

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	23.07	0.81	23.88	<=33.01	Pass
			1880	22.91	0.81	23.72	<=33.01	Pass
			1909.8	22.60	0.81	23.41	<=33.01	Pass
	GPRS	1 TX Slot	1850.2	23.52	0.81	24.33	<=33.01	Pass
		2 TX Slots	1850.2	21.57	0.81	22.38	<=33.01	Pass
		3 TX Slots	1850.2	20.11	0.81	20.92	<=33.01	Pass
		4 TX Slots	1850.2	18.02	0.81	18.83	<=33.01	Pass
		1 TX Slot	1880	23.33	0.81	24.14	<=33.01	Pass
		2 TX Slots	1880	21.65	0.81	22.46	<=33.01	Pass
		3 TX Slots	1880	20.25	0.81	21.06	<=33.01	Pass
		4 TX Slots	1880	18.20	0.81	19.01	<=33.01	Pass
		1 TX Slot	1909.8	23.09	0.81	23.90	<=33.01	Pass
		2 TX Slots	1909.8	21.70	0.81	22.51	<=33.01	Pass
		3 TX Slots	1909.8	20.34	0.81	21.15	<=33.01	Pass
		4 TX Slots	1909.8	18.33	0.81	19.14	<=33.01	Pass
	EGPRS	1 TX Slot	1850.2	19.95	0.81	20.76	<=33.01	Pass
		2 TX Slots	1850.2	18.25	0.81	19.06	<=33.01	Pass
		3 TX Slots	1850.2	15.89	0.81	16.70	<=33.01	Pass
		4 TX Slots	1850.2	13.72	0.81	14.53	<=33.01	Pass
		1 TX Slot	1880	19.57	0.81	20.38	<=33.01	Pass
		2 TX Slots	1880	17.92	0.81	18.73	<=33.01	Pass
		3 TX Slots	1880	15.55	0.81	16.36	<=33.01	Pass
		4 TX Slots	1880	14.95	0.81	15.76	<=33.01	Pass
		1 TX Slot	1909.8	19.82	0.81	20.63	<=33.01	Pass
		2 TX Slots	1909.8	18.93	0.81	19.74	<=33.01	Pass
		3 TX Slots	1909.8	15.59	0.81	16.40	<=33.01	Pass
		4 TX Slots	1909.8	13.28	0.81	14.09	<=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	2.099	0.0011	-2.5 to 2.5	Pass
			3.85	0.743	0.0004	-2.5 to 2.5	Pass
			4.43	-2.357	-0.0013	-2.5 to 2.5	Pass
		-30	3.85	17.112	0.0092	-2.5 to 2.5	Pass
		-20	3.85	-1.421	-0.0008	-2.5 to 2.5	Pass
		-10	3.85	4.133	0.0022	-2.5 to 2.5	Pass
		0	3.85	-1.033	-0.0006	-2.5 to 2.5	Pass
		10	3.85	-4.940	-0.0027	-2.5 to 2.5	Pass

		30	3.85	-6.489	-0.0035	-2.5 to 2.5	Pass
		40	3.85	-3.358	-0.0018	-2.5 to 2.5	Pass
		50	3.85	-2.809	-0.0015	-2.5 to 2.5	Pass
		20	3.27	-10.170	-0.0054	-2.5 to 2.5	Pass
			3.85	-5.650	-0.0030	-2.5 to 2.5	Pass
			4.43	-4.423	-0.0024	-2.5 to 2.5	Pass
		-30	3.85	-1.227	-0.0007	-2.5 to 2.5	Pass
		-20	3.85	-8.297	-0.0044	-2.5 to 2.5	Pass
		-10	3.85	-3.067	-0.0016	-2.5 to 2.5	Pass
	0	3.85	-9.363	-0.0050	-2.5 to 2.5	Pass	
	10	3.85	-3.713	-0.0020	-2.5 to 2.5	Pass	
	30	3.85	-1.679	-0.0009	-2.5 to 2.5	Pass	
	40	3.85	-5.876	-0.0031	-2.5 to 2.5	Pass	
	50	3.85	7.684	0.0041	-2.5 to 2.5	Pass	
	1909.8	20	3.27	-11.687	-0.0061	-2.5 to 2.5	Pass
			3.85	-12.947	-0.0068	-2.5 to 2.5	Pass
			4.43	-13.431	-0.0070	-2.5 to 2.5	Pass
		-30	3.85	-12.688	-0.0066	-2.5 to 2.5	Pass
		-20	3.85	-14.077	-0.0074	-2.5 to 2.5	Pass
		-10	3.85	-16.111	-0.0084	-2.5 to 2.5	Pass
		0	3.85	-10.331	-0.0054	-2.5 to 2.5	Pass
10		3.85	-6.651	-0.0035	-2.5 to 2.5	Pass	
30		3.85	-8.071	-0.0042	-2.5 to 2.5	Pass	
40		3.85	-3.035	-0.0016	-2.5 to 2.5	Pass	
50		3.85	-1.937	-0.0010	-2.5 to 2.5	Pass	
GPRS		1850.2	20	3.27	-8.620	-0.0047	-2.5 to 2.5
	3.85			-7.232	-0.0039	-2.5 to 2.5	Pass
	4.43			12.591	0.0068	-2.5 to 2.5	Pass
	-30		3.85	8.168	0.0044	-2.5 to 2.5	Pass
	-20		3.85	-0.129	-0.0001	-2.5 to 2.5	Pass
	-10		3.85	15.077	0.0081	-2.5 to 2.5	Pass
	0		3.85	-3.971	-0.0021	-2.5 to 2.5	Pass
	10		3.85	1.679	0.0009	-2.5 to 2.5	Pass
	30		3.85	7.361	0.0040	-2.5 to 2.5	Pass
	40		3.85	-8.879	-0.0048	-2.5 to 2.5	Pass
	50		3.85	5.230	0.0028	-2.5 to 2.5	Pass
	1880		20	3.27	3.745	0.0020	-2.5 to 2.5
		3.85		-9.492	-0.0050	-2.5 to 2.5	Pass
		4.43		-0.226	-0.0001	-2.5 to 2.5	Pass
		-30	3.85	4.778	0.0025	-2.5 to 2.5	Pass
		-20	3.85	14.270	0.0076	-2.5 to 2.5	Pass
		-10	3.85	-10.202	-0.0054	-2.5 to 2.5	Pass
		0	3.85	-0.904	-0.0005	-2.5 to 2.5	Pass
		10	3.85	9.040	0.0048	-2.5 to 2.5	Pass
		30	3.85	-4.133	-0.0022	-2.5 to 2.5	Pass
		40	3.85	9.589	0.0051	-2.5 to 2.5	Pass
		50	3.85	13.205	0.0070	-2.5 to 2.5	Pass
		1909.8	20	3.27	-11.558	-0.0061	-2.5 to 2.5
	3.85			2.066	0.0011	-2.5 to 2.5	Pass
	4.43			-2.034	-0.0011	-2.5 to 2.5	Pass
	-30		3.85	2.163	0.0011	-2.5 to 2.5	Pass
	-20		3.85	-13.366	-0.0070	-2.5 to 2.5	Pass
	-10		3.85	-2.938	-0.0015	-2.5 to 2.5	Pass
	0		3.85	2.131	0.0011	-2.5 to 2.5	Pass
	10		3.85	-2.325	-0.0012	-2.5 to 2.5	Pass
30	3.85		-3.681	-0.0019	-2.5 to 2.5	Pass	
40	3.85		5.037	0.0026	-2.5 to 2.5	Pass	
50	3.85		-7.071	-0.0037	-2.5 to 2.5	Pass	
EGPRS	1850.2		20	3.27	1.098	0.0006	-2.5 to 2.5

			3.85	0.258	0.0001	-2.5 to 2.5	Pass	
			4.43	-0.323	-0.0002	-2.5 to 2.5	Pass	
		-30	3.85	-9.234	-0.0050	-2.5 to 2.5	Pass	
		-20	3.85	2.163	0.0012	-2.5 to 2.5	Pass	
		-10	3.85	-3.325	-0.0018	-2.5 to 2.5	Pass	
		0	3.85	15.982	0.0086	-2.5 to 2.5	Pass	
		10	3.85	-2.873	-0.0016	-2.5 to 2.5	Pass	
		30	3.85	2.066	0.0011	-2.5 to 2.5	Pass	
		40	3.85	9.008	0.0049	-2.5 to 2.5	Pass	
		50	3.85	-1.098	-0.0006	-2.5 to 2.5	Pass	
	1880	20		3.27	8.782	0.0047	-2.5 to 2.5	Pass
				3.85	-1.743	-0.0009	-2.5 to 2.5	Pass
				4.43	-1.388	-0.0007	-2.5 to 2.5	Pass
		-30	3.85	0.678	0.0004	-2.5 to 2.5	Pass	
		-20	3.85	7.845	0.0042	-2.5 to 2.5	Pass	
		-10	3.85	8.136	0.0043	-2.5 to 2.5	Pass	
		0	3.85	11.106	0.0059	-2.5 to 2.5	Pass	
		10	3.85	13.076	0.0070	-2.5 to 2.5	Pass	
		30	3.85	12.785	0.0068	-2.5 to 2.5	Pass	
		40	3.85	22.503	0.0120	-2.5 to 2.5	Pass	
	50	3.85	21.535	0.0115	-2.5 to 2.5	Pass		
	1909.8	20		3.27	9.169	0.0048	-2.5 to 2.5	Pass
				3.85	16.434	0.0086	-2.5 to 2.5	Pass
				4.43	3.551	0.0019	-2.5 to 2.5	Pass
		-30	3.85	13.947	0.0073	-2.5 to 2.5	Pass	
		-20	3.85	-9.815	-0.0051	-2.5 to 2.5	Pass	
		-10	3.85	2.938	0.0015	-2.5 to 2.5	Pass	
		0	3.85	2.454	0.0013	-2.5 to 2.5	Pass	
		10	3.85	15.529	0.0081	-2.5 to 2.5	Pass	
		30	3.85	4.681	0.0025	-2.5 to 2.5	Pass	
40		3.85	5.037	0.0026	-2.5 to 2.5	Pass		
50	3.85	-9.912	-0.0052	-2.5 to 2.5	Pass			

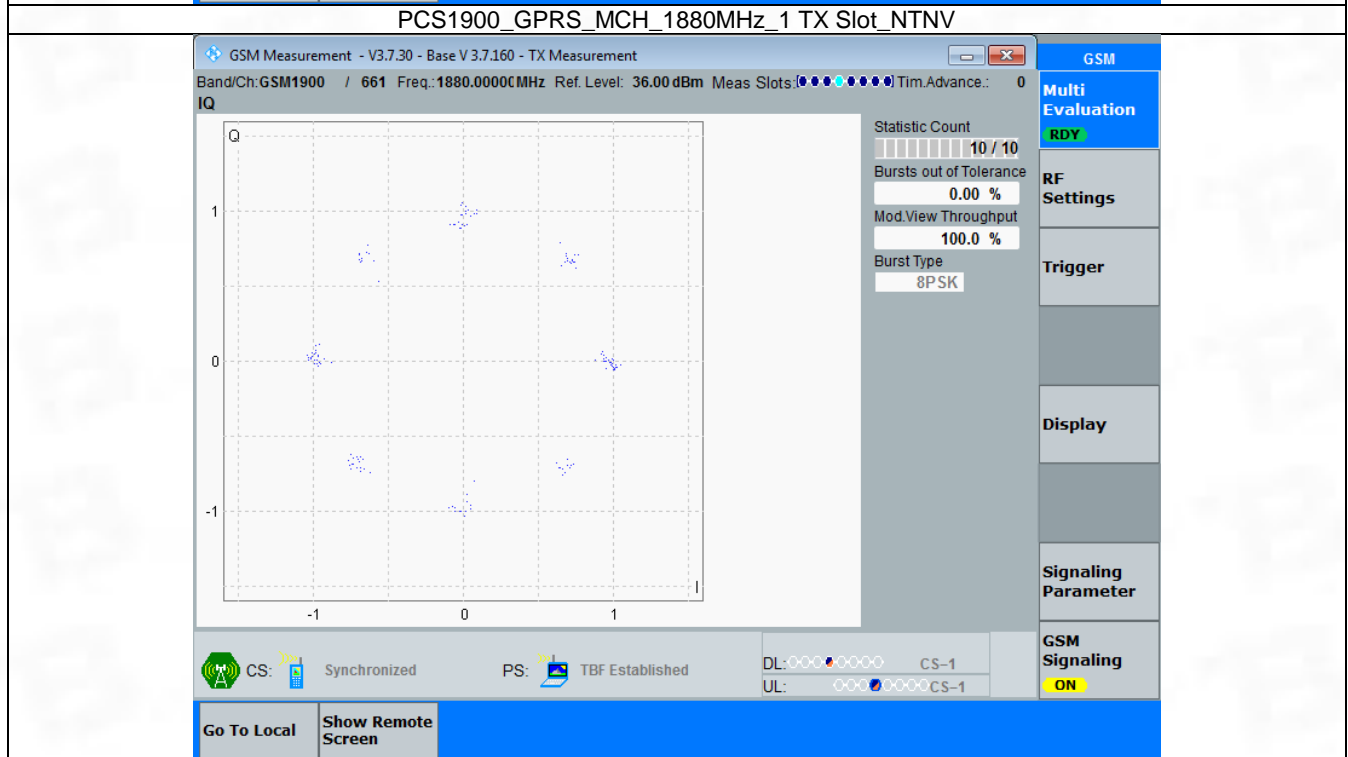
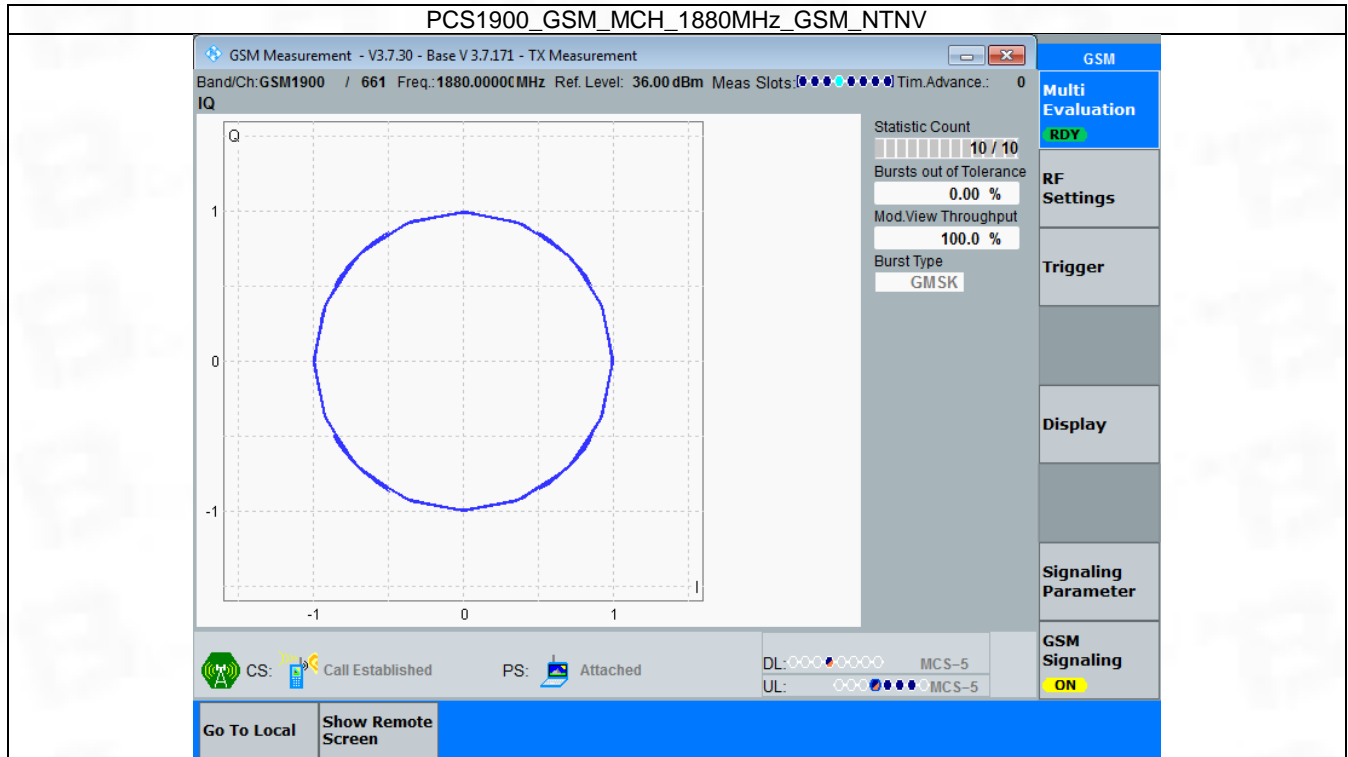
3. Modulation Characteristics

