

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	28.10	-0.33	27.77	<=33.01	Pass	
			1880	28.00	-0.33	27.67	<=33.01	Pass	
			1909.8	27.49	-0.33	27.16	<=33.01	Pass	
	GPRS	1 TX Slot	1850.2	28.07	-0.33	27.74	<=33.01	Pass	
			2 TX Slots	1850.2	27.42	-0.33	27.09	<=33.01	Pass
			3 TX Slots	1850.2	25.69	-0.33	25.36	<=33.01	Pass
			4 TX Slots	1850.2	24.56	-0.33	24.23	<=33.01	Pass
		2 TX Slots	1880	27.85	-0.33	27.52	<=33.01	Pass	
			1880	27.28	-0.33	26.95	<=33.01	Pass	
			1880	25.57	-0.33	25.24	<=33.01	Pass	
			1880	24.41	-0.33	24.08	<=33.01	Pass	
		4 TX Slots	1909.8	27.31	-0.33	26.98	<=33.01	Pass	
			1909.8	26.64	-0.33	26.31	<=33.01	Pass	
			1909.8	24.83	-0.33	24.50	<=33.01	Pass	
			1909.8	23.66	-0.33	23.33	<=33.01	Pass	
	EGPRS	1 TX Slot	1850.2	23.55	-0.33	23.86	<=33.01	Pass	
			1850.2	23.34	-0.33	23.65	<=33.01	Pass	
			1850.2	23.32	-0.33	23.63	<=33.01	Pass	
			1850.2	23.03	-0.33	23.34	<=33.01	Pass	
		2 TX Slots	1880	23.23	-0.33	23.54	<=33.01	Pass	
			1880	23.30	-0.33	23.61	<=33.01	Pass	
			1880	23.16	-0.33	23.47	<=33.01	Pass	
			1880	22.48	-0.33	22.79	<=33.01	Pass	
		3 TX Slots	1909.8	21.57	-0.33	21.88	<=33.01	Pass	
			1909.8	21.52	-0.33	21.83	<=33.01	Pass	
			1909.8	21.49	-0.33	21.80	<=33.01	Pass	
			1909.8	21.45	-0.33	21.76	<=33.01	Pass	
			1909.8	21.45	-0.33	21.76	<=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	9.783	0.0053	-2.5 to 2.5	Pass
			3.85	17.176	0.0093	-2.5 to 2.5	Pass
			4.43	24.247	0.0131	-2.5 to 2.5	Pass
		-30	3.85	25.893	0.0140	-2.5 to 2.5	Pass
		-20	3.85	22.988	0.0124	-2.5 to 2.5	Pass

		-10	3.85	24.570	0.0133	-2.5 to 2.5	Pass	
		0	3.85	22.568	0.0122	-2.5 to 2.5	Pass	
		10	3.85	21.761	0.0118	-2.5 to 2.5	Pass	
		30	3.85	20.728	0.0112	-2.5 to 2.5	Pass	
		40	3.85	20.017	0.0108	-2.5 to 2.5	Pass	
	50	3.85	20.889	0.0113	-2.5 to 2.5	Pass		
	1880	20	3.27	23.730	0.0126	-2.5 to 2.5	Pass	
			3.85	16.563	0.0088	-2.5 to 2.5	Pass	
			4.43	22.858	0.0122	-2.5 to 2.5	Pass	
		-30	3.85	23.666	0.0126	-2.5 to 2.5	Pass	
		-20	3.85	22.310	0.0119	-2.5 to 2.5	Pass	
		-10	3.85	25.441	0.0135	-2.5 to 2.5	Pass	
		0	3.85	23.181	0.0123	-2.5 to 2.5	Pass	
		10	3.85	21.212	0.0113	-2.5 to 2.5	Pass	
		30	3.85	25.893	0.0138	-2.5 to 2.5	Pass	
		40	3.85	19.081	0.0101	-2.5 to 2.5	Pass	
	50	3.85	26.119	0.0139	-2.5 to 2.5	Pass		
	1909.8	20	3.27	24.892	0.0130	-2.5 to 2.5	Pass	
			3.85	24.408	0.0128	-2.5 to 2.5	Pass	
			4.43	26.119	0.0137	-2.5 to 2.5	Pass	
		-30	3.85	23.924	0.0125	-2.5 to 2.5	Pass	
		-20	3.85	22.955	0.0120	-2.5 to 2.5	Pass	
		-10	3.85	18.855	0.0099	-2.5 to 2.5	Pass	
		0	3.85	27.734	0.0145	-2.5 to 2.5	Pass	
		10	3.85	24.634	0.0129	-2.5 to 2.5	Pass	
		30	3.85	25.377	0.0133	-2.5 to 2.5	Pass	
		40	3.85	29.025	0.0152	-2.5 to 2.5	Pass	
	50	3.85	22.116	0.0116	-2.5 to 2.5	Pass		
	GPRS	1850.2	20	3.27	19.824	0.0107	-2.5 to 2.5	Pass
				3.85	31.737	0.0172	-2.5 to 2.5	Pass
4.43				28.767	0.0155	-2.5 to 2.5	Pass	
-30			3.85	23.666	0.0128	-2.5 to 2.5	Pass	
-20			3.85	24.731	0.0134	-2.5 to 2.5	Pass	
-10			3.85	20.211	0.0109	-2.5 to 2.5	Pass	
0			3.85	28.638	0.0155	-2.5 to 2.5	Pass	
10			3.85	21.954	0.0119	-2.5 to 2.5	Pass	
30			3.85	25.151	0.0136	-2.5 to 2.5	Pass	
40			3.85	20.921	0.0113	-2.5 to 2.5	Pass	
50		3.85	26.152	0.0141	-2.5 to 2.5	Pass		
1880		20	3.27	27.346	0.0145	-2.5 to 2.5	Pass	
			3.85	22.568	0.0120	-2.5 to 2.5	Pass	
			4.43	24.666	0.0131	-2.5 to 2.5	Pass	
		-30	3.85	26.184	0.0139	-2.5 to 2.5	Pass	
		-20	3.85	23.149	0.0123	-2.5 to 2.5	Pass	
		-10	3.85	22.374	0.0119	-2.5 to 2.5	Pass	
		0	3.85	23.214	0.0123	-2.5 to 2.5	Pass	
		10	3.85	22.923	0.0122	-2.5 to 2.5	Pass	
		30	3.85	19.113	0.0102	-2.5 to 2.5	Pass	
		40	3.85	19.791	0.0105	-2.5 to 2.5	Pass	
50		3.85	23.859	0.0127	-2.5 to 2.5	Pass		
1909.8		20	3.27	26.378	0.0138	-2.5 to 2.5	Pass	
			3.85	24.634	0.0129	-2.5 to 2.5	Pass	
			4.43	20.437	0.0107	-2.5 to 2.5	Pass	
		-30	3.85	25.054	0.0131	-2.5 to 2.5	Pass	
		-20	3.85	17.305	0.0091	-2.5 to 2.5	Pass	
		-10	3.85	26.926	0.0141	-2.5 to 2.5	Pass	
0		3.85	23.440	0.0123	-2.5 to 2.5	Pass		

		10	3.85	19.985	0.0105	-2.5 to 2.5	Pass
		30	3.85	19.630	0.0103	-2.5 to 2.5	Pass
		40	3.85	20.502	0.0107	-2.5 to 2.5	Pass
		50	3.85	23.730	0.0124	-2.5 to 2.5	Pass
EGPRS	1850.2	20	3.27	2.873	0.0016	-2.5 to 2.5	Pass
			3.85	10.105	0.0055	-2.5 to 2.5	Pass
			4.43	-2.906	-0.0016	-2.5 to 2.5	Pass
		-30	3.85	4.940	0.0027	-2.5 to 2.5	Pass
		-20	3.85	-2.357	-0.0013	-2.5 to 2.5	Pass
		-10	3.85	8.136	0.0044	-2.5 to 2.5	Pass
		0	3.85	-5.456	-0.0029	-2.5 to 2.5	Pass
		10	3.85	3.325	0.0018	-2.5 to 2.5	Pass
		30	3.85	0.194	0.0001	-2.5 to 2.5	Pass
		40	3.85	0.194	0.0001	-2.5 to 2.5	Pass
		50	3.85	0.743	0.0004	-2.5 to 2.5	Pass
		1880	20	3.27	-0.743	-0.0004	-2.5 to 2.5
	3.85			8.685	0.0046	-2.5 to 2.5	Pass
	4.43			5.585	0.0030	-2.5 to 2.5	Pass
	-30		3.85	2.583	0.0014	-2.5 to 2.5	Pass
	-20		3.85	12.043	0.0064	-2.5 to 2.5	Pass
	-10		3.85	10.977	0.0058	-2.5 to 2.5	Pass
	0		3.85	5.811	0.0031	-2.5 to 2.5	Pass
	10		3.85	3.745	0.0020	-2.5 to 2.5	Pass
	30		3.85	7.038	0.0037	-2.5 to 2.5	Pass
	40		3.85	4.778	0.0025	-2.5 to 2.5	Pass
	50		3.85	4.875	0.0026	-2.5 to 2.5	Pass
	1909.8		20	3.27	4.681	0.0025	-2.5 to 2.5
		3.85		1.356	0.0007	-2.5 to 2.5	Pass
		4.43		-2.357	-0.0012	-2.5 to 2.5	Pass
		-30	3.85	-4.423	-0.0023	-2.5 to 2.5	Pass
		-20	3.85	2.099	0.0011	-2.5 to 2.5	Pass
		-10	3.85	10.202	0.0053	-2.5 to 2.5	Pass
		0	3.85	10.267	0.0054	-2.5 to 2.5	Pass
		10	3.85	6.845	0.0036	-2.5 to 2.5	Pass
		30	3.85	4.940	0.0026	-2.5 to 2.5	Pass
		40	3.85	15.271	0.0080	-2.5 to 2.5	Pass
50		3.85	10.331	0.0054	-2.5 to 2.5	Pass	

