

1. Effective (Isotropic) Radiated Power Output Data

1.1 PCS1900_EIRP

1.1.1 Test Result

Band: PCS1900									
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict	
	Network	Subset				Result	Limit		
NTNV	GSM	GSM	1850.2	25.57	0.54	26.11	<=33.01	Pass	
			1880	25.56	0.54	26.10	<=33.01	Pass	
			1909.8	25.11	0.54	25.65	<=33.01	Pass	
	GPRS	1 TX Slot	1850.2	25.65	0.54	26.19	<=33.01	Pass	
		2 TX Slots	1850.2	24.20	0.54	24.74	<=33.01	Pass	
		3 TX Slots	1850.2	23.27	0.54	23.81	<=33.01	Pass	
		4 TX Slots	1850.2	21.45	0.54	21.99	<=33.01	Pass	
		1 TX Slot	1880	25.58	0.54	26.12	<=33.01	Pass	
		2 TX Slots	1880	24.05	0.54	24.59	<=33.01	Pass	
		3 TX Slots	1880	22.97	0.54	23.51	<=33.01	Pass	
		4 TX Slots	1880	20.99	0.54	21.53	<=33.01	Pass	
		1 TX Slot	1909.8	25.09	0.54	25.63	<=33.01	Pass	
		2 TX Slots	1909.8	22.74	0.54	23.28	<=33.01	Pass	
		3 TX Slots	1909.8	21.19	0.54	21.73	<=33.01	Pass	
		4 TX Slots	1909.8	18.73	0.54	19.27	<=33.01	Pass	
		EGPRS	1 TX Slot	1850.2	27.82	0.54	28.36	<=33.01	Pass
			2 TX Slots	1850.2	24.95	0.54	25.49	<=33.01	Pass
			3 TX Slots	1850.2	23.10	0.54	23.64	<=33.01	Pass
			4 TX Slots	1850.2	19.96	0.54	20.50	<=33.01	Pass
	1 TX Slot		1880	28.35	0.54	28.89	<=33.01	Pass	
	2 TX Slots		1880	26.35	0.54	26.89	<=33.01	Pass	
	3 TX Slots		1880	24.42	0.54	24.96	<=33.01	Pass	
	4 TX Slots		1880	21.30	0.54	21.84	<=33.01	Pass	
	1 TX Slot		1909.8	28.11	0.54	28.65	<=33.01	Pass	
	2 TX Slots		1909.8	25.99	0.54	26.53	<=33.01	Pass	
	3 TX Slots		1909.8	24.33	0.54	24.87	<=33.01	Pass	
	4 TX Slots		1909.8	21.20	0.54	21.74	<=33.01	Pass	

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 PCS1900

2.1.1 Test Result

Band: PCS1900							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
GSM	1850.2	20	3.27	20.728	0.0112	-2.5 to 2.5	Pass
			3.85	21.341	0.0115	-2.5 to 2.5	Pass
			4.43	23.084	0.0125	-2.5 to 2.5	Pass
		-30	3.85	24.957	0.0135	-2.5 to 2.5	Pass
		-20	3.85	24.150	0.0131	-2.5 to 2.5	Pass
		-10	3.85	28.605	0.0155	-2.5 to 2.5	Pass

		0	3.85	18.984	0.0103	-2.5 to 2.5	Pass	
		10	3.85	23.278	0.0126	-2.5 to 2.5	Pass	
		30	3.85	21.890	0.0118	-2.5 to 2.5	Pass	
		40	3.85	27.798	0.0150	-2.5 to 2.5	Pass	
		50	3.85	26.539	0.0143	-2.5 to 2.5	Pass	
	1880	20	3.27	31.672	0.0168	-2.5 to 2.5	Pass	
			3.85	30.865	0.0164	-2.5 to 2.5	Pass	
			4.43	28.799	0.0153	-2.5 to 2.5	Pass	
		-30	3.85	25.280	0.0134	-2.5 to 2.5	Pass	
		-20	3.85	26.022	0.0138	-2.5 to 2.5	Pass	
		-10	3.85	27.023	0.0144	-2.5 to 2.5	Pass	
		0	3.85	24.376	0.0130	-2.5 to 2.5	Pass	
		10	3.85	23.892	0.0127	-2.5 to 2.5	Pass	
		30	3.85	25.409	0.0135	-2.5 to 2.5	Pass	
		40	3.85	25.861	0.0138	-2.5 to 2.5	Pass	
		50	3.85	27.185	0.0145	-2.5 to 2.5	Pass	
	1909.8	20	3.27	25.280	0.0132	-2.5 to 2.5	Pass	
			3.85	28.121	0.0147	-2.5 to 2.5	Pass	
			4.43	24.118	0.0126	-2.5 to 2.5	Pass	
		-30	3.85	30.123	0.0158	-2.5 to 2.5	Pass	
		-20	3.85	29.154	0.0153	-2.5 to 2.5	Pass	
		-10	3.85	27.443	0.0144	-2.5 to 2.5	Pass	
		0	3.85	25.312	0.0133	-2.5 to 2.5	Pass	
		10	3.85	20.598	0.0108	-2.5 to 2.5	Pass	
		30	3.85	26.668	0.0140	-2.5 to 2.5	Pass	
		40	3.85	25.667	0.0134	-2.5 to 2.5	Pass	
		50	3.85	30.026	0.0157	-2.5 to 2.5	Pass	
	GPRS	1850.2	20	3.27	19.533	0.0106	-2.5 to 2.5	Pass
				3.85	21.535	0.0116	-2.5 to 2.5	Pass
				4.43	24.699	0.0133	-2.5 to 2.5	Pass
			-30	3.85	22.084	0.0119	-2.5 to 2.5	Pass
			-20	3.85	25.441	0.0138	-2.5 to 2.5	Pass
			-10	3.85	20.437	0.0110	-2.5 to 2.5	Pass
0			3.85	22.277	0.0120	-2.5 to 2.5	Pass	
10			3.85	22.084	0.0119	-2.5 to 2.5	Pass	
30			3.85	15.207	0.0082	-2.5 to 2.5	Pass	
40			3.85	23.343	0.0126	-2.5 to 2.5	Pass	
50			3.85	20.663	0.0112	-2.5 to 2.5	Pass	
1880		20	3.27	20.631	0.0110	-2.5 to 2.5	Pass	
			3.85	23.827	0.0127	-2.5 to 2.5	Pass	
			4.43	18.952	0.0101	-2.5 to 2.5	Pass	
		-30	3.85	20.211	0.0108	-2.5 to 2.5	Pass	
		-20	3.85	20.405	0.0109	-2.5 to 2.5	Pass	
		-10	3.85	22.374	0.0119	-2.5 to 2.5	Pass	
		0	3.85	24.311	0.0129	-2.5 to 2.5	Pass	
	10	3.85	24.505	0.0130	-2.5 to 2.5	Pass		
1909.8	20	3.85	25.990	0.0138	-2.5 to 2.5	Pass		
		3.85	23.536	0.0125	-2.5 to 2.5	Pass		
		3.85	20.954	0.0111	-2.5 to 2.5	Pass		
	3.27	23.730	0.0124	-2.5 to 2.5	Pass			
	3.85	19.307	0.0101	-2.5 to 2.5	Pass			
	4.43	20.146	0.0105	-2.5 to 2.5	Pass			
	-30	3.85	17.241	0.0090	-2.5 to 2.5	Pass		
	-20	3.85	21.276	0.0111	-2.5 to 2.5	Pass		
	-10	3.85	20.469	0.0107	-2.5 to 2.5	Pass		
0	3.85	20.889	0.0109	-2.5 to 2.5	Pass			
10	3.85	21.761	0.0114	-2.5 to 2.5	Pass			
30	3.85	21.922	0.0115	-2.5 to 2.5	Pass			
40	3.85	21.825	0.0114	-2.5 to 2.5	Pass			

EGPRS	1850.2	50	3.85	21.406	0.0112	-2.5 to 2.5	Pass
		20	3.27	31.350	0.0169	-2.5 to 2.5	Pass
			3.85	32.286	0.0175	-2.5 to 2.5	Pass
			4.43	28.993	0.0157	-2.5 to 2.5	Pass
			-30	3.85	24.311	0.0131	-2.5 to 2.5
		-20	3.85	34.320	0.0185	-2.5 to 2.5	Pass
		-10	3.85	27.152	0.0147	-2.5 to 2.5	Pass
		0	3.85	24.311	0.0131	-2.5 to 2.5	Pass
		10	3.85	22.116	0.0120	-2.5 to 2.5	Pass
		30	3.85	24.182	0.0131	-2.5 to 2.5	Pass
	40	3.85	25.570	0.0138	-2.5 to 2.5	Pass	
	50	3.85	19.372	0.0105	-2.5 to 2.5	Pass	
	1880	20	3.27	23.440	0.0125	-2.5 to 2.5	Pass
			3.85	23.472	0.0125	-2.5 to 2.5	Pass
			4.43	27.023	0.0144	-2.5 to 2.5	Pass
		-30	3.85	21.502	0.0114	-2.5 to 2.5	Pass
		-20	3.85	27.378	0.0146	-2.5 to 2.5	Pass
		-10	3.85	24.634	0.0131	-2.5 to 2.5	Pass
		0	3.85	23.859	0.0127	-2.5 to 2.5	Pass
		10	3.85	29.251	0.0156	-2.5 to 2.5	Pass
		30	3.85	29.090	0.0155	-2.5 to 2.5	Pass
		40	3.85	31.059	0.0165	-2.5 to 2.5	Pass
	50	3.85	27.604	0.0147	-2.5 to 2.5	Pass	
	1909.8	20	3.27	28.089	0.0147	-2.5 to 2.5	Pass
			3.85	25.312	0.0133	-2.5 to 2.5	Pass
			4.43	26.991	0.0141	-2.5 to 2.5	Pass
		-30	3.85	21.728	0.0114	-2.5 to 2.5	Pass
		-20	3.85	20.211	0.0106	-2.5 to 2.5	Pass
		-10	3.85	25.667	0.0134	-2.5 to 2.5	Pass
		0	3.85	26.281	0.0138	-2.5 to 2.5	Pass
		10	3.85	27.120	0.0142	-2.5 to 2.5	Pass
		30	3.85	23.407	0.0123	-2.5 to 2.5	Pass
		40	3.85	31.317	0.0164	-2.5 to 2.5	Pass
	50	3.85	22.213	0.0116	-2.5 to 2.5	Pass	

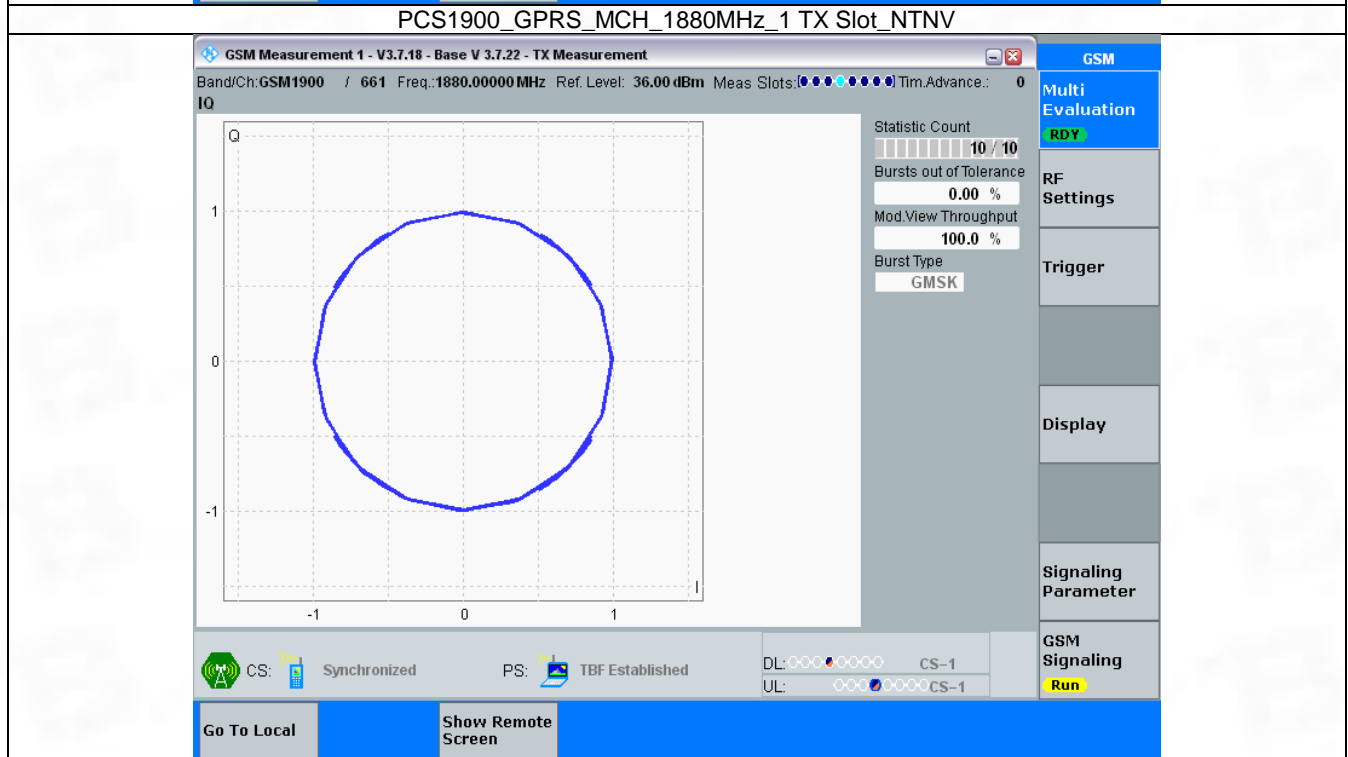
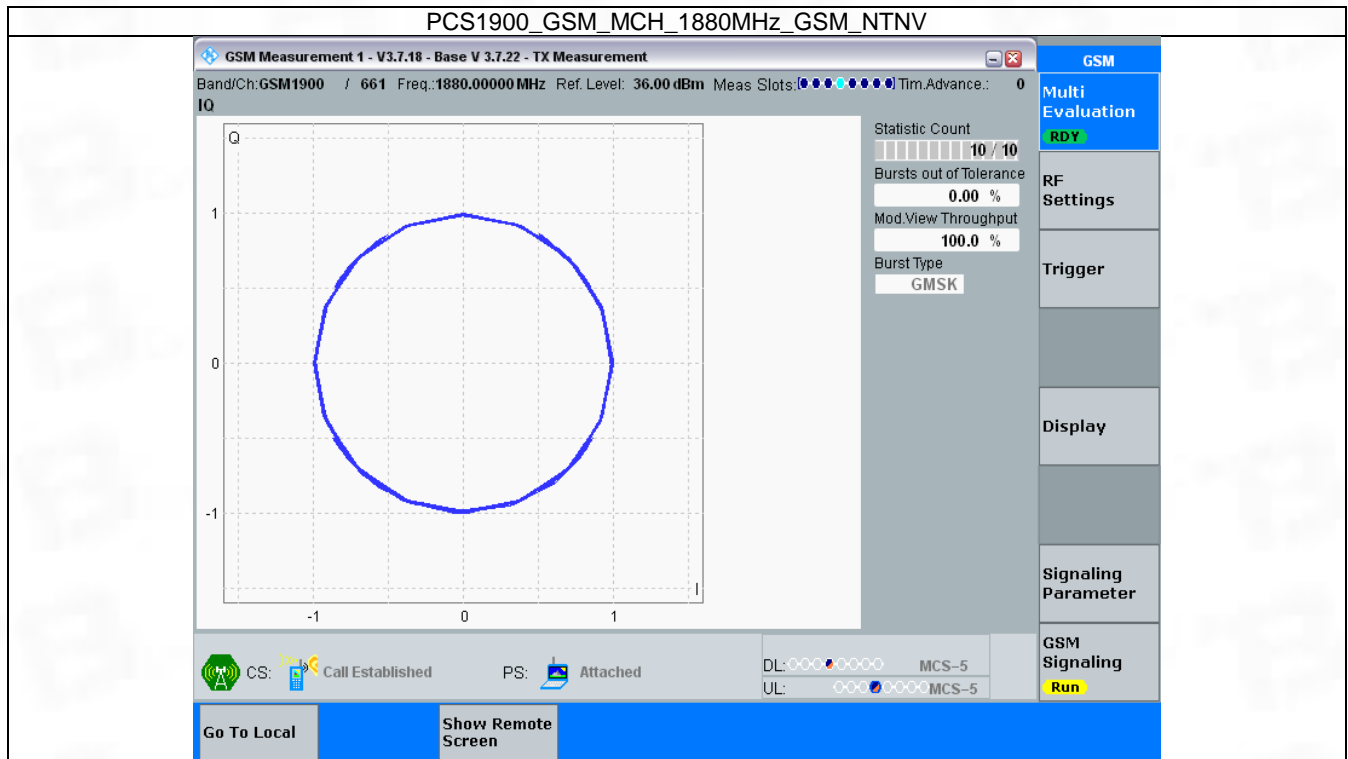
3. Modulation Characteristics

3.1 PCS1900

3.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1880	Refer To Test Graph		Pass
	GPRS	1 TX Slot	1880	Refer To Test Graph		Pass
	EGPRS	1 TX Slot	1880	Refer To Test Graph		Pass

3.1.2 Test Graph

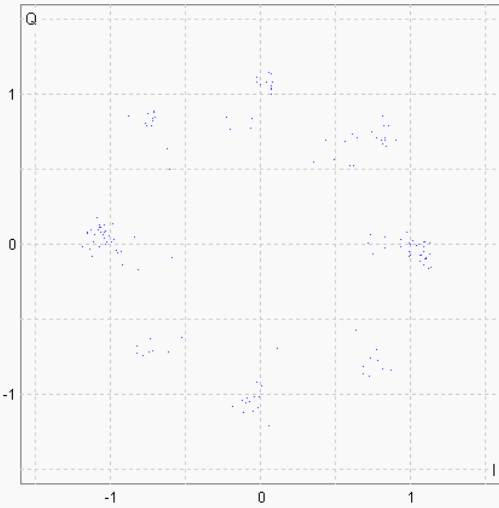


PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV

GSM Measurement 1 - V3.7.18 - Base V 3.7.22 - TX Measurement

Band/Ch: GSM1900 / 661 Freq.: 1880.00000 MHz Ref. Level: 39.23 dBm Meas Slots: [Progress Bar] Tim. Advance.: 0

IQ



Statistic Count: 10 / 10
Bursts out of Tolerance: 0.00 %
Mod. View Throughput: 100.0 %
Burst Type: 8PSK

Multi Evaluation **RDY**

RF Settings

Trigger

Display

Signaling Parameter

GSM Signaling **Run**

CS: Synchronized PS: TBF Established DL: MCS-5 UL: MCS-5

Go To Local **Show Remote Screen**

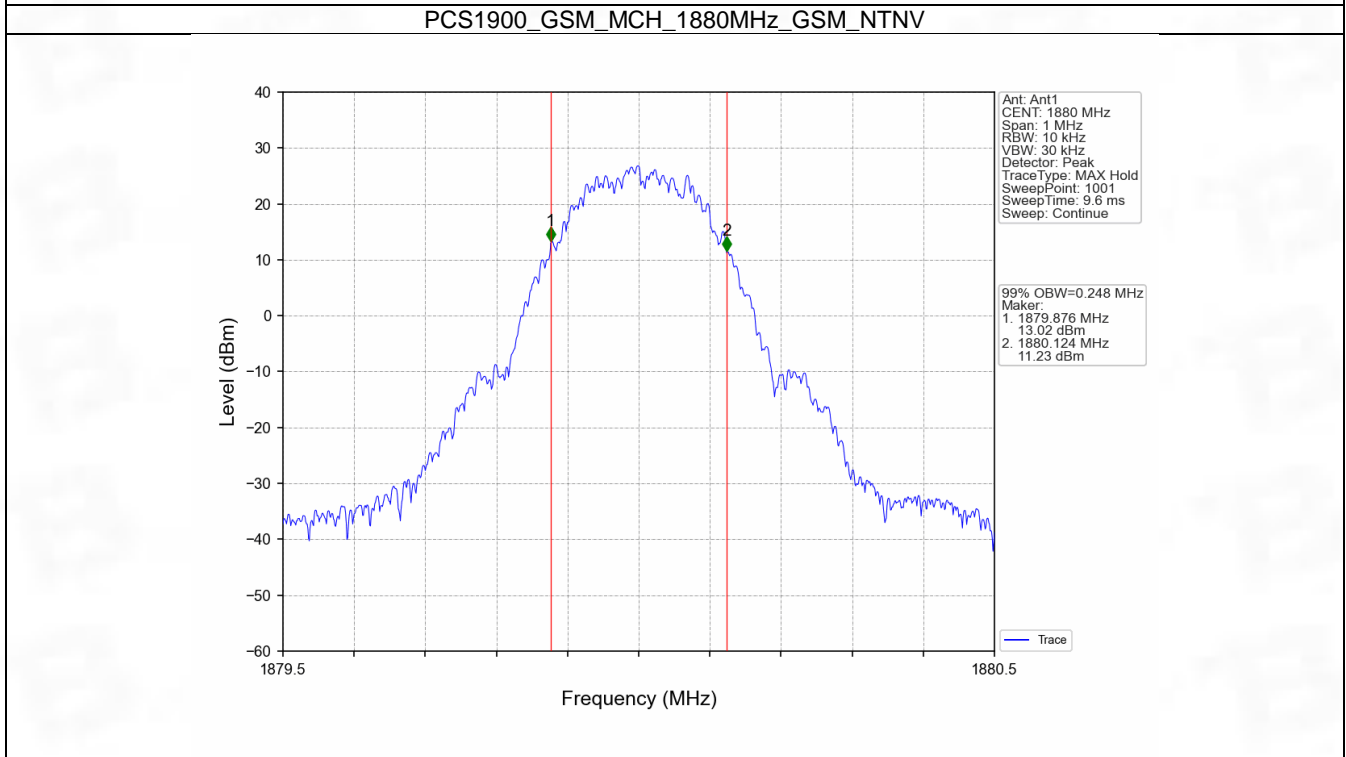
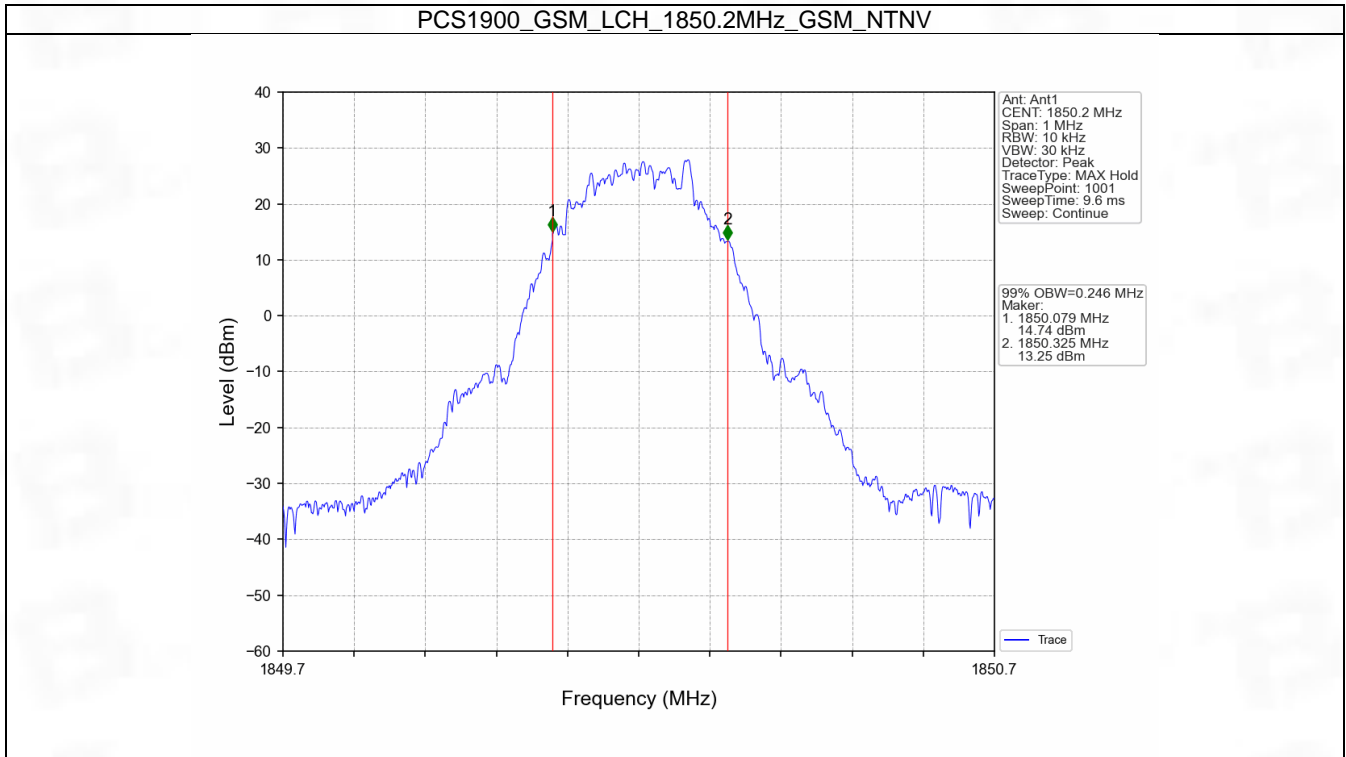
4. 99% & 26dB Bandwidth

