

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	30.87	-0.34	30.53	<=33.01	Pass
			1880	30.98	-0.34	30.64	<=33.01	Pass
			1909.8	30.89	-0.34	30.55	<=33.01	Pass
	GPRS	1 TX Slot	1850.2	30.88	-0.34	30.54	<=33.01	Pass
		2 TX Slots	1850.2	29.99	-0.34	29.65	<=33.01	Pass
		3 TX Slots	1850.2	28.56	-0.34	28.22	<=33.01	Pass
		4 TX Slots	1850.2	28.06	-0.34	27.72	<=33.01	Pass
		1 TX Slot	1880	30.95	-0.34	30.61	<=33.01	Pass
		2 TX Slots	1880	30.08	-0.34	29.74	<=33.01	Pass
		3 TX Slots	1880	28.64	-0.34	28.30	<=33.01	Pass
		4 TX Slots	1880	28.12	-0.34	27.78	<=33.01	Pass
		1 TX Slot	1909.8	30.86	-0.34	30.52	<=33.01	Pass
		2 TX Slots	1909.8	29.99	-0.34	29.65	<=33.01	Pass
		3 TX Slots	1909.8	28.55	-0.34	28.21	<=33.01	Pass
		4 TX Slots	1909.8	28.04	-0.34	27.70	<=33.01	Pass
	EGPRS	1 TX Slot	1850.2	31.66	-0.34	31.32	<=33.01	Pass
		2 TX Slots	1850.2	31.23	-0.34	30.89	<=33.01	Pass
		3 TX Slots	1850.2	29.91	-0.34	29.57	<=33.01	Pass
		4 TX Slots	1850.2	28.93	-0.34	28.59	<=33.01	Pass
		1 TX Slot	1880	31.67	-0.34	31.33	<=33.01	Pass
		2 TX Slots	1880	31.37	-0.34	31.03	<=33.01	Pass
		3 TX Slots	1880	30.02	-0.34	29.68	<=33.01	Pass
		4 TX Slots	1880	29.23	-0.34	28.89	<=33.01	Pass
		1 TX Slot	1909.8	31.36	-0.34	31.02	<=33.01	Pass
		2 TX Slots	1909.8	30.95	-0.34	30.61	<=33.01	Pass
		3 TX Slots	1909.8	29.76	-0.34	29.42	<=33.01	Pass
		4 TX Slots	1909.8	28.93	-0.34	28.59	<=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	-13.269	-0.0072	-2.5 to 2.5	Pass	
			3.85	-12.495	-0.0068	-2.5 to 2.5	Pass	
			4.43	-5.941	-0.0032	-2.5 to 2.5	Pass	
		-30	3.85	-1.065	-0.0006	-2.5 to 2.5	Pass	
			-20	3.85	-2.647	-0.0014	-2.5 to 2.5	Pass
				3.85	-2.744	-0.0015	-2.5 to 2.5	Pass
			0	3.85	-3.293	-0.0018	-2.5 to 2.5	Pass
			10	3.85	-1.421	-0.0008	-2.5 to 2.5	Pass

		30	3.85	1.065	0.0006	-2.5 to 2.5	Pass
		40	3.85	-6.619	-0.0036	-2.5 to 2.5	Pass
		50	3.85	-16.111	-0.0087	-2.5 to 2.5	Pass
	1880	20	3.27	-3.519	-0.0019	-2.5 to 2.5	Pass
			3.85	-0.032	0.0000	-2.5 to 2.5	Pass
			4.43	-1.388	-0.0007	-2.5 to 2.5	Pass
		-30	3.85	0.936	0.0005	-2.5 to 2.5	Pass
		-20	3.85	0.517	0.0003	-2.5 to 2.5	Pass
		-10	3.85	1.098	0.0006	-2.5 to 2.5	Pass
		0	3.85	0.936	0.0005	-2.5 to 2.5	Pass
		10	3.85	2.228	0.0012	-2.5 to 2.5	Pass
		30	3.85	1.647	0.0009	-2.5 to 2.5	Pass
		40	3.85	-3.003	-0.0016	-2.5 to 2.5	Pass
		50	3.85	-7.878	-0.0042	-2.5 to 2.5	Pass
	1909.8	20	3.27	2.486	0.0013	-2.5 to 2.5	Pass
			3.85	-3.487	-0.0018	-2.5 to 2.5	Pass
			4.43	0.872	0.0005	-2.5 to 2.5	Pass
		-30	3.85	3.455	0.0018	-2.5 to 2.5	Pass
		-20	3.85	-2.260	-0.0012	-2.5 to 2.5	Pass
		-10	3.85	0.323	0.0002	-2.5 to 2.5	Pass
		0	3.85	6.070	0.0032	-2.5 to 2.5	Pass
10		3.85	0.291	0.0002	-2.5 to 2.5	Pass	
30		3.85	-1.969	-0.0010	-2.5 to 2.5	Pass	
40		3.85	-7.232	-0.0038	-2.5 to 2.5	Pass	
50	3.85	-1.808	-0.0009	-2.5 to 2.5	Pass		
GPRS	1850.2	20	3.27	-8.814	-0.0048	-2.5 to 2.5	Pass
			3.85	0.097	0.0001	-2.5 to 2.5	Pass
			4.43	-3.196	-0.0017	-2.5 to 2.5	Pass
		-30	3.85	-0.969	-0.0005	-2.5 to 2.5	Pass
		-20	3.85	-2.421	-0.0013	-2.5 to 2.5	Pass
		-10	3.85	1.421	0.0008	-2.5 to 2.5	Pass
		0	3.85	-4.907	-0.0027	-2.5 to 2.5	Pass
		10	3.85	-1.517	-0.0008	-2.5 to 2.5	Pass
		30	3.85	-1.485	-0.0008	-2.5 to 2.5	Pass
		40	3.85	-0.194	-0.0001	-2.5 to 2.5	Pass
	50	3.85	5.747	0.0031	-2.5 to 2.5	Pass	
	1880	20	3.27	2.357	0.0013	-2.5 to 2.5	Pass
			3.85	-3.422	-0.0018	-2.5 to 2.5	Pass
			4.43	-4.681	-0.0025	-2.5 to 2.5	Pass
		-30	3.85	-3.196	-0.0017	-2.5 to 2.5	Pass
		-20	3.85	2.131	0.0011	-2.5 to 2.5	Pass
		-10	3.85	-0.387	-0.0002	-2.5 to 2.5	Pass
		0	3.85	-1.776	-0.0009	-2.5 to 2.5	Pass
		10	3.85	-1.001	-0.0005	-2.5 to 2.5	Pass
		30	3.85	-0.065	0.0000	-2.5 to 2.5	Pass
		40	3.85	2.841	0.0015	-2.5 to 2.5	Pass
	50	3.85	1.033	0.0005	-2.5 to 2.5	Pass	
	1909.8	20	3.27	-3.648	-0.0019	-2.5 to 2.5	Pass
			3.85	-1.905	-0.0010	-2.5 to 2.5	Pass
			4.43	-5.553	-0.0029	-2.5 to 2.5	Pass
		-30	3.85	-1.614	-0.0008	-2.5 to 2.5	Pass
		-20	3.85	1.905	0.0010	-2.5 to 2.5	Pass
		-10	3.85	-1.065	-0.0006	-2.5 to 2.5	Pass
		0	3.85	2.551	0.0013	-2.5 to 2.5	Pass
		10	3.85	-1.873	-0.0010	-2.5 to 2.5	Pass
30		3.85	-1.001	-0.0005	-2.5 to 2.5	Pass	
40		3.85	0.420	0.0002	-2.5 to 2.5	Pass	
50	3.85	-4.165	-0.0022	-2.5 to 2.5	Pass		
EGPRS	1850.2	20	3.27	-9.460	-0.0051	-2.5 to 2.5	Pass

			3.85	-6.651	-0.0036	-2.5 to 2.5	Pass	
			4.43	-12.721	-0.0069	-2.5 to 2.5	Pass	
		-30	3.85	-8.007	-0.0043	-2.5 to 2.5	Pass	
		-20	3.85	-15.110	-0.0082	-2.5 to 2.5	Pass	
		-10	3.85	-12.043	-0.0065	-2.5 to 2.5	Pass	
		0	3.85	-7.071	-0.0038	-2.5 to 2.5	Pass	
		10	3.85	-4.585	-0.0025	-2.5 to 2.5	Pass	
		30	3.85	-6.748	-0.0036	-2.5 to 2.5	Pass	
		40	3.85	-3.229	-0.0017	-2.5 to 2.5	Pass	
	50	3.85	-1.937	-0.0010	-2.5 to 2.5	Pass		
	1880	20		3.27	-2.421	-0.0013	-2.5 to 2.5	Pass
				3.85	-4.585	-0.0024	-2.5 to 2.5	Pass
				4.43	-12.656	-0.0067	-2.5 to 2.5	Pass
		-30	3.85	-0.969	-0.0005	-2.5 to 2.5	Pass	
		-20	3.85	-7.006	-0.0037	-2.5 to 2.5	Pass	
		-10	3.85	-7.103	-0.0038	-2.5 to 2.5	Pass	
		0	3.85	-6.522	-0.0035	-2.5 to 2.5	Pass	
		10	3.85	-5.973	-0.0032	-2.5 to 2.5	Pass	
		30	3.85	-2.680	-0.0014	-2.5 to 2.5	Pass	
	40	3.85	-4.649	-0.0025	-2.5 to 2.5	Pass		
	50	3.85	-7.329	-0.0039	-2.5 to 2.5	Pass		
	1909.8	20		3.27	-7.749	-0.0041	-2.5 to 2.5	Pass
				3.85	-4.778	-0.0025	-2.5 to 2.5	Pass
				4.43	-5.779	-0.0030	-2.5 to 2.5	Pass
		-30	3.85	-11.978	-0.0063	-2.5 to 2.5	Pass	
		-20	3.85	-3.519	-0.0018	-2.5 to 2.5	Pass	
		-10	3.85	-9.718	-0.0051	-2.5 to 2.5	Pass	
		0	3.85	-0.743	-0.0004	-2.5 to 2.5	Pass	
10		3.85	-7.942	-0.0042	-2.5 to 2.5	Pass		
30		3.85	-8.523	-0.0045	-2.5 to 2.5	Pass		
40	3.85	-7.297	-0.0038	-2.5 to 2.5	Pass			
50	3.85	-6.425	-0.0034	-2.5 to 2.5	Pass			

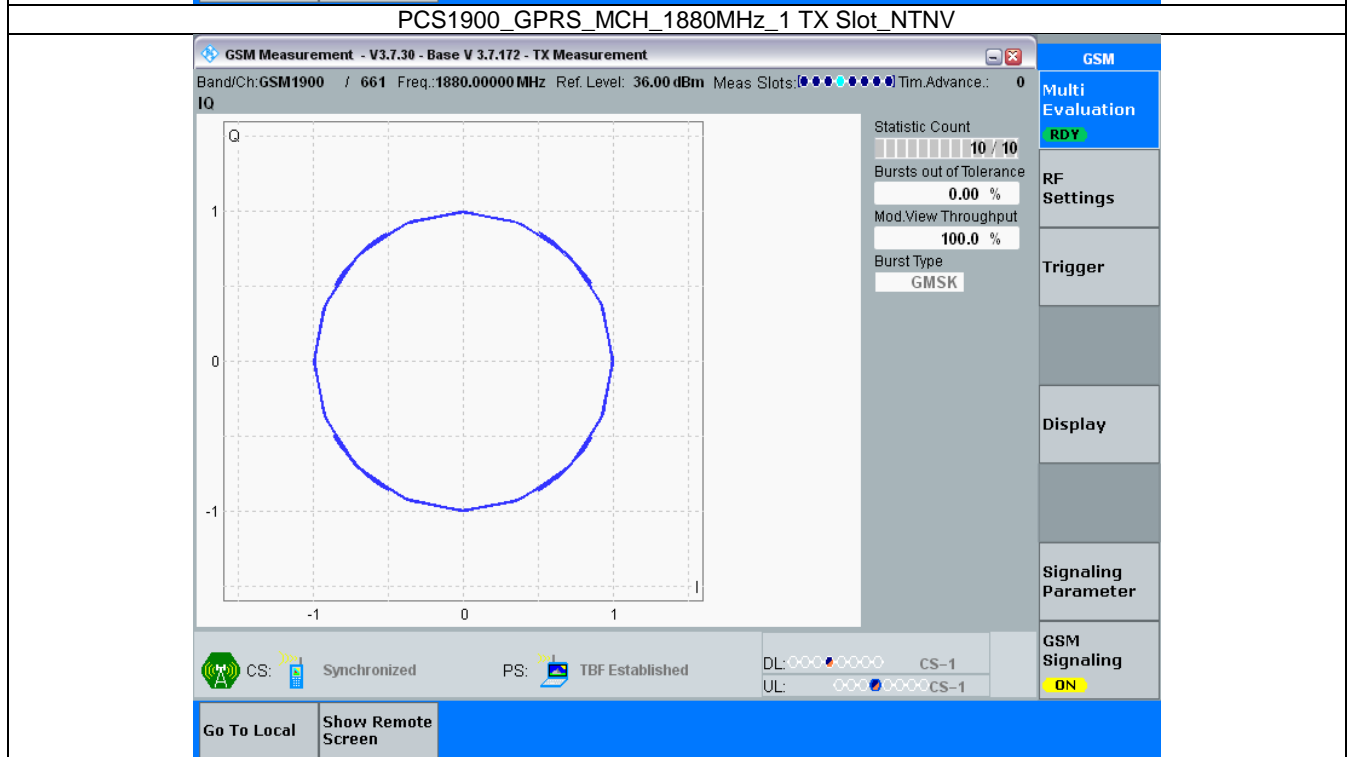
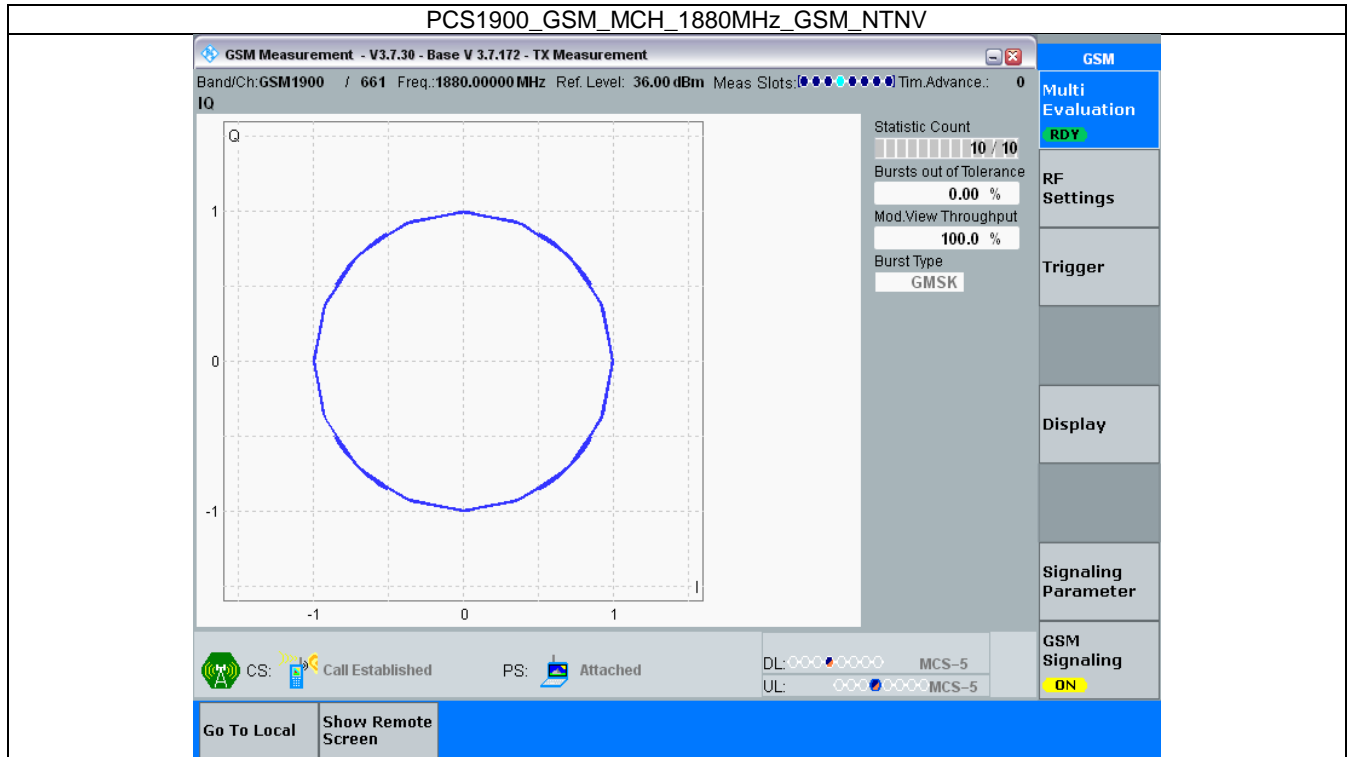
3. Modulation Characteristics