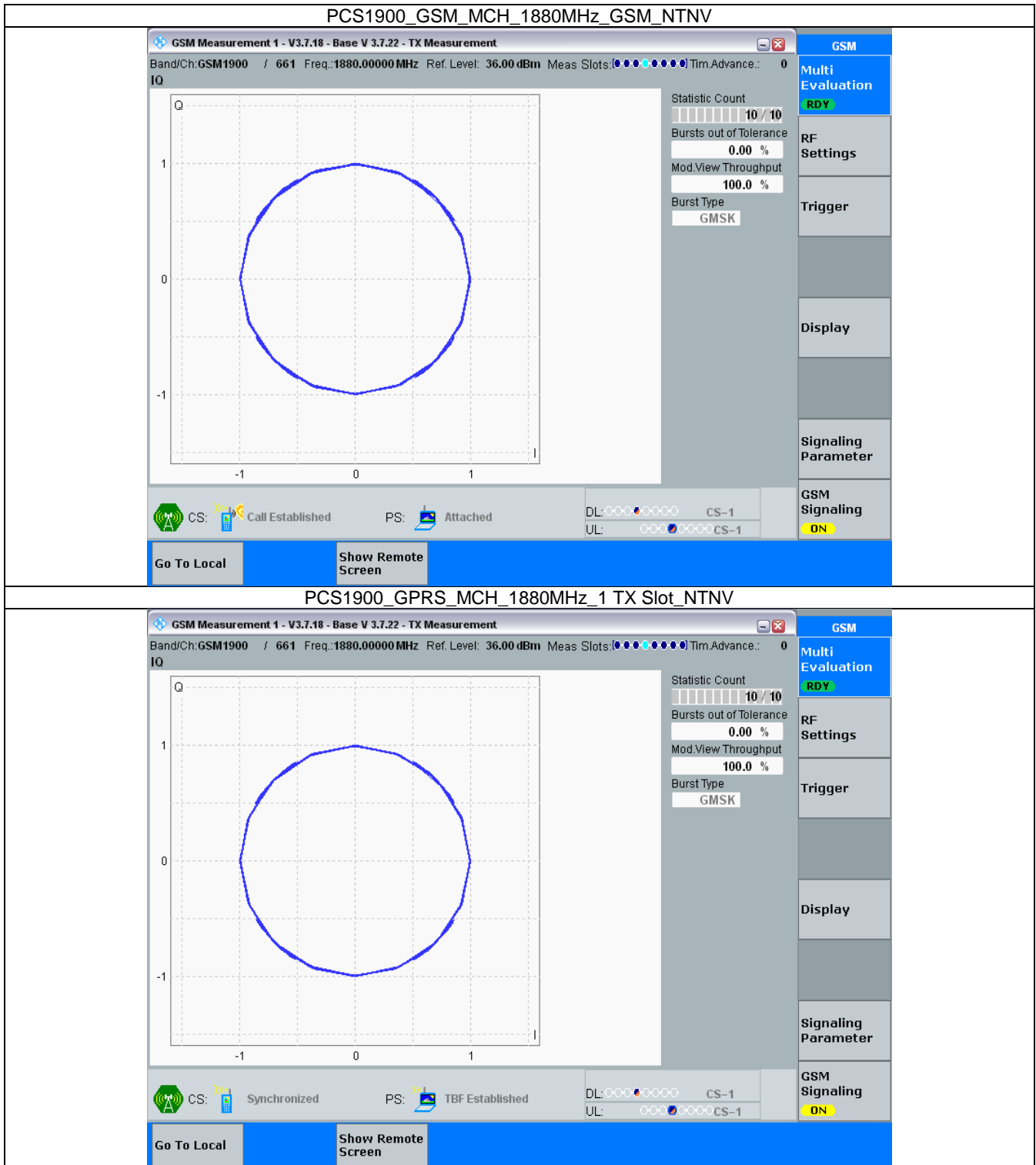
3. Modulation Characteristics

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

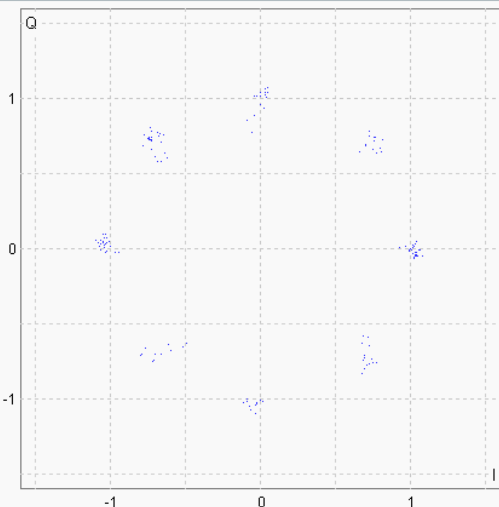


PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV

GSM Measurement - V3.7.30 - Base V3.7.160 - TX Measurement

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

IQ



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

GSM

Multi Evaluation
RDY

RF Settings

Trigger

Display

Signaling Parameter

GSM Signaling
ON

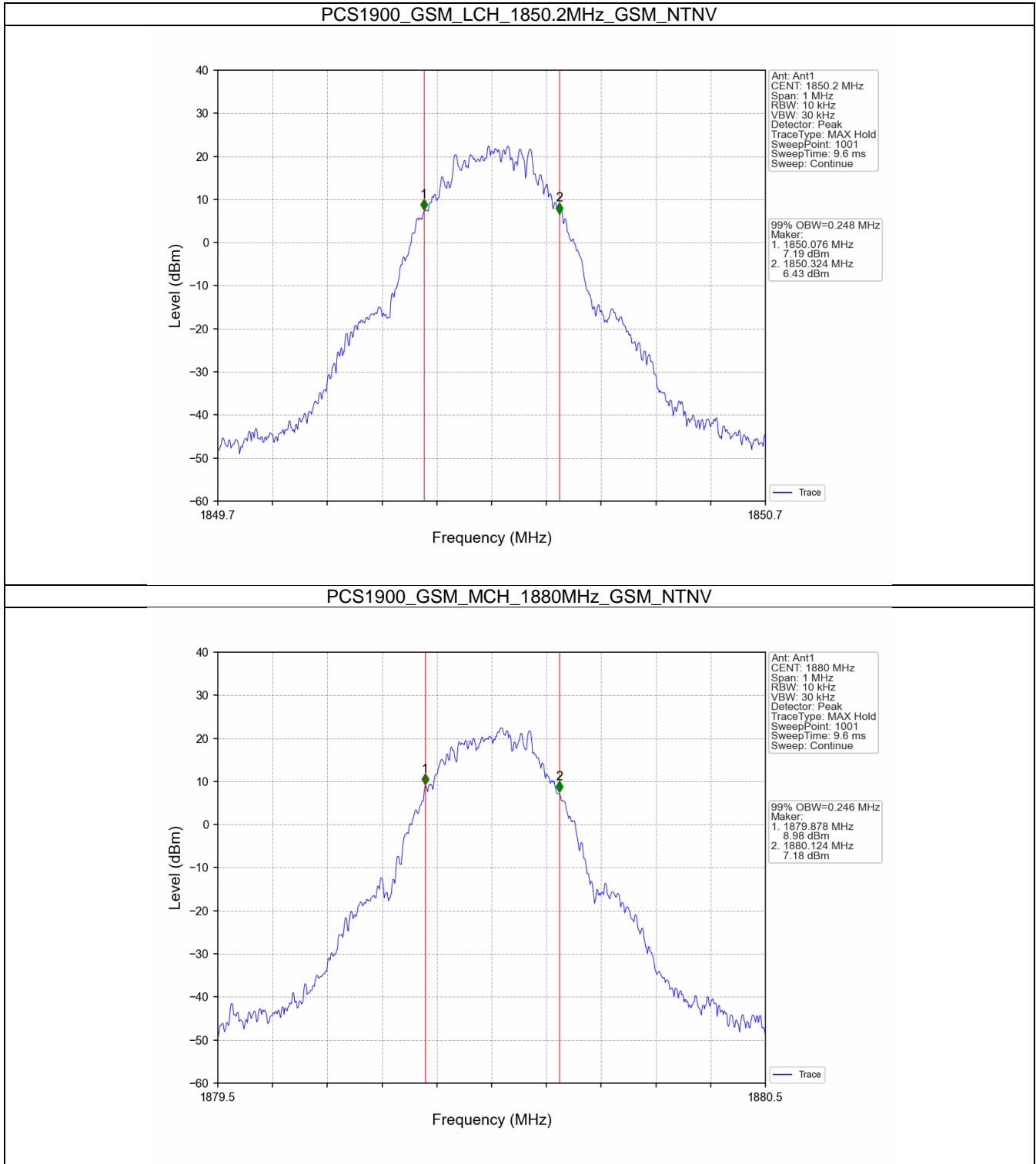
4. 99% & 26dB Bandwidth

4.1 PCS1900_OBW

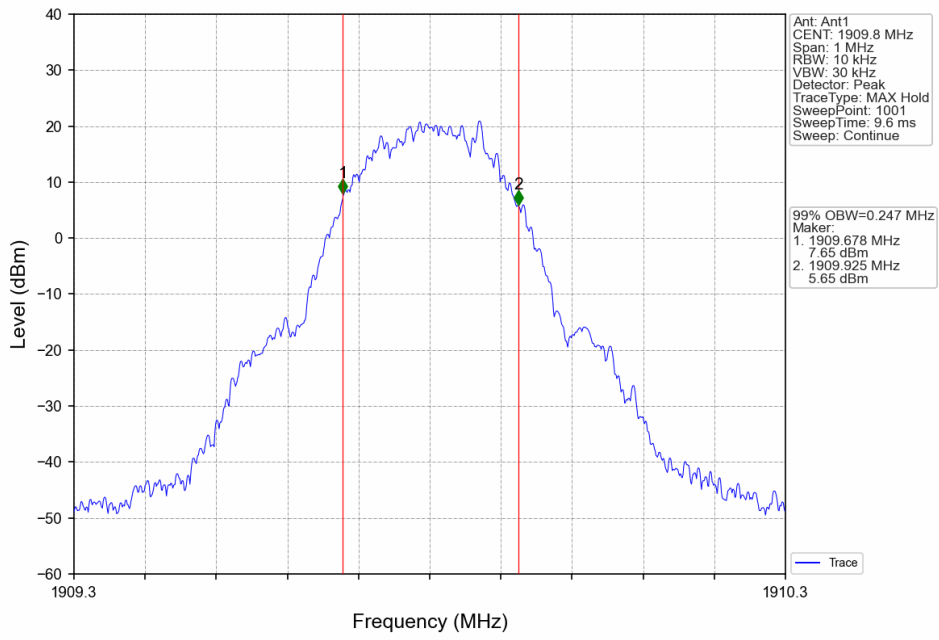
4.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.248	/	Pass
			1880	0.246	/	Pass
			1909.8	0.247	/	Pass
	GPRS	1 TX Slot	1850.2	0.245	/	Pass
			1880	0.248	/	Pass
			1909.8	0.243	/	Pass
	EGPRS	1 TX Slot	1850.2	0.258	/	Pass
			1880	0.255	/	Pass
			1909.8	0.252	/	Pass

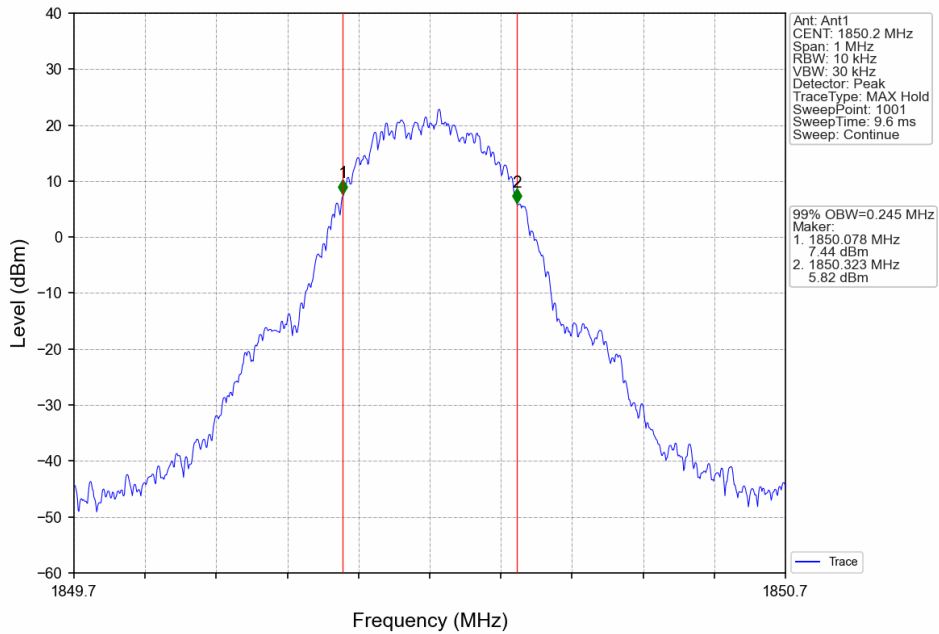
4.1.2 Test Graph



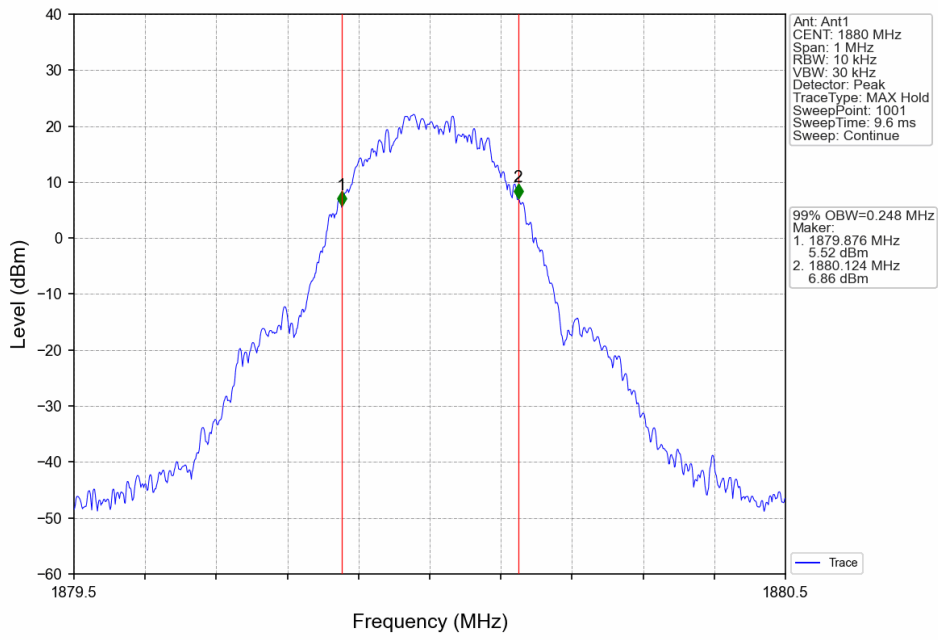
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



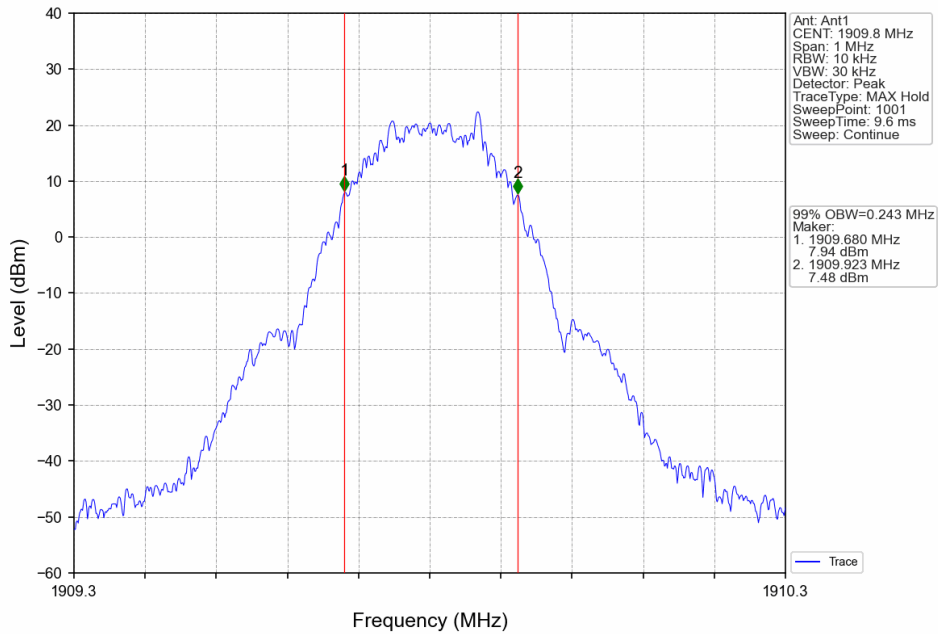
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



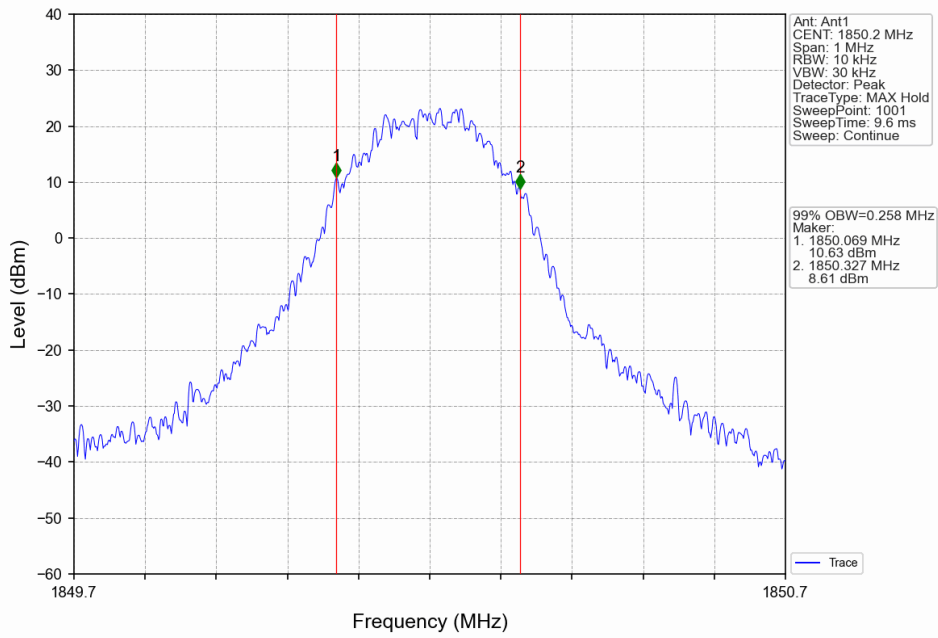
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



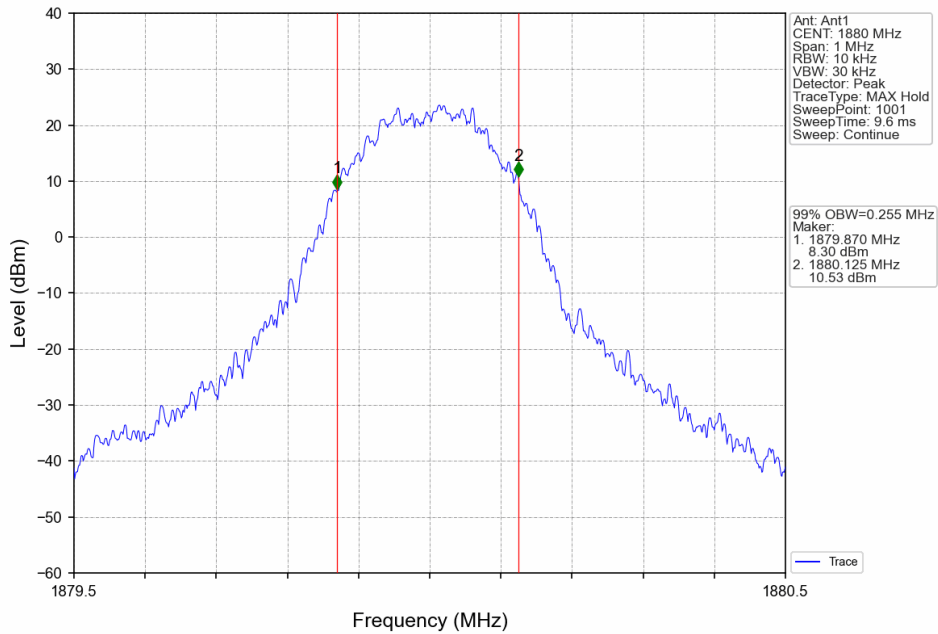
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



