

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	28.18	0.37	28.55	<=33.01	Pass
			1880	28.30	0.37	28.67	<=33.01	Pass
			1909.8	28.37	0.37	28.74	<=33.01	Pass
	GPRS	1 TX Slot	1850.2	18.86	0.37	19.23	<=33.01	Pass
		2 TX Slots	1850.2	27.53	0.37	27.90	<=33.01	Pass
		3 TX Slots	1850.2	25.51	0.37	25.88	<=33.01	Pass
		4 TX Slots	1850.2	24.37	0.37	24.74	<=33.01	Pass
		1 TX Slot	1880	28.31	0.37	28.68	<=33.01	Pass
		2 TX Slots	1880	27.64	0.37	28.01	<=33.01	Pass
		3 TX Slots	1880	25.52	0.37	25.89	<=33.01	Pass
		4 TX Slots	1880	24.36	0.37	24.73	<=33.01	Pass
		1 TX Slot	1909.8	28.40	0.37	28.77	<=33.01	Pass
		2 TX Slots	1909.8	27.79	0.37	28.16	<=33.01	Pass
		3 TX Slots	1909.8	25.74	0.37	26.11	<=33.01	Pass
4 TX Slots	1909.8	24.58	0.37	24.95	<=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	15.077	0.0081	-2.5 to 2.5	Pass	
			3.85	15.239	0.0082	-2.5 to 2.5	Pass	
			4.43	16.982	0.0092	-2.5 to 2.5	Pass	
		-30	3.85	21.438	0.0116	-2.5 to 2.5	Pass	
			-20	3.85	23.440	0.0127	-2.5 to 2.5	Pass
				3.85	35.579	0.0192	-2.5 to 2.5	Pass
			0	3.85	36.386	0.0197	-2.5 to 2.5	Pass
				3.85	34.998	0.0189	-2.5 to 2.5	Pass
			3.85	34.320	0.0185	-2.5 to 2.5	Pass	
	40	3.85	29.638	0.0160	-2.5 to 2.5	Pass		
		3.85	45.265	0.0245	-2.5 to 2.5	Pass		
	1880	20	3.27	28.993	0.0154	-2.5 to 2.5	Pass	
			3.85	32.189	0.0171	-2.5 to 2.5	Pass	
			4.43	35.579	0.0189	-2.5 to 2.5	Pass	
		-30	3.85	31.511	0.0168	-2.5 to 2.5	Pass	
			3.85	36.063	0.0192	-2.5 to 2.5	Pass	
		-10	3.85	31.802	0.0169	-2.5 to 2.5	Pass	
			3.85	31.253	0.0166	-2.5 to 2.5	Pass	
0		3.85	32.480	0.0173	-2.5 to 2.5	Pass		
		3.85	31.188	0.0166	-2.5 to 2.5	Pass		

		40	3.85	28.508	0.0152	-2.5 to 2.5	Pass
		50	3.85	27.830	0.0148	-2.5 to 2.5	Pass
	1909.8	20	3.27	20.598	0.0108	-2.5 to 2.5	Pass
			3.85	29.994	0.0157	-2.5 to 2.5	Pass
			4.43	24.440	0.0128	-2.5 to 2.5	Pass
		-30	3.85	22.923	0.0120	-2.5 to 2.5	Pass
		-20	3.85	24.731	0.0129	-2.5 to 2.5	Pass
		-10	3.85	25.635	0.0134	-2.5 to 2.5	Pass
		0	3.85	22.632	0.0119	-2.5 to 2.5	Pass
		10	3.85	29.606	0.0155	-2.5 to 2.5	Pass
		30	3.85	29.800	0.0156	-2.5 to 2.5	Pass
		40	3.85	22.245	0.0116	-2.5 to 2.5	Pass
	50	3.85	20.405	0.0107	-2.5 to 2.5	Pass	
	GPRS	1850.2	20	3.27	4.972	0.0027	-2.5 to 2.5
3.85				25.183	0.0136	-2.5 to 2.5	Pass
4.43				31.124	0.0168	-2.5 to 2.5	Pass
-30			3.85	28.896	0.0156	-2.5 to 2.5	Pass
-20			3.85	30.607	0.0165	-2.5 to 2.5	Pass
-10			3.85	31.931	0.0173	-2.5 to 2.5	Pass
0			3.85	26.765	0.0145	-2.5 to 2.5	Pass
10			3.85	22.923	0.0124	-2.5 to 2.5	Pass
30			3.85	20.179	0.0109	-2.5 to 2.5	Pass
40			3.85	26.604	0.0144	-2.5 to 2.5	Pass
50		3.85	21.180	0.0114	-2.5 to 2.5	Pass	
1880		20	3.27	22.245	0.0118	-2.5 to 2.5	Pass
			3.85	24.408	0.0130	-2.5 to 2.5	Pass
			4.43	21.406	0.0114	-2.5 to 2.5	Pass
		-30	3.85	29.509	0.0157	-2.5 to 2.5	Pass
		-20	3.85	29.348	0.0156	-2.5 to 2.5	Pass
		-10	3.85	26.571	0.0141	-2.5 to 2.5	Pass
		0	3.85	29.251	0.0156	-2.5 to 2.5	Pass
		10	3.85	26.152	0.0139	-2.5 to 2.5	Pass
		30	3.85	26.765	0.0142	-2.5 to 2.5	Pass
		40	3.85	31.479	0.0167	-2.5 to 2.5	Pass
50		3.85	28.186	0.0150	-2.5 to 2.5	Pass	
1909.8		20	3.27	21.890	0.0115	-2.5 to 2.5	Pass
			3.85	23.795	0.0125	-2.5 to 2.5	Pass
			4.43	25.829	0.0135	-2.5 to 2.5	Pass
		-30	3.85	25.506	0.0134	-2.5 to 2.5	Pass
		-20	3.85	23.666	0.0124	-2.5 to 2.5	Pass
		-10	3.85	22.310	0.0117	-2.5 to 2.5	Pass
		0	3.85	21.309	0.0112	-2.5 to 2.5	Pass
		10	3.85	22.891	0.0120	-2.5 to 2.5	Pass
	30	3.85	22.051	0.0115	-2.5 to 2.5	Pass	
	40	3.85	30.252	0.0158	-2.5 to 2.5	Pass	
50	3.85	22.762	0.0119	-2.5 to 2.5	Pass		

3. Modulation Characteristics

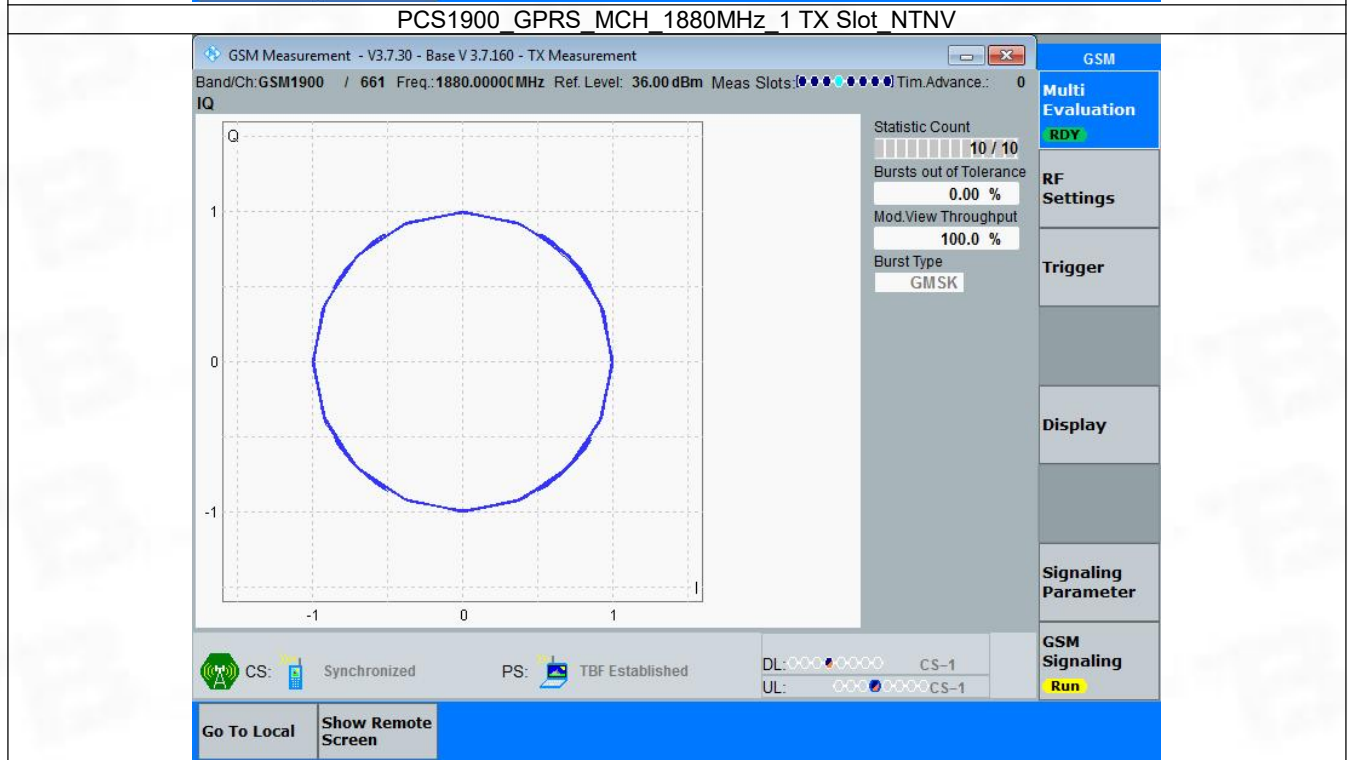
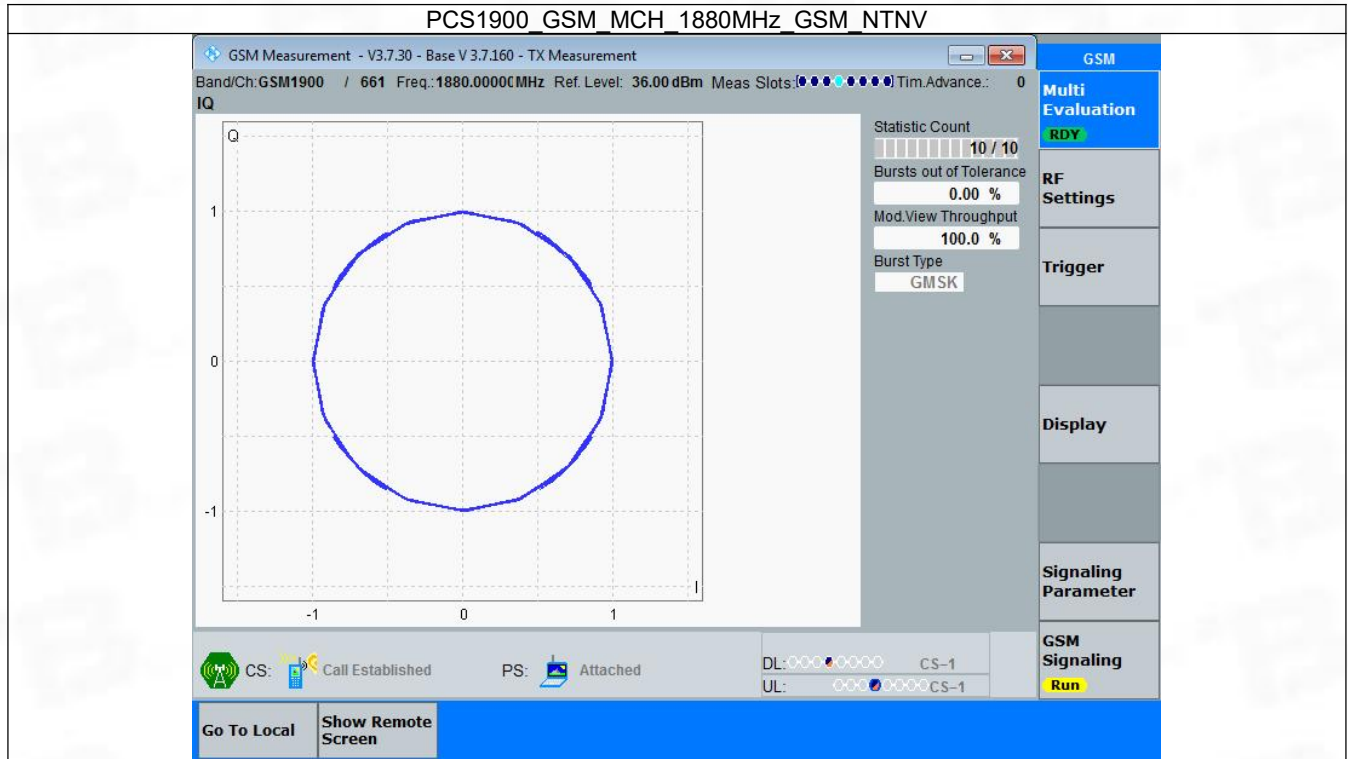
3.1 PCS1900