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

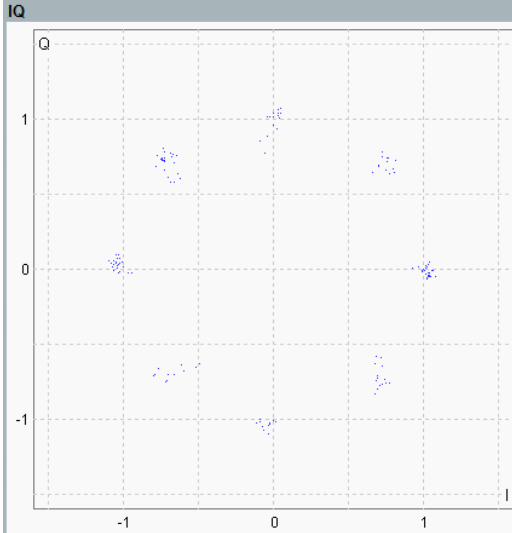
3.1.2 Test Graph



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV

GSM Measurement - V3.7.30 - Base V 3.7.160 - TX Measurement

Band/Ch:GSM1900 / 661 Freq.:1880.0000CMHz Ref. Level: 39.23dBm Meas Slots: [●●●●●●●●●●] Tim.Advance.: 0



Statistic Count
[Progress Bar] 10 / 10
Bursts out of Tolerance
0.00 %
Mod.View Throughput
100.0 %
Burst Type
8PSK

- GSM
- Multi Evaluation **RDY**
- RF Settings
- Trigger
- Display
- Signaling Parameter
- GSM Signaling **ON**

CS: [Icon] Synchronized PS: [Icon] TBF Established DL: [Progress Bar] MCS-5 UL: [Progress Bar] MCS-5

Go To Local Show Remote Screen

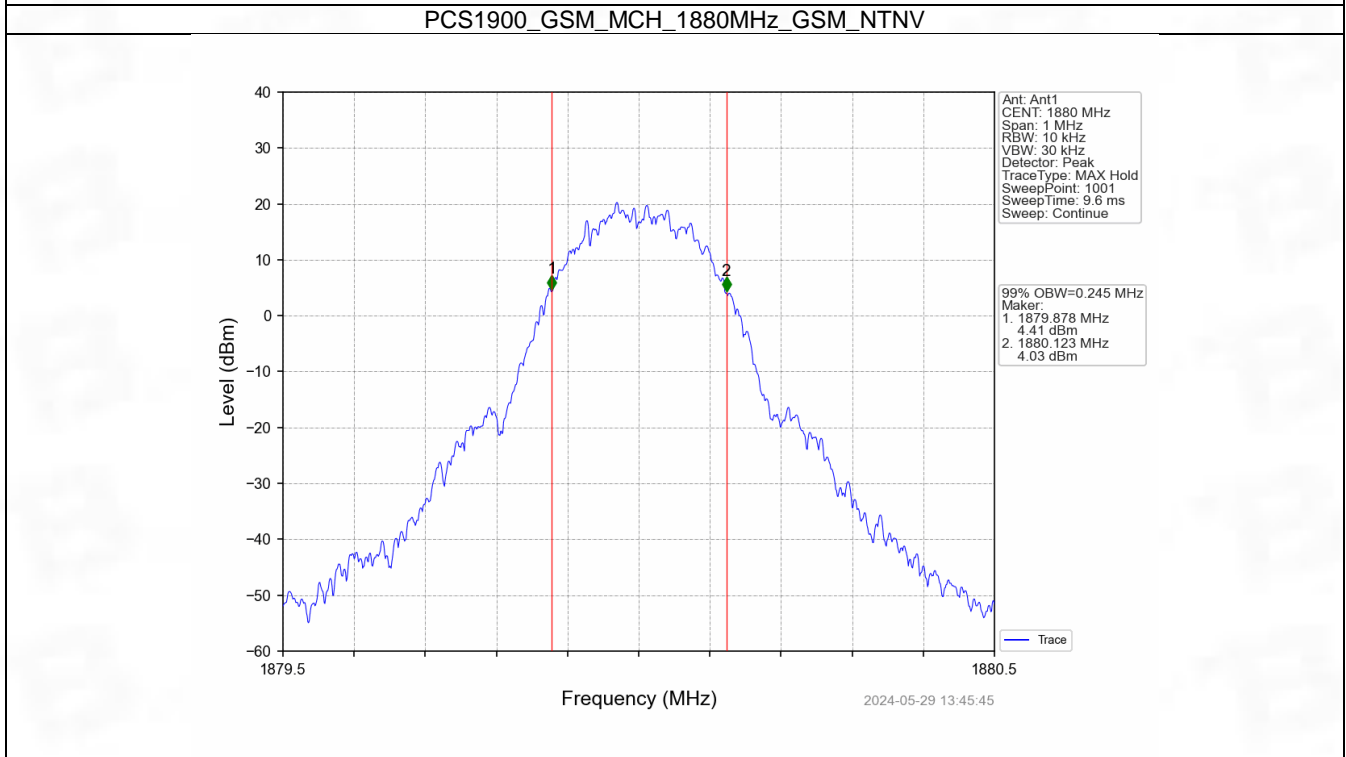
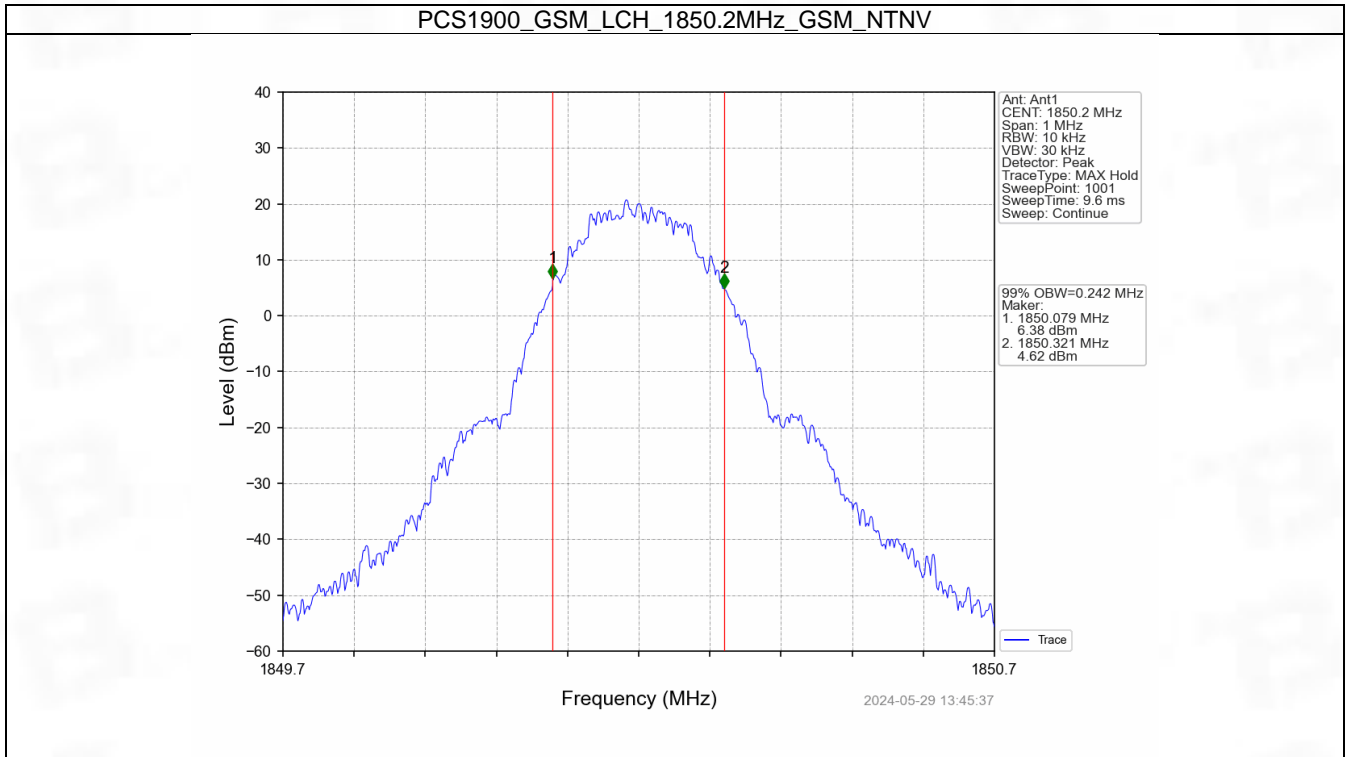
4. 99% & 26dB Bandwidth

4.1 PCS1900_OBW

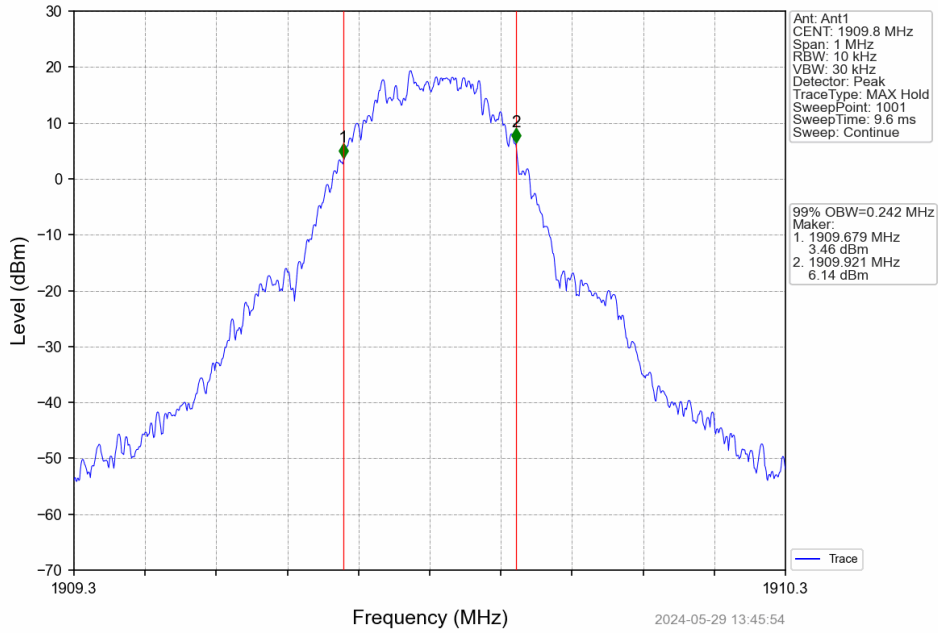
4.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.242	/	Pass
			1880	0.245	/	Pass
			1909.8	0.242	/	Pass
	GPRS	1 TX Slot	1850.2	0.246	/	Pass
			1880	0.247	/	Pass
			1909.8	0.240	/	Pass
	EGPRS	1 TX Slot	1850.2	0.259	/	Pass
			1880	0.251	/	Pass
			1909.8	0.251	/	Pass

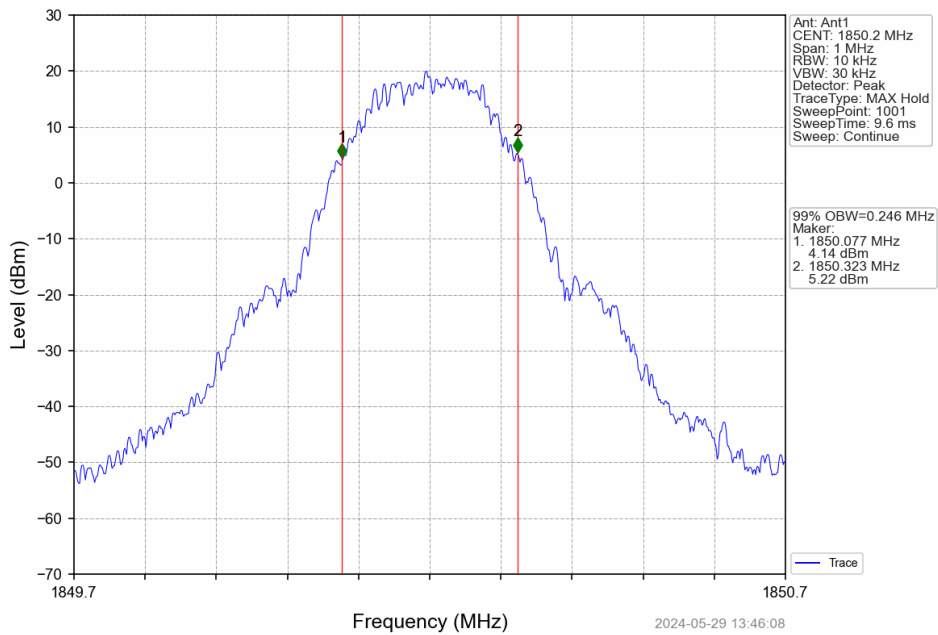
4.1.2 Test Graph



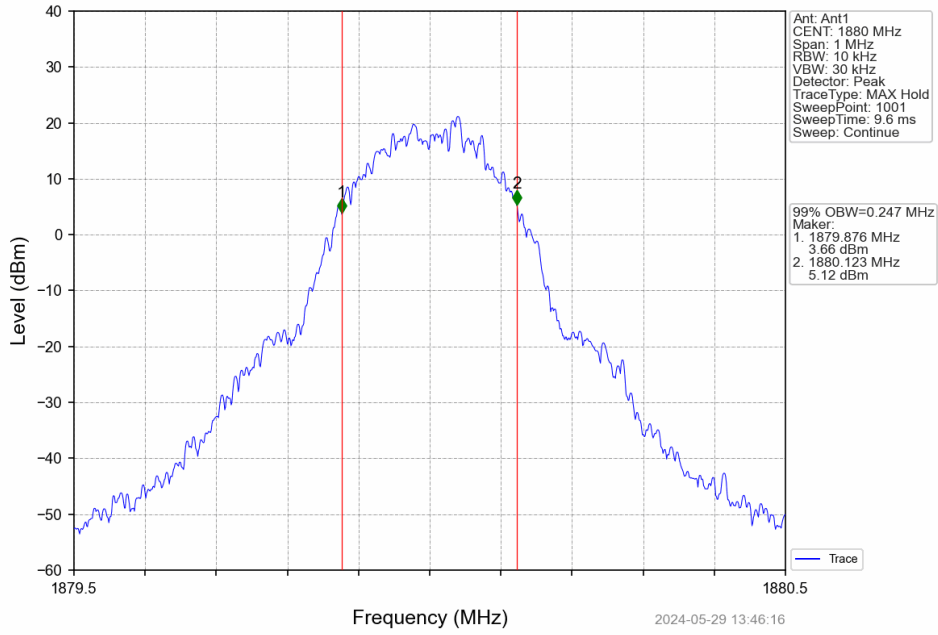
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



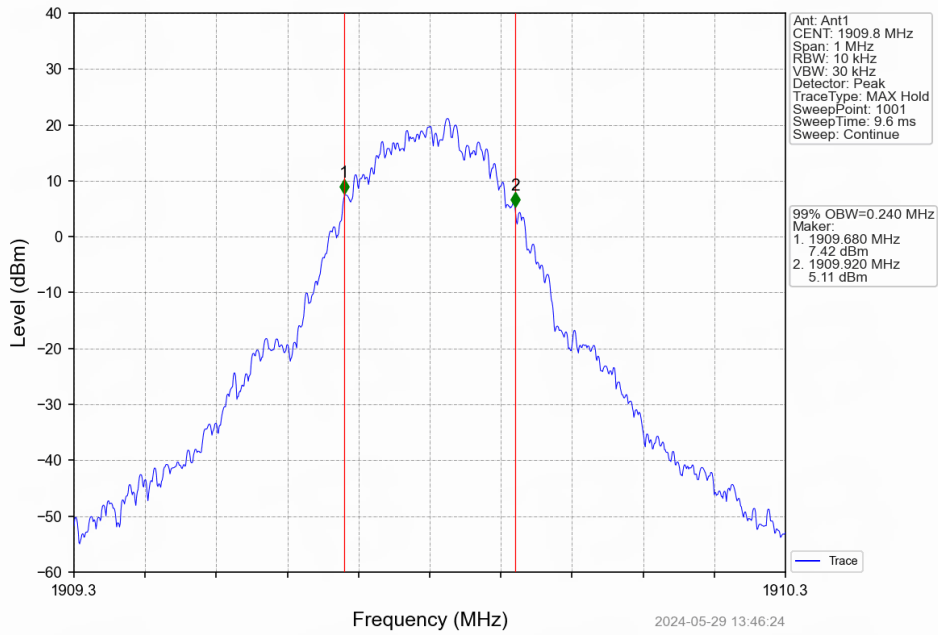
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