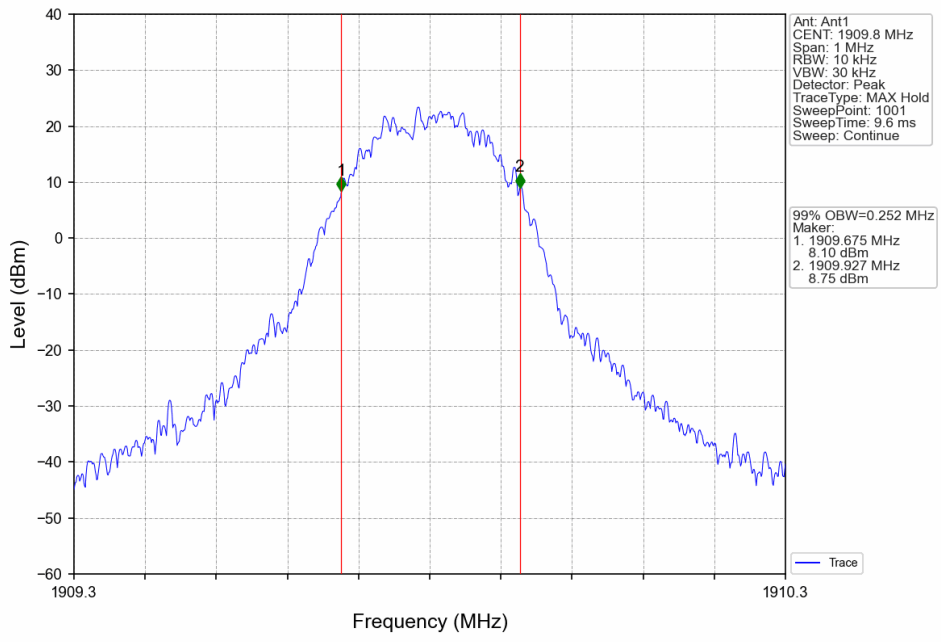
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV

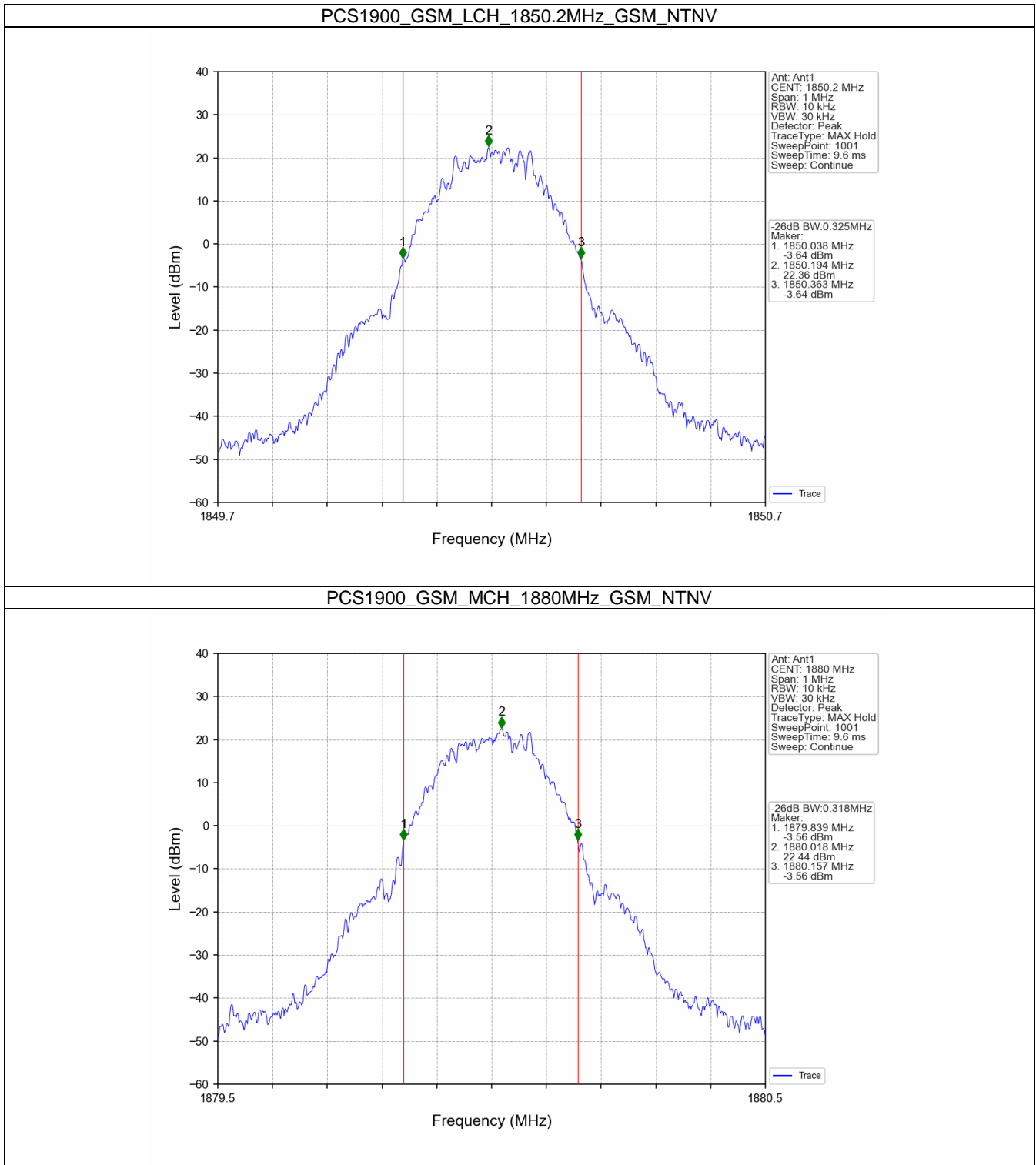


4.2 PCS1900_XDB

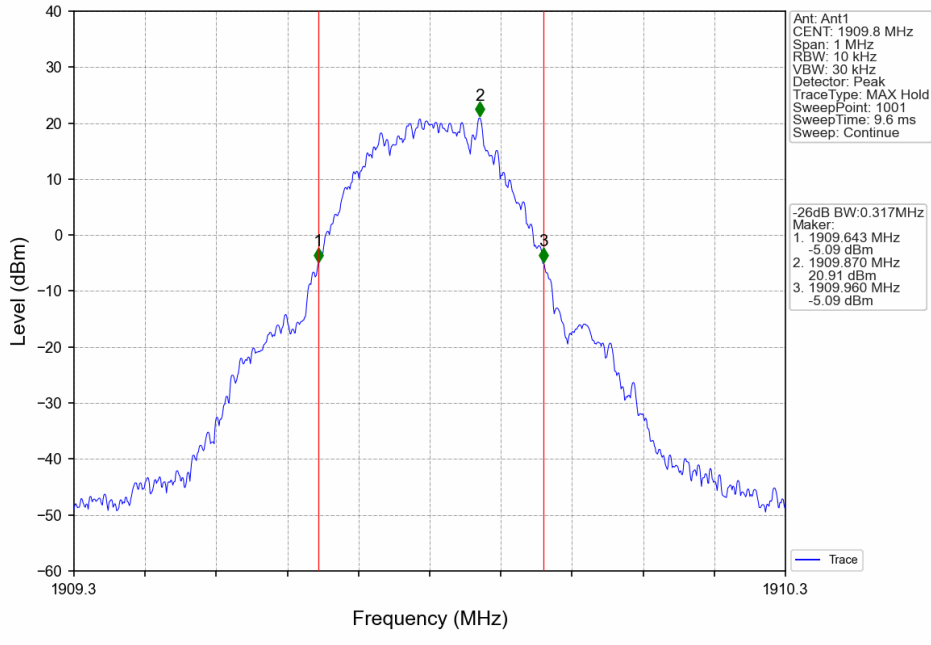
4.2.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.325	/	Pass
			1880	0.318	/	Pass
			1909.8	0.317	/	Pass
	GPRS	1 TX Slot	1850.2	0.314	/	Pass
			1880	0.316	/	Pass
			1909.8	0.316	/	Pass
	EGPRS	1 TX Slot	1850.2	0.306	/	Pass
			1880	0.304	/	Pass
			1909.8	0.305	/	Pass

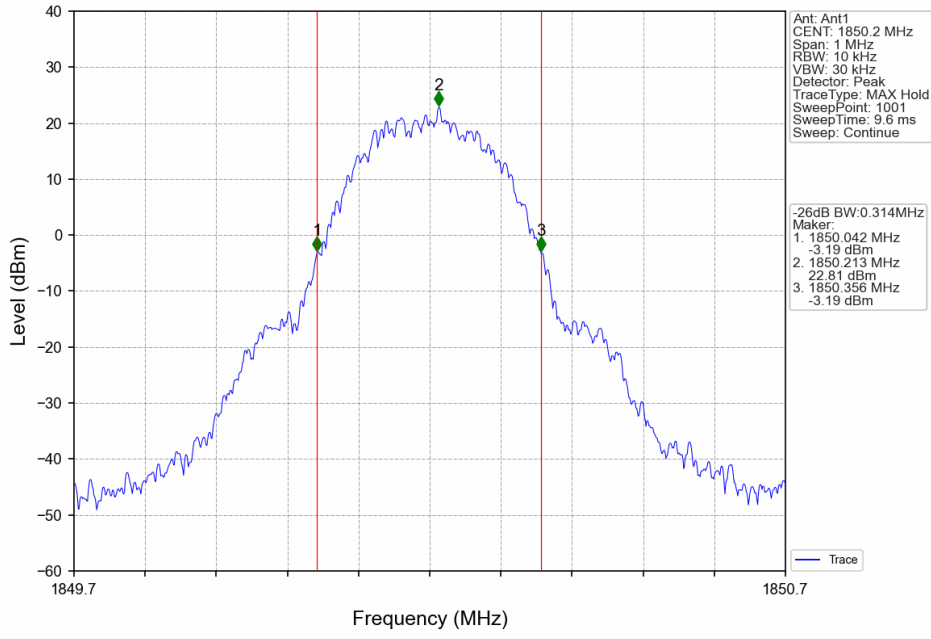
4.2.2 Test Graph



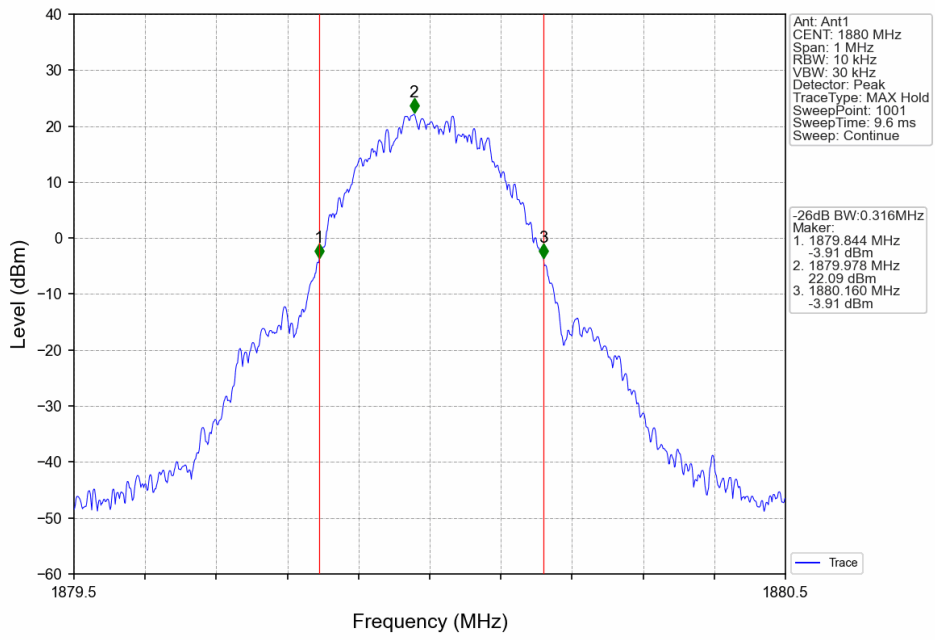
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



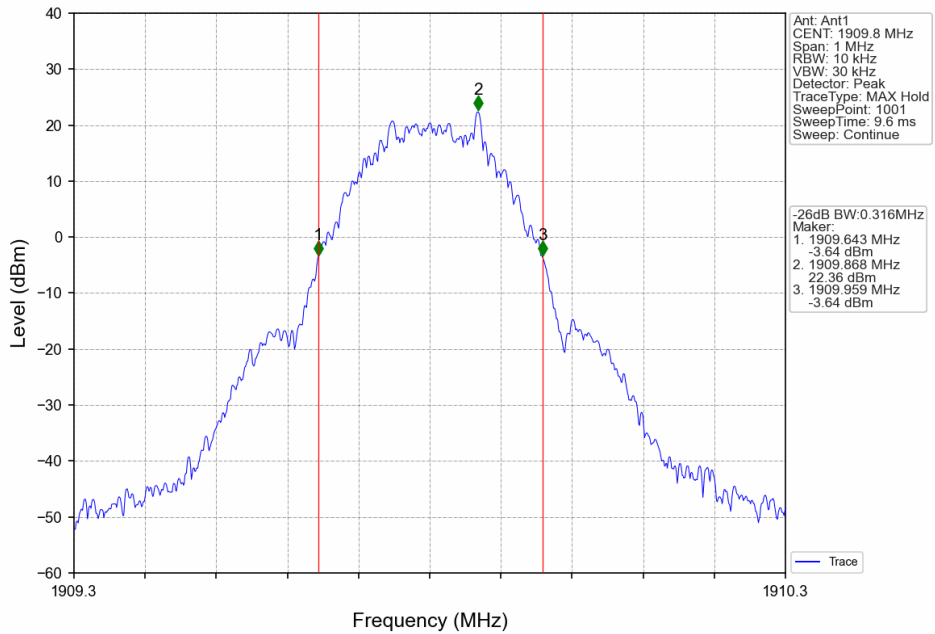
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



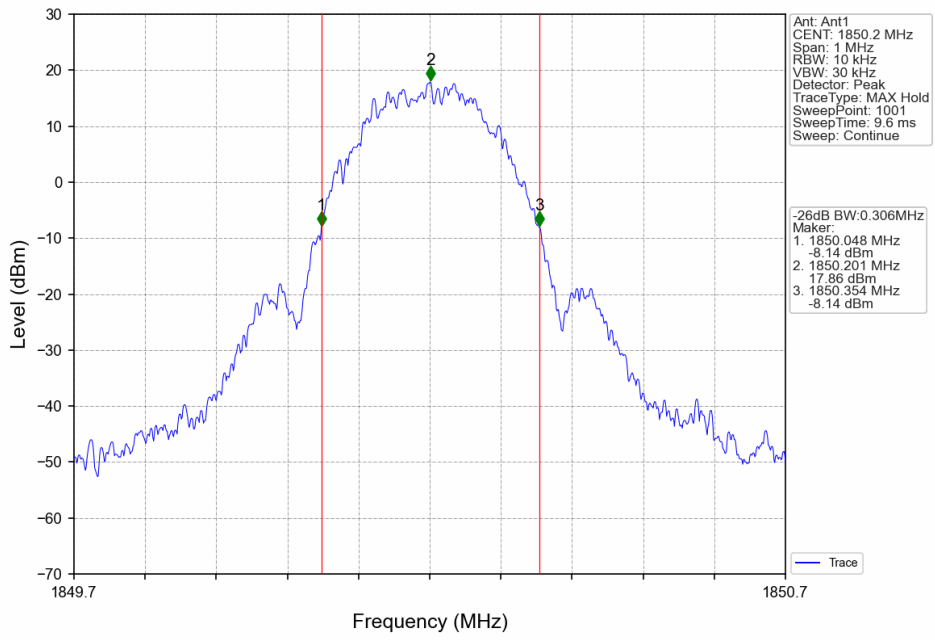
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