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

3.1.2 Test Graph



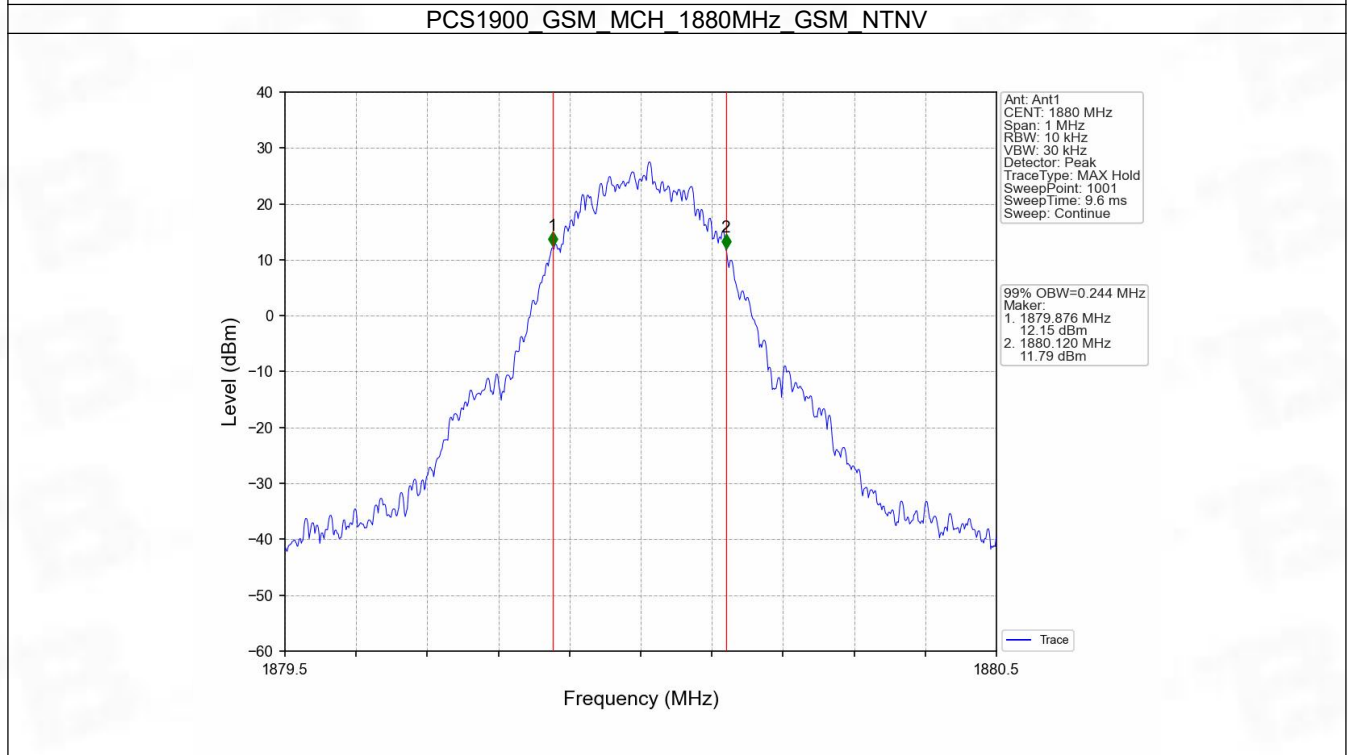
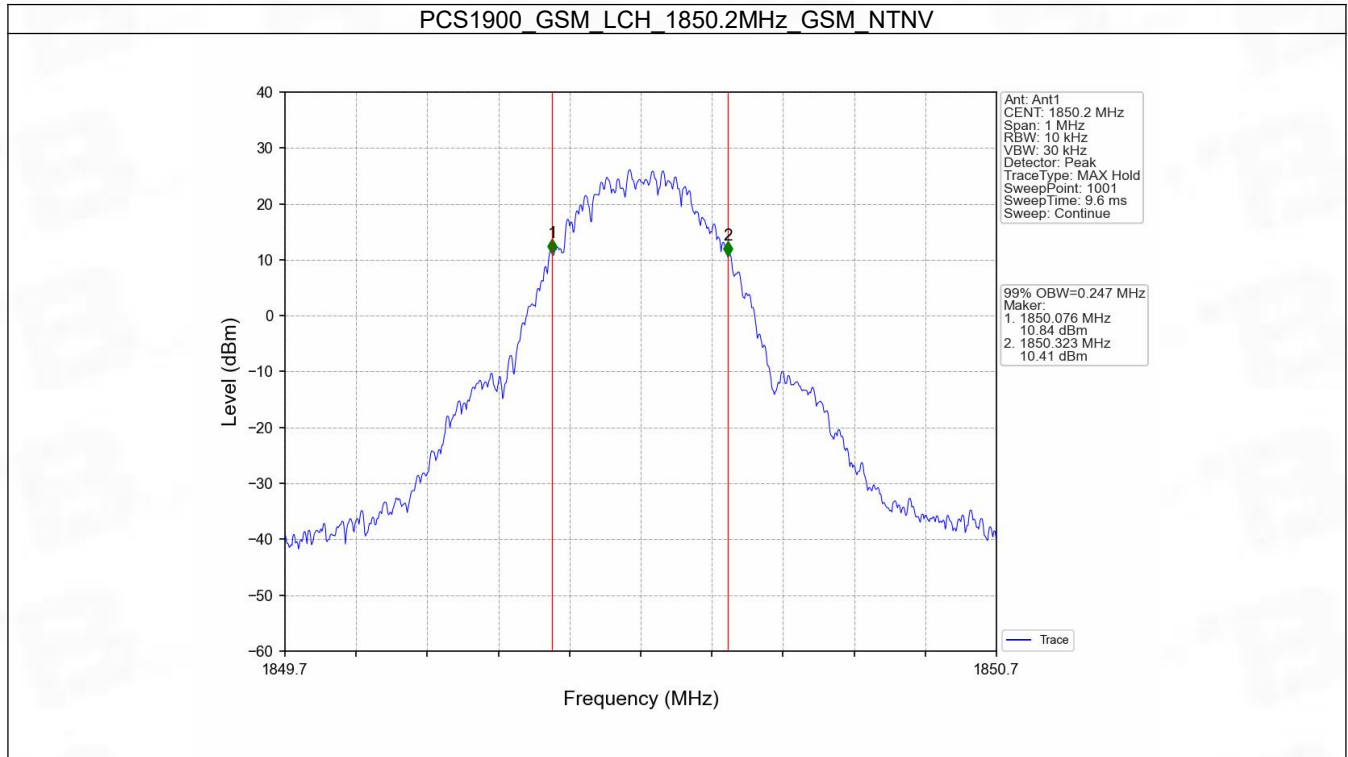
4. 99% & 26dB Bandwidth

4.1 PCS1900_OBW

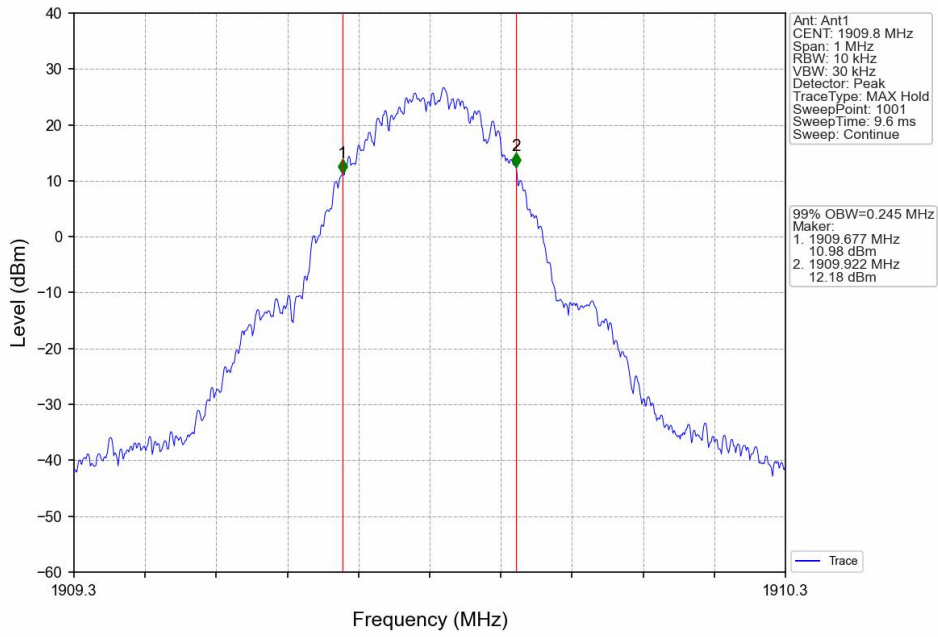
4.1.1 Test Result

Band: PCS1900					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GSM	GSM	1850.2	0.247	Pass
			1880	0.244	Pass
			1909.8	0.245	Pass
	GPRS	1 TX Slot	1850.2	0.242	Pass
			1880	0.249	Pass
			1909.8	0.240	Pass