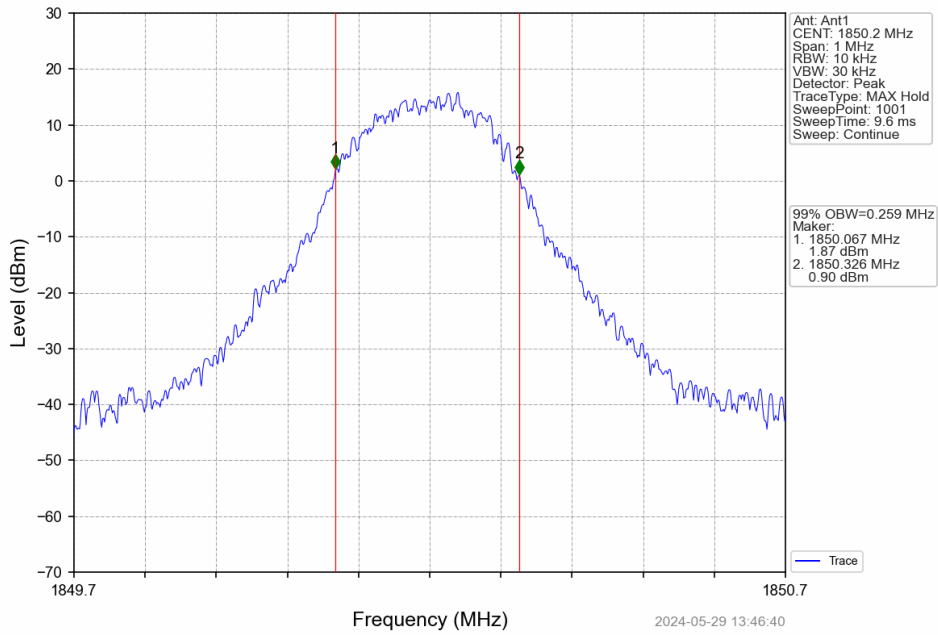
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



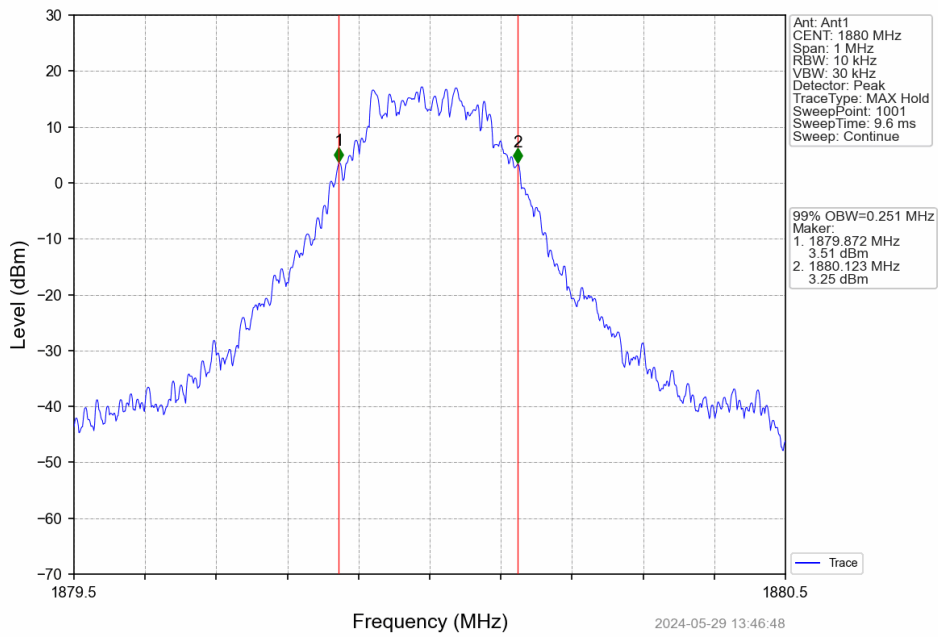
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



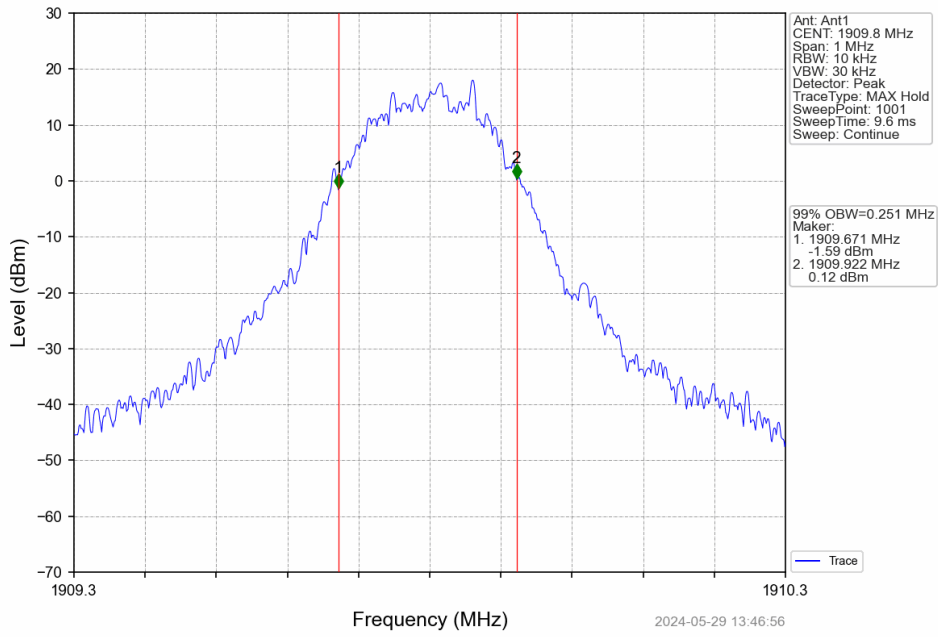
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV

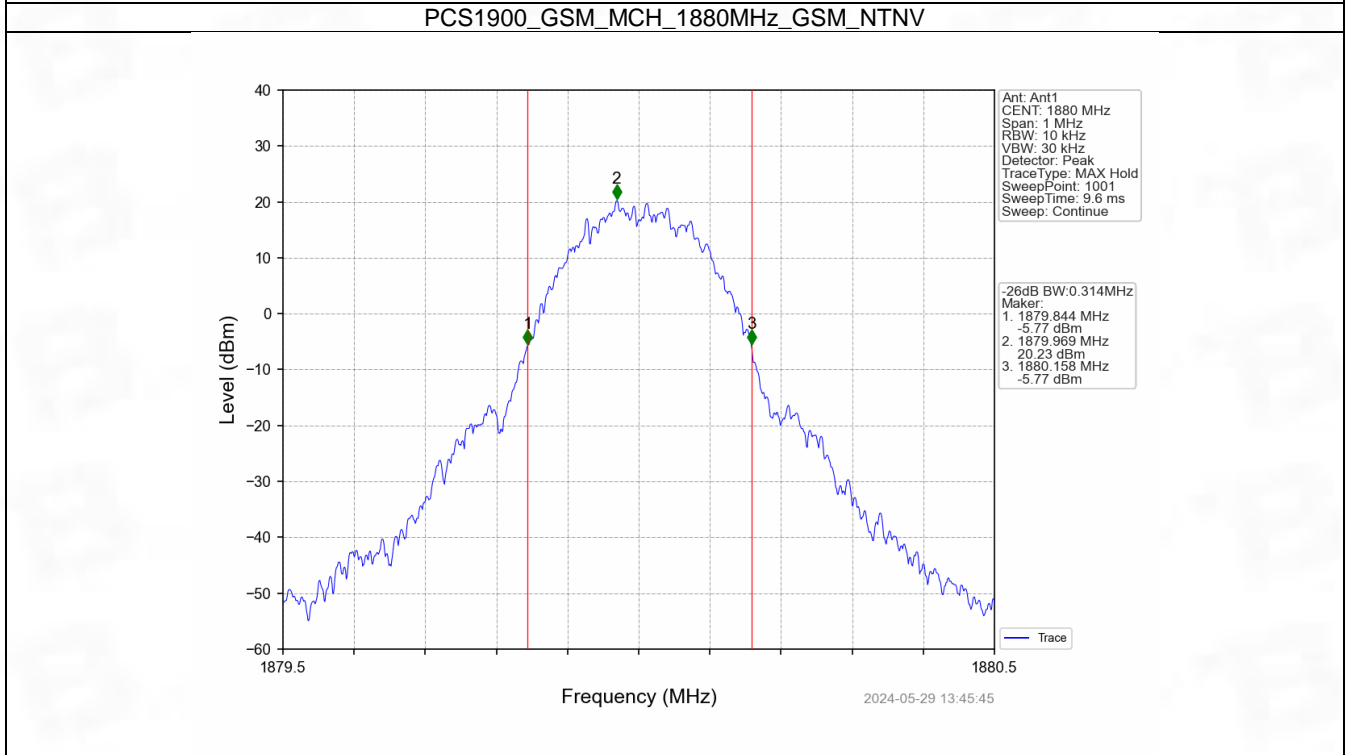
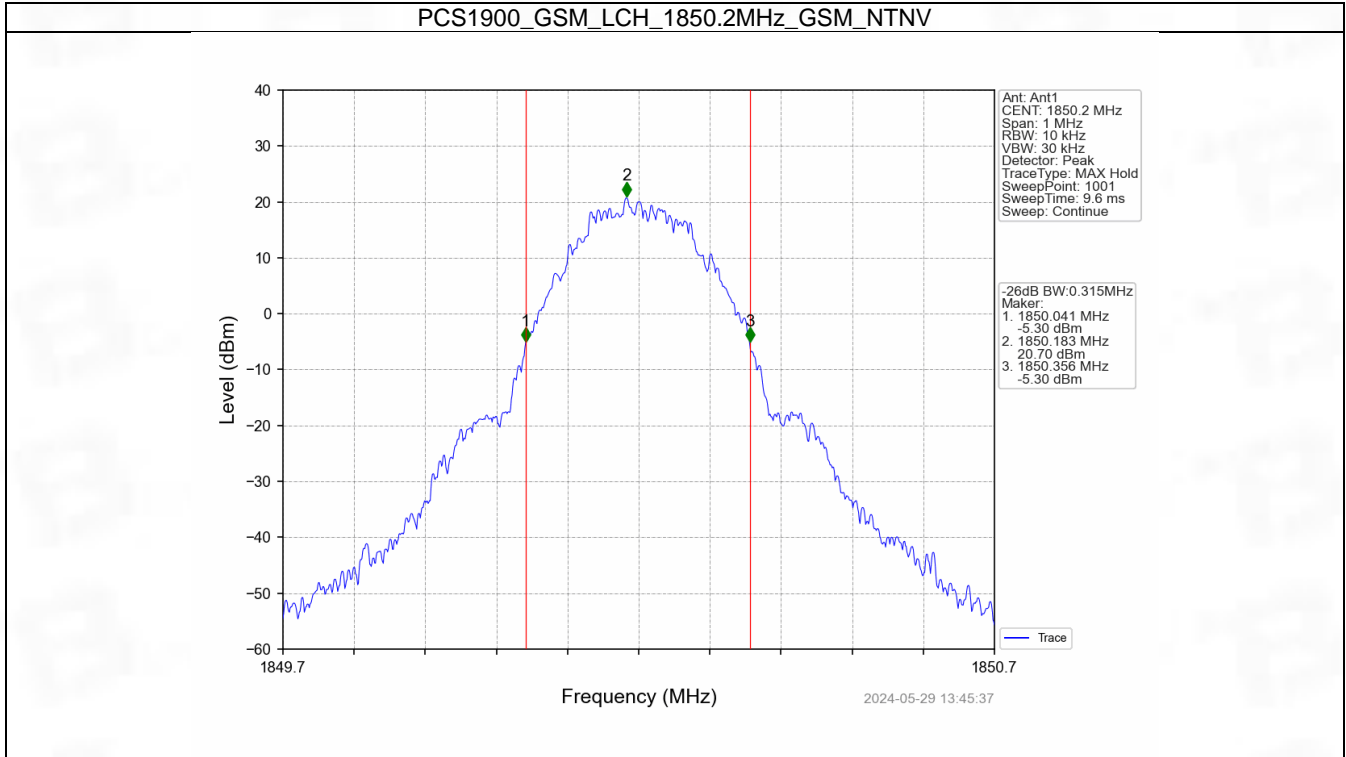


4.2 PCS1900_XDB

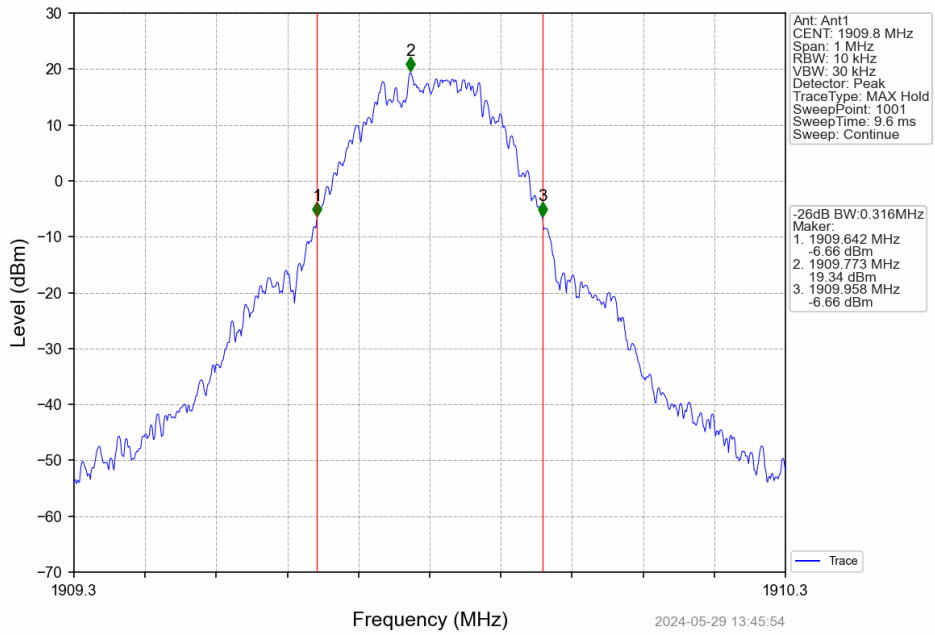
4.2.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.315	/	Pass
			1880	0.314	/	Pass
			1909.8	0.316	/	Pass
	GPRS	1 TX Slot	1850.2	0.318	/	Pass
			1880	0.308	/	Pass
			1909.8	0.305	/	Pass
	EGPRS	1 TX Slot	1850.2	0.342	/	Pass
			1880	0.319	/	Pass
			1909.8	0.311	/	Pass

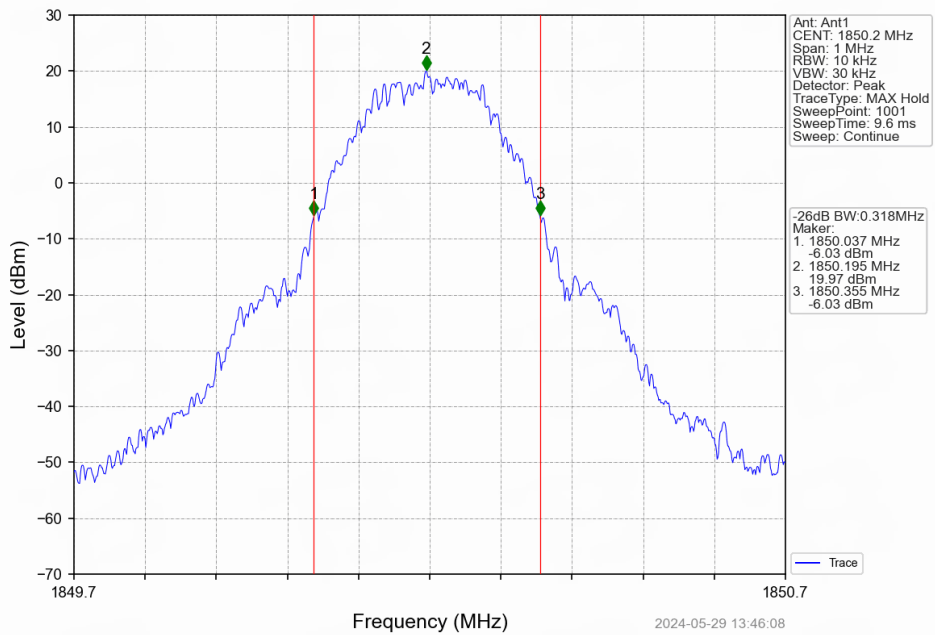
4.2.2 Test Graph



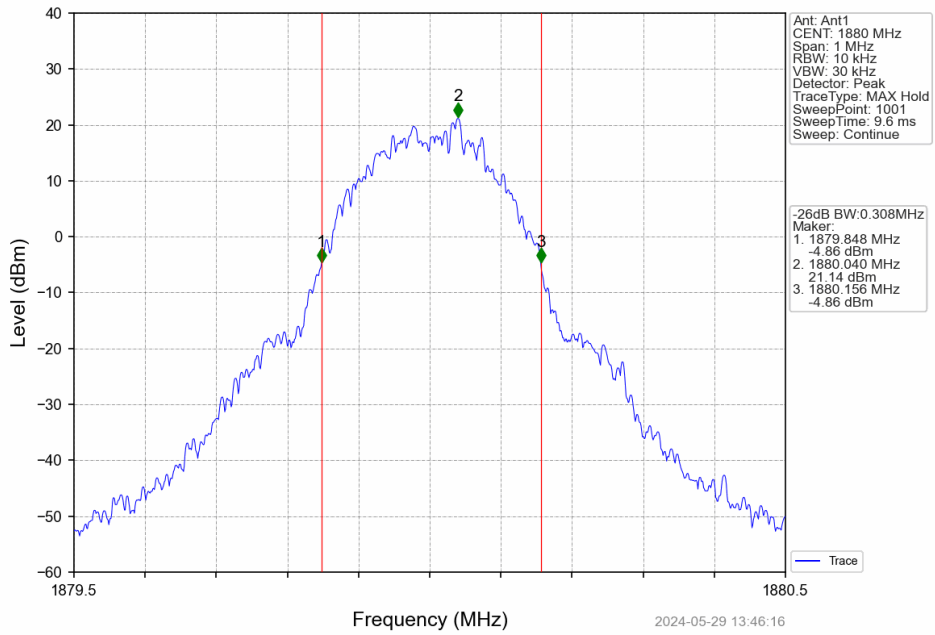
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



