

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

### 1.1.1 Band2\_EIRP

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	20.13	2.60	22.73	<=33.01	Pass	
			1880	20.28	2.60	22.88	<=33.01	Pass	
			1907.6	20.57	2.60	23.17	<=33.01	Pass	
	HSDPA	Subtest 1	1852.4	20.23	2.60	22.83	<=33.01	Pass	
		Subtest 2	1852.4	20.24	2.60	22.84	<=33.01	Pass	
		Subtest 3	1852.4	20.24	2.60	22.84	<=33.01	Pass	
		Subtest 4	1852.4	20.18	2.60	22.78	<=33.01	Pass	
		Subtest 1	1880	20.30	2.60	22.90	<=33.01	Pass	
		Subtest 2	1880	20.22	2.60	22.82	<=33.01	Pass	
		Subtest 3	1880	20.23	2.60	22.83	<=33.01	Pass	
		Subtest 4	1880	20.26	2.60	22.86	<=33.01	Pass	
		Subtest 1	1907.6	20.35	2.60	22.95	<=33.01	Pass	
		Subtest 2	1907.6	20.27	2.60	22.87	<=33.01	Pass	
		Subtest 3	1907.6	20.27	2.60	22.87	<=33.01	Pass	
		Subtest 4	1907.6	20.26	2.60	22.86	<=33.01	Pass	
		HSUPA	Subtest 1	1852.4	18.31	2.60	20.91	<=33.01	Pass
			Subtest 2	1852.4	18.04	2.60	20.64	<=33.01	Pass
	Subtest 3		1852.4	18.26	2.60	20.86	<=33.01	Pass	
	Subtest 4		1852.4	18.00	2.60	20.60	<=33.01	Pass	
	Subtest 5		1852.4	17.71	2.60	20.31	<=33.01	Pass	
	Subtest 1		1880	18.36	2.60	20.96	<=33.01	Pass	
	Subtest 2		1880	18.16	2.60	20.76	<=33.01	Pass	
	Subtest 3		1880	17.81	2.60	20.41	<=33.01	Pass	
	Subtest 4		1880	18.07	2.60	20.67	<=33.01	Pass	
	Subtest 5		1880	18.06	2.60	20.66	<=33.01	Pass	
	Subtest 1		1907.6	18.18	2.60	20.78	<=33.01	Pass	
	Subtest 2		1907.6	18.16	2.60	20.76	<=33.01	Pass	
	Subtest 3		1907.6	17.96	2.60	20.56	<=33.01	Pass	
	Subtest 4	1907.6	17.94	2.60	20.54	<=33.01	Pass		
	Subtest 5	1907.6	17.65	2.60	20.25	<=33.01	Pass		

Note1: EIRP=Conducted Power+Antenna Gain

## 2. Frequency Stability

### 2.1 Test Result

#### 2.1.1 Band2

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	3.841	0.0021	-2.5 to 2.5	Pass
			3.85	-2.103	-0.0011	-2.5 to 2.5	Pass
			4.43	-3.805	-0.0021	-2.5 to 2.5	Pass
		-30	3.85	-6.130	-0.0033	-2.5 to 2.5	Pass
		-20	3.85	1.495	0.0008	-2.5 to 2.5	Pass

		-10	3.85	-0.093	-0.0001	-2.5 to 2.5	Pass
		0	3.85	5.236	0.0028	-2.5 to 2.5	Pass
		10	3.85	0.093	0.0001	-2.5 to 2.5	Pass
		30	3.85	4.327	0.0023	-2.5 to 2.5	Pass
		40	3.85	-2.604	-0.0014	-2.5 to 2.5	Pass
	50	3.85	2.897	0.0016	-2.5 to 2.5	Pass	
	1880	20	3.27	-1.559	-0.0008	-2.5 to 2.5	Pass
			3.85	1.016	0.0005	-2.5 to 2.5	Pass
			4.43	1.416	0.0008	-2.5 to 2.5	Pass
		-30	3.85	-4.320	-0.0023	-2.5 to 2.5	Pass
		-20	3.85	-4.814	-0.0026	-2.5 to 2.5	Pass
		-10	3.85	-2.525	-0.0013	-2.5 to 2.5	Pass
		0	3.85	-0.322	-0.0002	-2.5 to 2.5	Pass
		10	3.85	5.043	0.0027	-2.5 to 2.5	Pass
		30	3.85	-7.532	-0.0040	-2.5 to 2.5	Pass
		40	3.85	6.788	0.0036	-2.5 to 2.5	Pass
		50	3.85	-2.818	-0.0015	-2.5 to 2.5	Pass
		1907.6	20	3.27	-2.382	-0.0012	-2.5 to 2.5
	3.85			-0.036	0.0000	-2.5 to 2.5	Pass
	4.43			-4.370	-0.0023	-2.5 to 2.5	Pass
	-30		3.85	-1.824	-0.0010	-2.5 to 2.5	Pass
	-20		3.85	-1.745	-0.0009	-2.5 to 2.5	Pass
	-10		3.85	-9.885	-0.0052	-2.5 to 2.5	Pass
	0		3.85	4.213	0.0022	-2.5 to 2.5	Pass
	10		3.85	6.530	0.0034	-2.5 to 2.5	Pass
	30		3.85	0.508	0.0003	-2.5 to 2.5	Pass
	40		3.85	0.050	0.0000	-2.5 to 2.5	Pass
50	3.85		1.788	0.0009	-2.5 to 2.5	Pass	
HSDPA	1852.4		20	3.27	5.636	0.0030	-2.5 to 2.5
		3.85		9.735	0.0053	-2.5 to 2.5	Pass
		4.43		16.708	0.0090	-2.5 to 2.5	Pass
		-30	3.85	6.123	0.0033	-2.5 to 2.5	Pass
		-20	3.85	3.119	0.0017	-2.5 to 2.5	Pass
		-10	3.85	4.663	0.0025	-2.5 to 2.5	Pass
		0	3.85	2.861	0.0015	-2.5 to 2.5	Pass
		10	3.85	4.113	0.0022	-2.5 to 2.5	Pass
		30	3.85	4.570	0.0025	-2.5 to 2.5	Pass
		40	3.85	13.940	0.0075	-2.5 to 2.5	Pass
		50	3.85	12.882	0.0070	-2.5 to 2.5	Pass
		1880	20	3.27	12.252	0.0065	-2.5 to 2.5
	3.85			4.950	0.0026	-2.5 to 2.5	Pass
	4.43			2.482	0.0013	-2.5 to 2.5	Pass
	-30		3.85	1.881	0.0010	-2.5 to 2.5	Pass
	-20		3.85	2.618	0.0014	-2.5 to 2.5	Pass
	-10		3.85	4.263	0.0023	-2.5 to 2.5	Pass
	0		3.85	5.829	0.0031	-2.5 to 2.5	Pass
	10		3.85	3.963	0.0021	-2.5 to 2.5	Pass
	30		3.85	2.639	0.0014	-2.5 to 2.5	Pass
	40		3.85	3.726	0.0020	-2.5 to 2.5	Pass
	50		3.85	9.785	0.0052	-2.5 to 2.5	Pass
	1907.6		20	3.27	-3.340	-0.0018	-2.5 to 2.5
		3.85		4.084	0.0021	-2.5 to 2.5	Pass
		4.43		-0.844	-0.0004	-2.5 to 2.5	Pass
		-30	3.85	-2.890	-0.0015	-2.5 to 2.5	Pass
		-20	3.85	-2.968	-0.0016	-2.5 to 2.5	Pass
-10		3.85	12.374	0.0065	-2.5 to 2.5	Pass	
0		3.85	11.601	0.0061	-2.5 to 2.5	Pass	
10		3.85	11.573	0.0061	-2.5 to 2.5	Pass	
30		3.85	6.595	0.0035	-2.5 to 2.5	Pass	

		40	3.85	2.067	0.0011	-2.5 to 2.5	Pass
		50	3.85	1.545	0.0008	-2.5 to 2.5	Pass
HSUPA	1852.4	20	3.27	-4.013	-0.0022	-2.5 to 2.5	Pass
			3.85	-8.097	-0.0044	-2.5 to 2.5	Pass
			4.43	-10.929	-0.0059	-2.5 to 2.5	Pass
		-30	3.85	-11.766	-0.0064	-2.5 to 2.5	Pass
		-20	3.85	-9.227	-0.0050	-2.5 to 2.5	Pass
		-10	3.85	-9.062	-0.0049	-2.5 to 2.5	Pass
		0	3.85	-9.041	-0.0049	-2.5 to 2.5	Pass
		10	3.85	-11.423	-0.0062	-2.5 to 2.5	Pass
		30	3.85	2.332	0.0013	-2.5 to 2.5	Pass
		40	3.85	-0.765	-0.0004	-2.5 to 2.5	Pass
	50	3.85	-0.200	-0.0001	-2.5 to 2.5	Pass	
	1880	20	3.27	-13.576	-0.0072	-2.5 to 2.5	Pass
			3.85	-11.430	-0.0061	-2.5 to 2.5	Pass
			4.43	-12.603	-0.0067	-2.5 to 2.5	Pass
		-30	3.85	-5.479	-0.0029	-2.5 to 2.5	Pass
		-20	3.85	-6.030	-0.0032	-2.5 to 2.5	Pass
		-10	3.85	-1.094	-0.0006	-2.5 to 2.5	Pass
		0	3.85	-3.548	-0.0019	-2.5 to 2.5	Pass
		10	3.85	-14.734	-0.0078	-2.5 to 2.5	Pass
		30	3.85	-17.037	-0.0091	-2.5 to 2.5	Pass
		40	3.85	-19.469	-0.0104	-2.5 to 2.5	Pass
	50	3.85	-15.070	-0.0080	-2.5 to 2.5	Pass	
	1907.6	20	3.27	-8.669	-0.0045	-2.5 to 2.5	Pass
			3.85	-13.390	-0.0070	-2.5 to 2.5	Pass
			4.43	-14.756	-0.0077	-2.5 to 2.5	Pass
		-30	3.85	-2.031	-0.0011	-2.5 to 2.5	Pass
		-20	3.85	-5.972	-0.0031	-2.5 to 2.5	Pass
		-10	3.85	-7.031	-0.0037	-2.5 to 2.5	Pass
		0	3.85	-3.476	-0.0018	-2.5 to 2.5	Pass
		10	3.85	-12.517	-0.0066	-2.5 to 2.5	Pass
30		3.85	-13.711	-0.0072	-2.5 to 2.5	Pass	
40		3.85	-10.600	-0.0056	-2.5 to 2.5	Pass	
50	3.85	-12.395	-0.0065	-2.5 to 2.5	Pass		

### 3. Modulation Characteristics

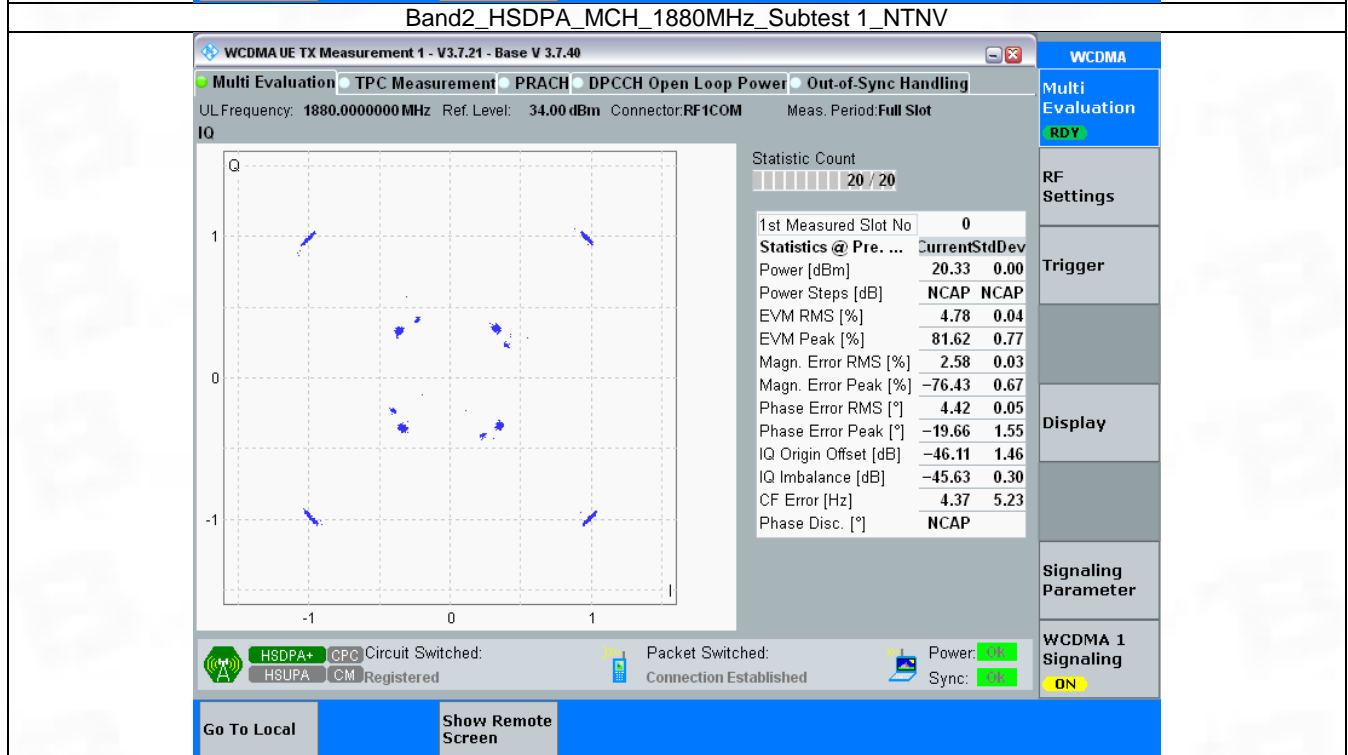
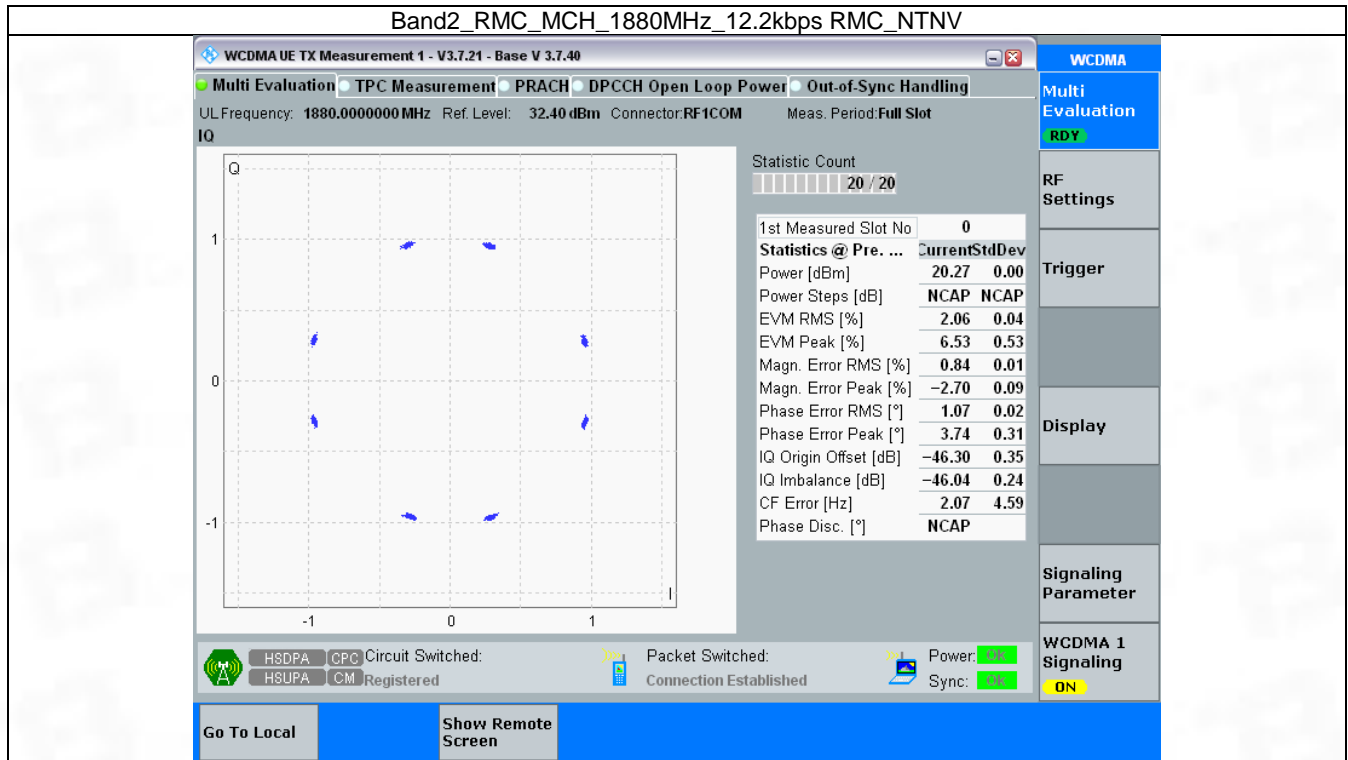
#### 3.1 Test Result

