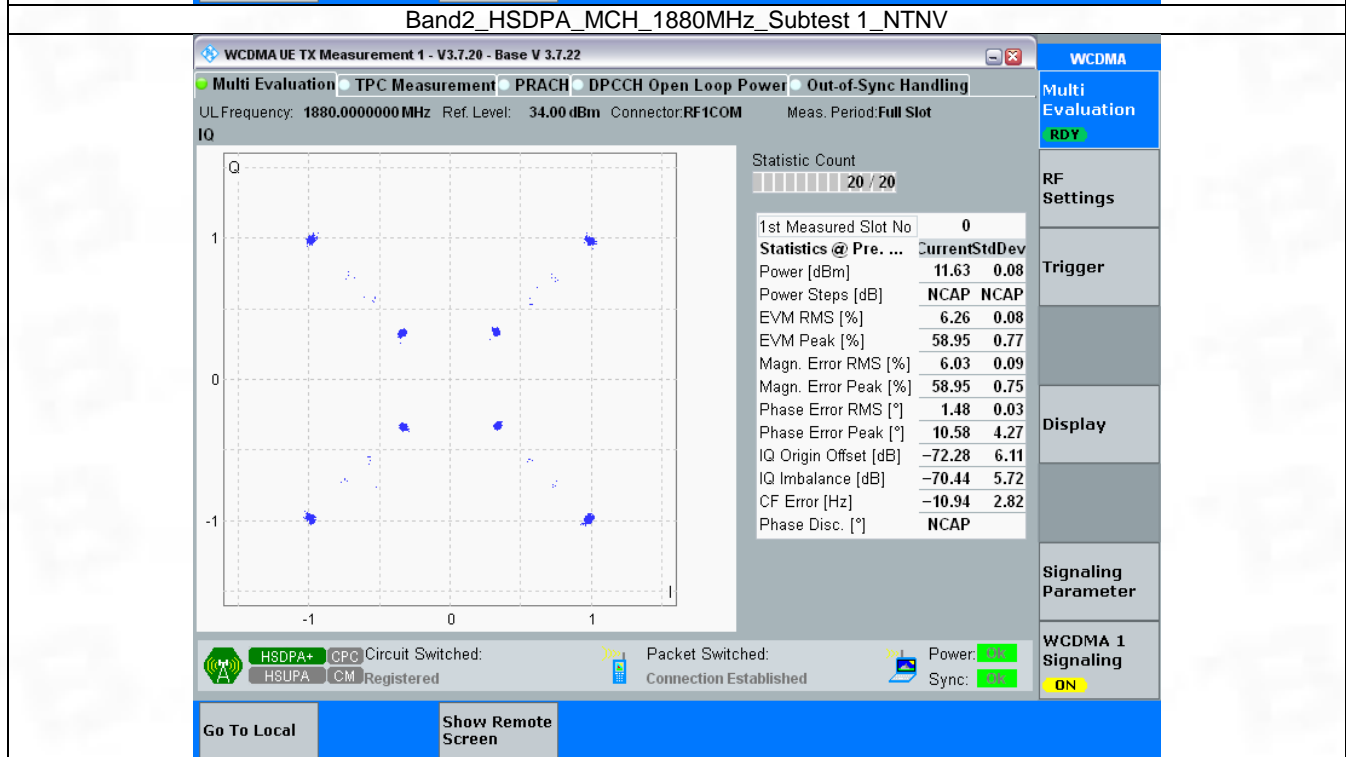
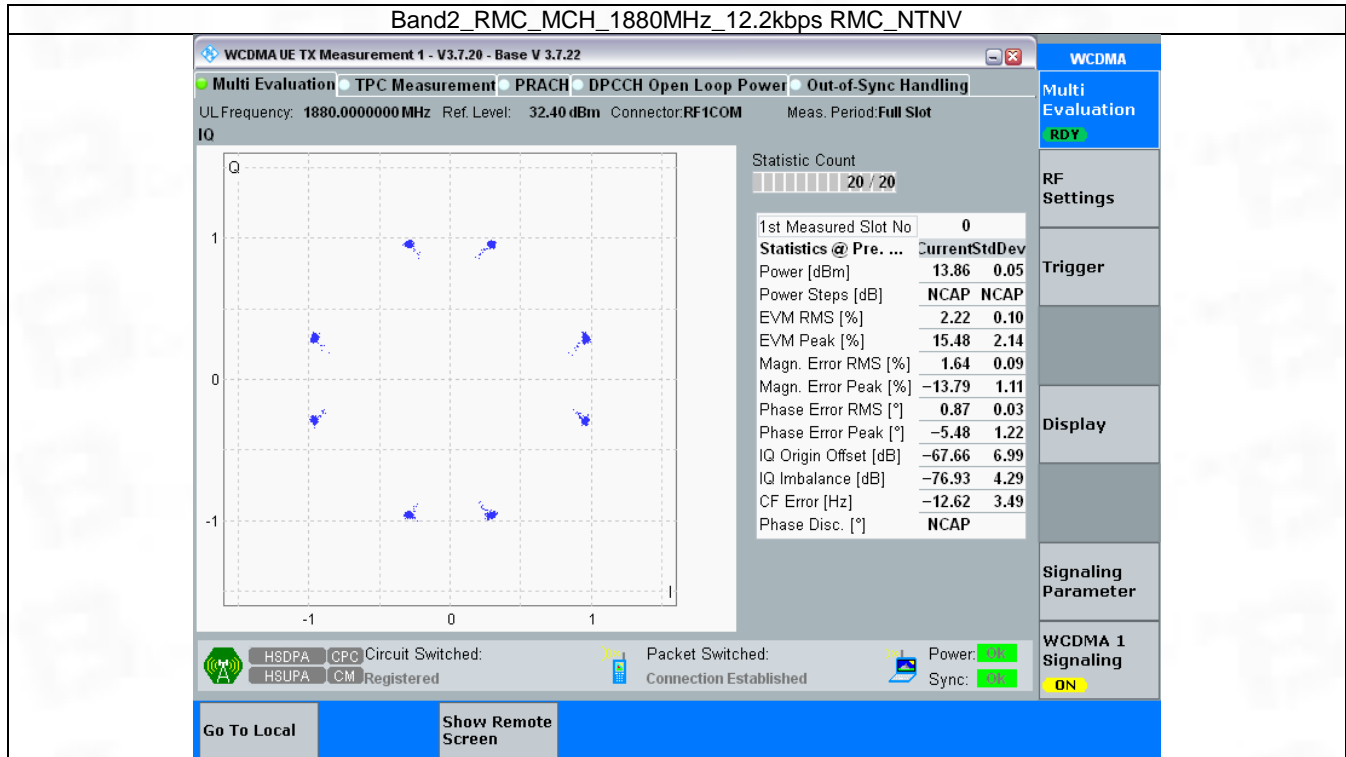
### 3. Modulation Characteristics

#### 3.1 Band2

##### 3.1.1 Test Result

Band: 2						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1880	Refer To Test Graph		Pass
	HSDPA	Subtest 1	1880	Refer To Test Graph		Pass
	HSUPA	Subtest 1	1880	Refer To Test Graph		Pass

### 3.1.2 Test Graph



Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV

WCDMA UE TX Measurement 1 - V3.7.20 - Base V 3.7.22
WCDMA

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

UL Frequency: 1880.000000 MHz Ref. Level: 34.00 dBm Connector: RF1COM Meas. Period: Full Slot
RDY

IQ

Statistic Count

20 / 20

1st Measured Slot No	0
Statistics @ Pre. ...	CurrentStdDev
Power [dBm]	11.90 2.48
Power Steps [dB]	NCAP NCAP
EVM RMS [%]	1.95 3.31
EVM Peak [%]	6.30 35.18
Magn. Error RMS [%]	1.10 3.54
Magn. Error Peak [%]	3.09 36.61
Phase Error RMS [°]	1.36 0.25
Phase Error Peak [°]	5.95 2.42
IQ Origin Offset [dB]	-72.68 6.65
IQ Imbalance [dB]	-83.38 5.89
CF Error [Hz]	-18.01 4.66
Phase Disc. [°]	NCAP

HSDPA+  CPC Circuit Switched  
 HSUPA  CM Registered

Packet Switched  
 Connection Established

Power: ON  
 Sync: ON

Go To Local

Show Remote Screen

WCDMA 1 Signaling ON

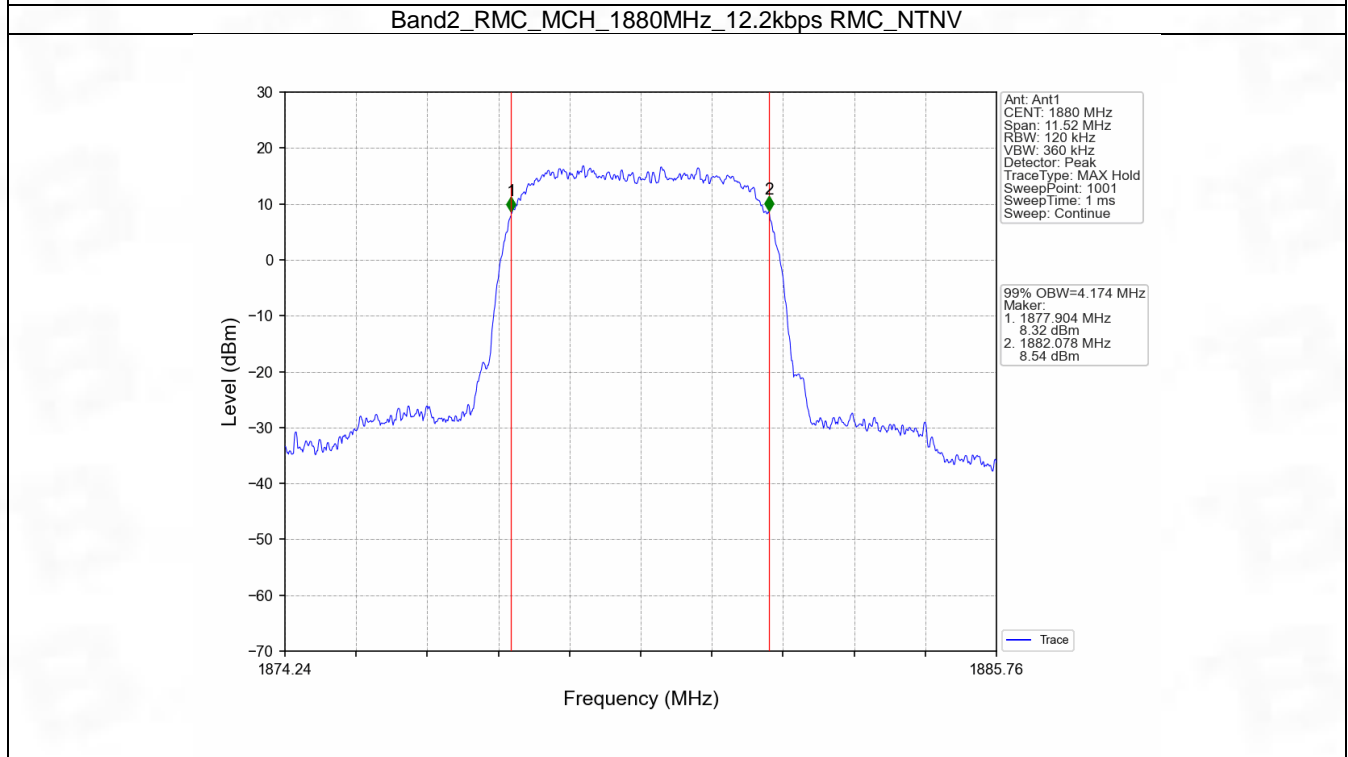
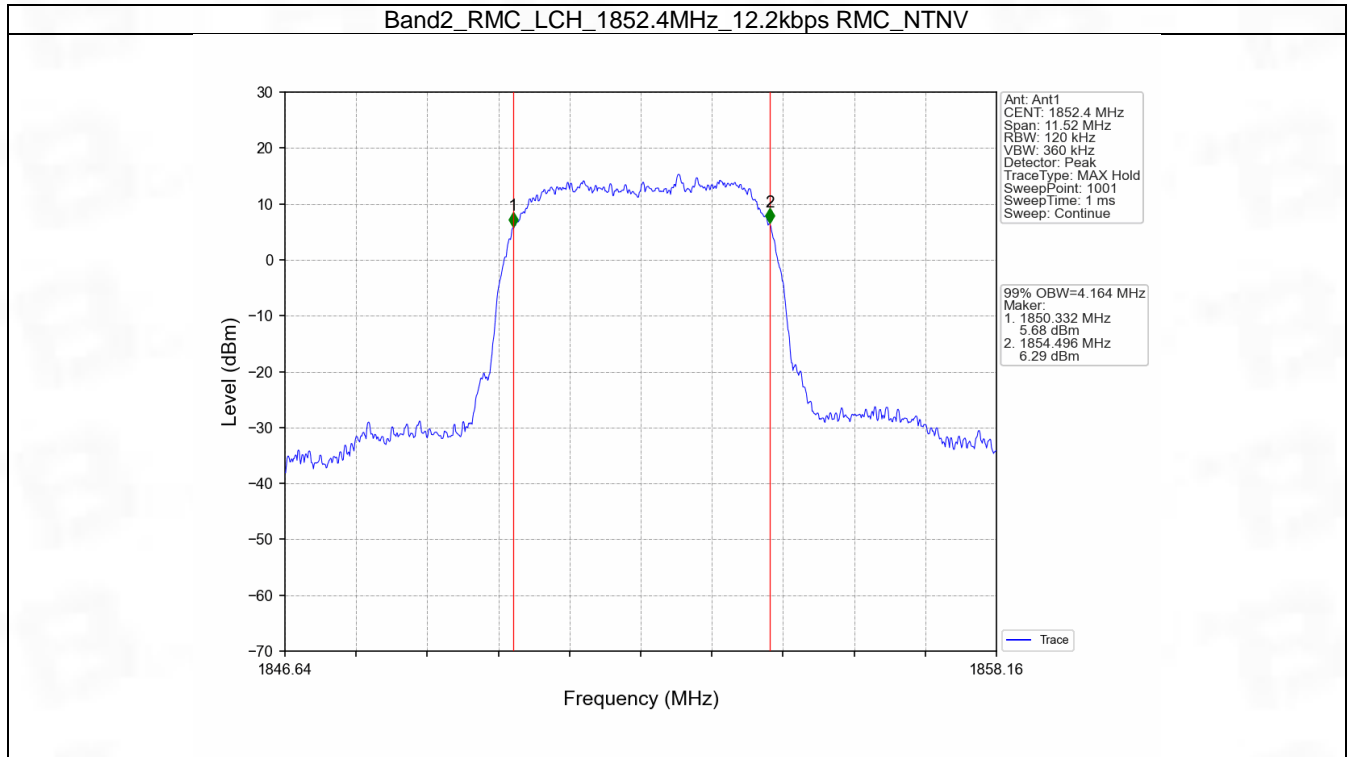
## 4. 99% & 26dB Bandwidth