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 3.7.172 - TX Measurement

Band/Ch: GSM1900 / 661 Freq.: 1880.00000 MHz Ref. Level: 39.23 dBm Meas Slots: ●●●●●●●● Tim. Advance.: 0

GSM

Multi Evaluation

RDY

RF Settings

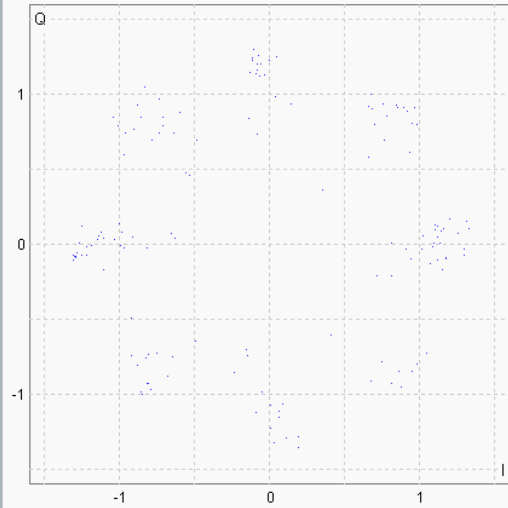
Trigger

Display

Signaling Parameter

GSM Signaling

ON



Statistic Count: 10 / 10

Bursts out of Tolerance: 0.00 %

Mod.View Throughput: 100.0 %

Burst Type: 8PSK

CS: Synchronized

PS: TBF Established

DL: ○○○●○○○ MCS-5

UL: ○○○●○○○ MCS-5

Go To Local
Show Remote Screen

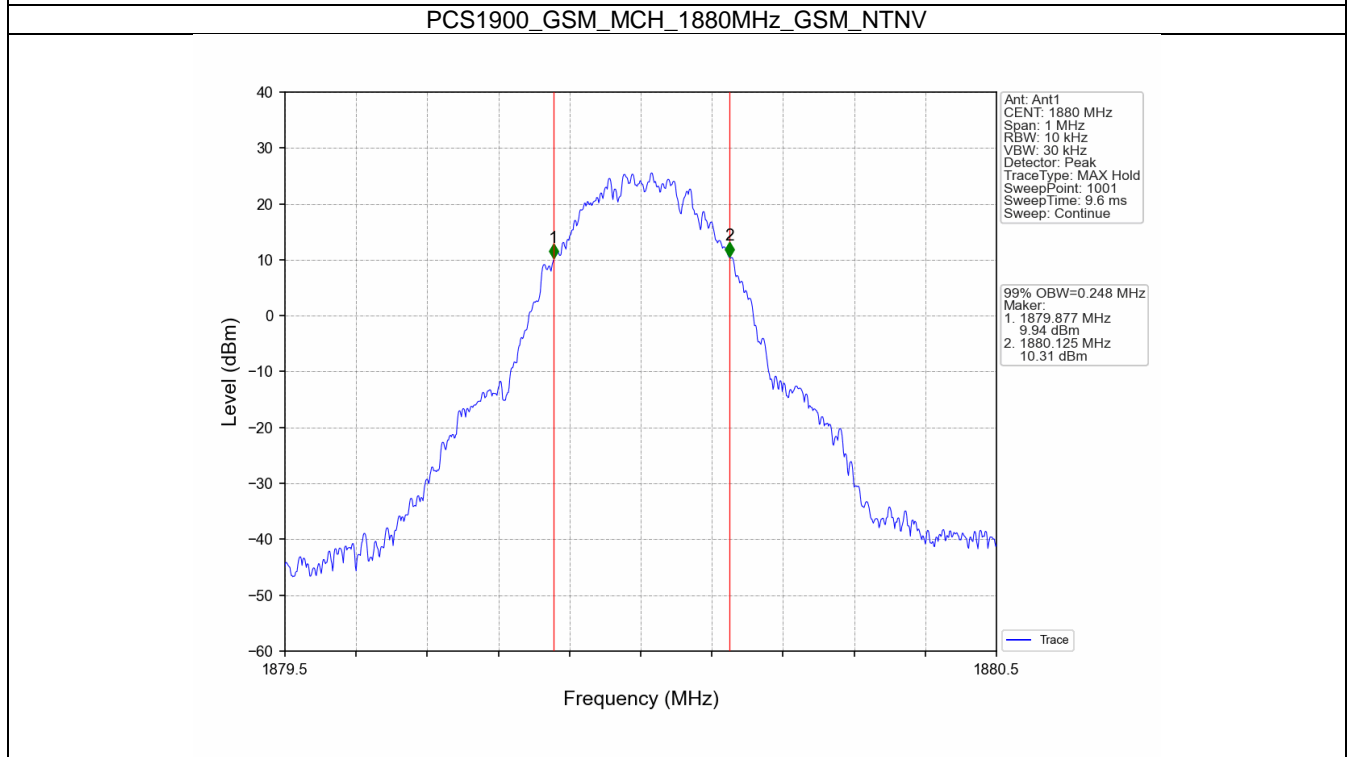
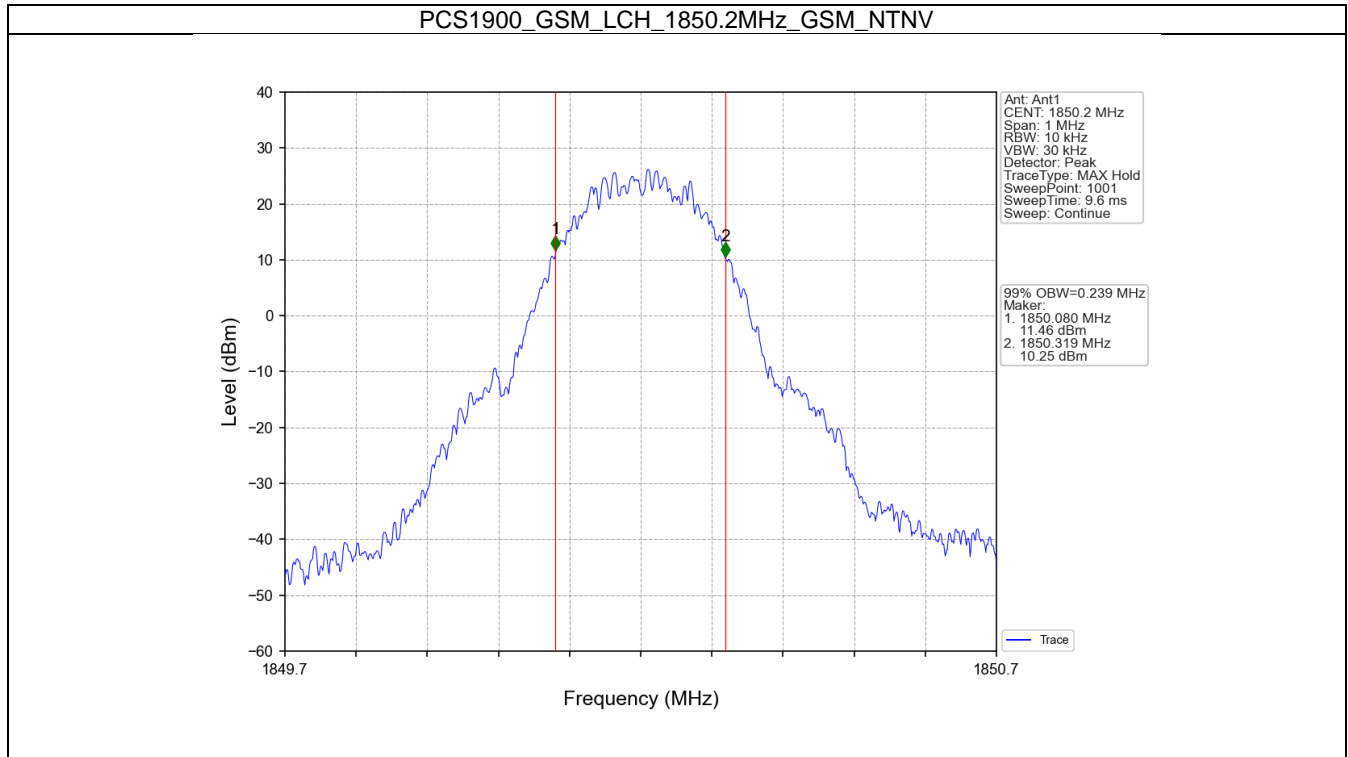
4. 99% & 26dB Bandwidth

4.1 PCS1900_OBW

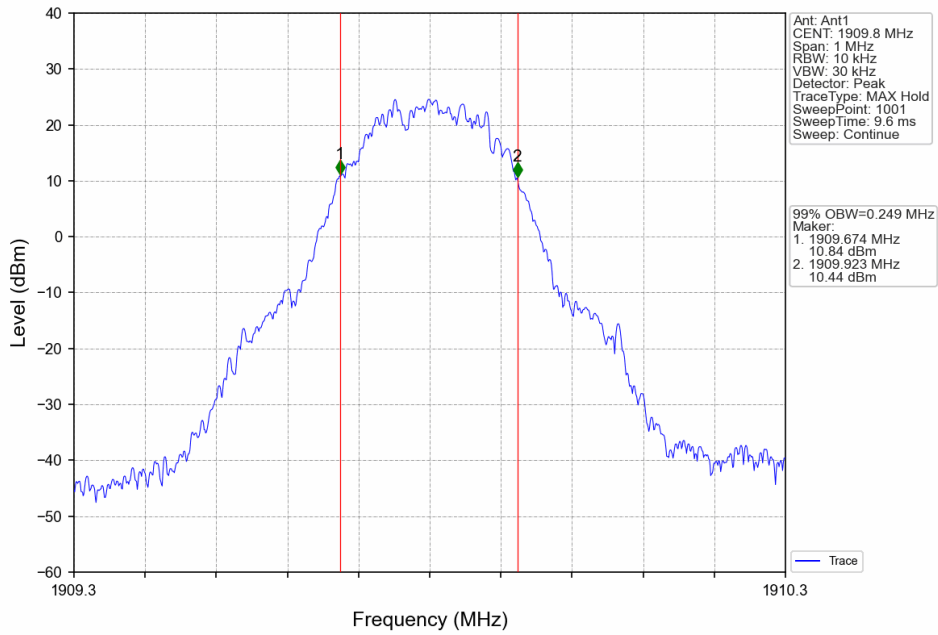
4.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.239	/	Pass
			1880	0.248	/	Pass
			1909.8	0.249	/	Pass
	GPRS	1 TX Slot	1850.2	0.249	/	Pass
			1880	0.248	/	Pass
			1909.8	0.246	/	Pass
	EGPRS	1 TX Slot	1850.2	0.278	/	Pass
			1880	0.293	/	Pass
			1909.8	0.285	/	Pass

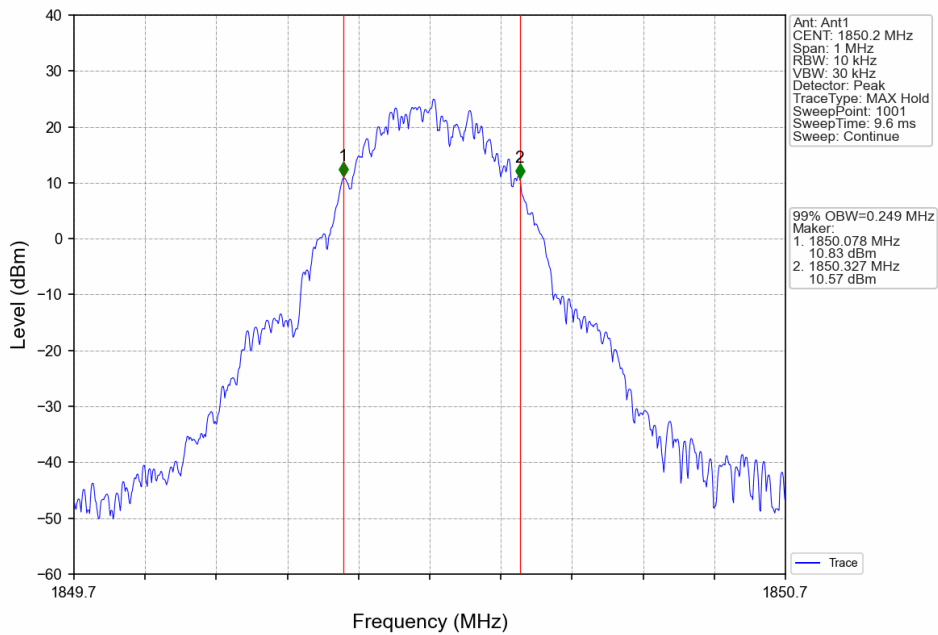
4.1.2 Test Graph



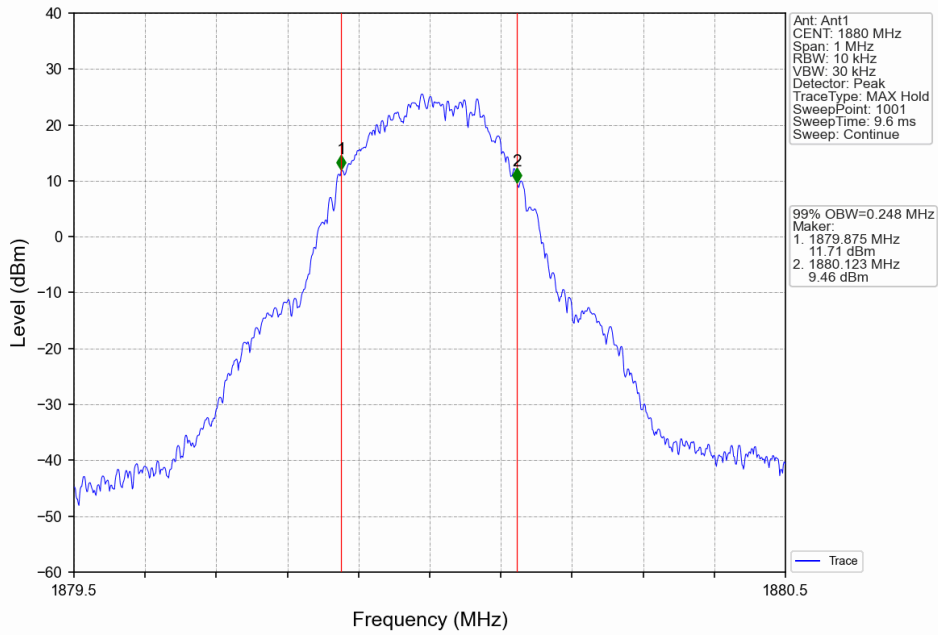
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



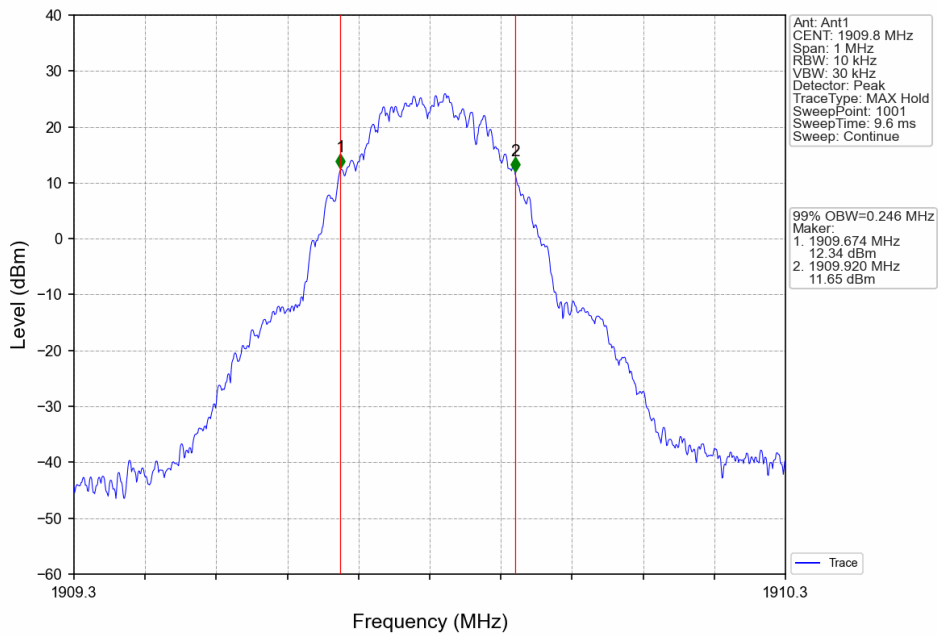
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