##### 3.1.1 Band2

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

## 3.2 Test Graph

### 3.2.1 Band2



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

WCDMA UE TX Measurement 1 - V3.7.21 - Base V 3.7.40
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

Statistic Count  
20 / 20

Statistics @ Pre. ...		Current	StdDev
1st Measured Slot No	0		
Power [dBm]	20.59	2.43	
Power Steps [dB]	NCAP	NCAP	
EVM RMS [%]	2.13	2.86	
EVM Peak [%]	7.36	38.25	
Magn. Error RMS [%]	1.06	1.20	
Magn. Error Peak [%]	3.17	39.31	
Phase Error RMS [°]	1.52	1.74	
Phase Error Peak [°]	6.22	7.44	
IQ Origin Offset [dB]	-46.10	3.20	
IQ Imbalance [dB]	-45.09	0.37	
CF Error [Hz]	-10.61	28.36	
Phase Disc. [°]	NCAP		

HSDPA+
  HSDPA

CPC
  CM

Circuit Switched:  
Registered

Packet Switched:  
Connection Established

Power: ON  
 Sync: ON

Go To Local
Show Remote Screen

WCDMA
Multi Evaluation
RF Settings
Trigger
Display
Signaling Parameter
WCDMA 1 Signaling

## 4. 99% & 26dB Bandwidth

### 4.1 Test Result

#### 4.1.1 Band2\_OBW

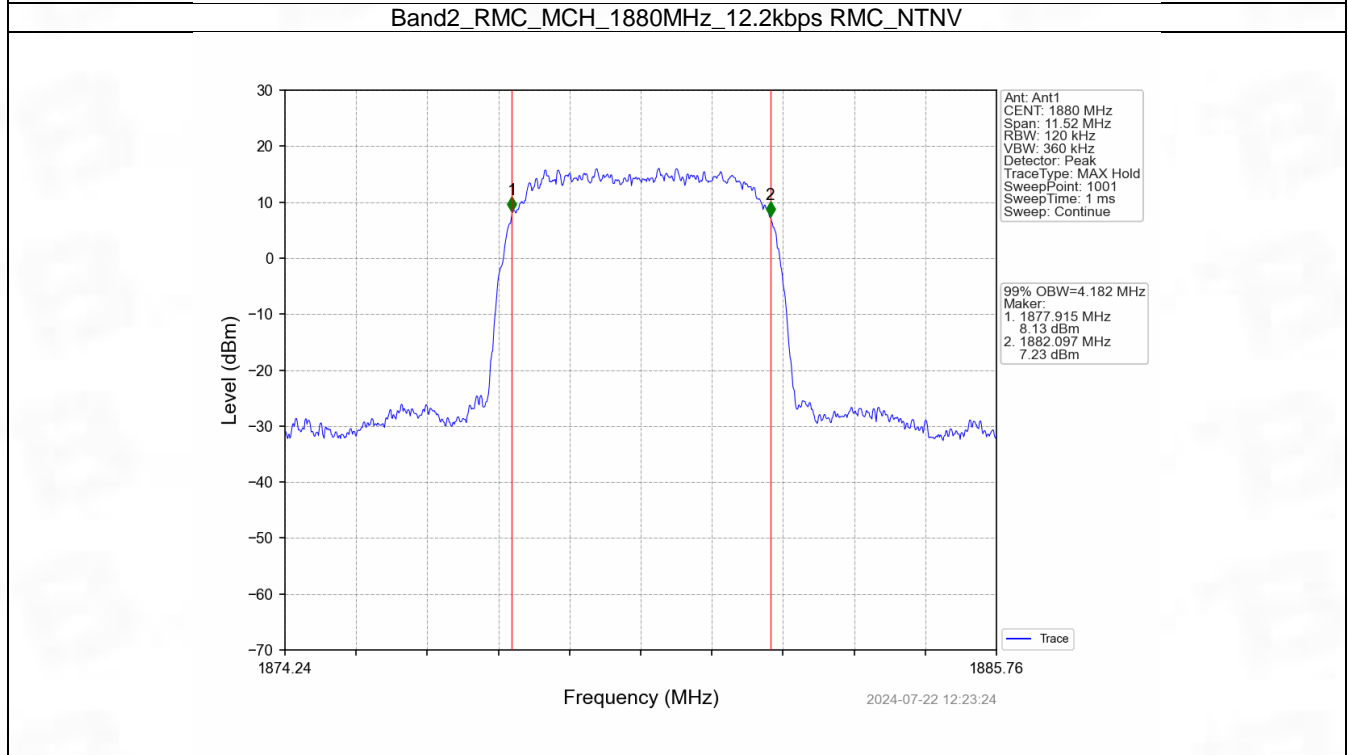
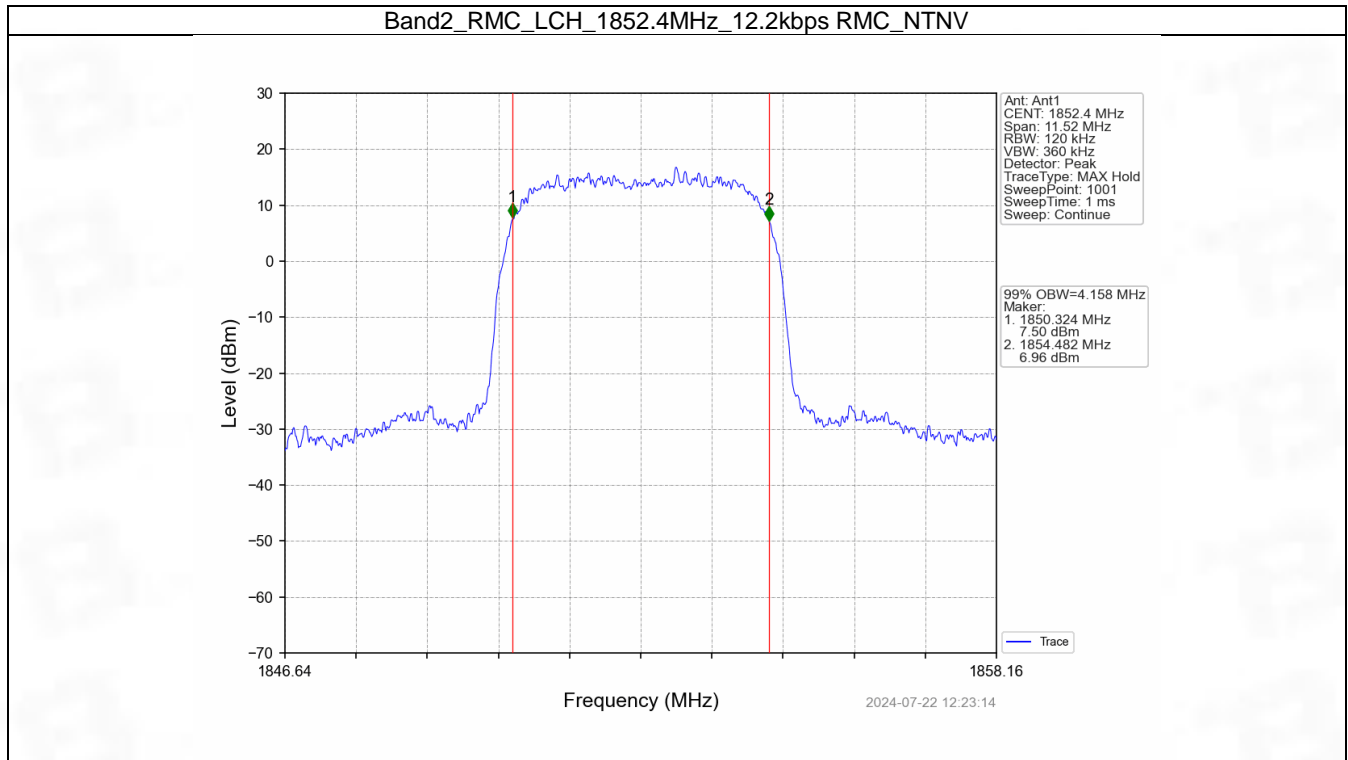
Band: 2						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	4.158	/	Pass
			1880	4.182	/	Pass
			1907.6	4.179	/	Pass
	HSDPA	Subtest 1	1852.4	4.149	/	Pass
			1880	4.172	/	Pass
			1907.6	4.157	/	Pass
	HSUPA	Subtest 1	1852.4	4.163	/	Pass
			1880	4.170	/	Pass
			1907.6	4.163	/	Pass

#### 4.1.2 Band2\_XDB

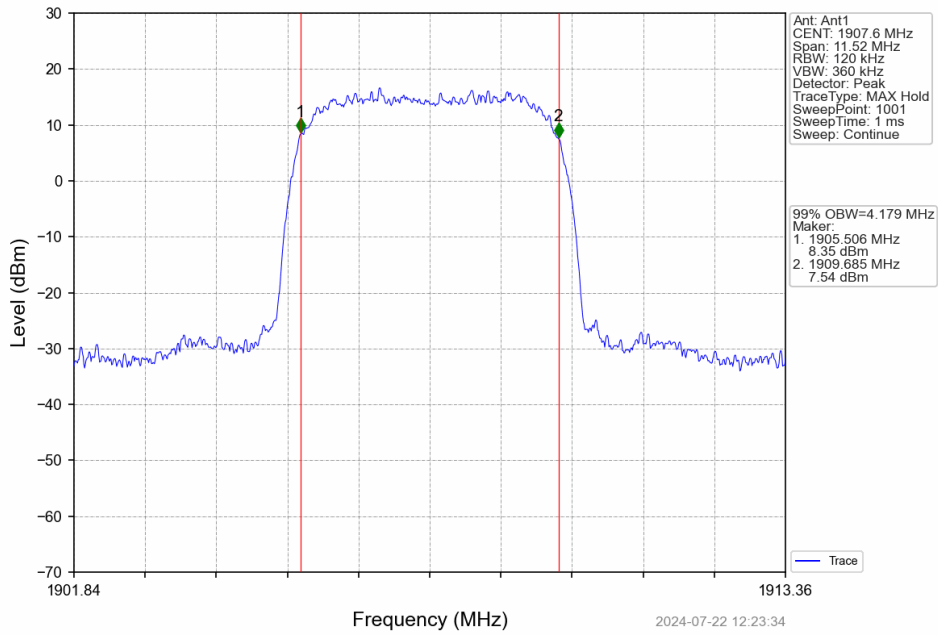
Band: 2						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	4.699	/	Pass
			1880	4.720	/	Pass
			1907.6	4.724	/	Pass
	HSDPA	Subtest 1	1852.4	4.720	/	Pass
			1880	4.704	/	Pass
			1907.6	4.706	/	Pass
	HSUPA	Subtest 1	1852.4	4.730	/	Pass
			1880	4.712	/	Pass
			1907.6	4.703	/	Pass

## 4.2 Test Graph

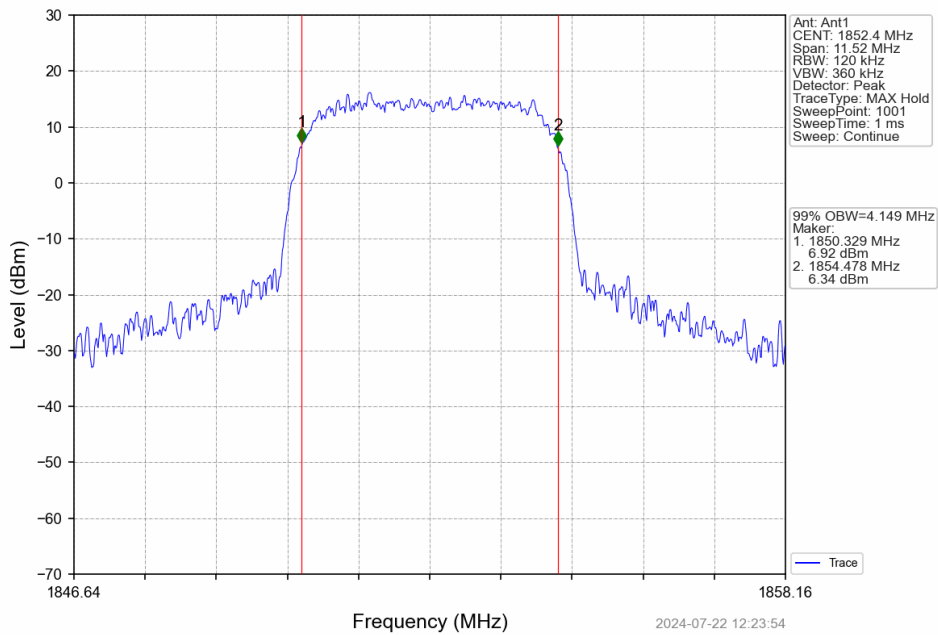
### 4.2.1 Band2\_OBW



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

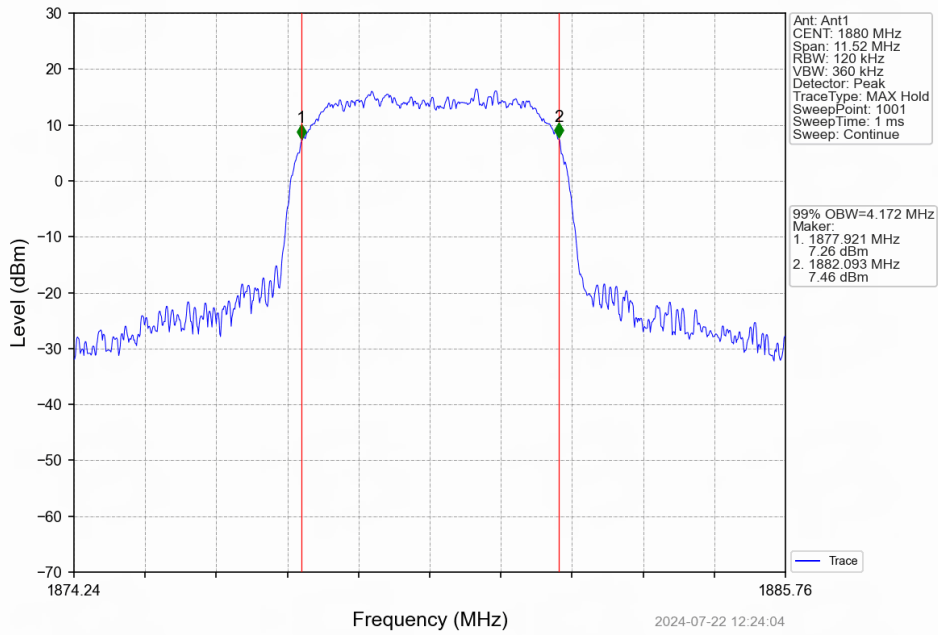


Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV

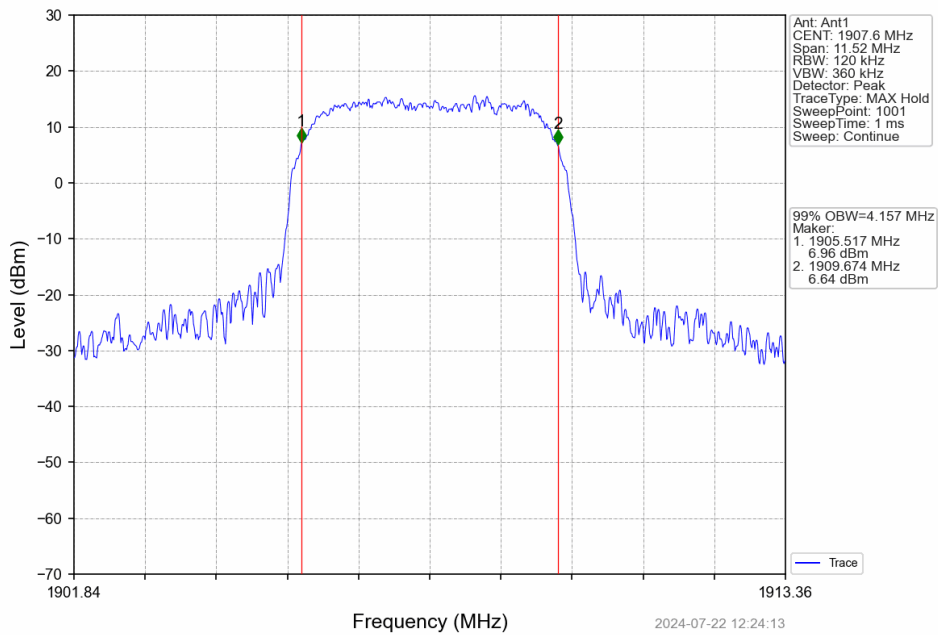




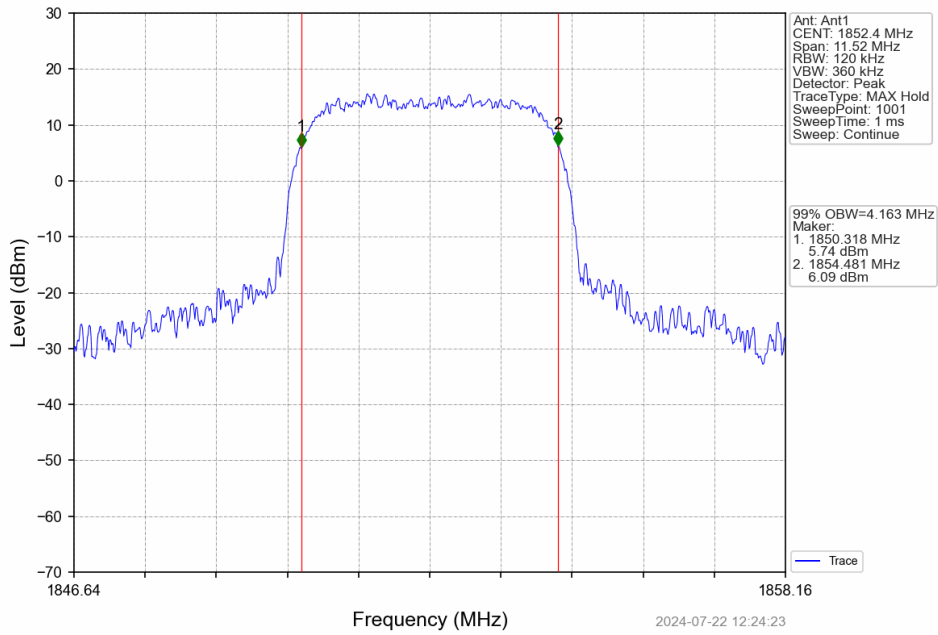
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