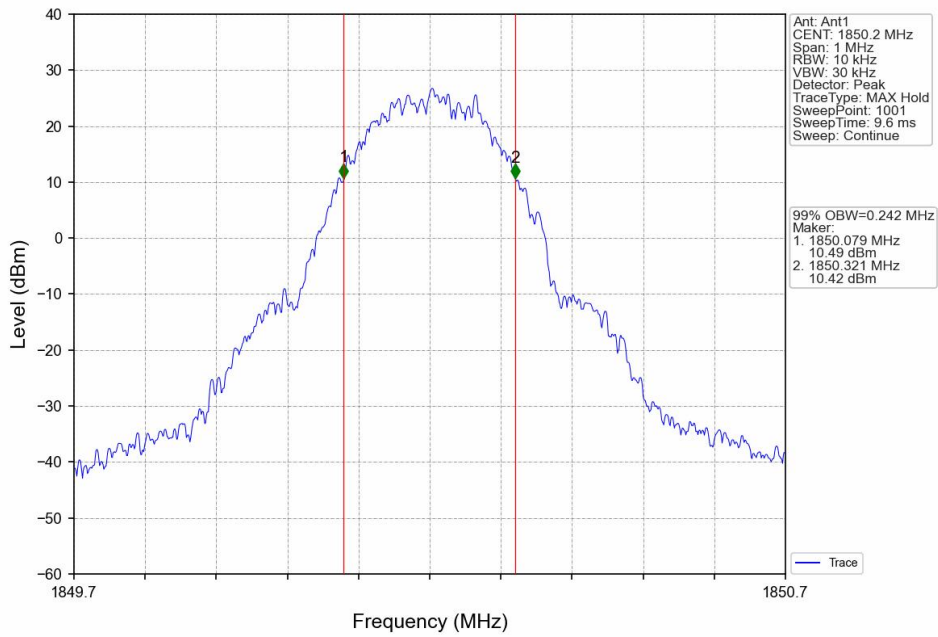
4.1.2 Test Graph



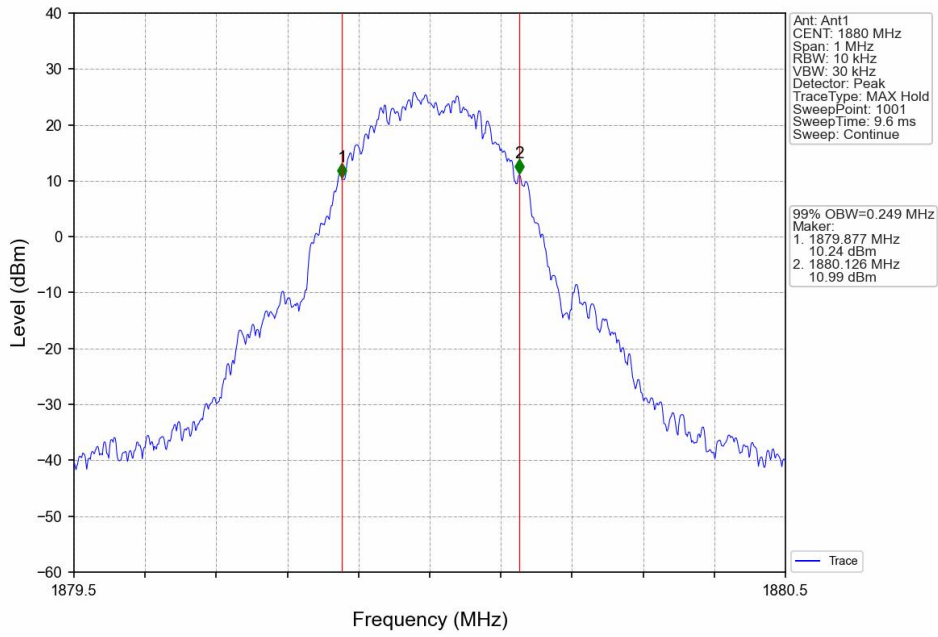
PCS1900 GSM_HCH_1909.8MHz_GSM_NTNV



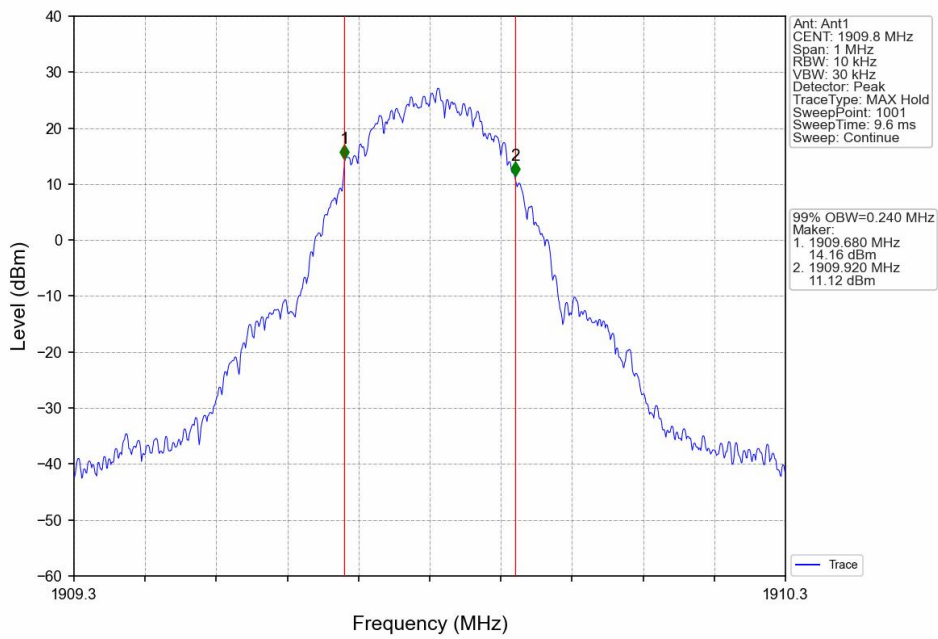
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV

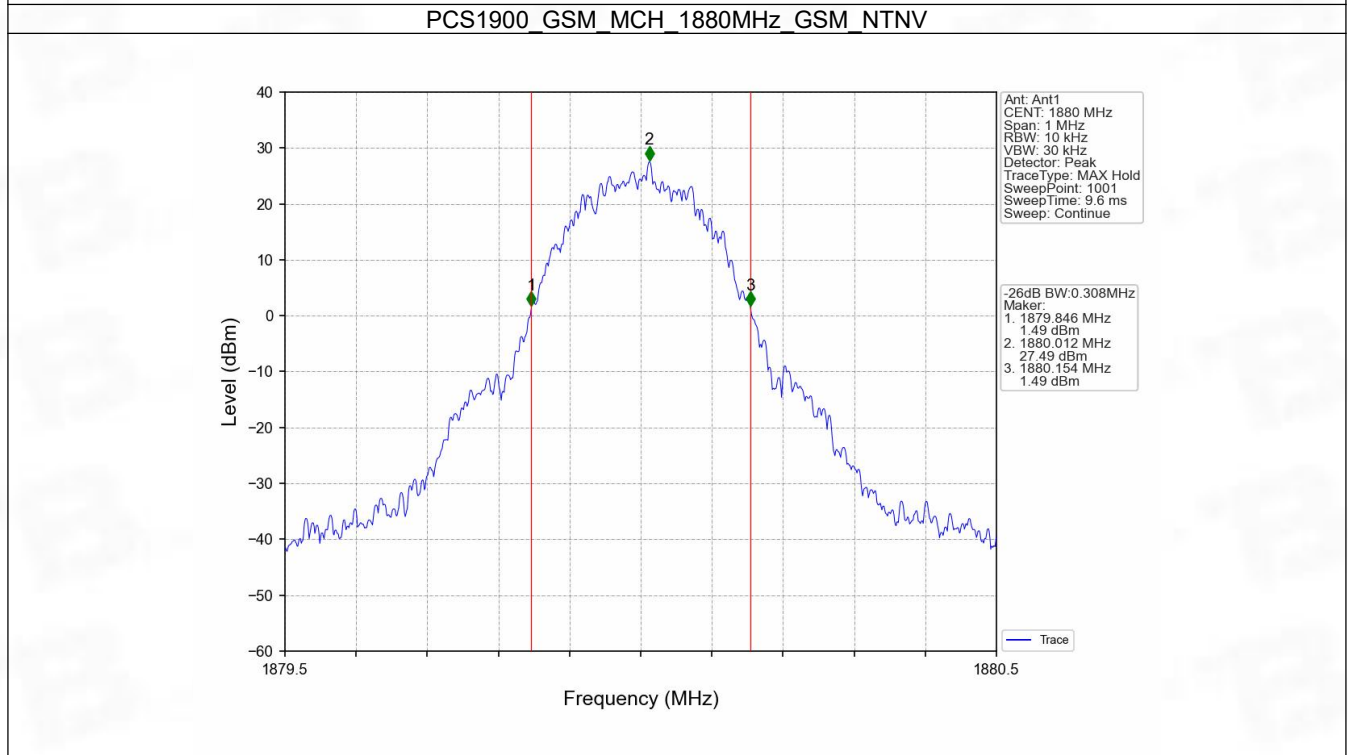
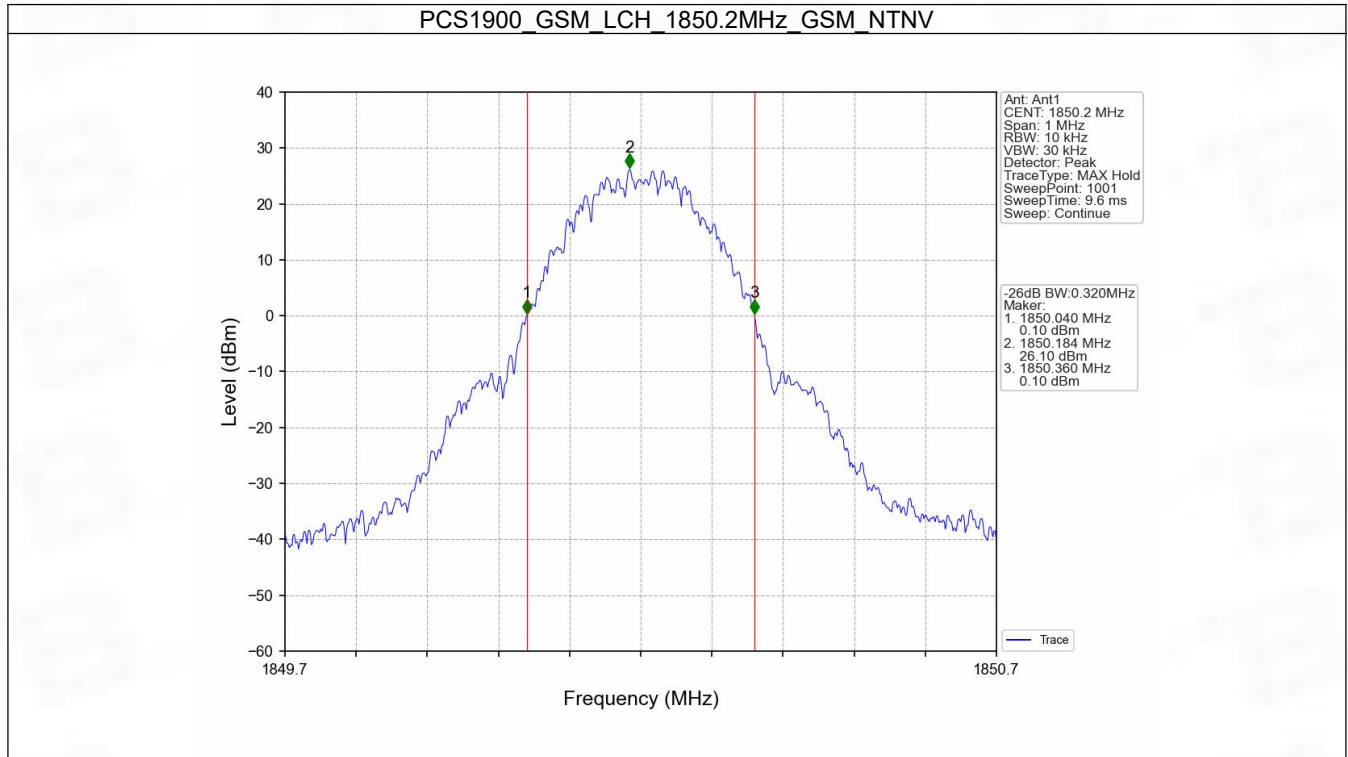


4.2 PCS1900_XDB

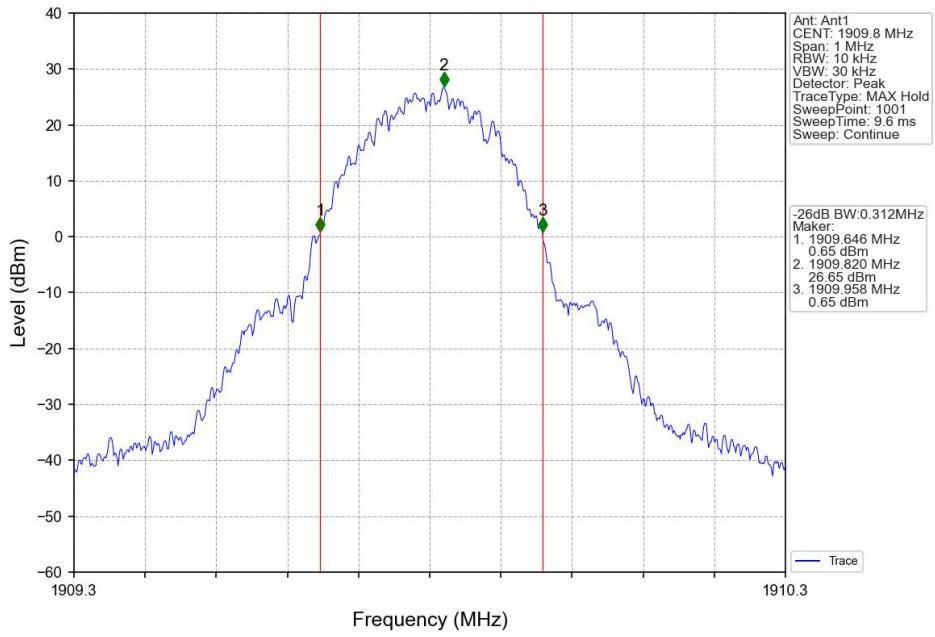
4.2.1 Test Result

Band: PCS1900					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GSM	GSM	1850.2	0.320	Pass
			1880	0.308	Pass
			1909.8	0.312	Pass
	GPRS	1 TX Slot	1850.2	0.318	Pass
			1880	0.322	Pass
			1909.8	0.315	Pass