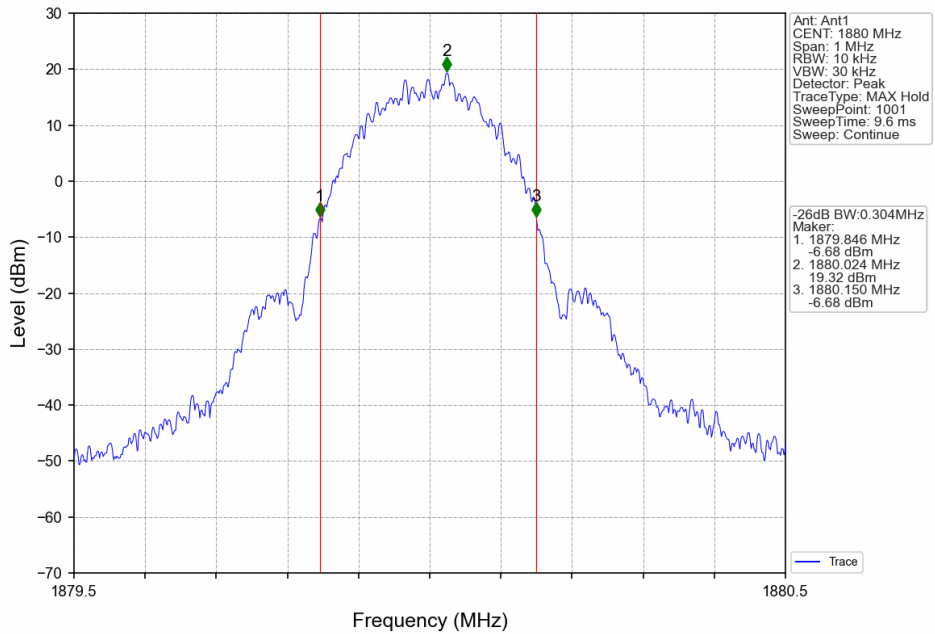
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



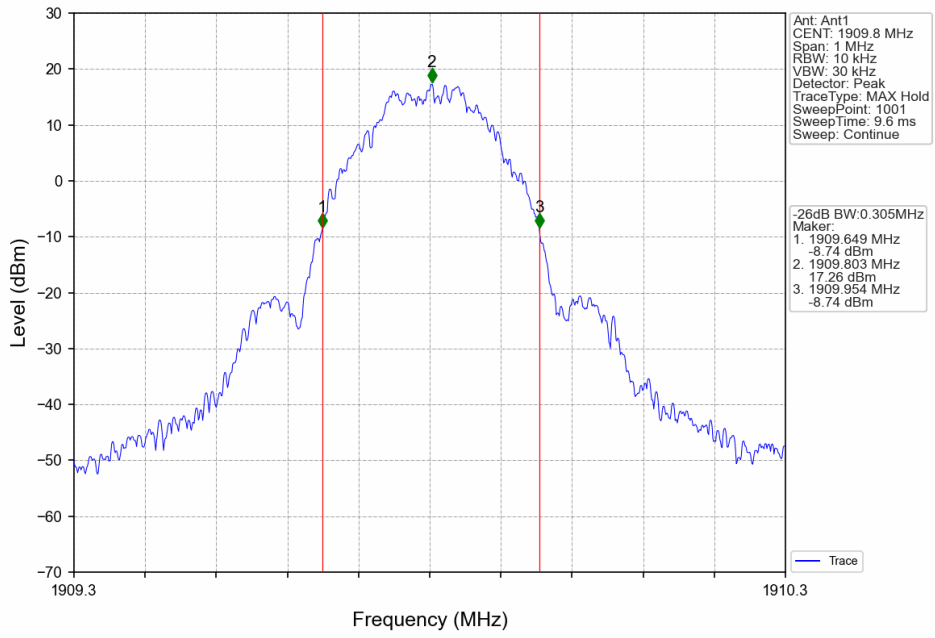
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



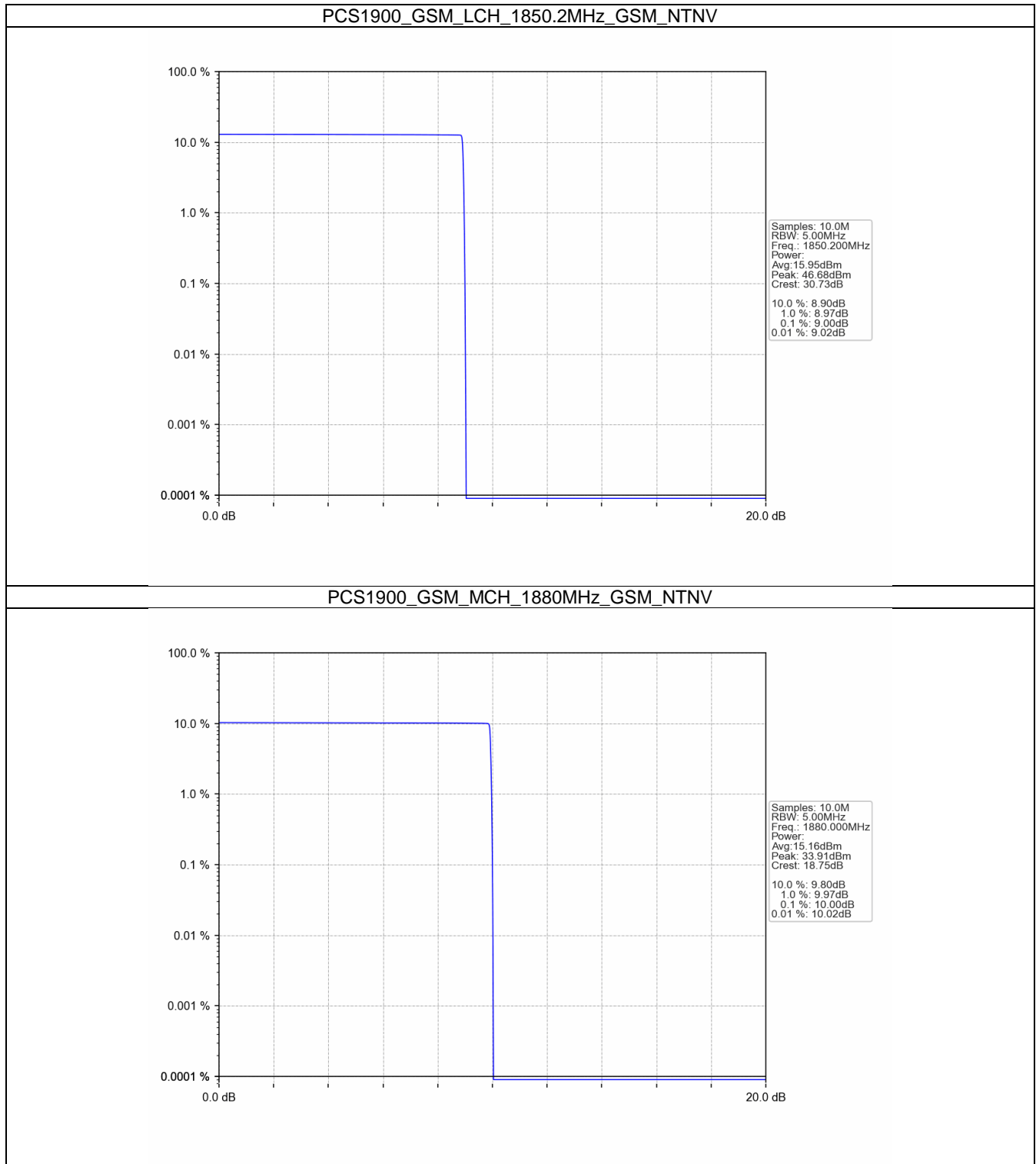
5. Peak-Average Ratio

5.1 PCS1900

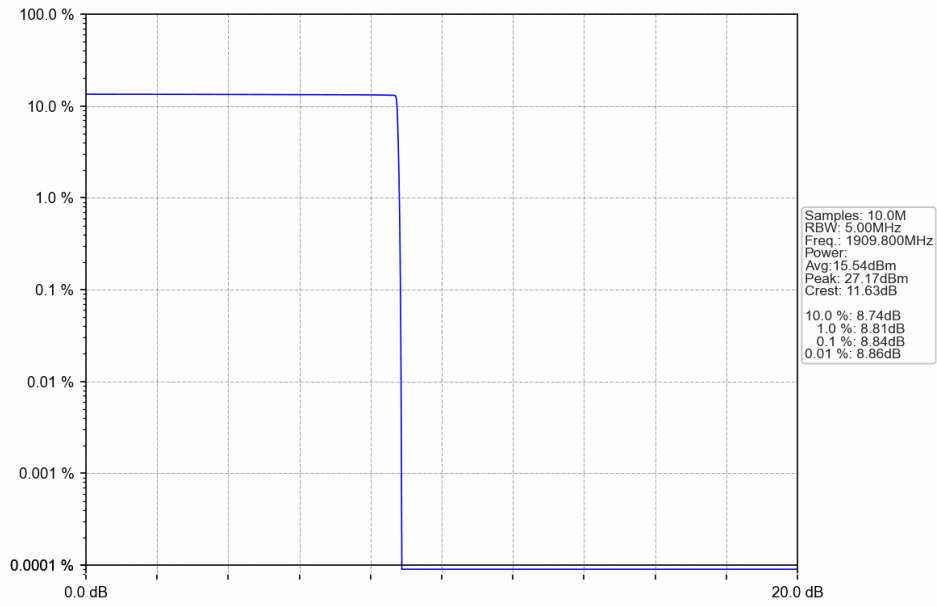
5.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	9.00	<=13	Pass
			1880	10.00	<=13	Pass
			1909.8	8.84	<=13	Pass
	GPRS	4 TX Slots	1850.2	3.84	<=13	Pass
			1880	3.59	<=13	Pass
			1909.8	3.78	<=13	Pass
	EGPRS	4 TX Slots	1850.2	12.35	<=13	Pass
			1880	7.05	<=13	Pass
			1909.8	7.07	<=13	Pass

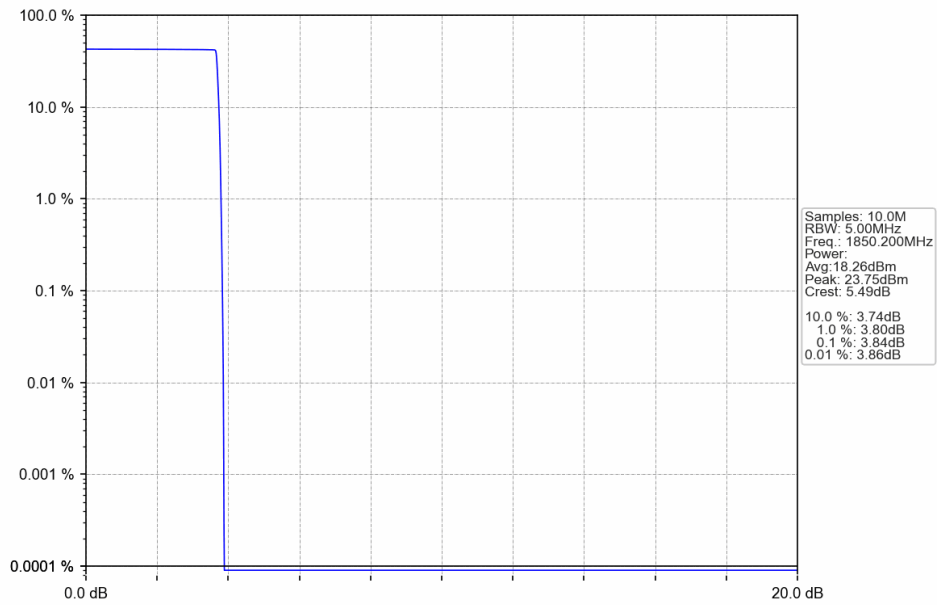
5.1.2 Test Graph



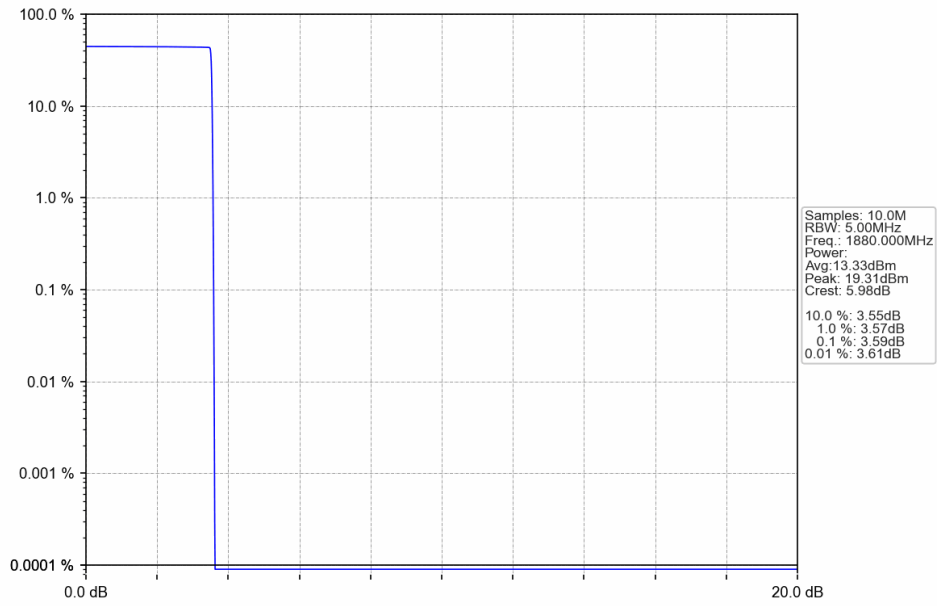
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



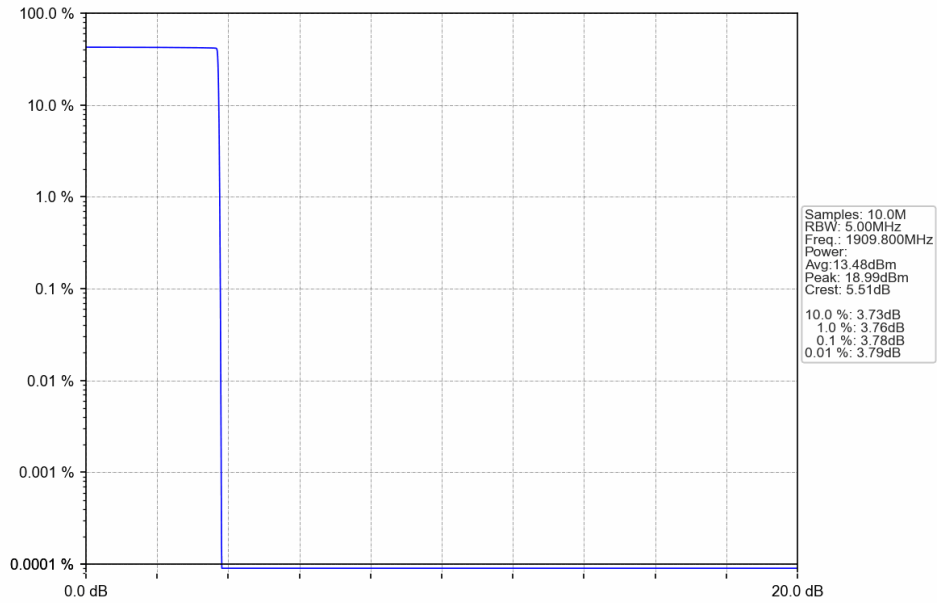
PCS1900_GPRS_LCH_1850.2MHz_4 TX Slots_NTNV