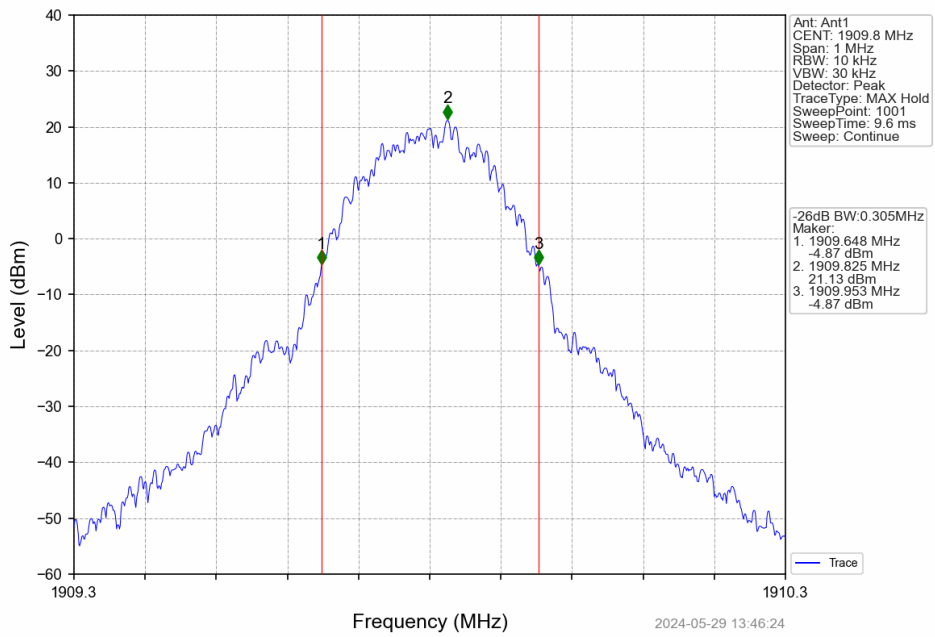
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



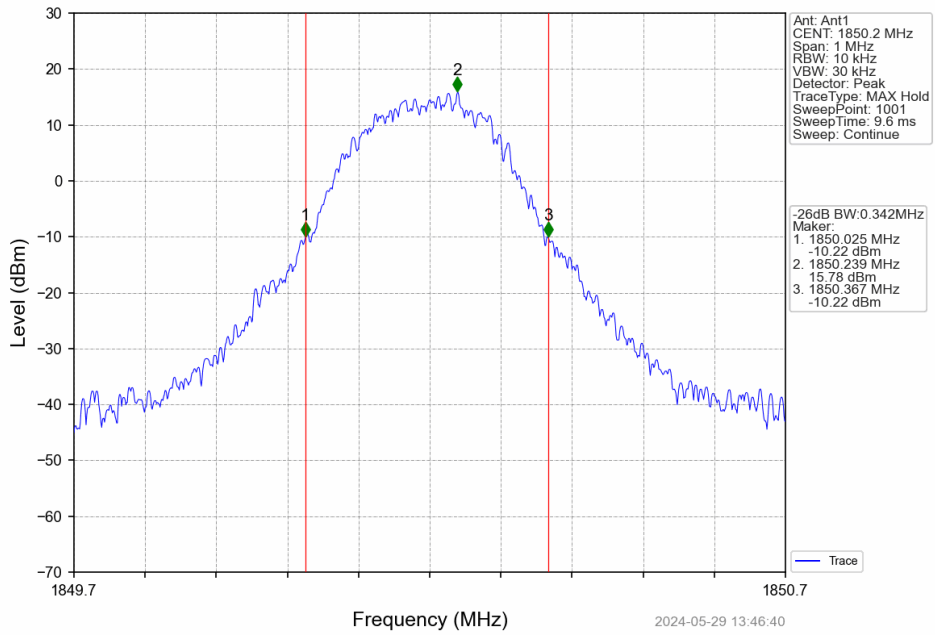
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



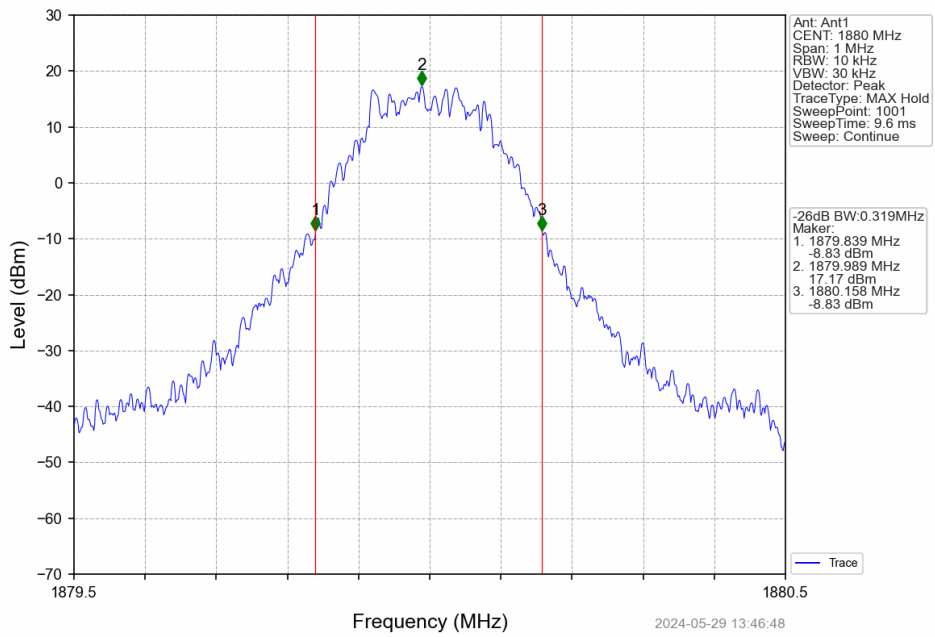
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



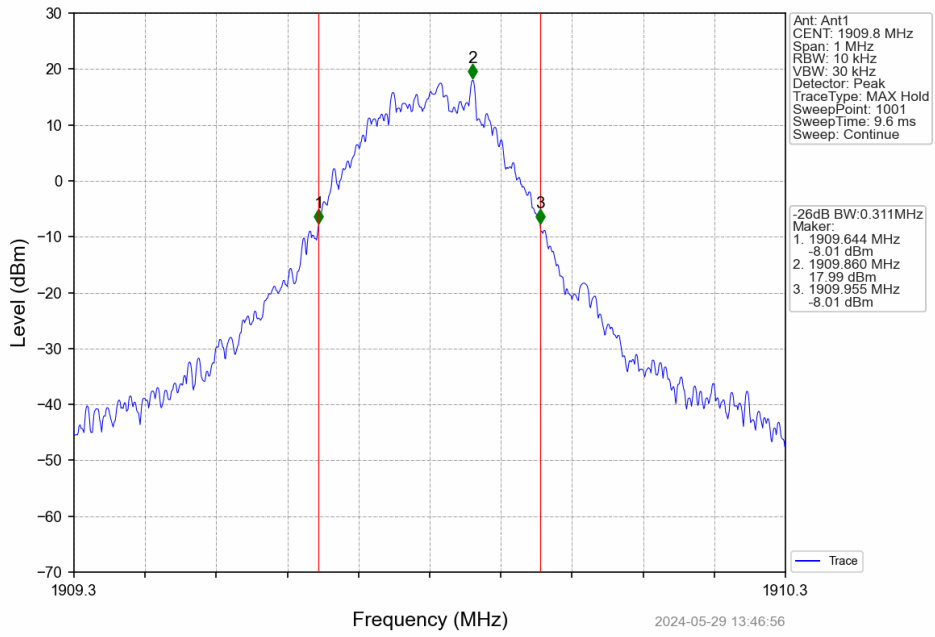
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



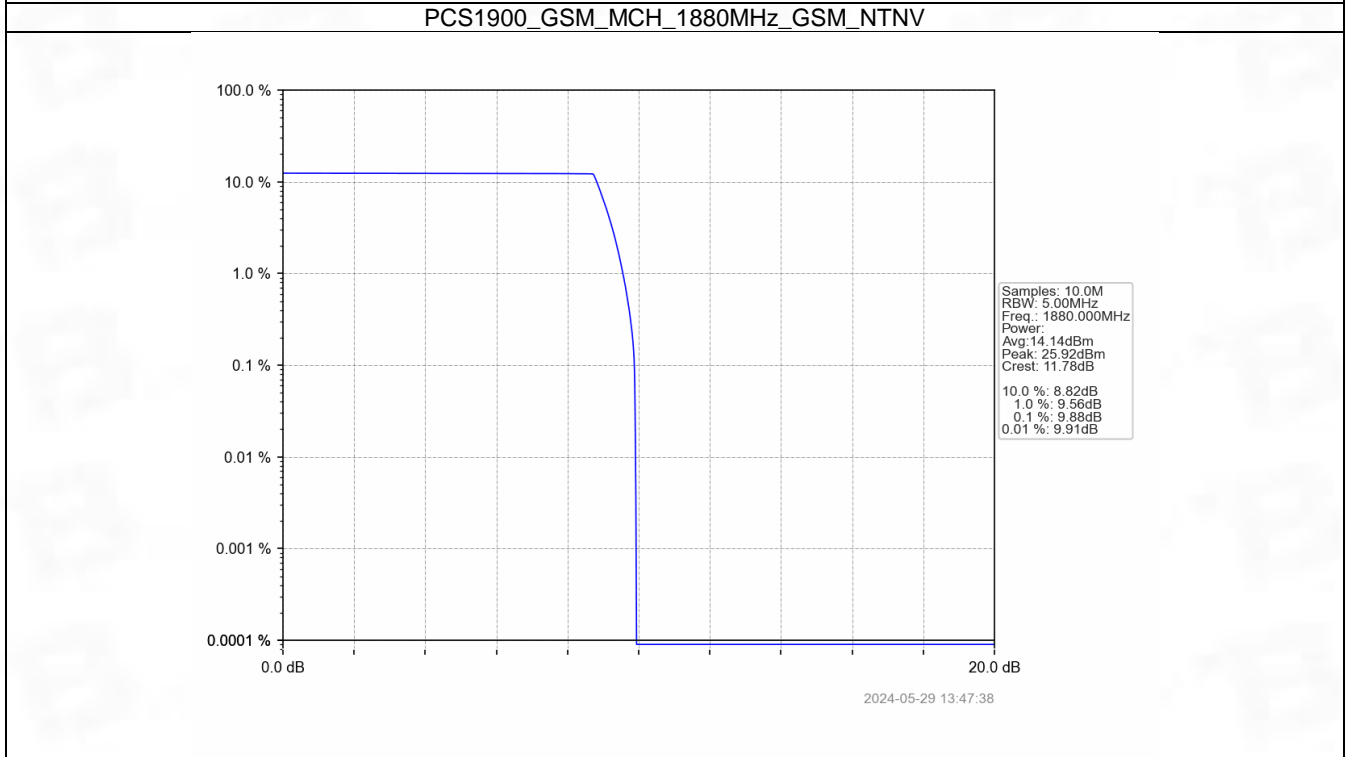
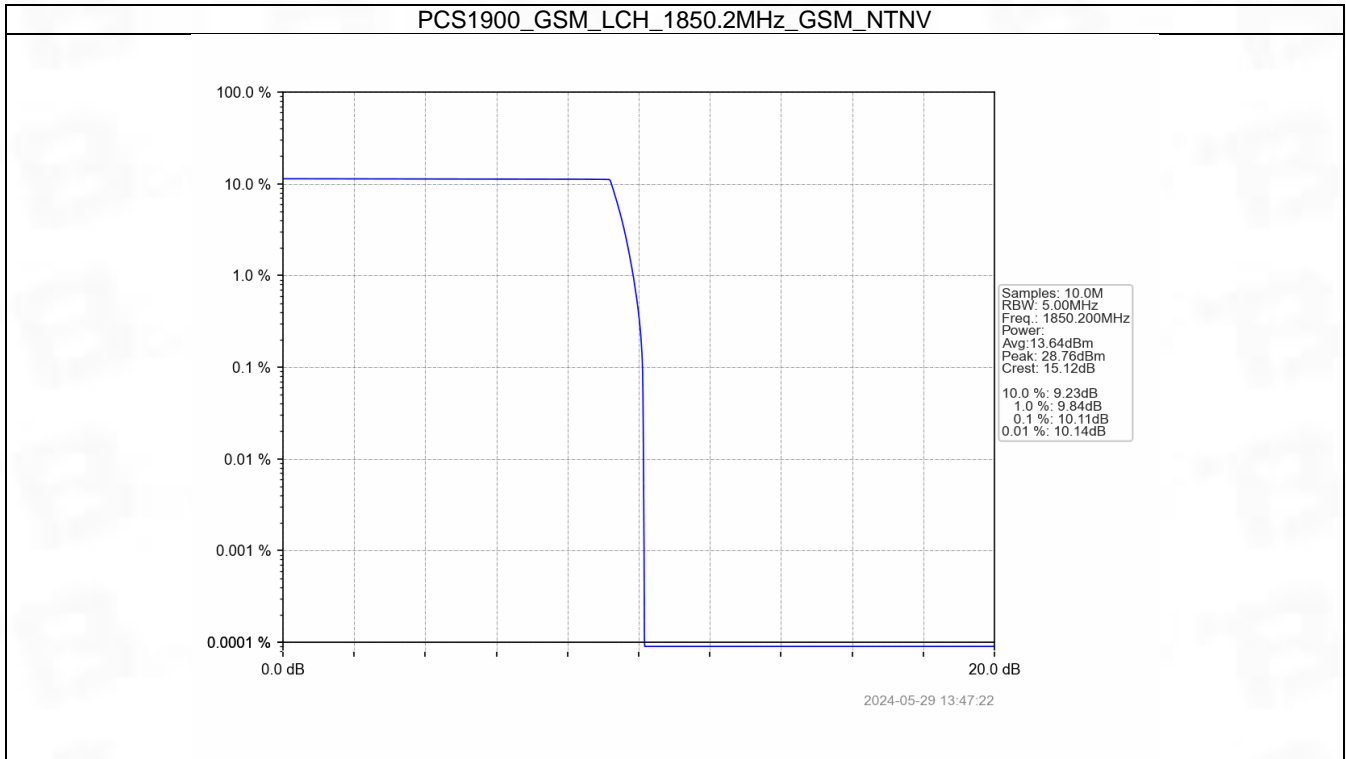
5. Peak-Average Ratio

5.1 PCS1900

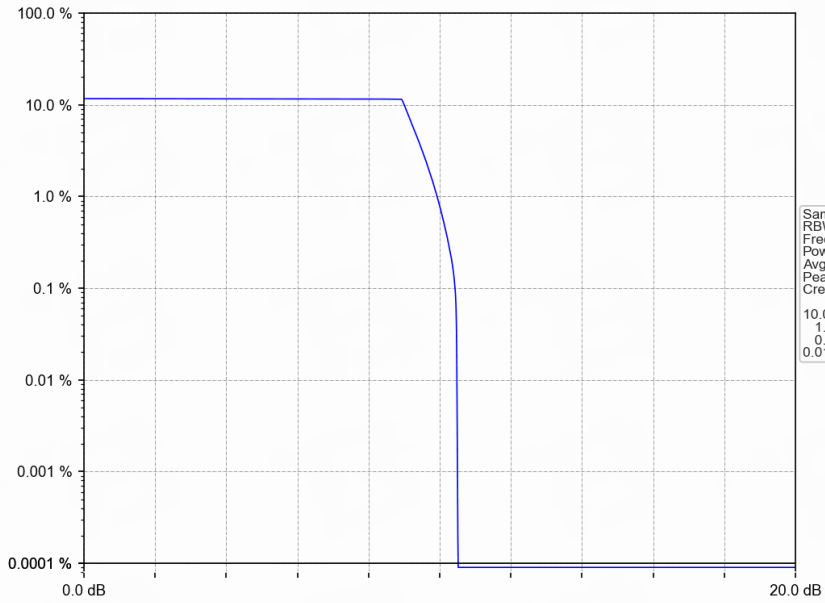
5.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	10.11	<=13	Pass
			1880	9.88	<=13	Pass
			1909.8	10.43	<=13	Pass
	GPRS	4 TX Slots	1850.2	3.47	<=13	Pass
			1880	3.60	<=13	Pass
			1909.8	3.61	<=13	Pass
	EGPRS	4 TX Slots	1850.2	8.62	<=13	Pass
			1880	9.11	<=13	Pass
			1909.8	9.58	<=13	Pass