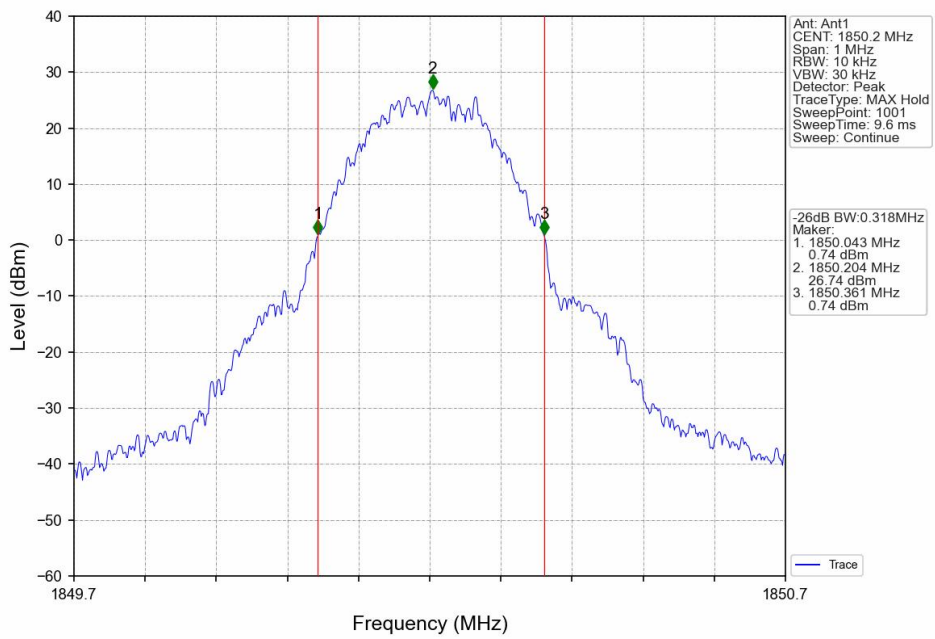
4.2.2 Test Graph



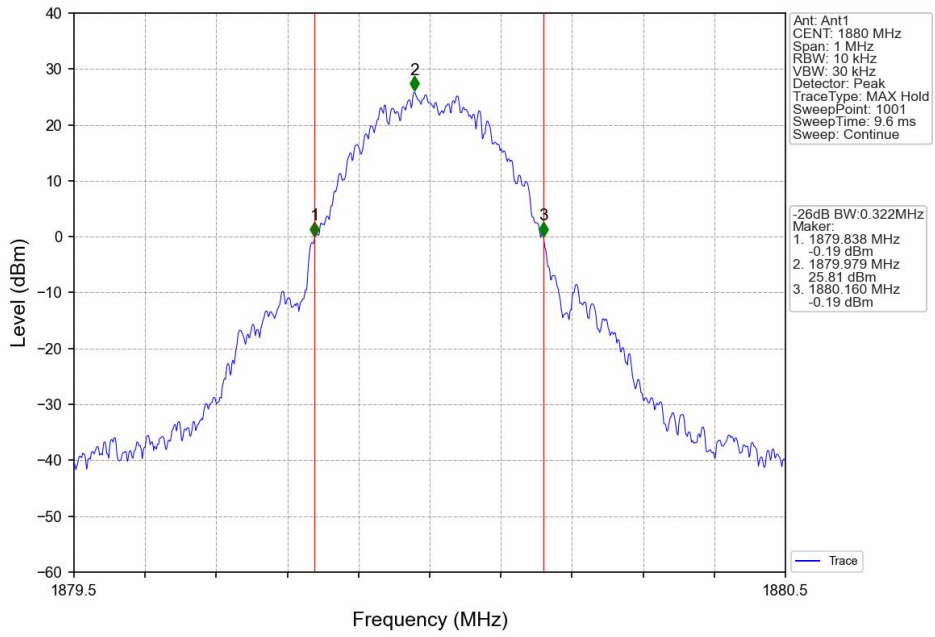
PCS1900 GSM_HCH_1909.8MHz_GSM_NTNV



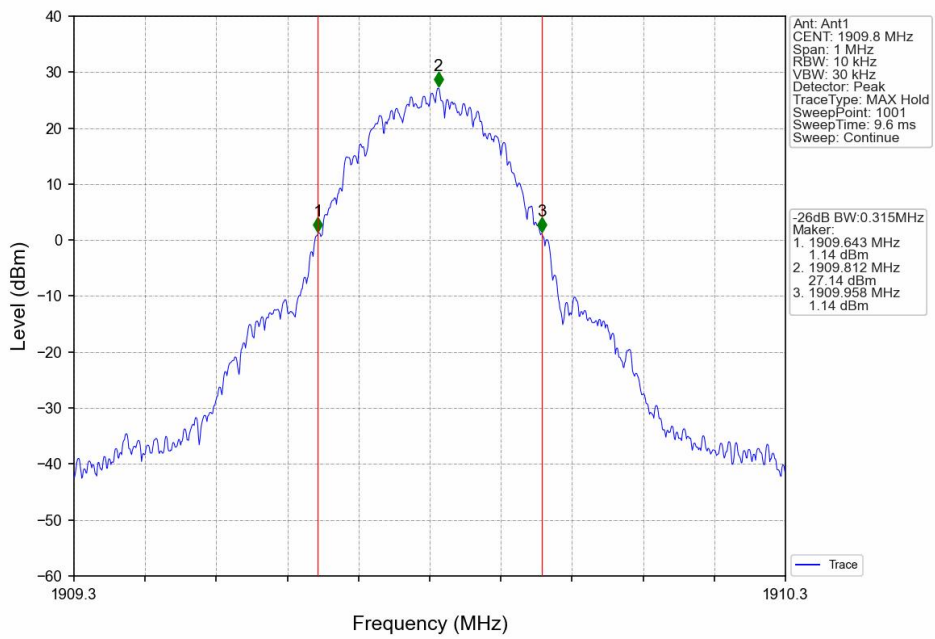
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



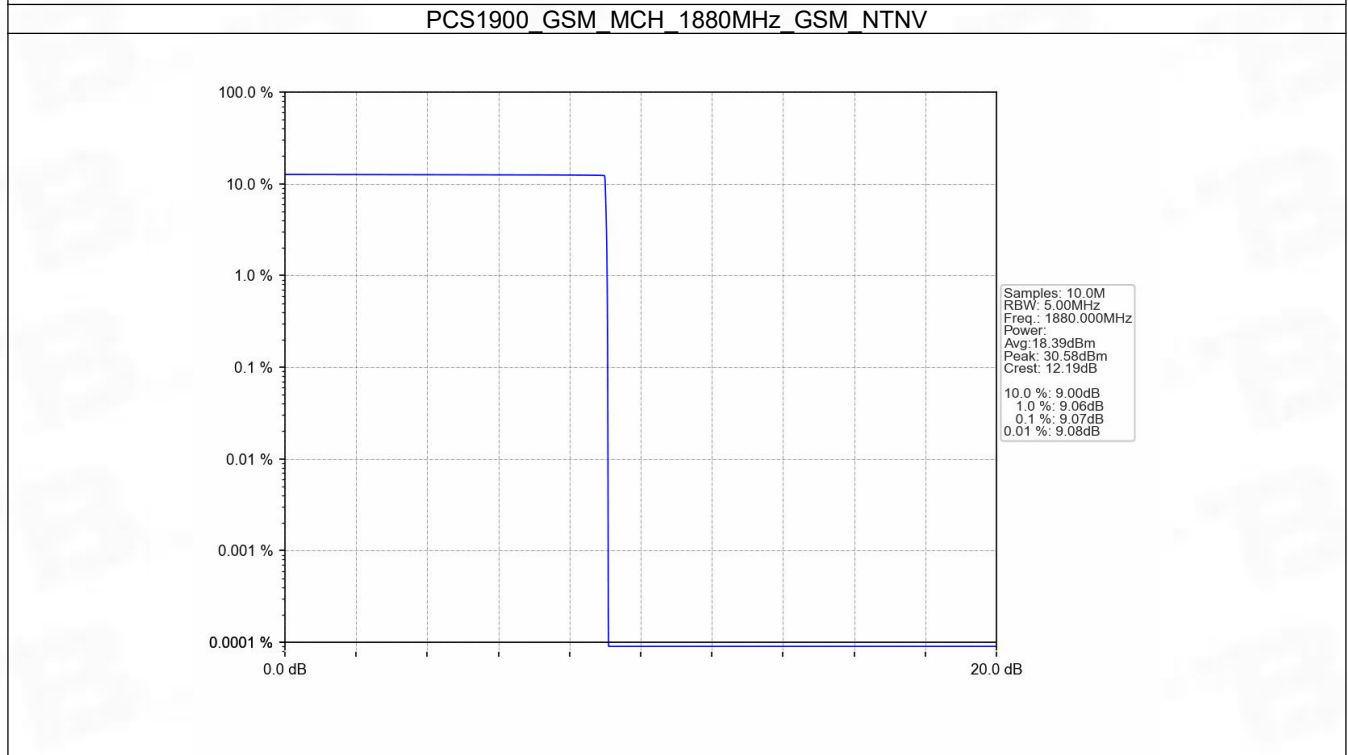
5. Peak-Average Ratio

5.1 PCS1900

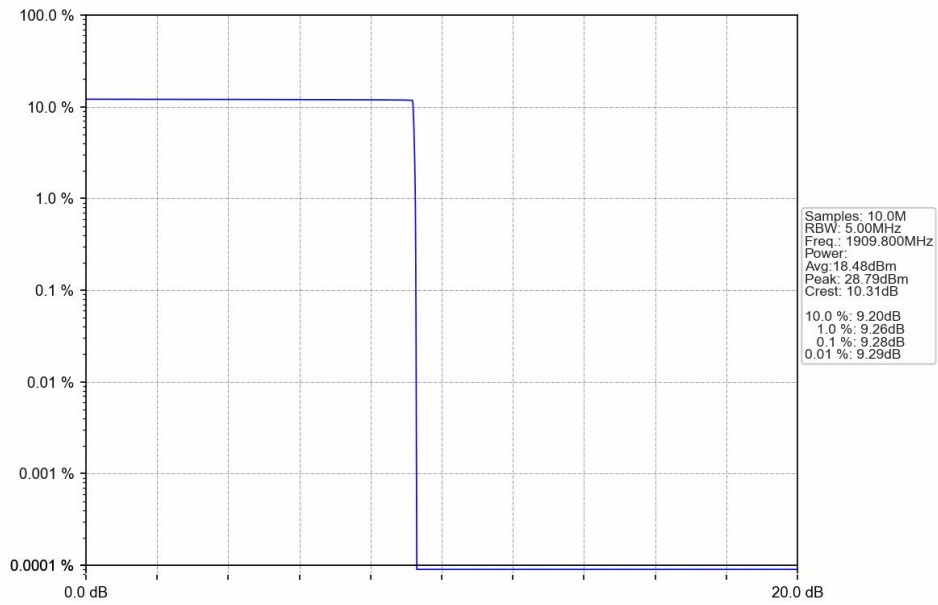
5.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	9.47	<=13	Pass
			1880	9.07	<=13	Pass
			1909.8	9.28	<=13	Pass
	GPRS	4 TX Slots	1850.2	9.80	<=13	Pass
			1880	3.81	<=13	Pass
			1909.8	3.60	<=13	Pass