4.1 PCS1900_OBW

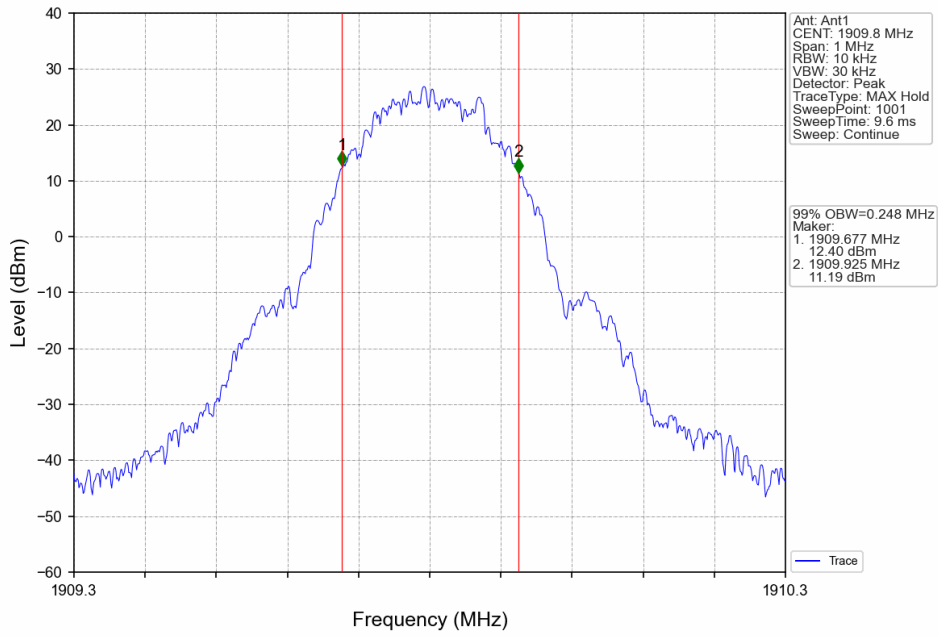
4.1.1 Test Result

Band: PCS1900					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GSM	GSM	1850.2	0.246	Pass
			1880	0.248	Pass
			1909.8	0.248	Pass
	GPRS	1 TX Slot	1850.2	0.242	Pass
			1880	0.246	Pass
			1909.8	0.244	Pass
	EGPRS	1 TX Slot	1850.2	0.256	Pass
			1880	0.269	Pass
			1909.8	0.269	Pass

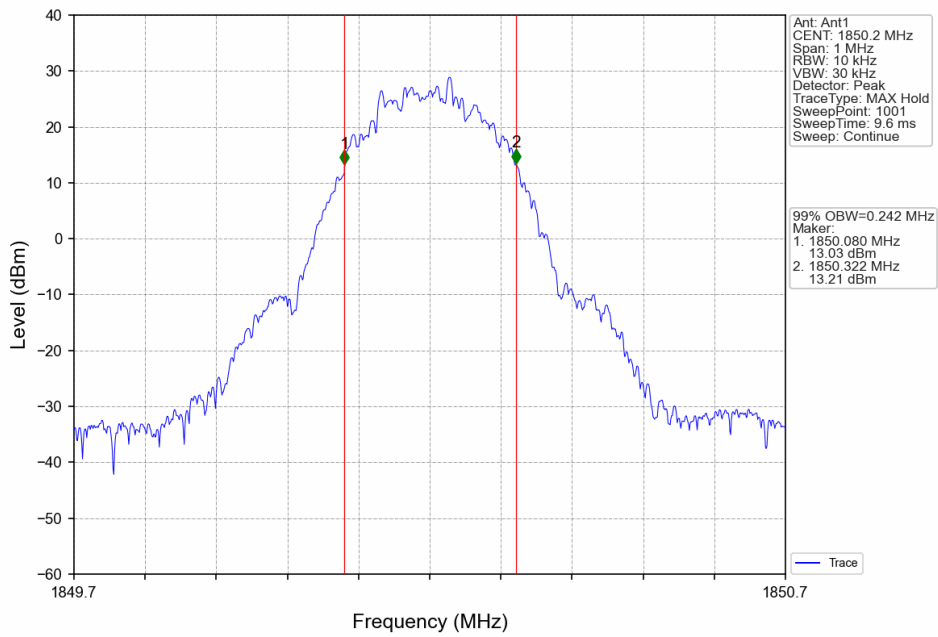
4.1.2 Test Graph



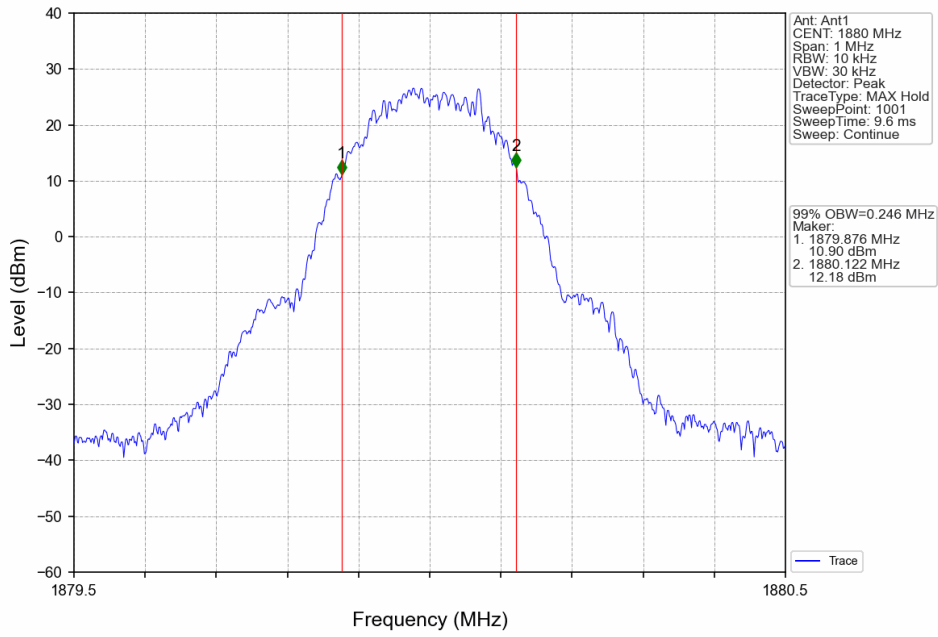
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



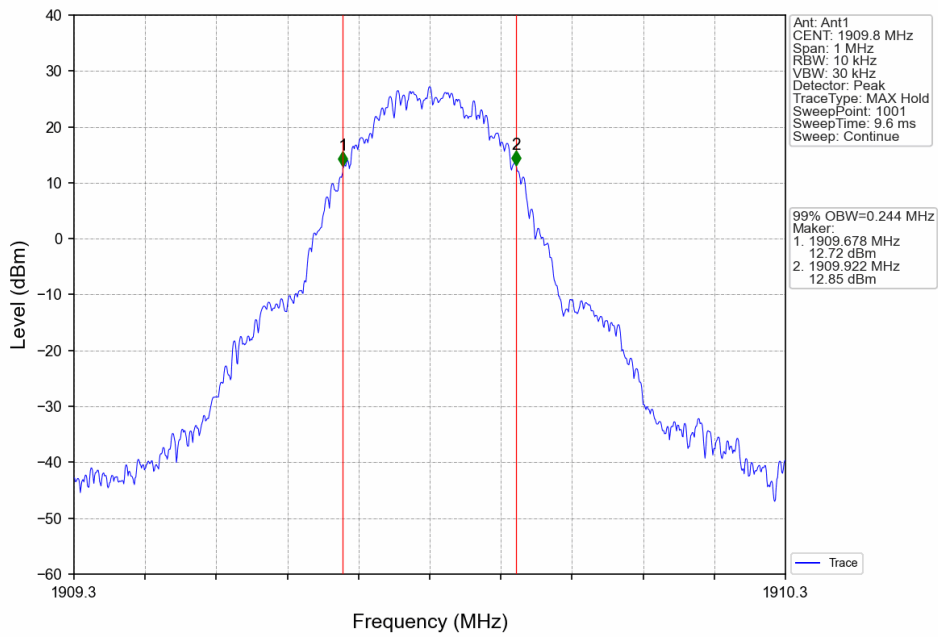
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



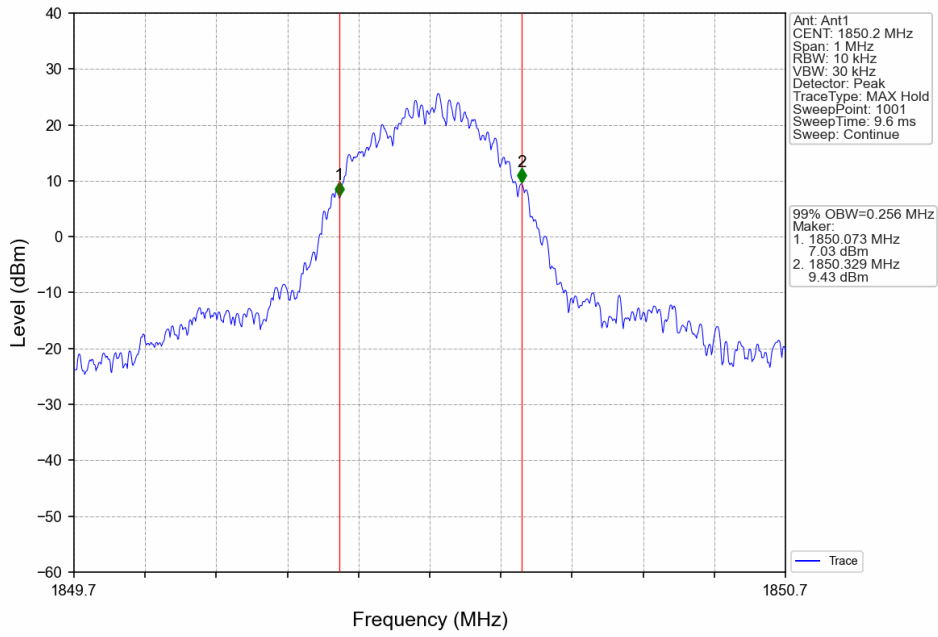
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



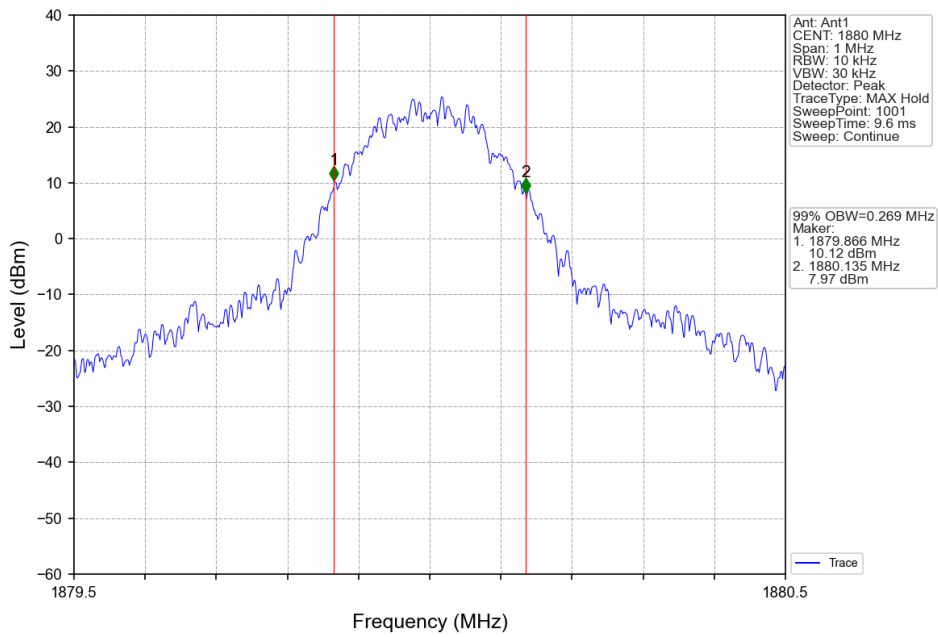
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



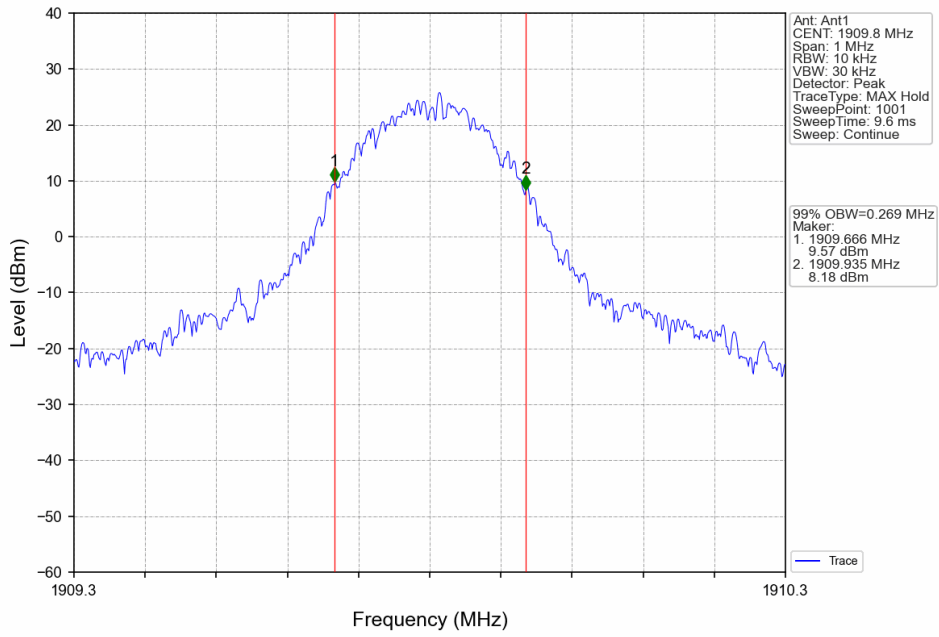
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV

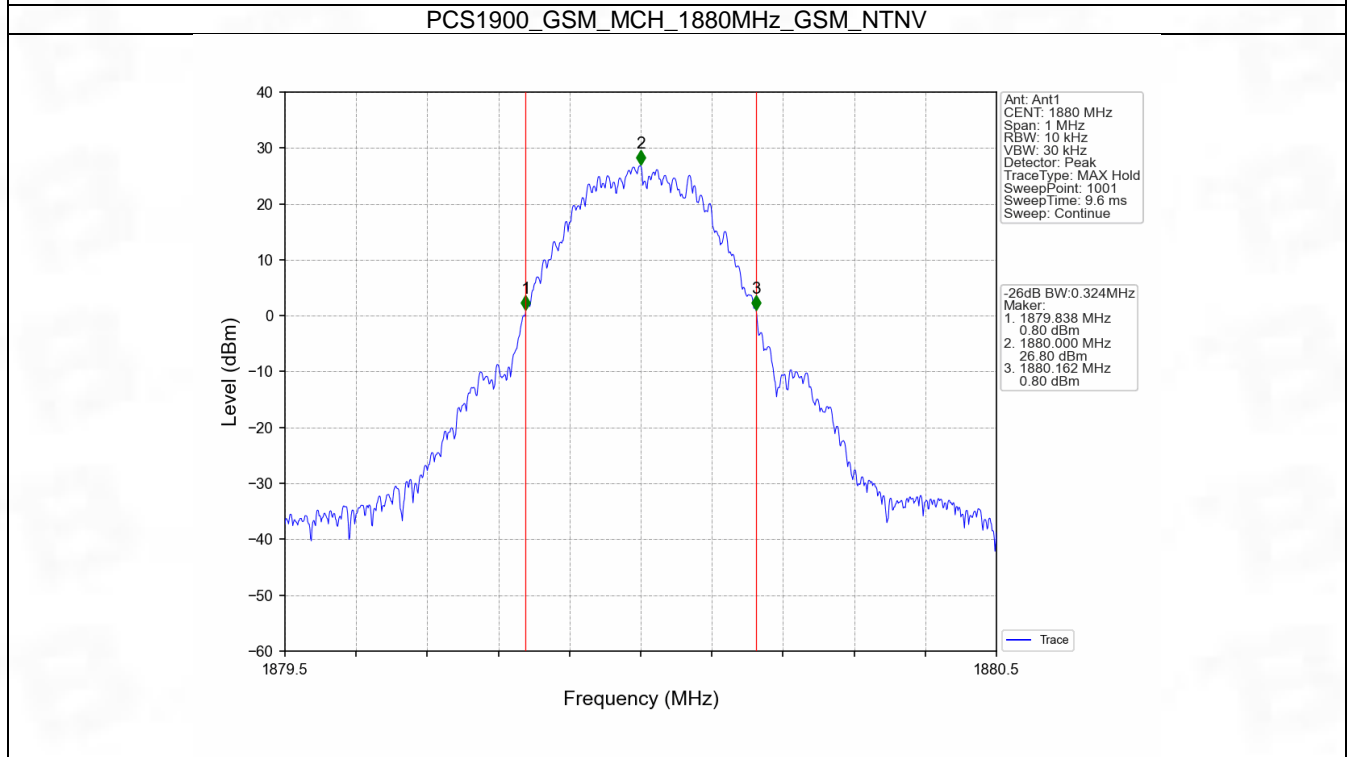
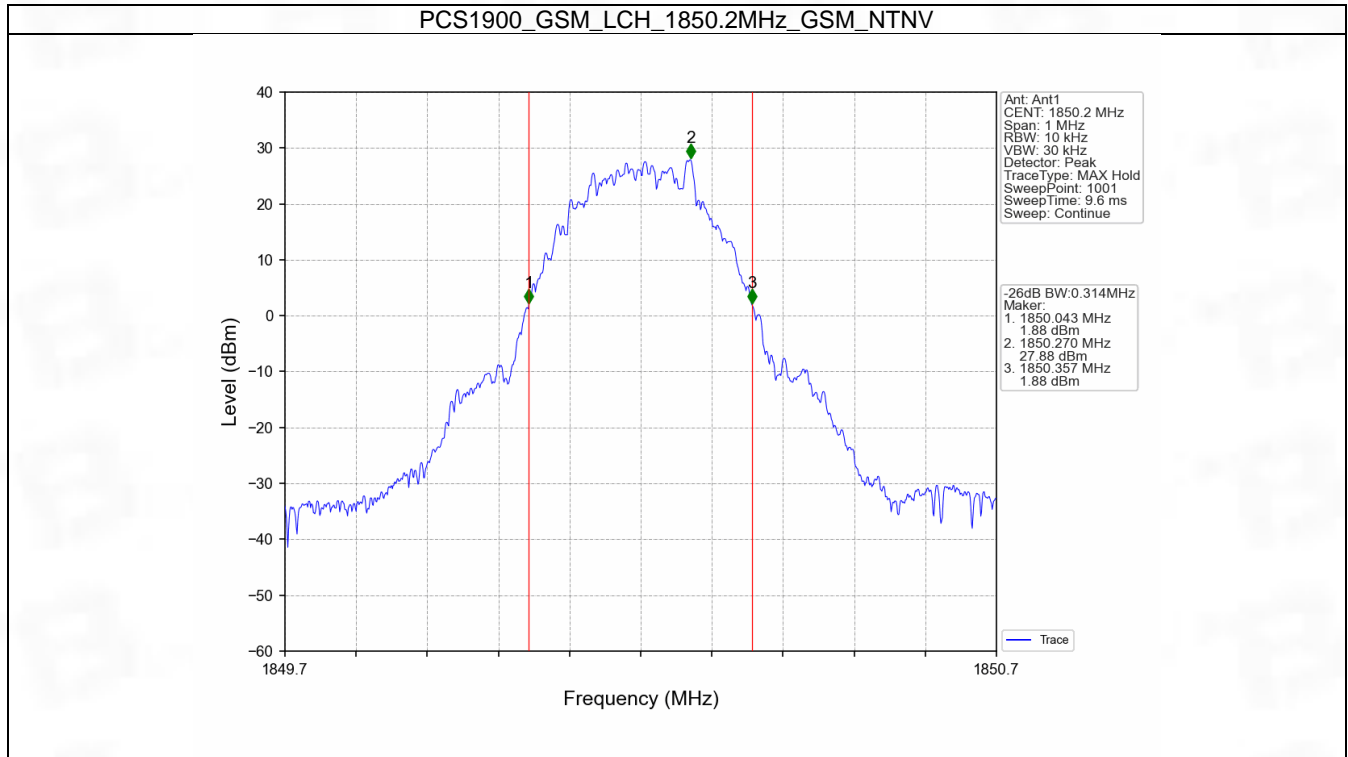