5.1.2 Test Graph



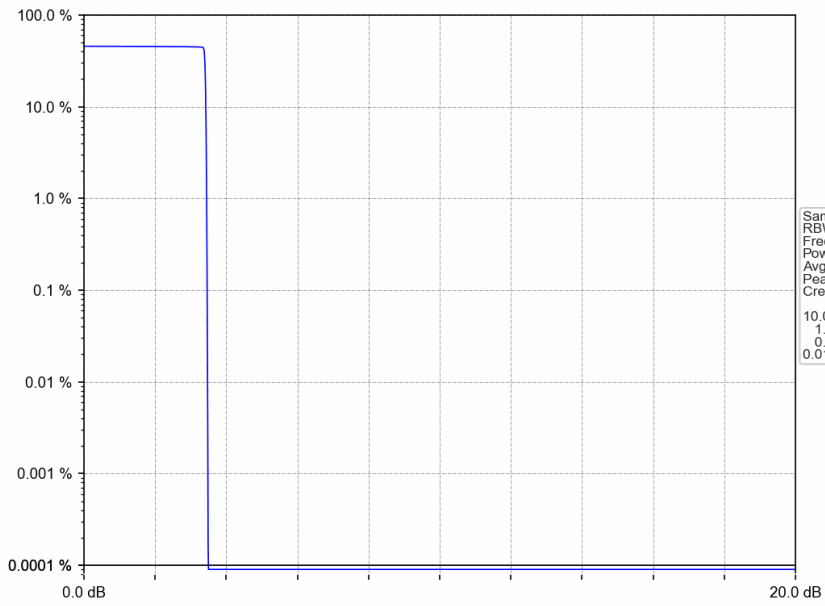
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



Samples: 10.0M
RBW: 5.00MHz
Freq.: 1909.800MHz
Power:
Avg: 13.51dBm
Peak: 31.07dBm
Crest: 17.56dB
10.0 %: 9.00dB
1.0 %: 9.93dB
0.1 %: 10.43dB
0.01 %: 10.49dB

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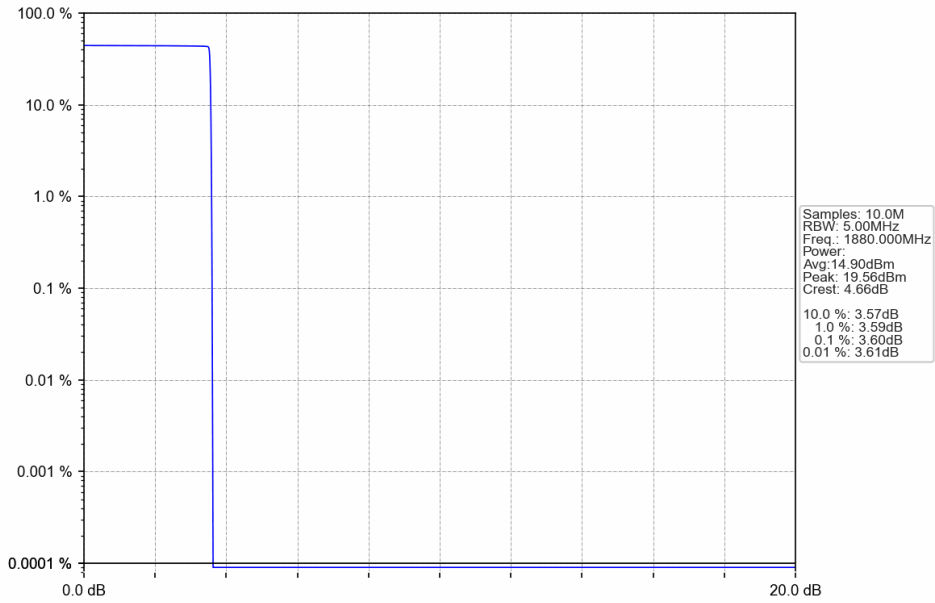
PCS1900_GPRS_LCH_1850.2MHz_4 TX Slots_NTNV



Samples: 10.0M
RBW: 5.00MHz
Freq.: 1850.200MHz
Power:
Avg: 14.60dBm
Peak: 21.94dBm
Crest: 7.34dB
10.0 %: 3.43dB
1.0 %: 3.45dB
0.1 %: 3.47dB
0.01 %: 3.48dB

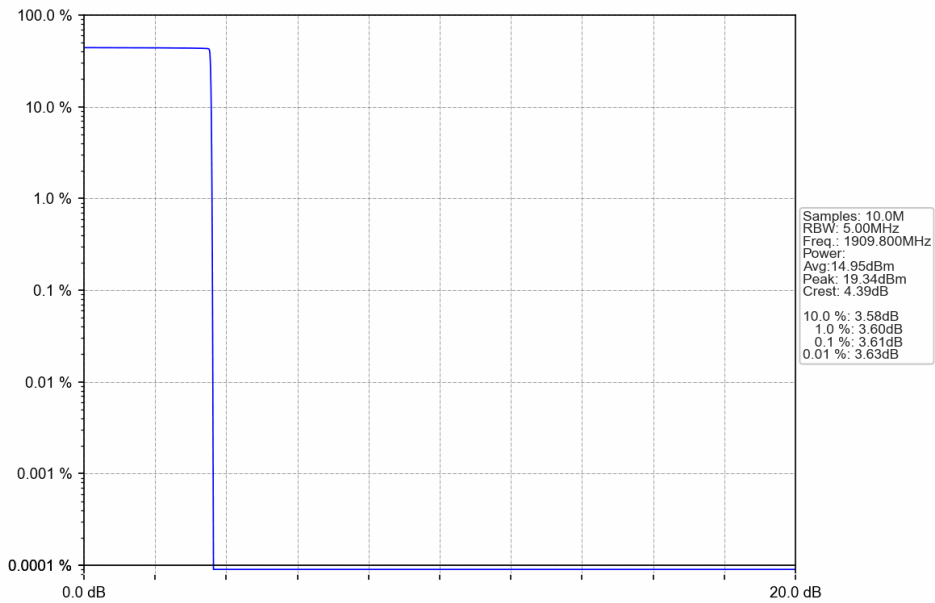
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PCS1900_GPRS_MCH_1880MHz_4 TX Slots_NTNV



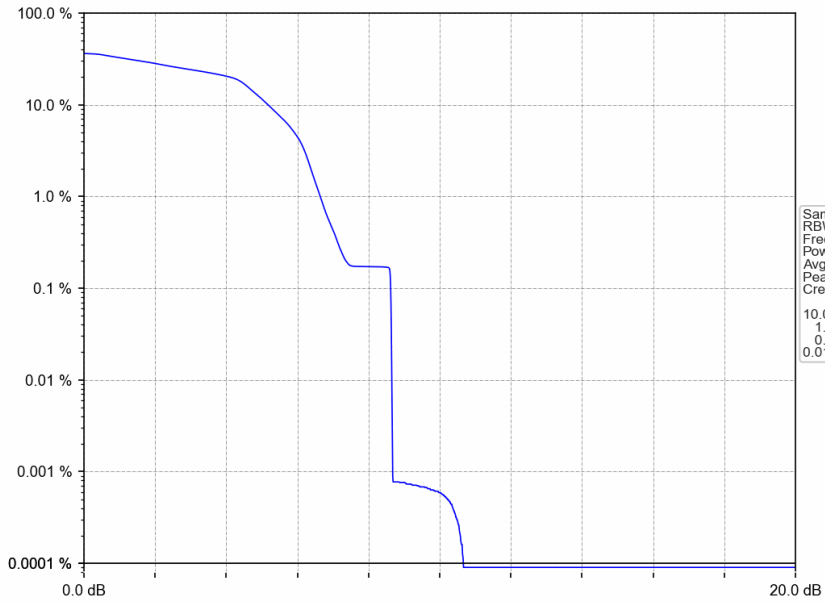
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PCS1900_GPRS_HCH_1909.8MHz_4 TX Slots_NTNV



2024-05-29 13:48:30

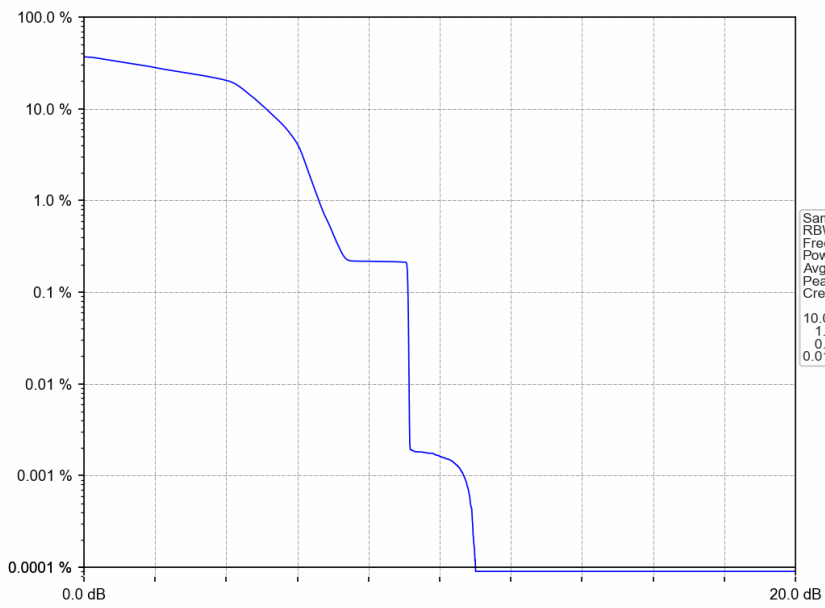
PCS1900_EGPRS_LCH_1850.2MHz_4 TX Slots_NTNV



Samples: 10.0M
RBW: 5.00MHz
Freq.: 1850.200MHz
Power:
Avg: 9.36dBm
Peak: 20.73dBm
Crest: 11.37dB
10.0 %: 5.18dB
1.0 %: 6.64dB
0.1 %: 8.62dB
0.01 %: 8.65dB

2024-05-29 13:48:52

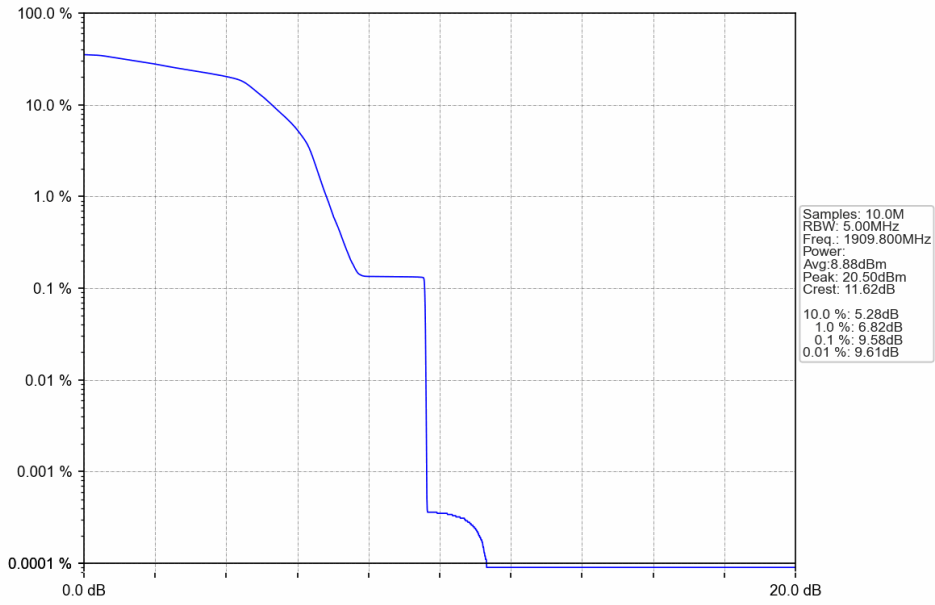
PCS1900_EGPRS_MCH_1880MHz_4 TX Slots_NTNV



Samples: 10.0M
RBW: 5.00MHz
Freq.: 1880.000MHz
Power:
Avg: 9.31dBm
Peak: 20.82dBm
Crest: 11.51dB
10.0 %: 5.12dB
1.0 %: 6.60dB
0.1 %: 9.11dB
0.01 %: 9.14dB

2024-05-29 13:49:07

PCS1900_EGPRS_HCH_1909.8MHz_4 TX Slots_NTNV



2024-05-29 13:49:24

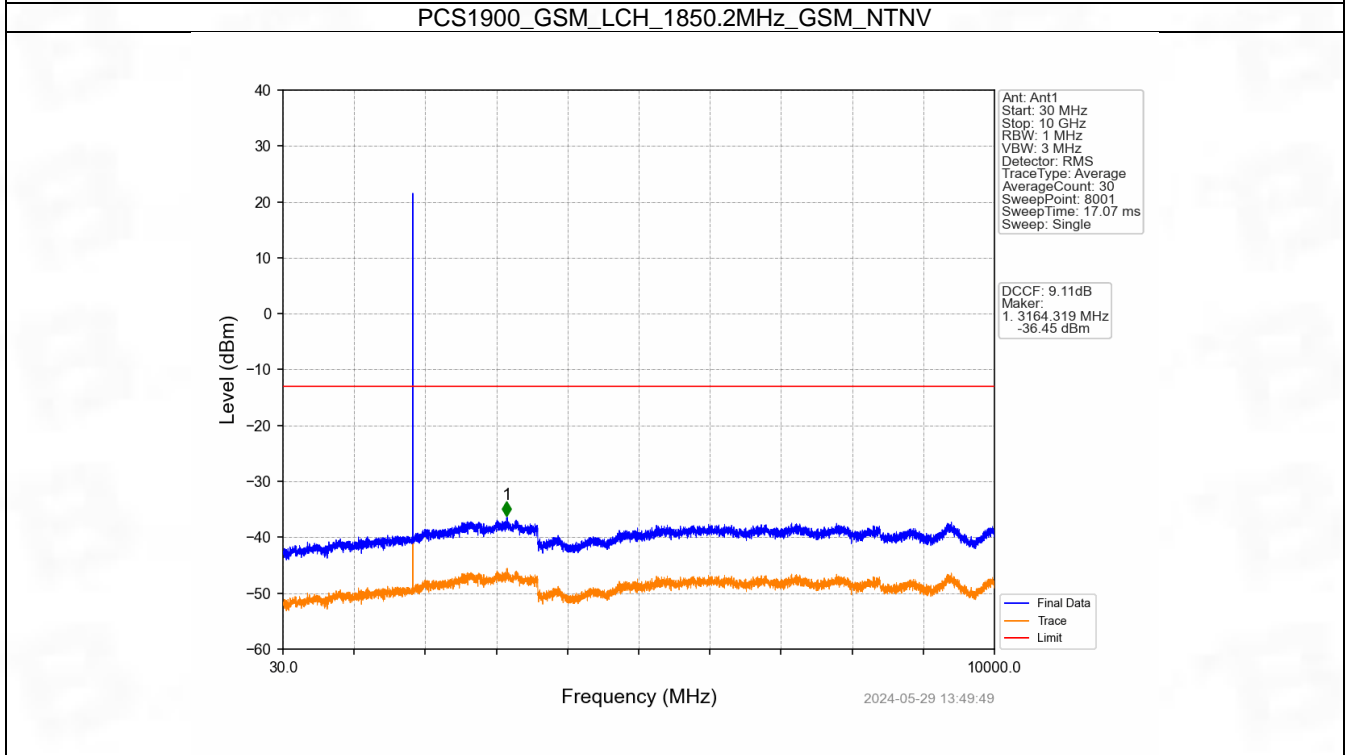
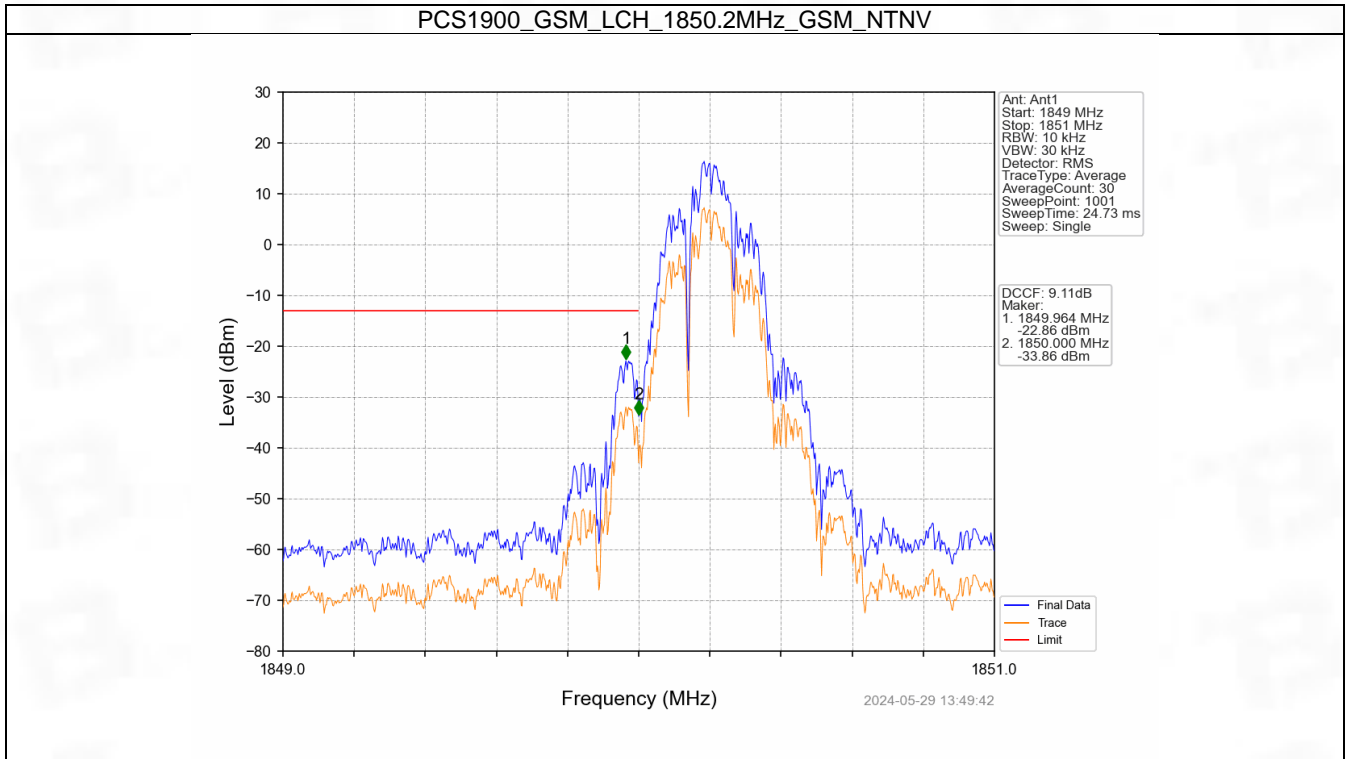
6. Spurious Emission