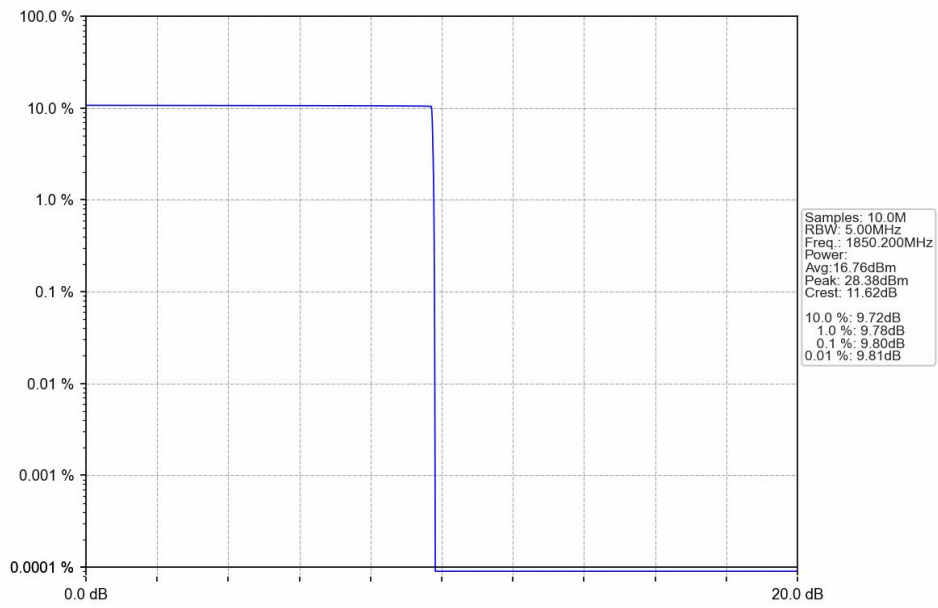
5.1.2 Test Graph



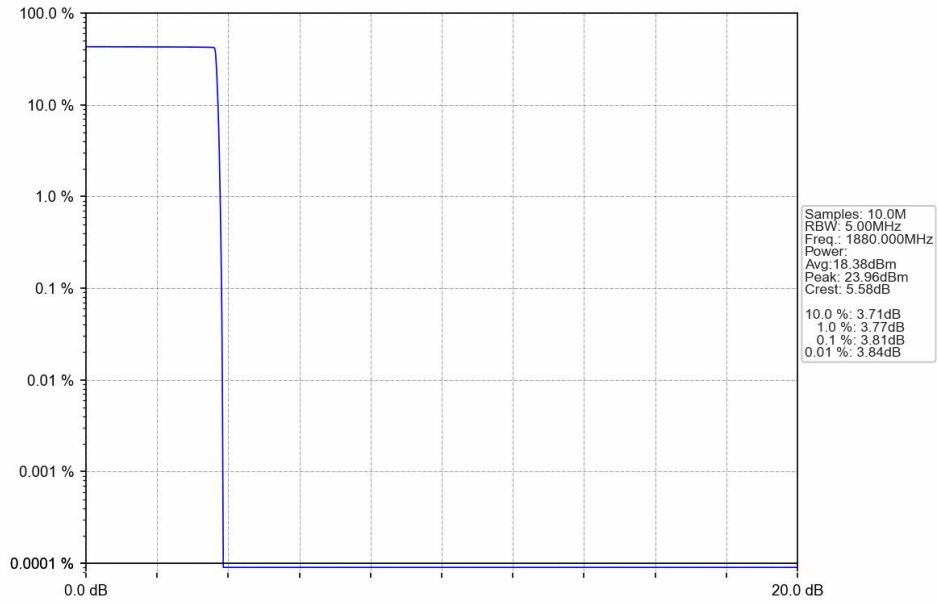
PCS1900 GSM_HCH_1909.8MHz_GSM_NTNV



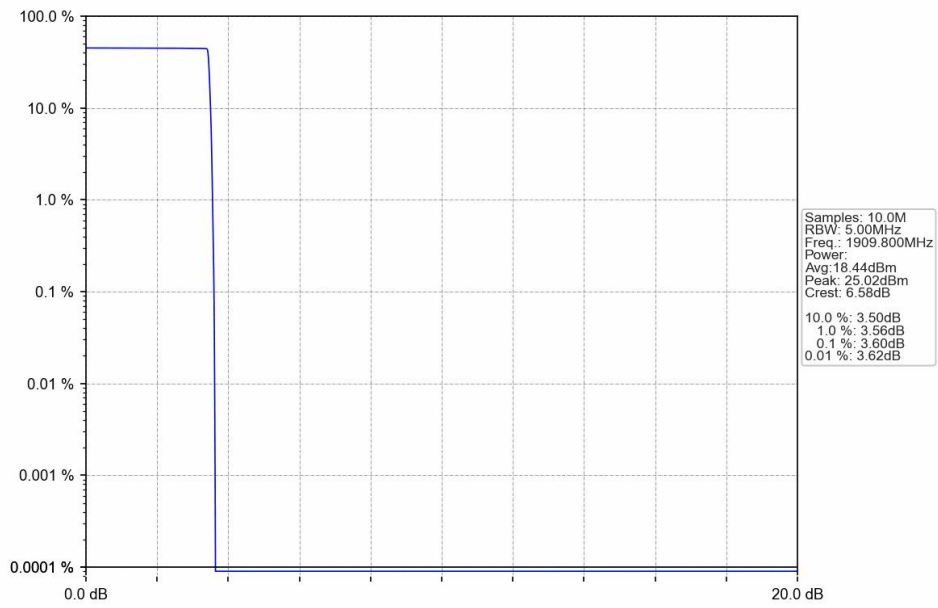
PCS1900 GPRS_LCH_1850.2MHz_4 TX Slots_NTNV



PCS1900_GPRS_MCH_1880MHz_4 TX Slots_NTNV



PCS1900_GPRS_HCH_1909.8MHz_4 TX Slots_NTNV



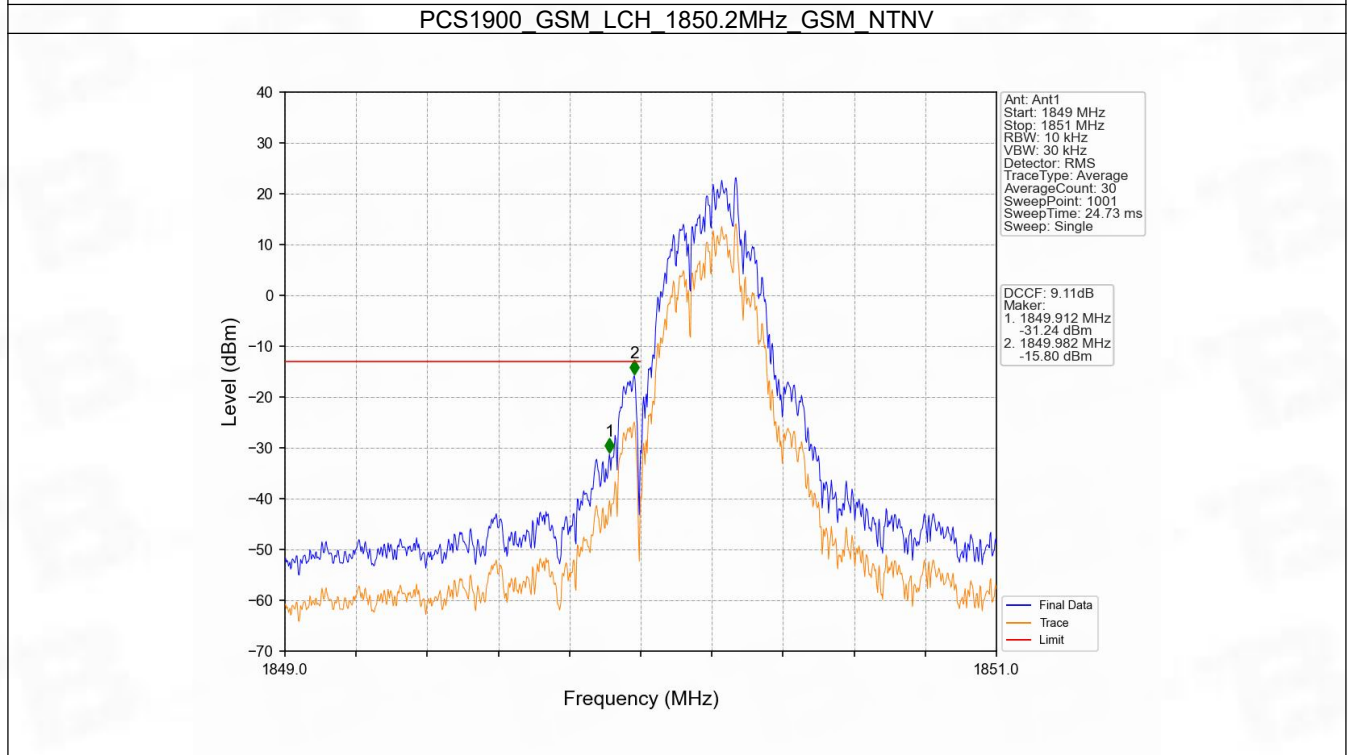
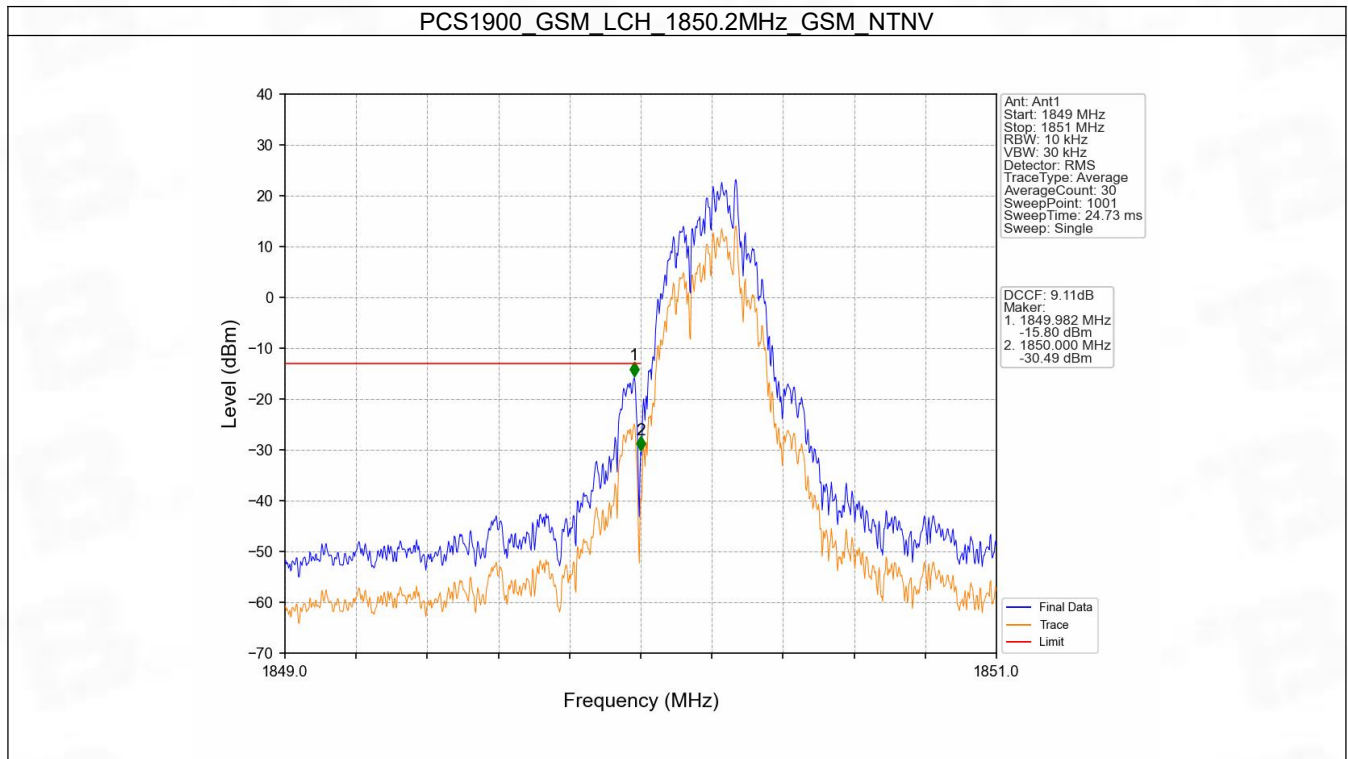
6. Spurious Emission