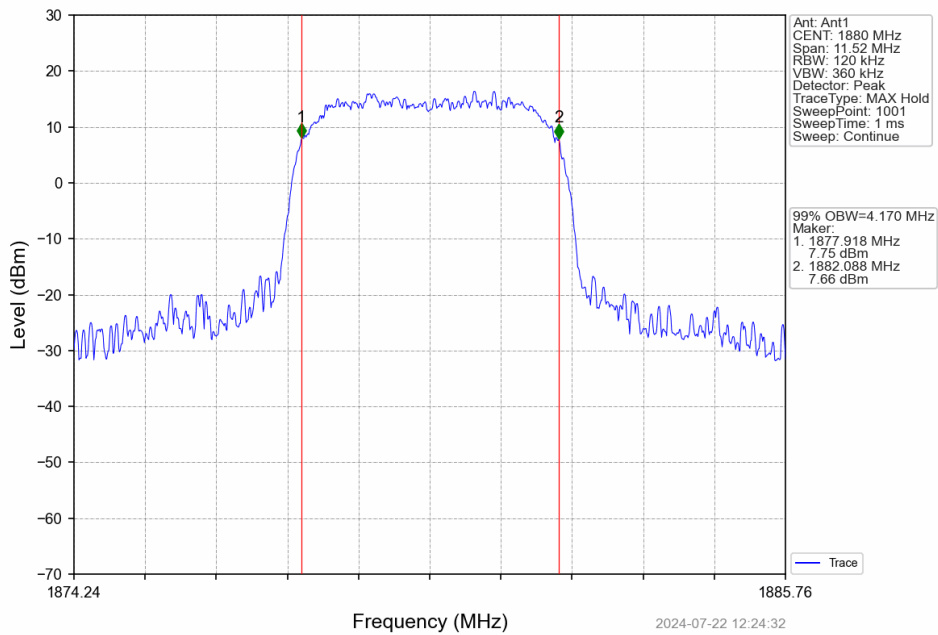
Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



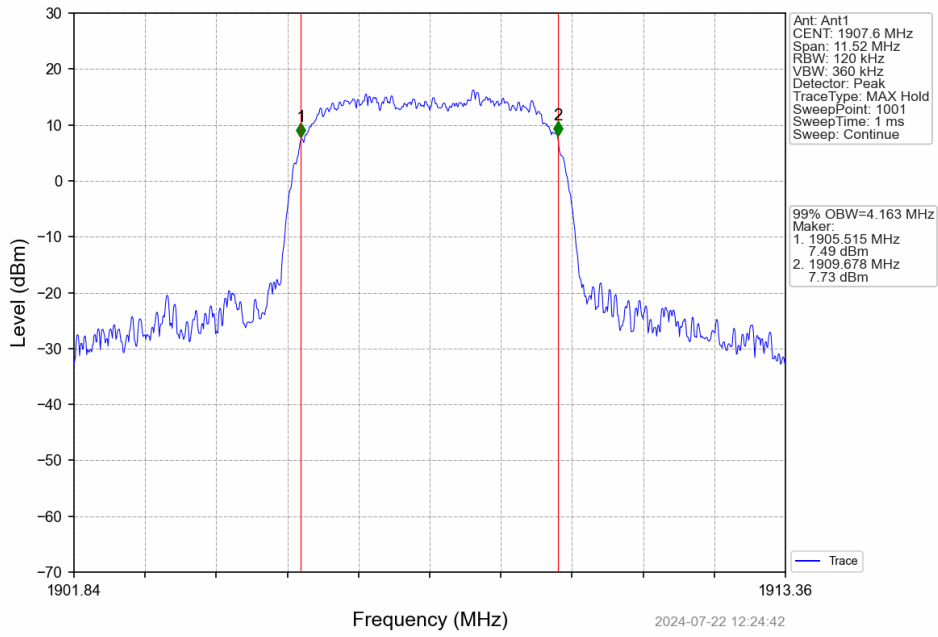
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



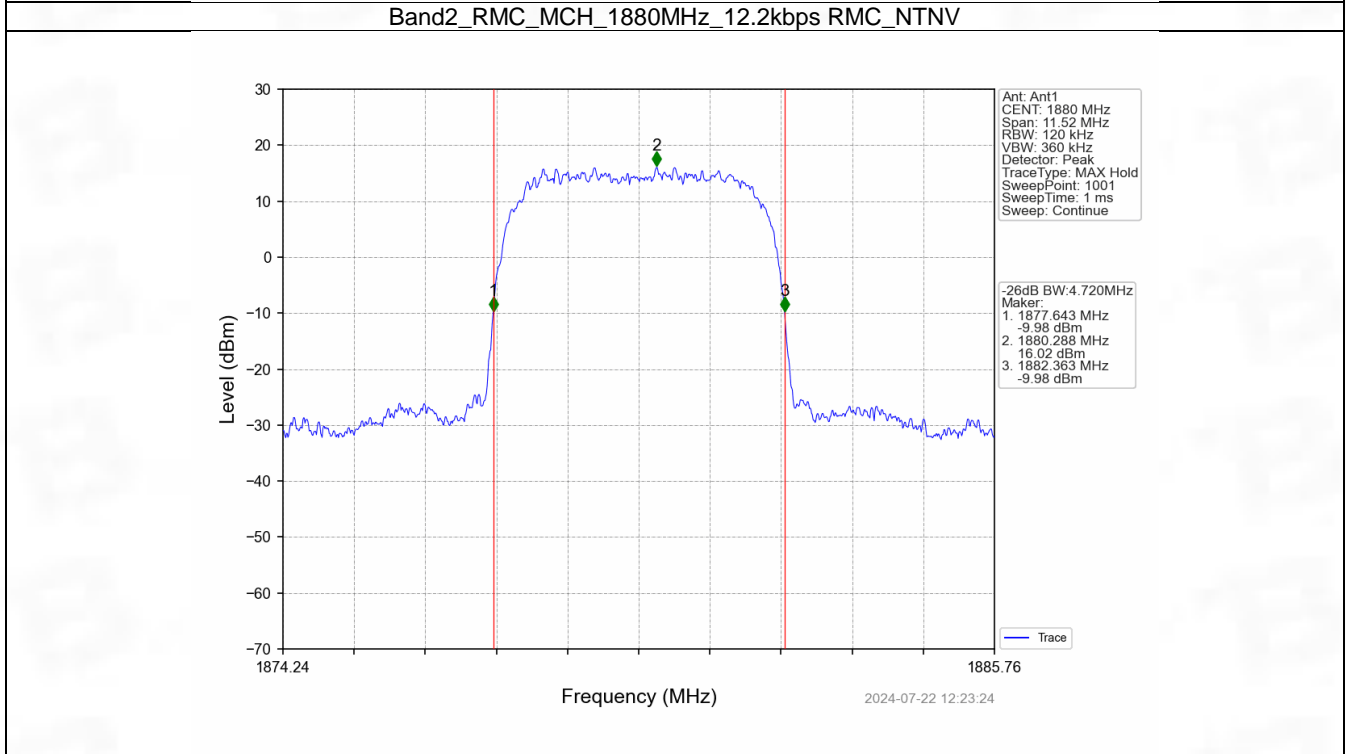
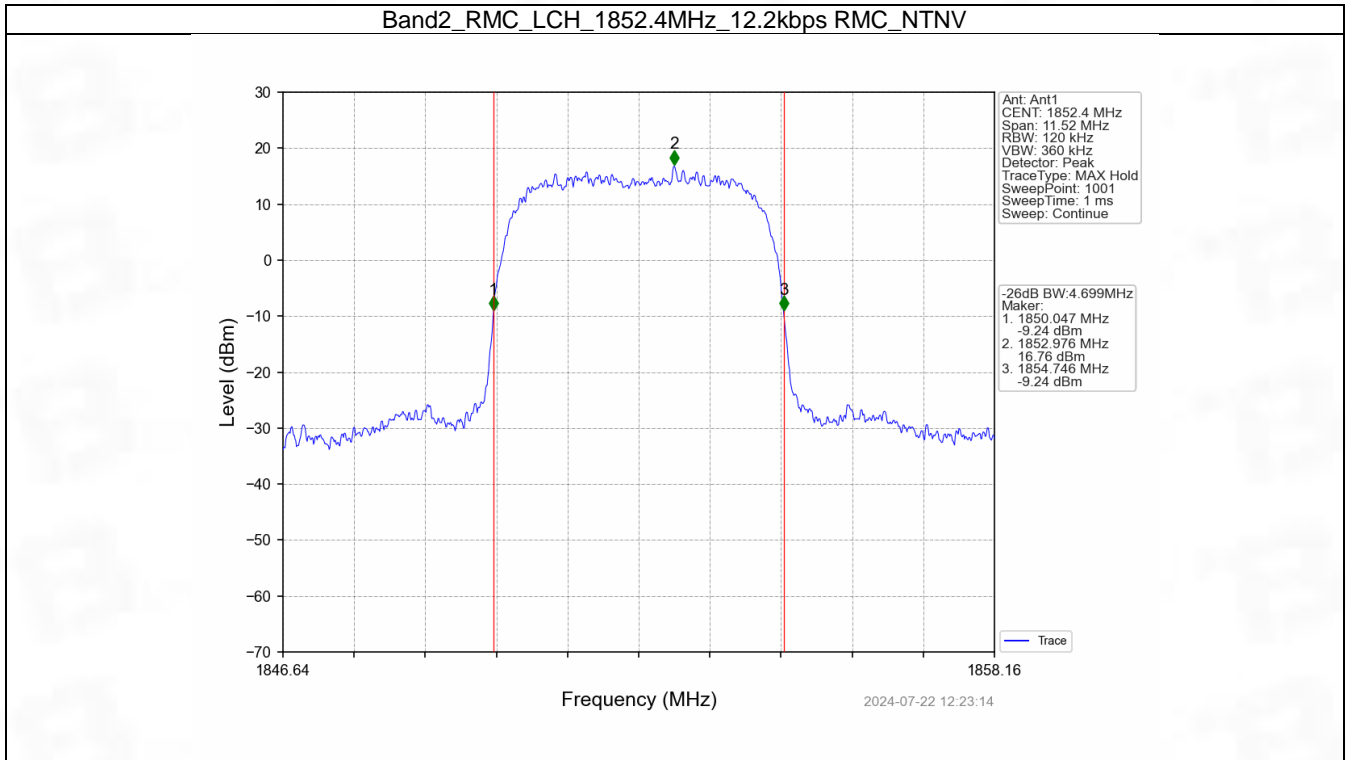
Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



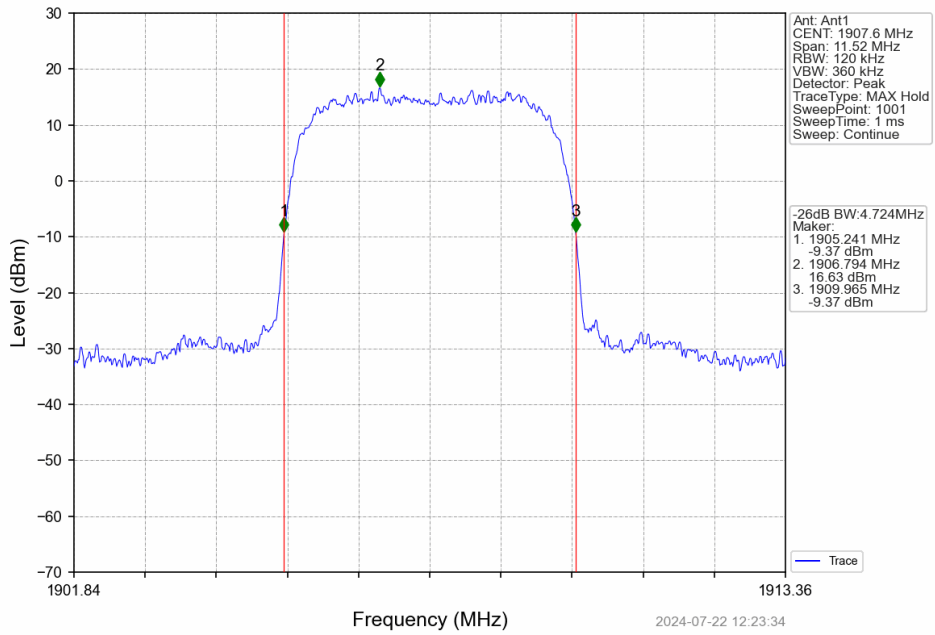
Band2\_HSUPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



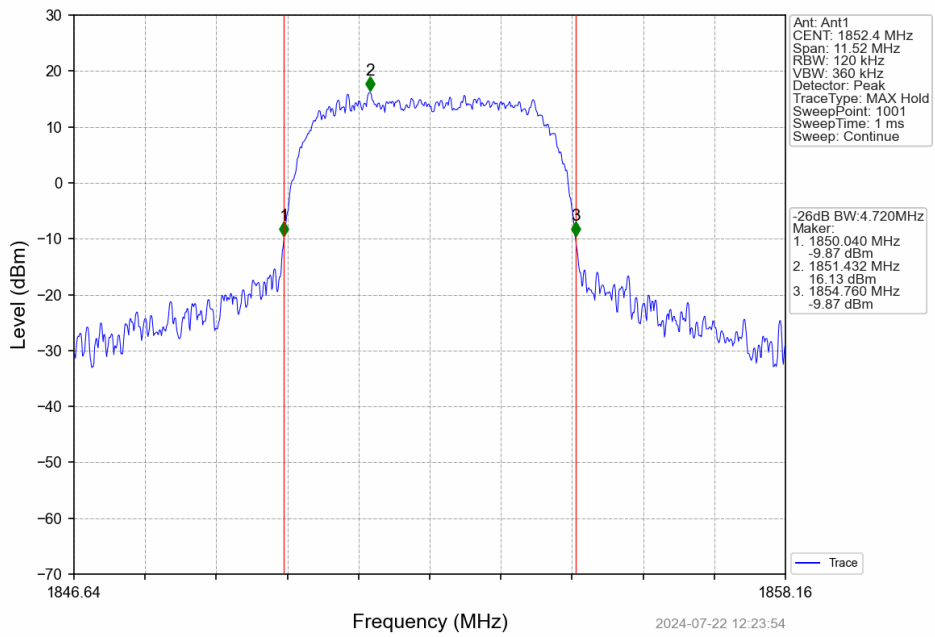
### 4.2.2 Band2\_XDB



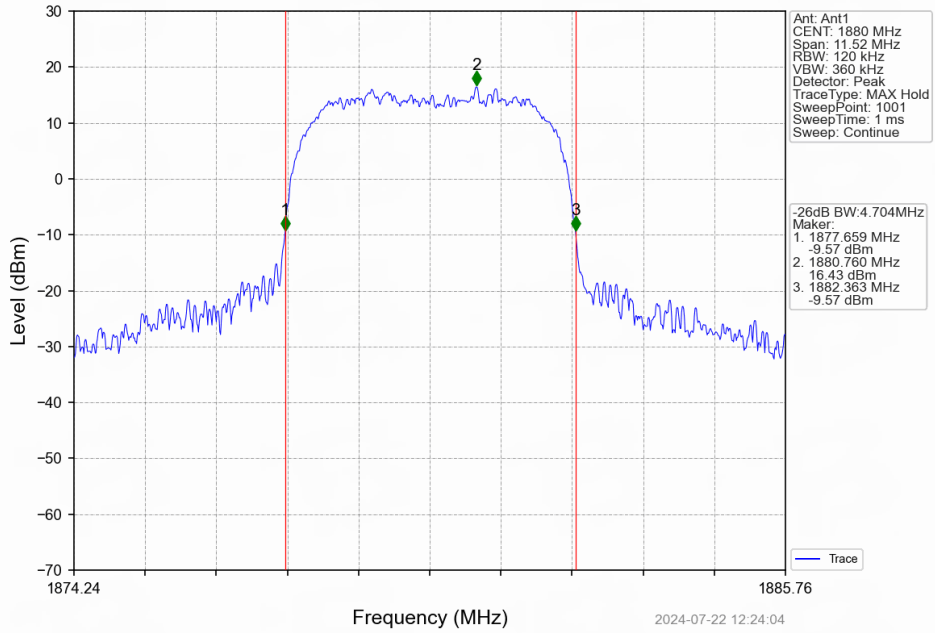
Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