6.1 PCS1900

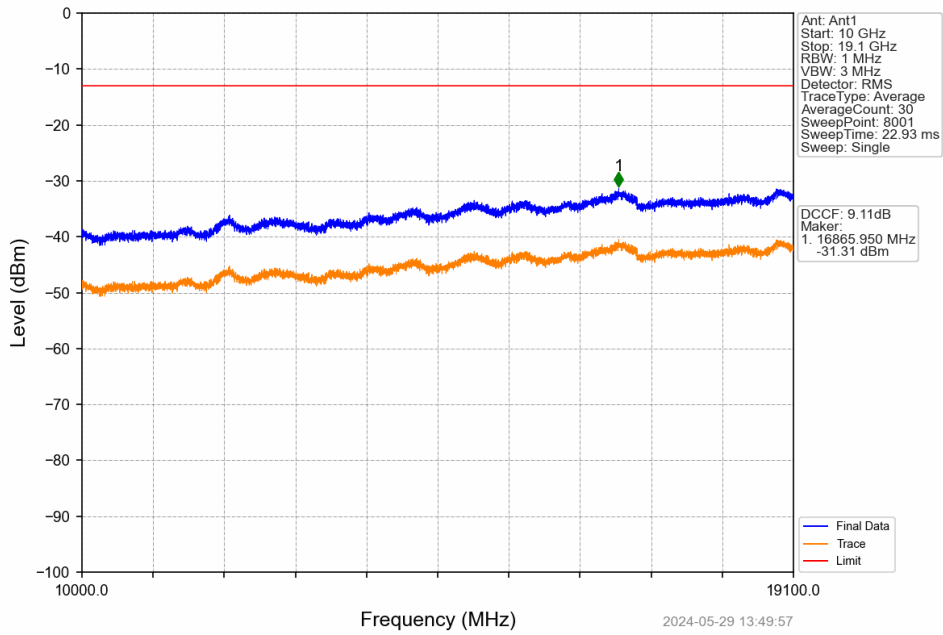
6.1.1 Test Result

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	

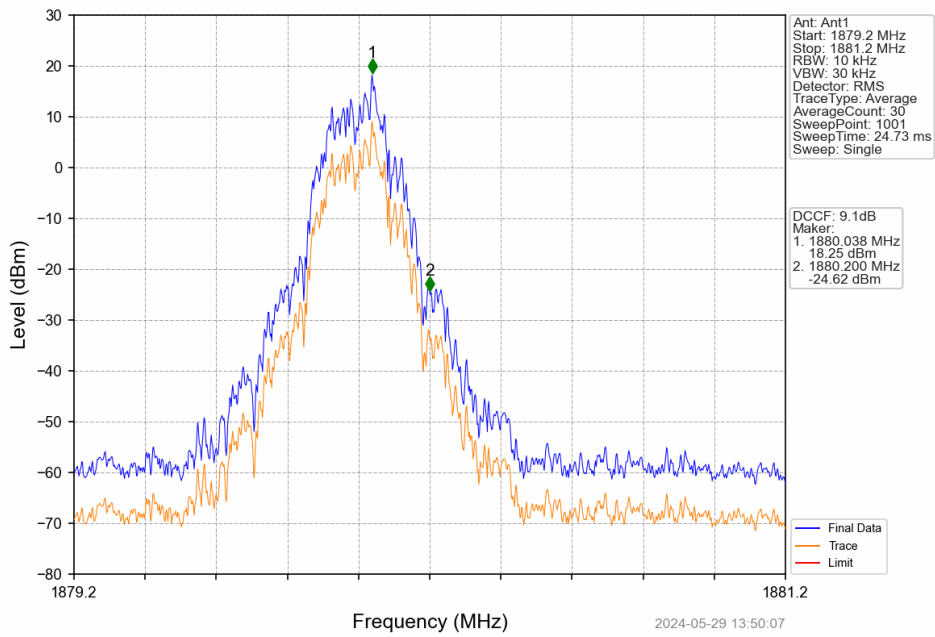
6.1.2 Test Graph



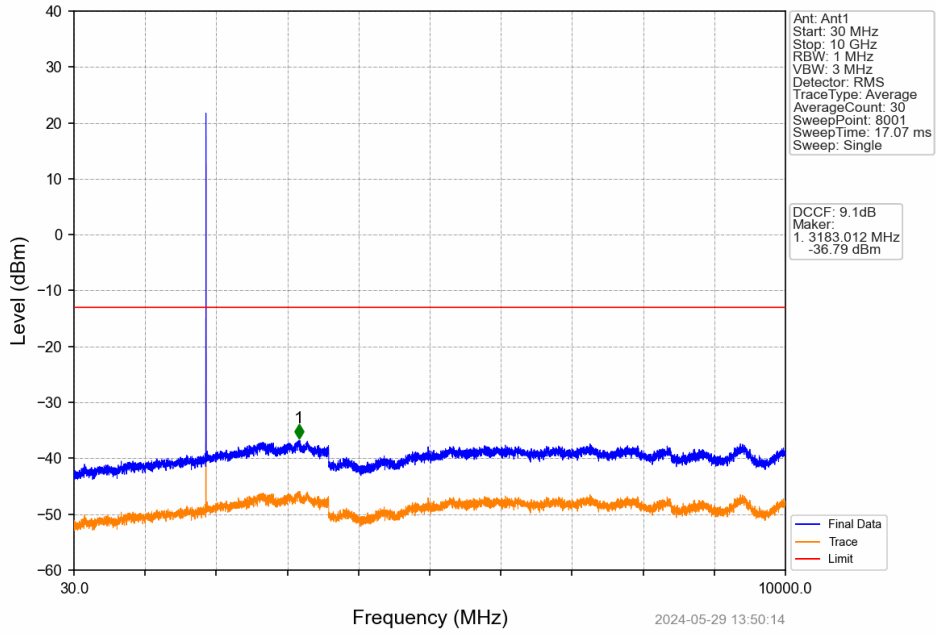
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



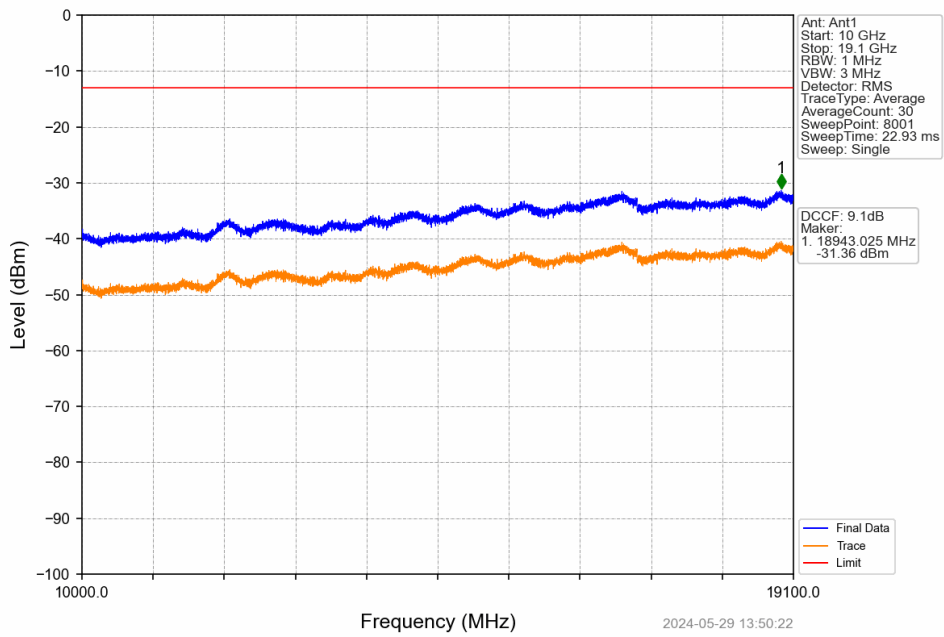
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



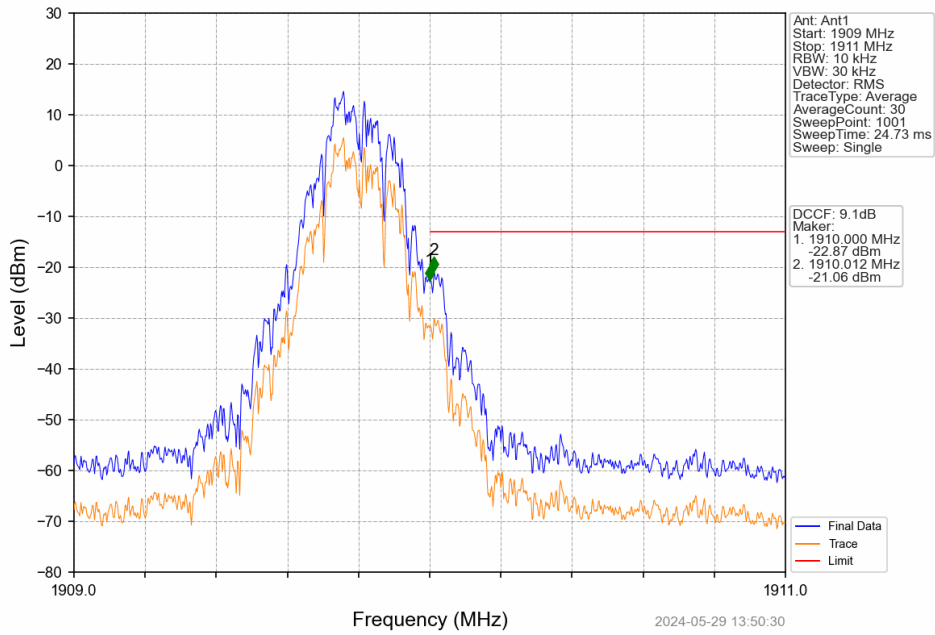
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



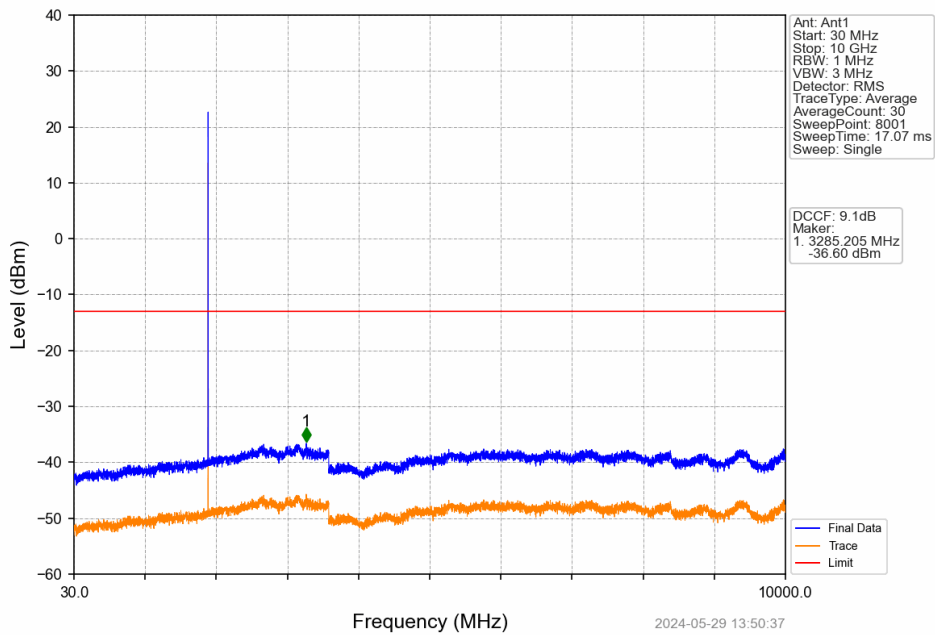
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



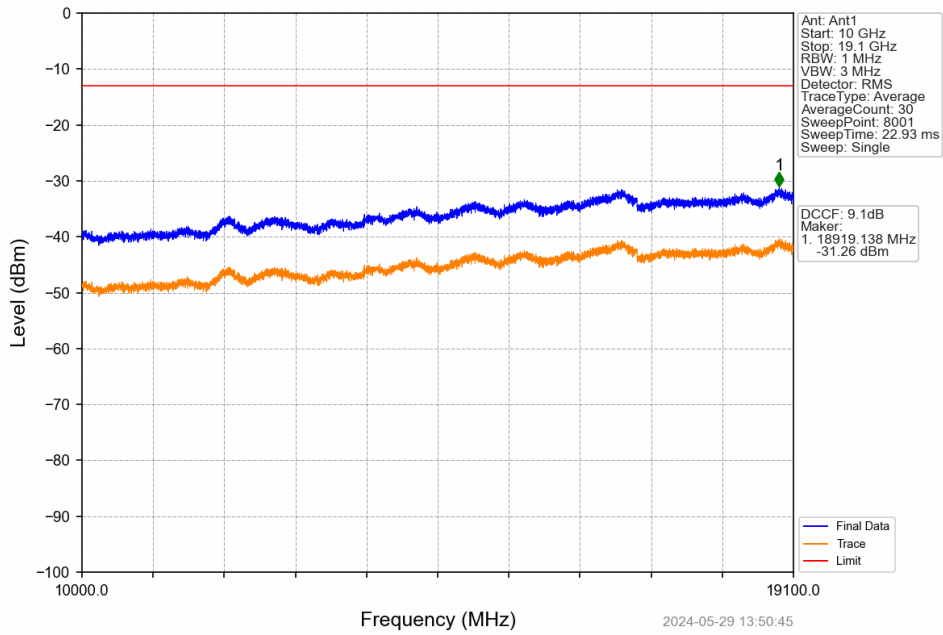
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