4.2 PCS1900_XDB

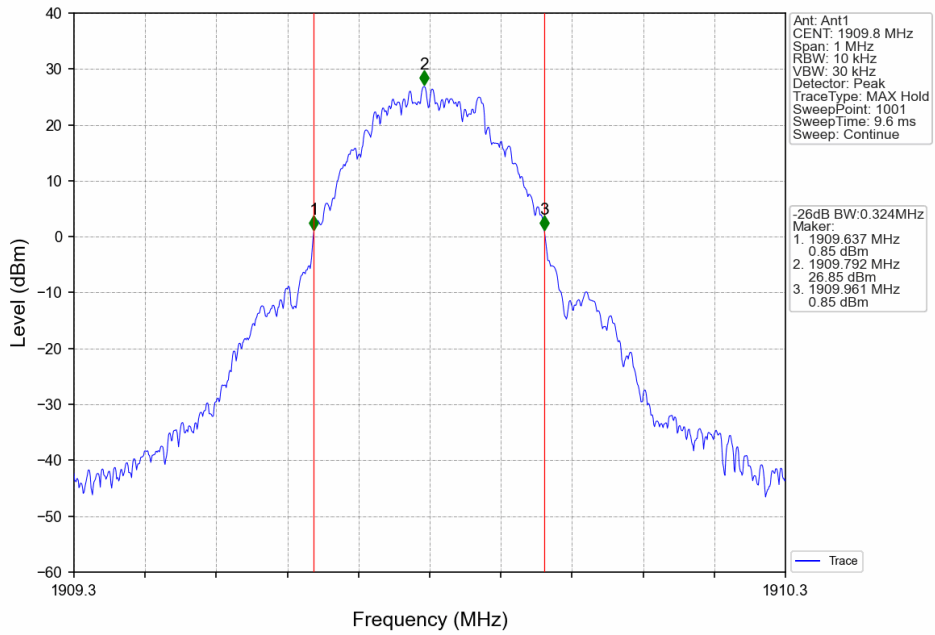
4.2.1 Test Result

Band: PCS1900					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GSM	GSM	1850.2	0.314	Pass
			1880	0.324	Pass
			1909.8	0.324	Pass
	GPRS	1 TX Slot	1850.2	0.308	Pass
			1880	0.320	Pass
			1909.8	0.313	Pass
	EGPRS	1 TX Slot	1850.2	0.320	Pass
			1880	0.352	Pass
			1909.8	0.340	Pass

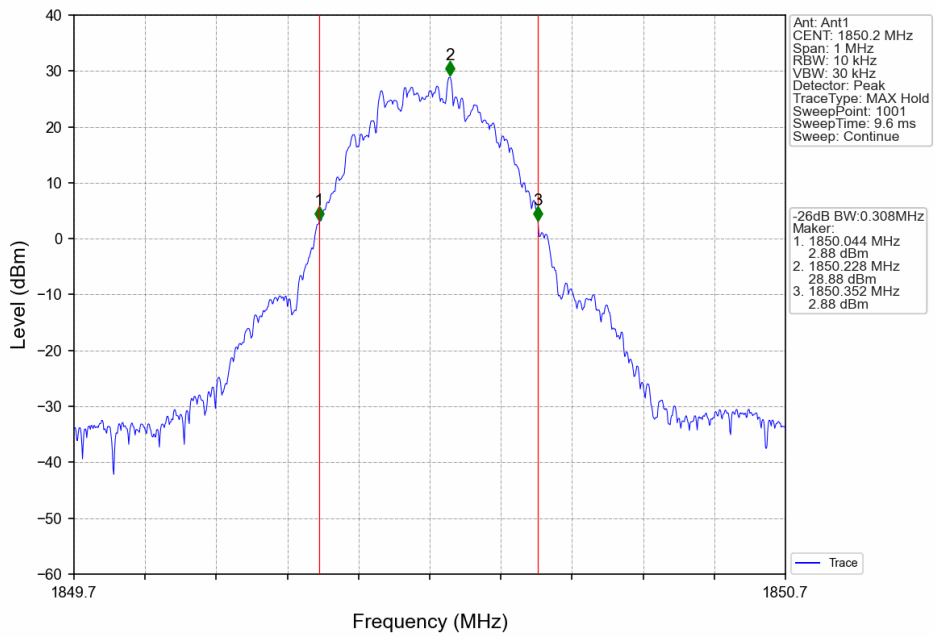
4.2.2 Test Graph



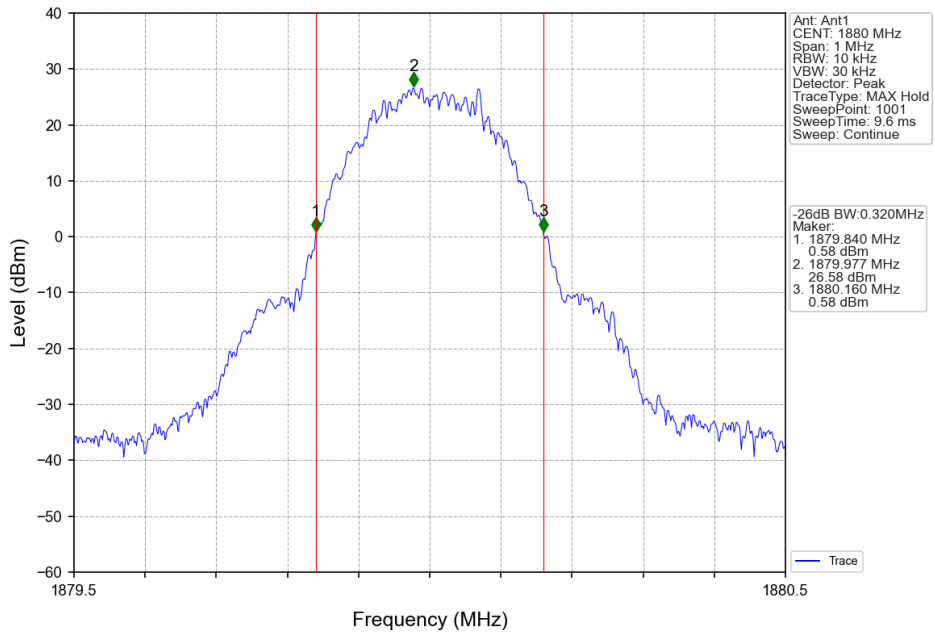
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



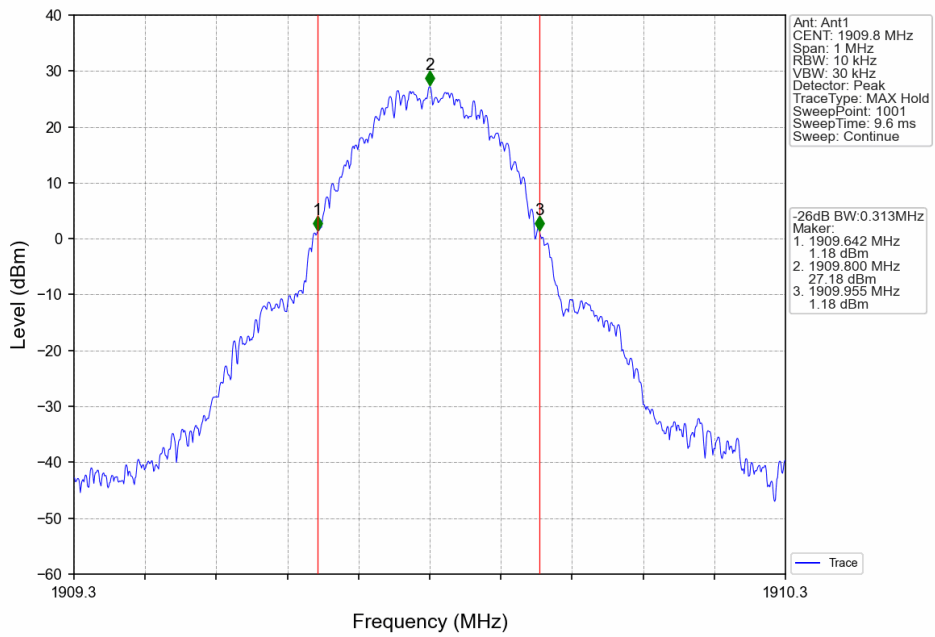
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



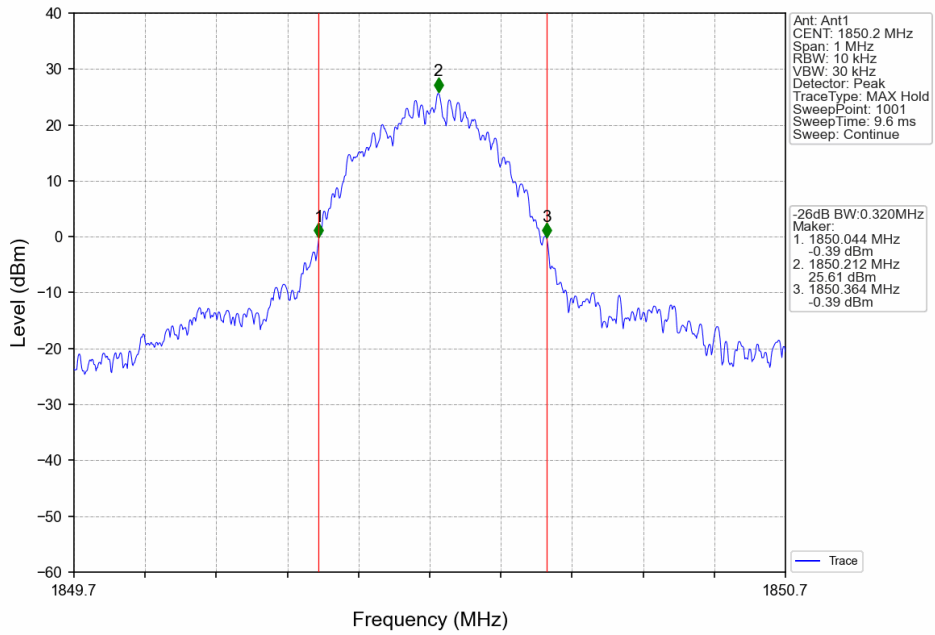
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



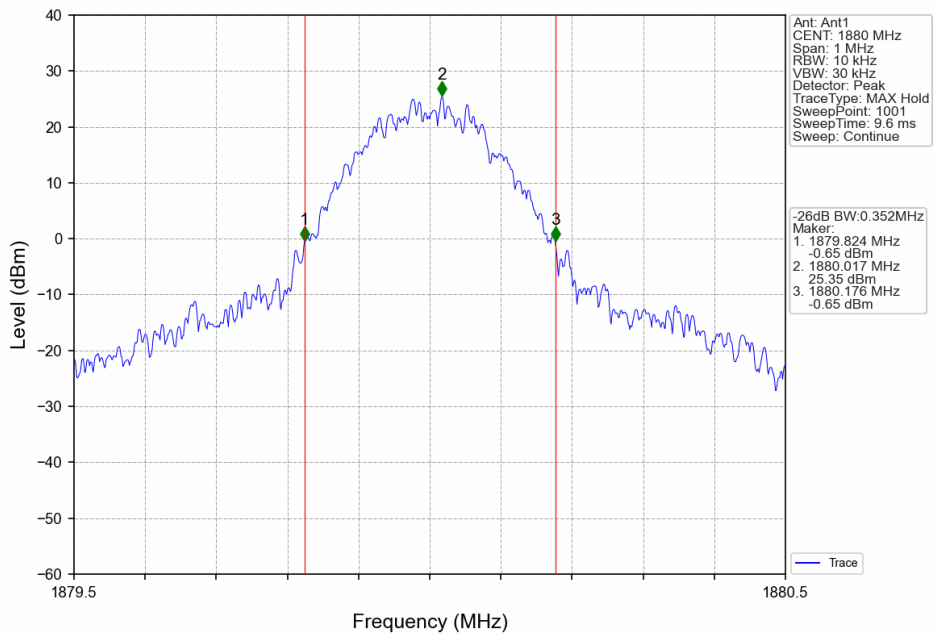
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



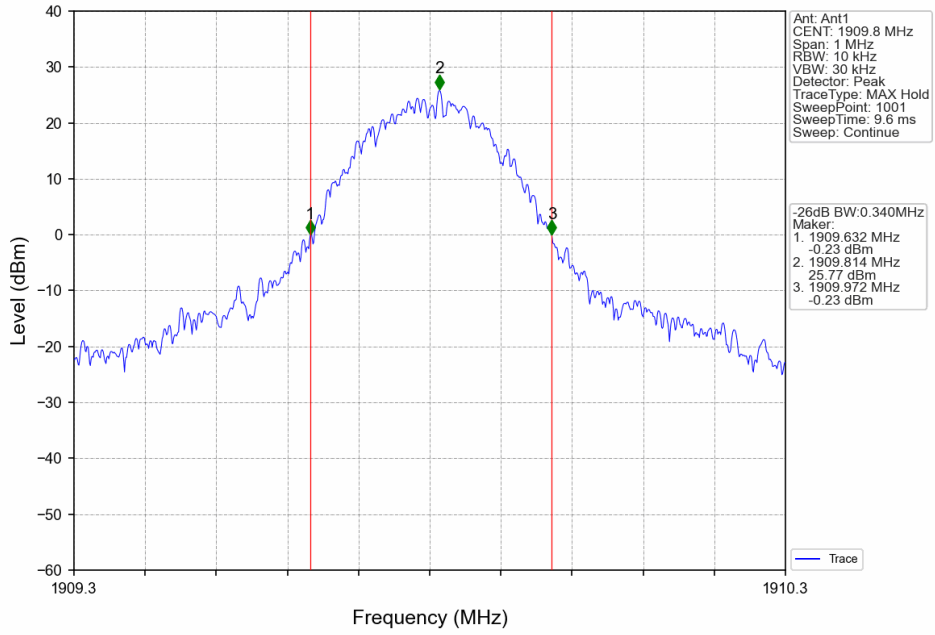
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



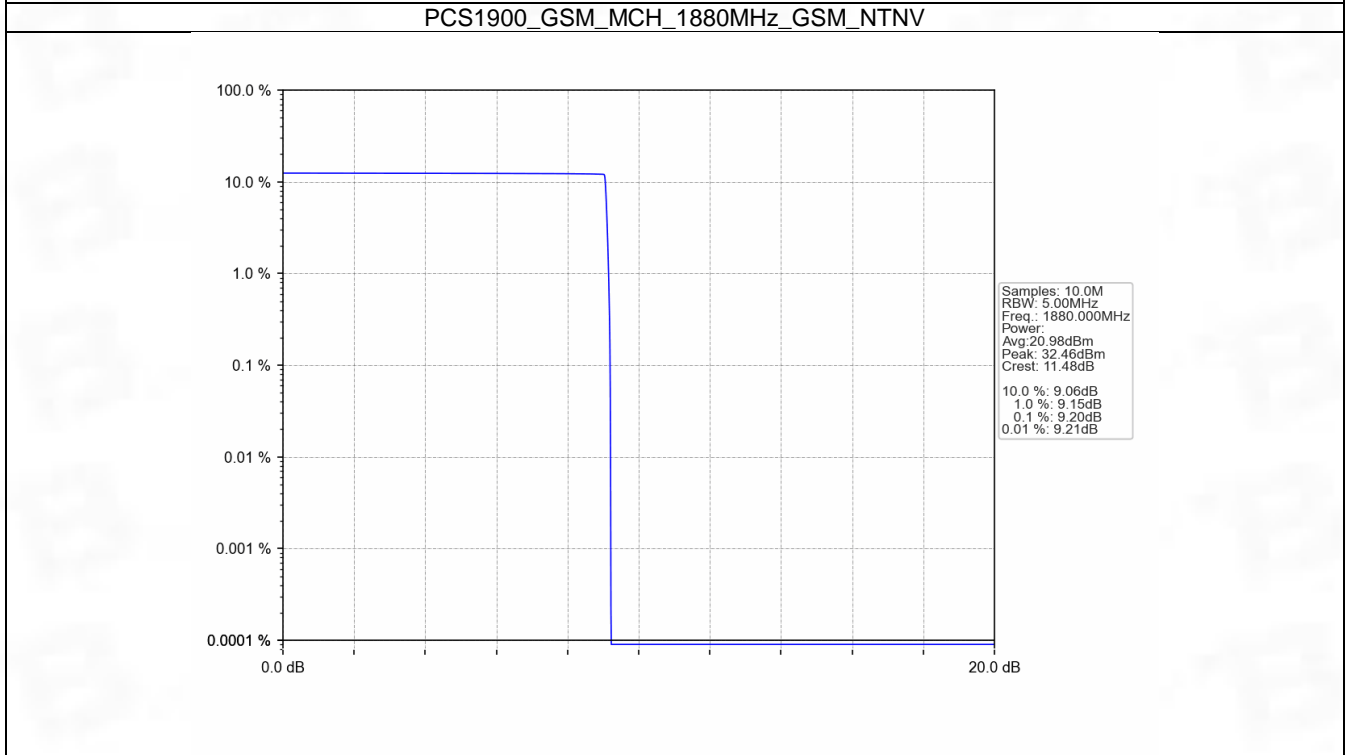
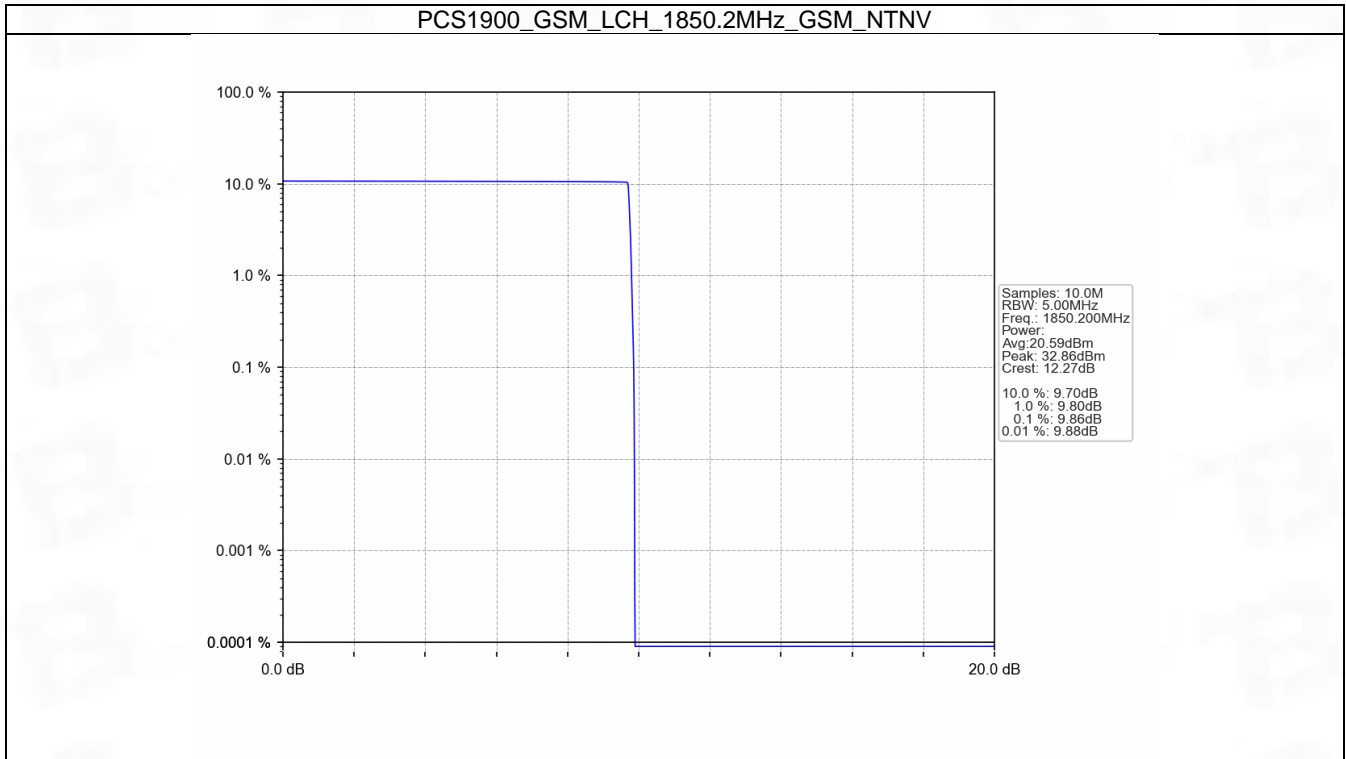
5. Peak-Average Ratio

5.1 PCS1900

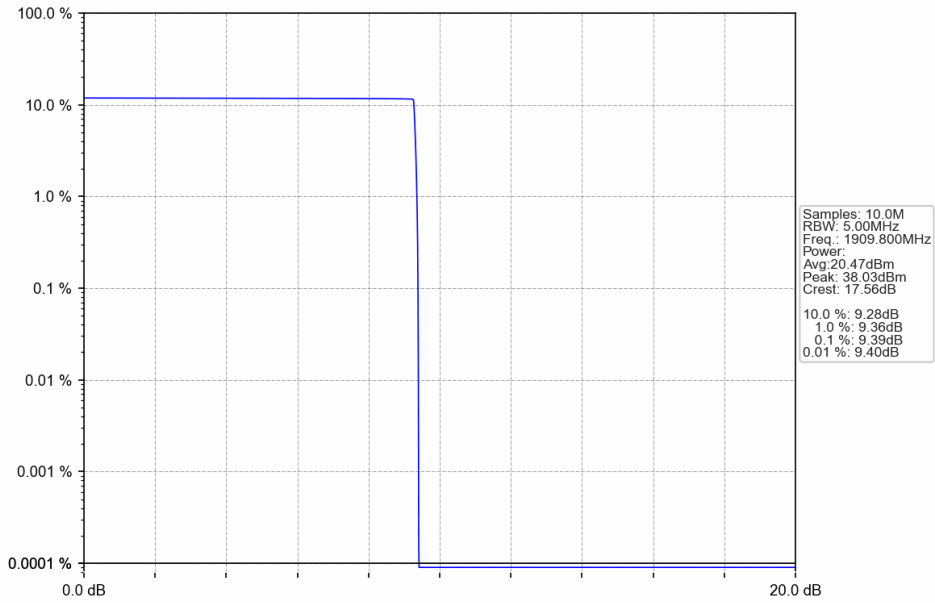
5.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	9.86	<=13	Pass
			1880	9.20	<=13	Pass
			1909.8	9.39	<=13	Pass
	GPRS	4 TX Slots	1850.2	3.62	<=13	Pass
			1880	3.74	<=13	Pass
			1909.8	3.90	<=13	Pass
	EGPRS	4 TX Slots	1850.2	9.18	<=13	Pass
			1880	7.24	<=13	Pass
			1909.8	7.26	<=13	Pass