### 4.1 Band2\_OBW

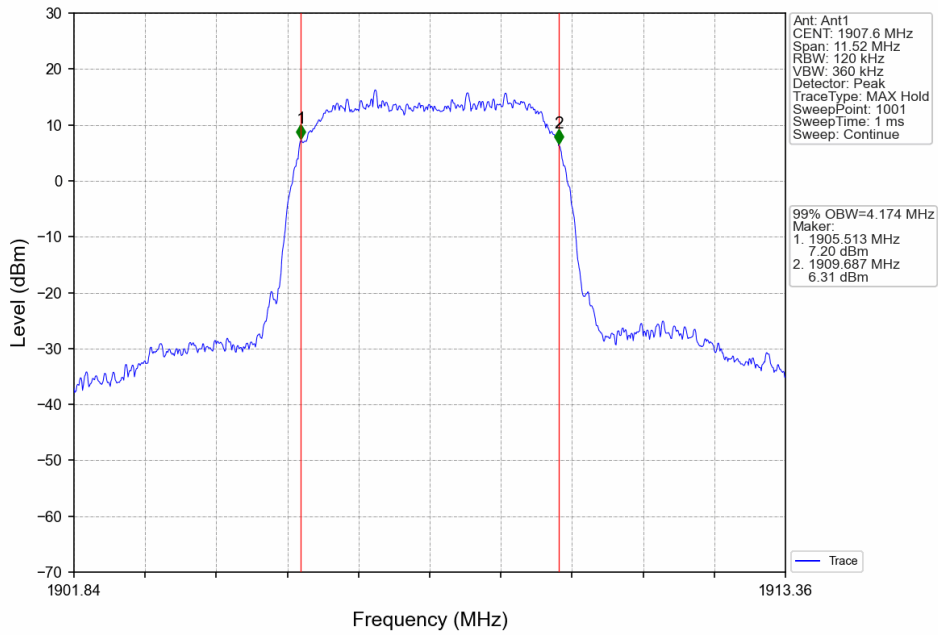
#### 4.1.1 Test Result

Band: 2						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	4.164	/	Pass
			1880	4.174	/	Pass
			1907.6	4.174	/	Pass
	HSDPA	Subtest 1	1852.4	4.238	/	Pass
			1880	4.181	/	Pass
			1907.6	4.207	/	Pass
	HSUPA	Subtest 1	1852.4	4.225	/	Pass
			1880	4.173	/	Pass
			1907.6	4.206	/	Pass

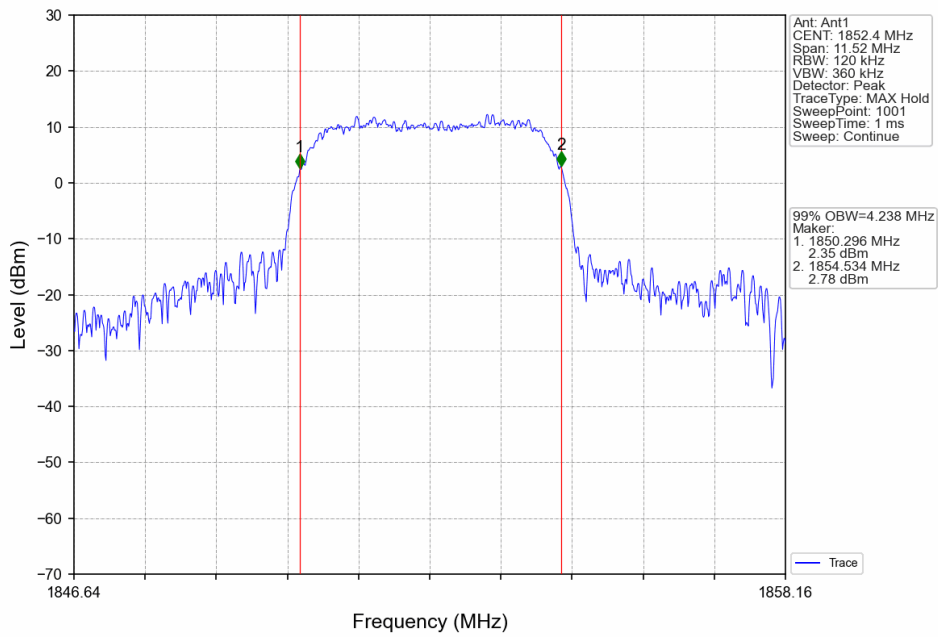
### 4.1.2 Test Graph



Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV

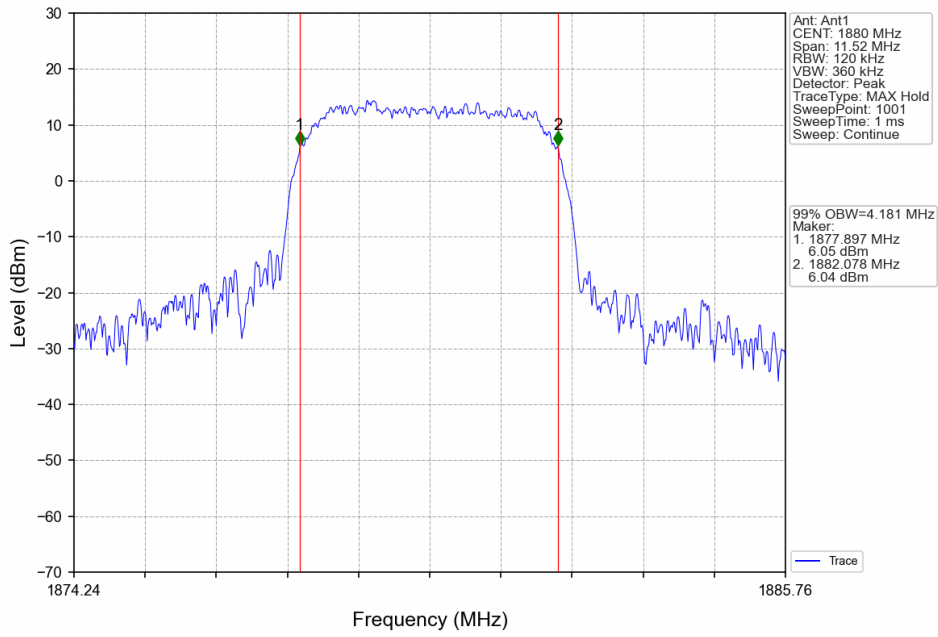


Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV

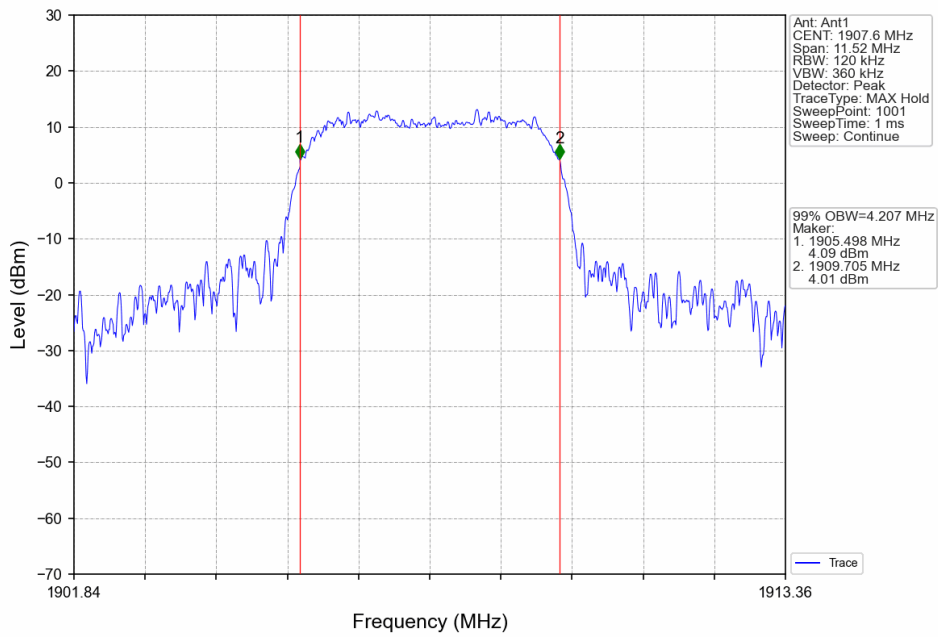




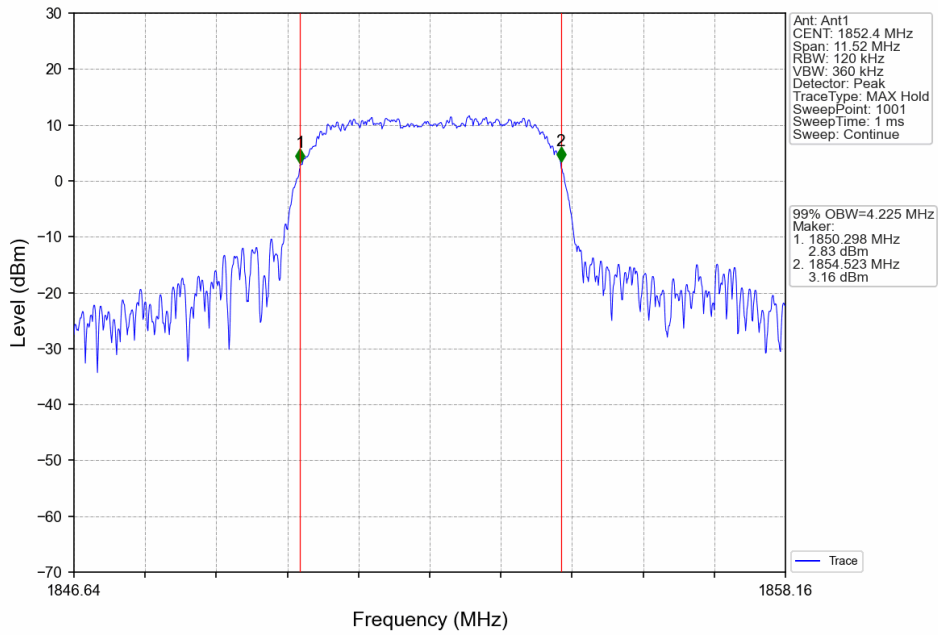
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



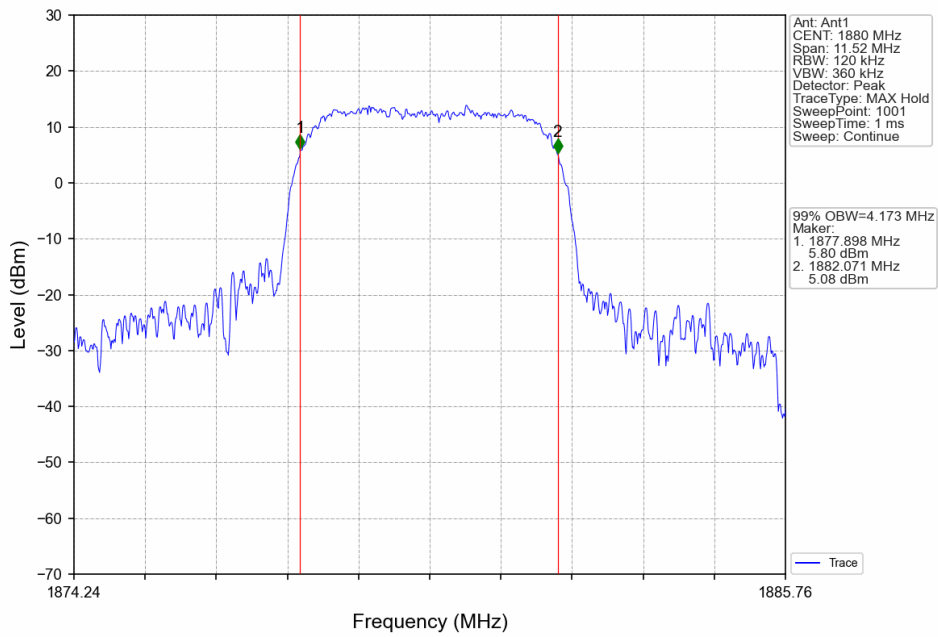
Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



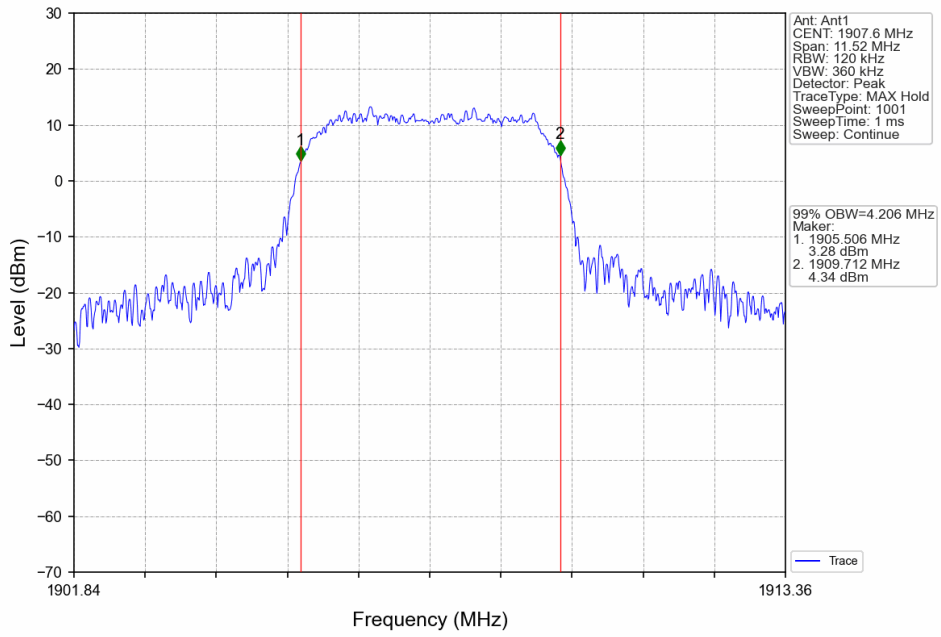
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