6.1 PCS1900

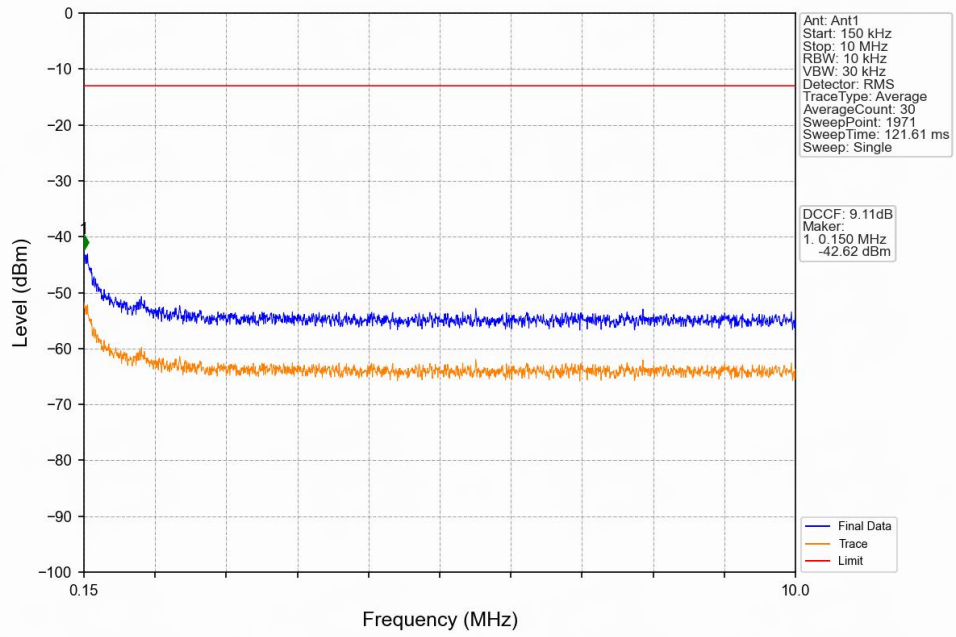
6.1.1 Test Result

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	

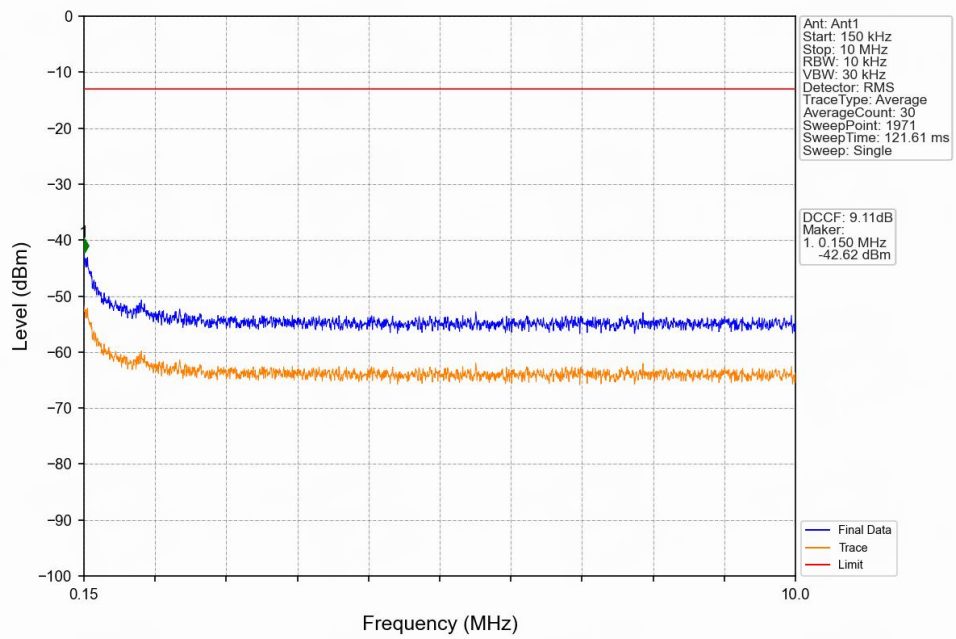
6.1.2 Test Graph



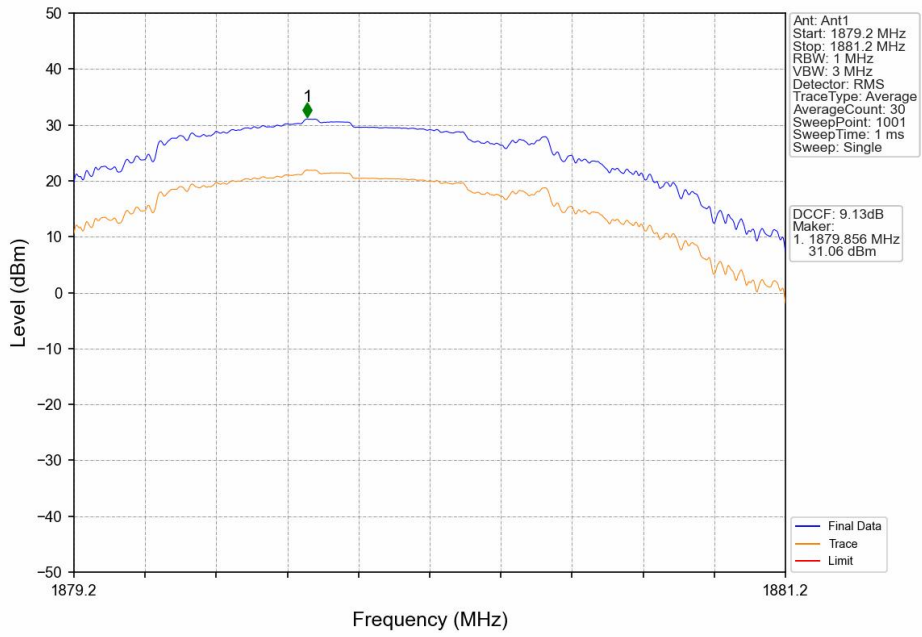
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



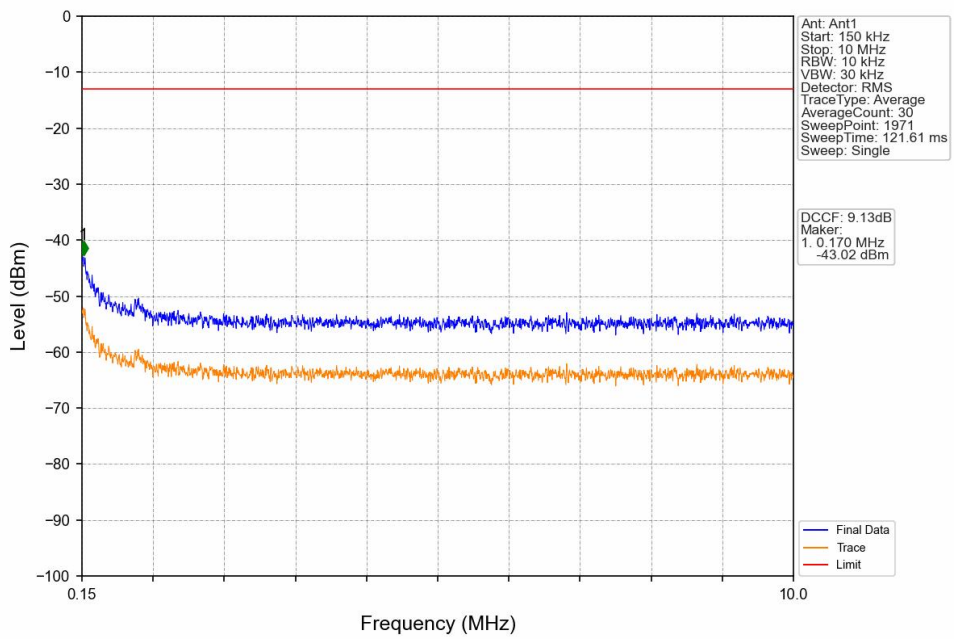
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