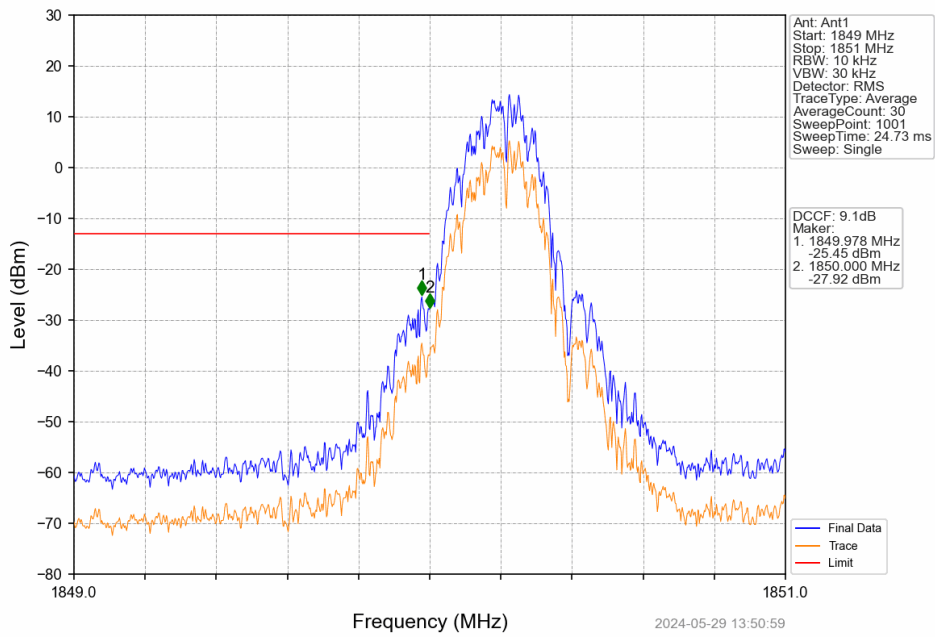
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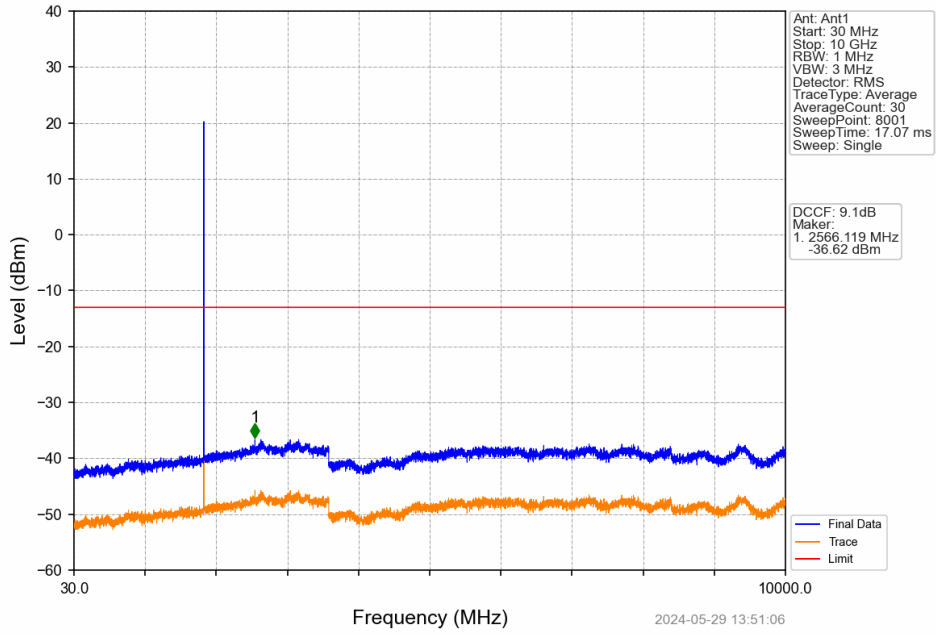
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



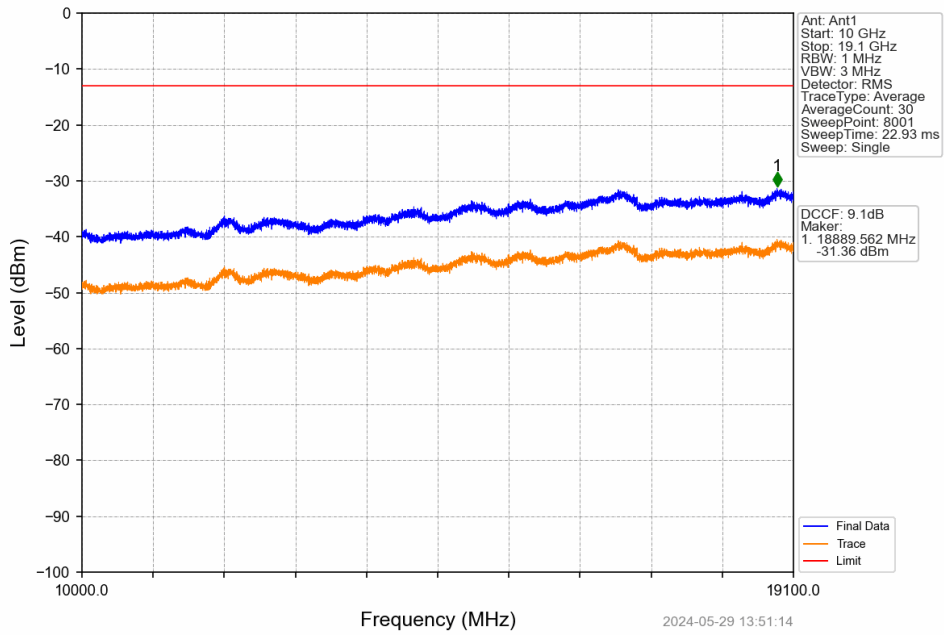
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



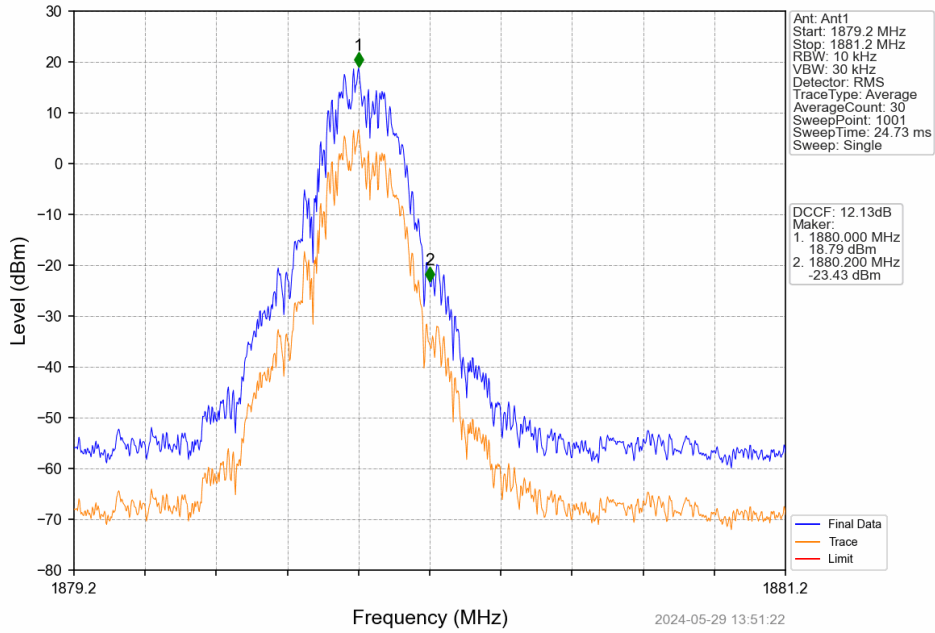
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



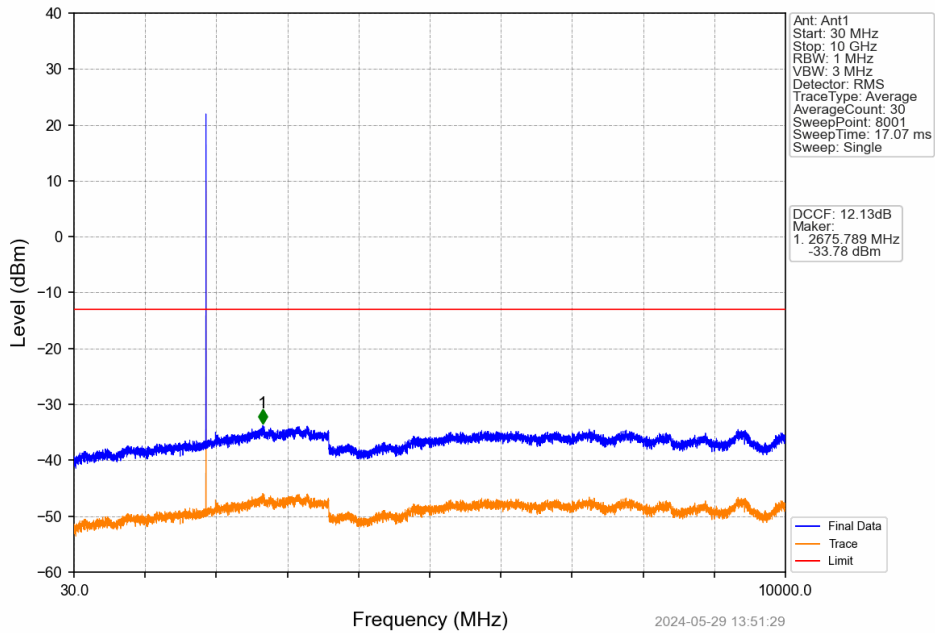
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



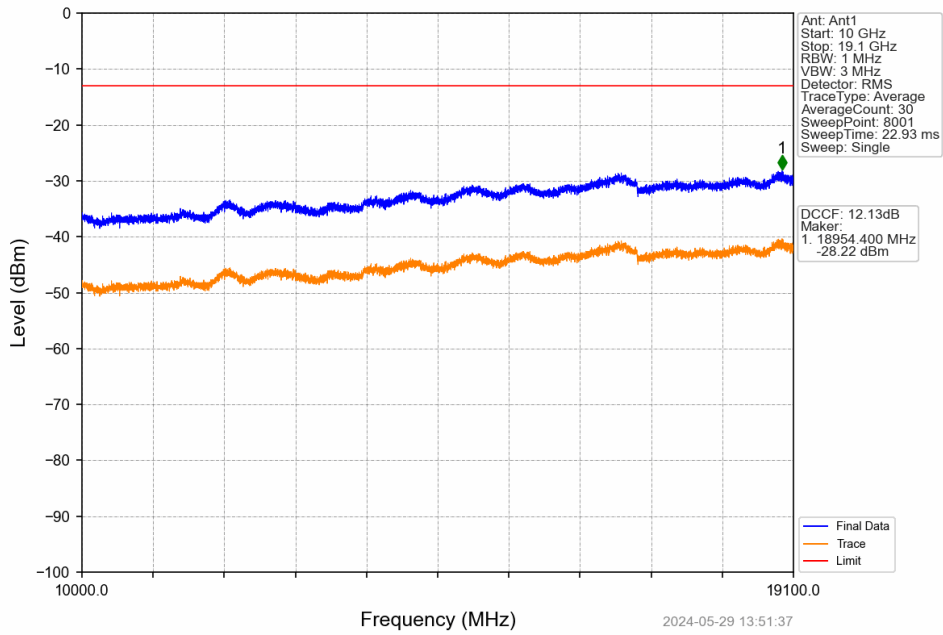
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



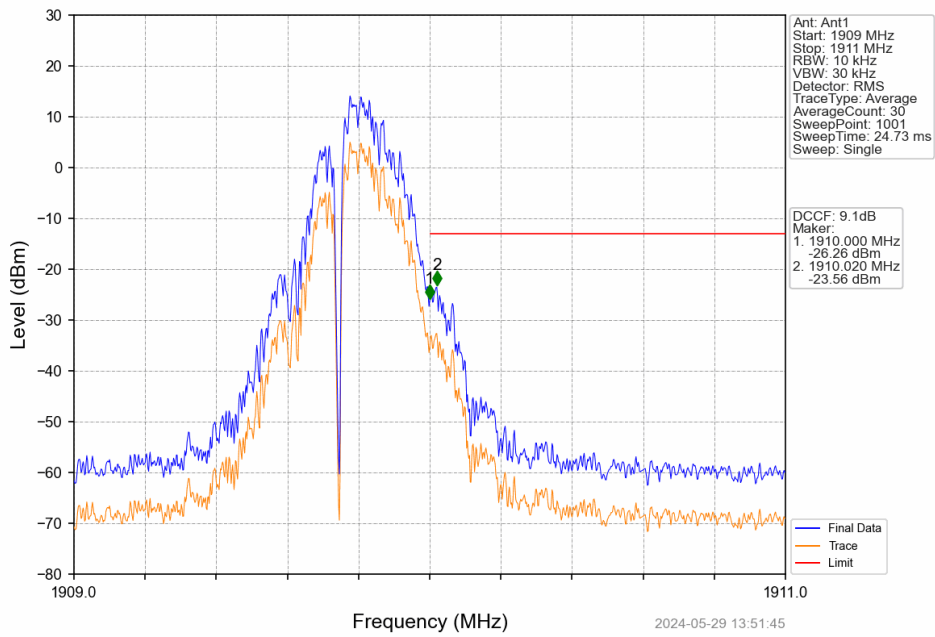
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



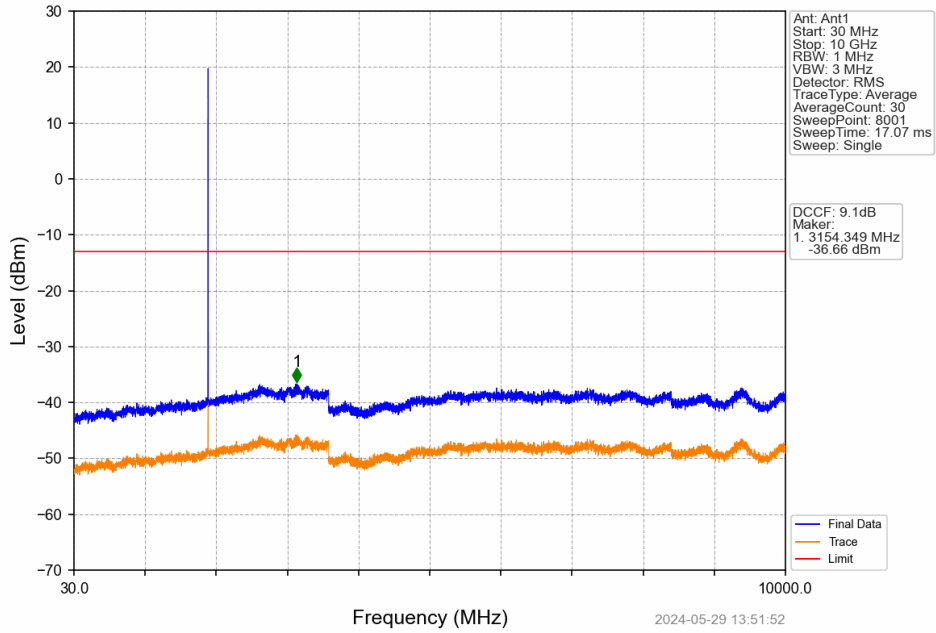
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



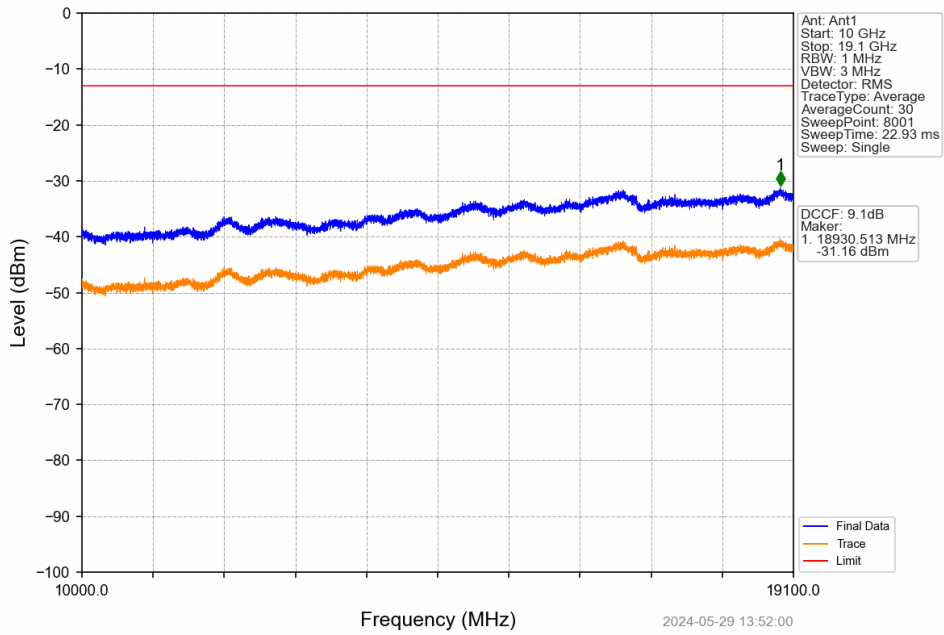
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