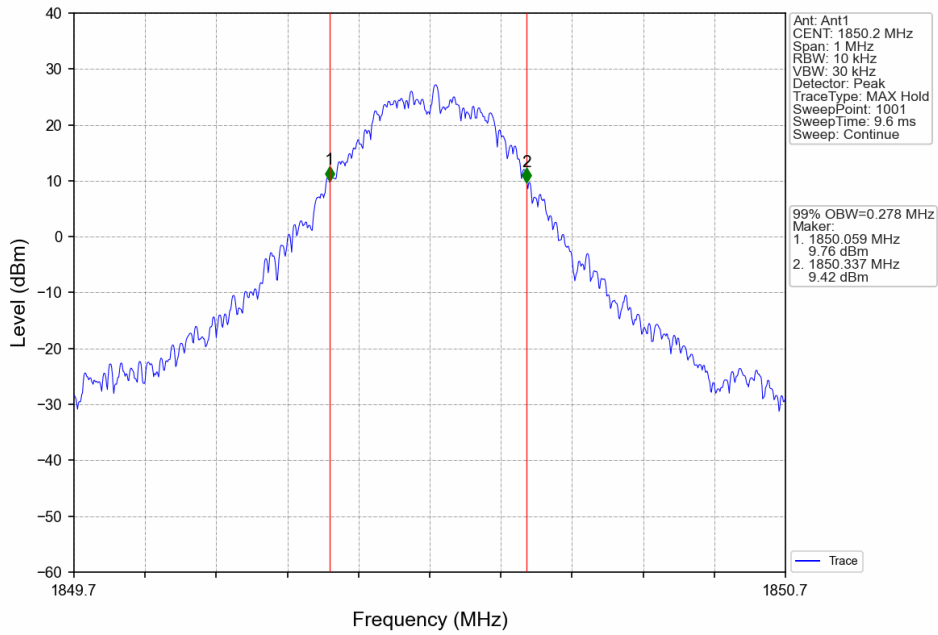
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



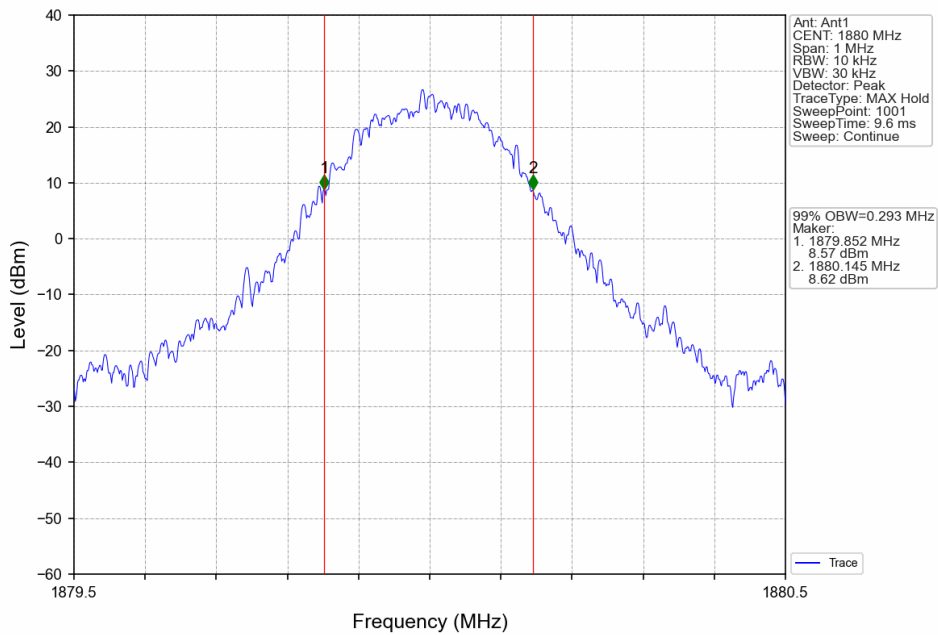
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



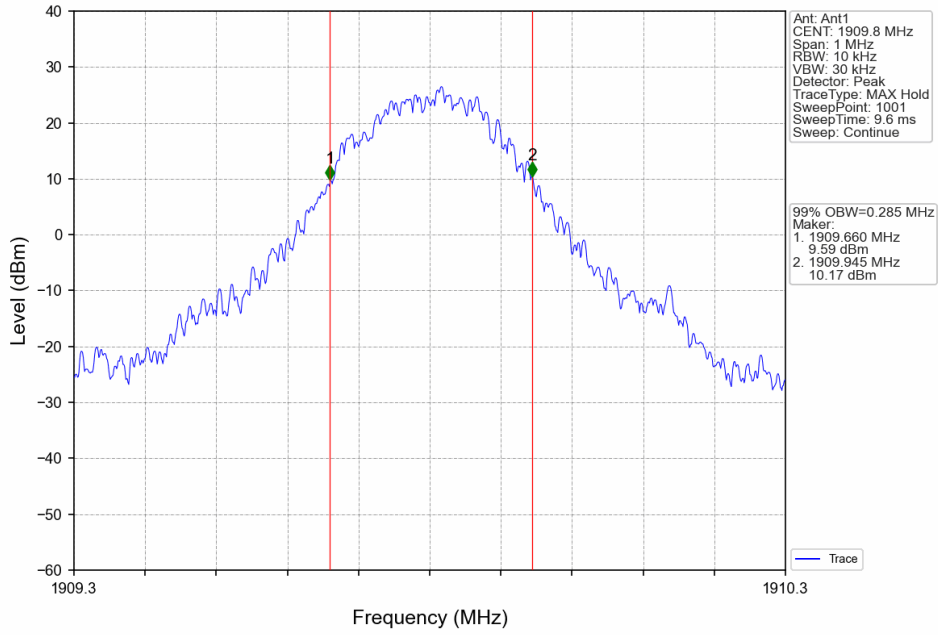
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV

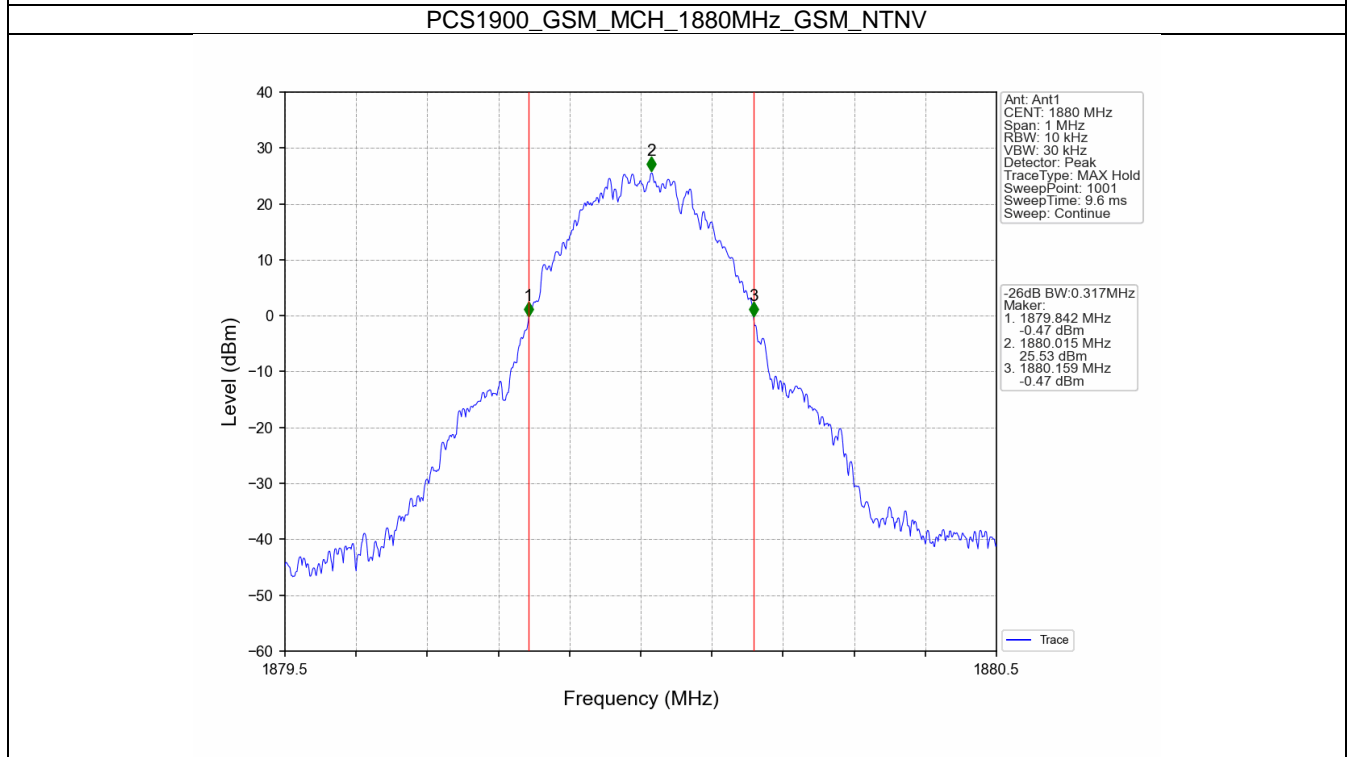
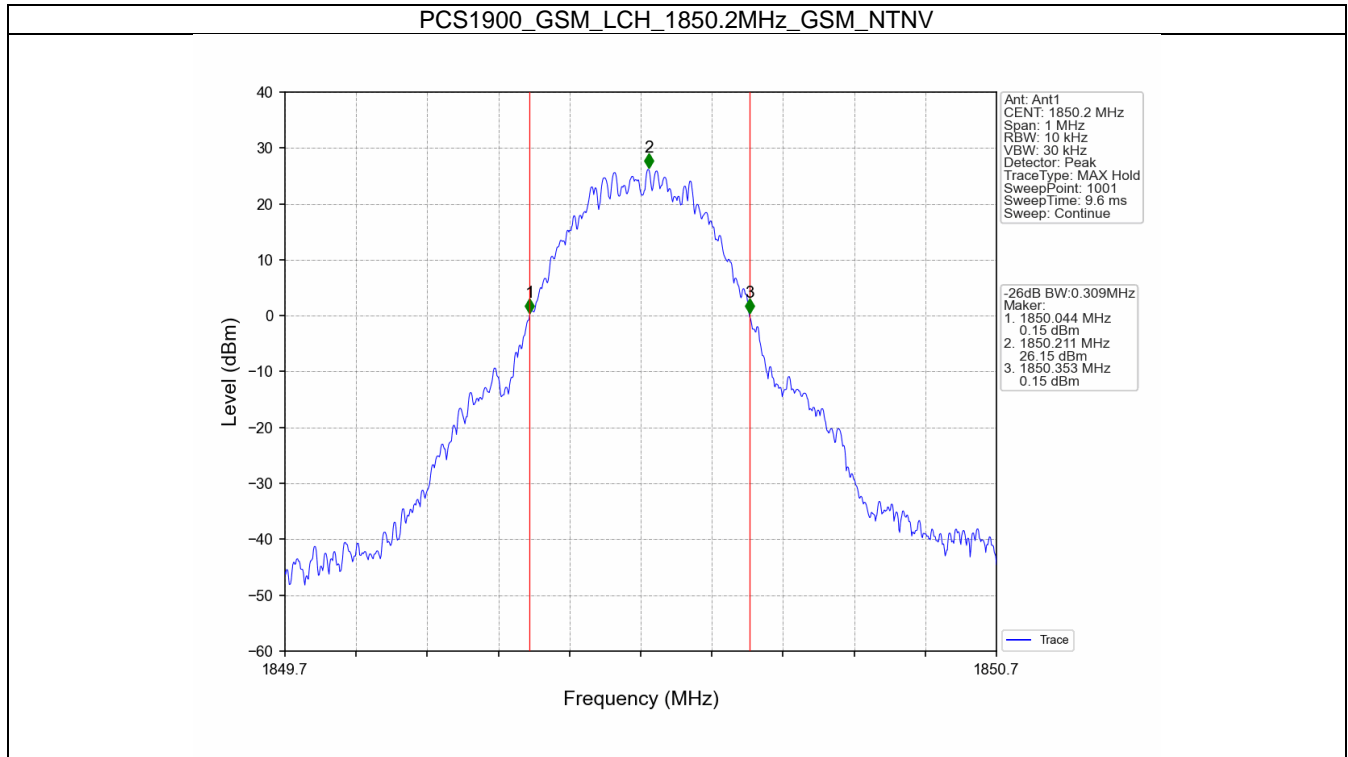


4.2 PCS1900_XDB

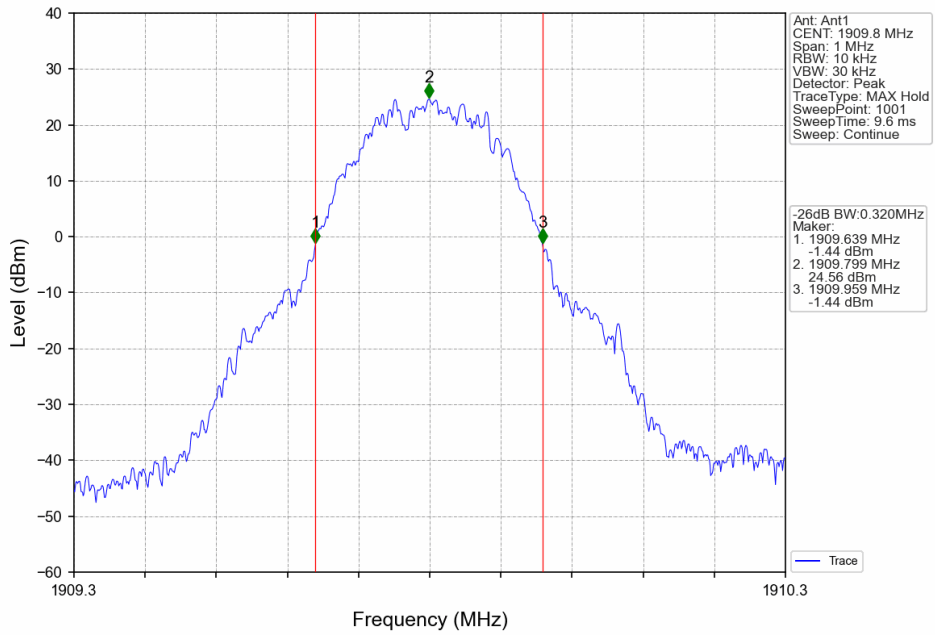
4.2.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.309	/	Pass
			1880	0.317	/	Pass
			1909.8	0.320	/	Pass
	GPRS	1 TX Slot	1850.2	0.322	/	Pass
			1880	0.315	/	Pass
			1909.8	0.312	/	Pass
	EGPRS	1 TX Slot	1850.2	0.372	/	Pass
			1880	0.393	/	Pass
			1909.8	0.385	/	Pass