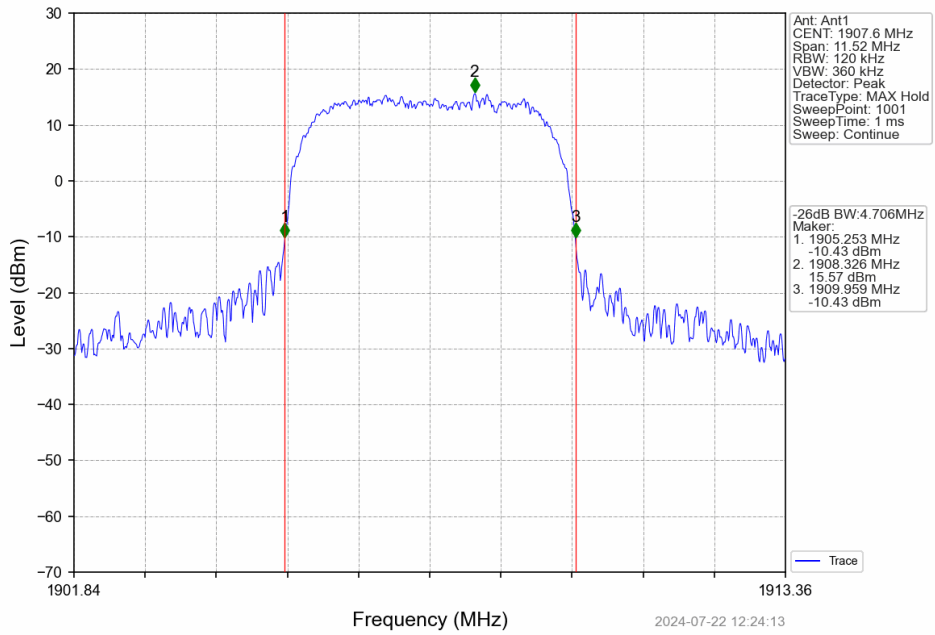
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



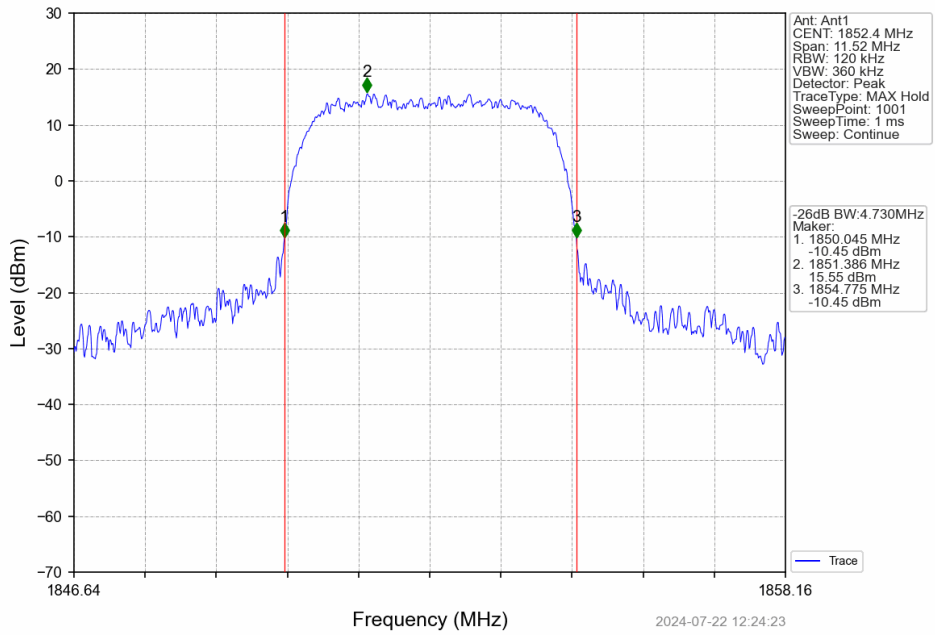
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



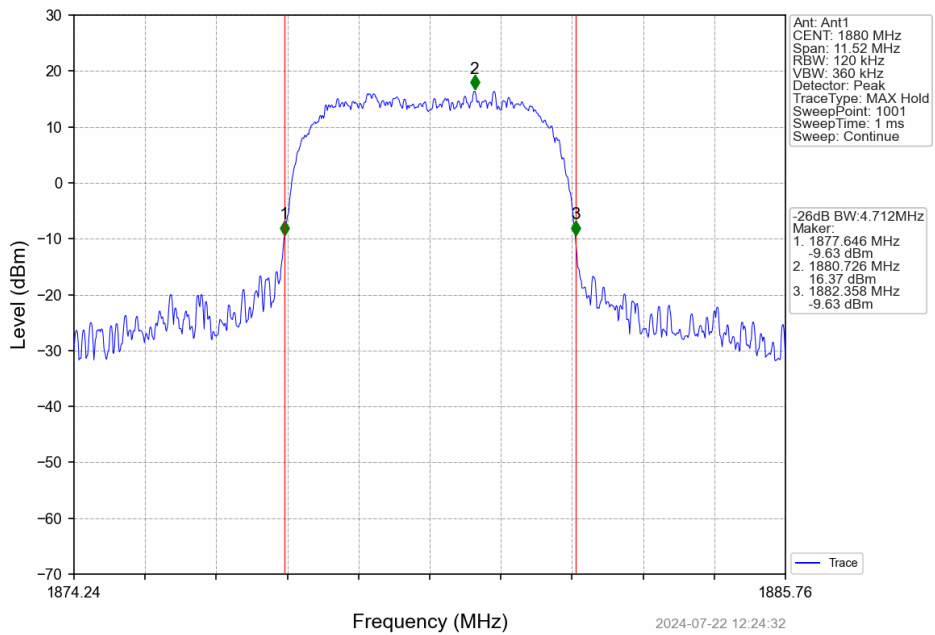
Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



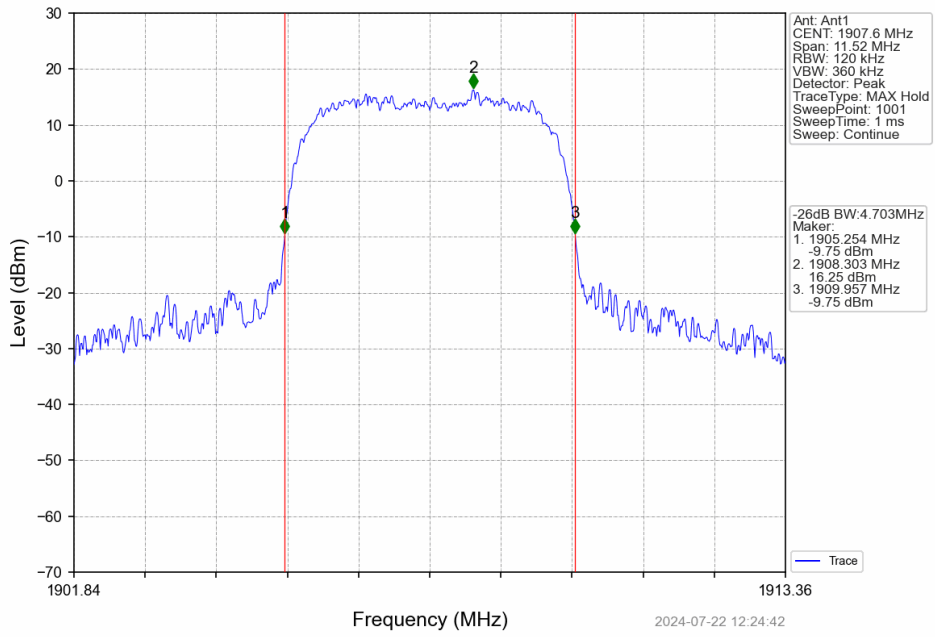
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



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



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





## 5. Peak-Average Ratio

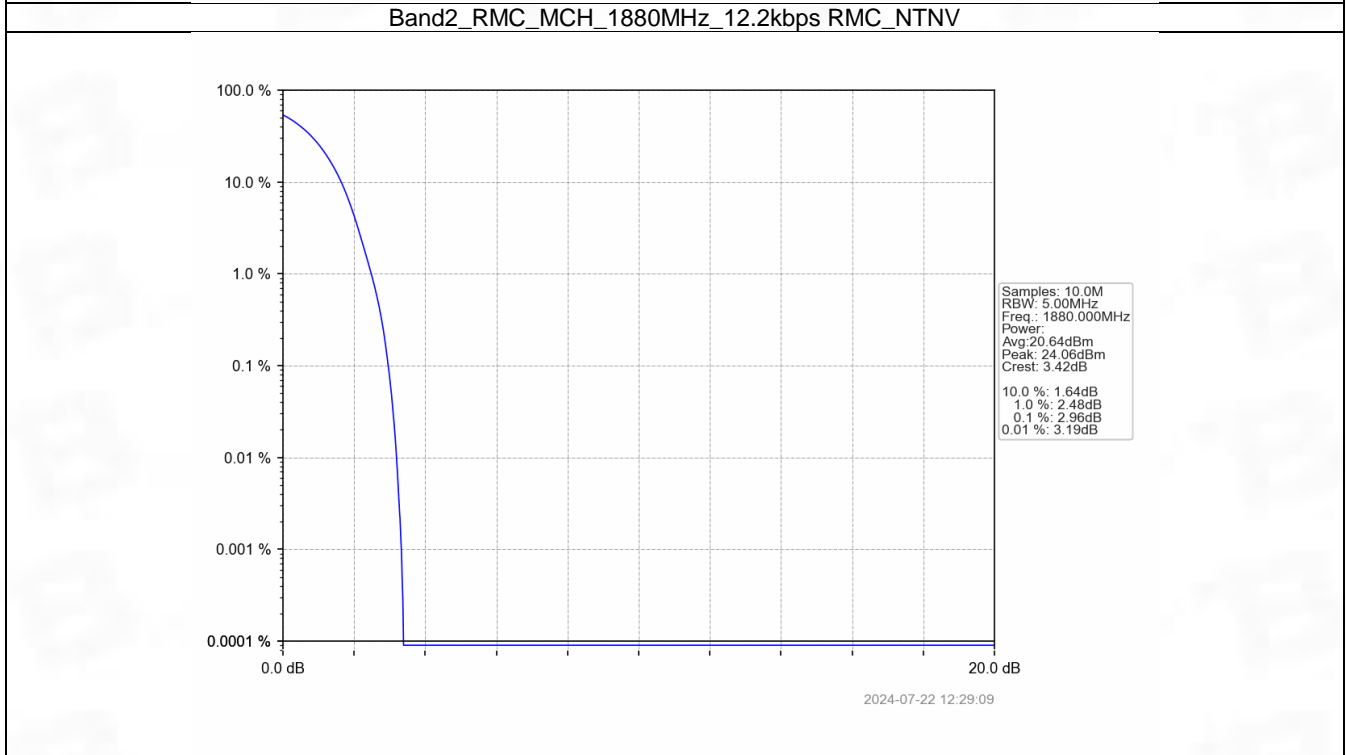
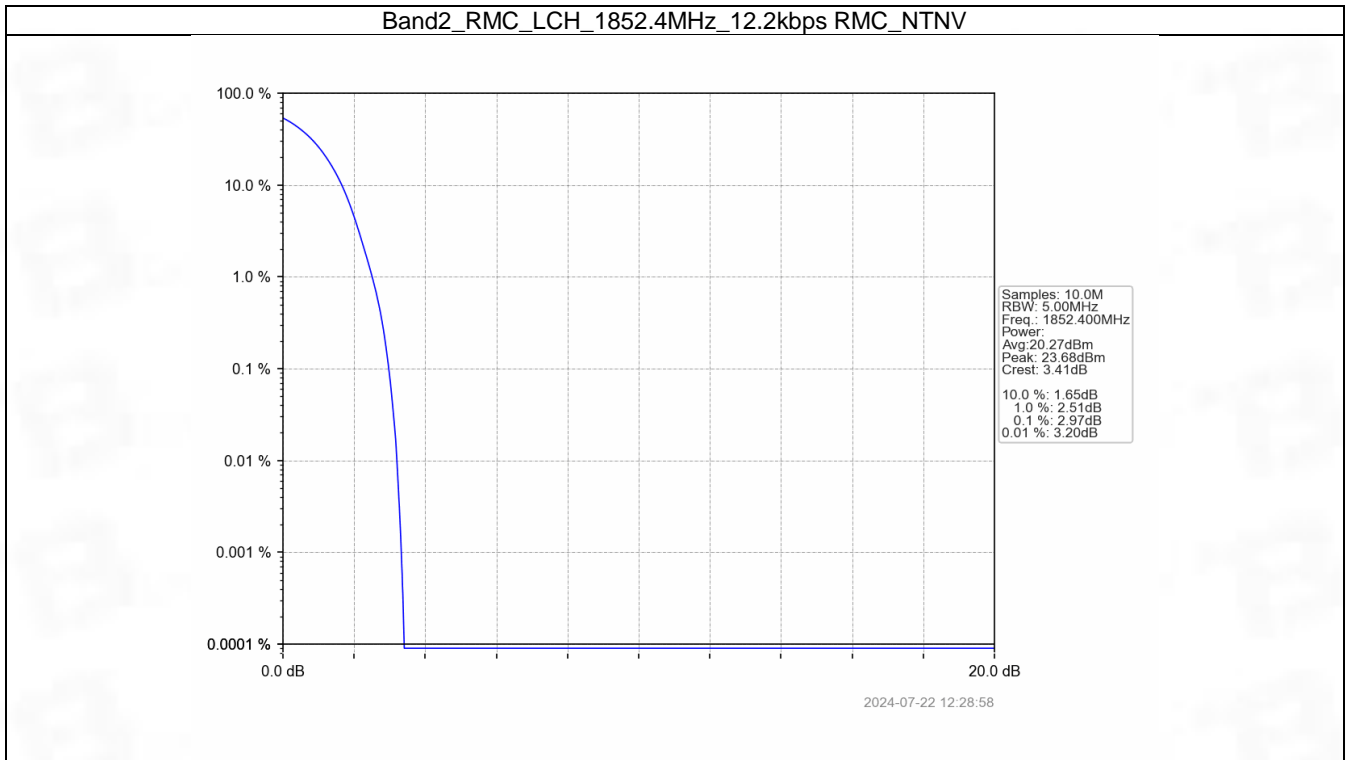
### 5.1 Test Result

#### 5.1.1 Band2

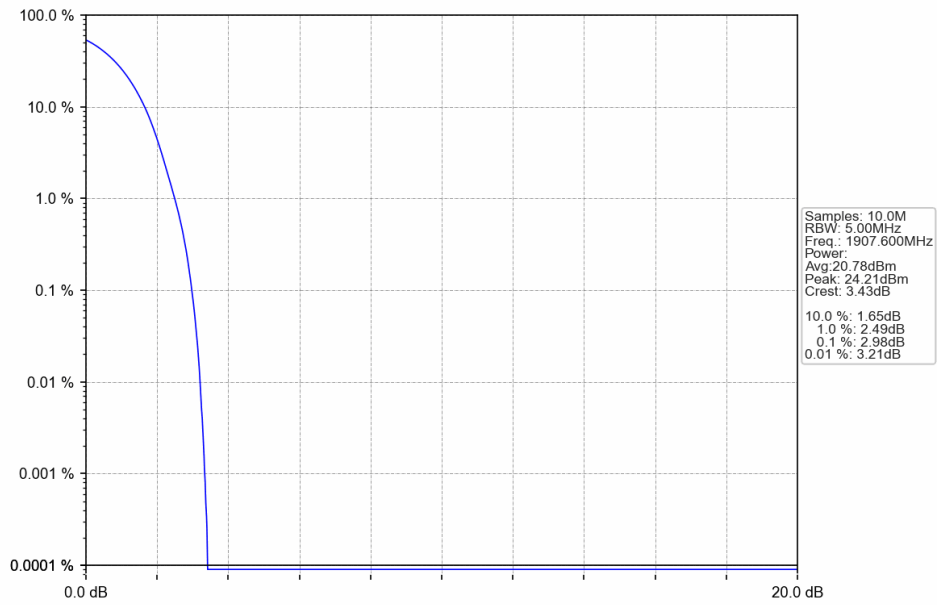
Band: 2						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	2.97	<=13	Pass
			1880	2.96	<=13	Pass
			1907.6	2.98	<=13	Pass
	HSDPA	Subtest 1	1852.4	5.74	<=13	Pass
			1880	5.59	<=13	Pass
			1907.6	5.83	<=13	Pass
	HSUPA	Subtest 1	1852.4	5.42	<=13	Pass
			1880	5.74	<=13	Pass
			1907.6	5.69	<=13	Pass