Band2\_HSUPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV

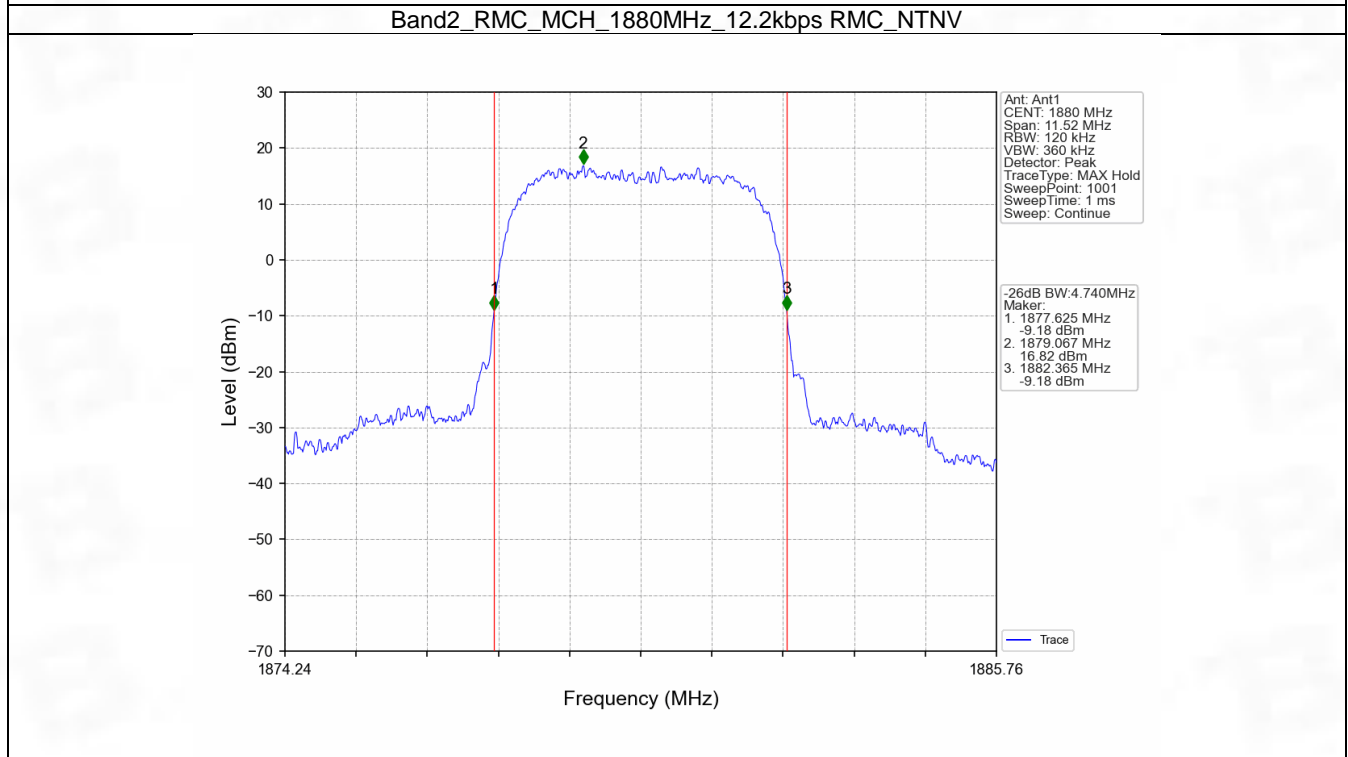
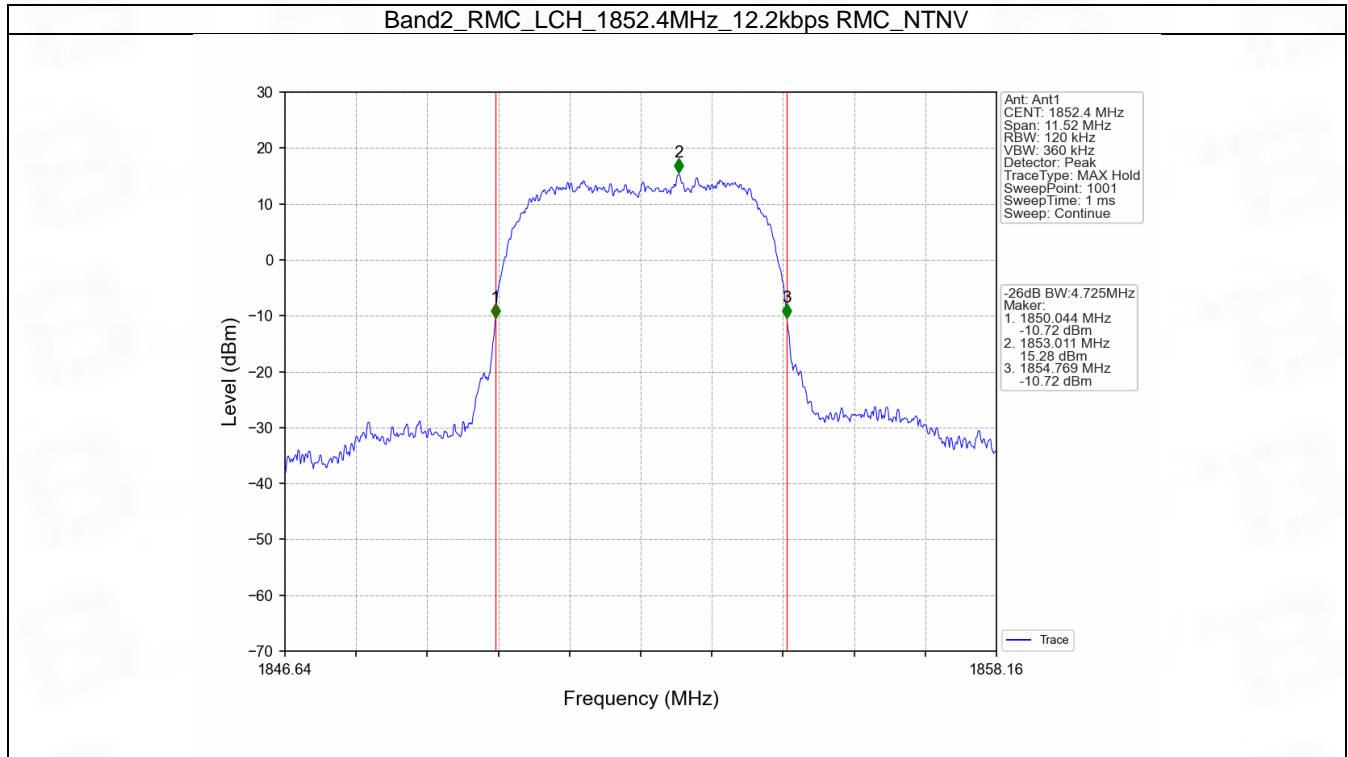


## 4.2 Band2\_XDB

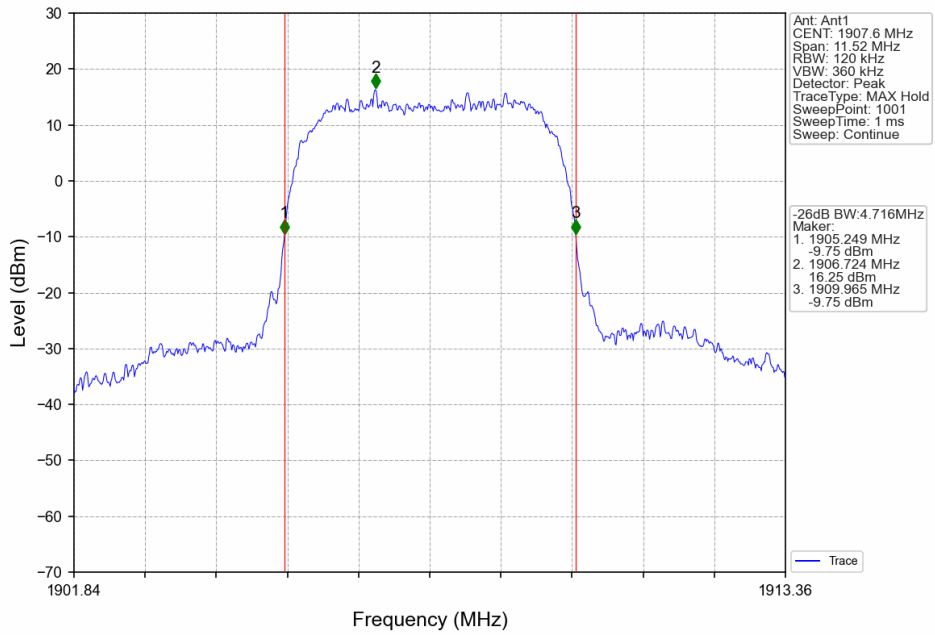
### 4.2.1 Test Result

Band: 2						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	4.725	/	Pass
			1880	4.740	/	Pass
			1907.6	4.716	/	Pass
	HSDPA	Subtest 1	1852.4	6.300	/	Pass
			1880	4.728	/	Pass
			1907.6	5.503	/	Pass
	HSUPA	Subtest 1	1852.4	6.121	/	Pass
			1880	4.751	/	Pass
			1907.6	5.343	/	Pass

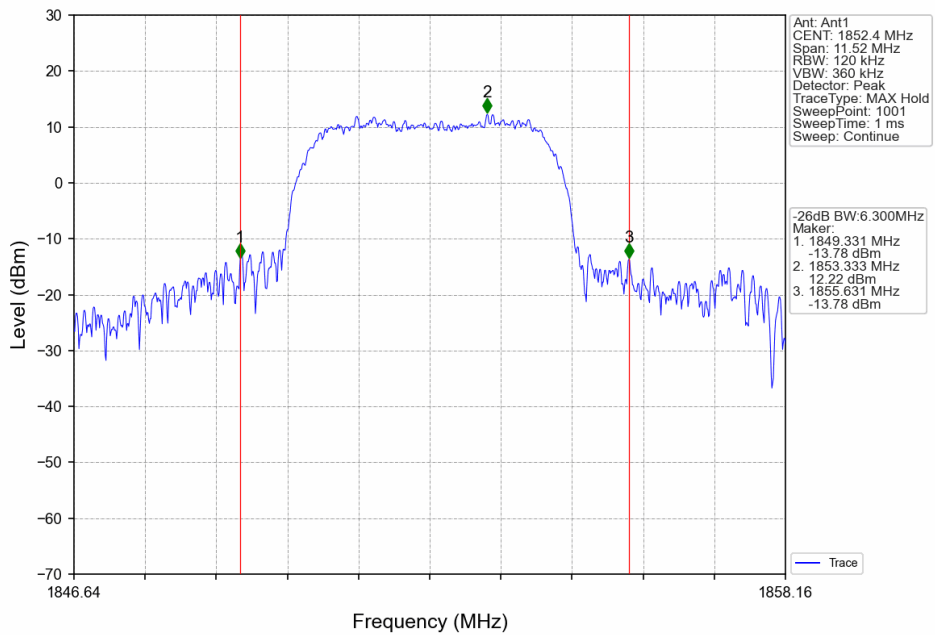
## 4.2.2 Test Graph



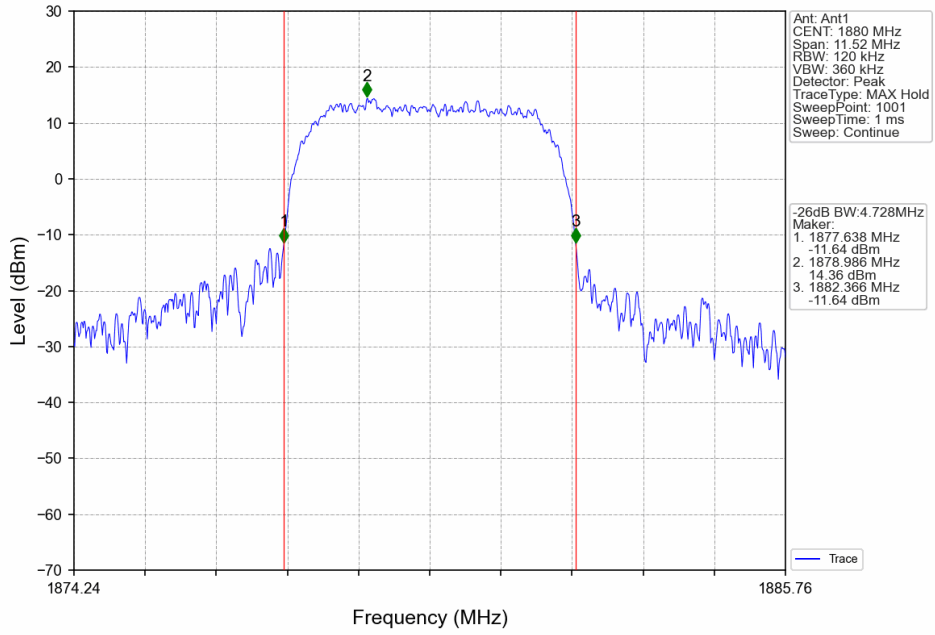
Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



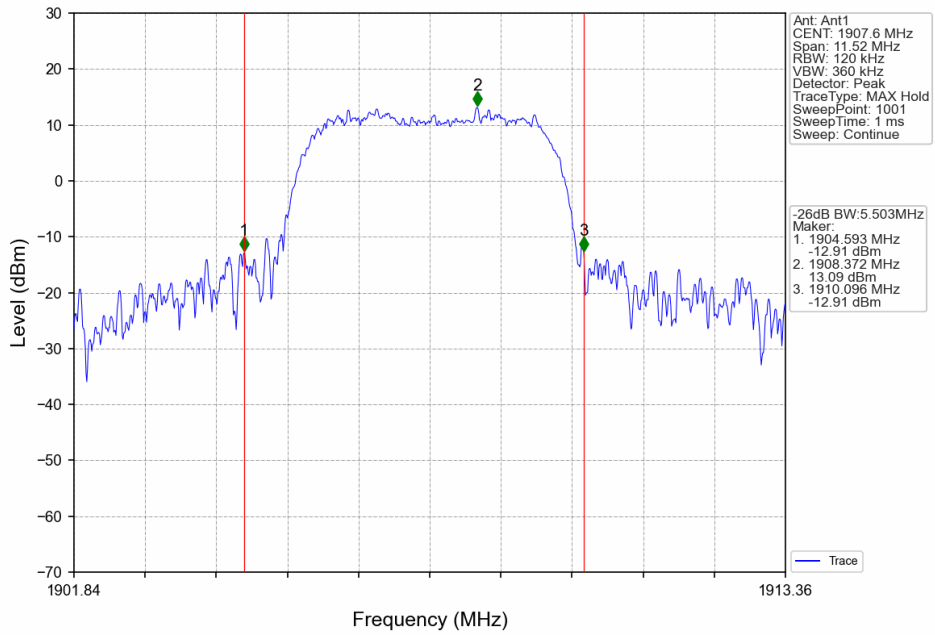
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



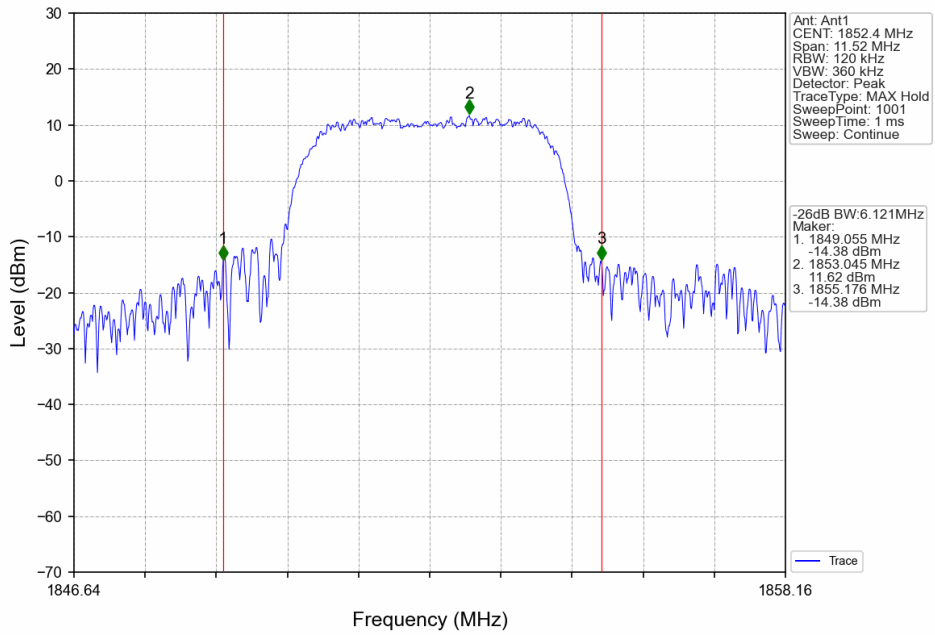
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