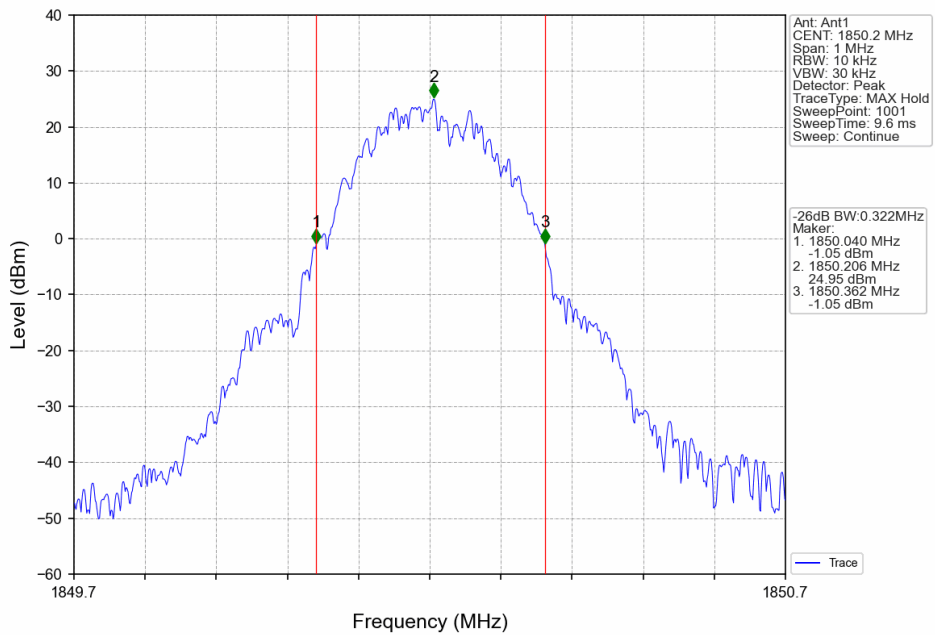
4.2.2 Test Graph



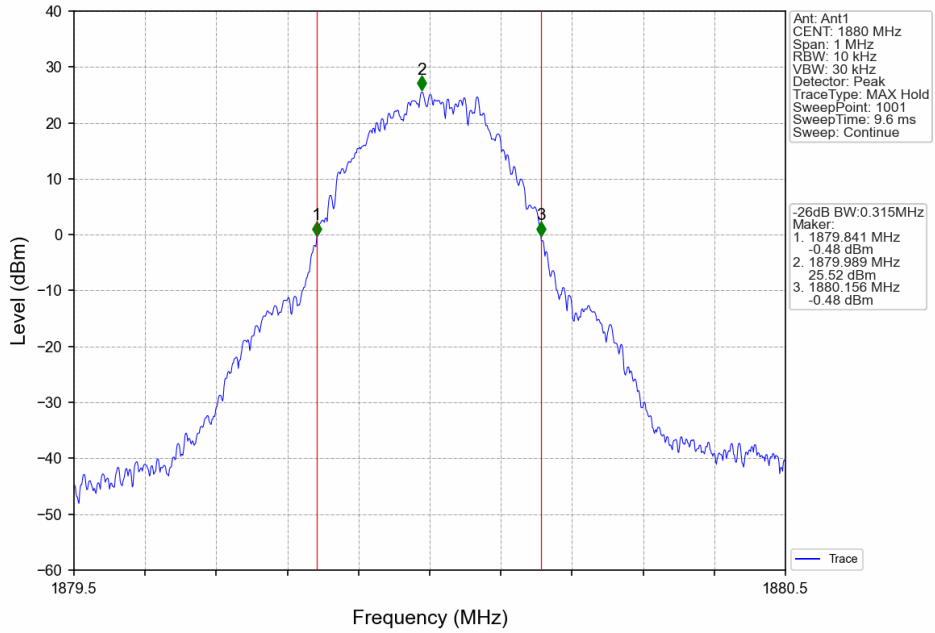
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



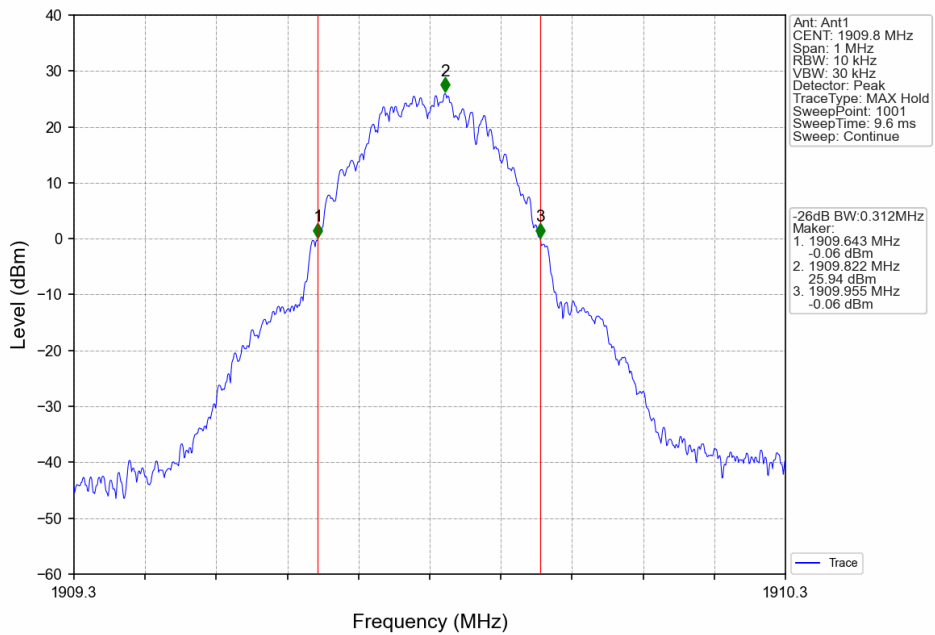
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



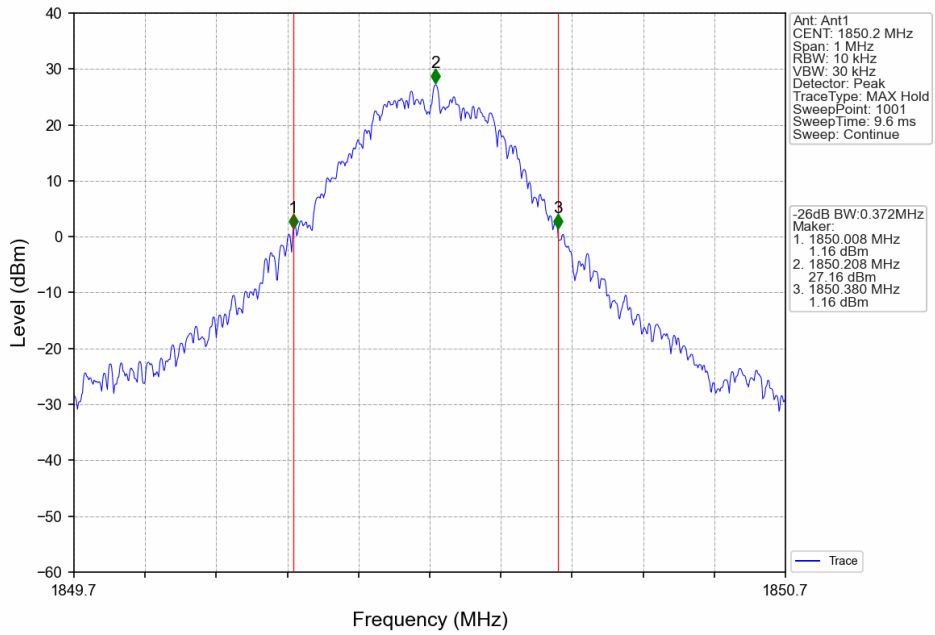
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



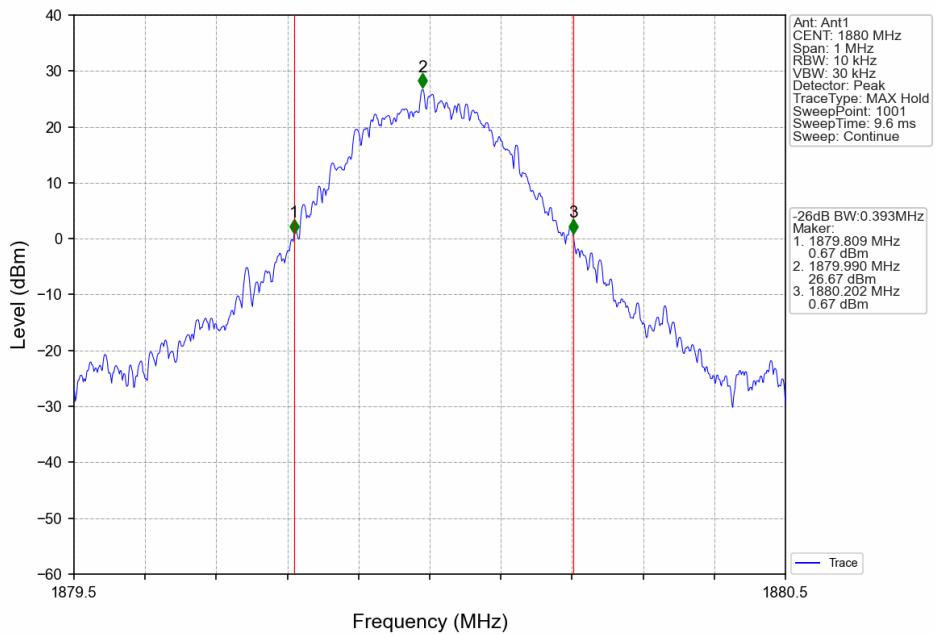
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



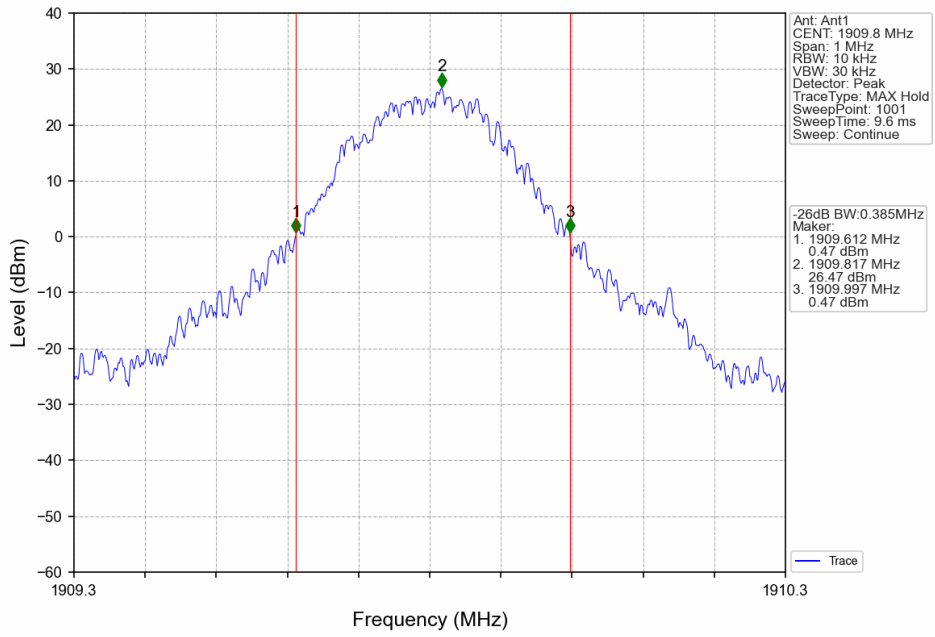
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



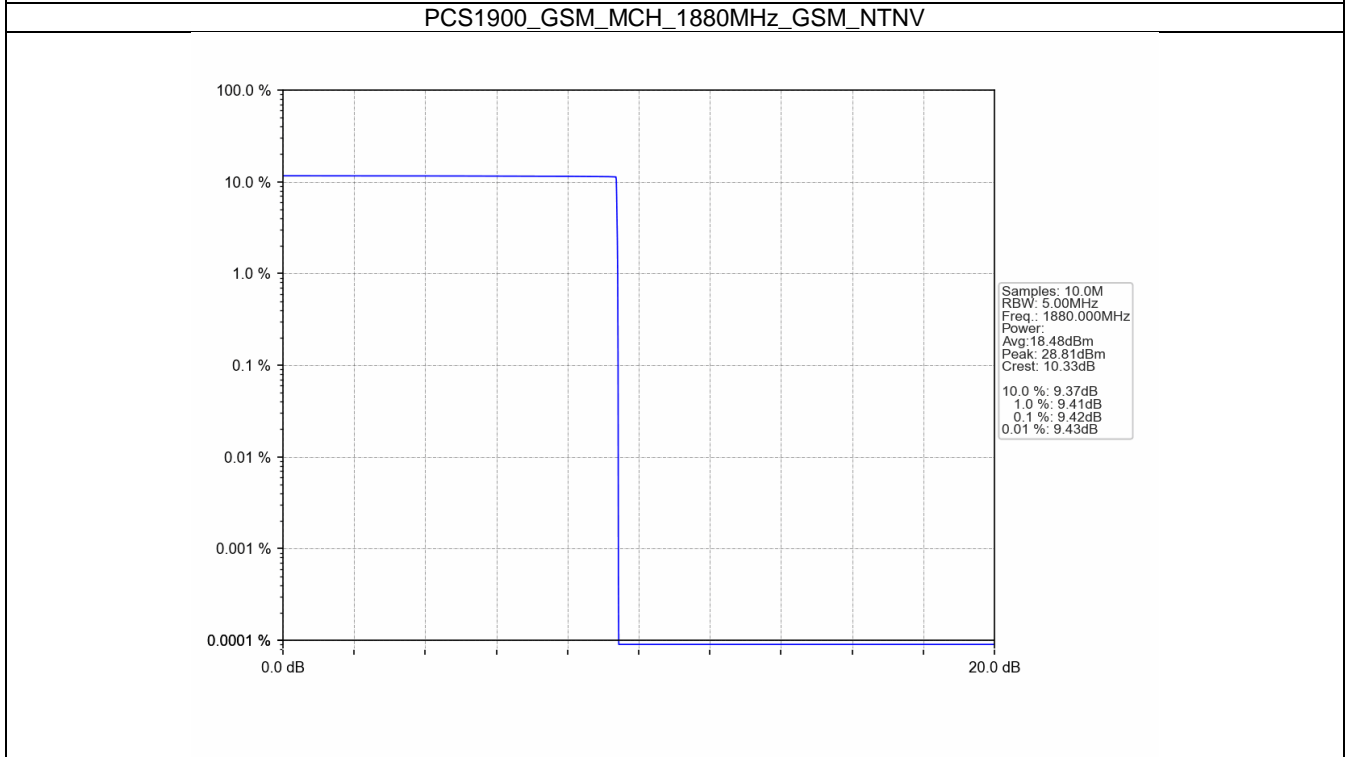
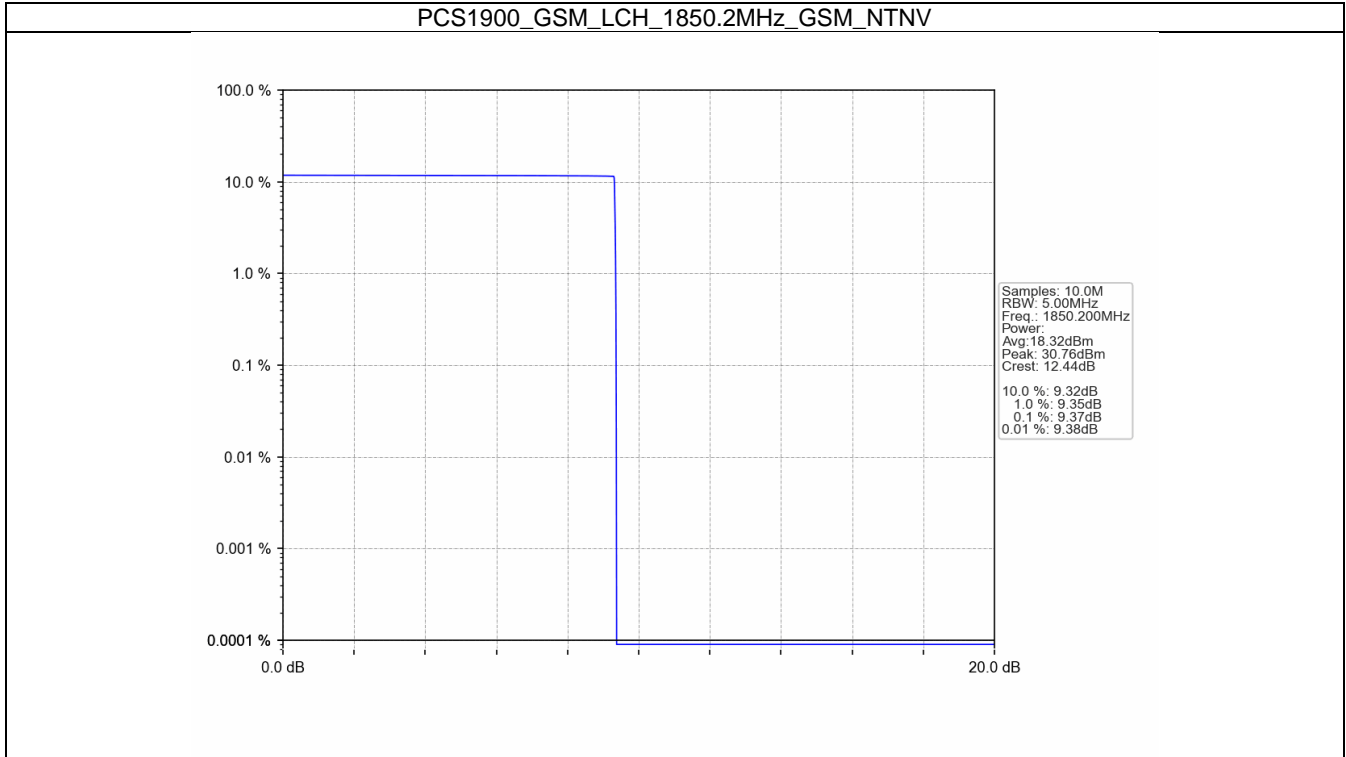
5. Peak-Average Ratio