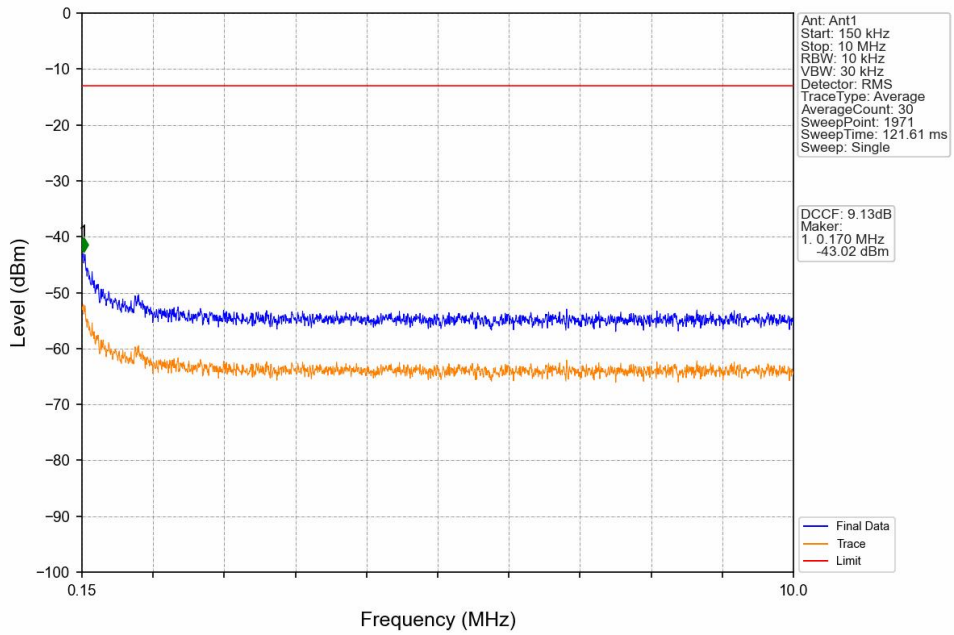
PCS1900 GSM MCH 1880MHz GSM NTN



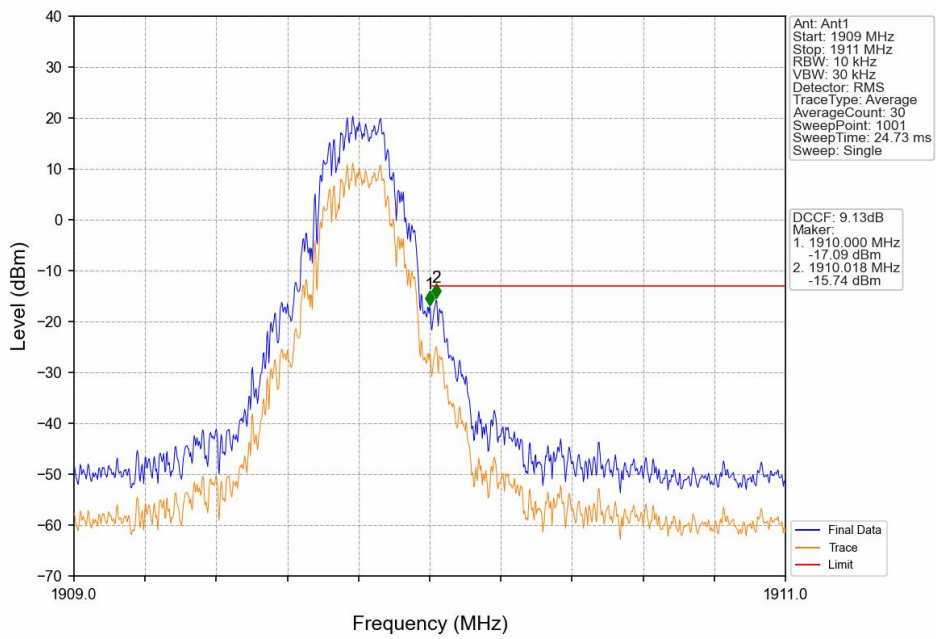
PCS1900 GSM MCH 1880MHz GSM NTN



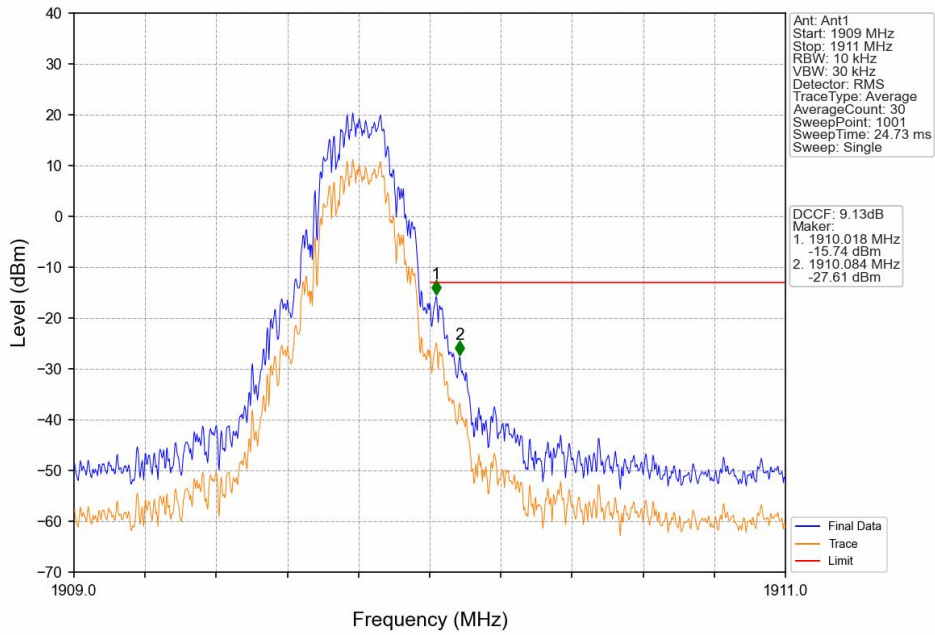
PCS1900 GSM MCH 1880MHz GSM NTN



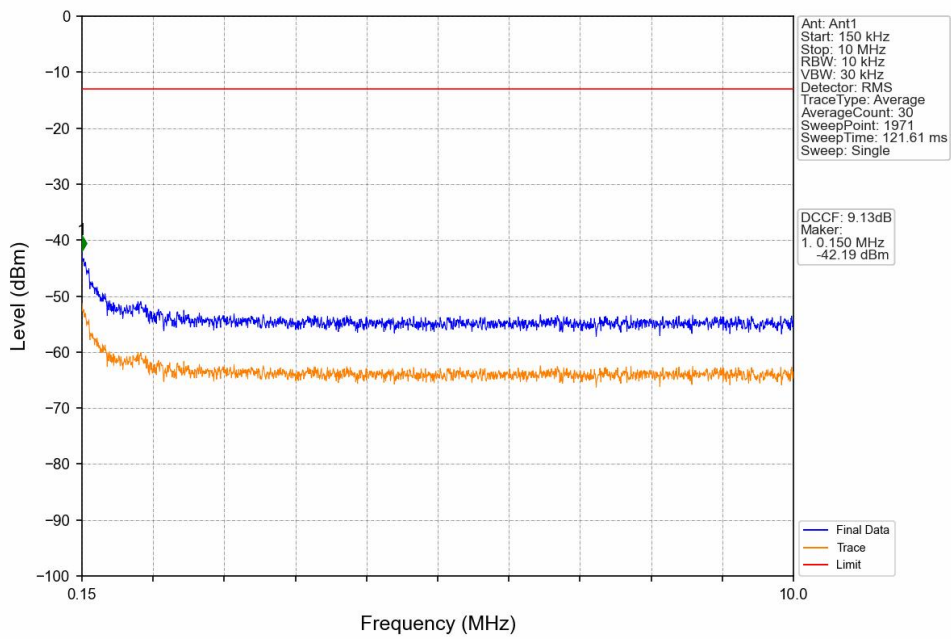
PCS1900 GSM HCH 1909.8MHz GSM NTN



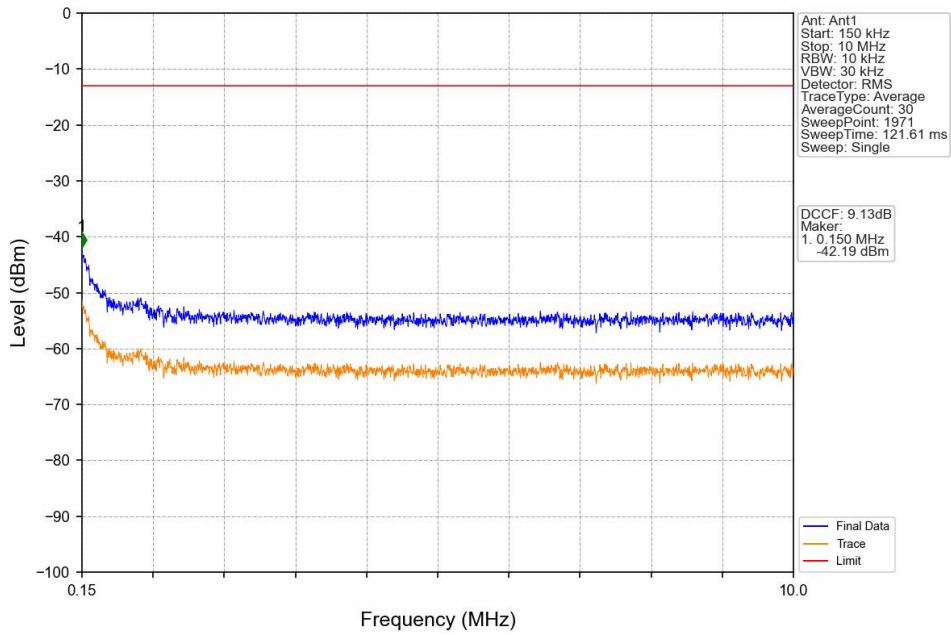
PCS1900 GSM_HCH_1909.8MHz_GSM_NTNV



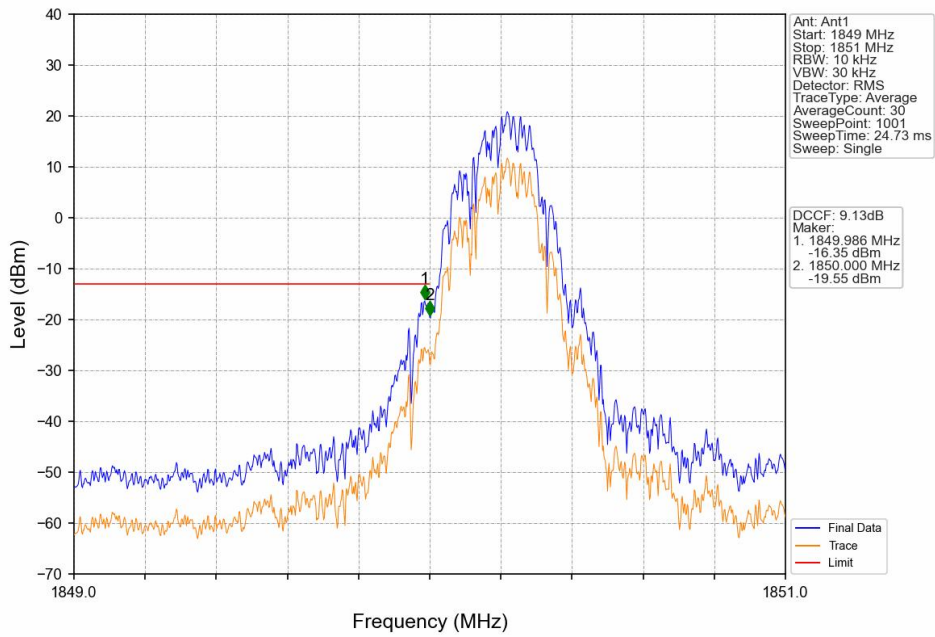
PCS1900 GSM_HCH_1909.8MHz_GSM_NTNV



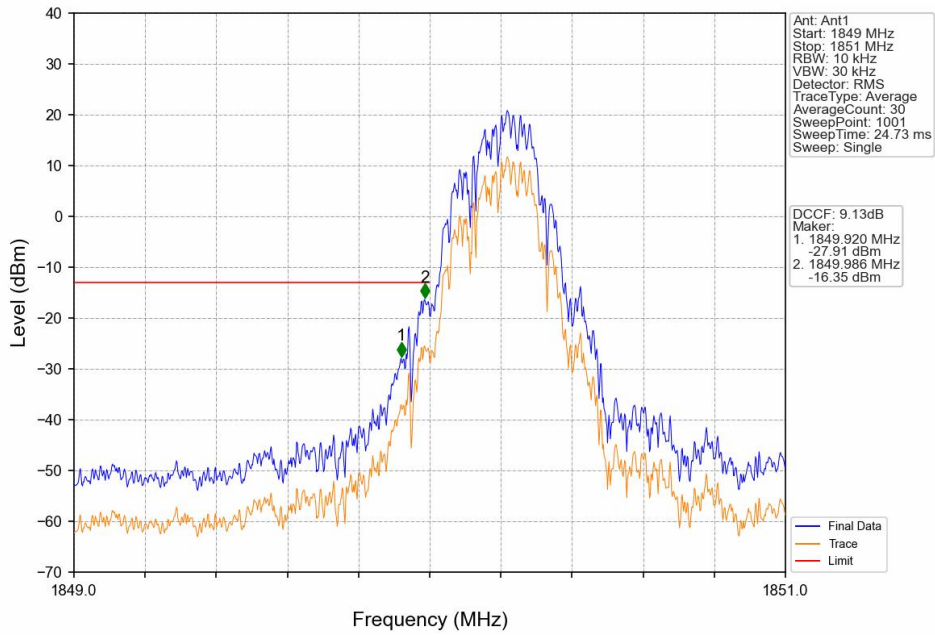
PCS1900 GSM_HCH_1909.8MHz_GSM_NTNV



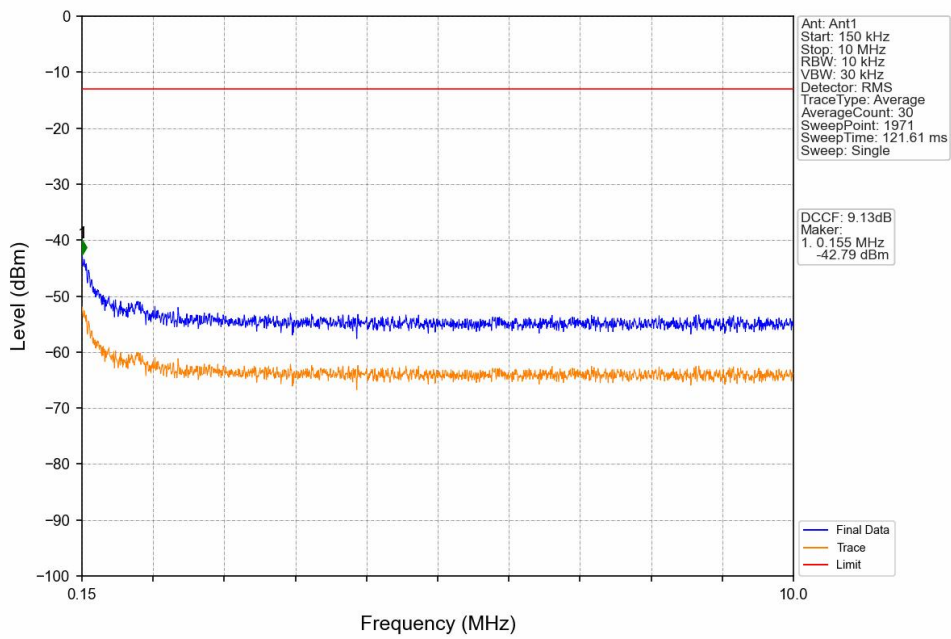
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



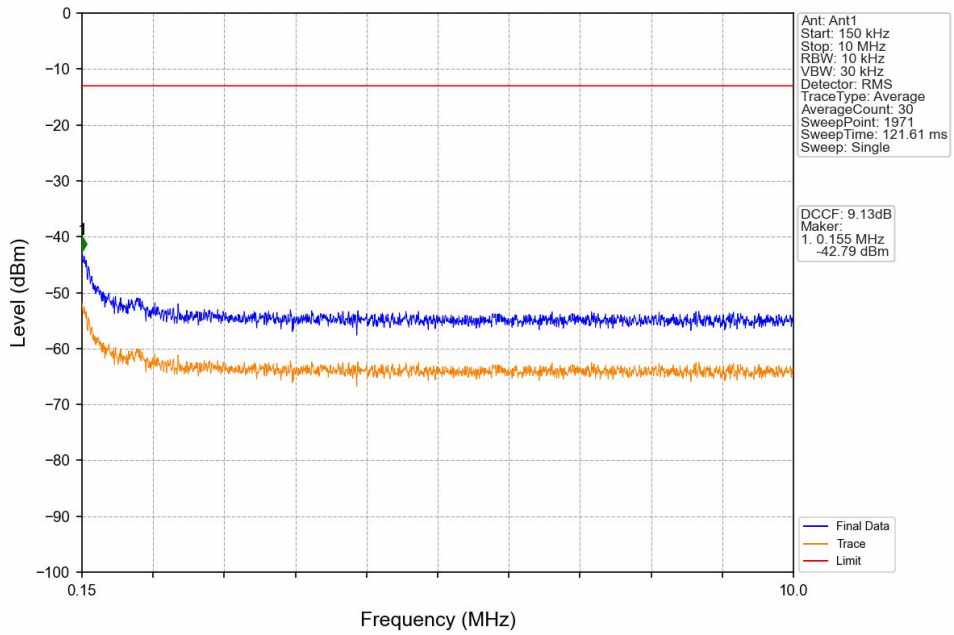
PCS1900_GPRS_LCH_1850.2MHz_1_TX_Slot_NTNV



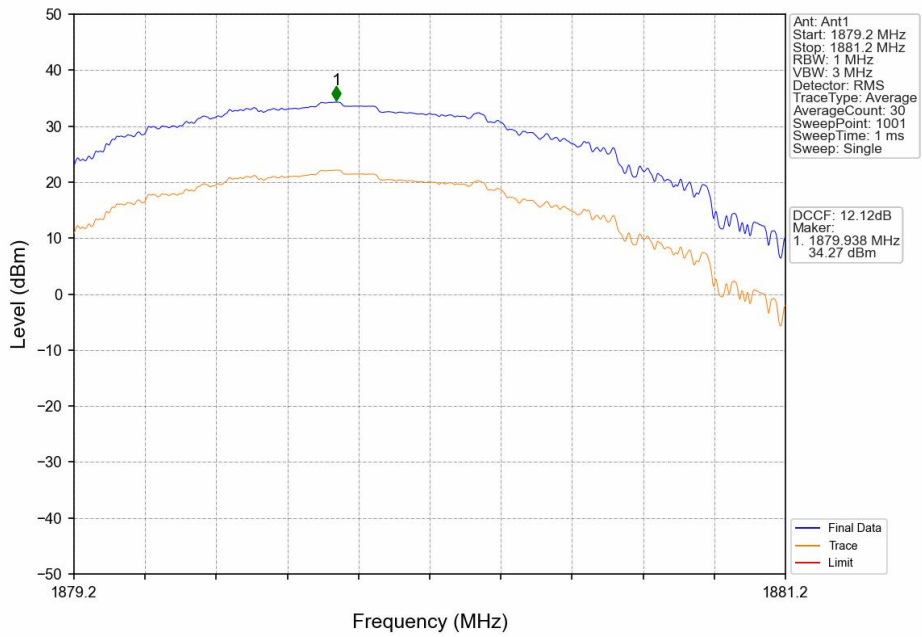
PCS1900_GPRS_LCH_1850.2MHz_1_TX_Slot_NTNV