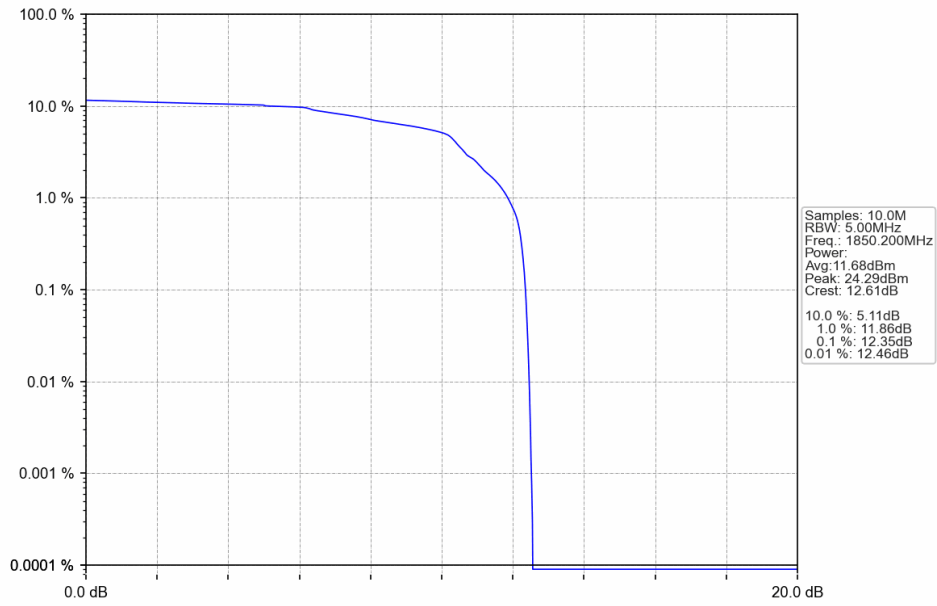
PCS1900_GPRS_MCH_1880MHz_4 TX Slots_NTNV



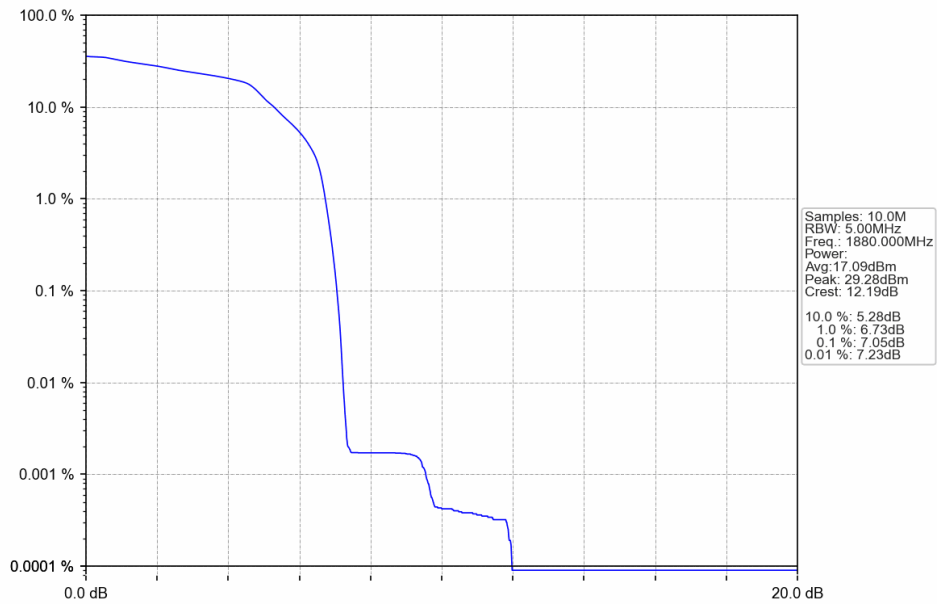
PCS1900_GPRS_HCH_1909.8MHz_4 TX Slots_NTNV



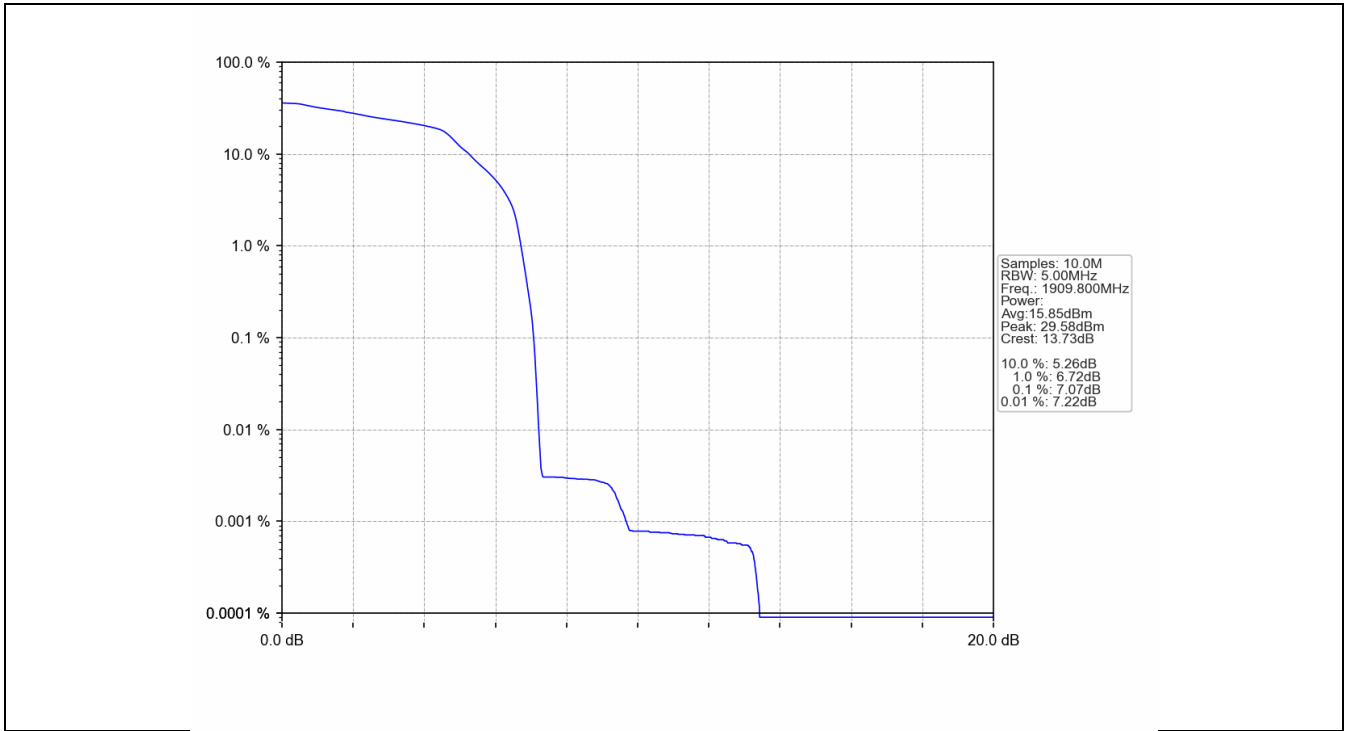
PCS1900_EGPRS_LCH_1850.2MHz_4 TX Slots_NTNV



PCS1900_EGPRS_MCH_1880MHz_4 TX Slots_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_4 TX Slots_NTNV



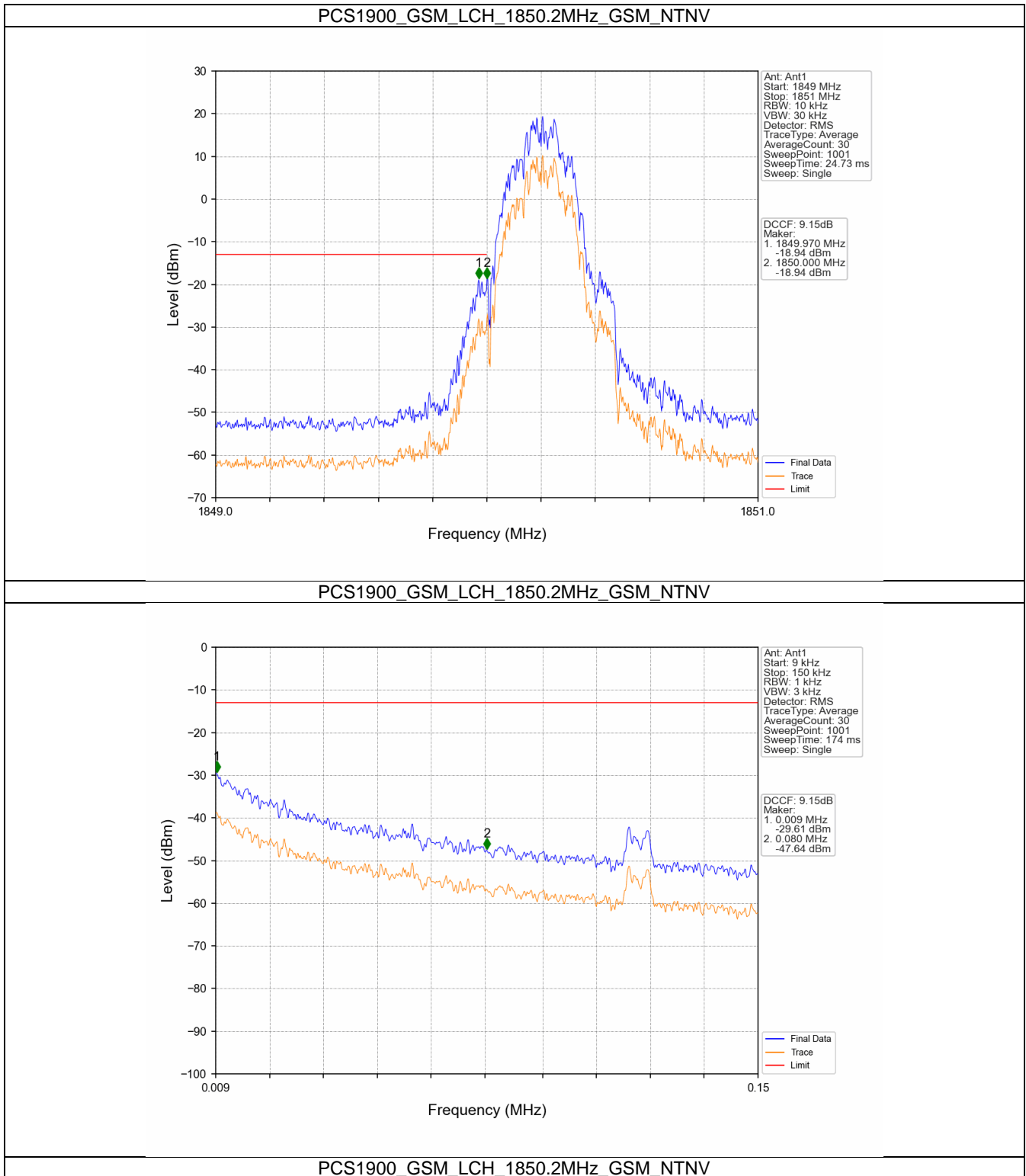
6. Spurious Emission

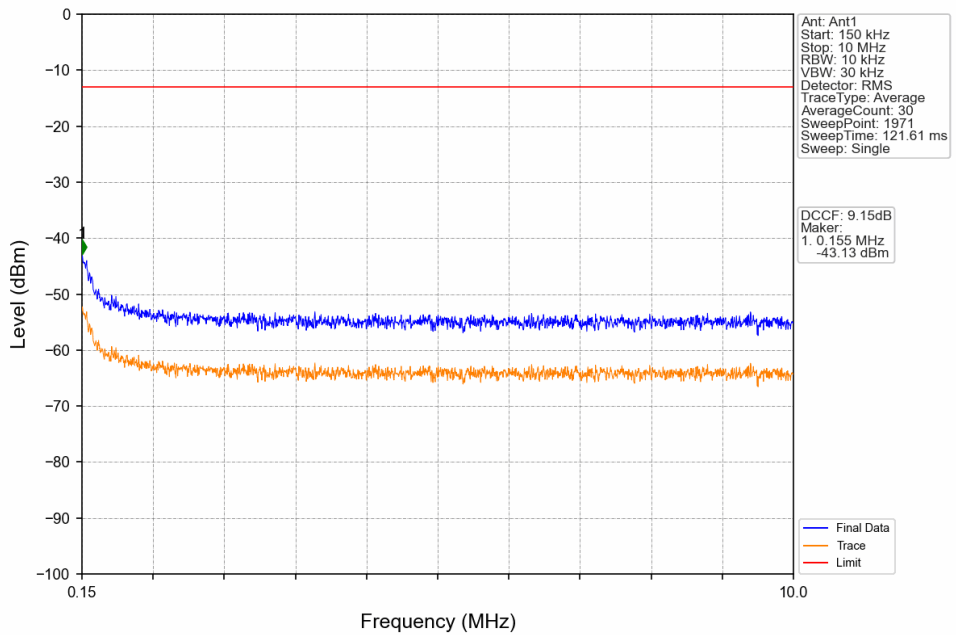
6.1 PCS1900

6.1.1 Test Result

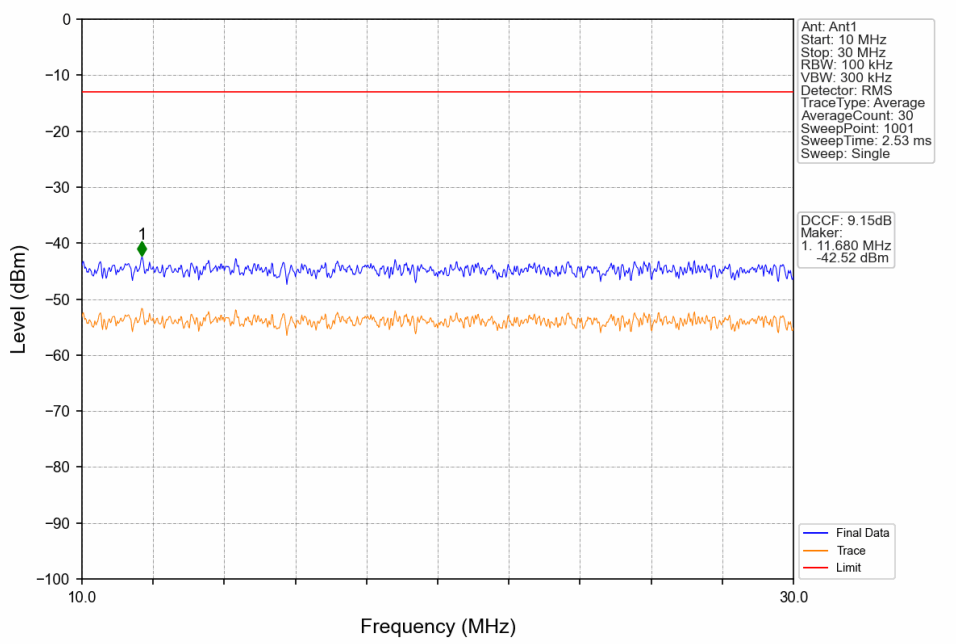
Band: PCS1900						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1909.8	Refer To Test Graph		Pass
	GPRS	1 TX Slot	1850.2	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass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