5.1 PCS1900

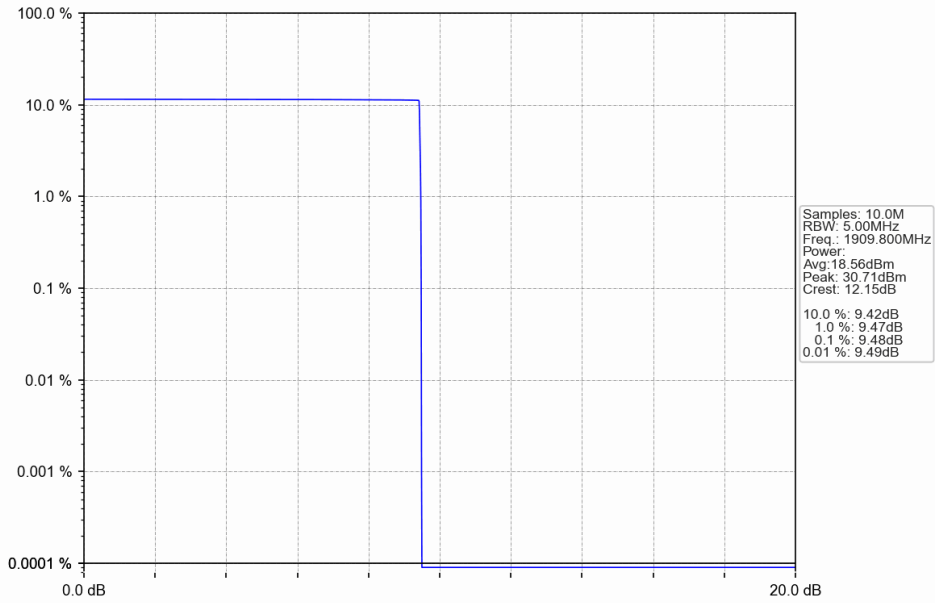
5.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	9.37	<=13	Pass
			1880	9.42	<=13	Pass
			1909.8	9.48	<=13	Pass
	GPRS	4 TX Slots	1850.2	3.50	<=13	Pass
			1880	3.55	<=13	Pass
			1909.8	3.52	<=13	Pass
	EGPRS	4 TX Slots	1850.2	6.19	<=13	Pass
			1880	5.95	<=13	Pass
			1909.8	6.04	<=13	Pass

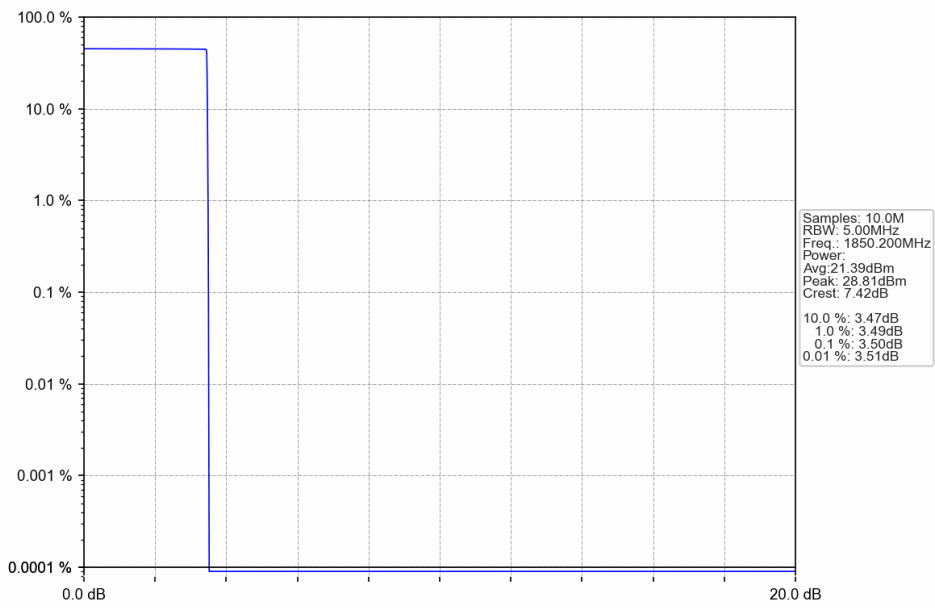
5.1.2 Test Graph



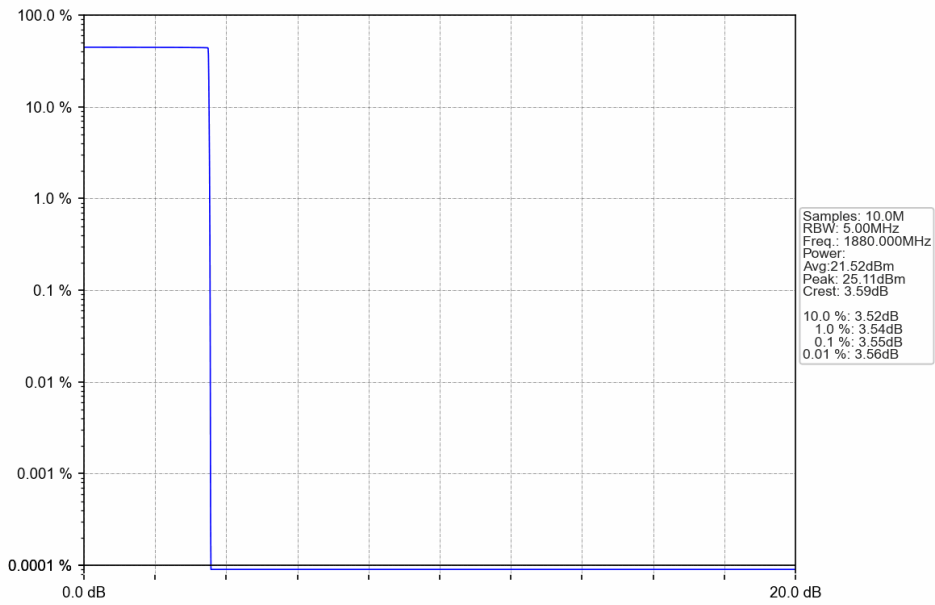
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



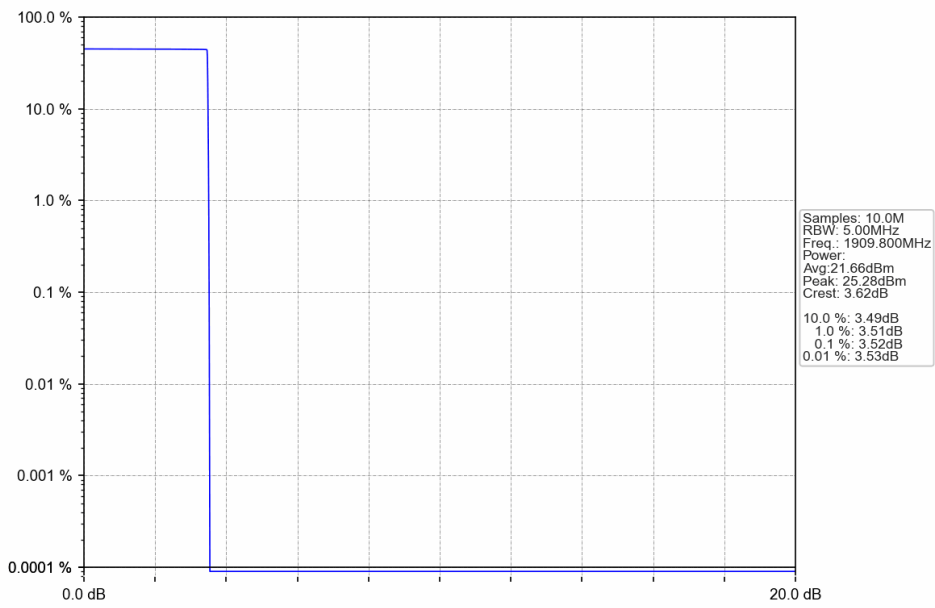
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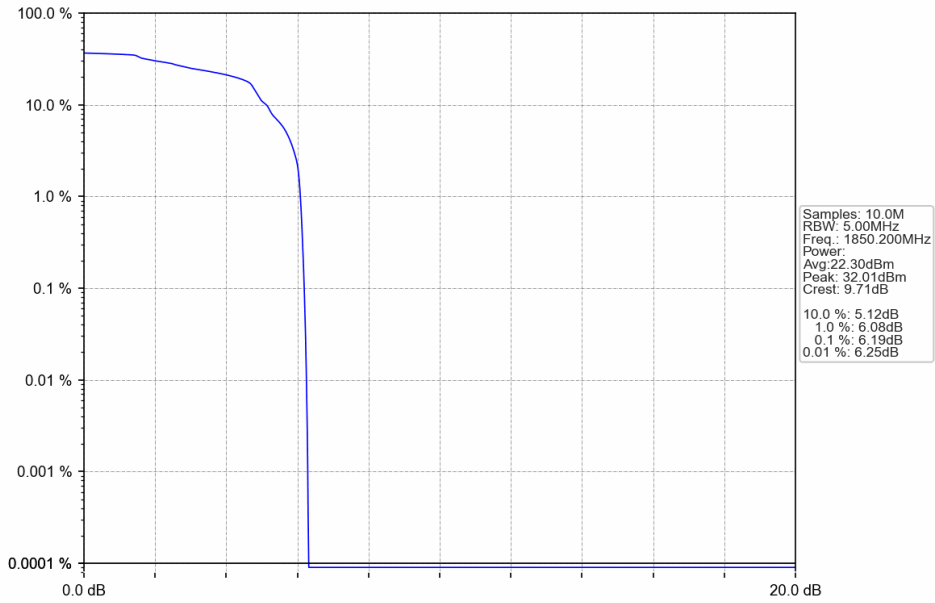
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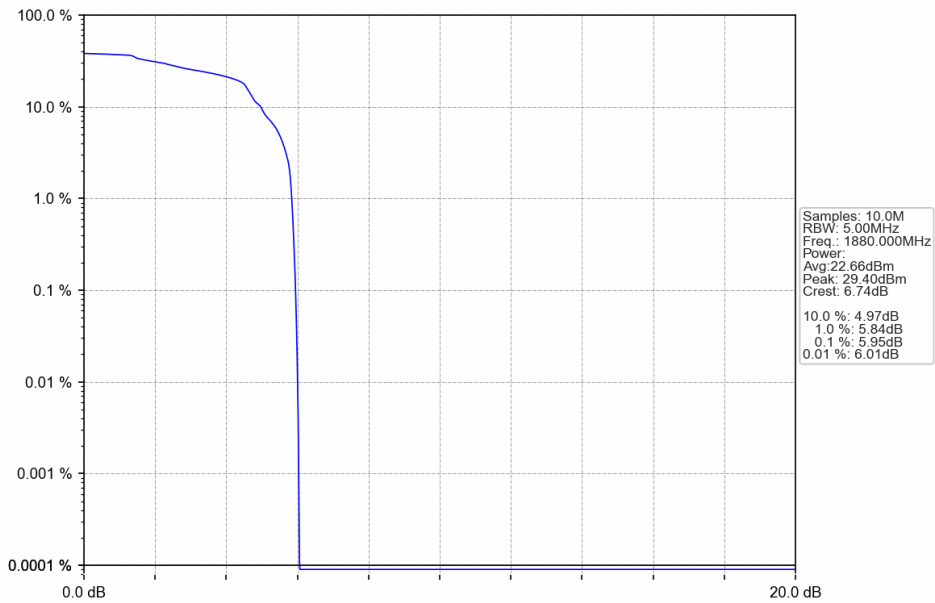
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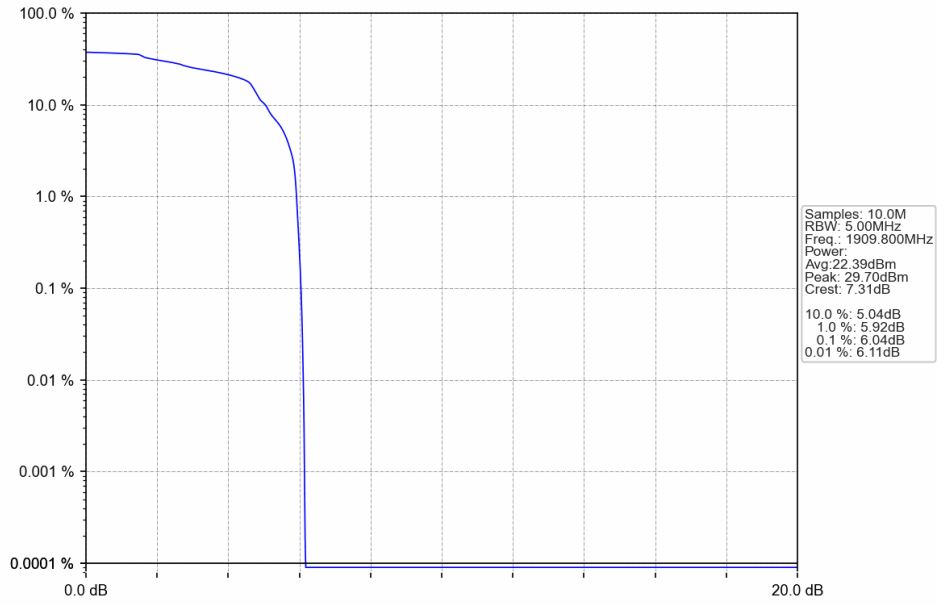
PCS1900_EGPRS_LCH_1850.2MHz_4 TX Slots_NTNV



PCS1900_EGPRS_MCH_1880MHz_4 TX Slots_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_4 TX Slots_NTNV