## 5.2 Test Graph

### 5.2.1 Band2

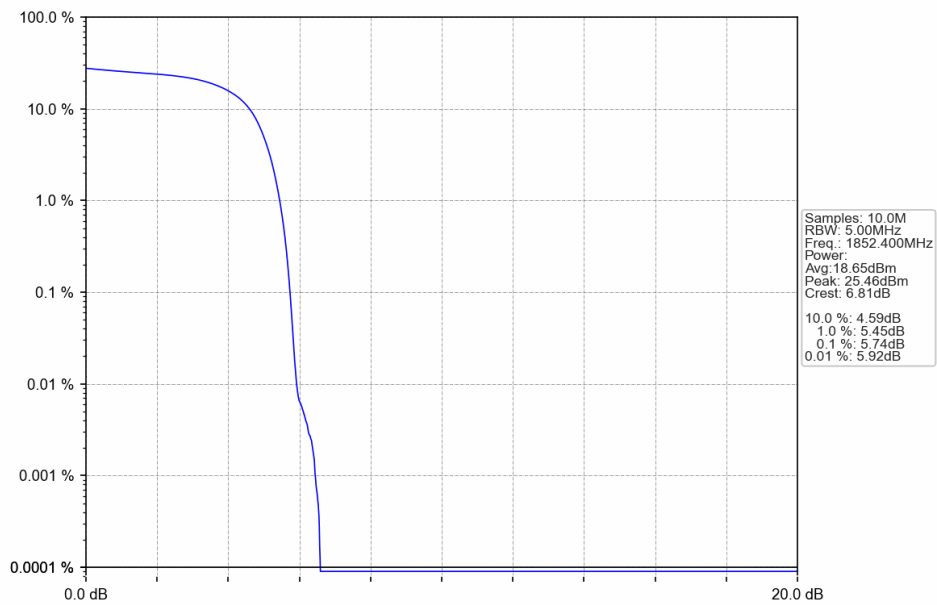


Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



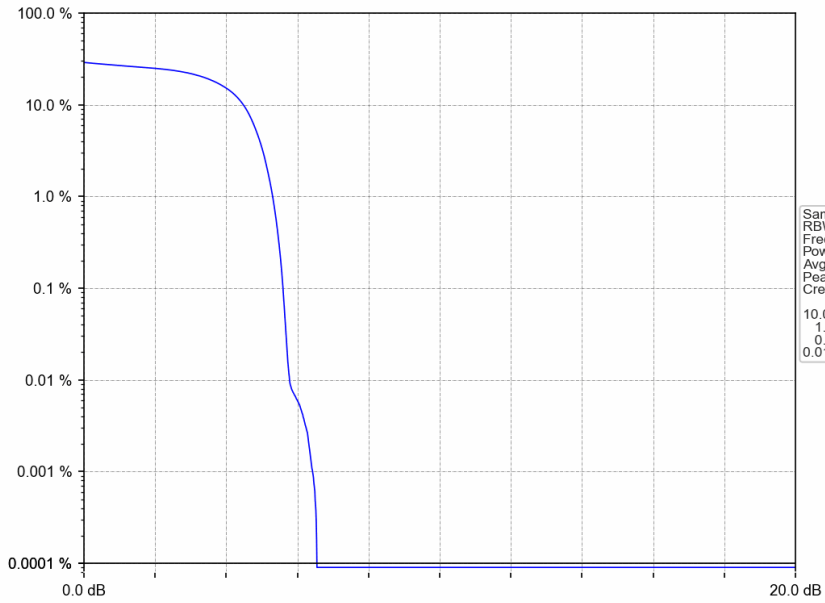
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Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



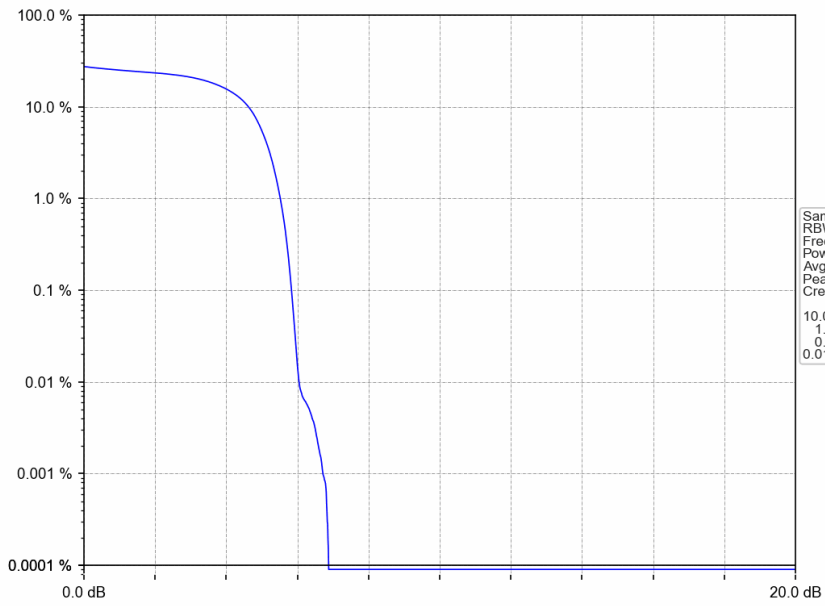
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Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



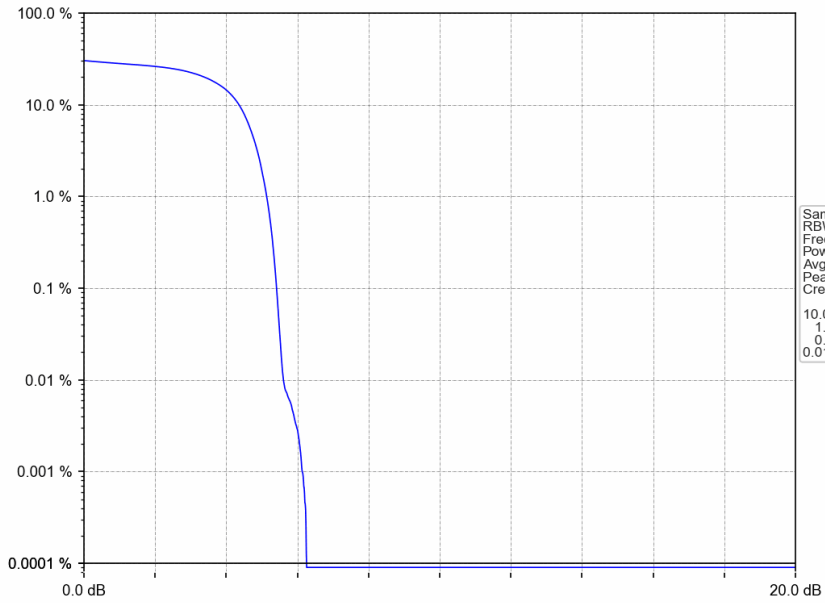
2024-07-22 12:29:54

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



2024-07-22 12:30:07

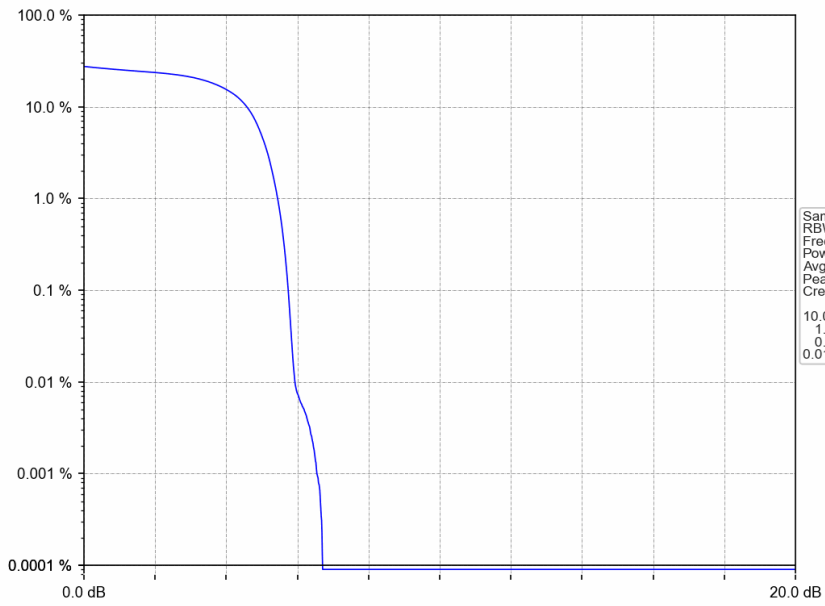
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



Samples: 10.0M  
RBW: 5.00MHz  
Freq.: 1852.400MHz  
Power:  
Avg: 18.98dBm  
Peak: 26.97dBm  
Crest: 7.99dB  
10.0 %: 4.36dB  
1.0 %: 5.14dB  
0.1 %: 5.42dB  
0.01 %: 5.61dB

2024-07-22 12:30:19

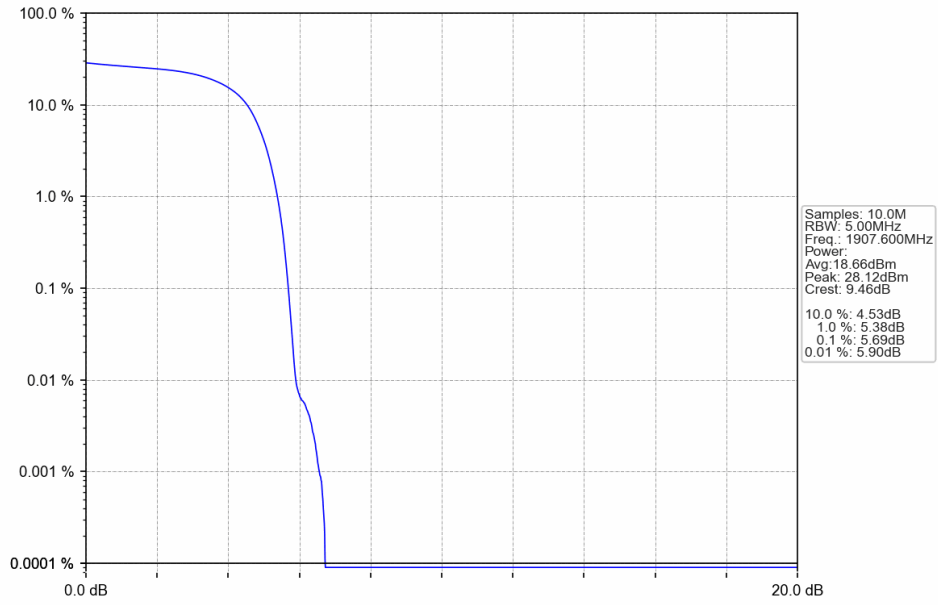
Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



Samples: 10.0M  
RBW: 5.00MHz  
Freq.: 1880.000MHz  
Power:  
Avg: 18.79dBm  
Peak: 27.31dBm  
Crest: 8.52dB  
10.0 %: 4.58dB  
1.0 %: 5.44dB  
0.1 %: 5.74dB  
0.01 %: 5.93dB

2024-07-22 12:30:31

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



2024-07-22 12:30:43

## 6. Spurious Emission

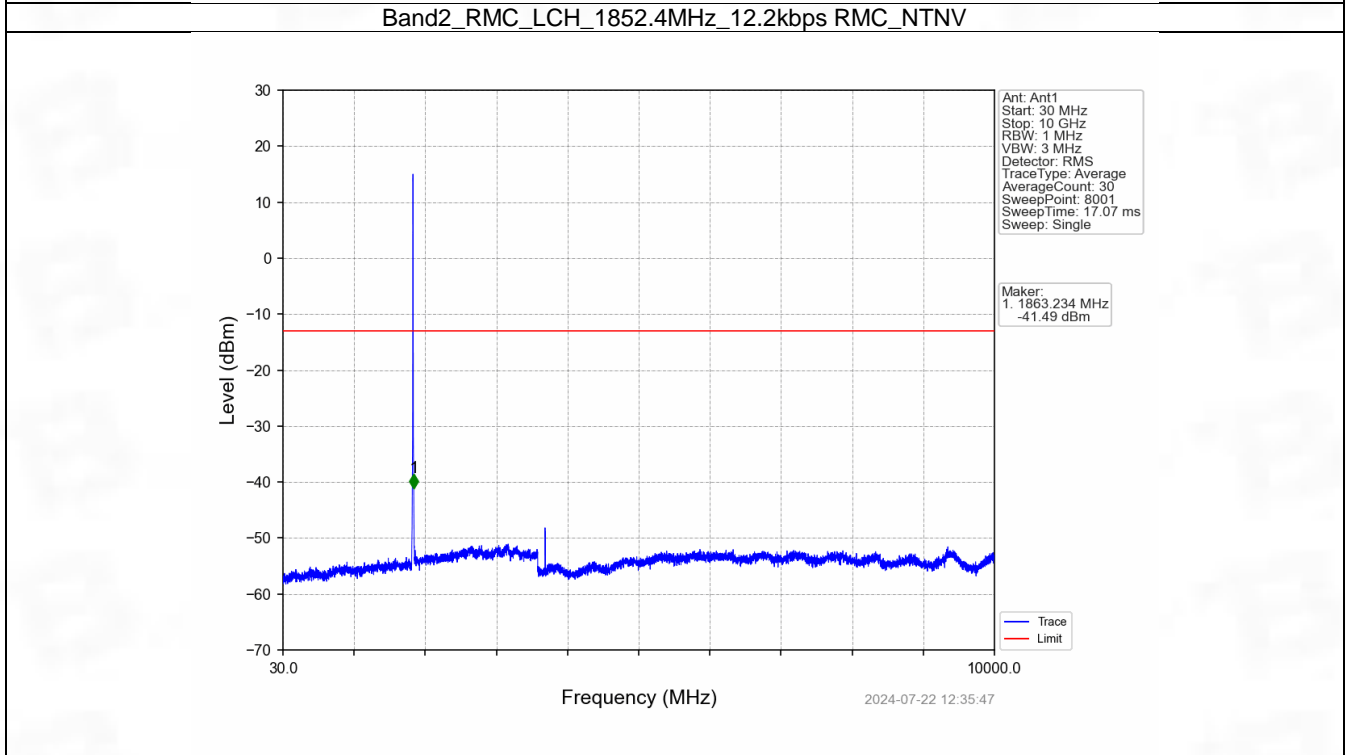
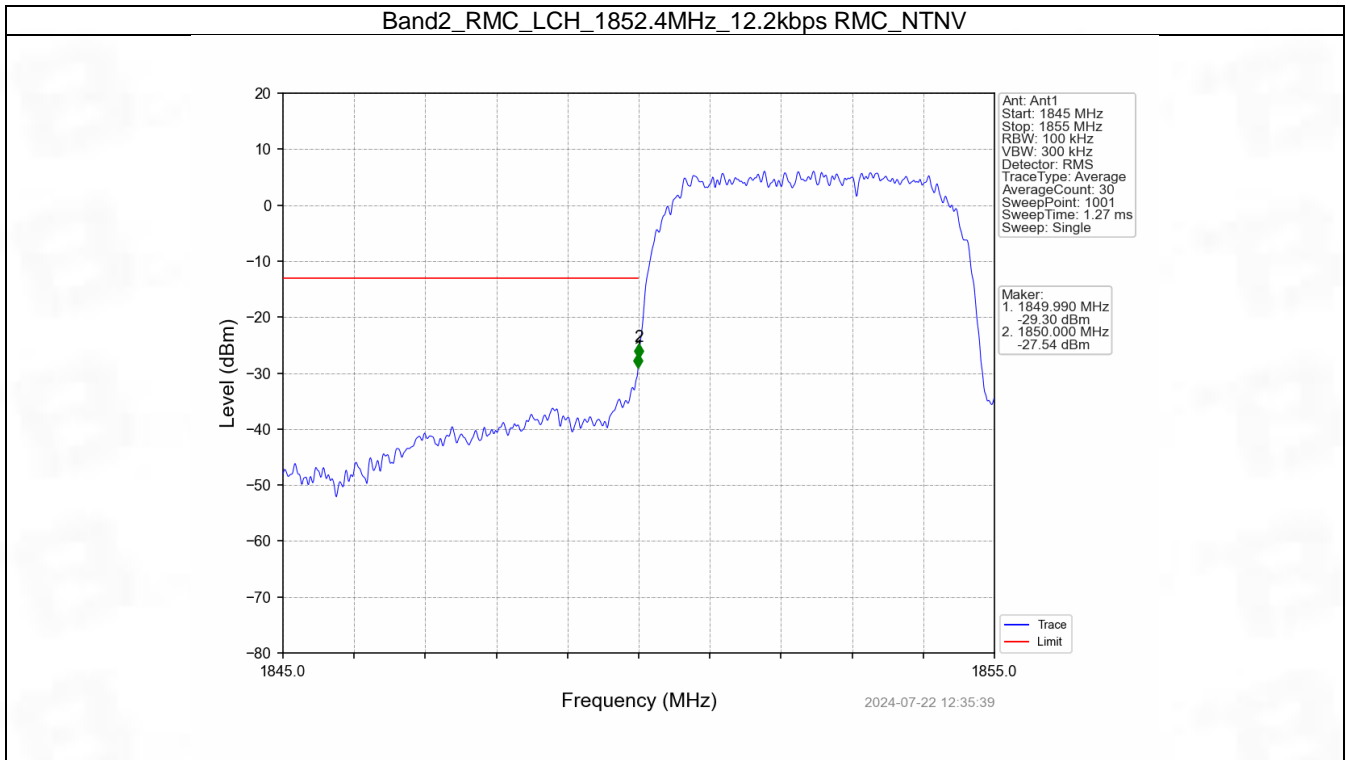
### 6.1 Test Result