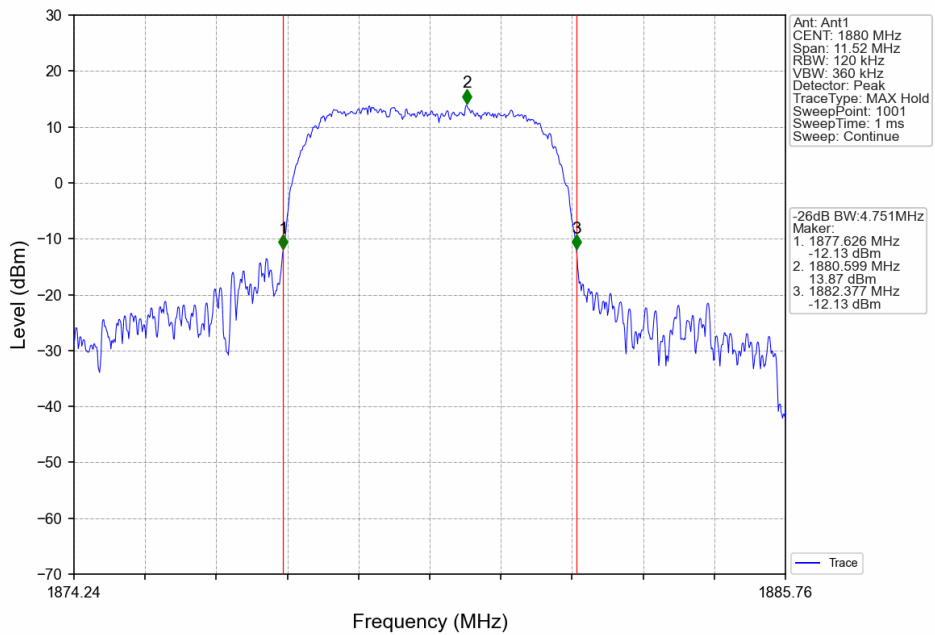
Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV

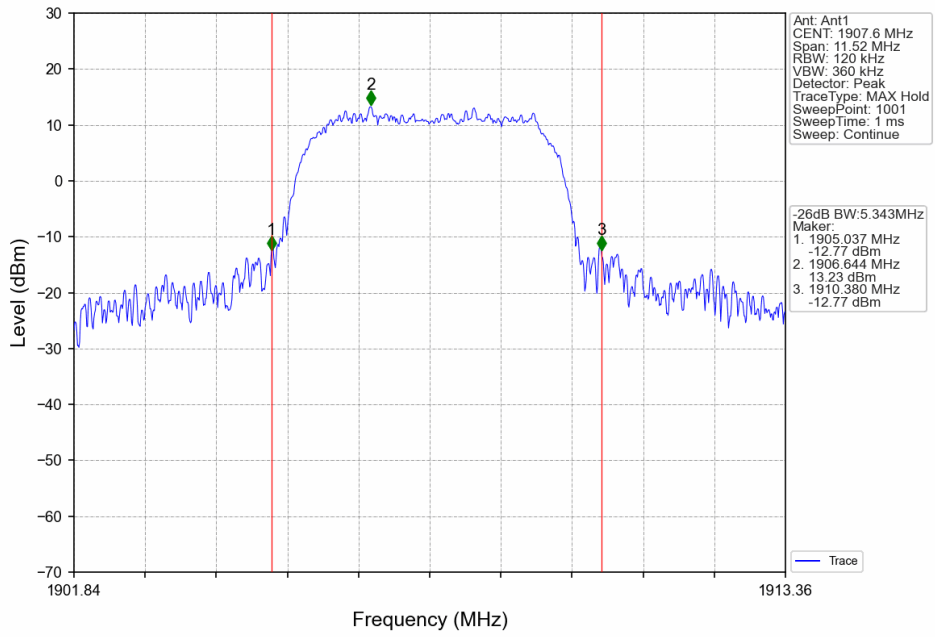


Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV





Band2\_HSUPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



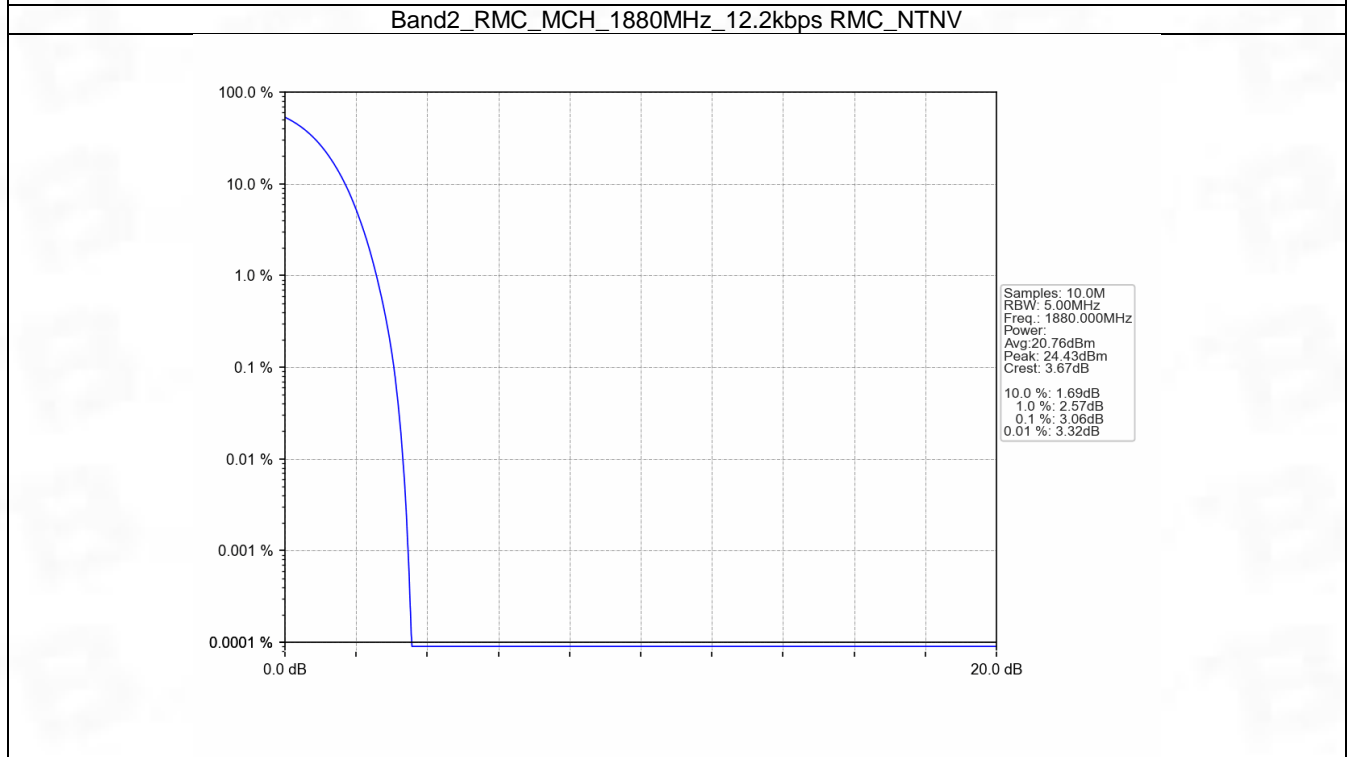
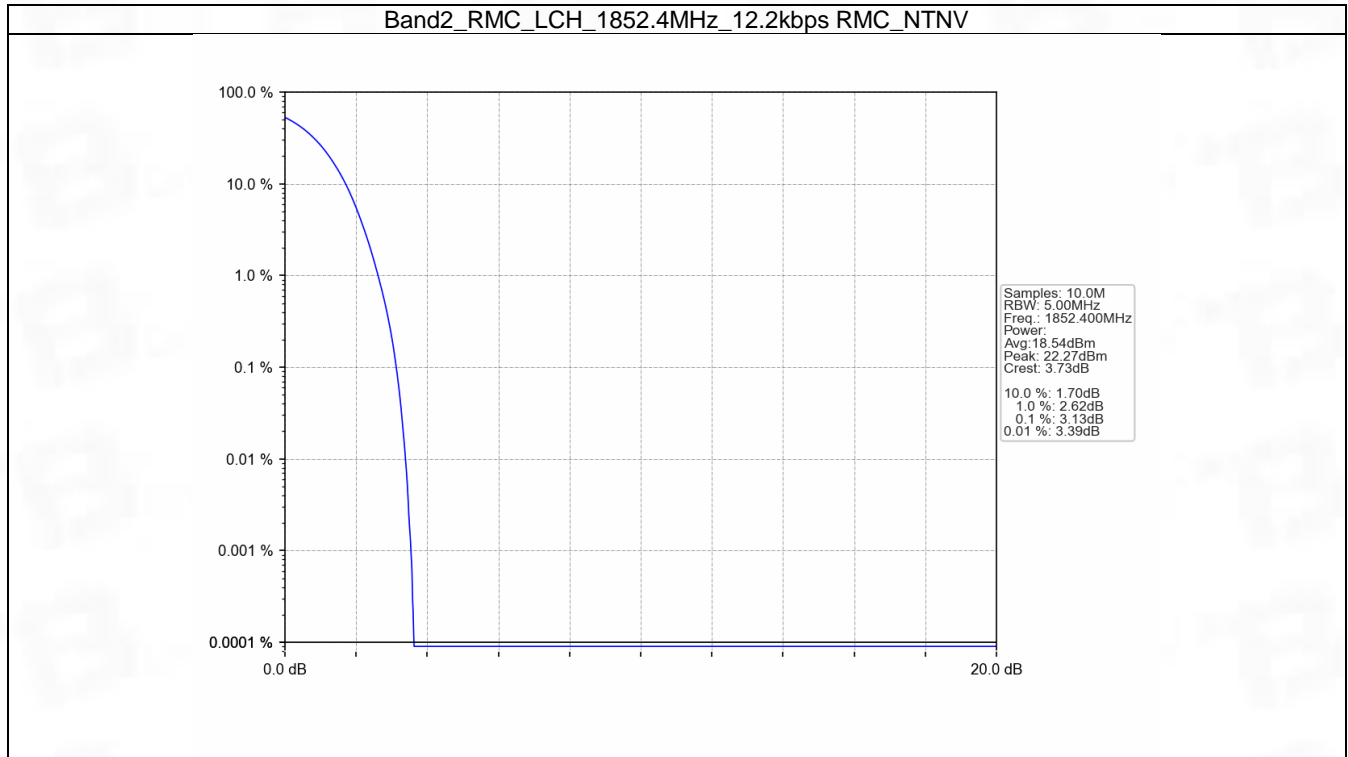
## 5. Peak-Average Ratio

### 5.1 Band2

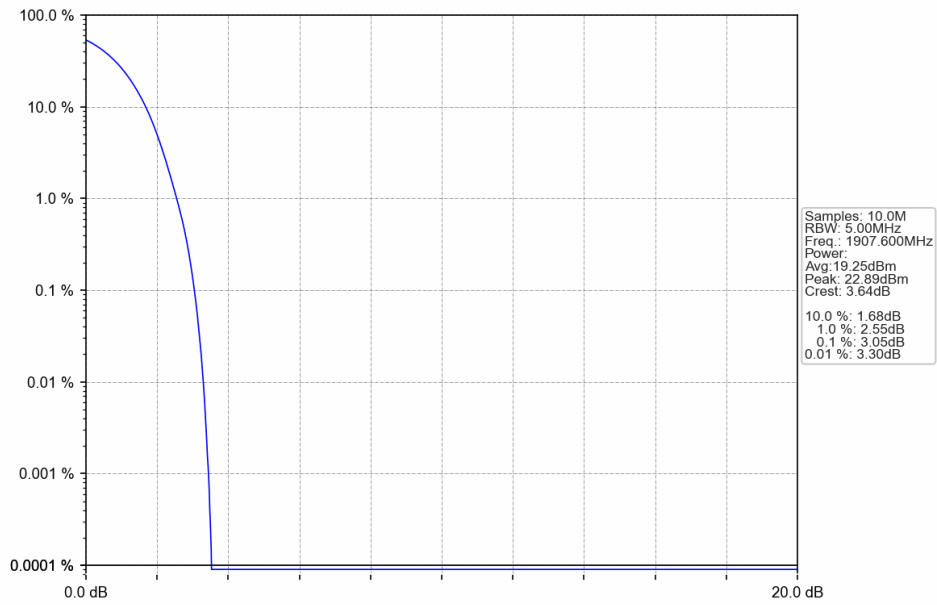
#### 5.1.1 Test Result

Band: 2						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	3.13	<=13	Pass
			1880	3.06	<=13	Pass
			1907.6	3.05	<=13	Pass
	HSDPA	Subtest 1	1852.4	5.93	<=13	Pass
			1880	5.78	<=13	Pass
			1907.6	5.71	<=13	Pass
	HSUPA	Subtest 1	1852.4	5.94	<=13	Pass
			1880	5.76	<=13	Pass
			1907.6	5.78	<=13	Pass