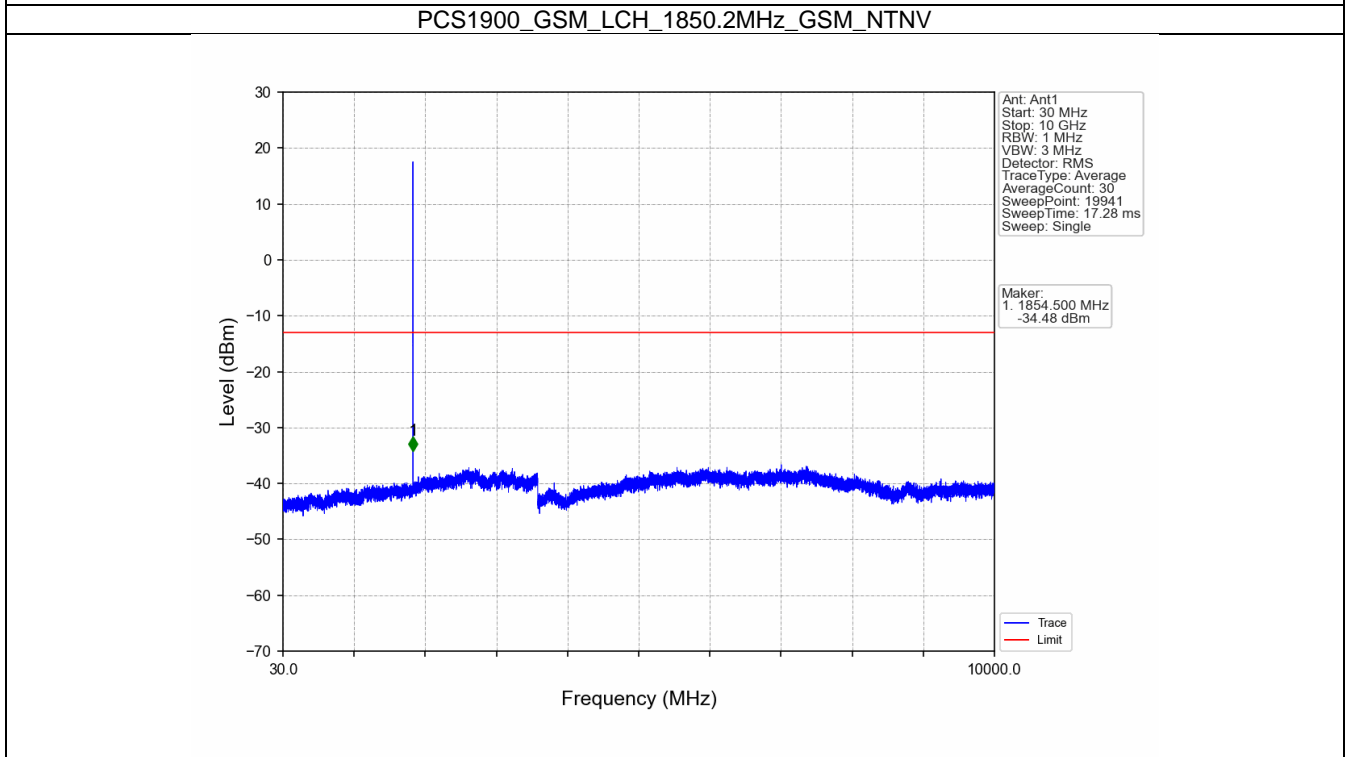
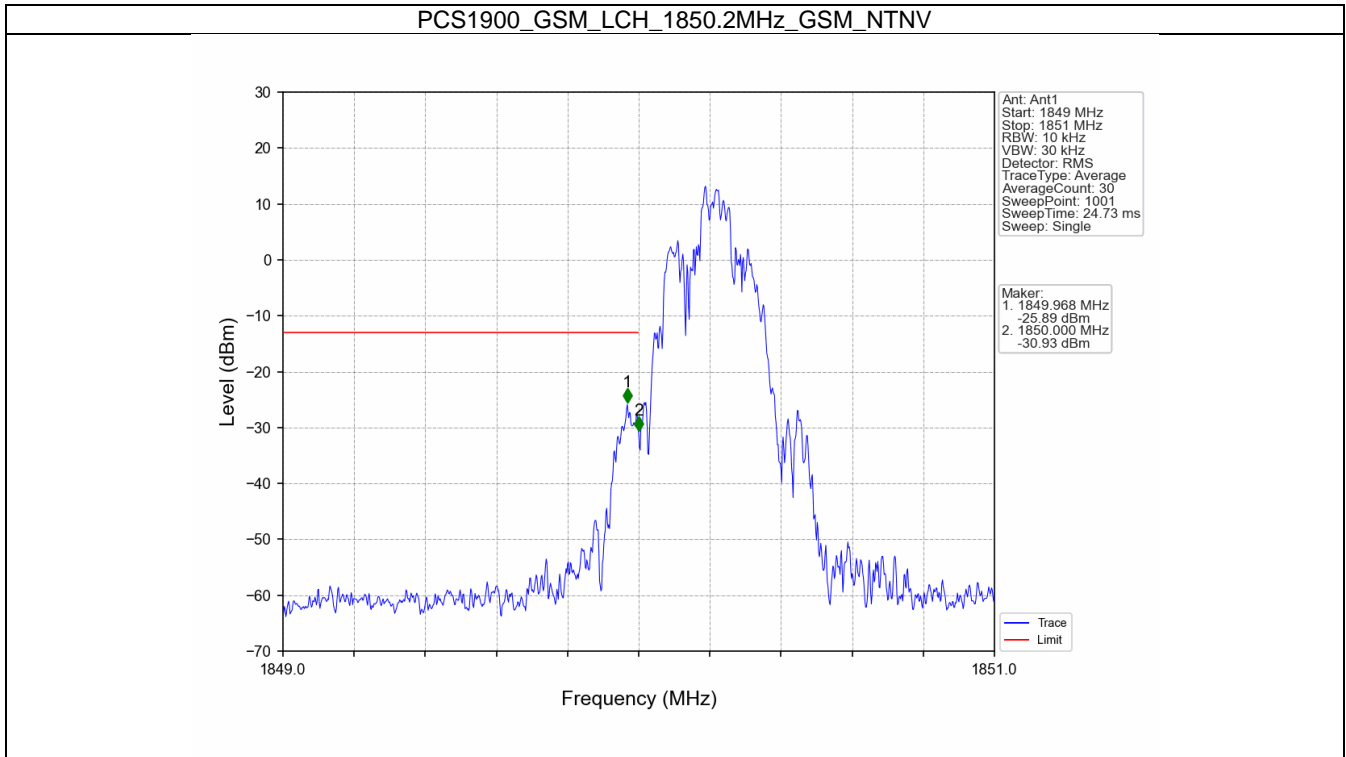
6. Spurious Emission

6.1 PCS1900

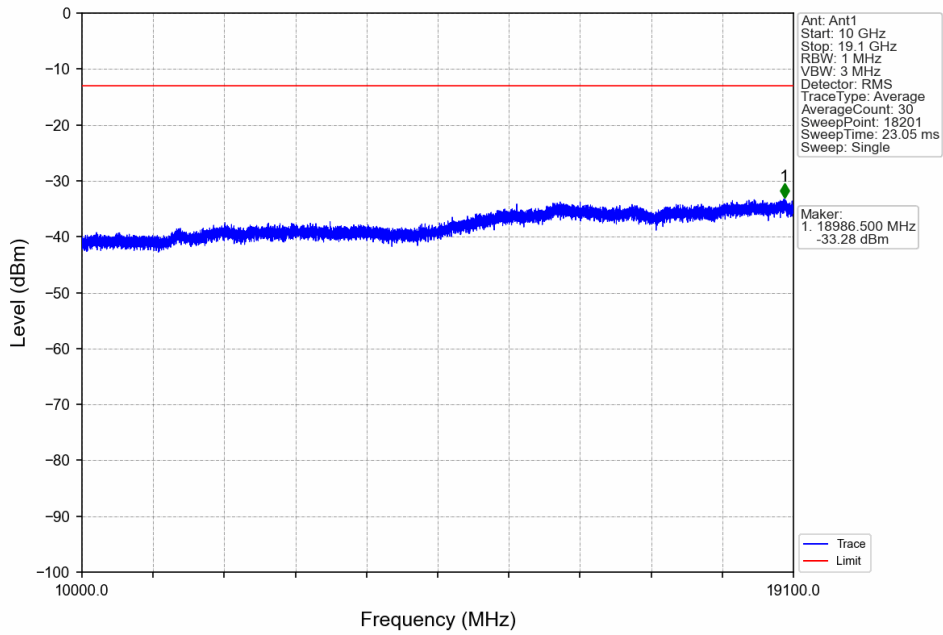
6.1.1 Test Result

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

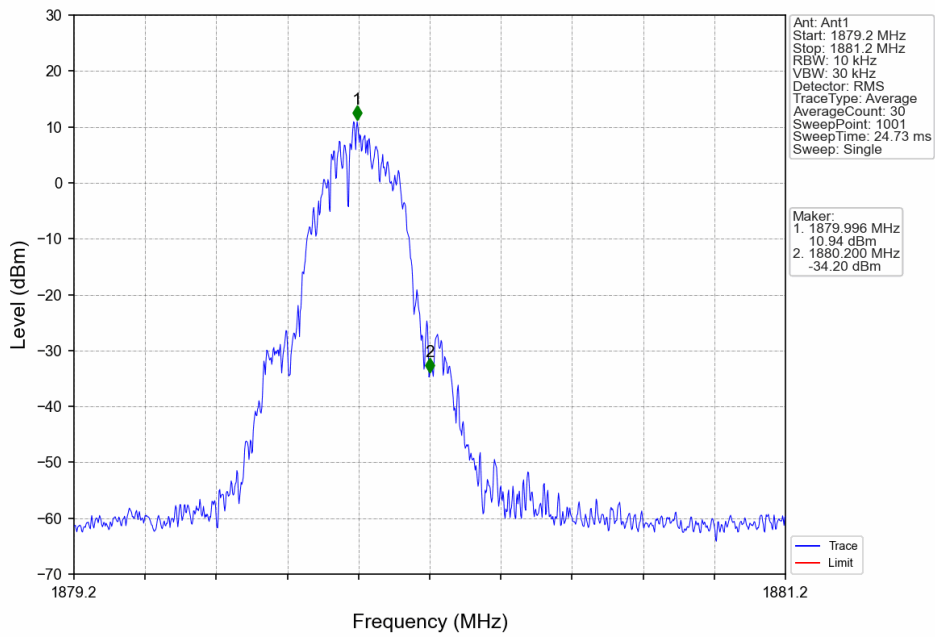
6.1.2 Test Graph



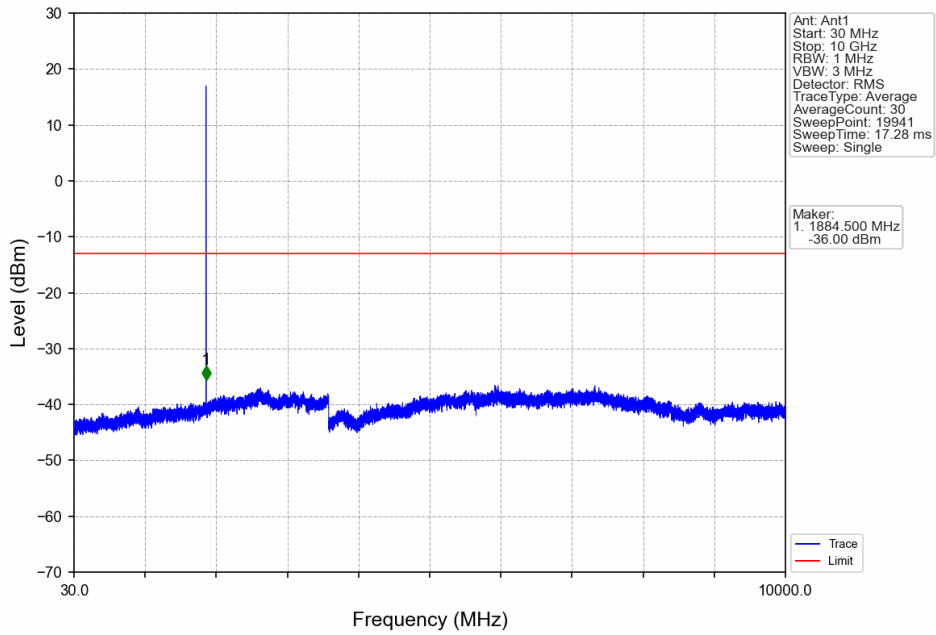
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



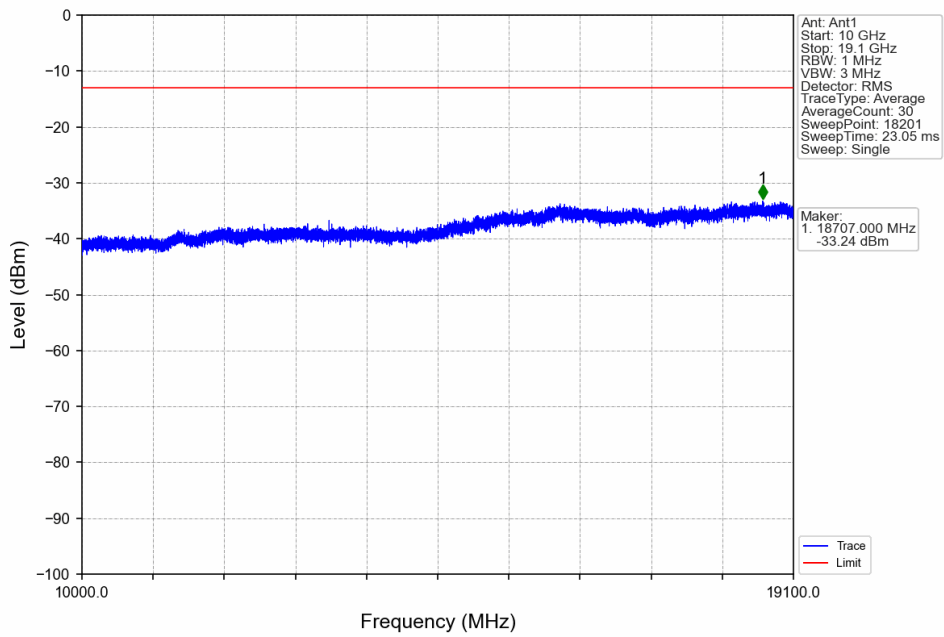
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



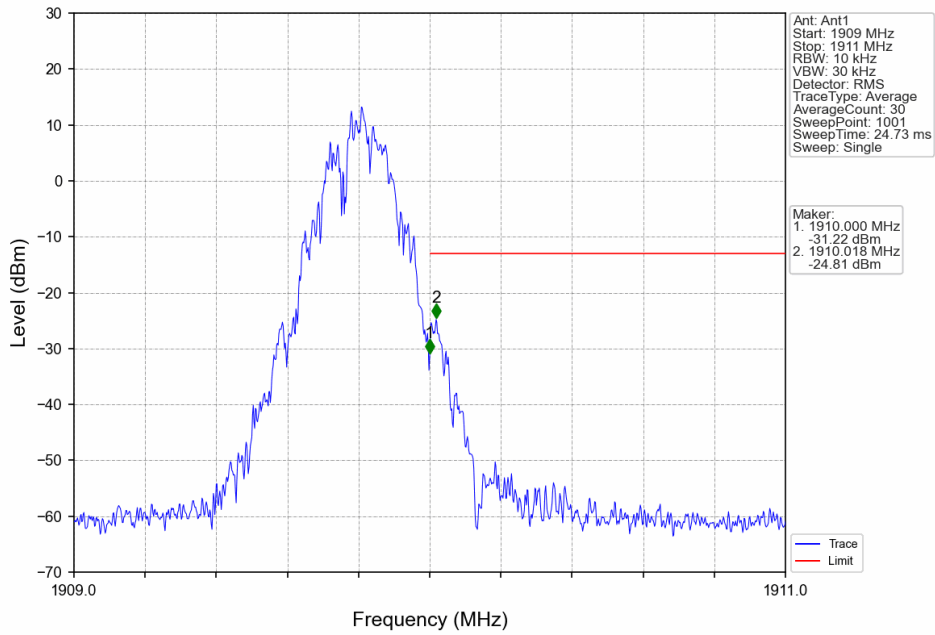
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



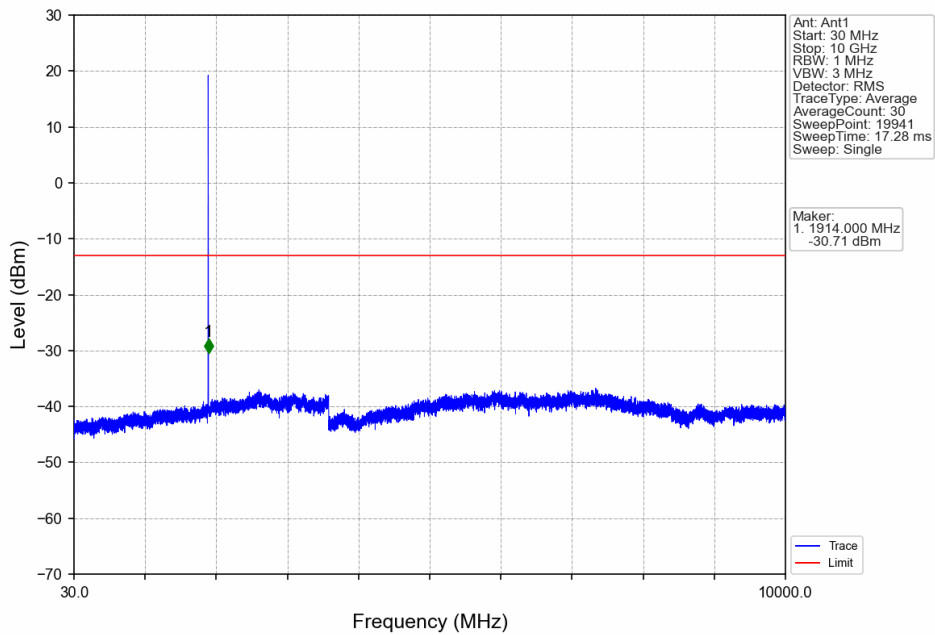
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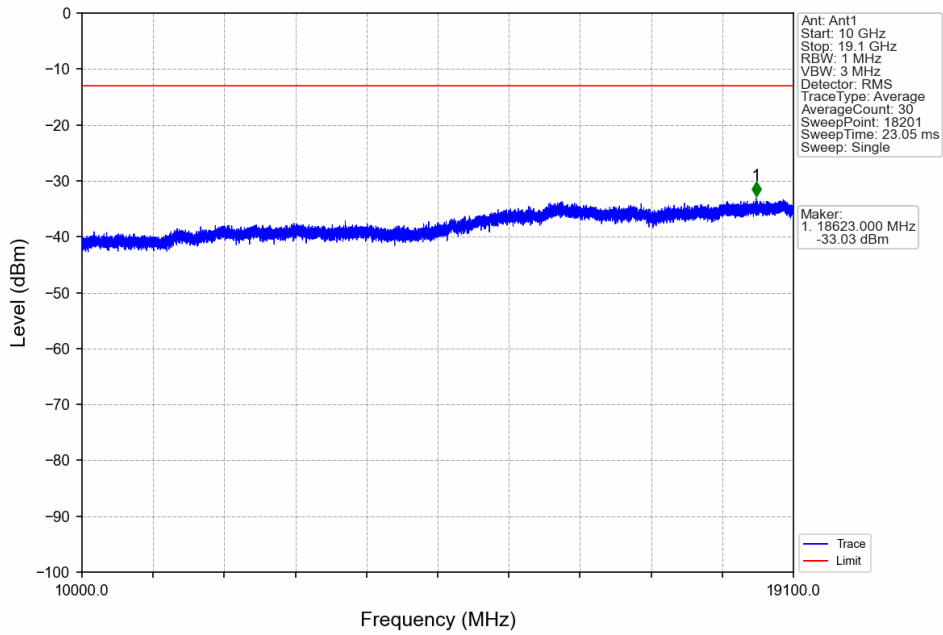
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