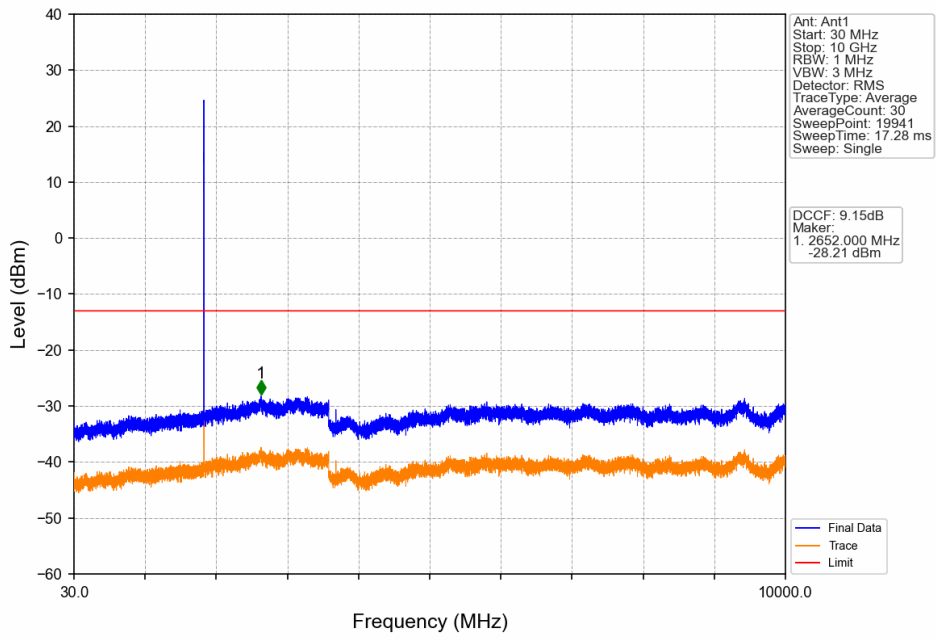




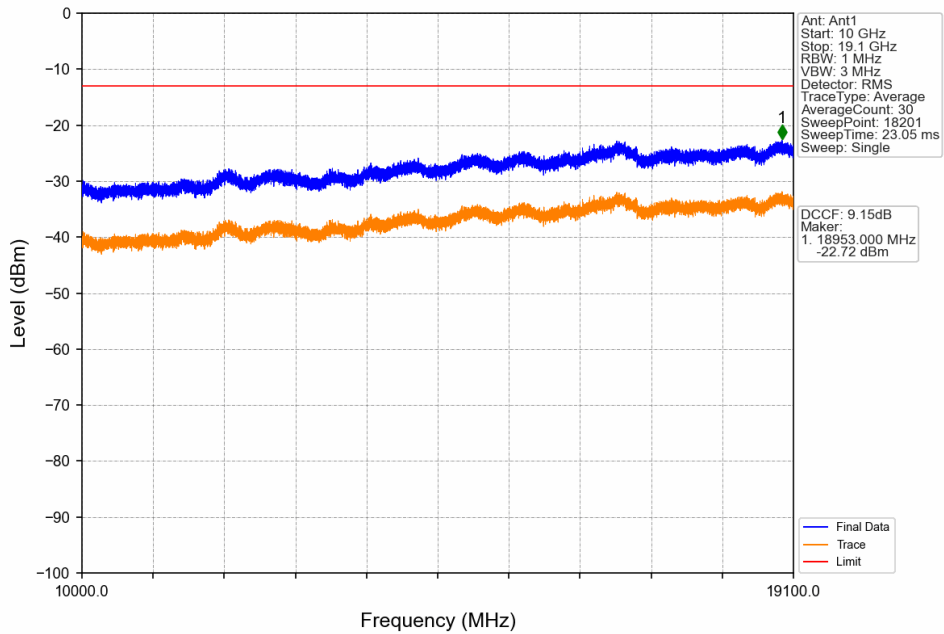
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



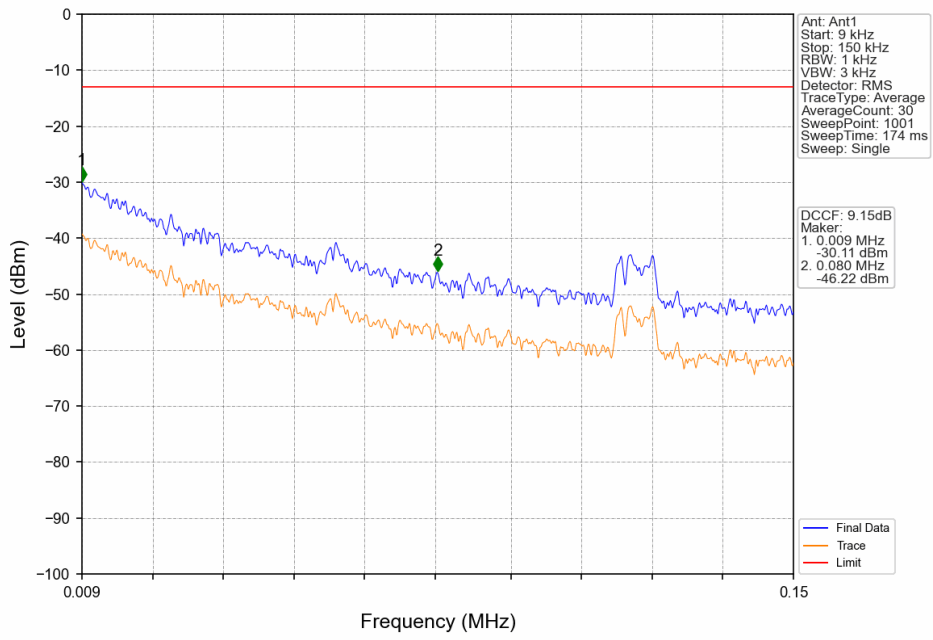
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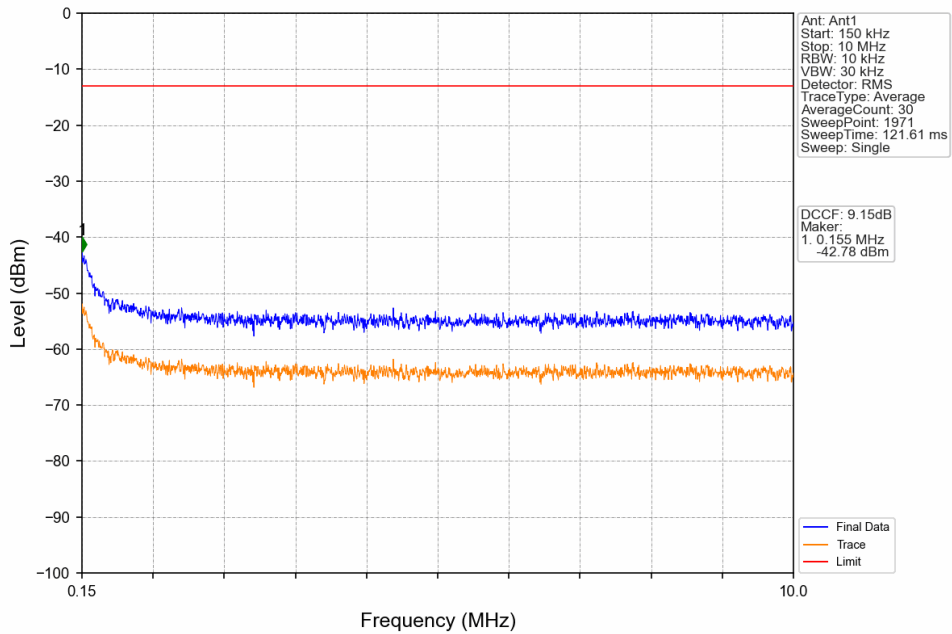
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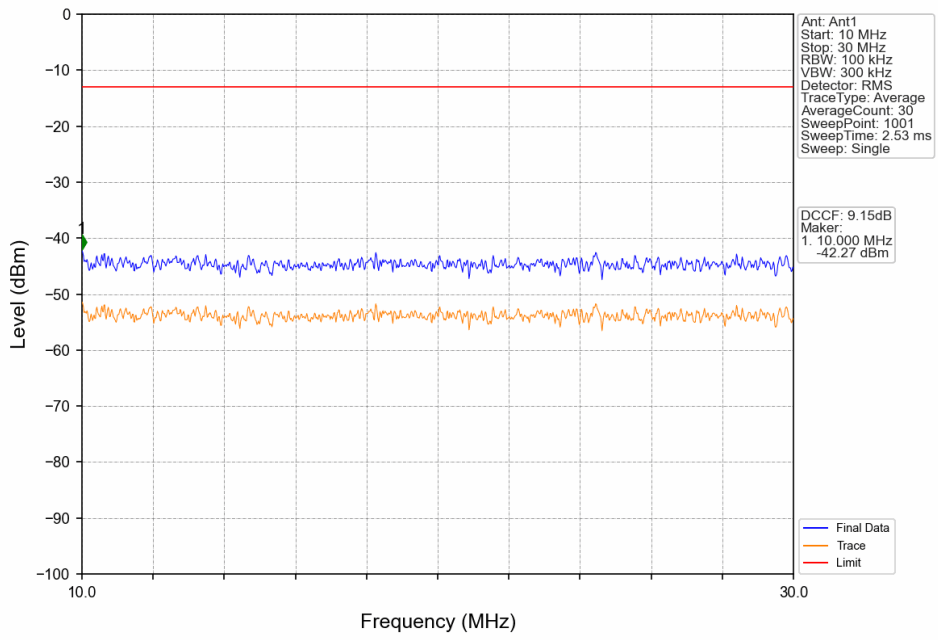
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



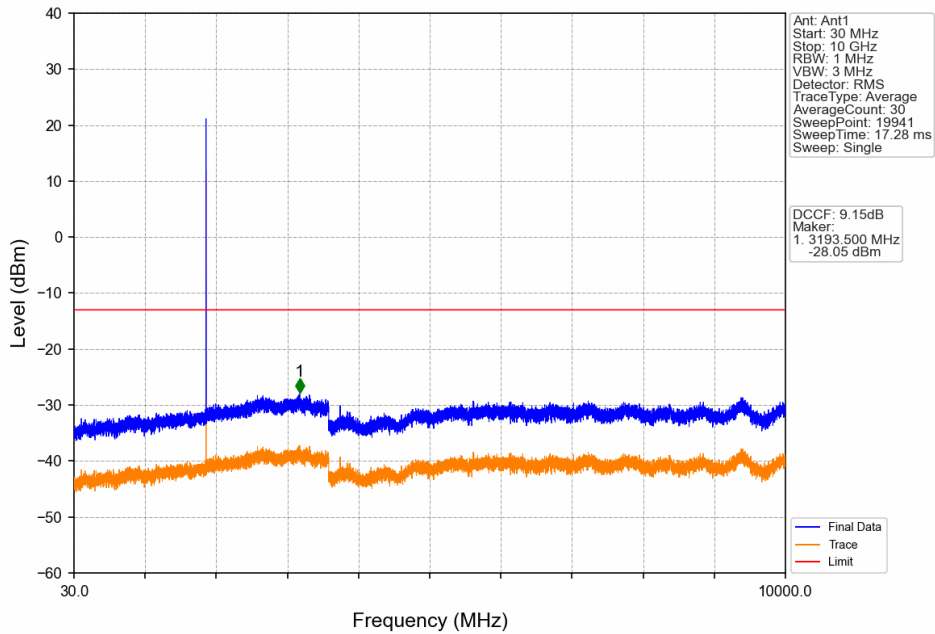
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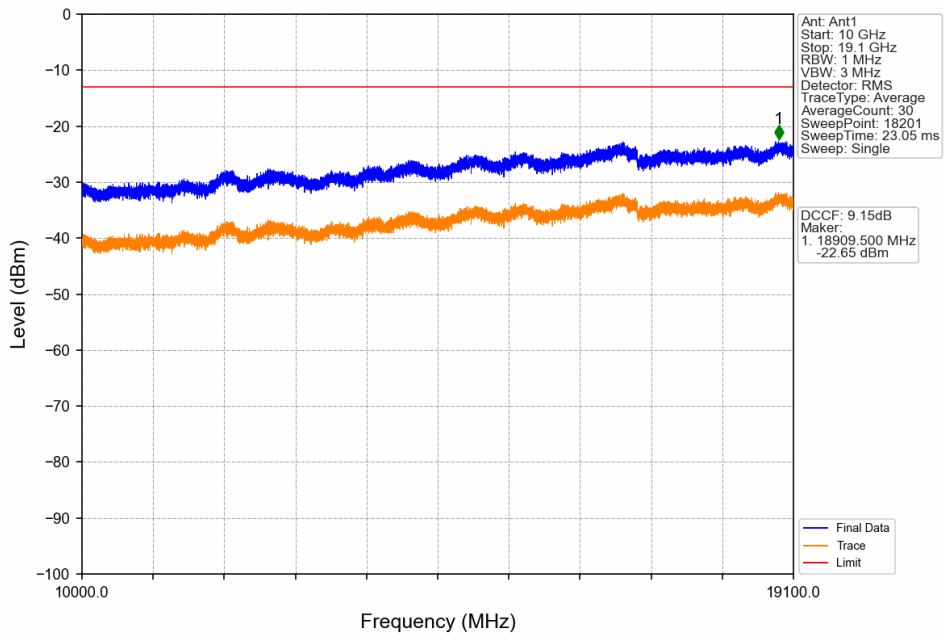
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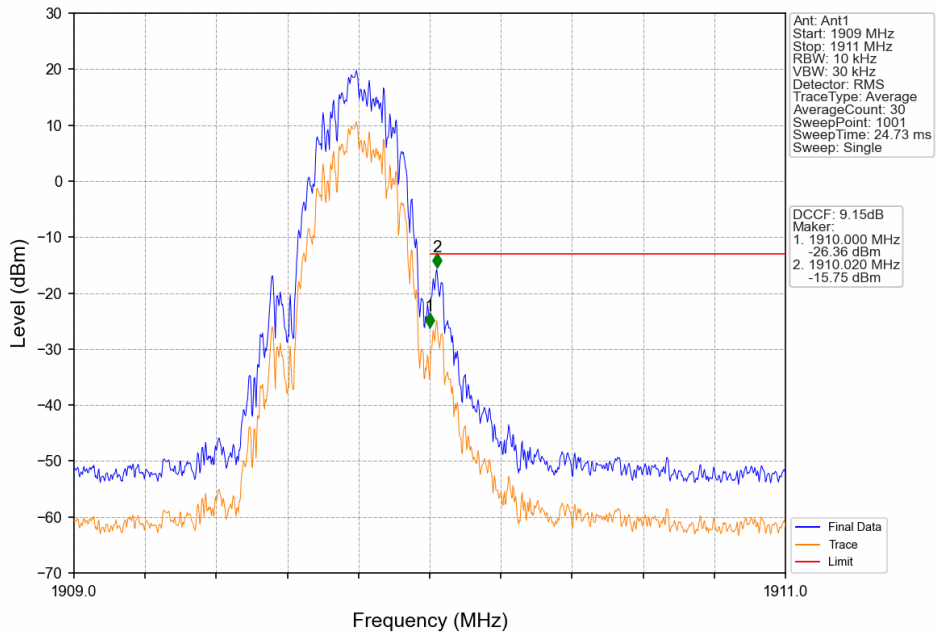
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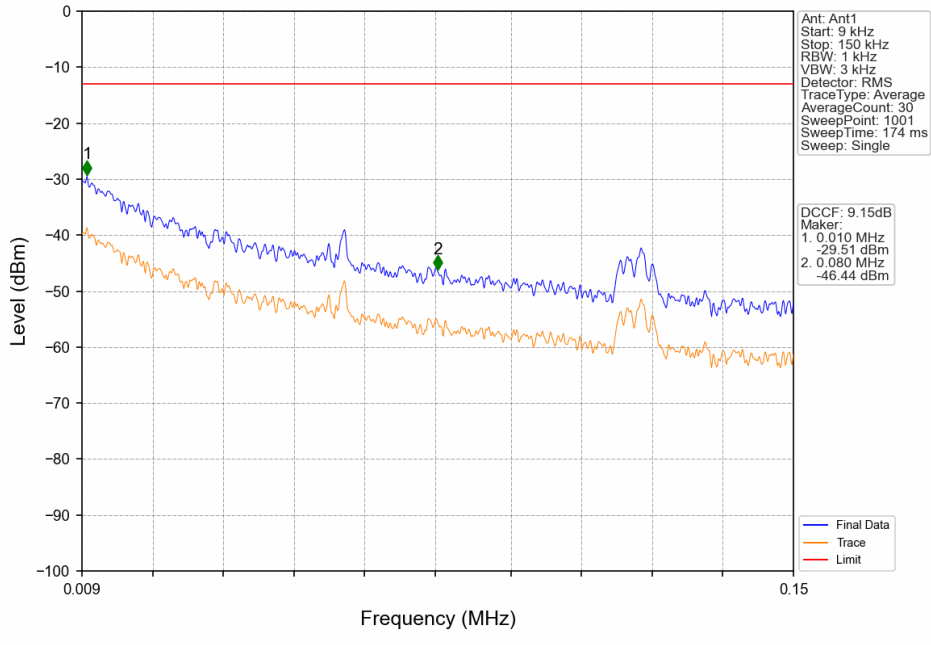
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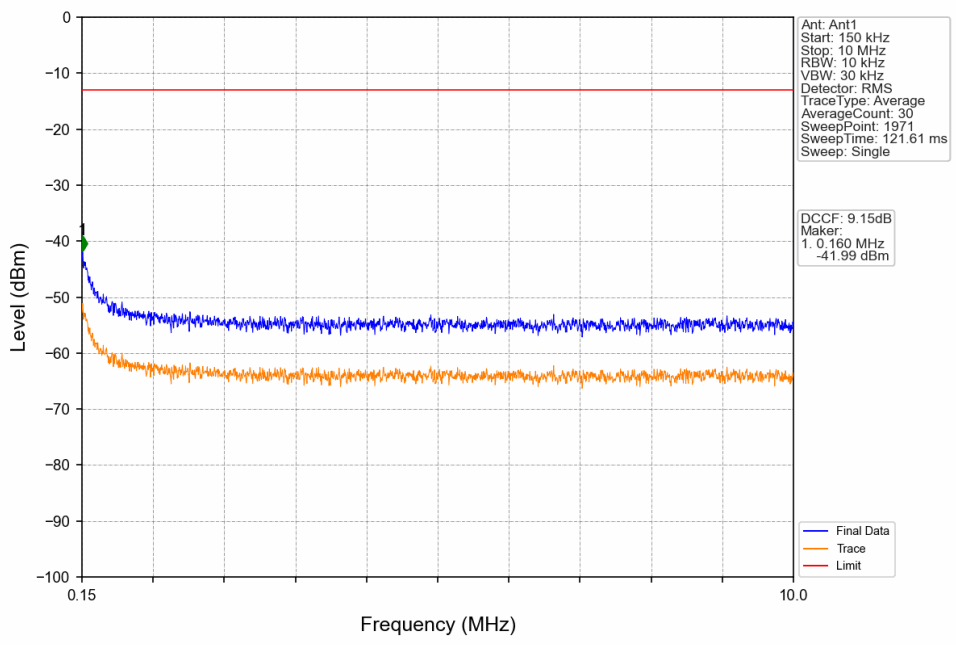
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