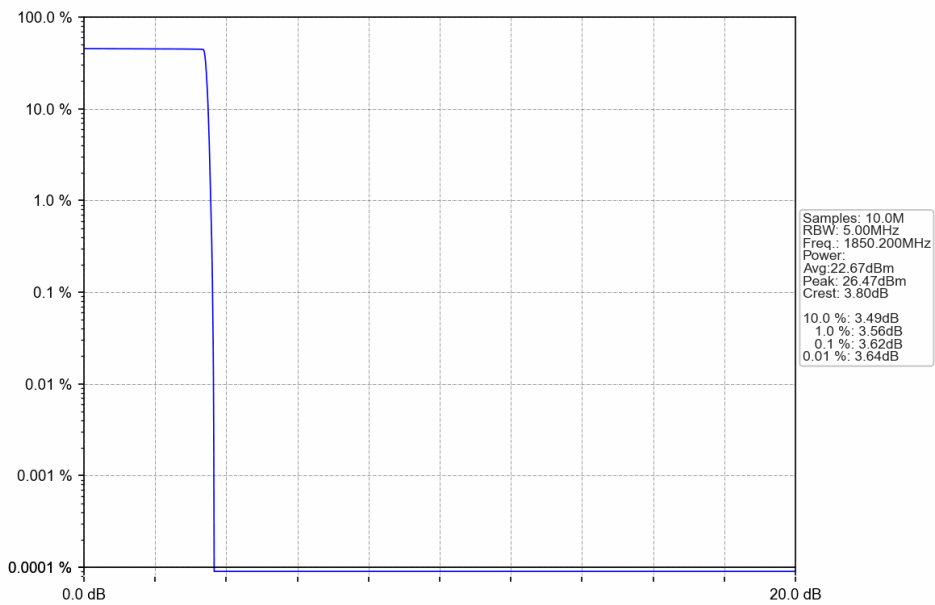
5.1.2 Test Graph



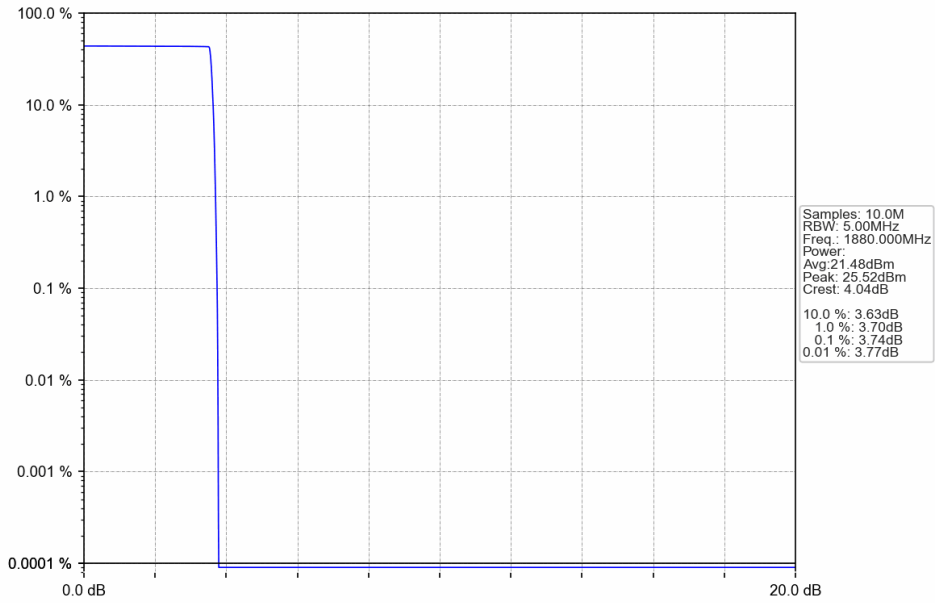
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



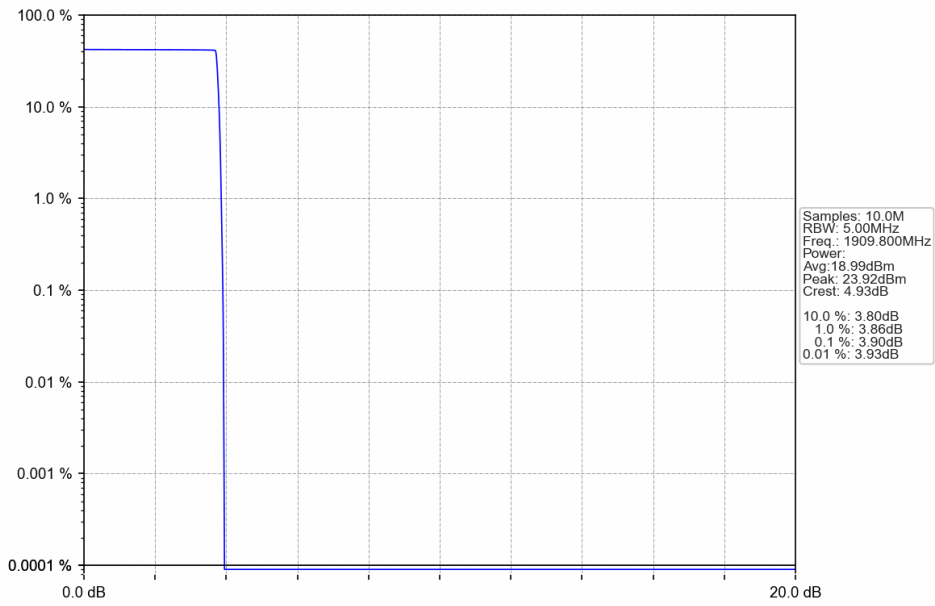
PCS1900_GPRS_LCH_1850.2MHz_4 TX Slots_NTNV



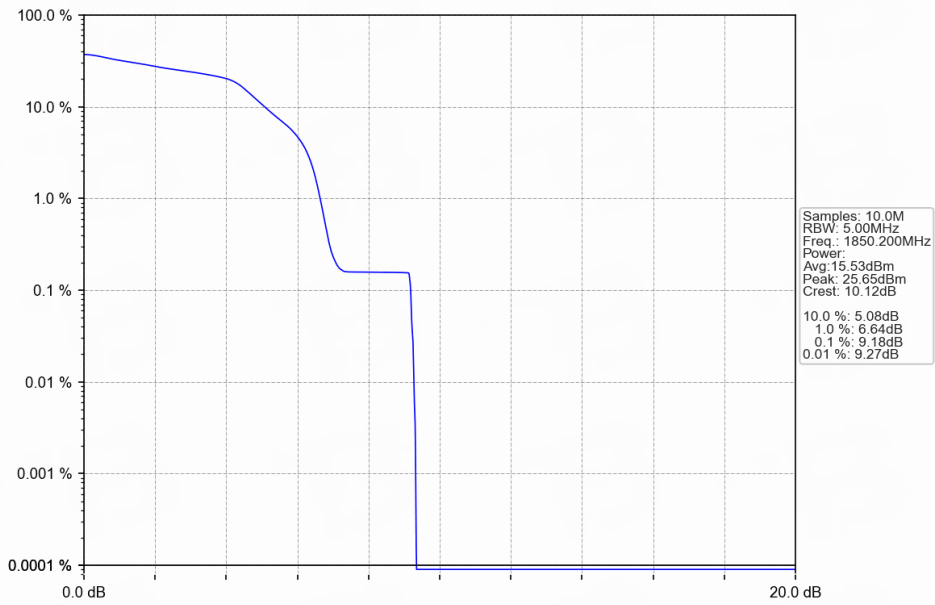
PCS1900_GPRS_MCH_1880MHz_4 TX Slots_NTNV



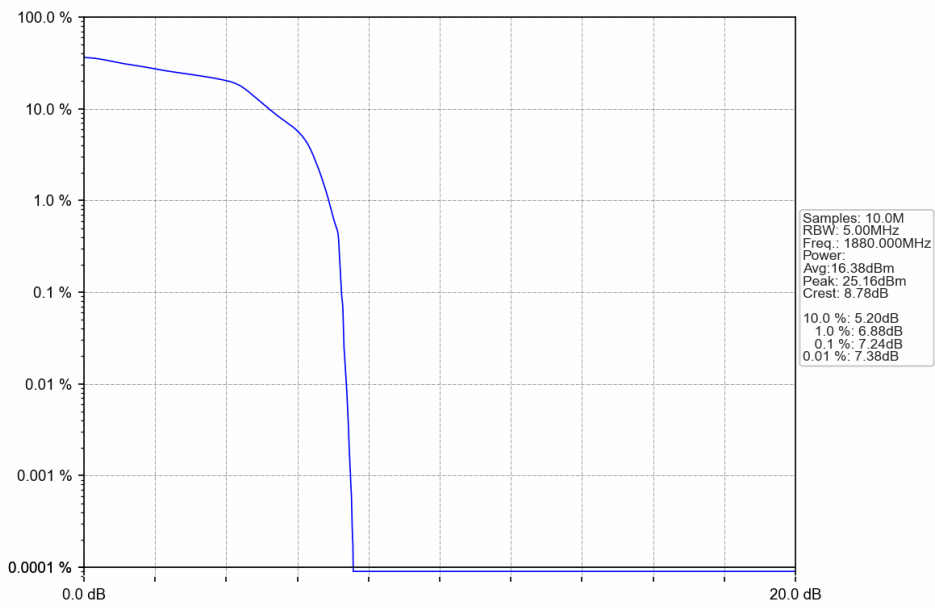
PCS1900_GPRS_HCH_1909.8MHz_4 TX Slots_NTNV



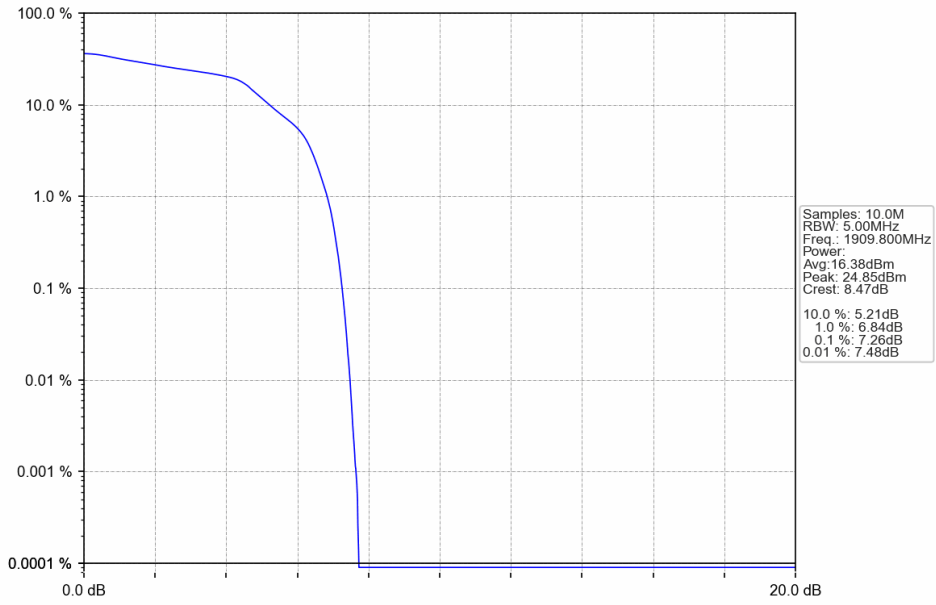
PCS1900_EGPRS_LCH_1850.2MHz_4 TX Slots_NTNV



PCS1900_EGPRS_MCH_1880MHz_4 TX Slots_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_4 TX Slots_NTNV



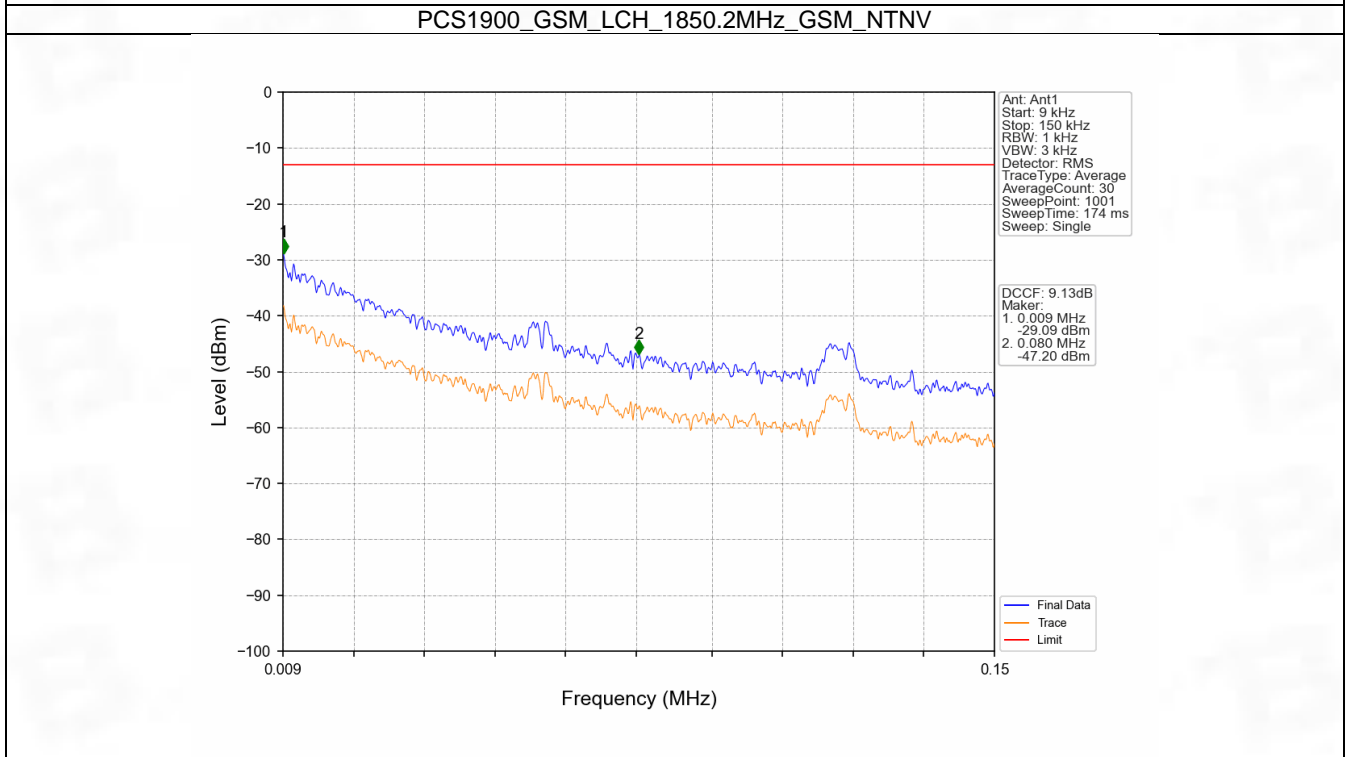
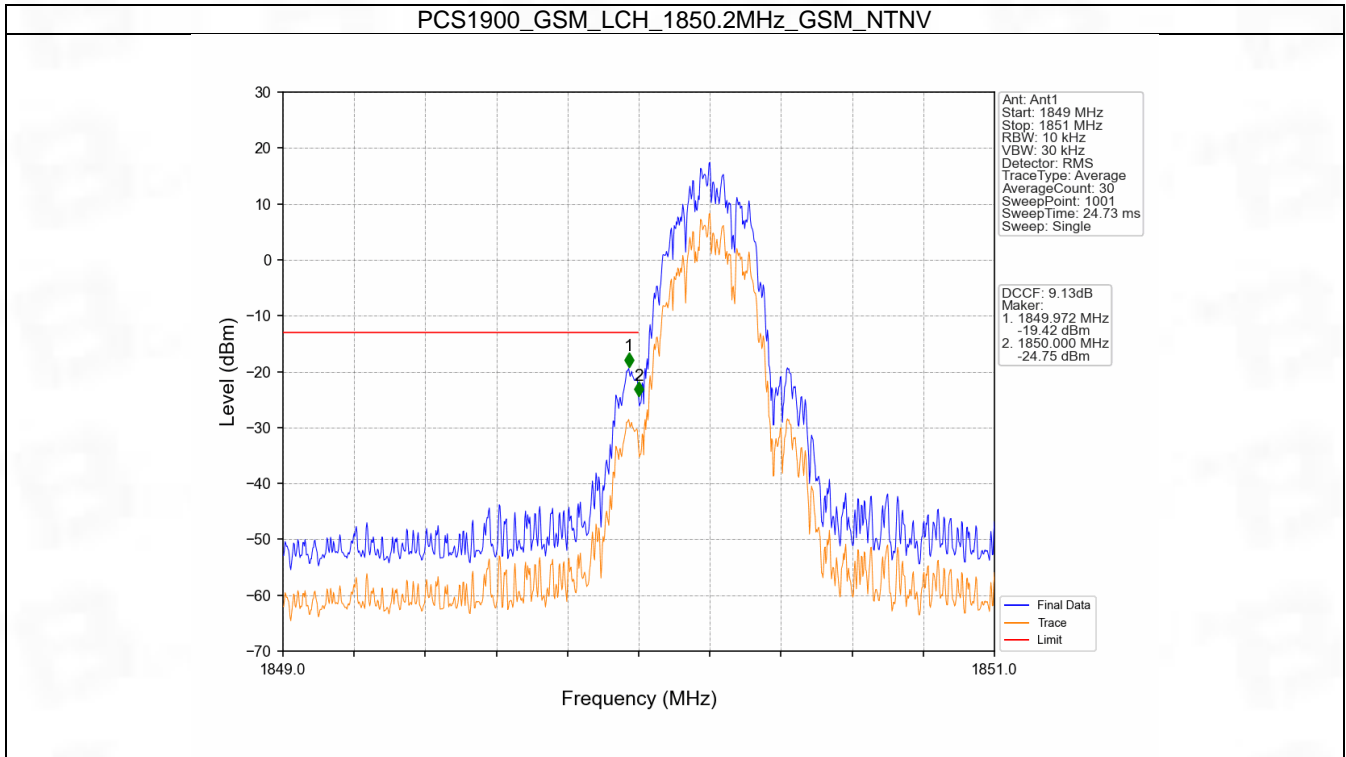
6. Spurious Emission

6.1 PCS1900

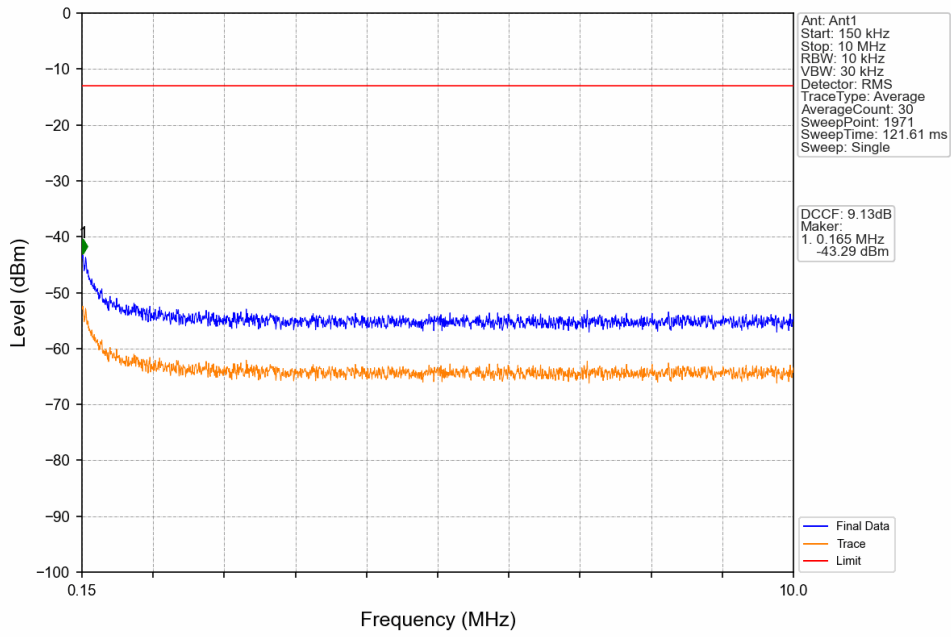
6.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1909.8	Refer To Test Graph		Pass
	GPRS	1 TX Slot	1850.2	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1909.8	Refer To Test Graph		Pass
	EGPRS	1 TX Slot	1850.2	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1909.8	Refer To Test Graph		Pass