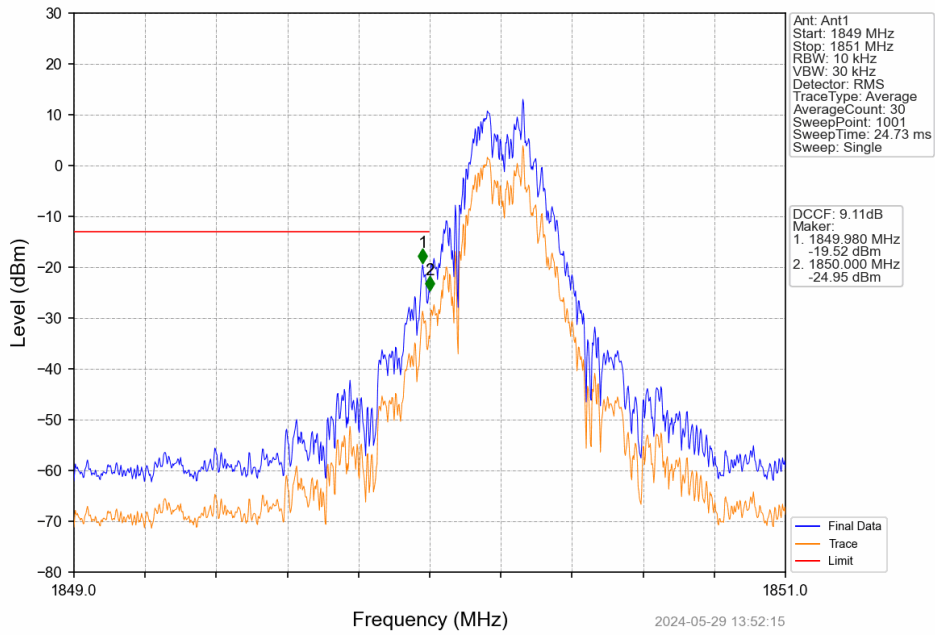
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



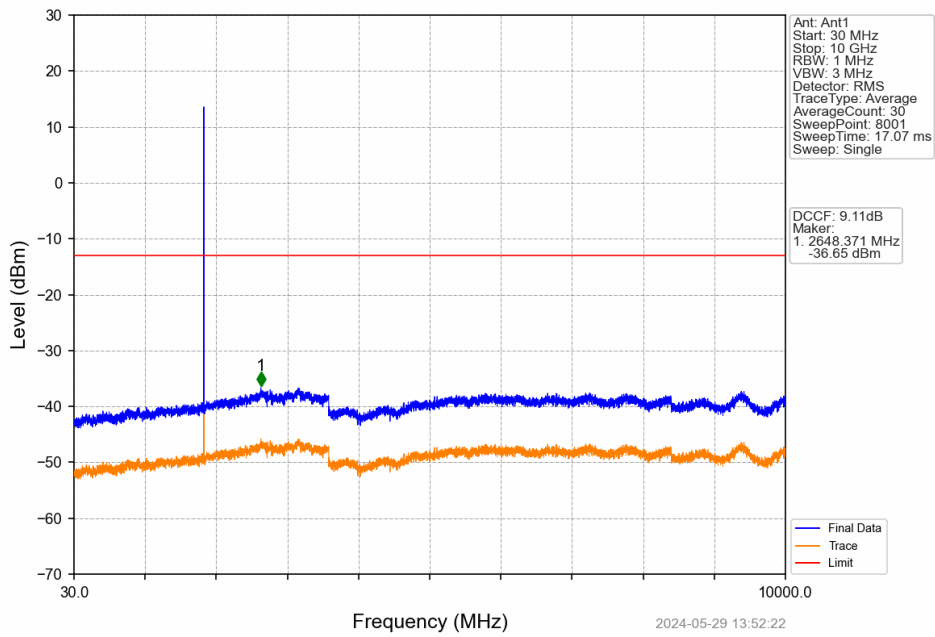
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



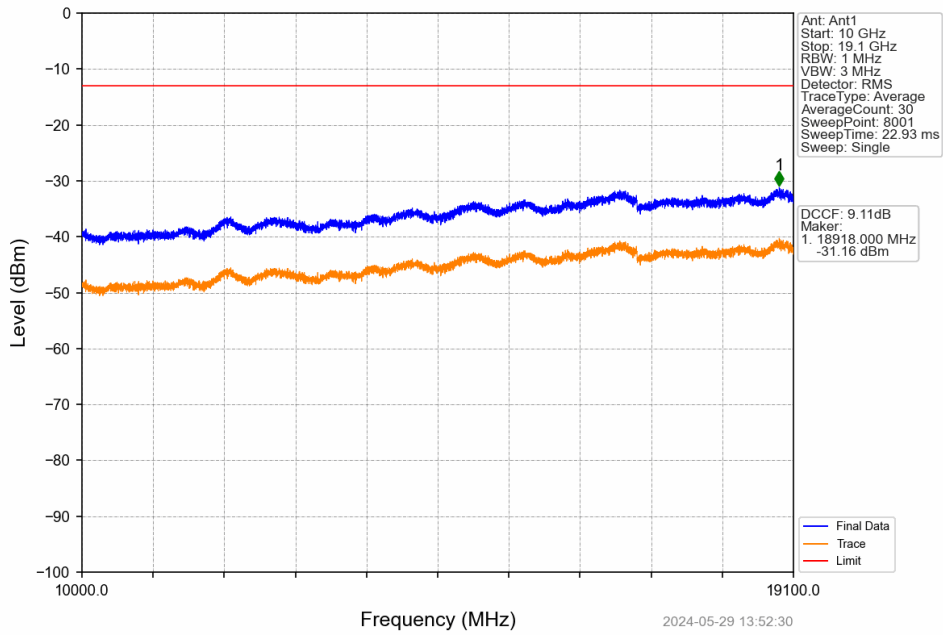
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



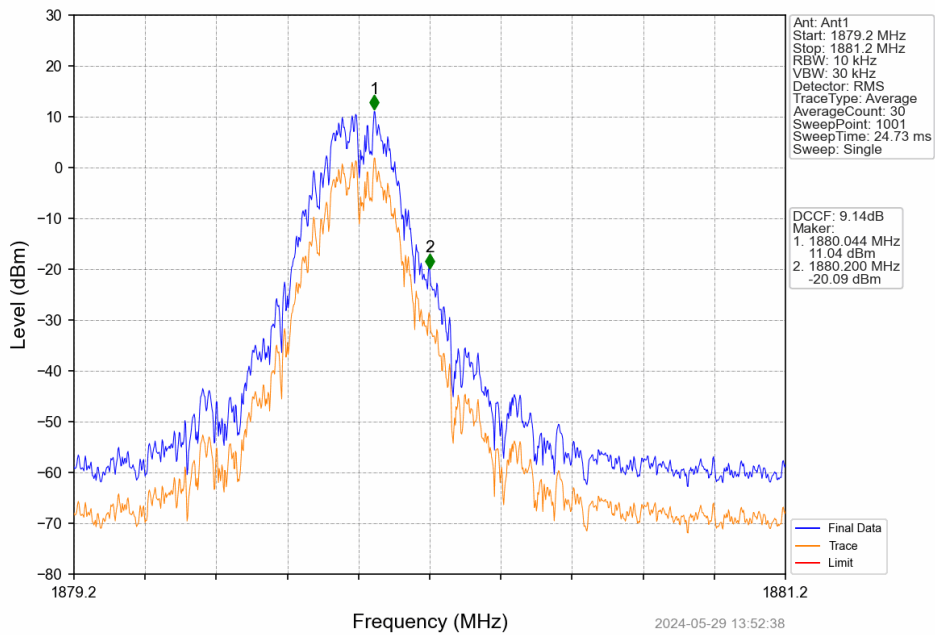
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



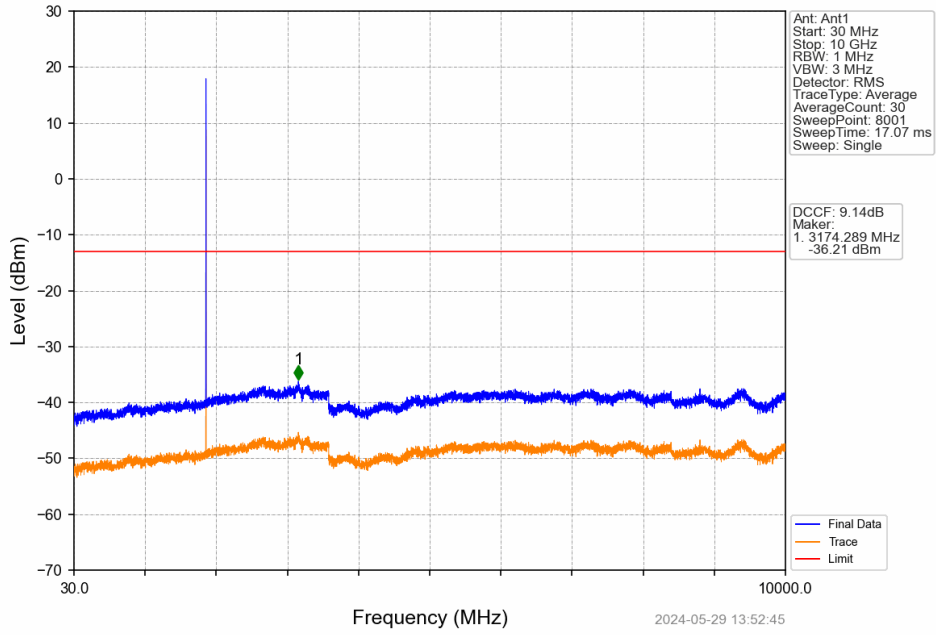
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



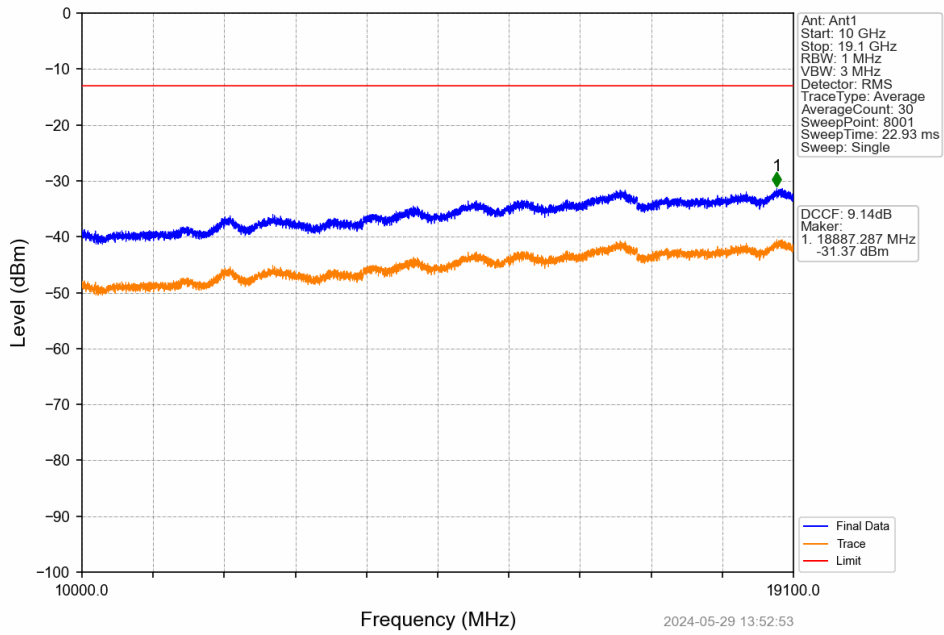
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



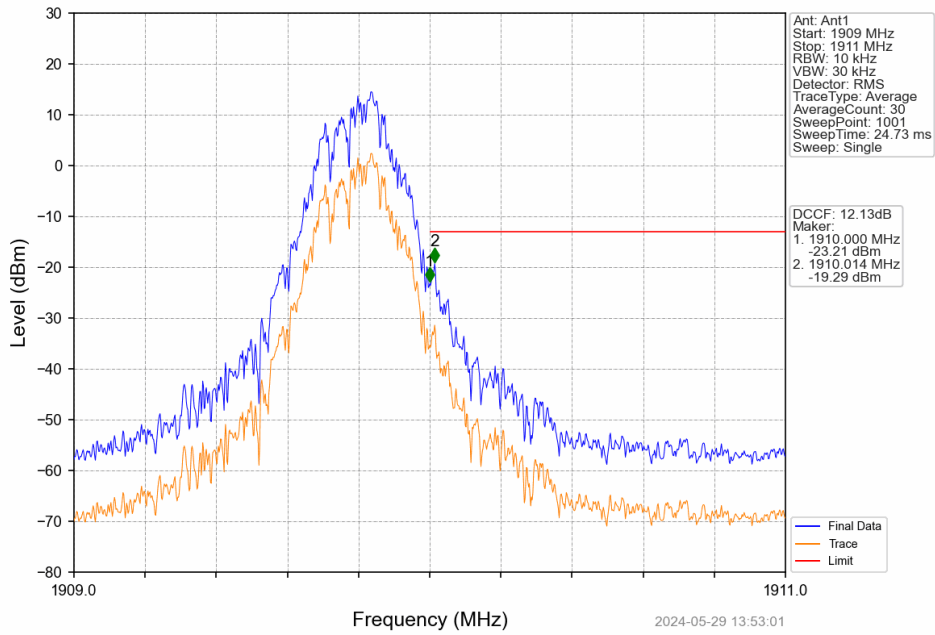
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



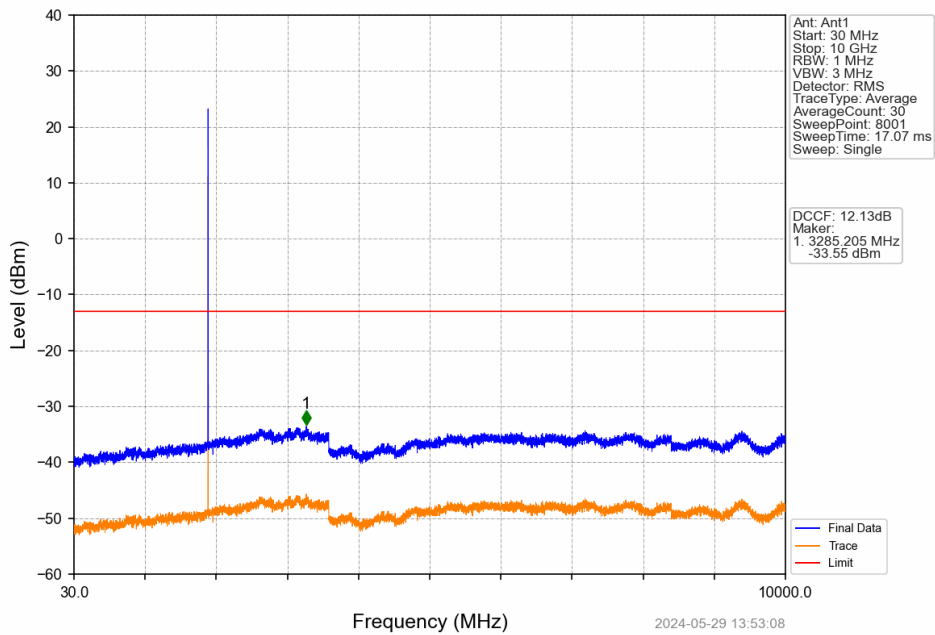
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



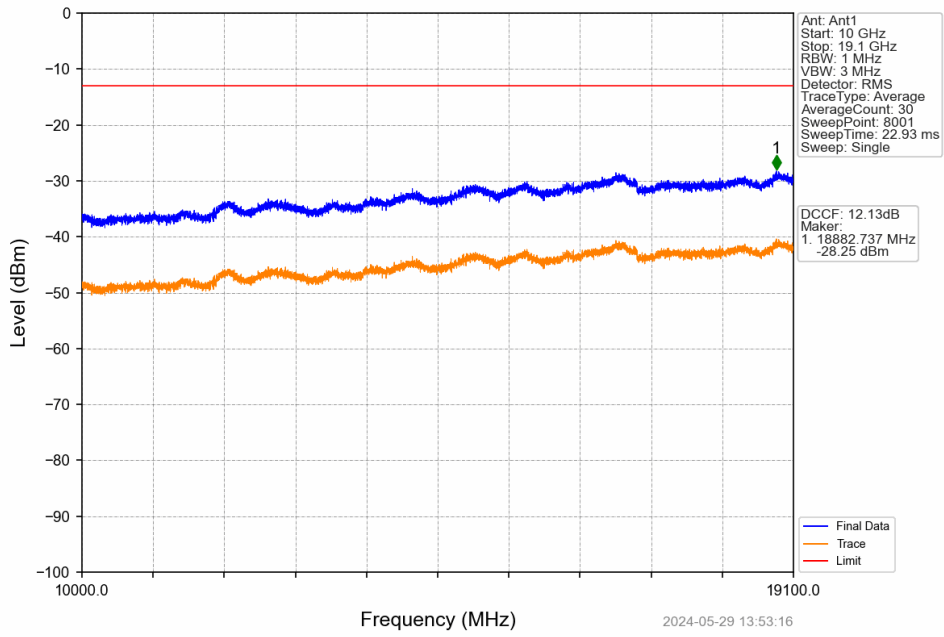
PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



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	0.2249	0.0092	ppm	247KGXW	24E	23.52
PCS1900	0.2	1850.2	1909.8	0.0989	0.0120	ppm	259KG7W	24E	19.95

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	0.2710	0.0092	ppm	247KGXW	24E	24.33
PCS1900	0.2	1850.2	1909.8	0.1191	0.0120	ppm	259KG7W	24E	20.76