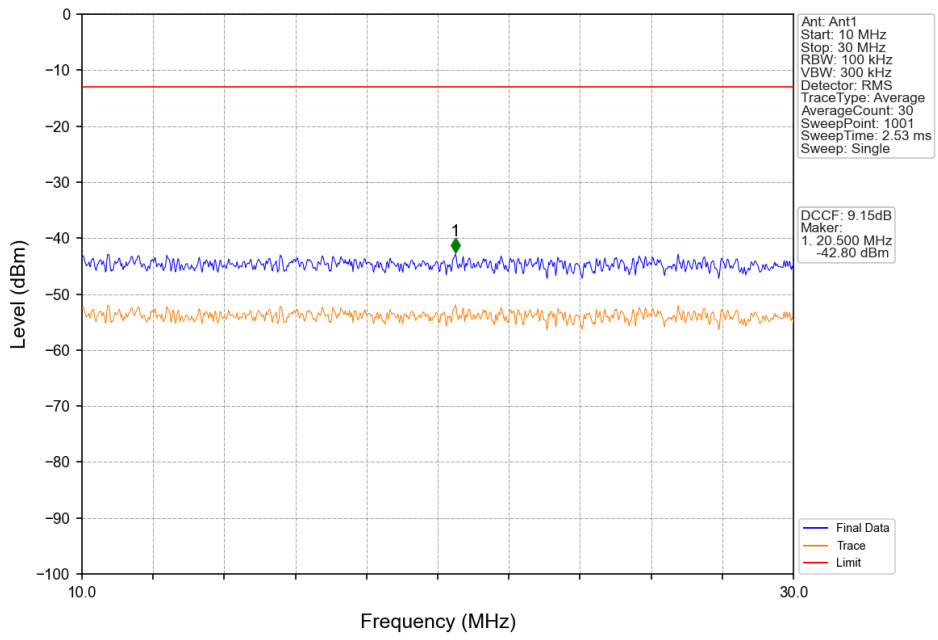
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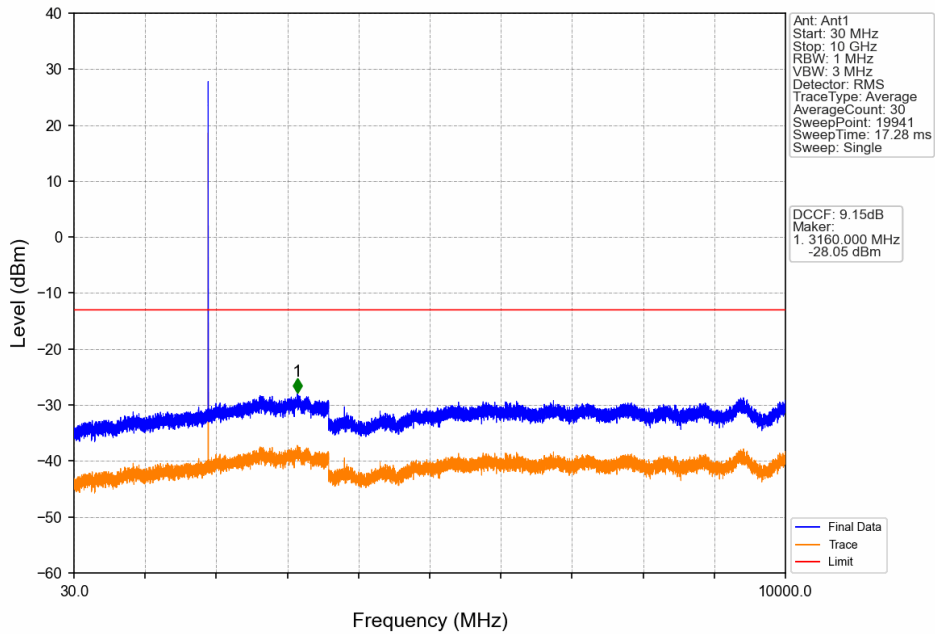
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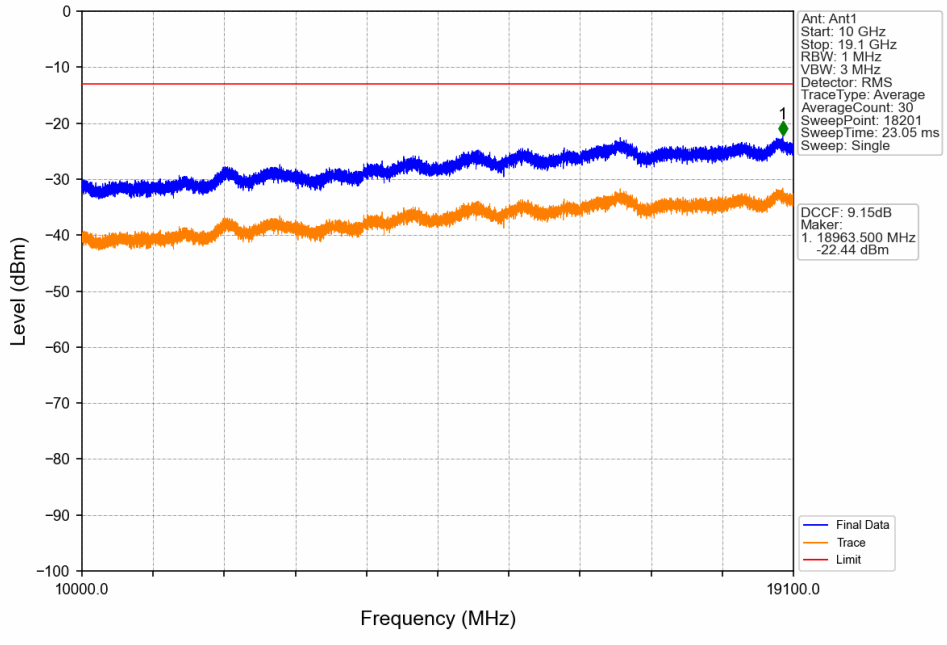
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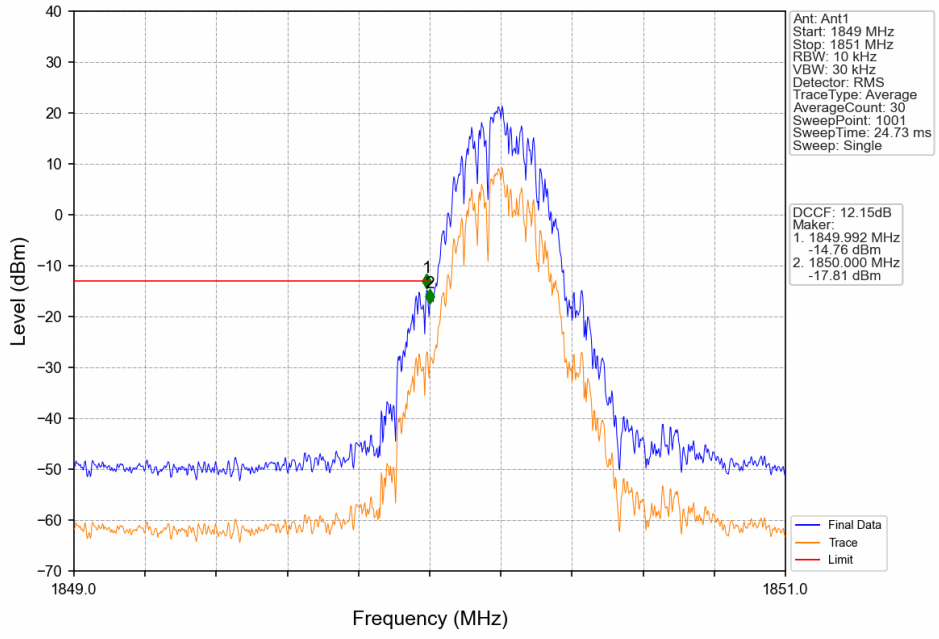
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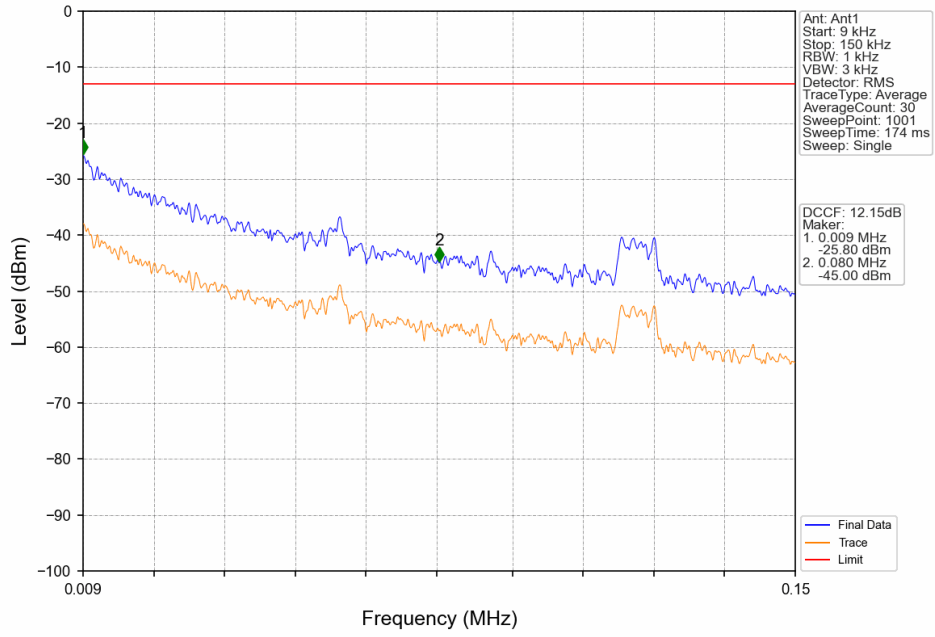
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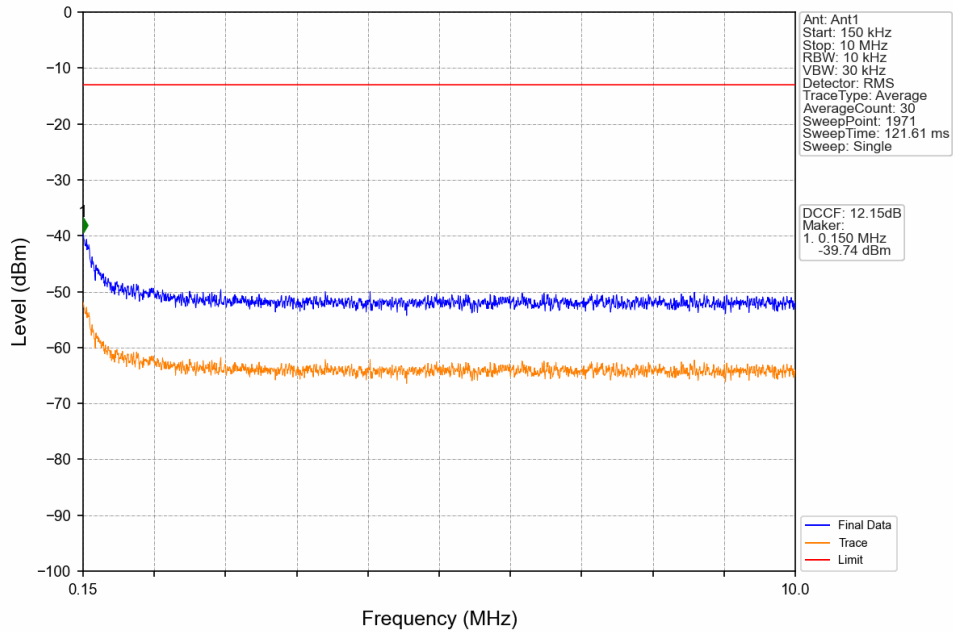
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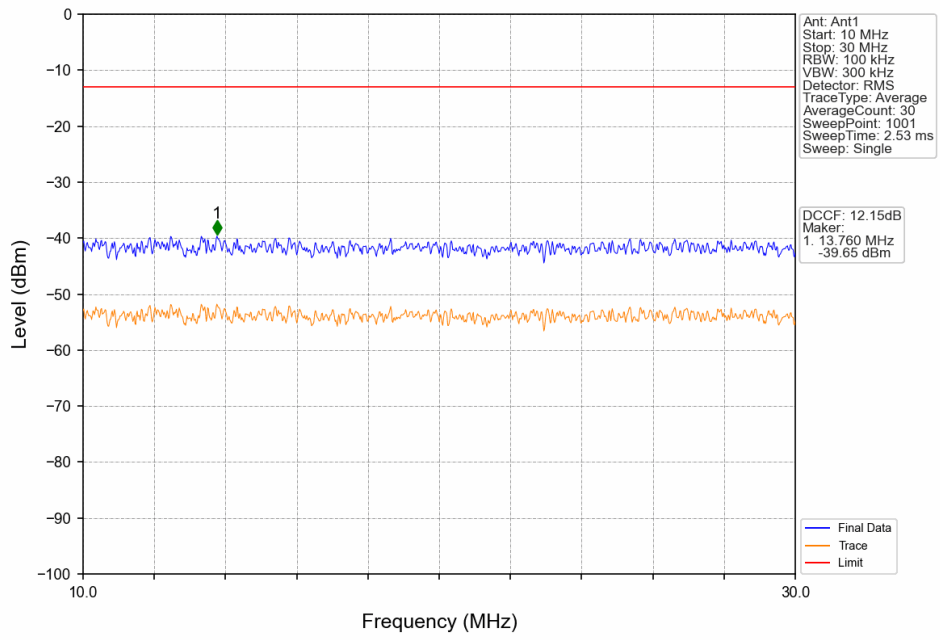
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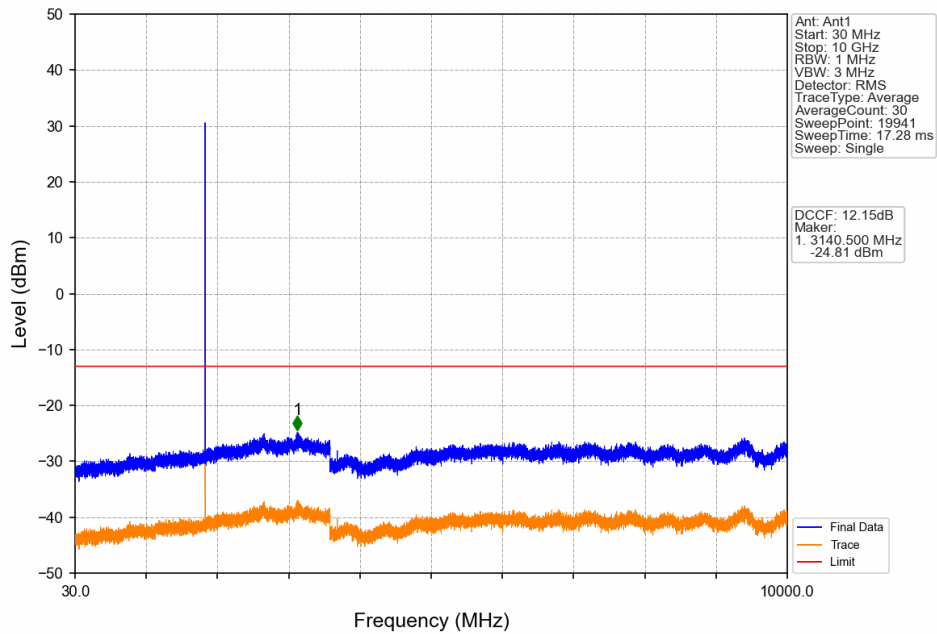
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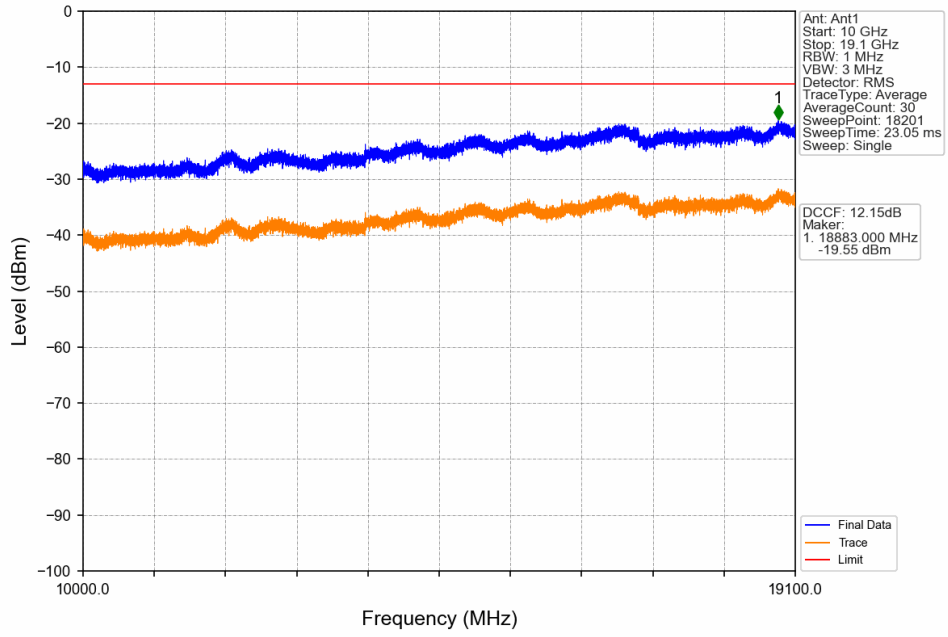
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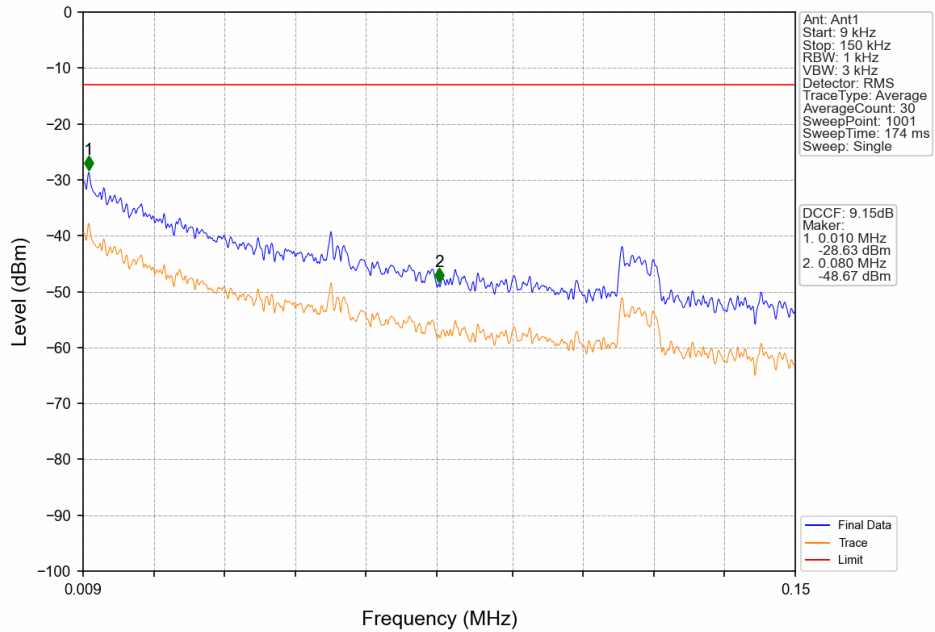
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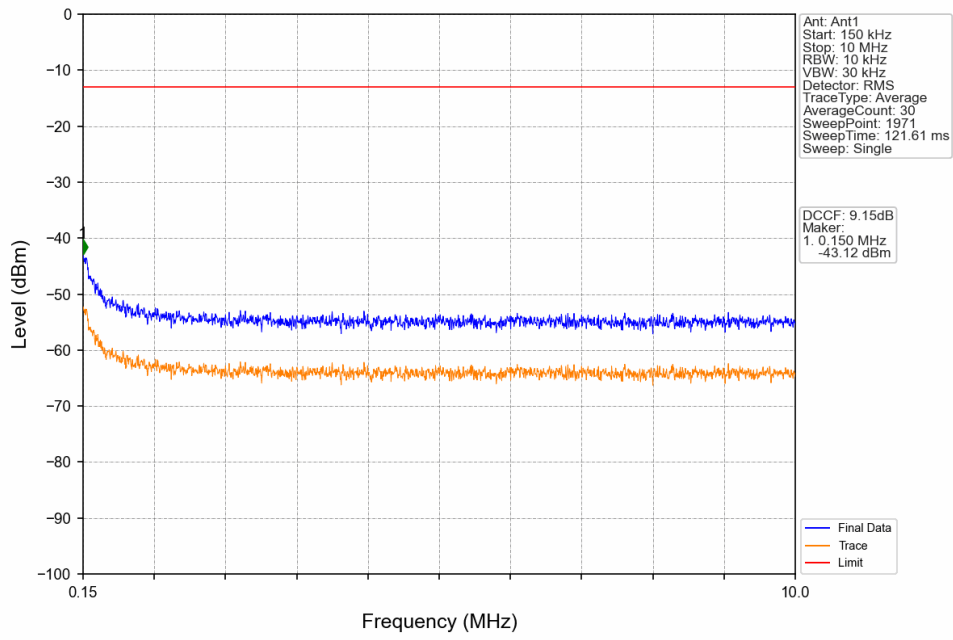
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