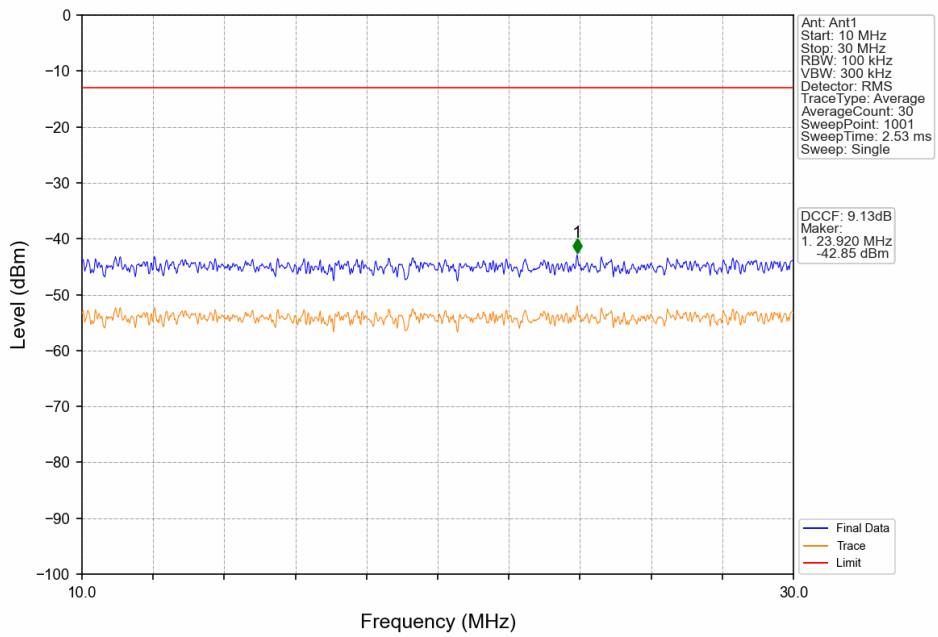
6.1.2 Test Graph



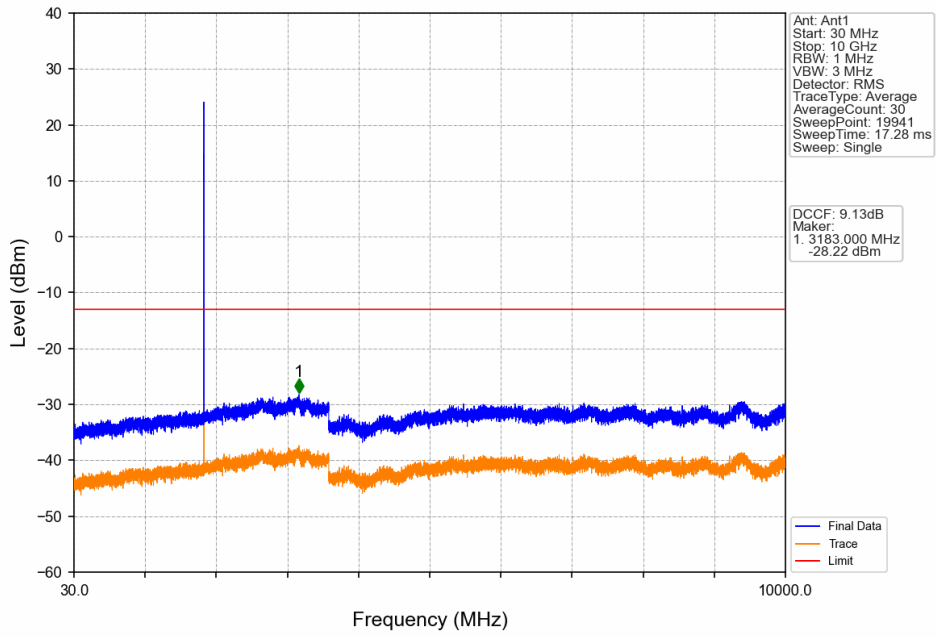
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



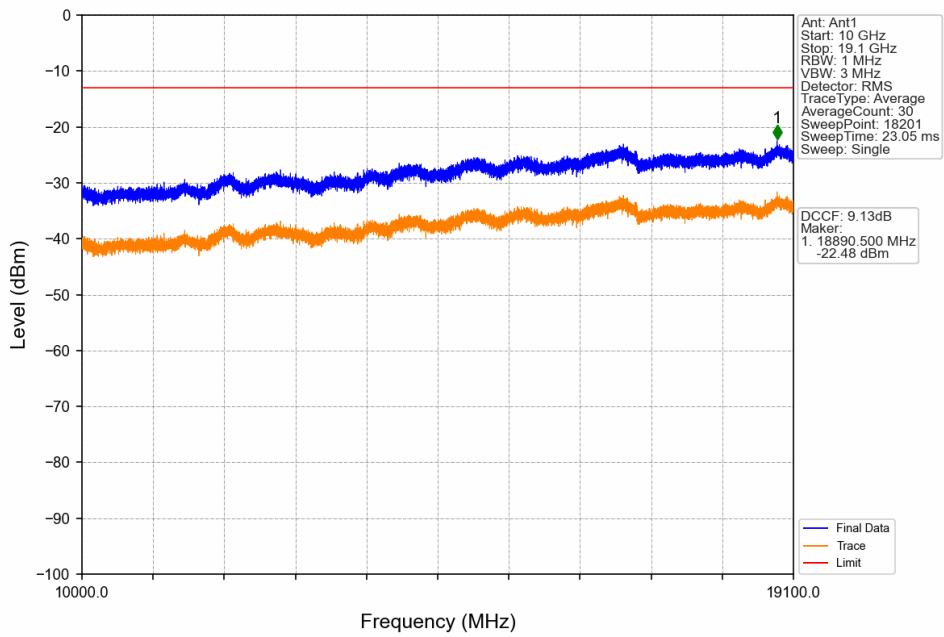
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



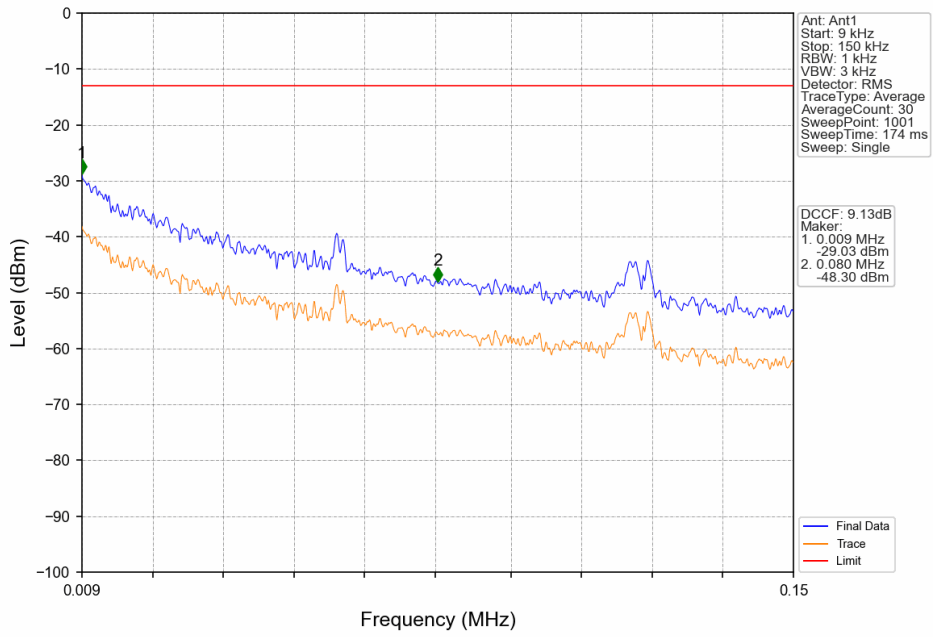
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



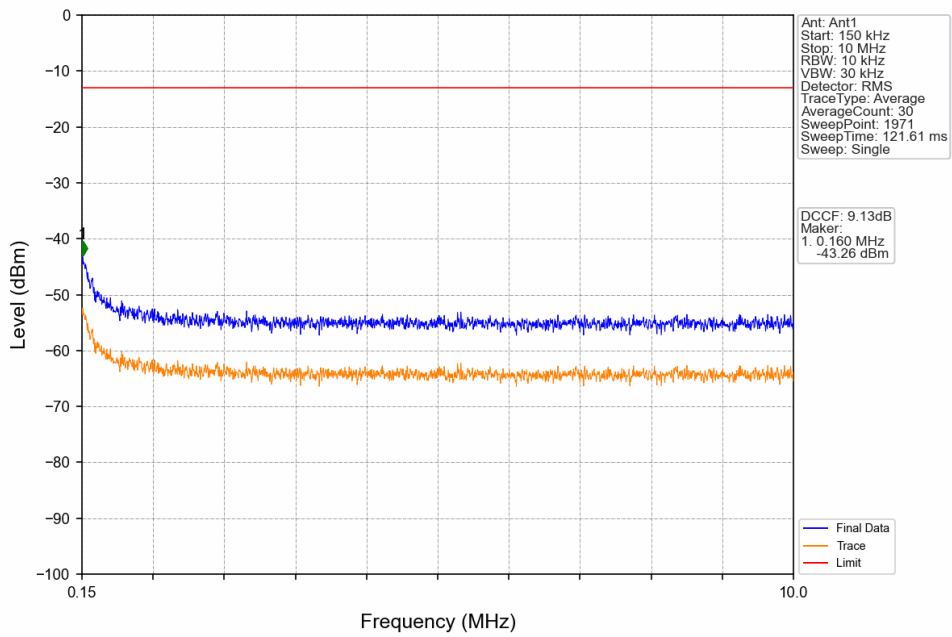
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



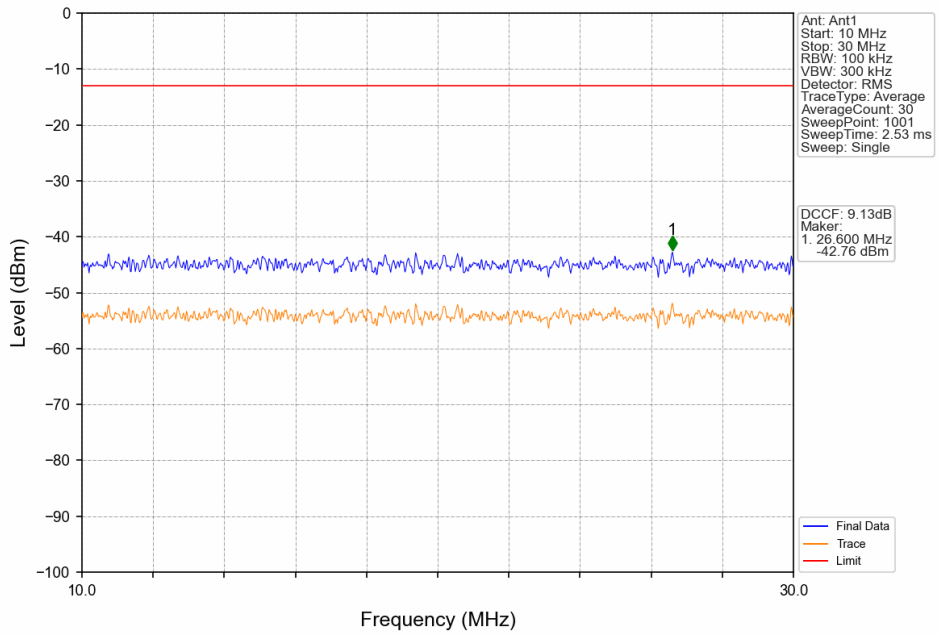
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



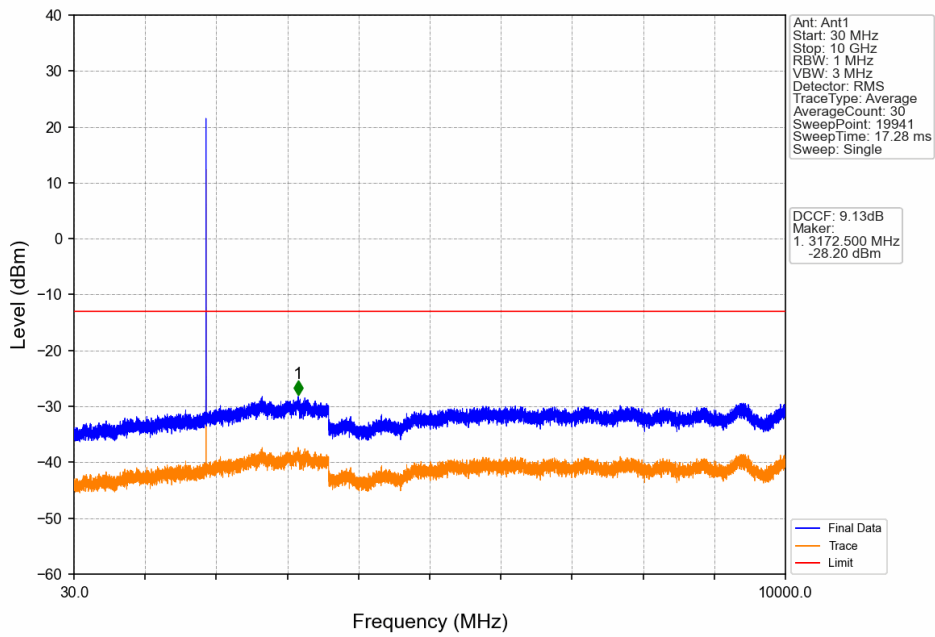
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



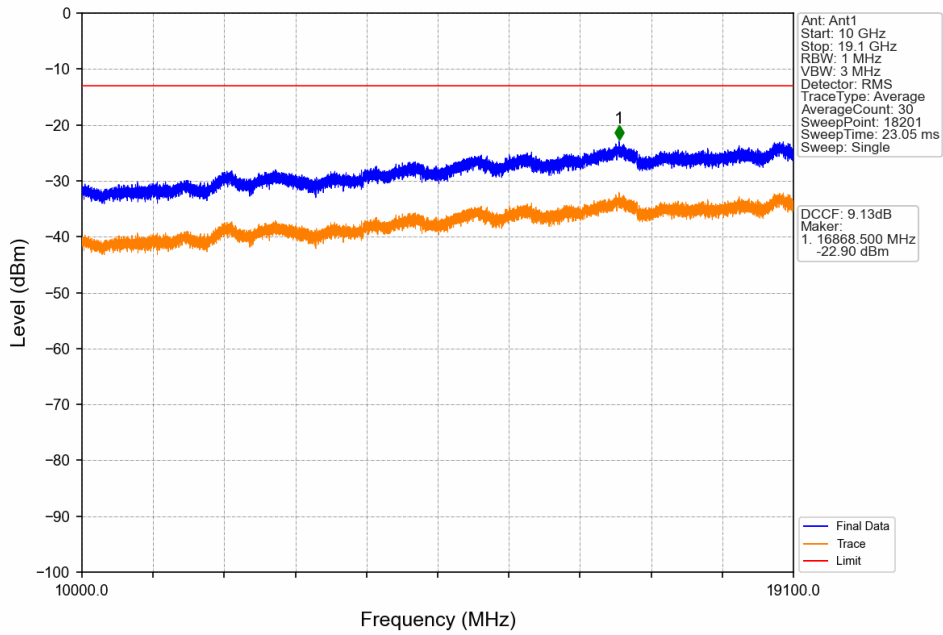
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



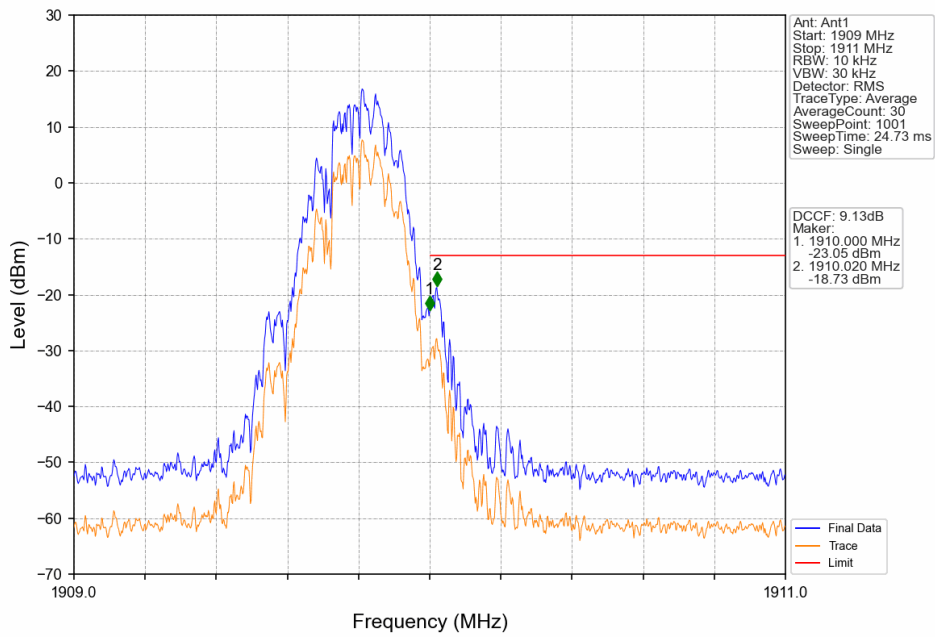
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



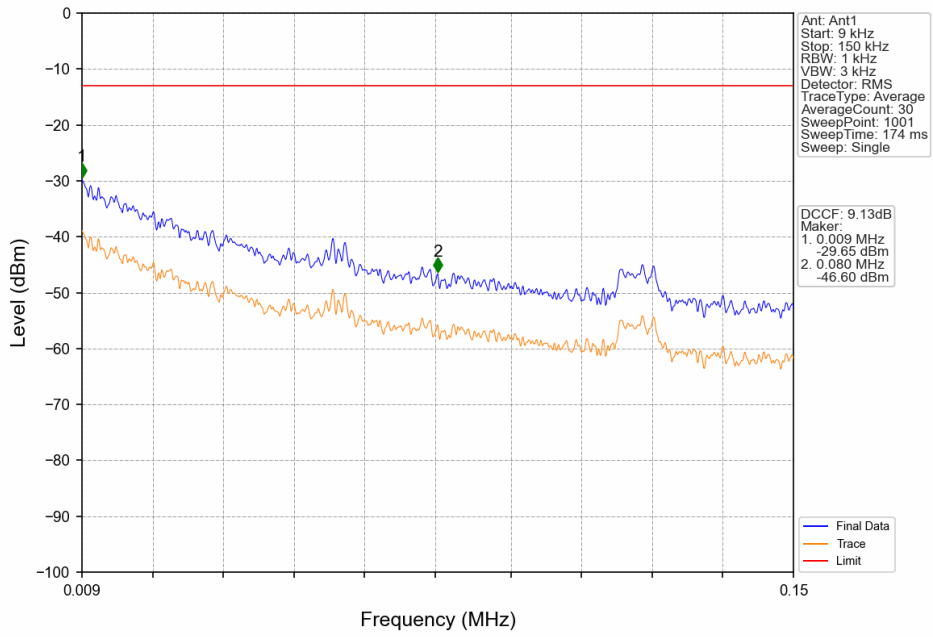
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



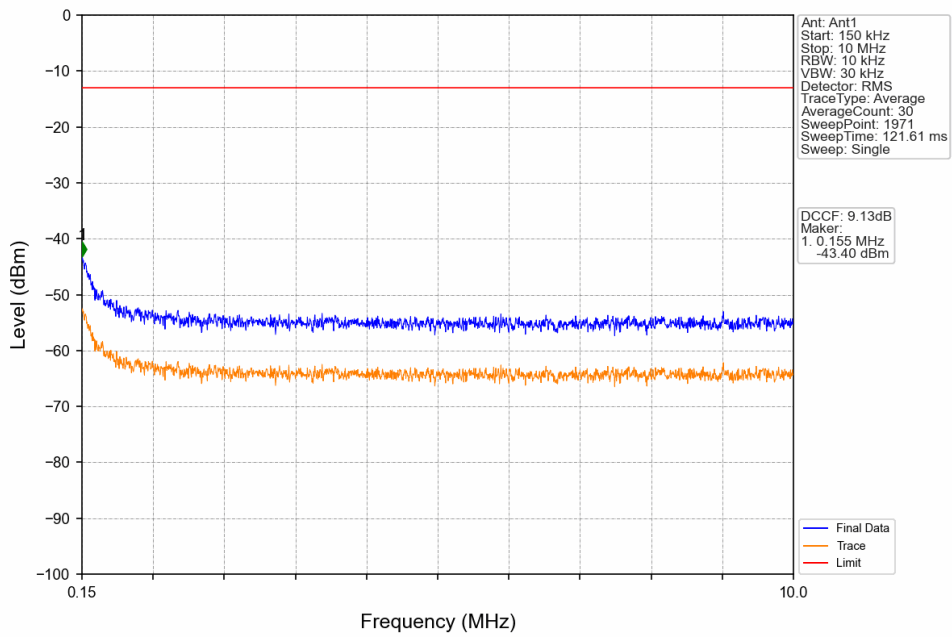
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



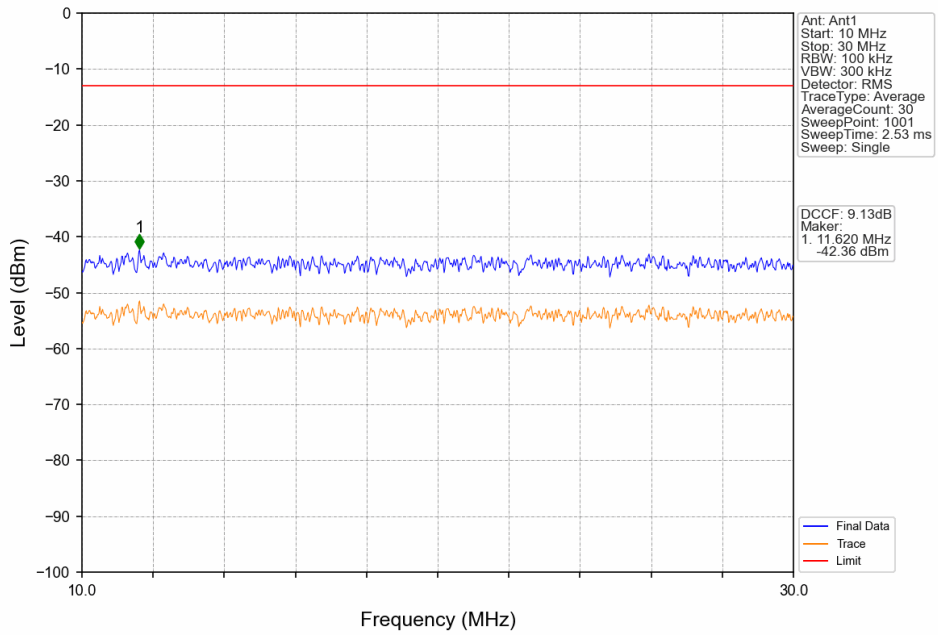
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



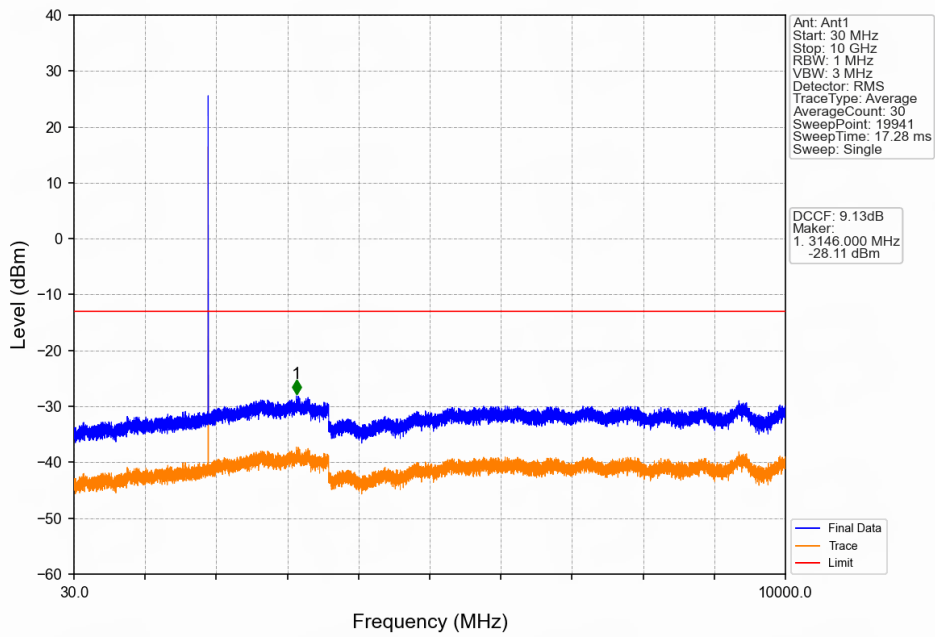
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