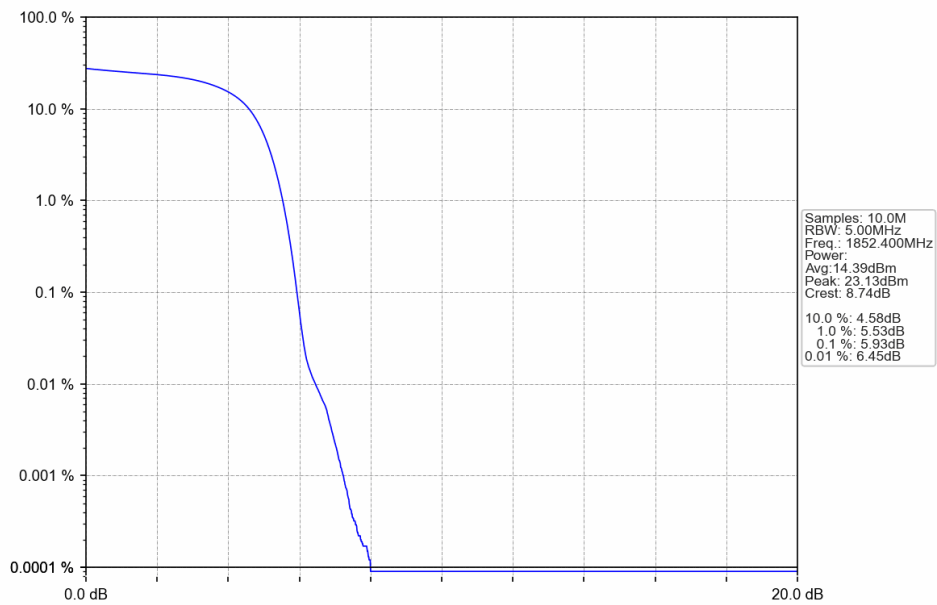
## 5.1.2 Test Graph



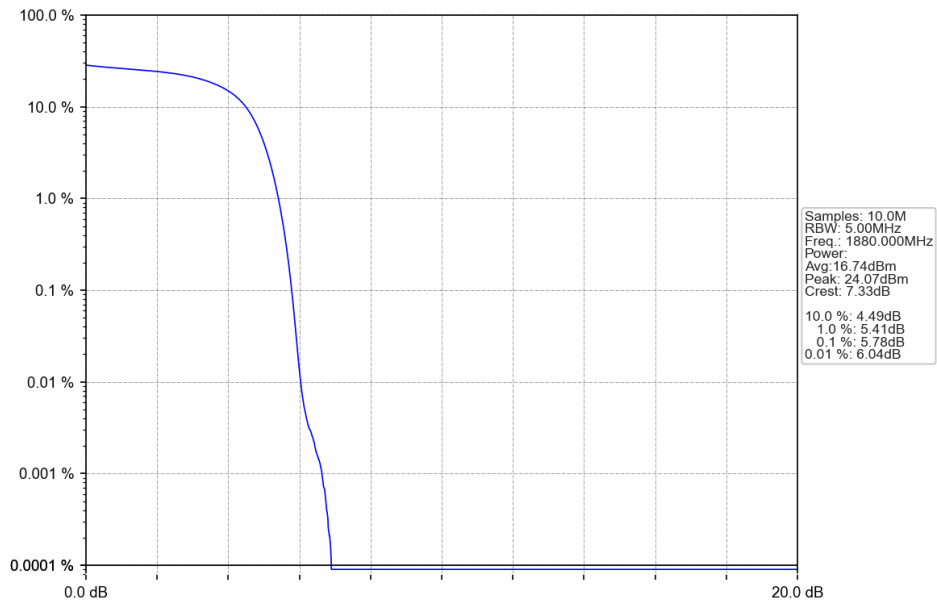
Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



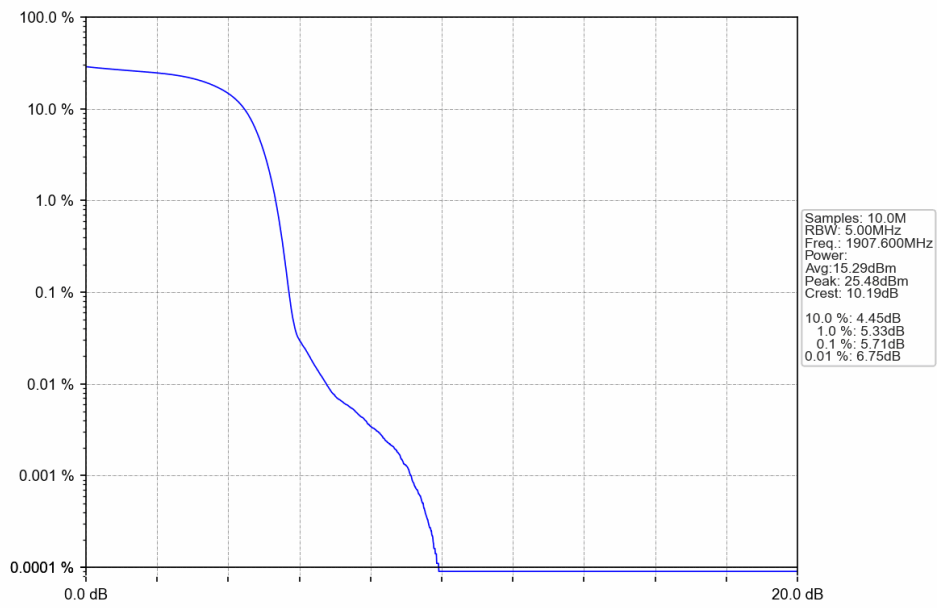
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



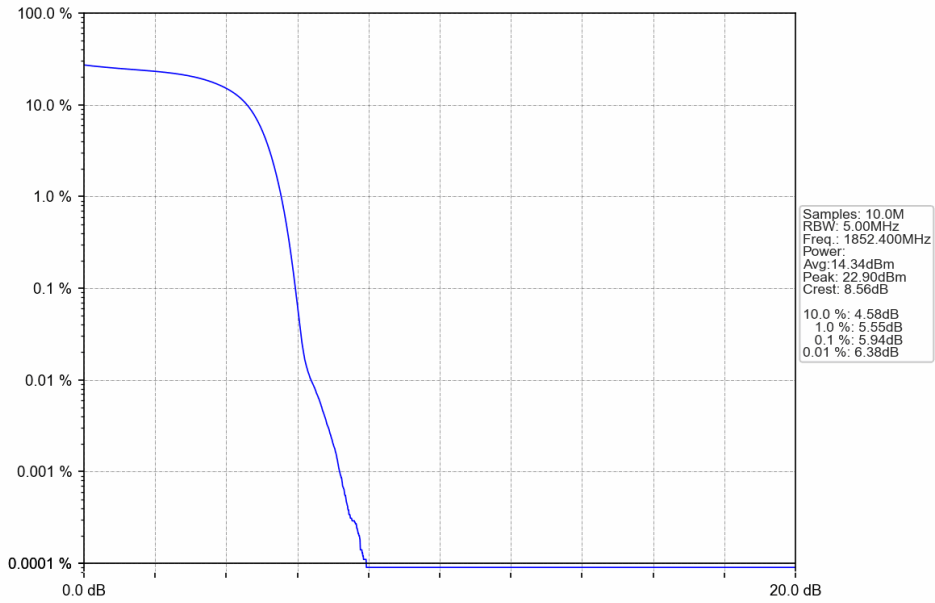
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



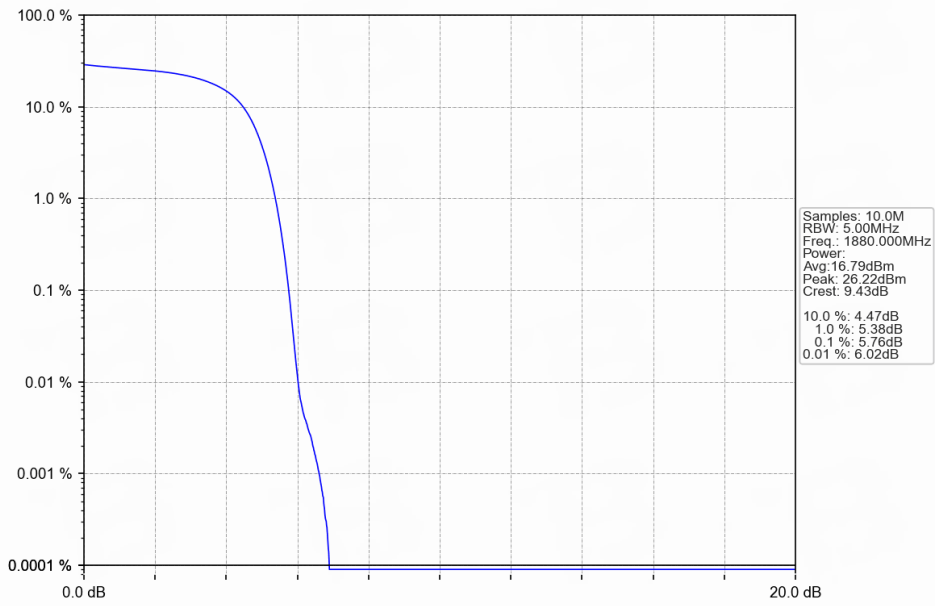
Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



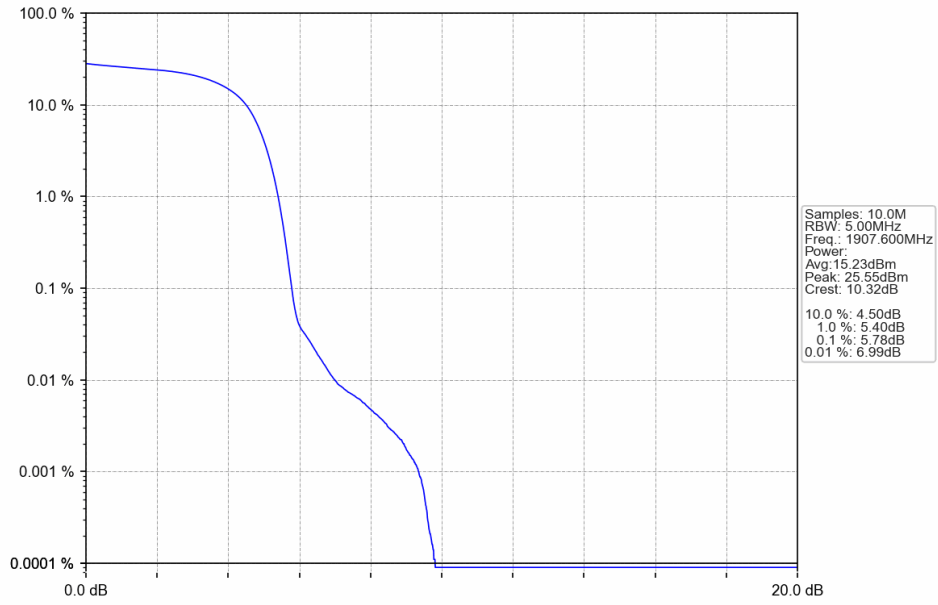
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



Band2\_HSUPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



## 6. Spurious Emission

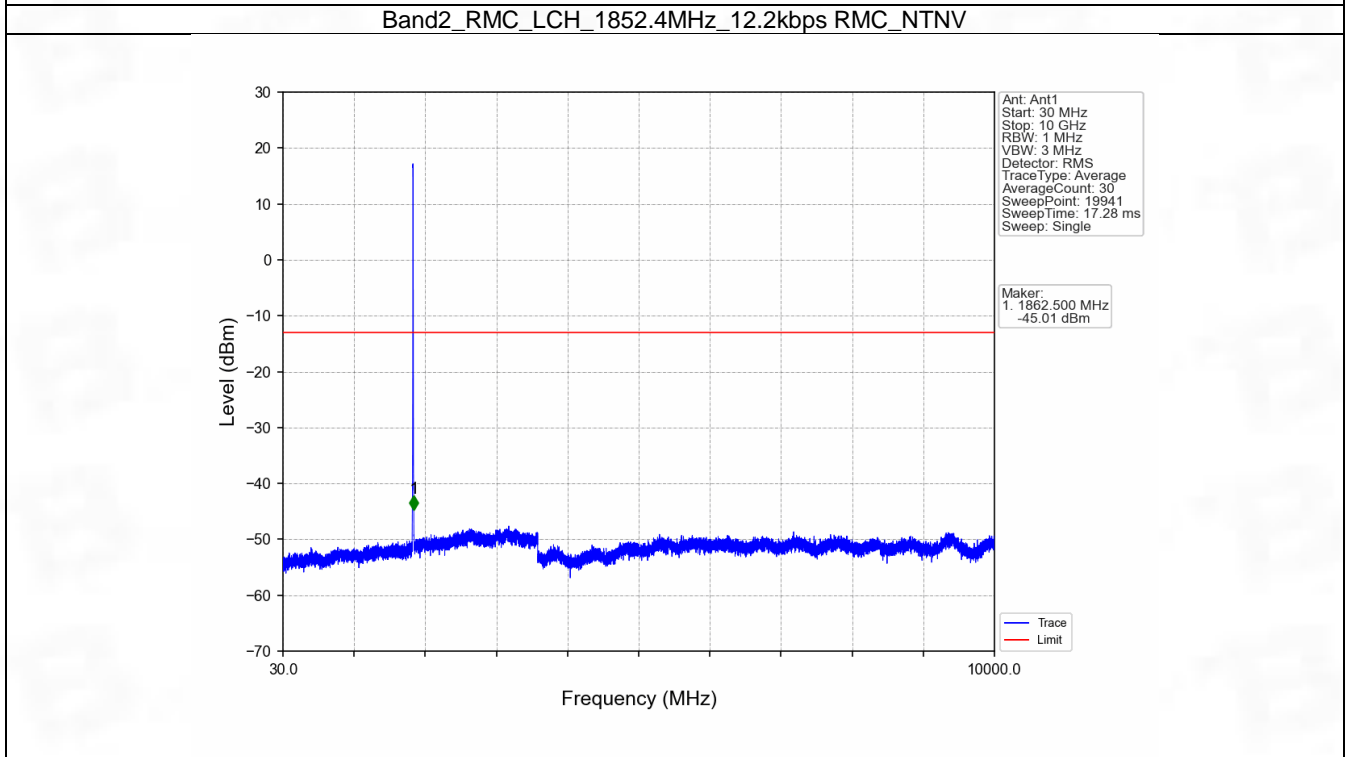
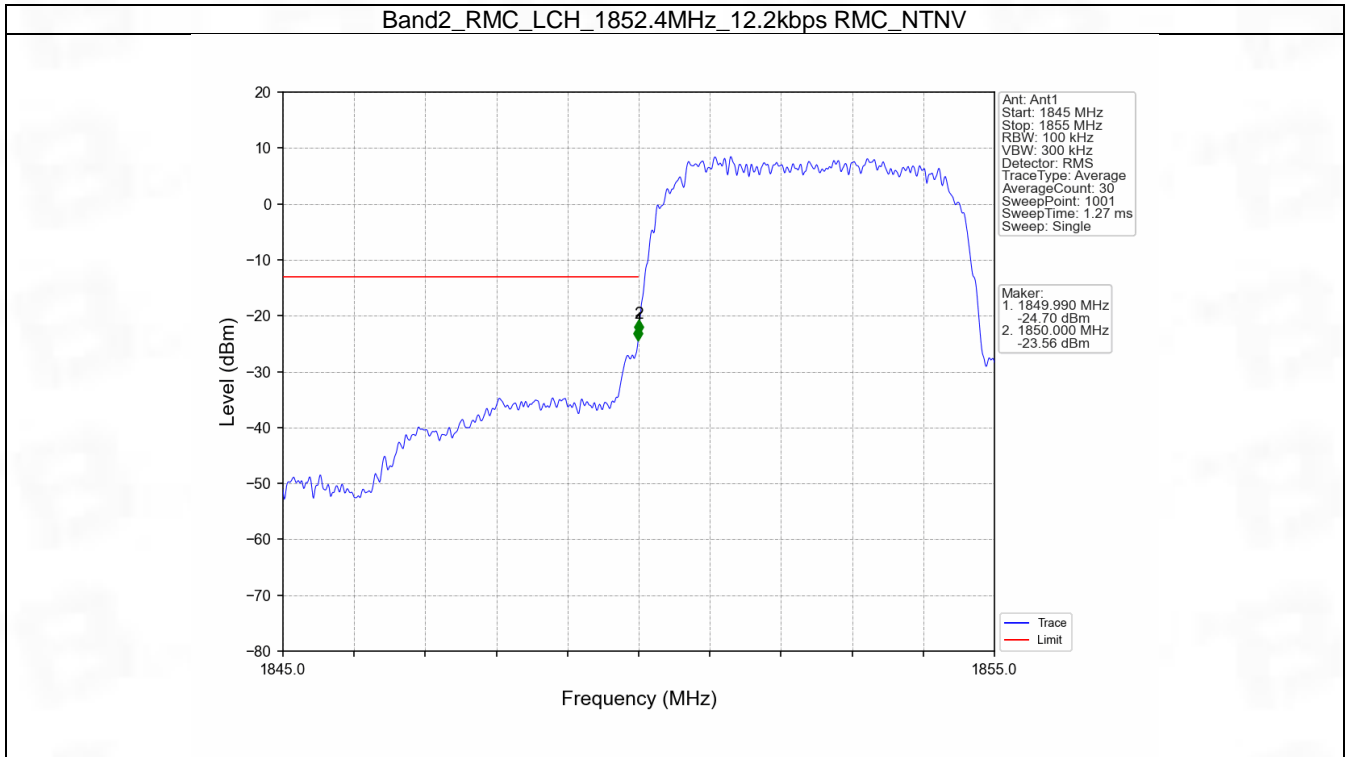
### 6.1 Band2