#### 6.1.1 Band2

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

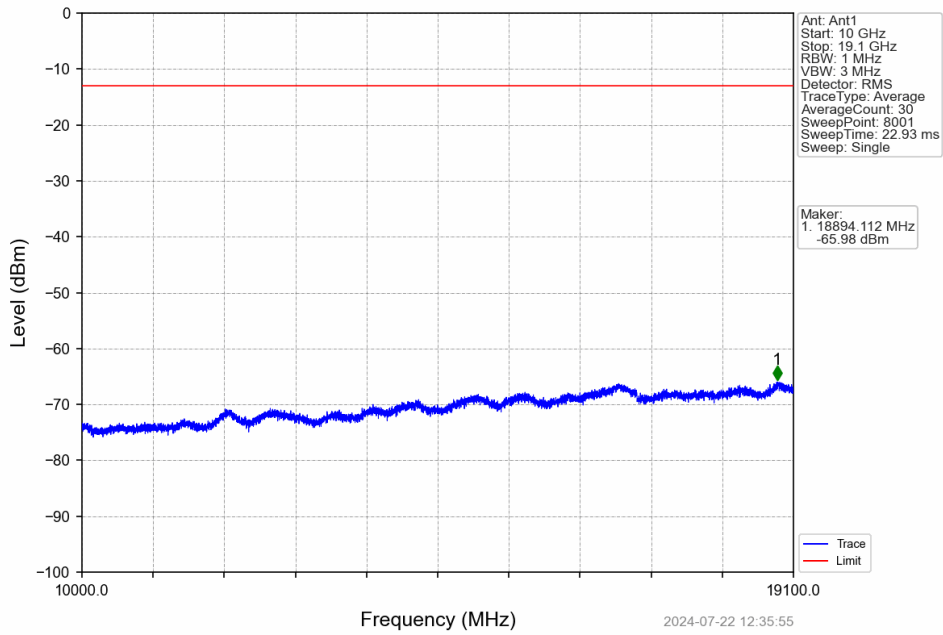
## 6.2 Test Graph

### 6.2.1 Band2

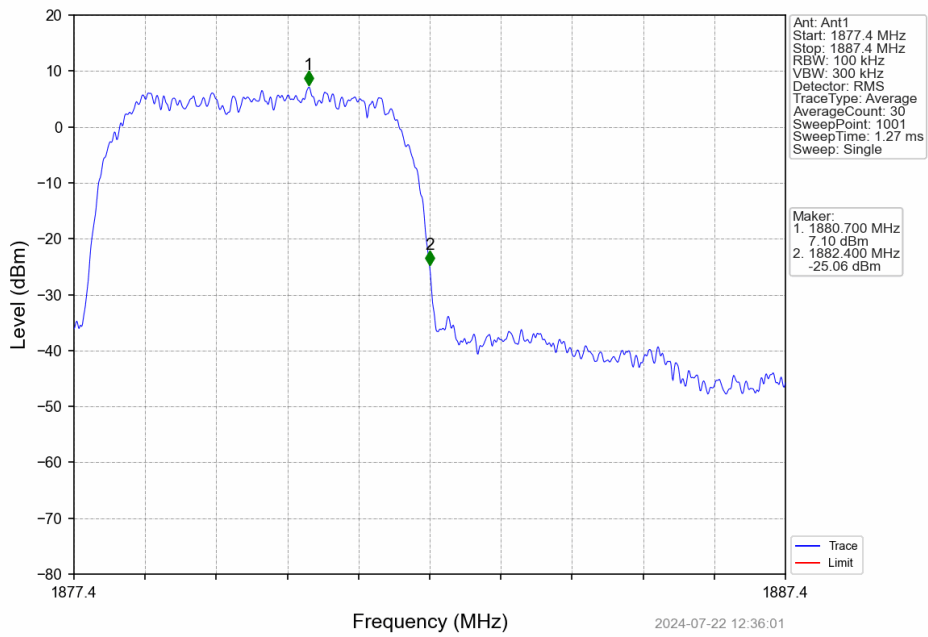




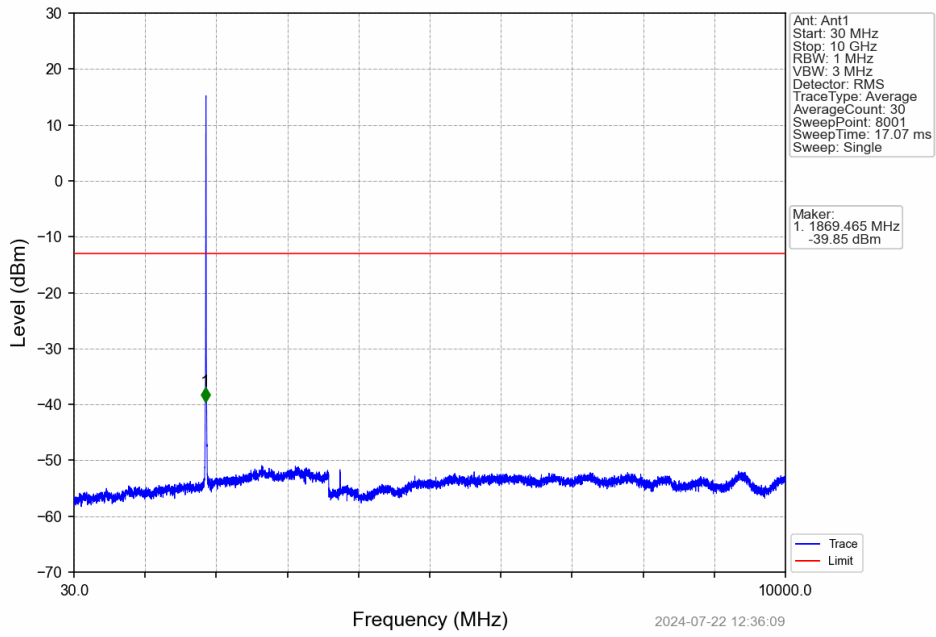
Band2\_RMC\_LCH\_1852.4MHz\_12.2kbps RMC\_NTNV



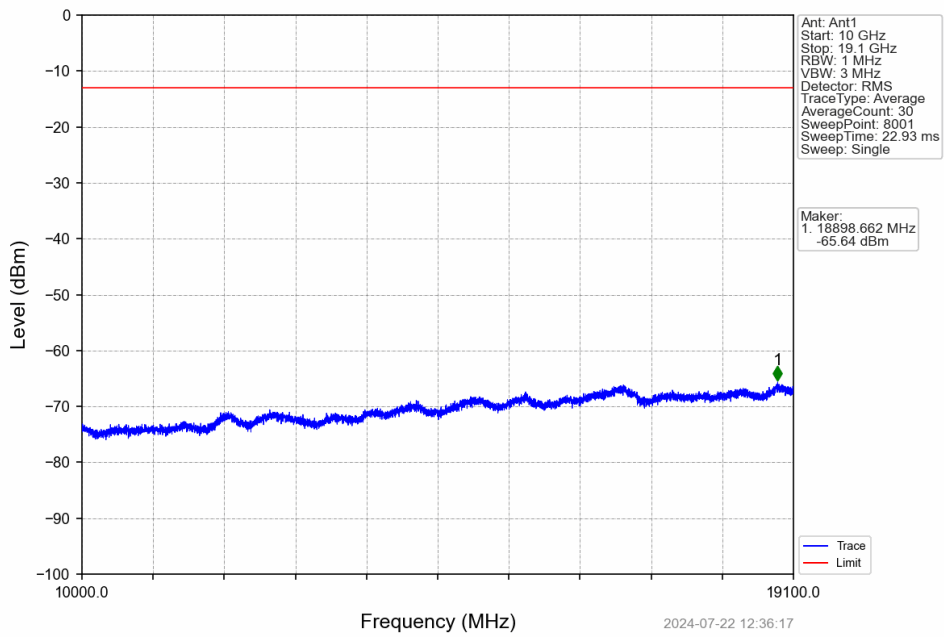
Band2\_RMC\_MCH\_1880MHz\_12.2kbps RMC\_NTNV



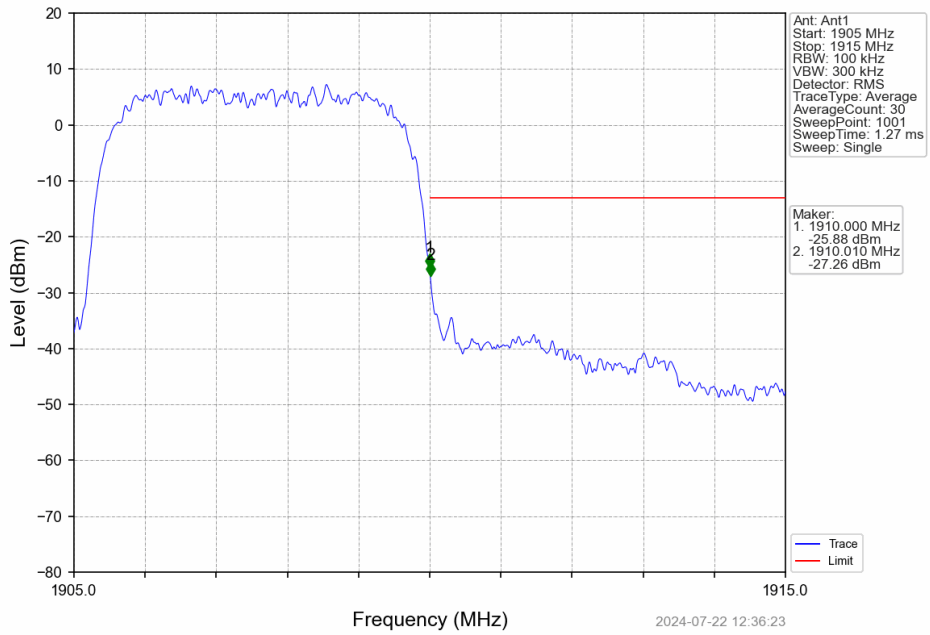
Band2\_RMC\_MCH\_1880MHz\_12.2kbps RMC\_NTNV



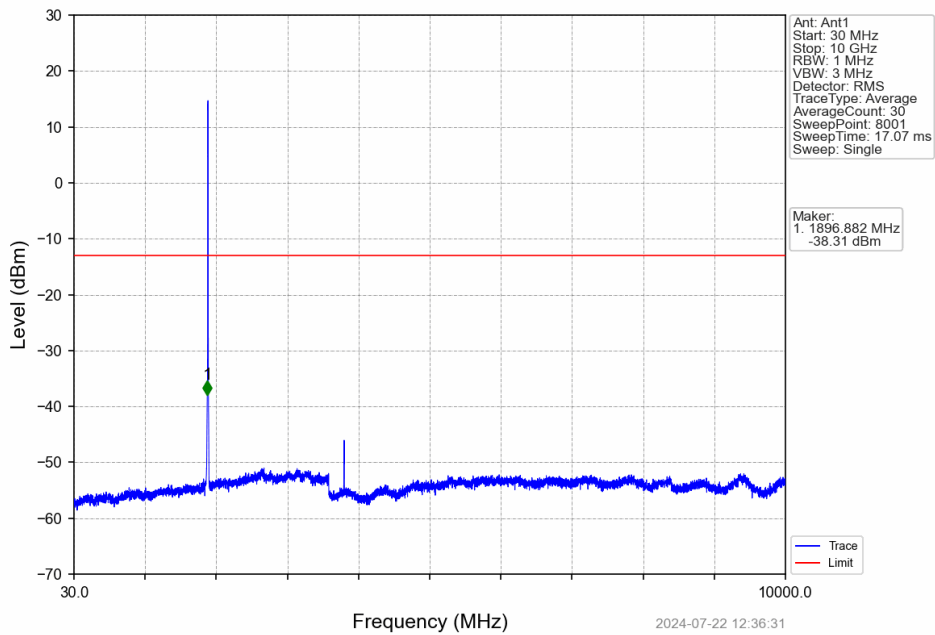
Band2\_RMC\_MCH\_1880MHz\_12.2kbps RMC\_NTNV



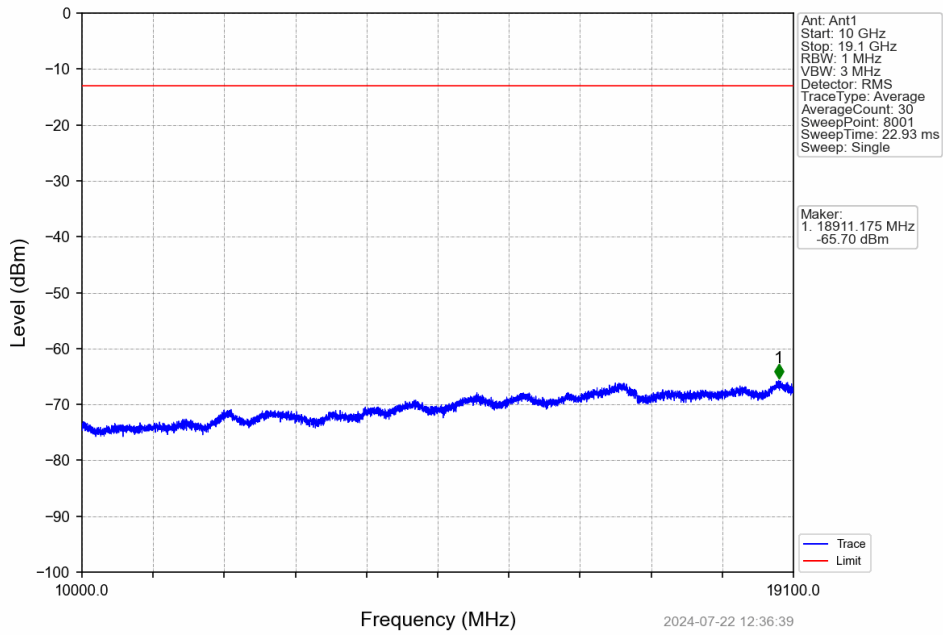
Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