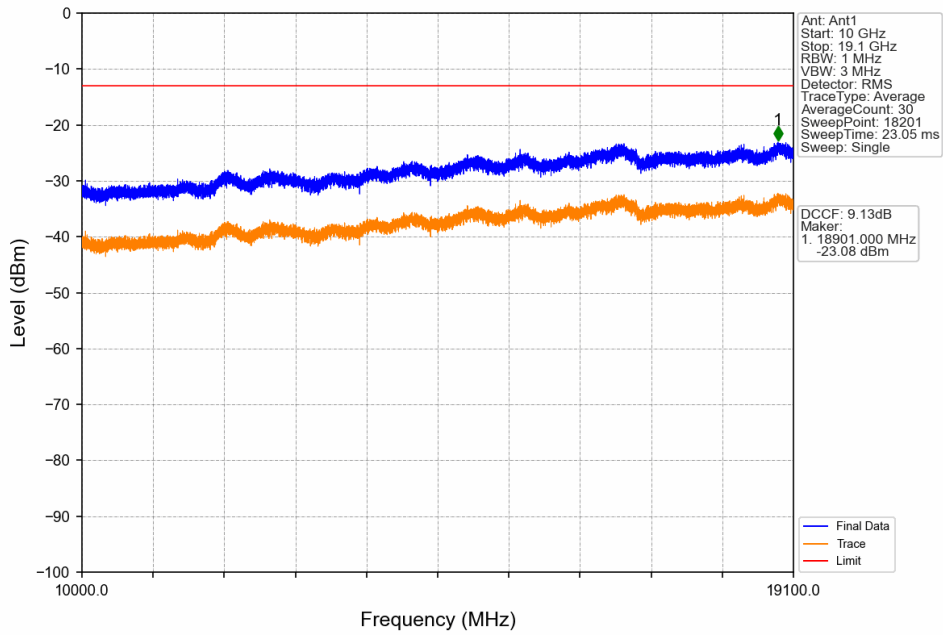
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



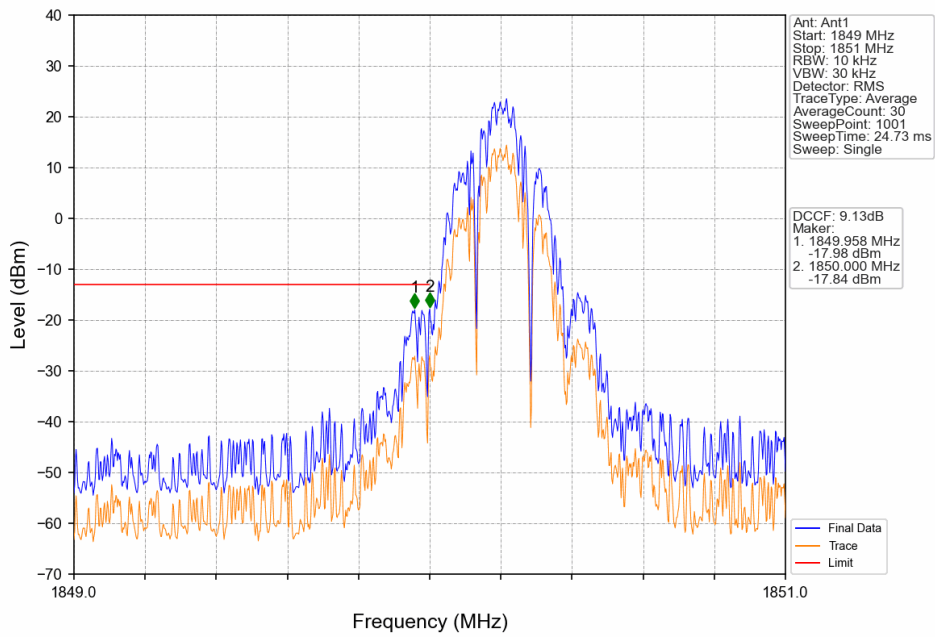
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



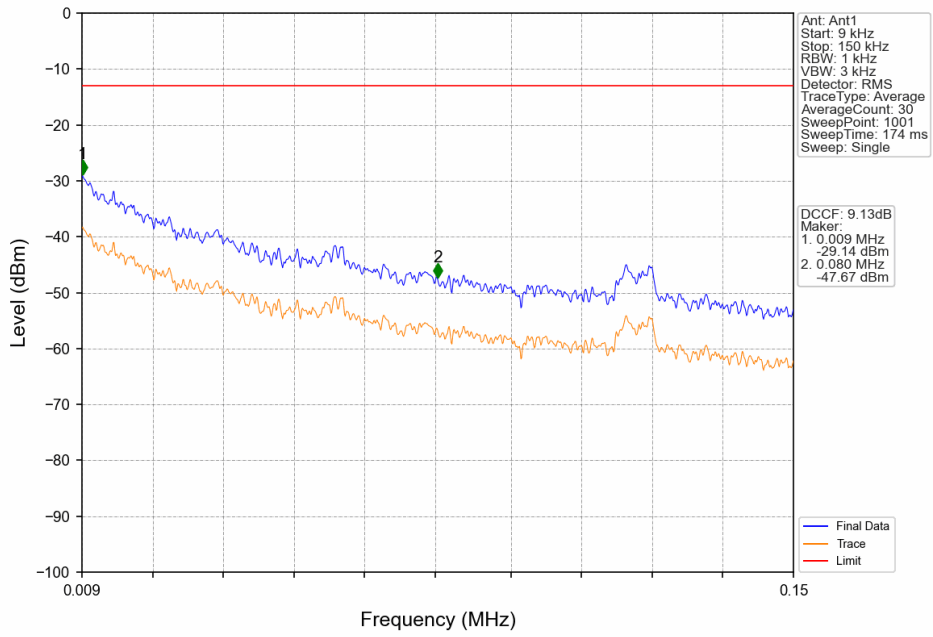
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



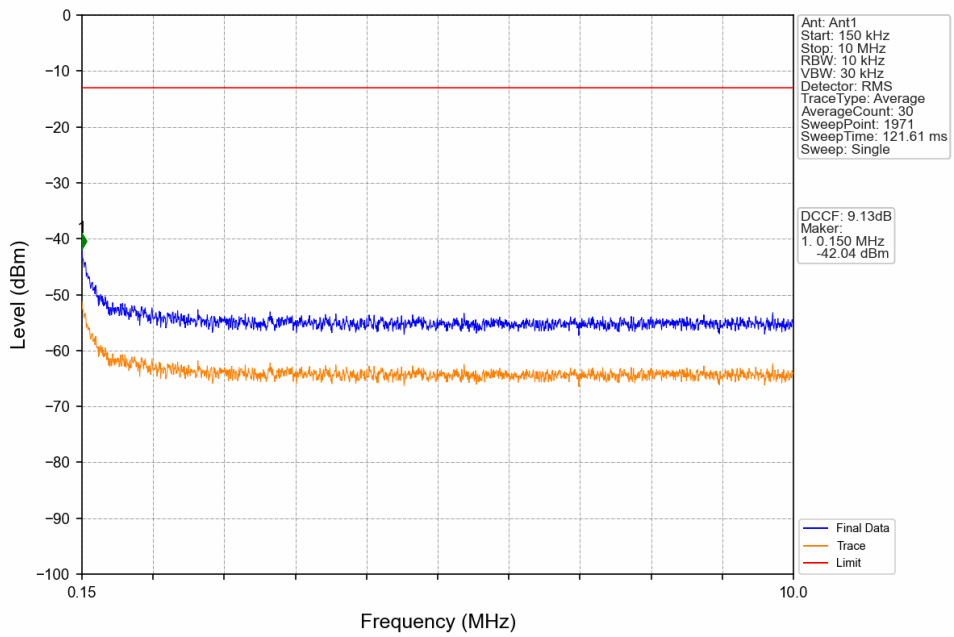
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



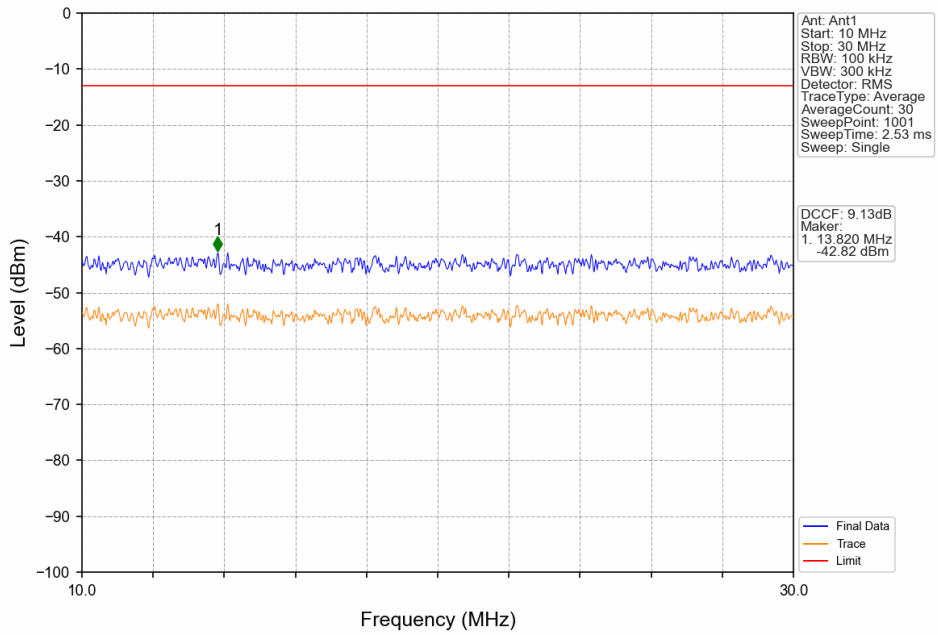
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



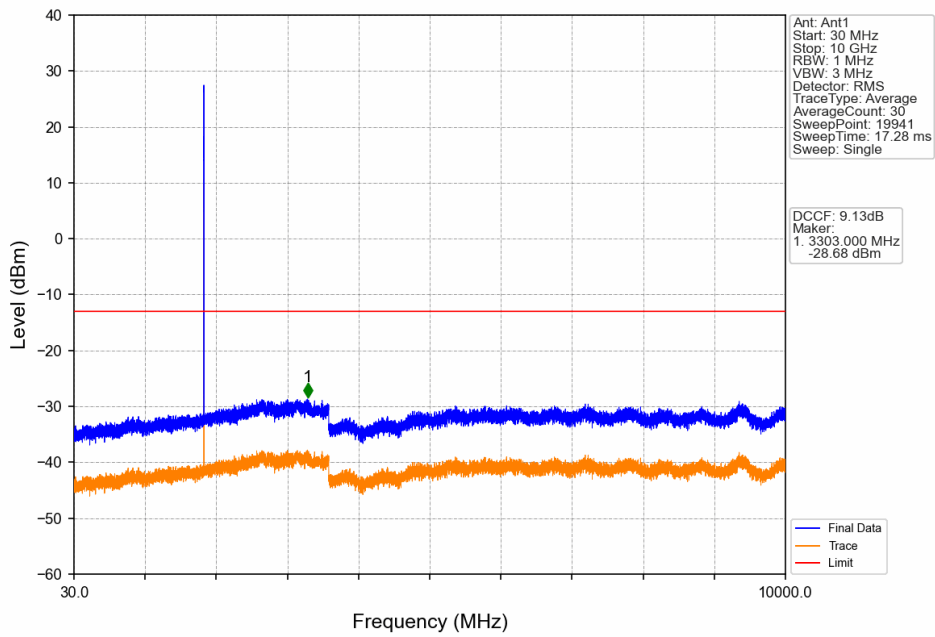
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



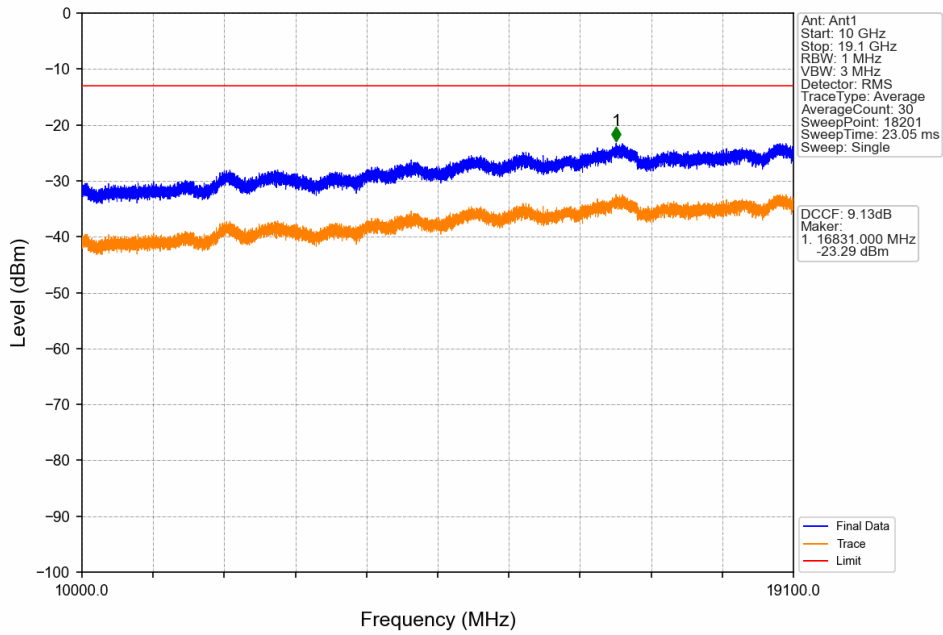
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



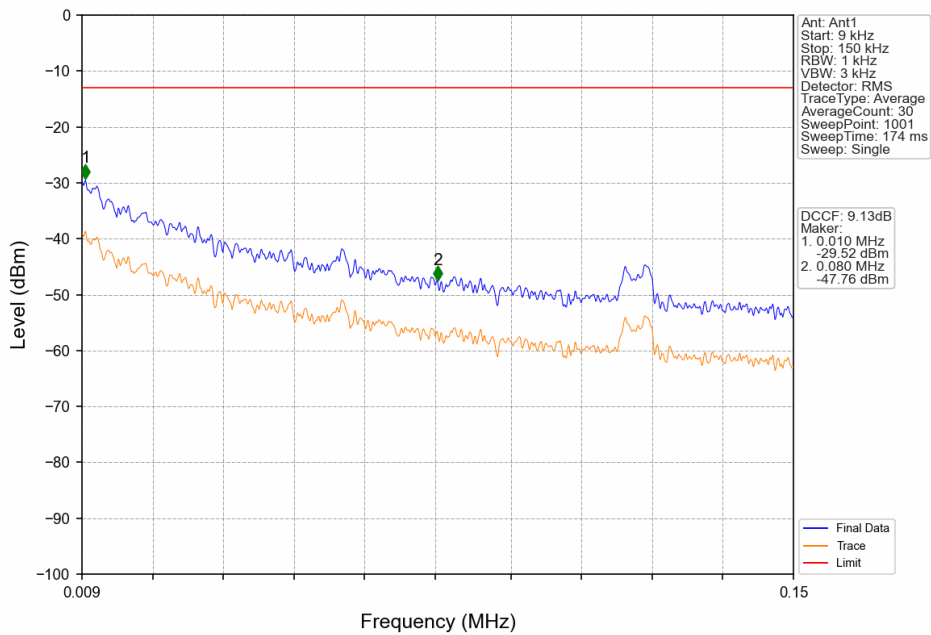
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



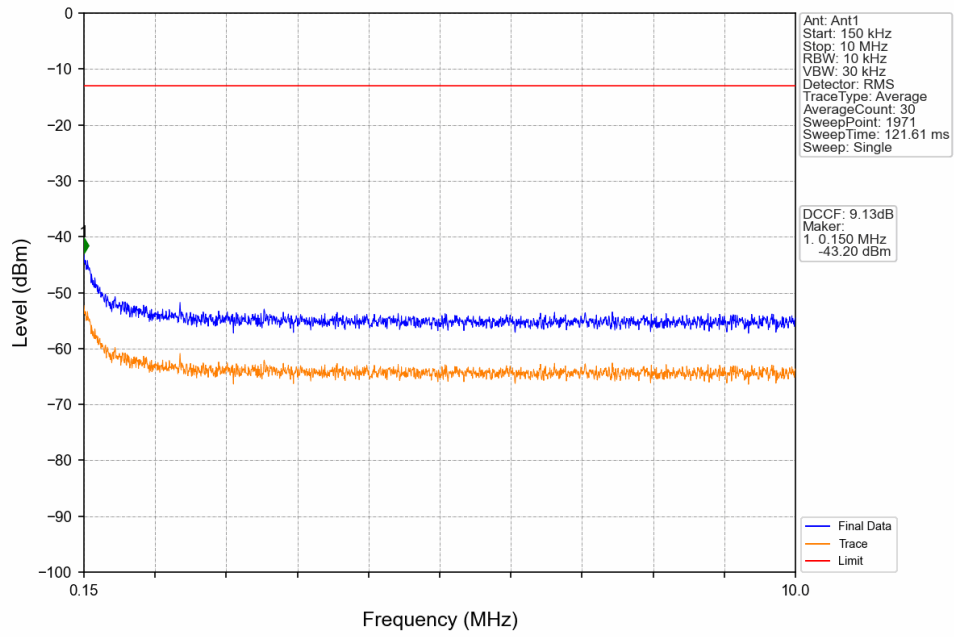
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



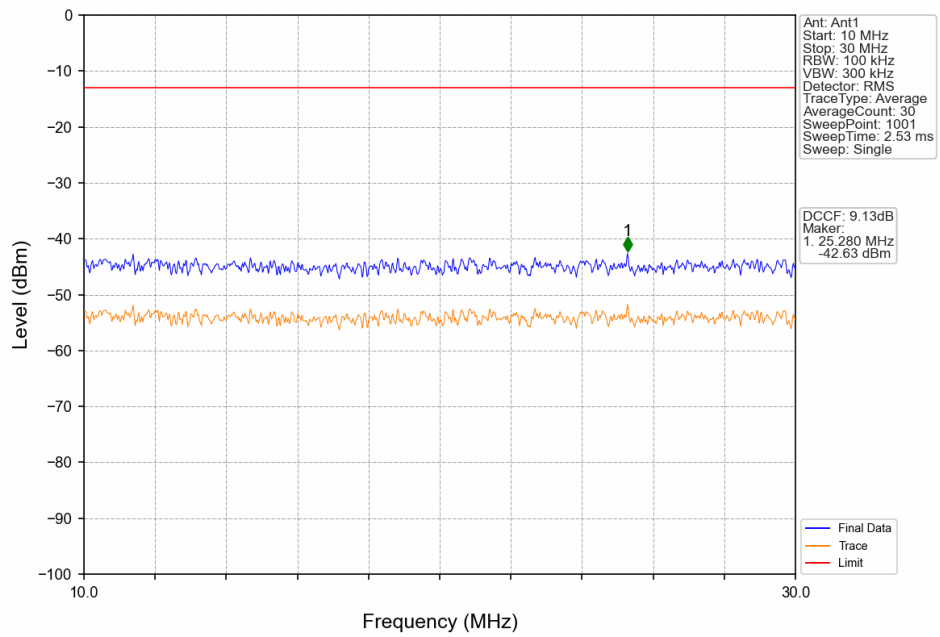
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



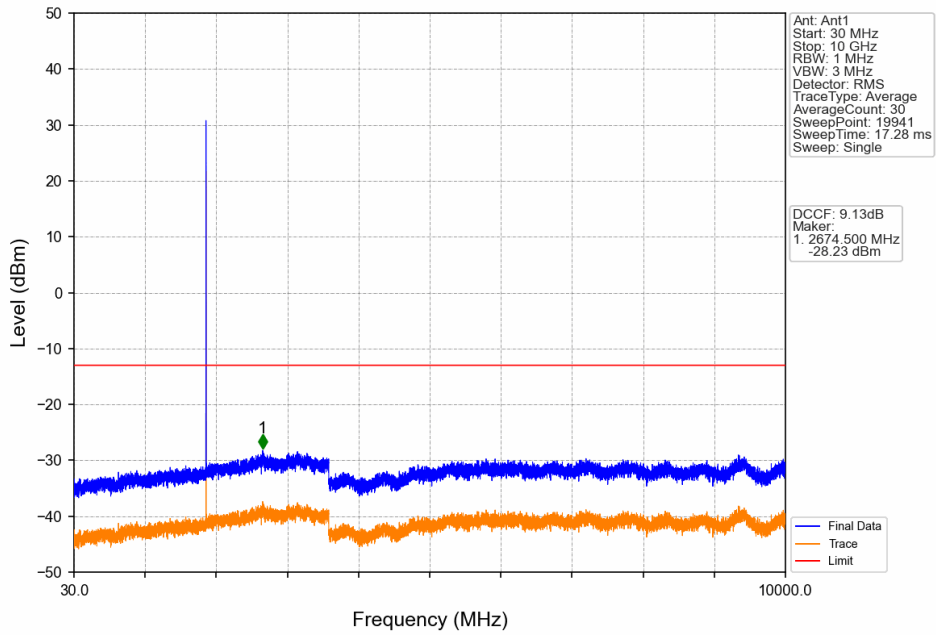
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



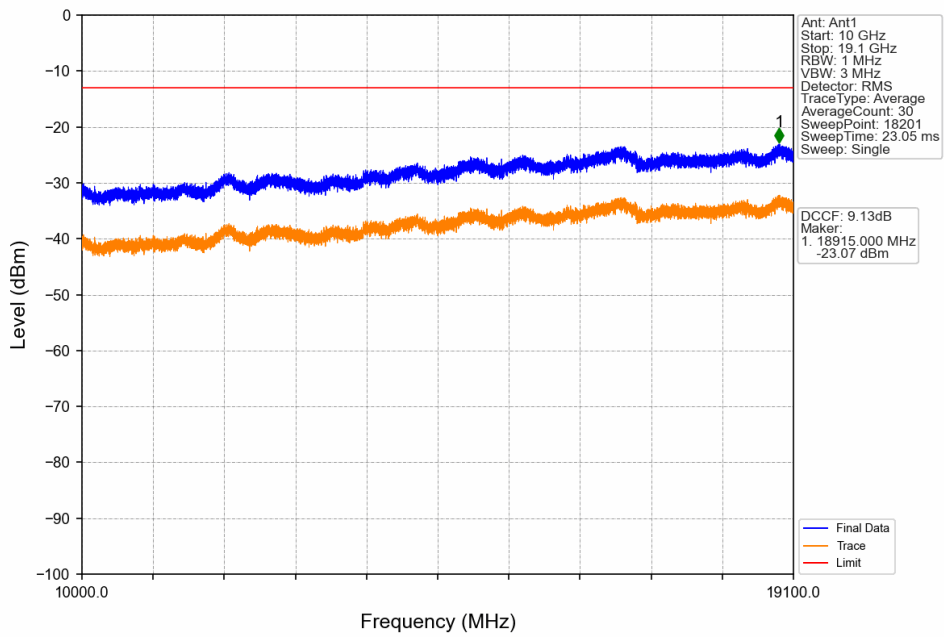
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