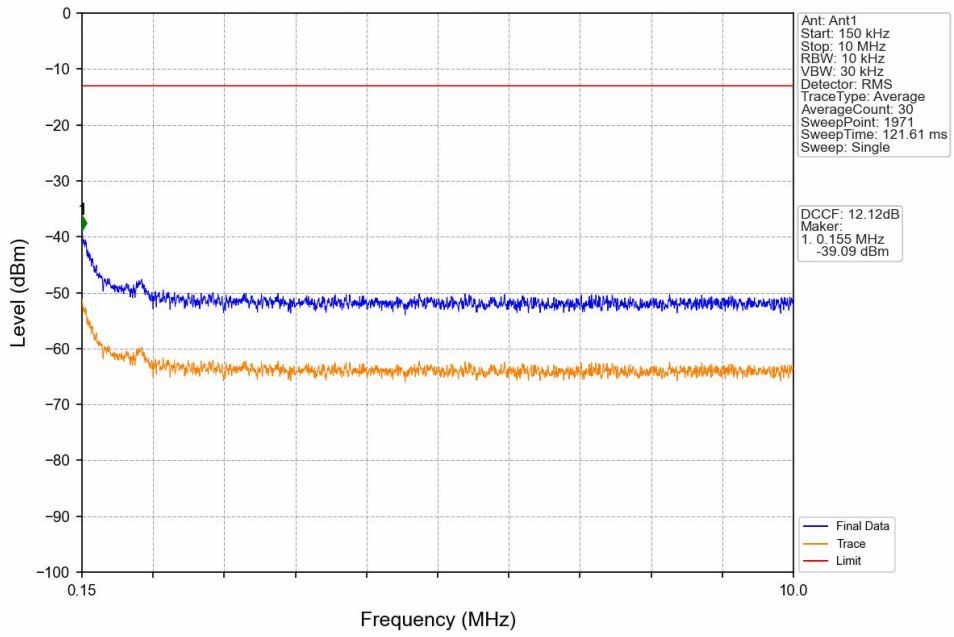
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



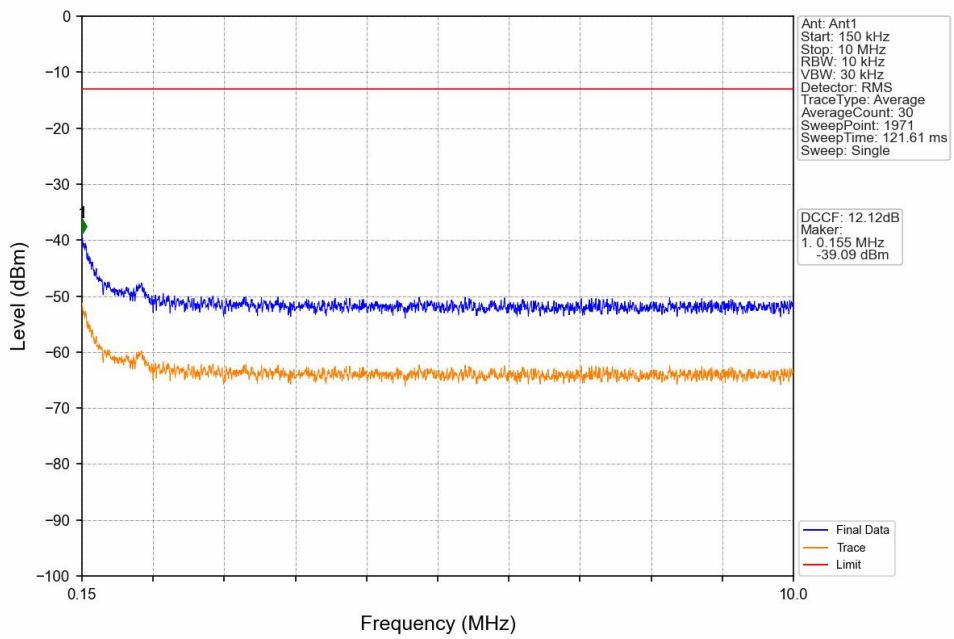
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



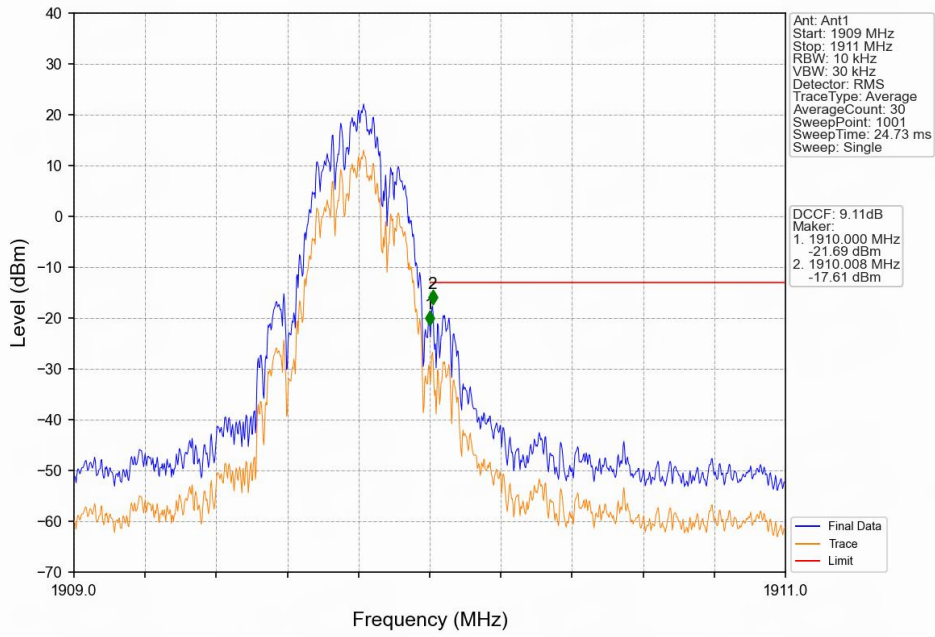
PCS1900_GPRS_MCH_1880MHz_1_TX_Slot_NTNV



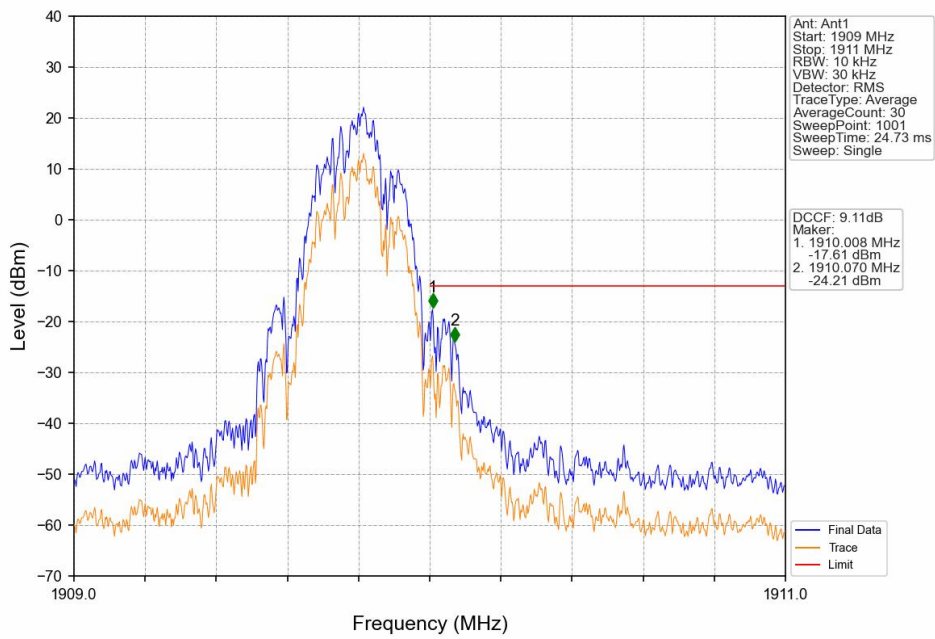
PCS1900_GPRS_MCH_1880MHz_1_TX_Slot_NTNV



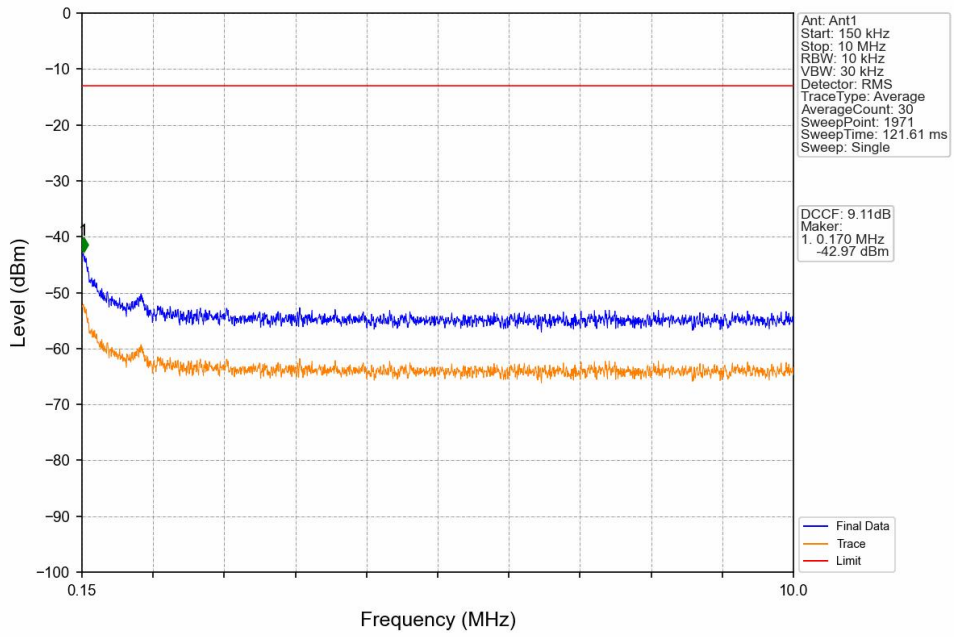
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



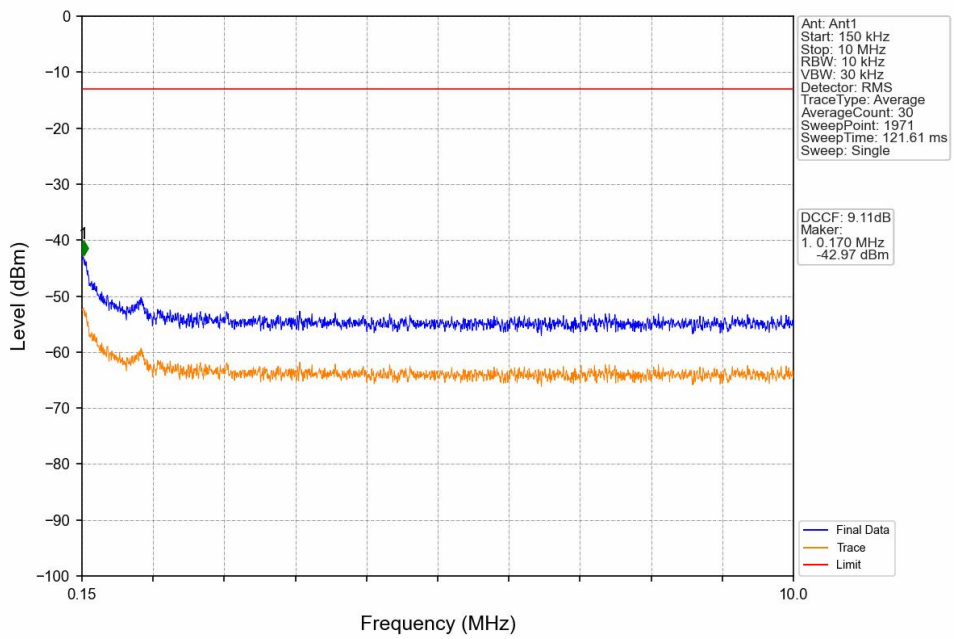
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



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	0.6918	0.0245	ppm	249KGXW	24E	28.40

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	0.7534	0.0245	ppm	249KGXW	24E	28.77