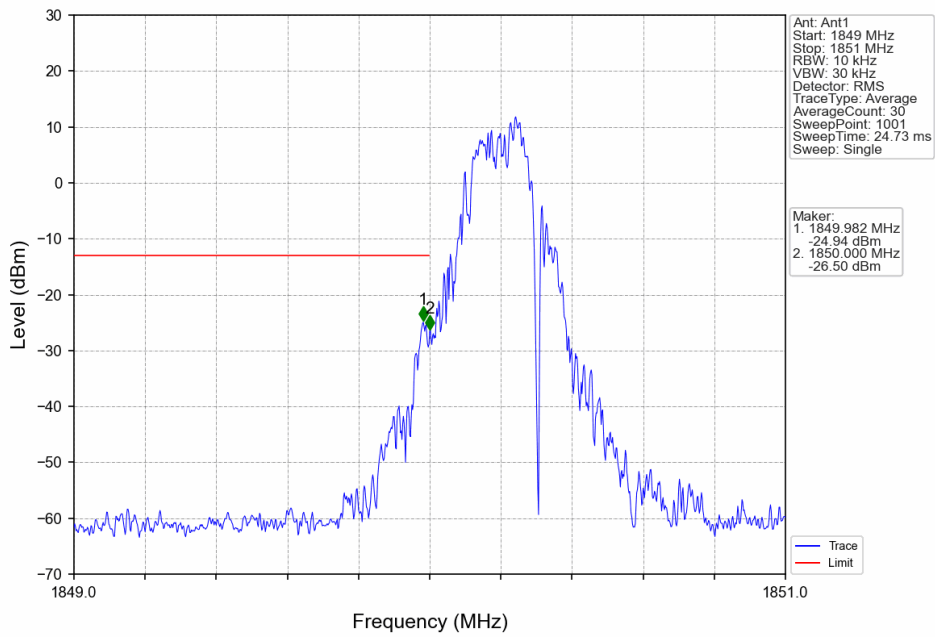
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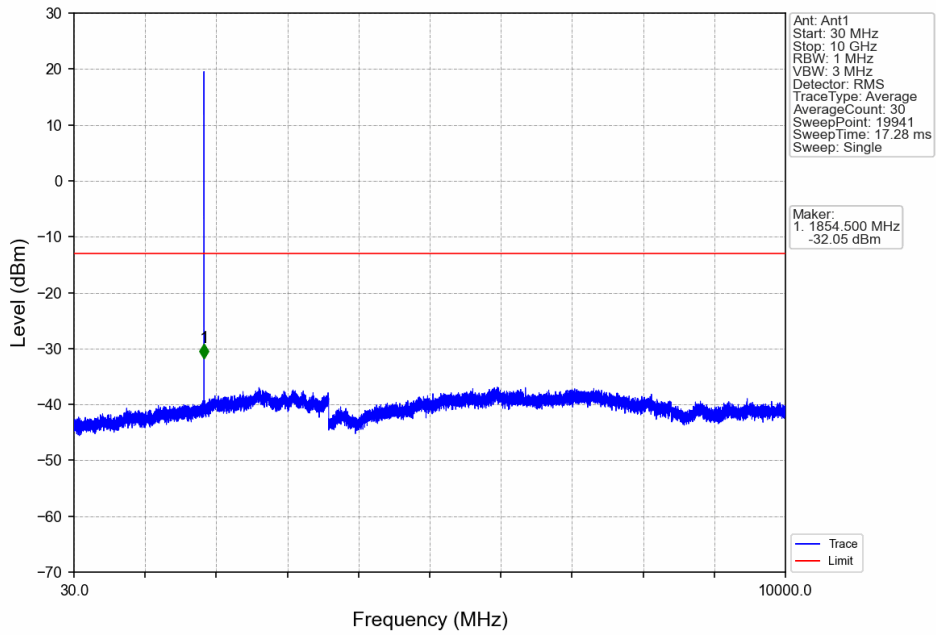
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



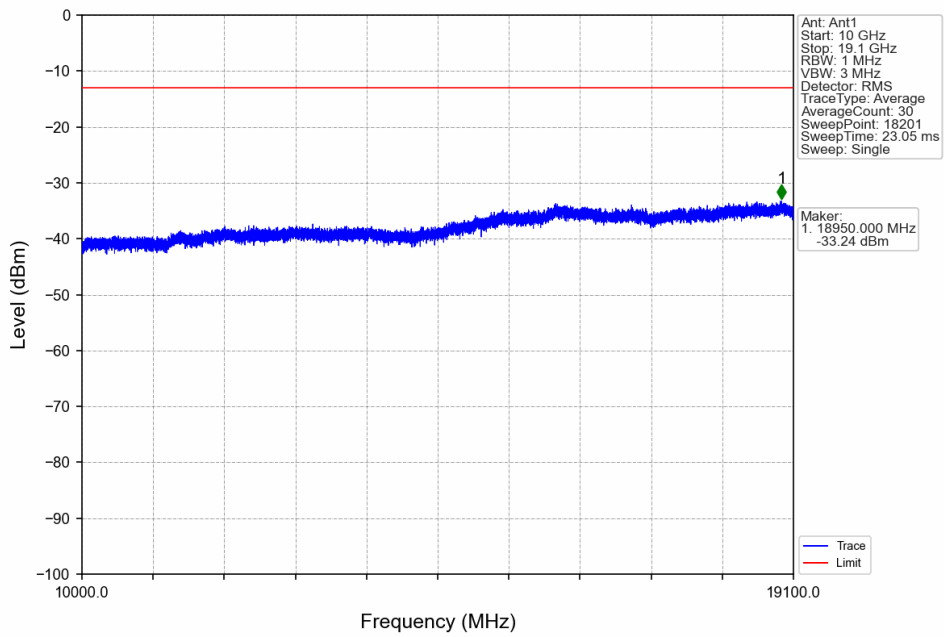
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



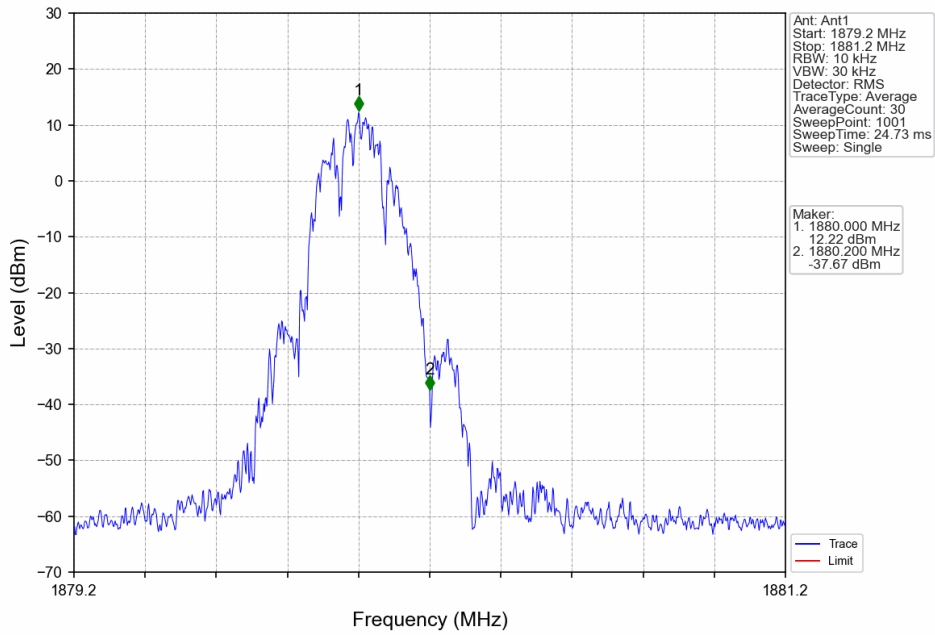
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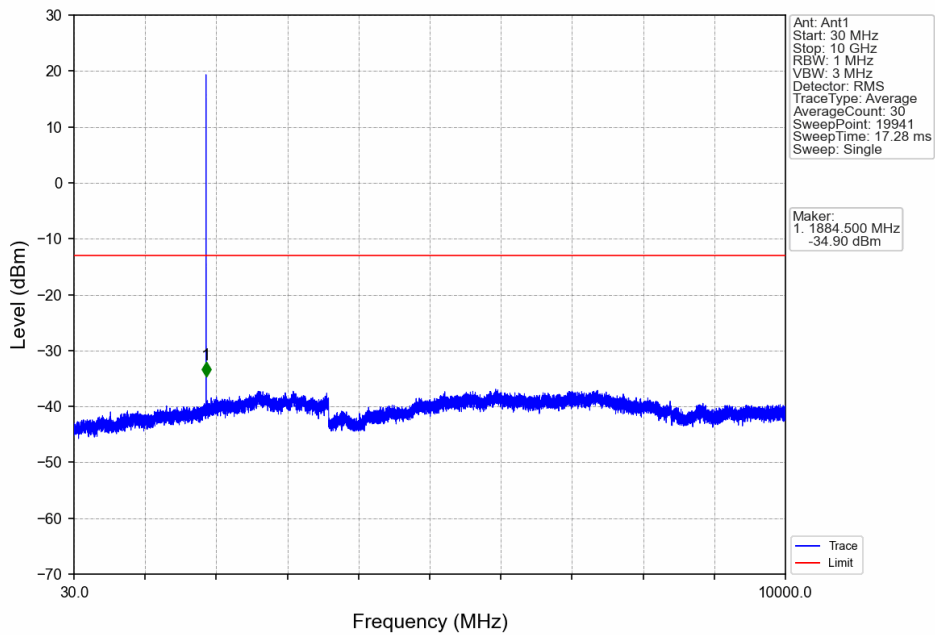
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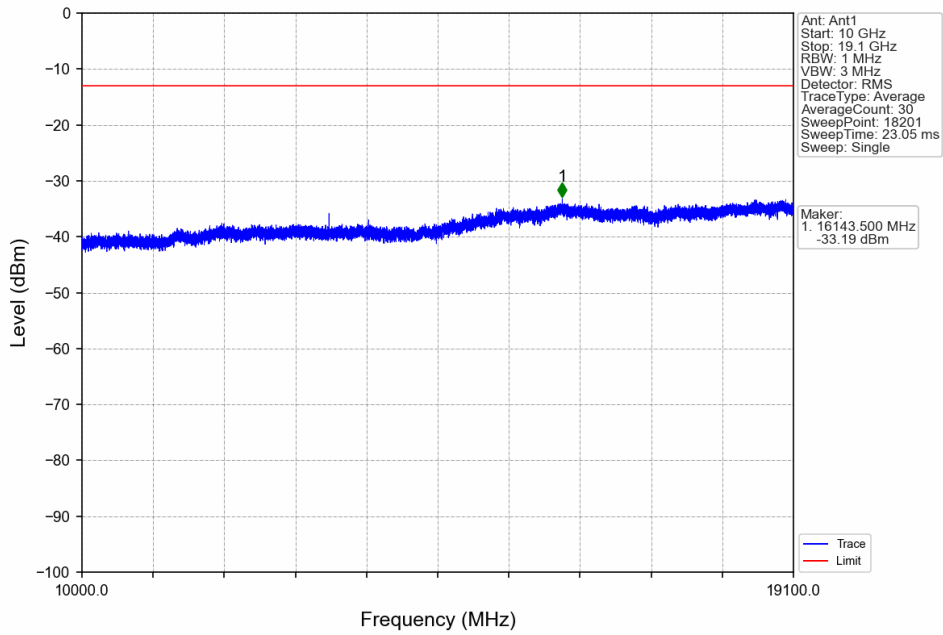
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



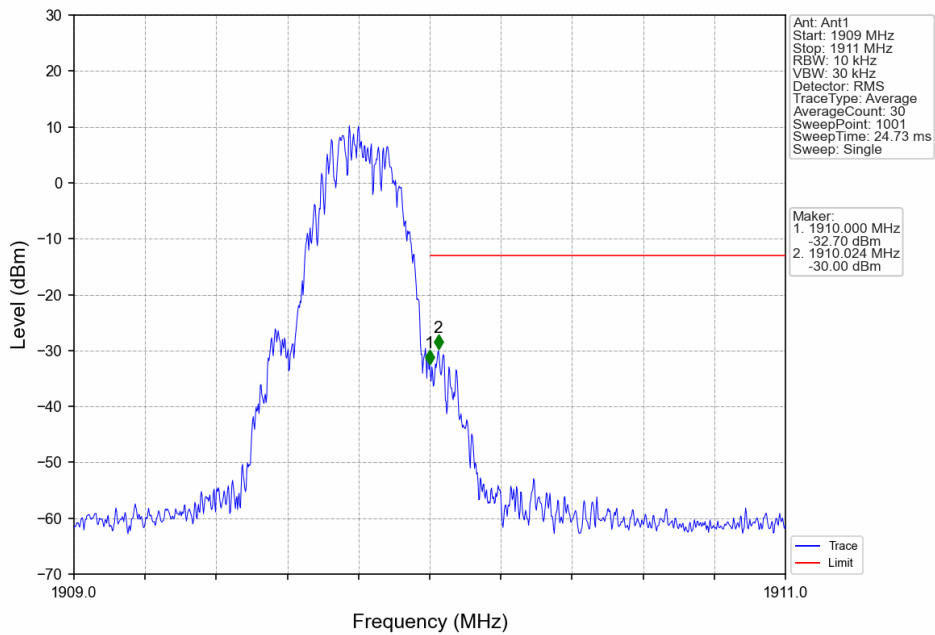
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