#### 6.1.1 Test Result

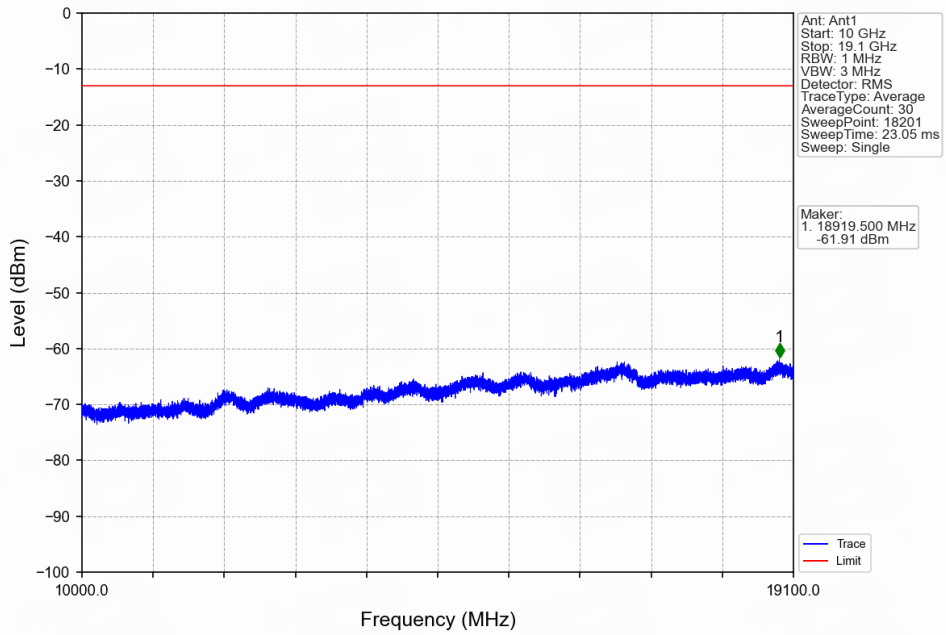
Band: 2						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1907.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	1852.4	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1907.6	Refer To Test Graph		Pass
	HSUPA	Subtest 1	1852.4	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1907.6	Refer To Test Graph		Pass



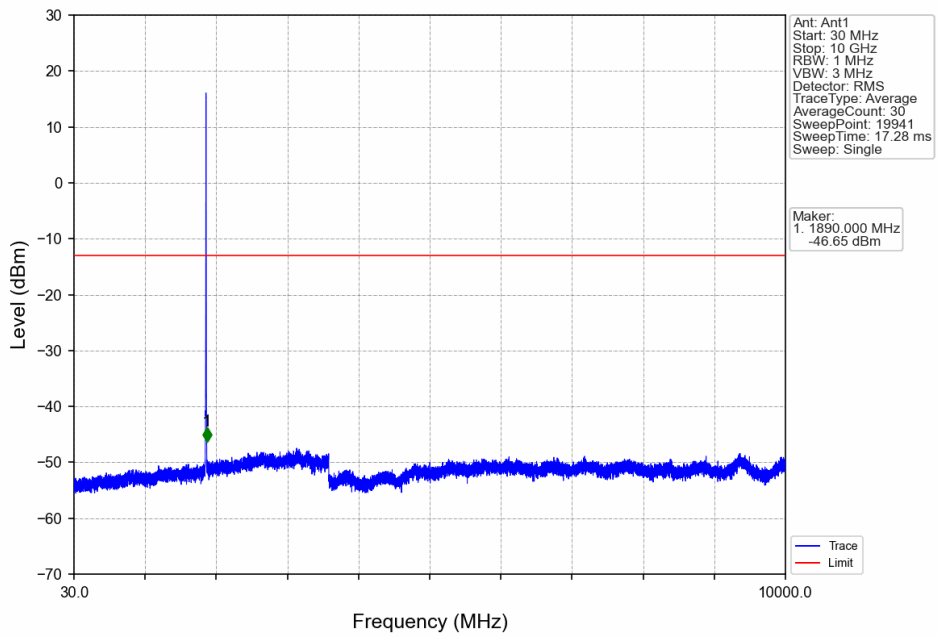
### 6.1.2 Test Graph



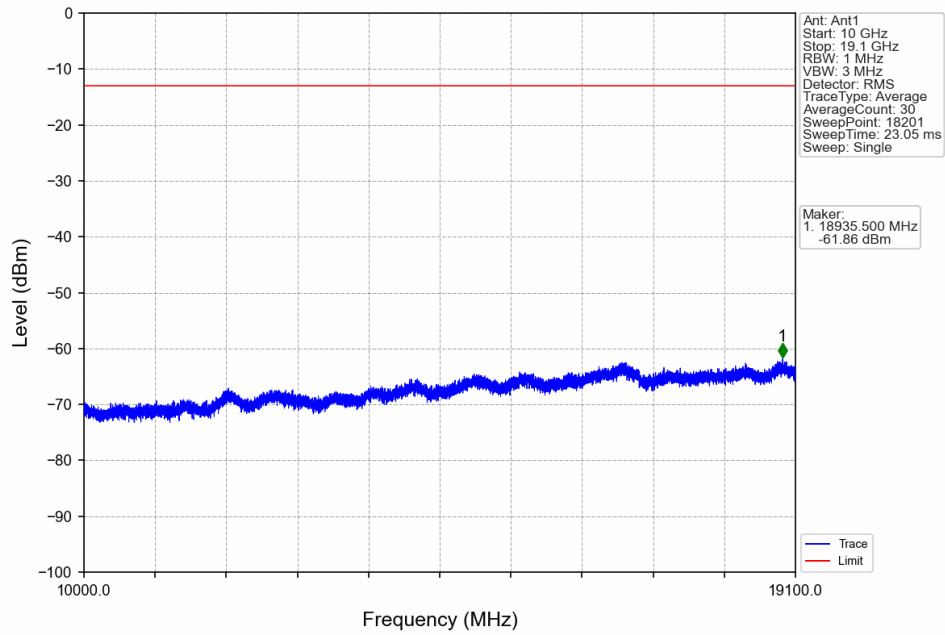
Band2\_RMC\_LCH\_1852.4MHz\_12.2kbps RMC\_NTNV



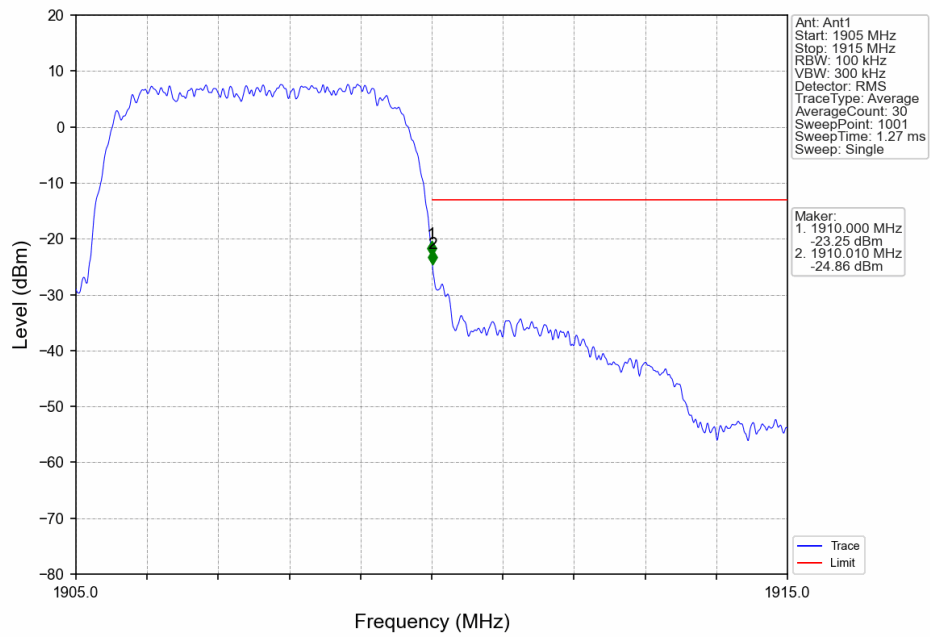
Band2\_RMC\_MCH\_1880MHz\_12.2kbps RMC\_NTNV



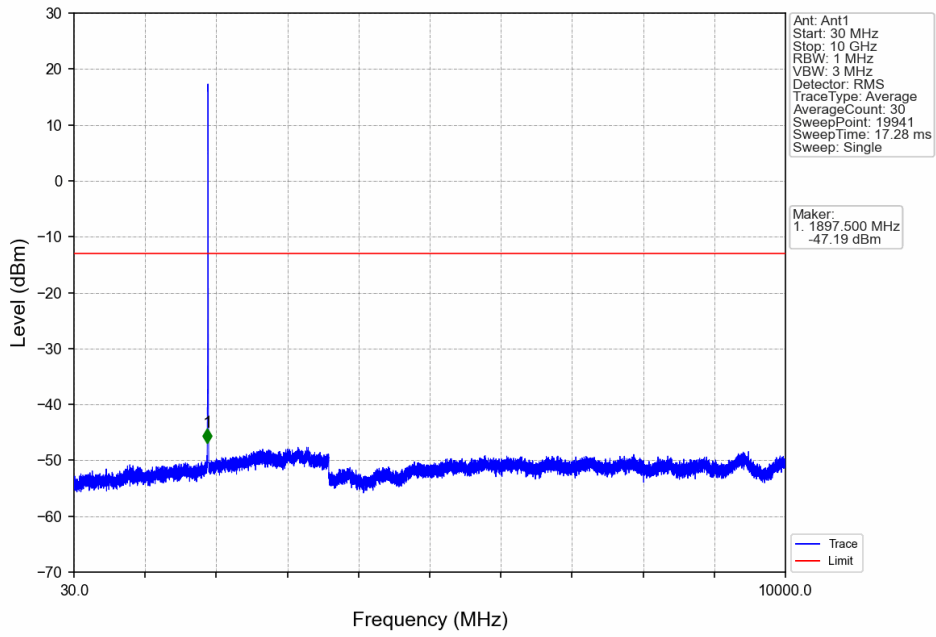
Band2\_RMC\_MCH\_1880MHz\_12.2kbps RMC\_NTNV



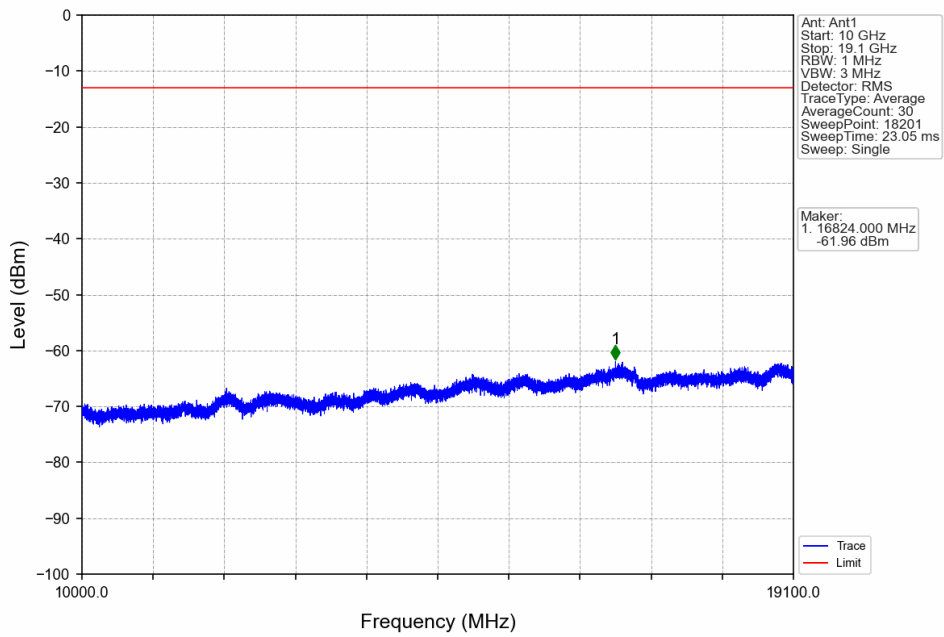
Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



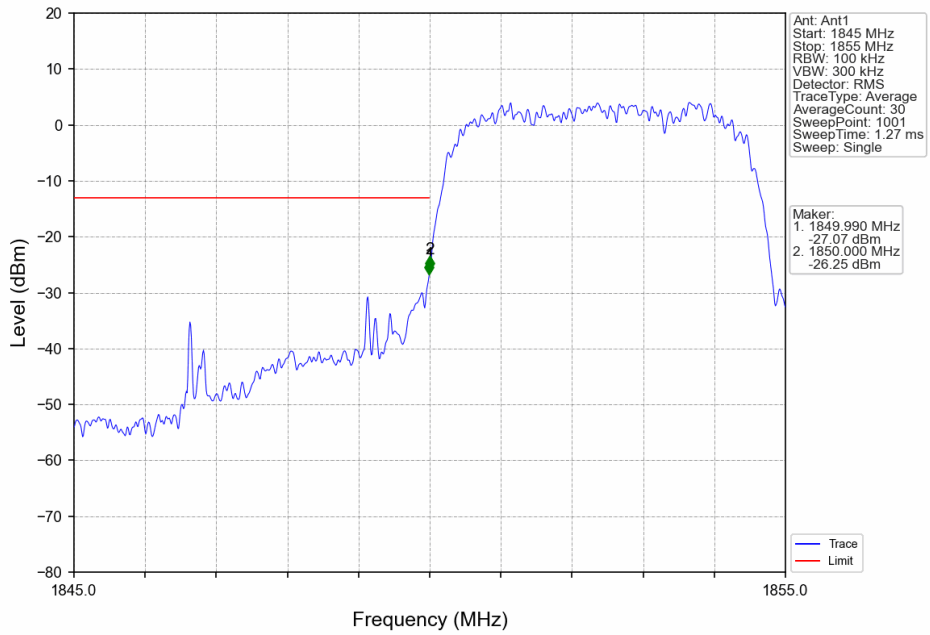
Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