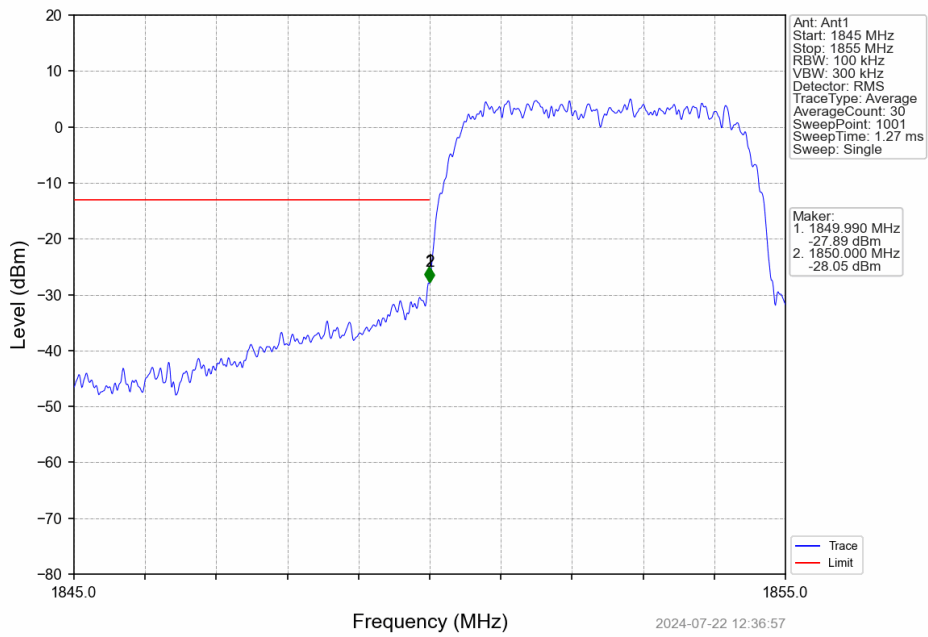
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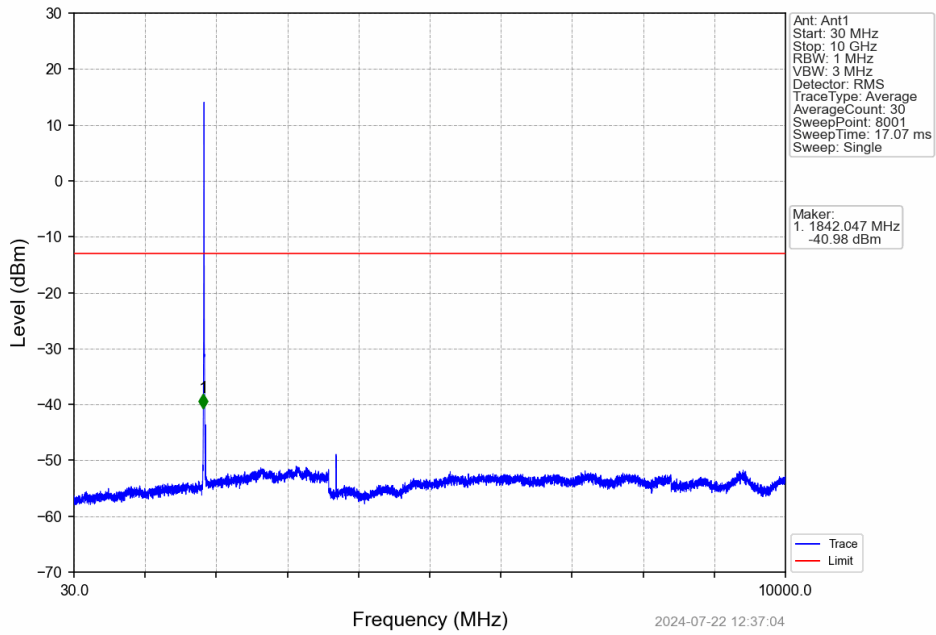
Band2\_RMC\_HCH\_1907.6MHz\_12.2kbps RMC\_NTNV



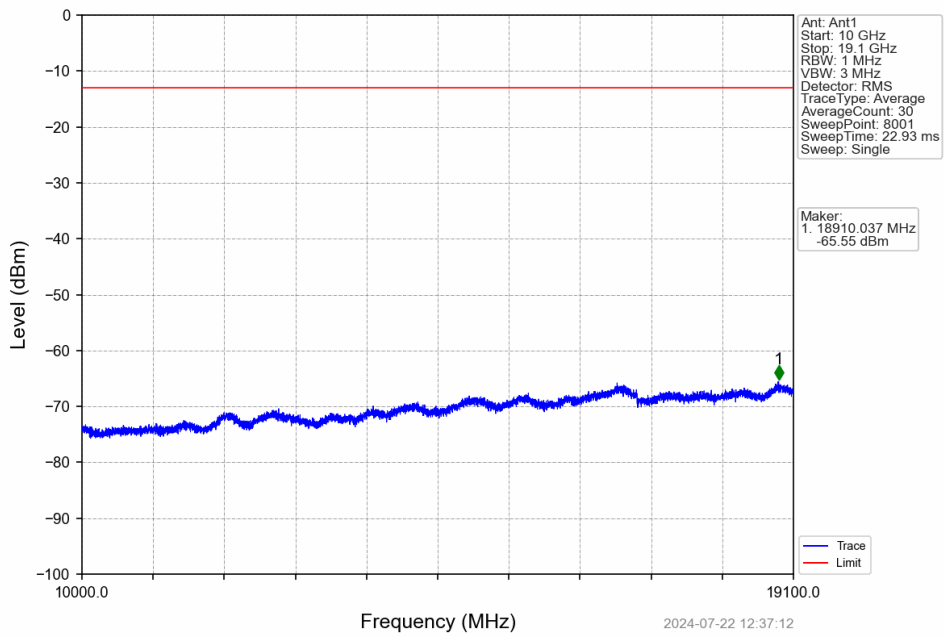
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



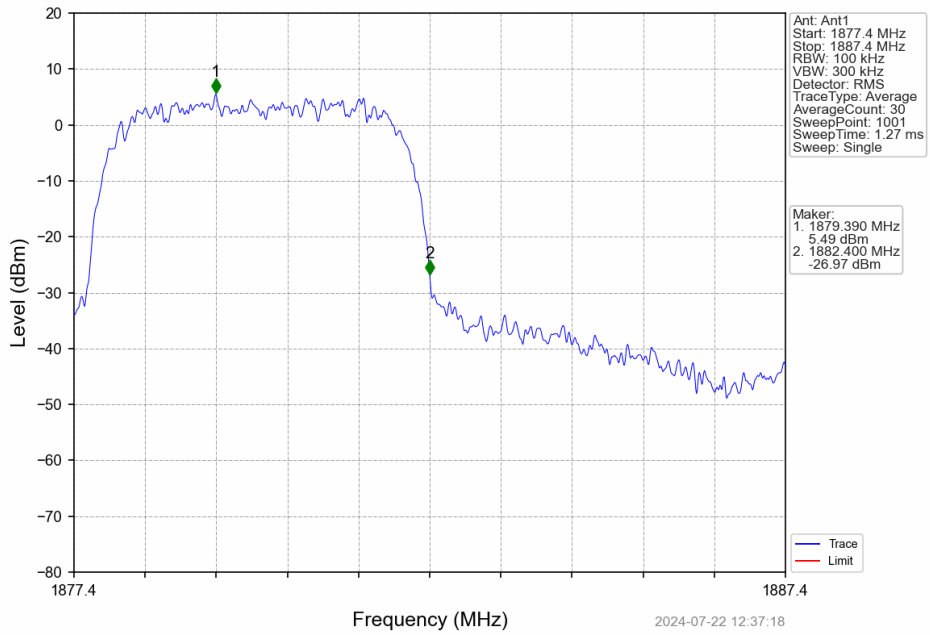
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



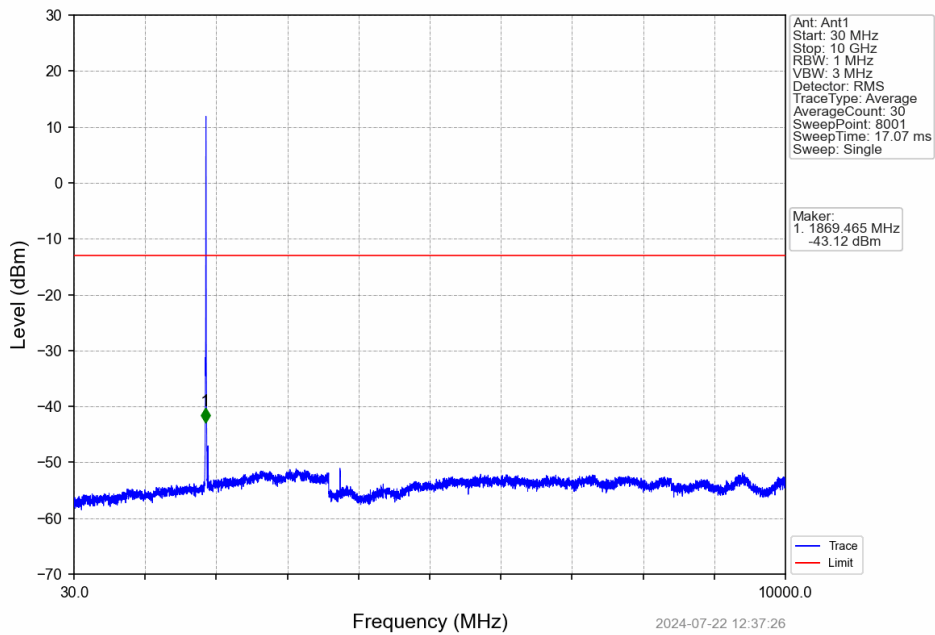
Band2\_HSDPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



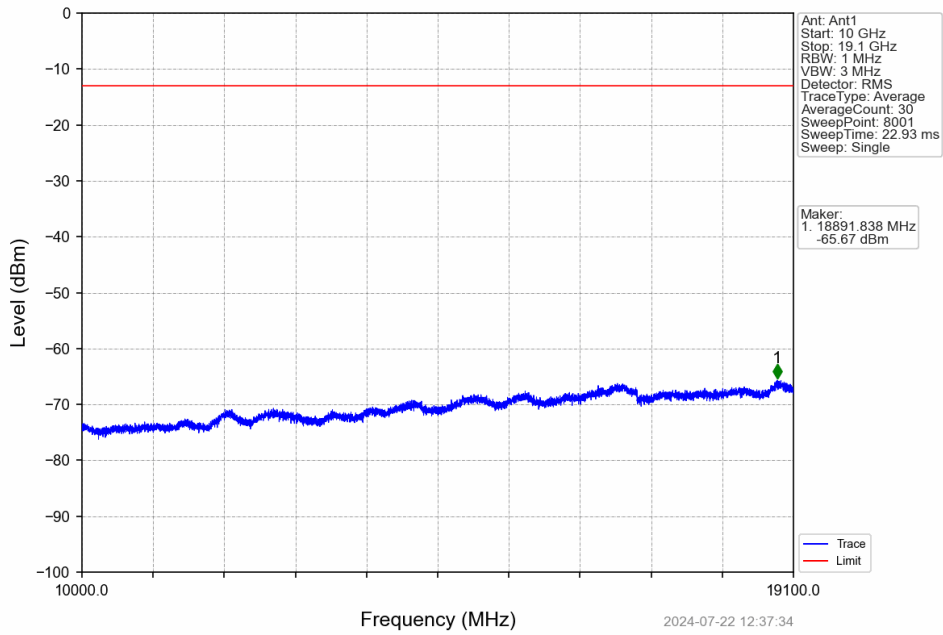
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



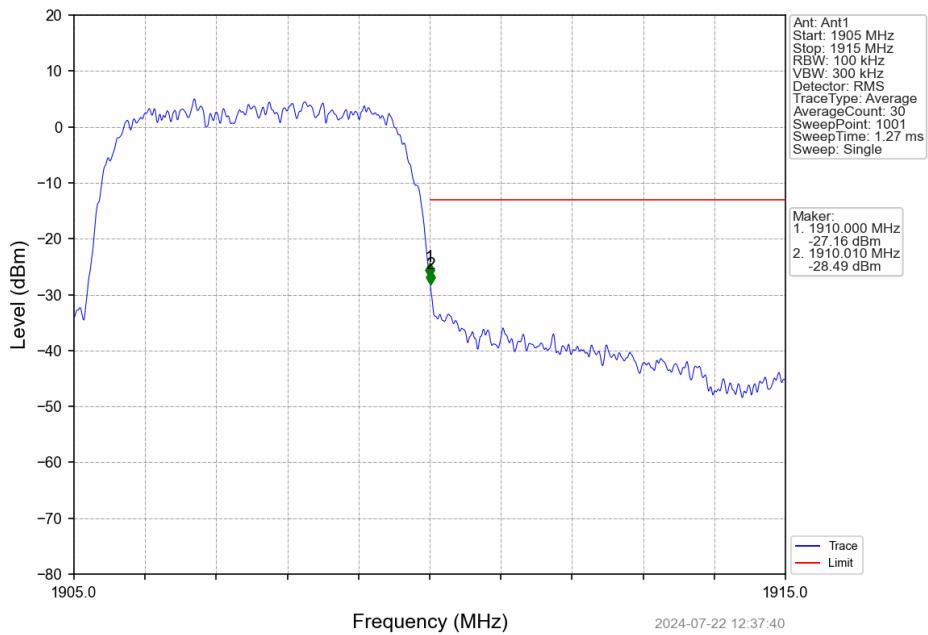
Band2\_HSDPA\_MCH\_1880MHz\_Subtest 1\_NTNV



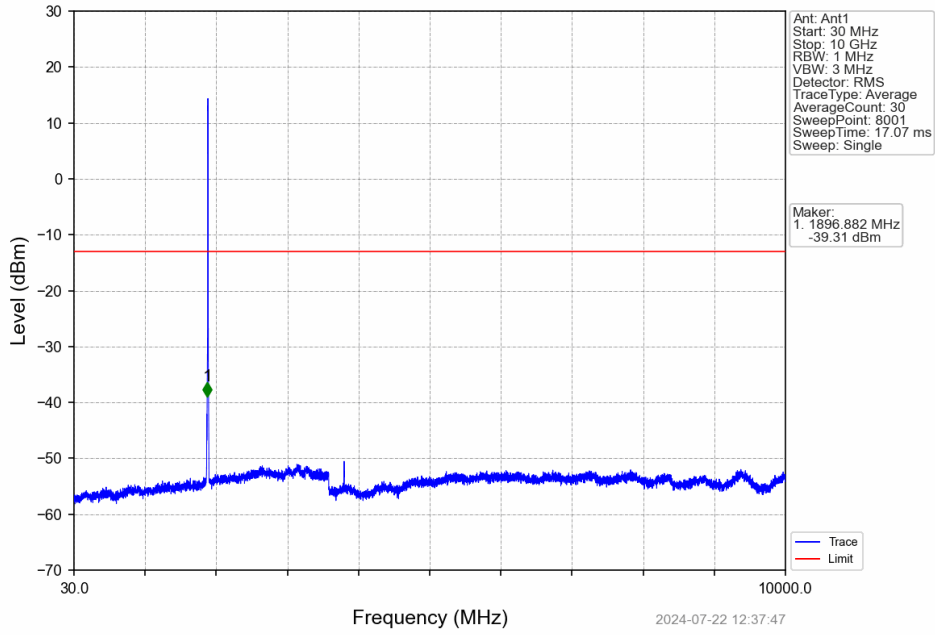
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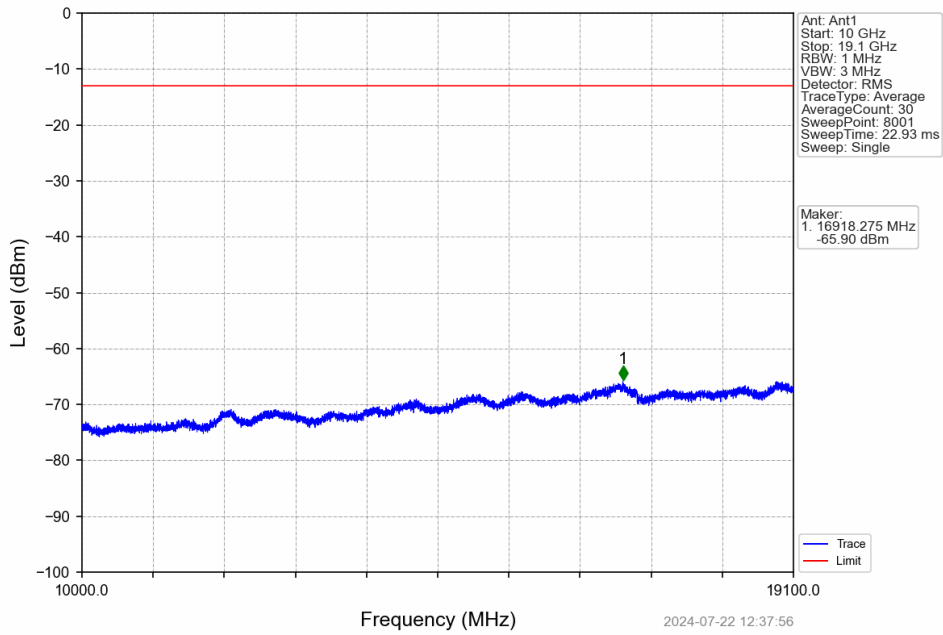
Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