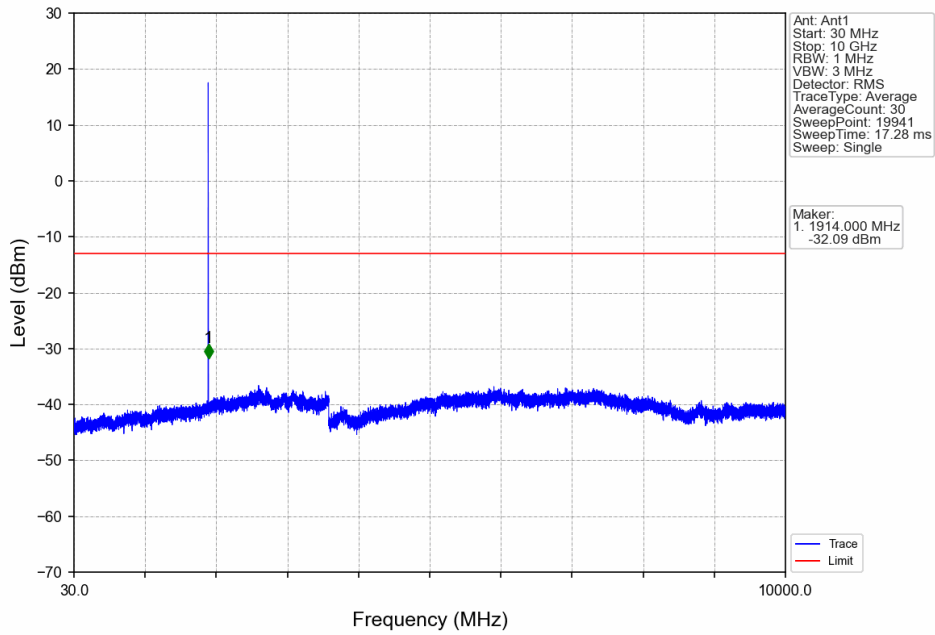
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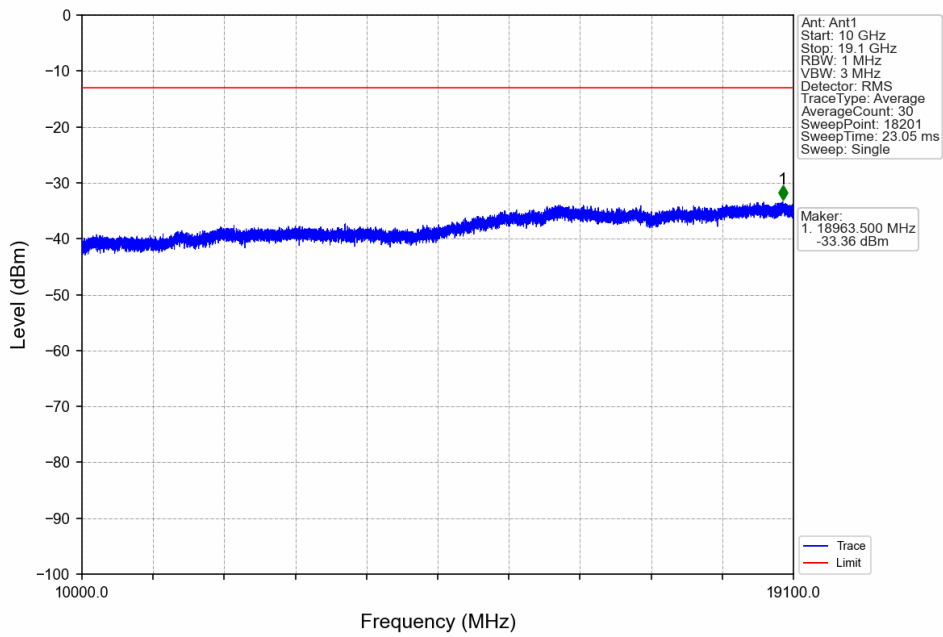
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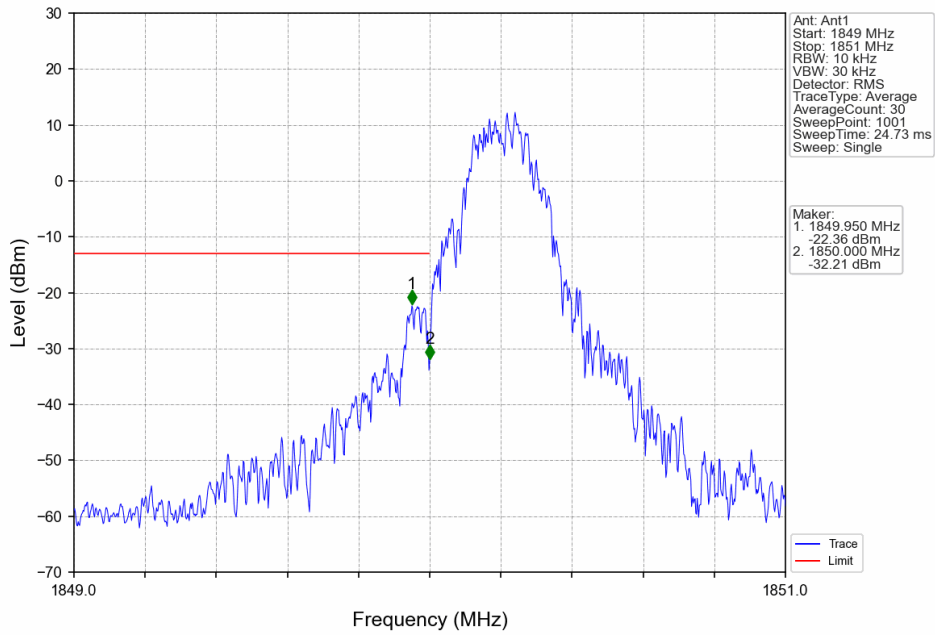
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



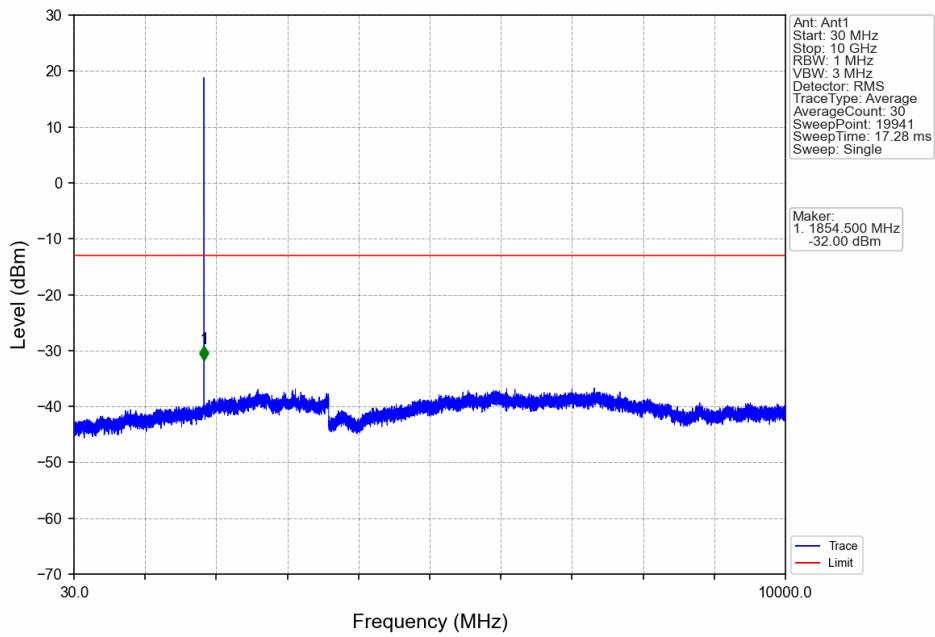
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



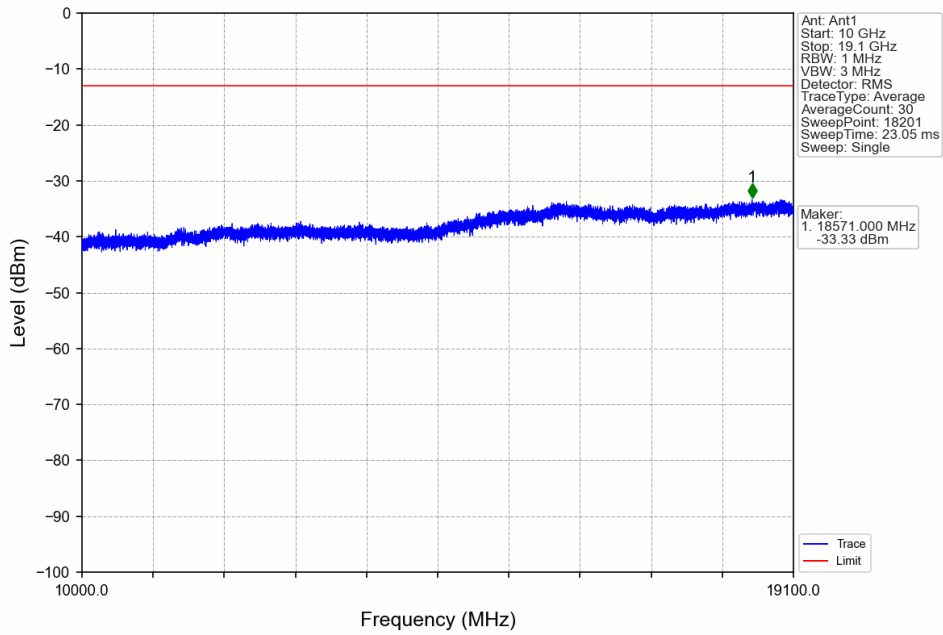
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



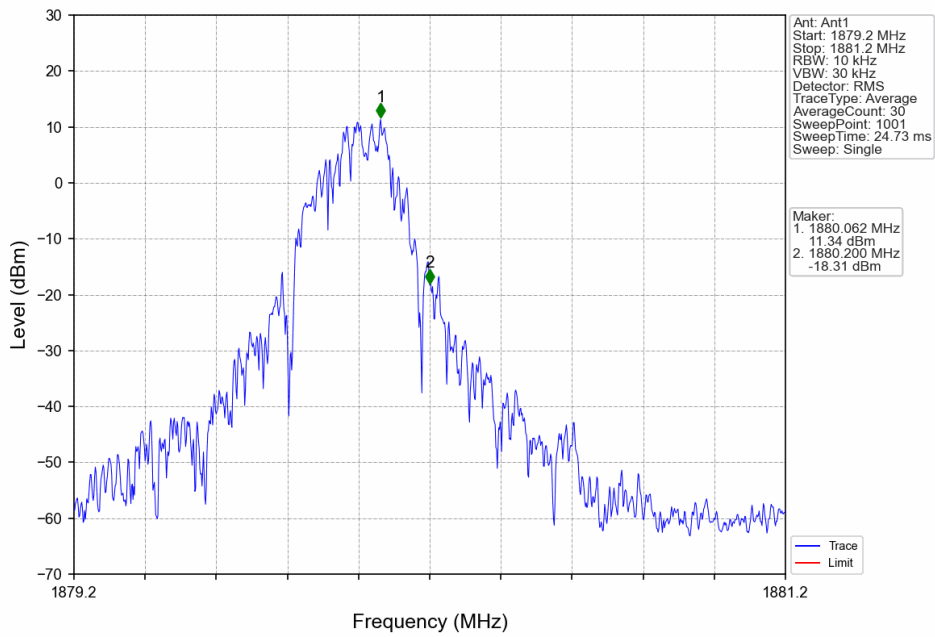
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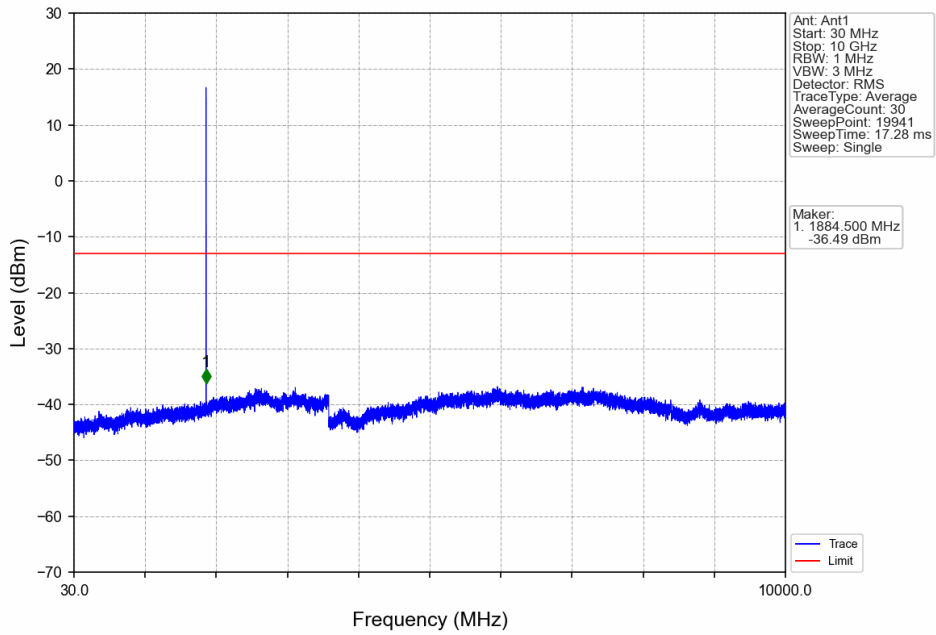
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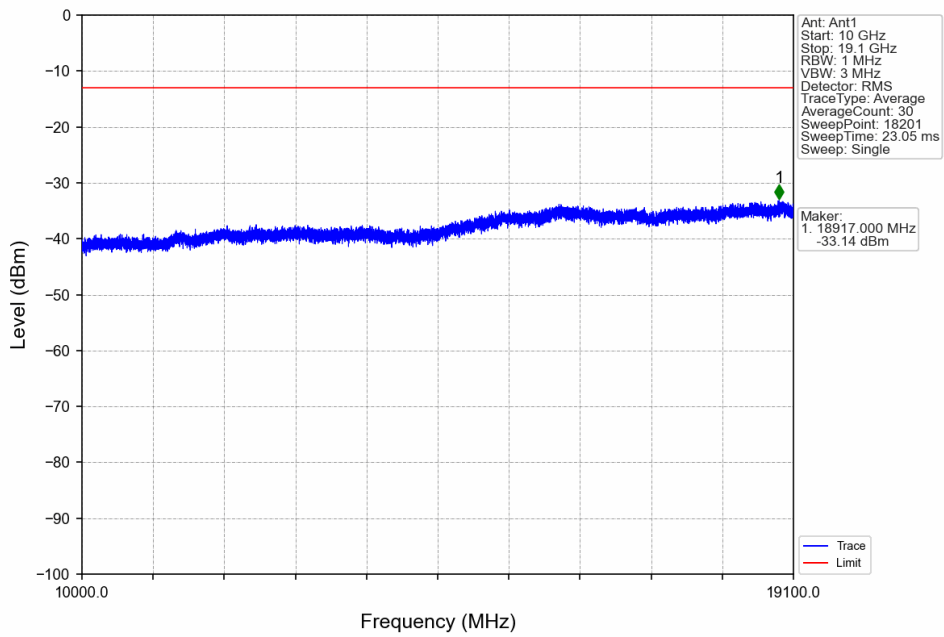
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



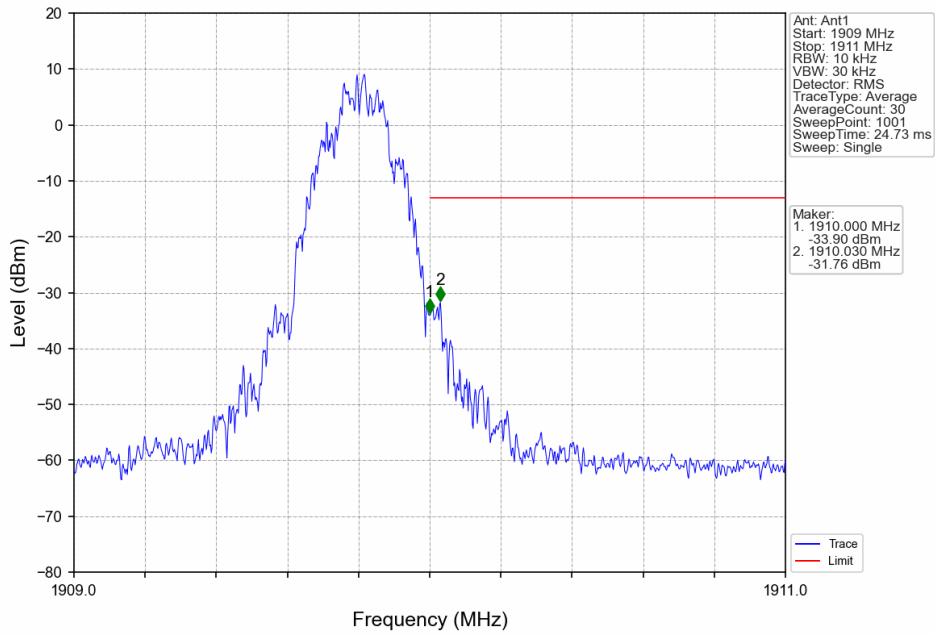
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



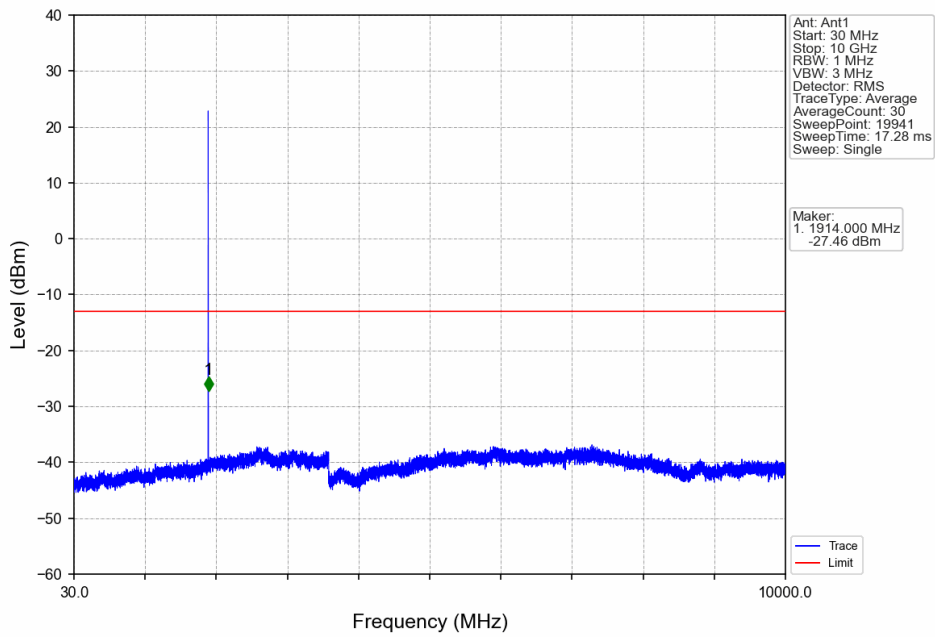
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



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