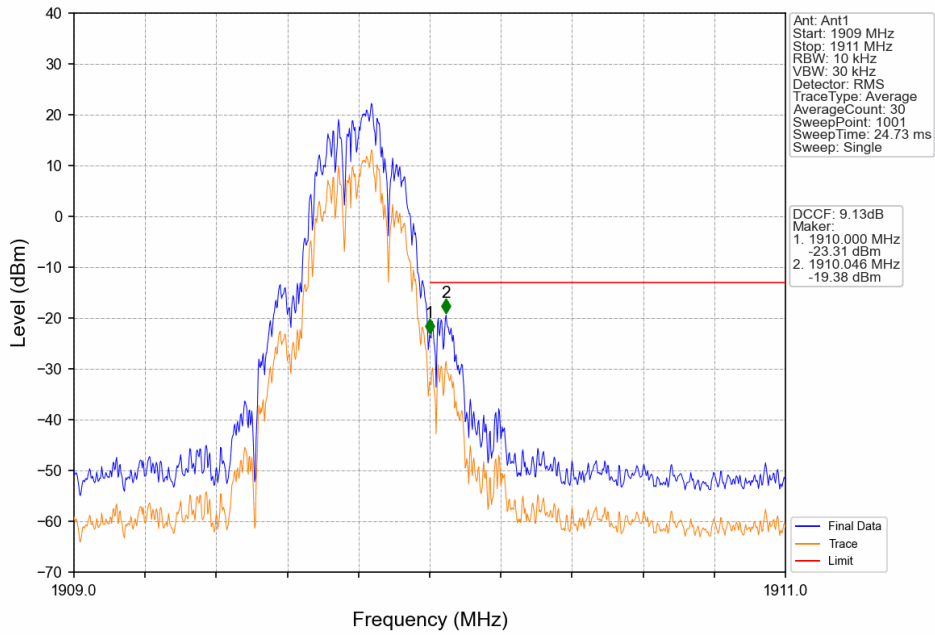
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



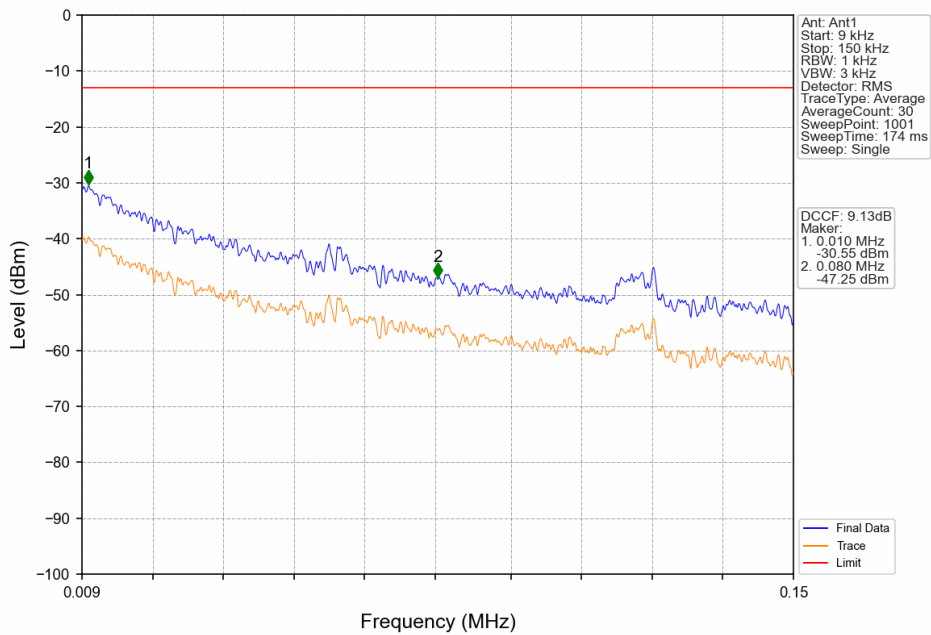
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



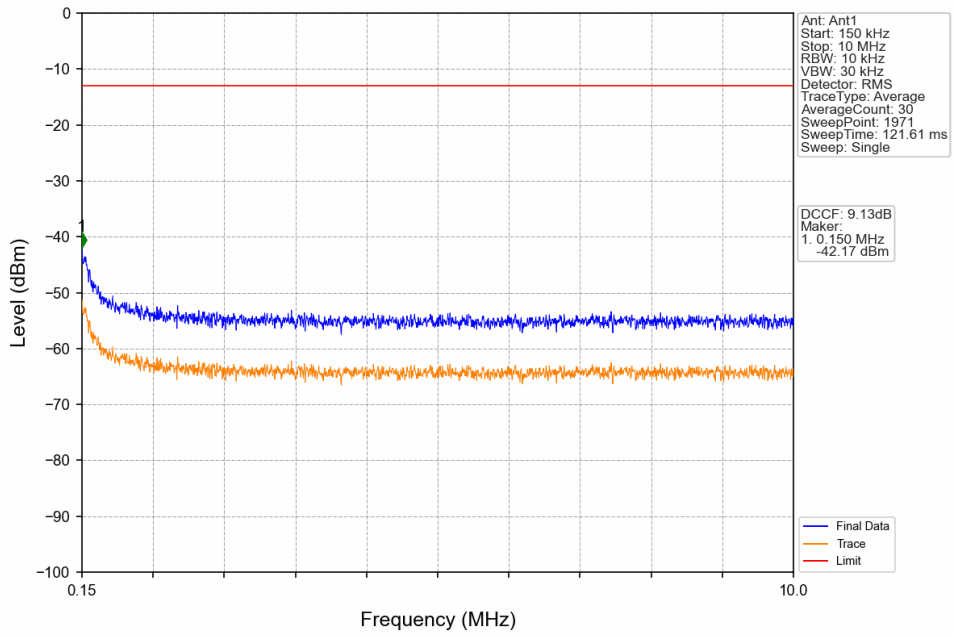
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



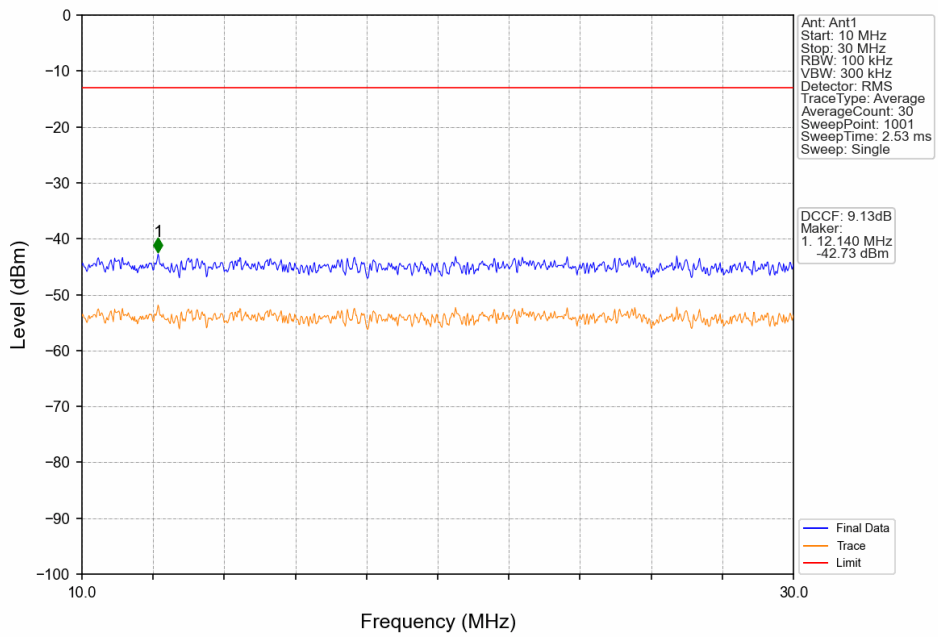
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



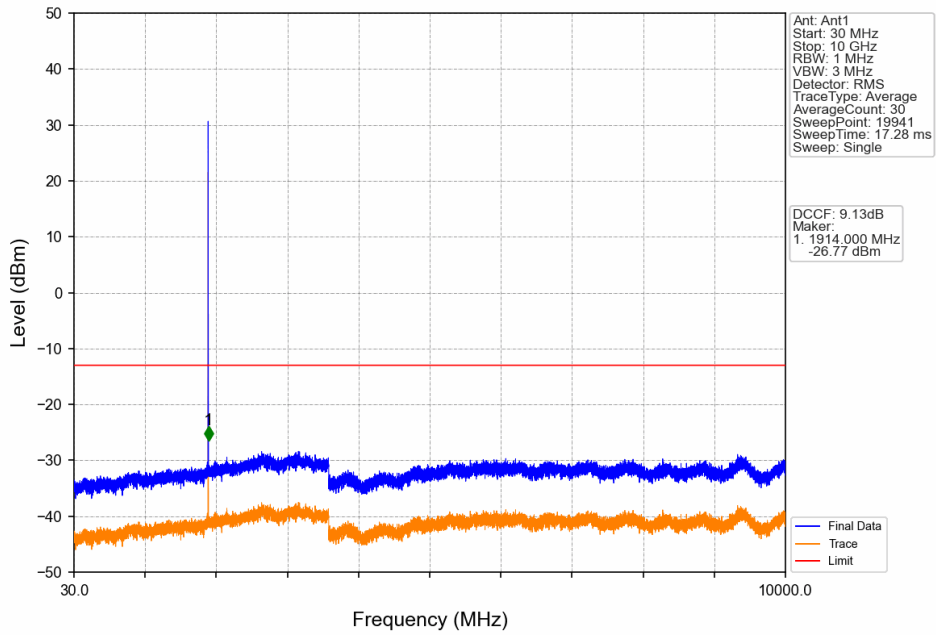
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



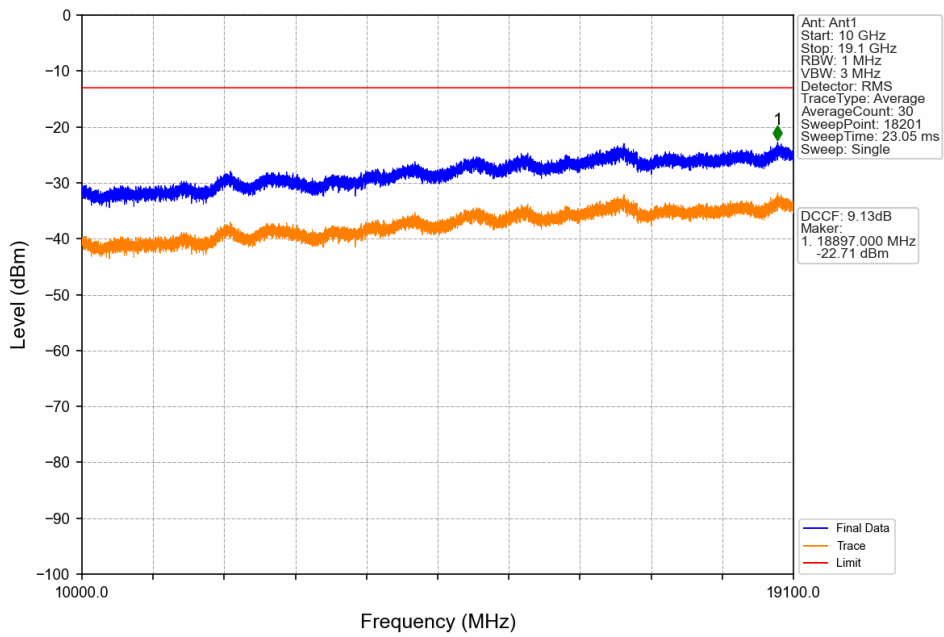
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



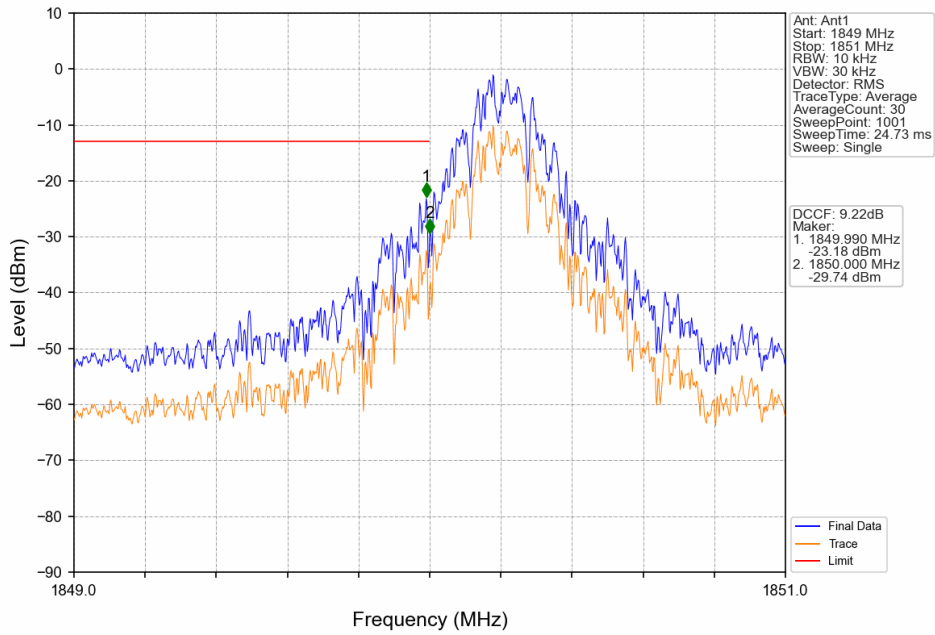
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



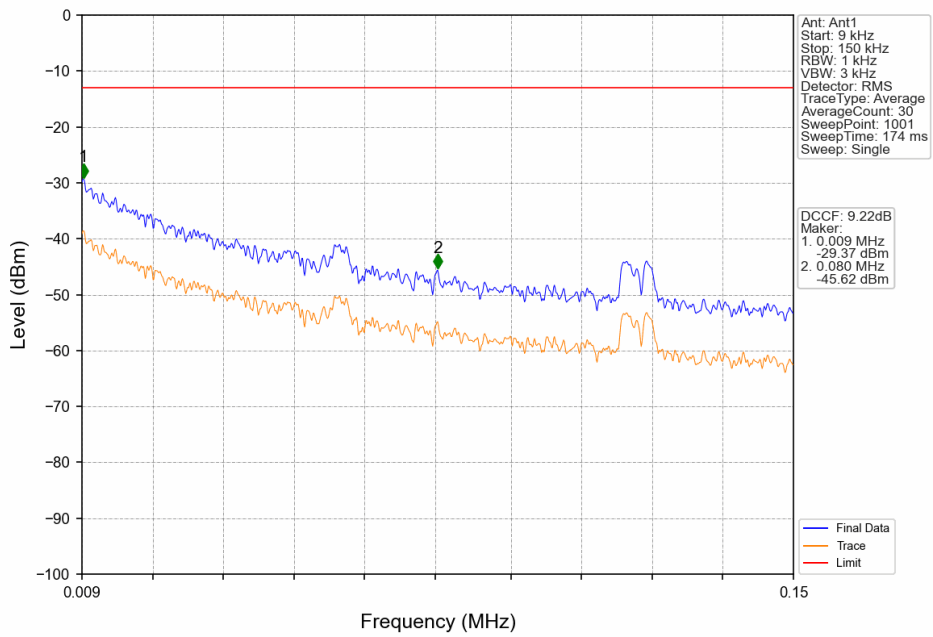
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



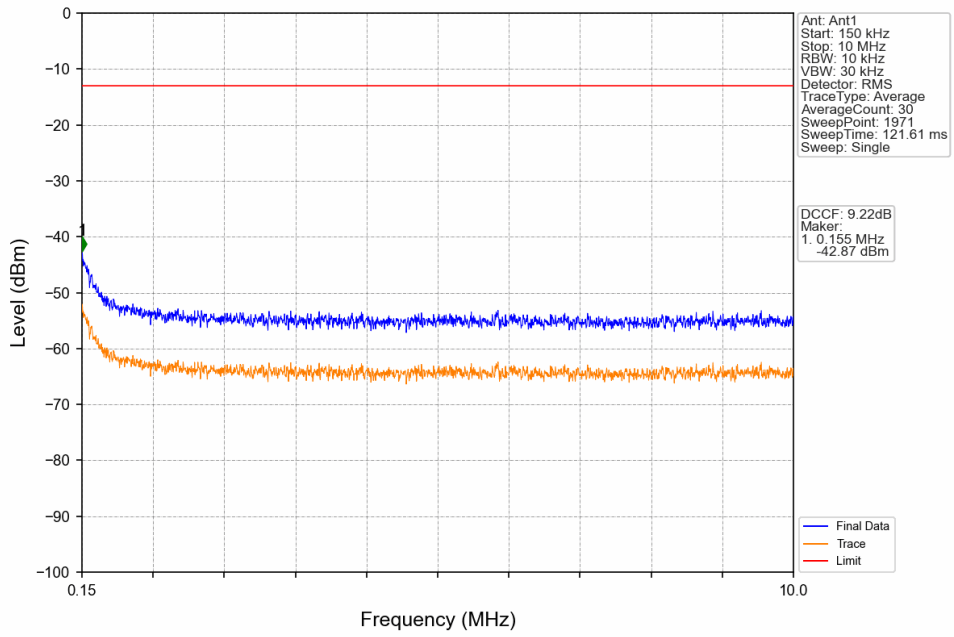
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



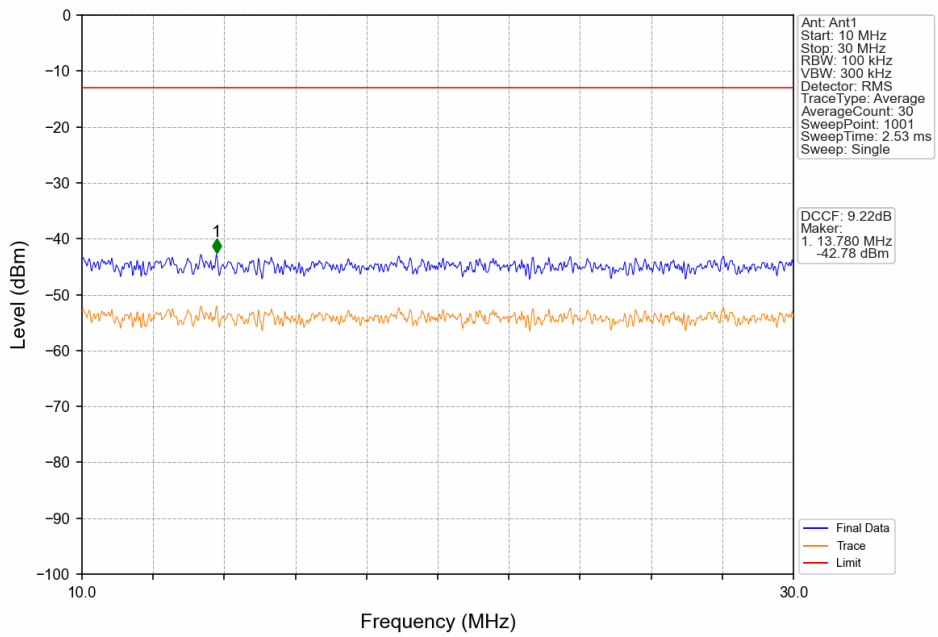
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



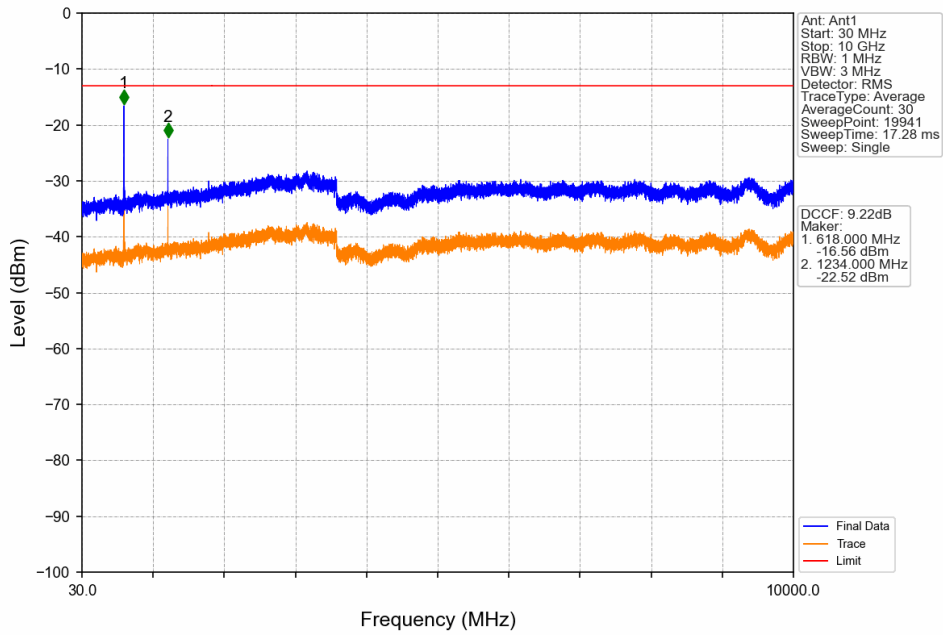
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