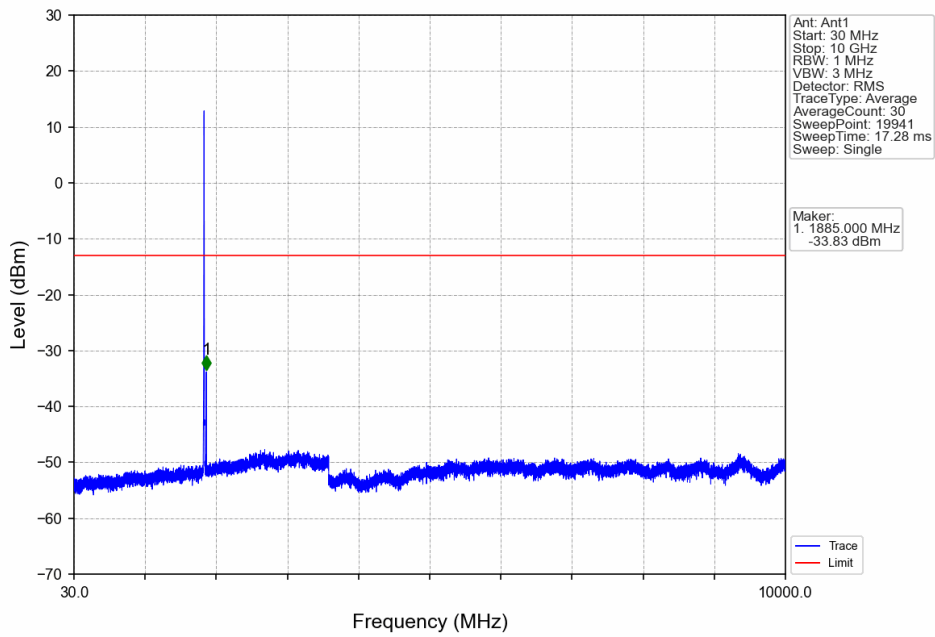
Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



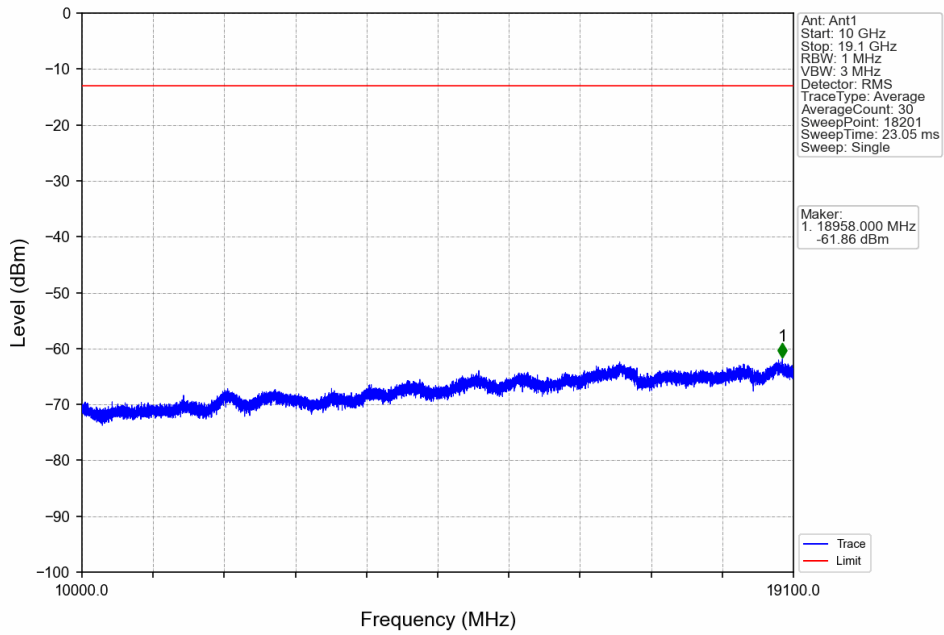
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



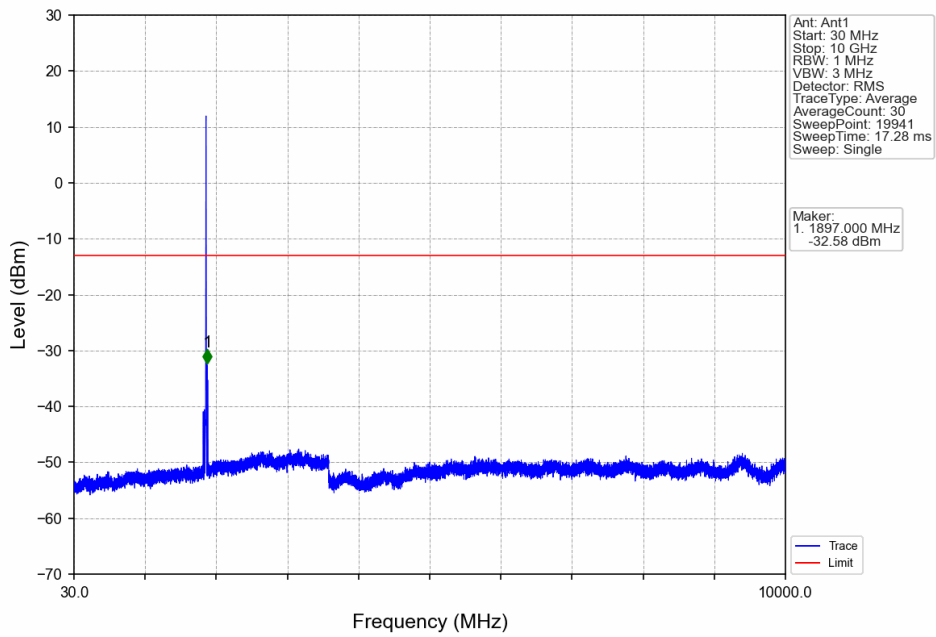
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



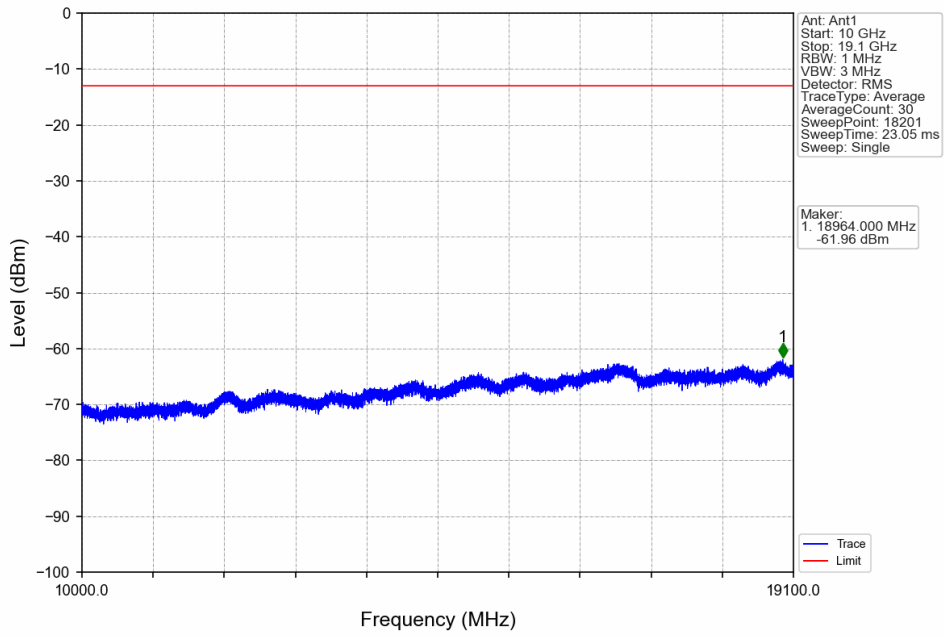
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



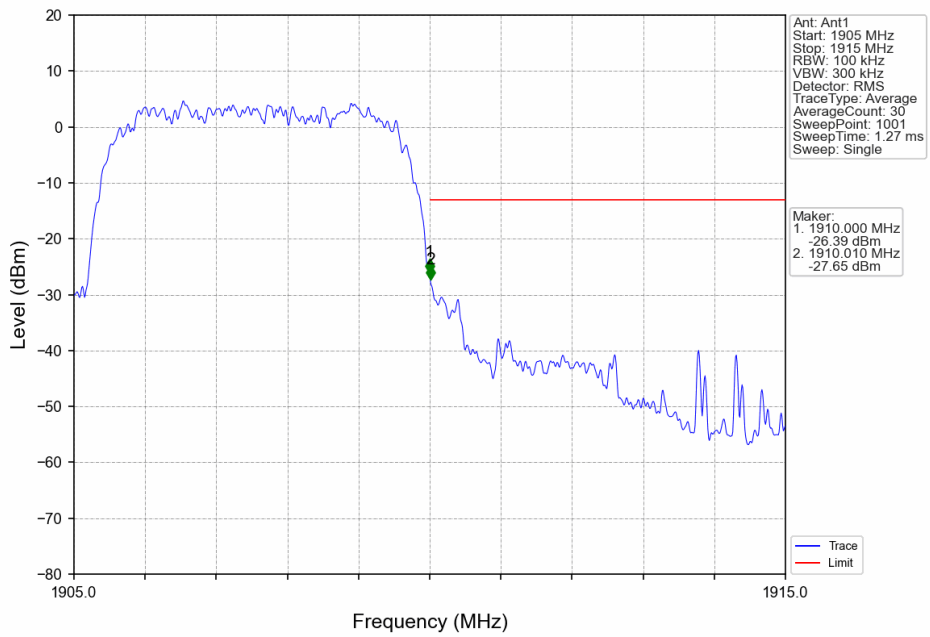
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



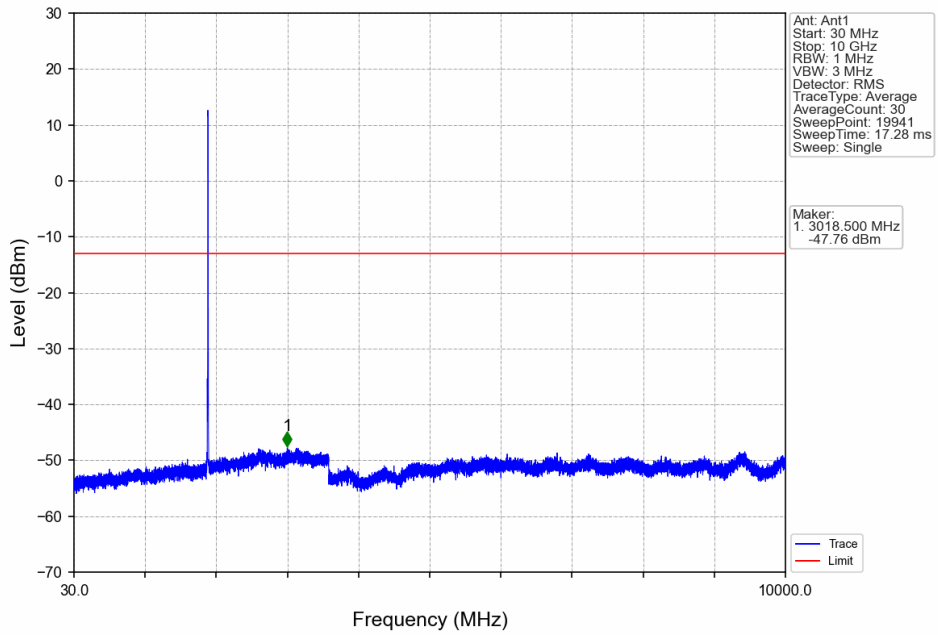
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



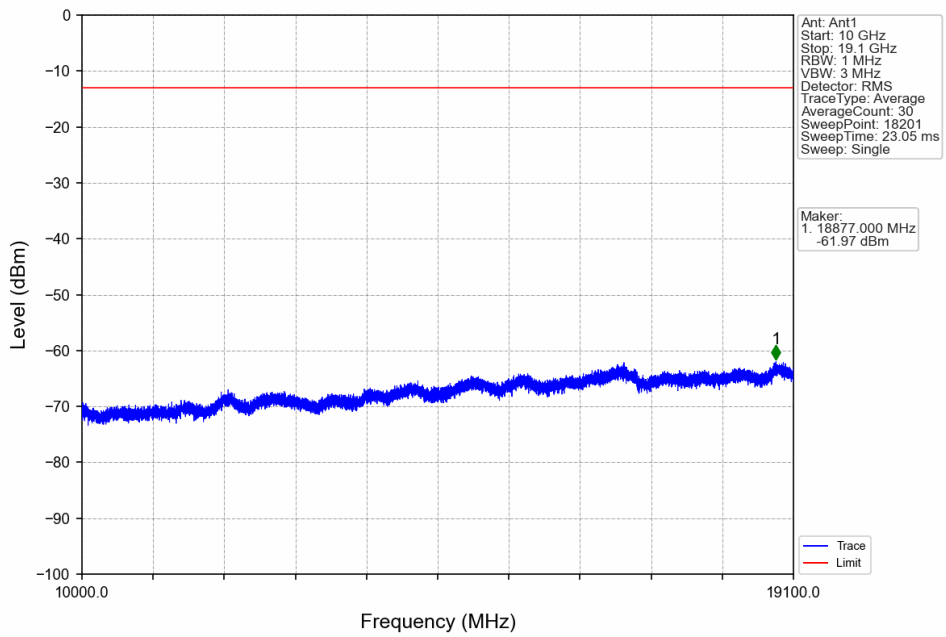
Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV