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

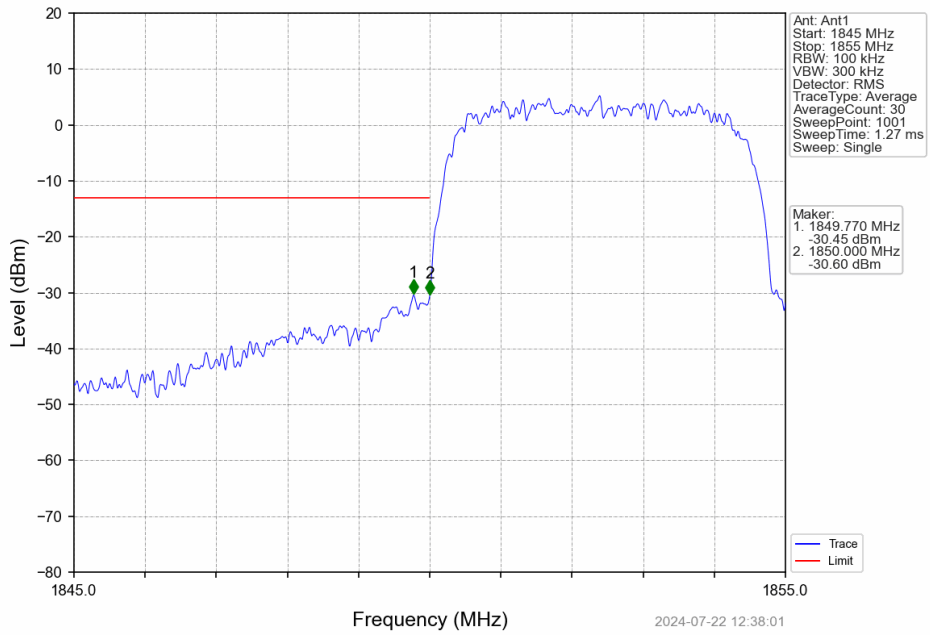


Band2\_HSDPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV

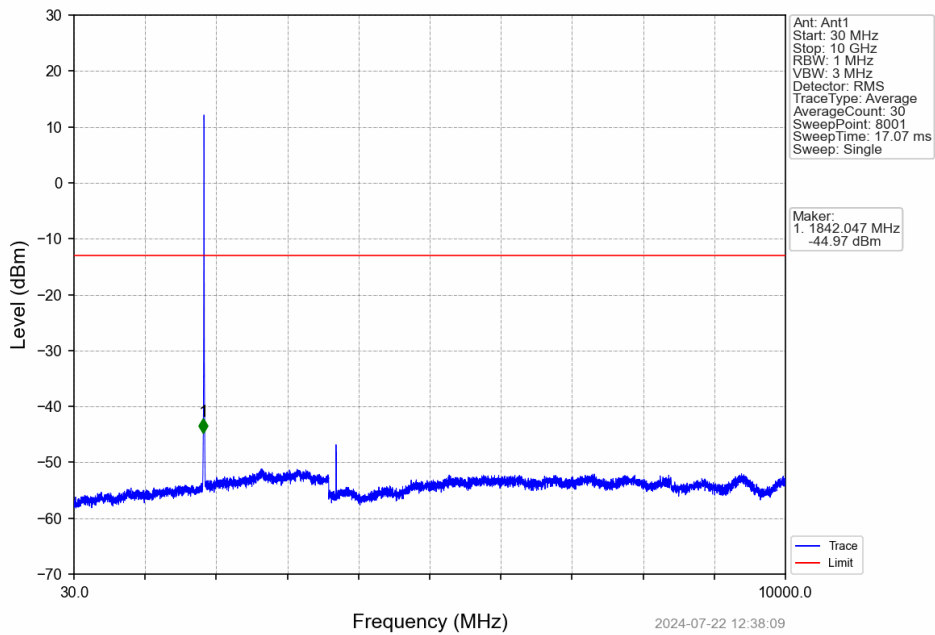




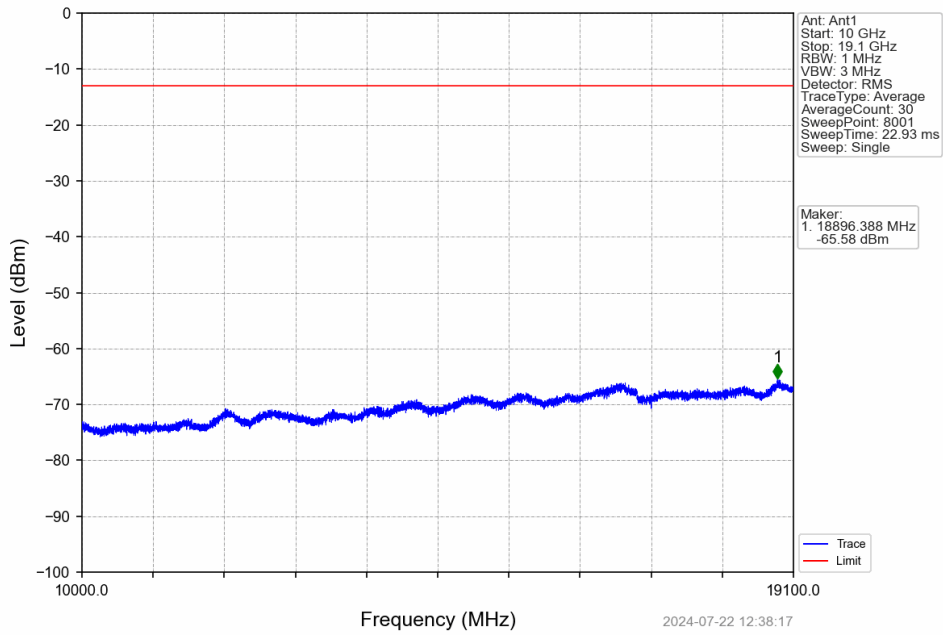
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



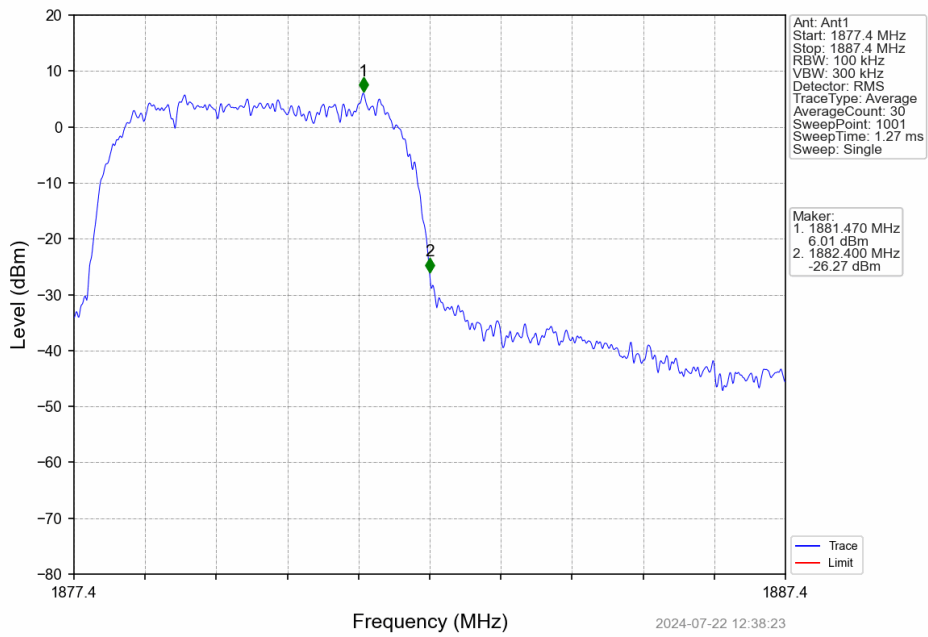
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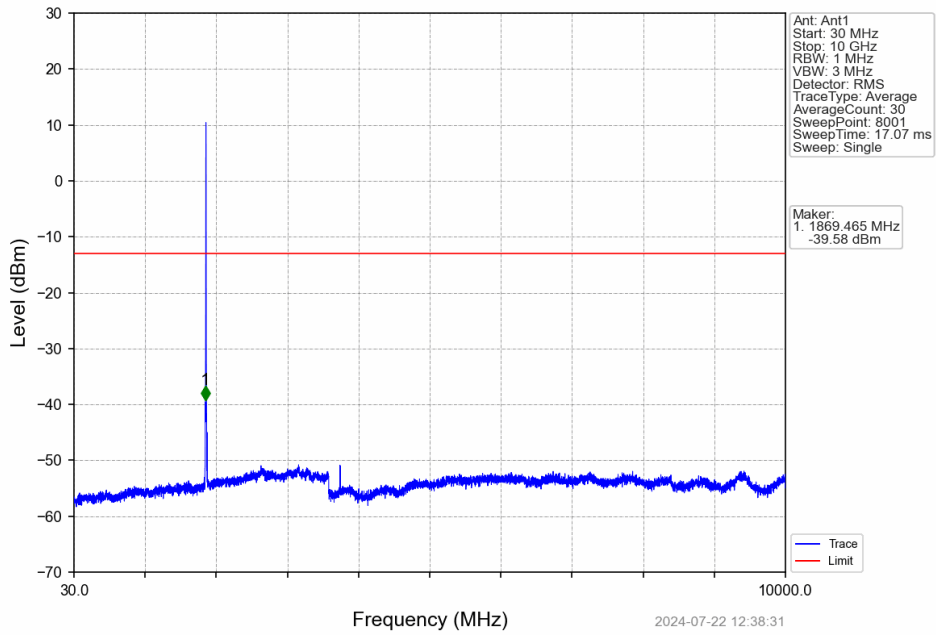
Band2\_HSUPA\_LCH\_1852.4MHz\_Subtest 1\_NTNV



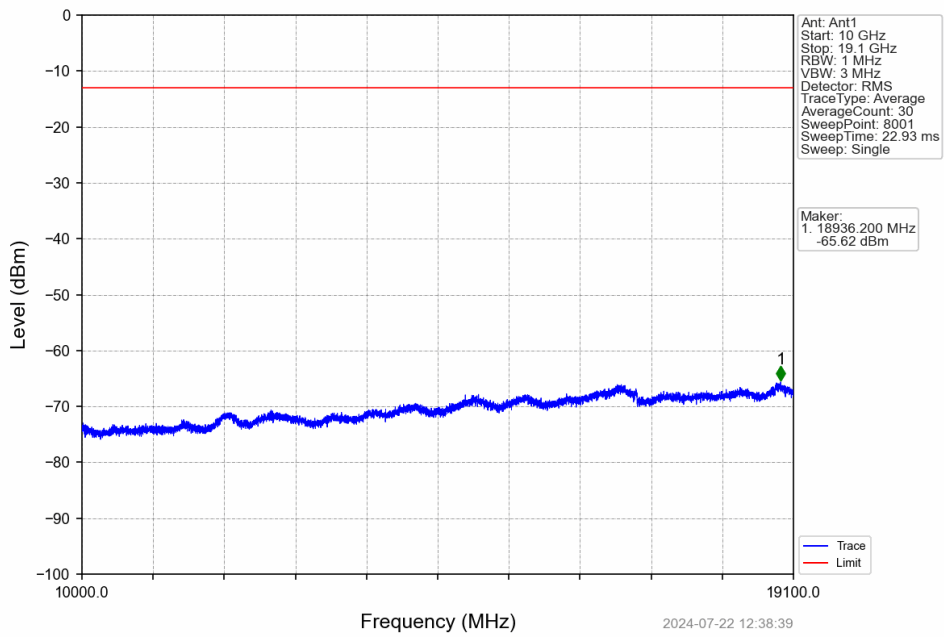
Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



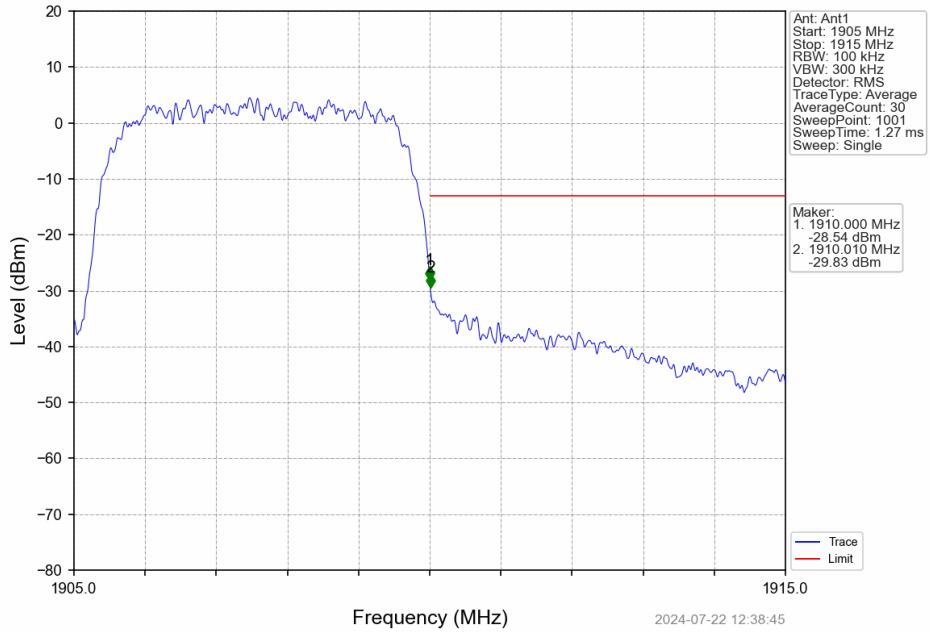
Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



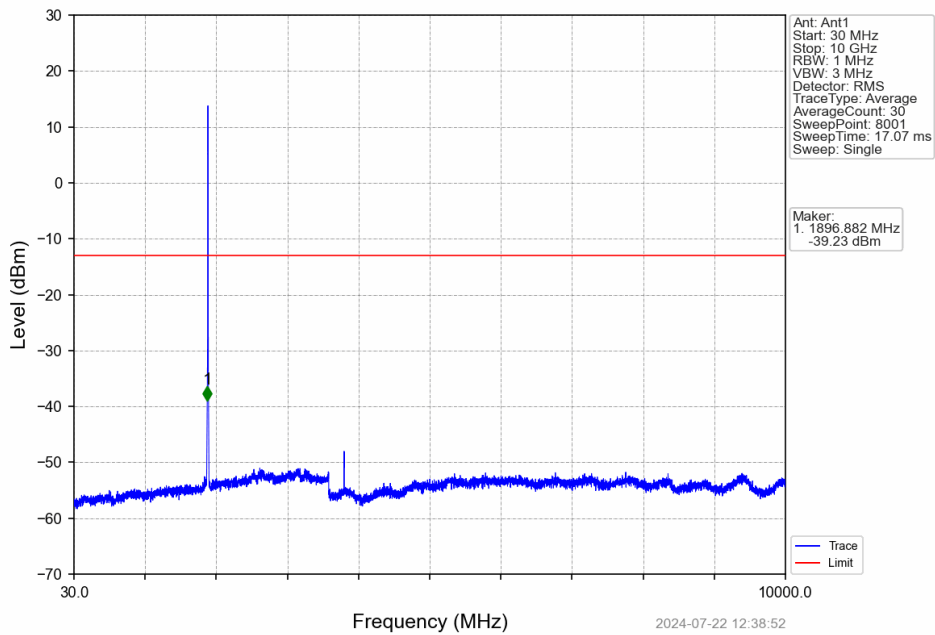
Band2\_HSUPA\_MCH\_1880MHz\_Subtest 1\_NTNV



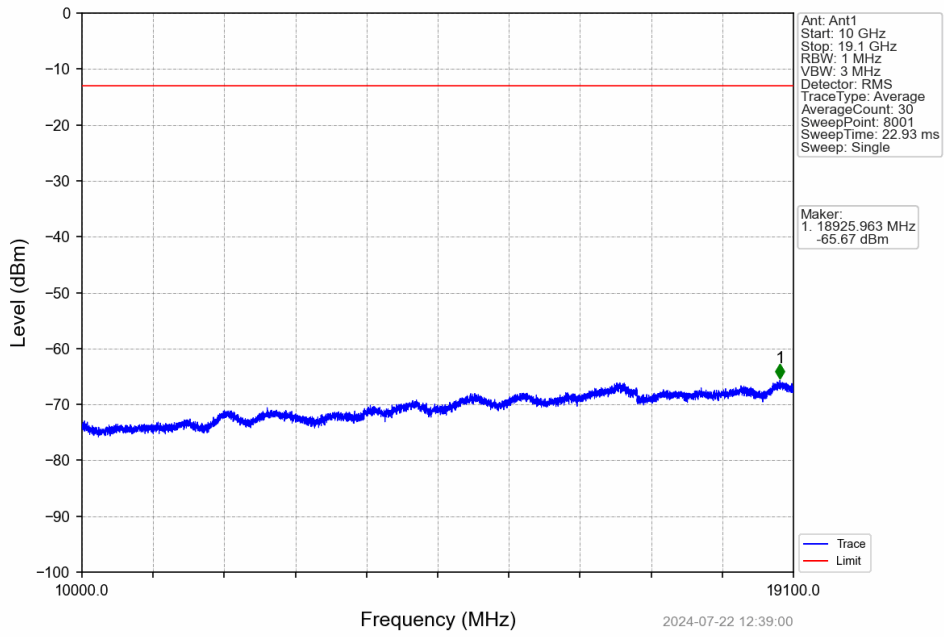
Band2\_HSUPA\_HCH\_1907.6MHz\_Subtest 1\_NTNV



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



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



## 7. Form731

### 7.1 Test Result

#### 7.1.1 Form731\_Power

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	0.1140	0.0104	ppm	4M18F9W	24E	20.57

#### 7.1.2 Form731\_EIRP

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	0.2075	0.0104	ppm	4M18F9W	24E	23.17