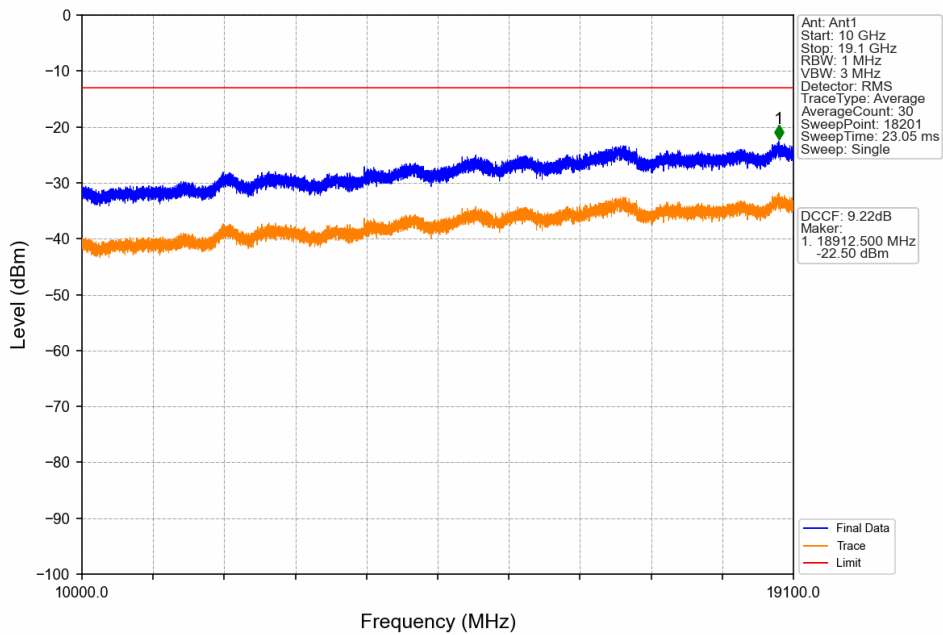
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



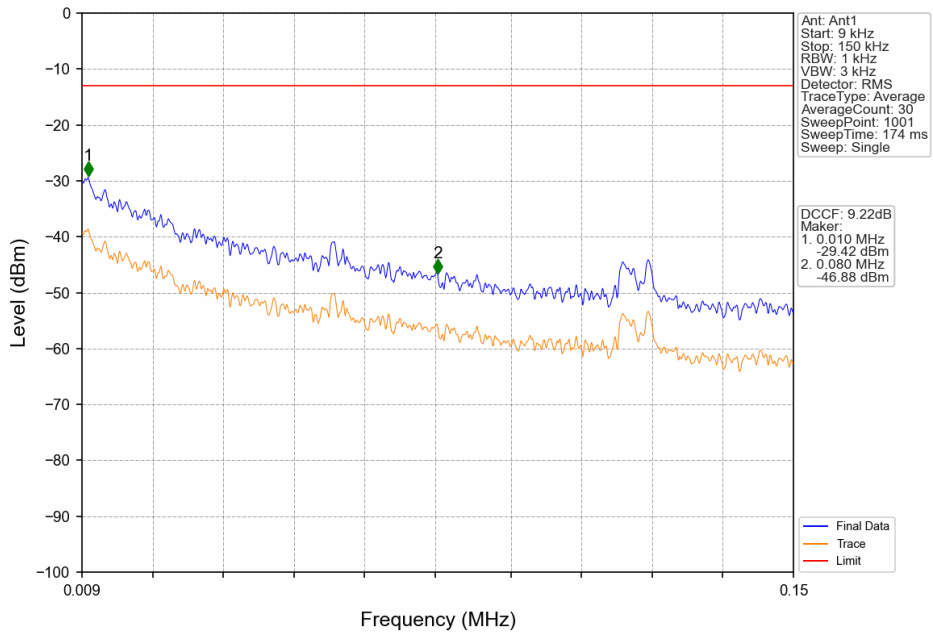
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



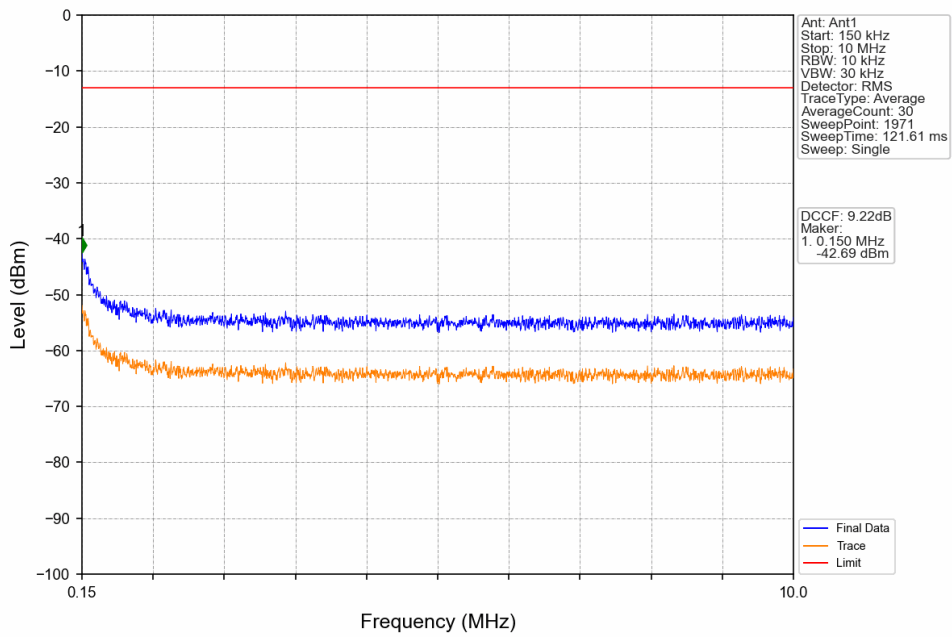
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



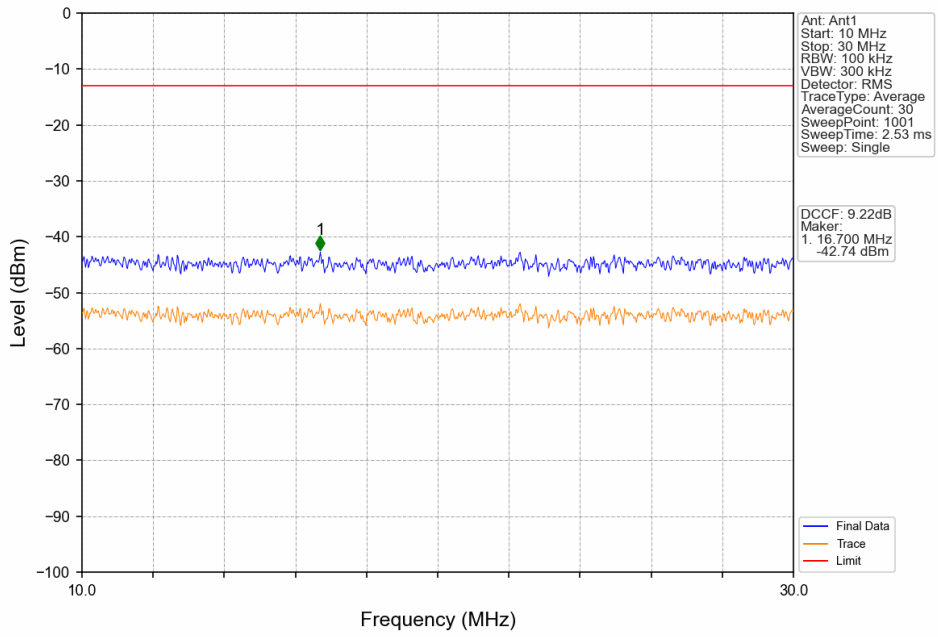
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



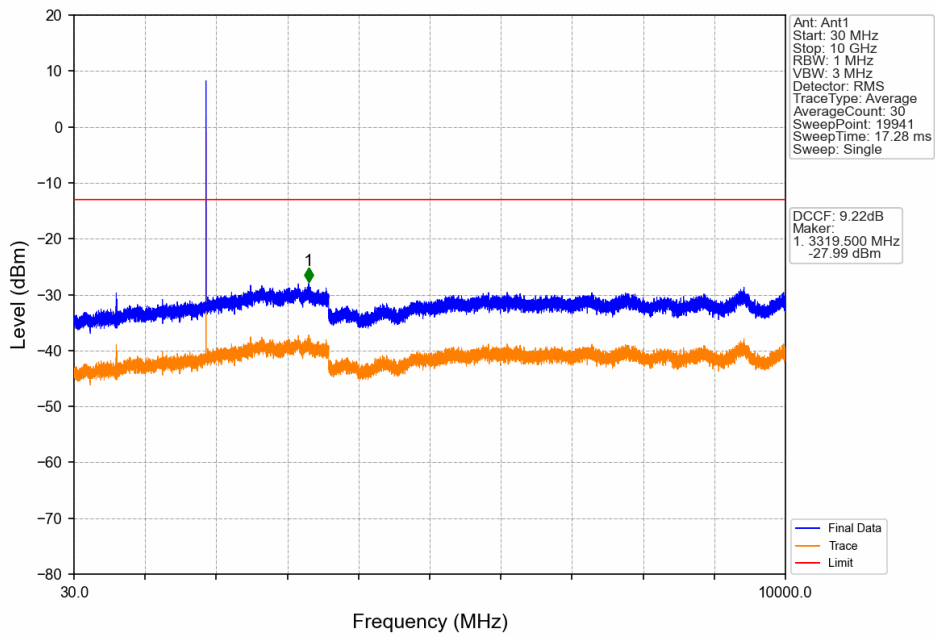
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



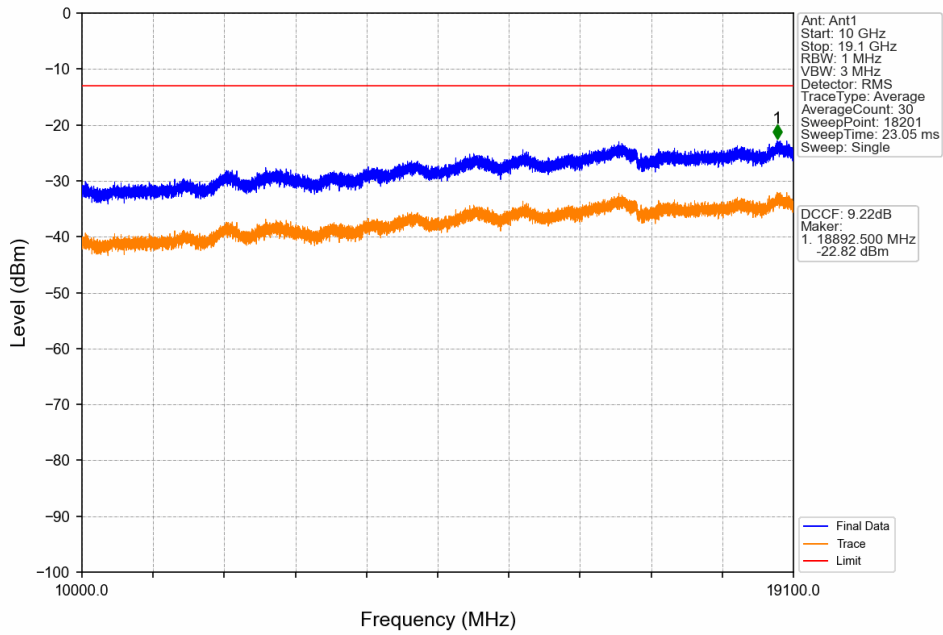
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



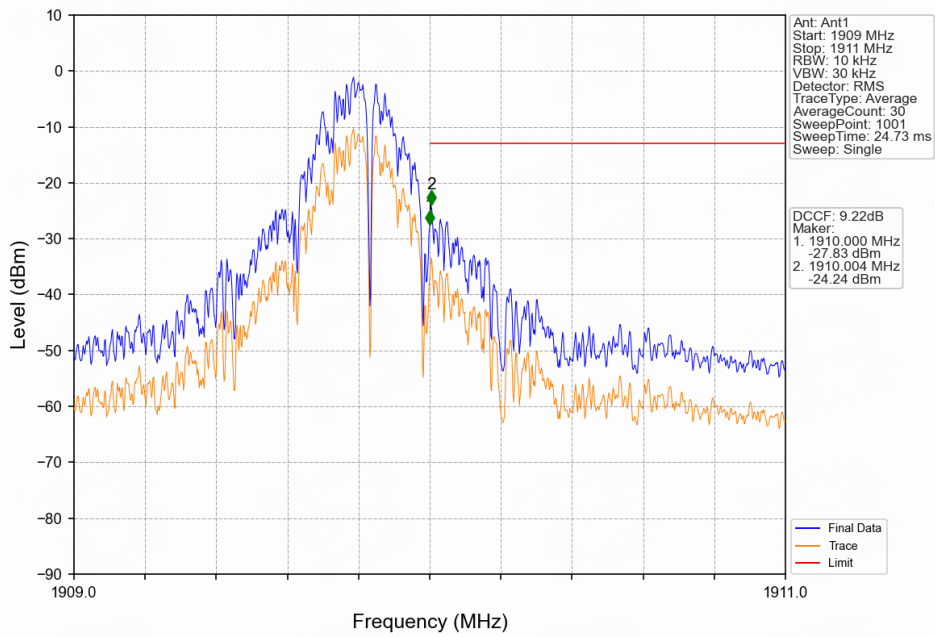
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



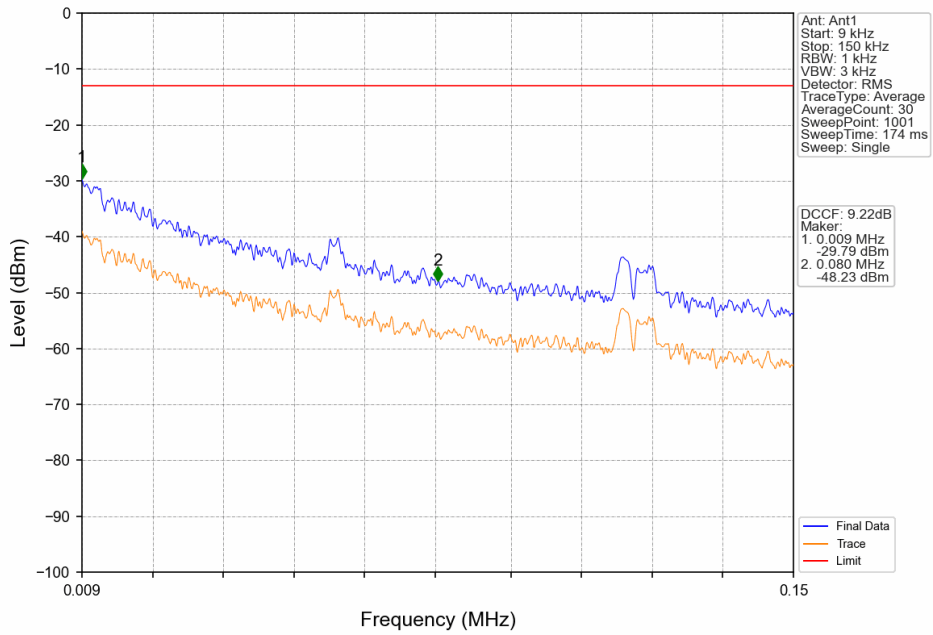
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



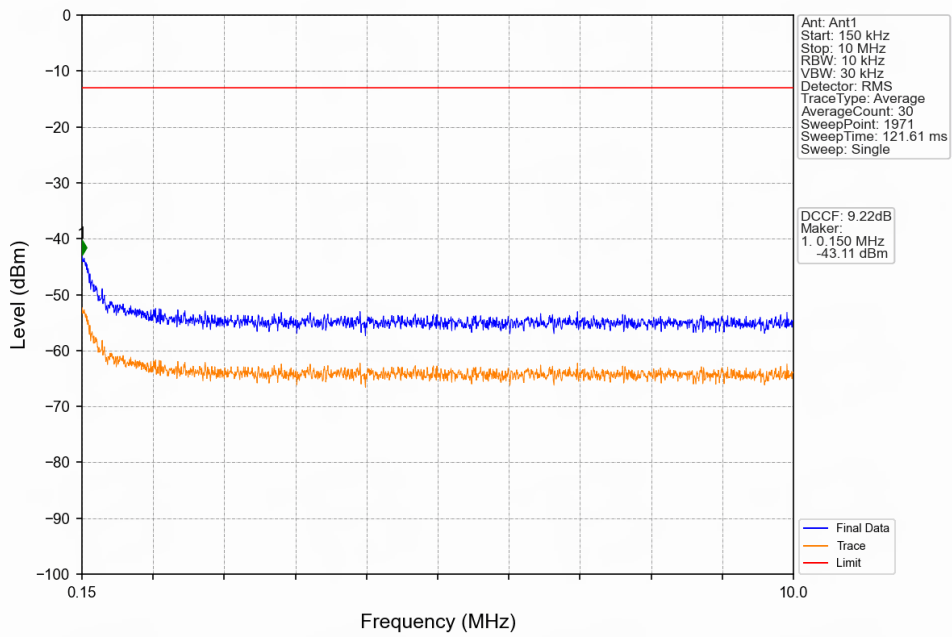
PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



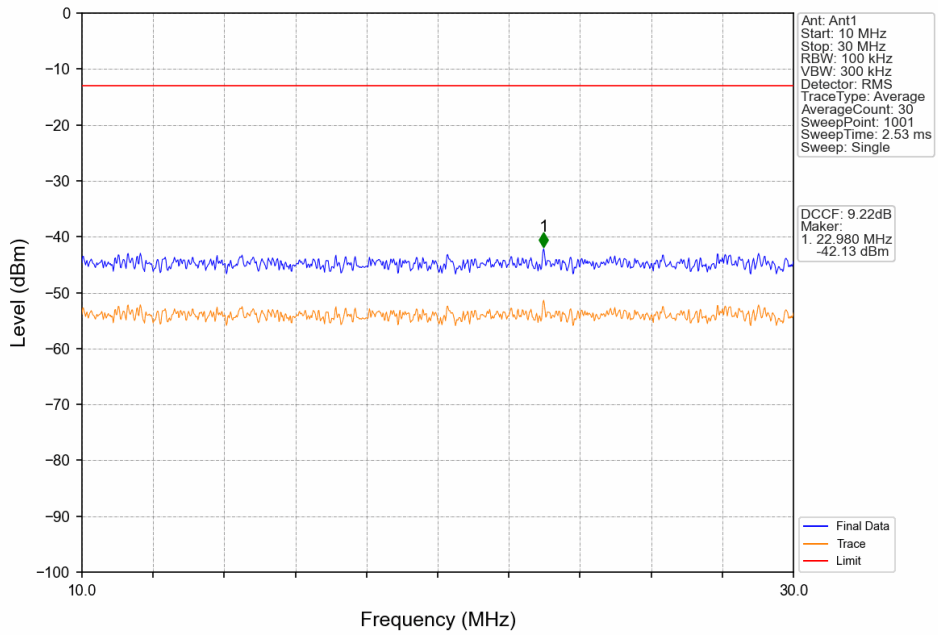
PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



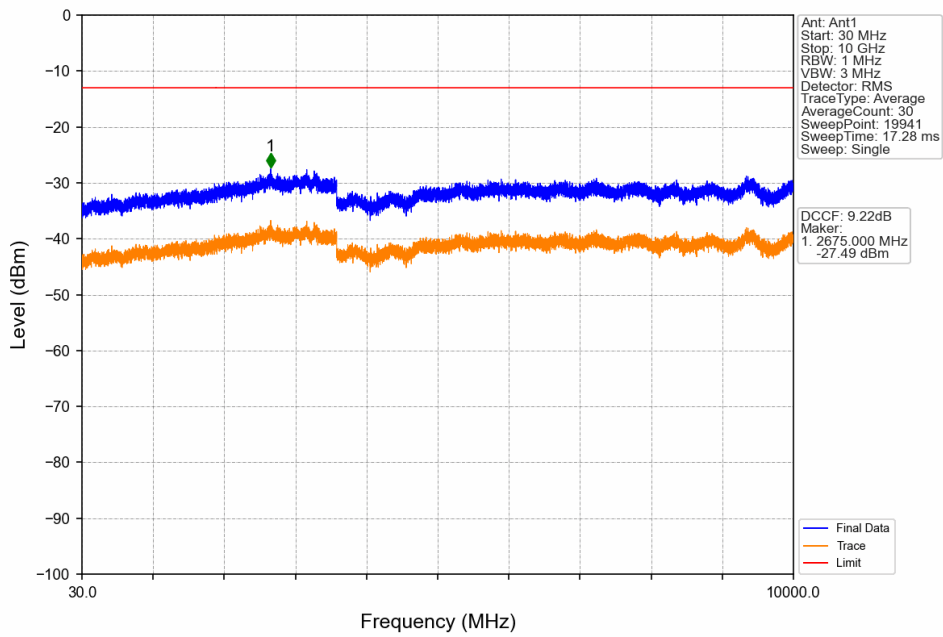
PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



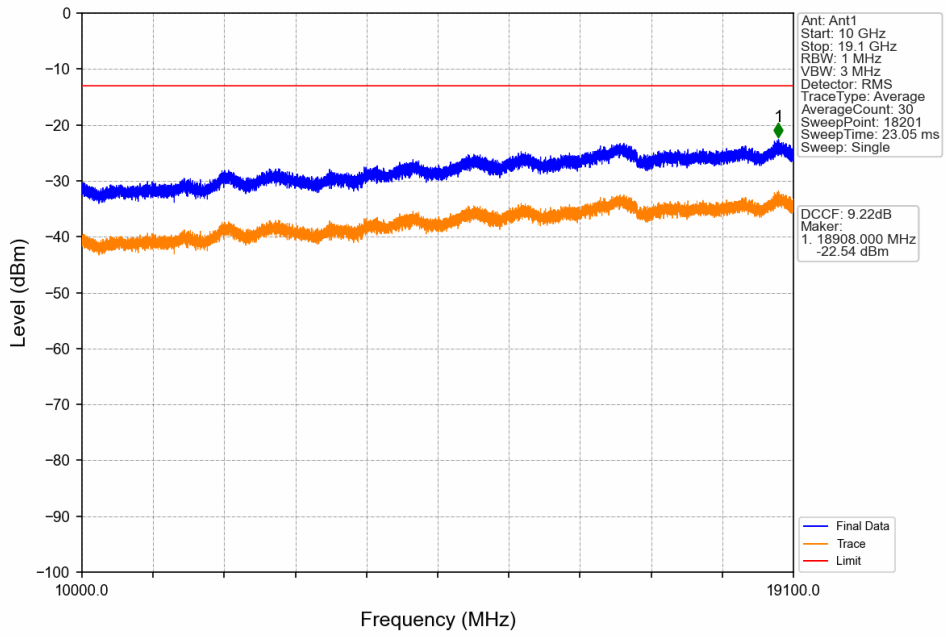
PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_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)
PCS1900	0.2	1850.2	1909.8	0.3673	0.0168	ppm	248KGXW	24E	25.65
PCS1900	0.2	1850.2	1909.8	0.6839	0.0185	ppm	269KG7W	24E	28.35

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)
PCS1900	0.2	1850.2	1909.8	0.4159	0.0168	ppm	248KGXW	24E	26.19
PCS1900	0.2	1850.2	1909.8	0.7745	0.0185	ppm	269KG7W	24E	28.89