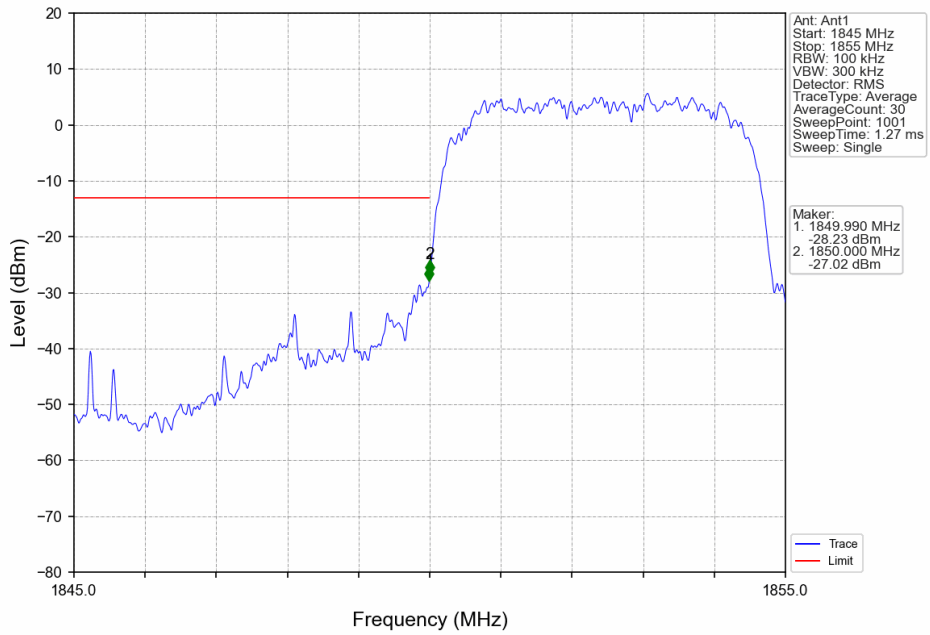


Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV

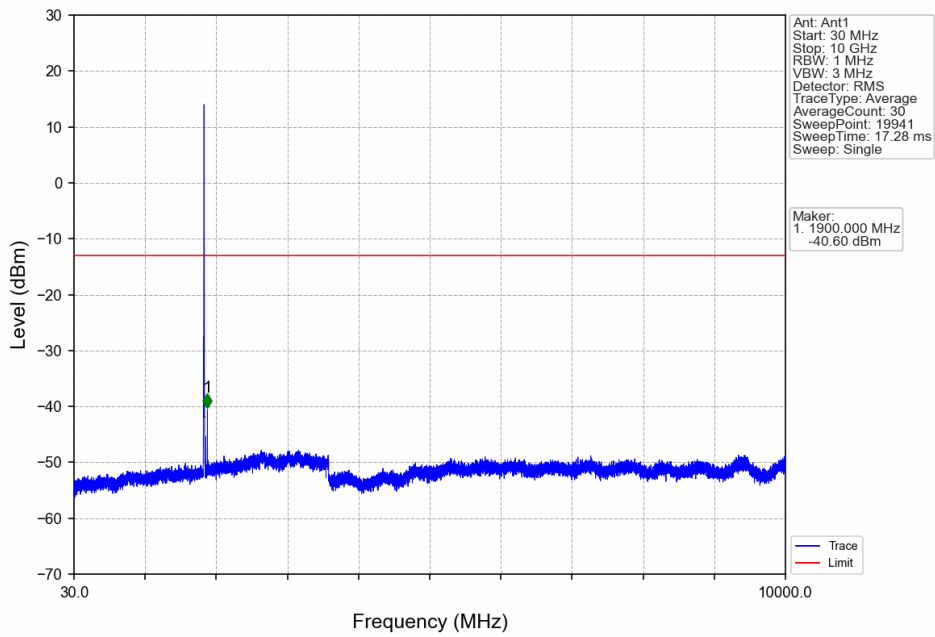




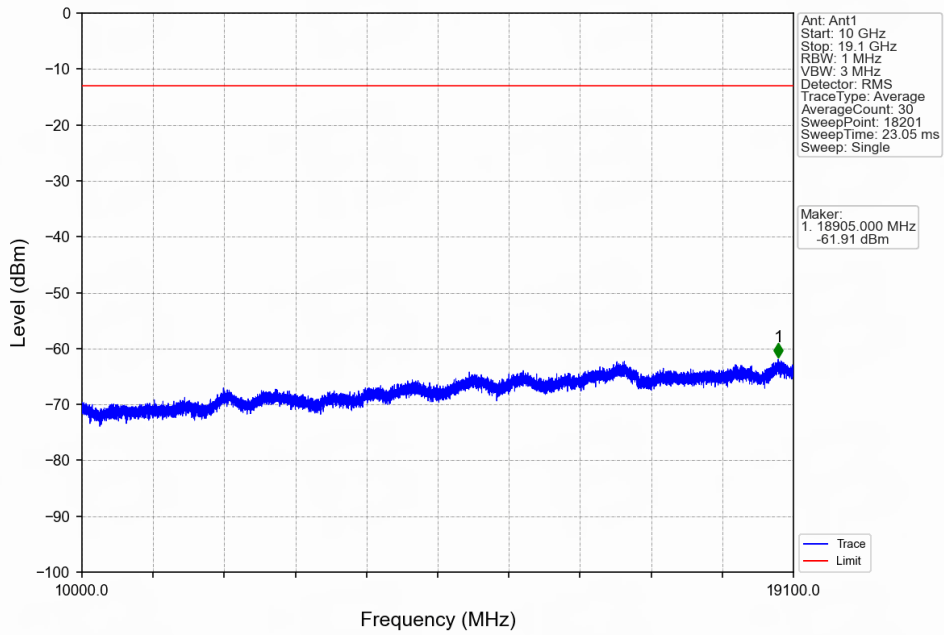
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



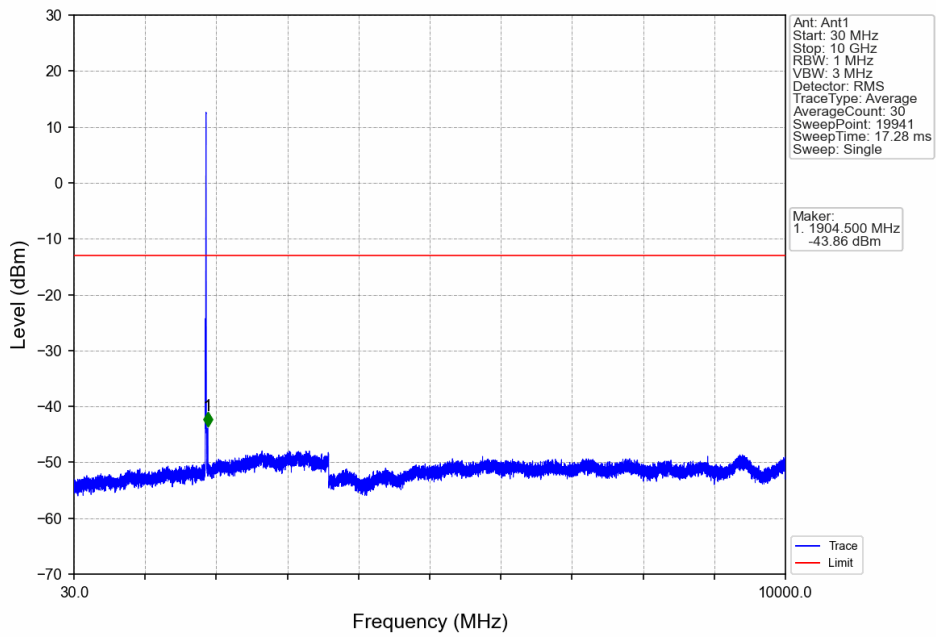
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



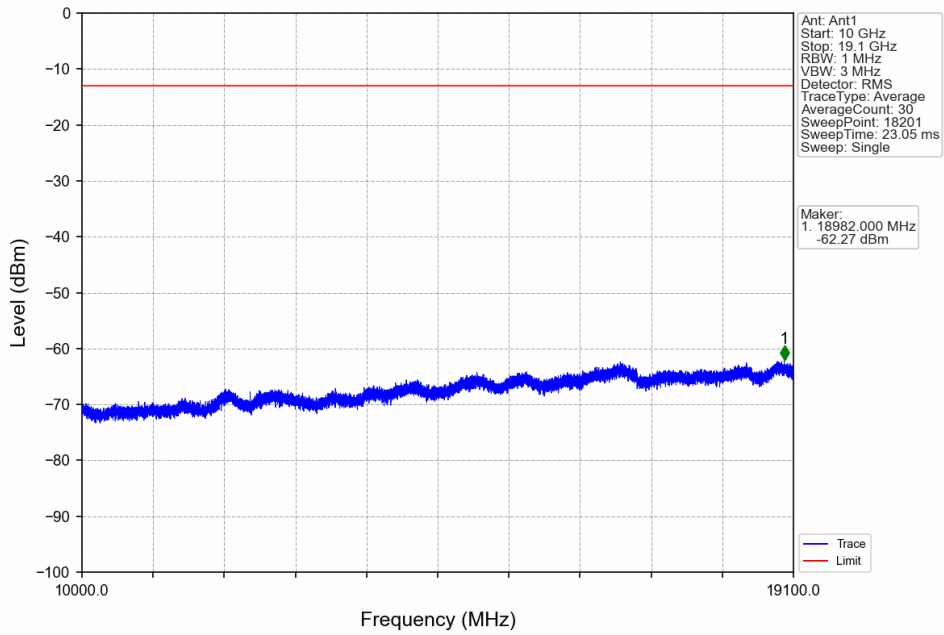
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



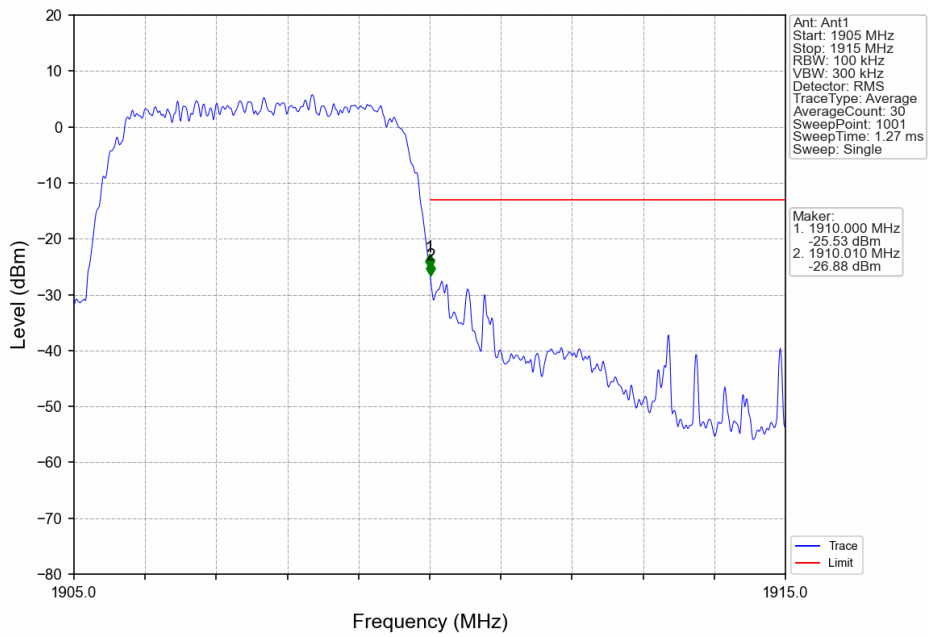
Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



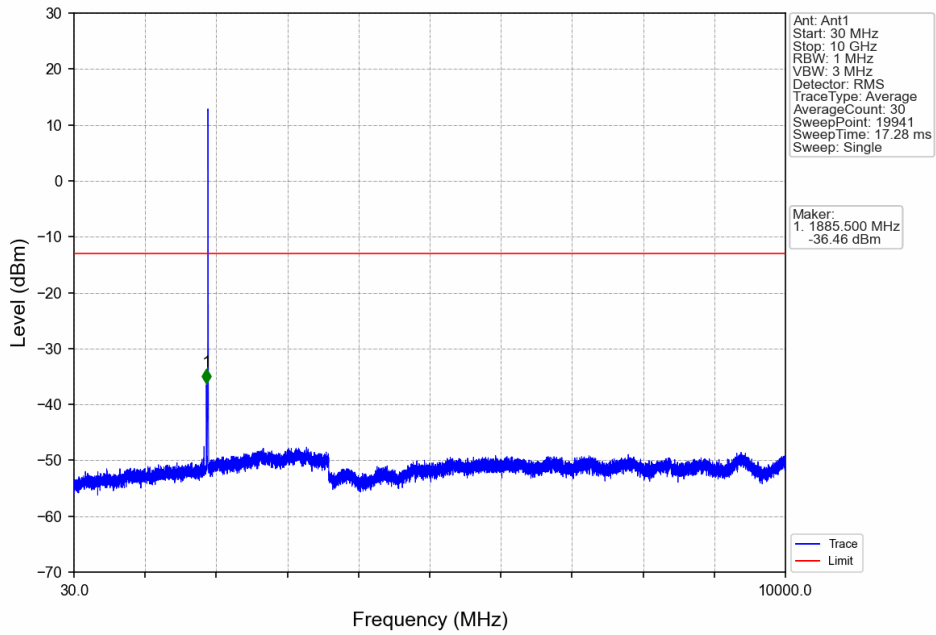
Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



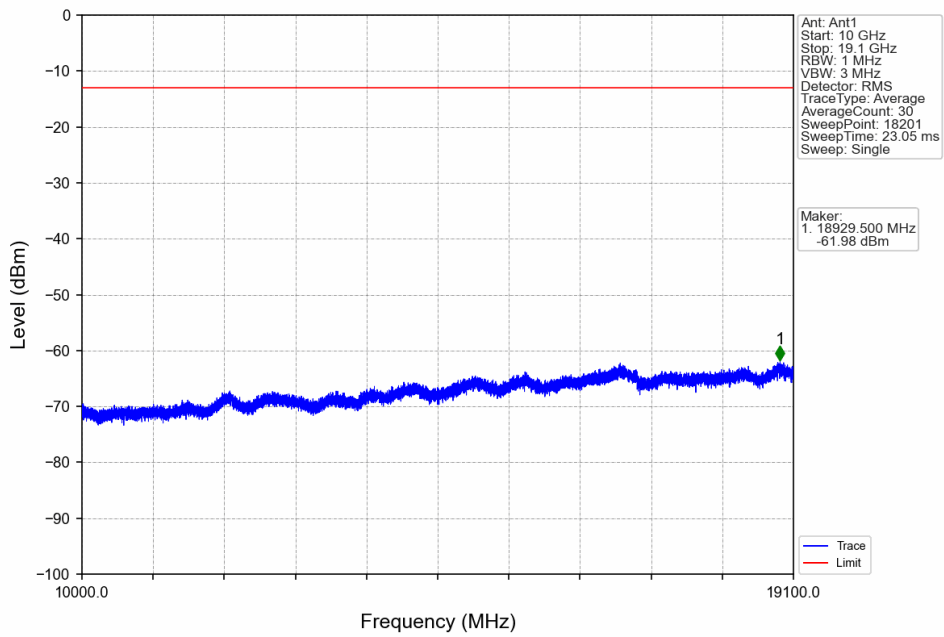
Band2\_HSUPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



Band2\_HSUPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



Band2\_HSUPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



## 7. Form731

### 7.1 Form731\_Power

#### 7.1.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
2	3.84	1852.4	1907.6	0.1445	0.0114	ppm	4M24F9W	24E	21.60

### 7.2 Form731\_EIRP

#### 7.2.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
2	3.84	1852.4	1907.6	0.0938	0.0114	ppm	4M24F9W	24E	19.72