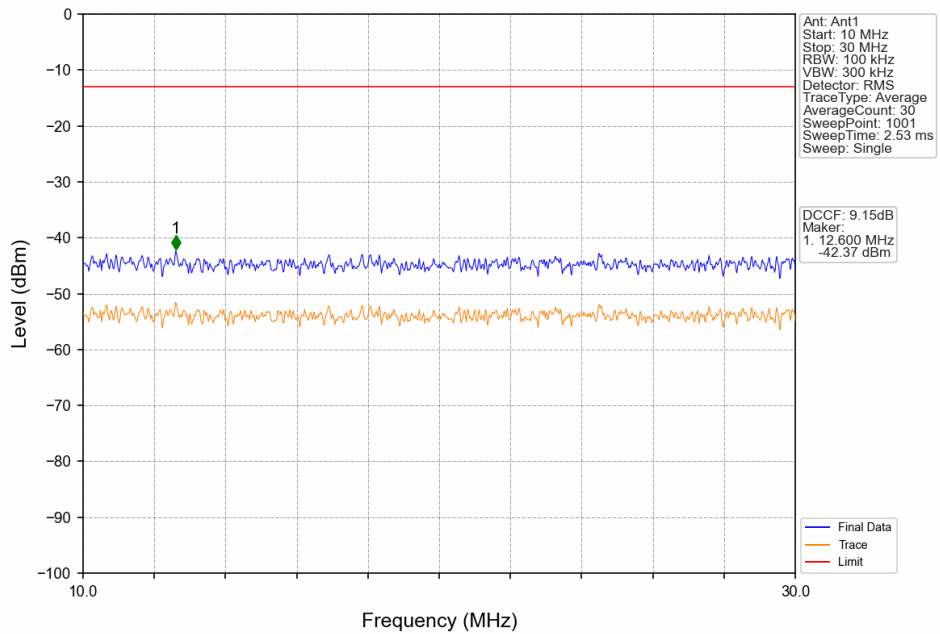
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



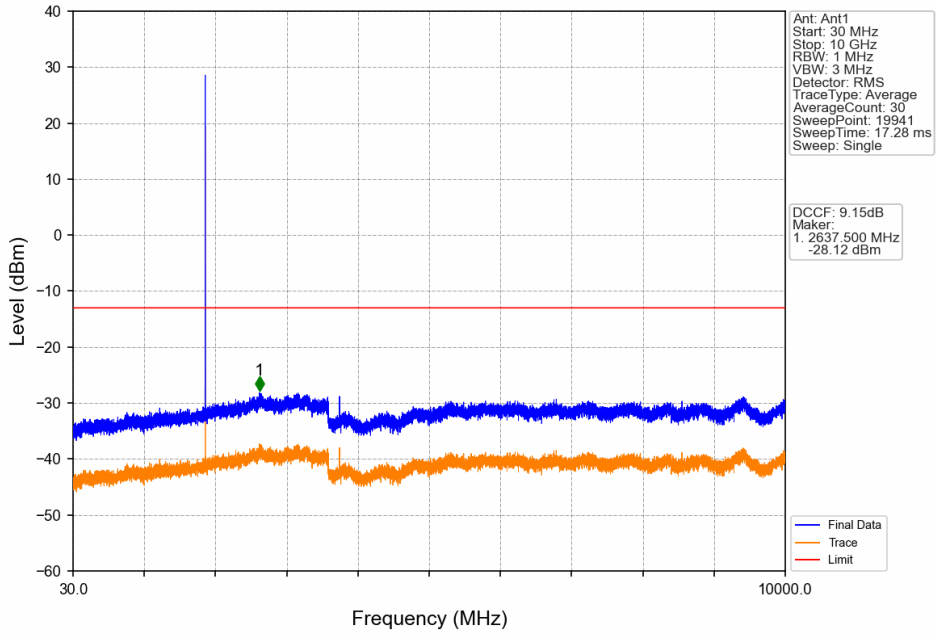
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



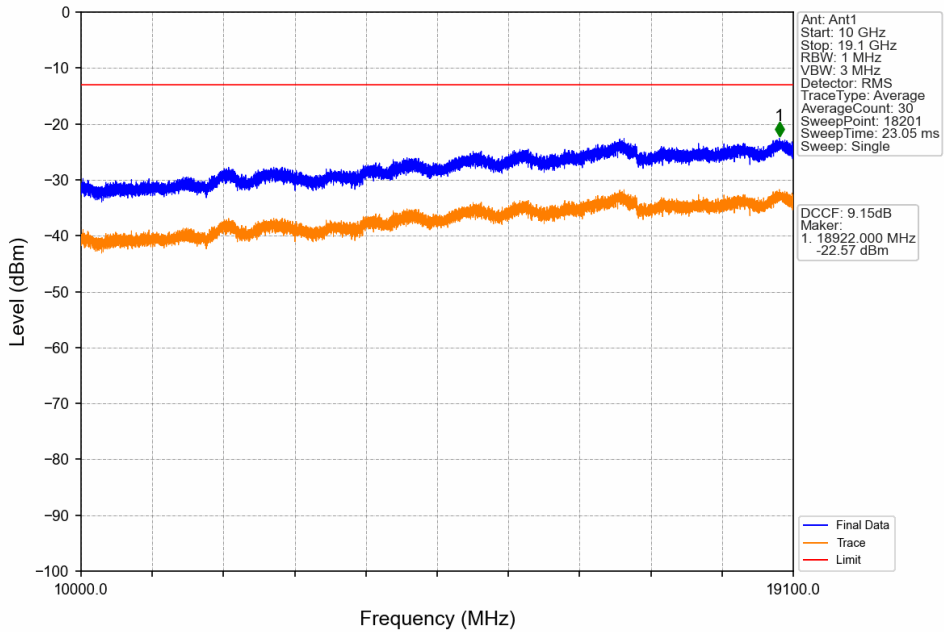
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



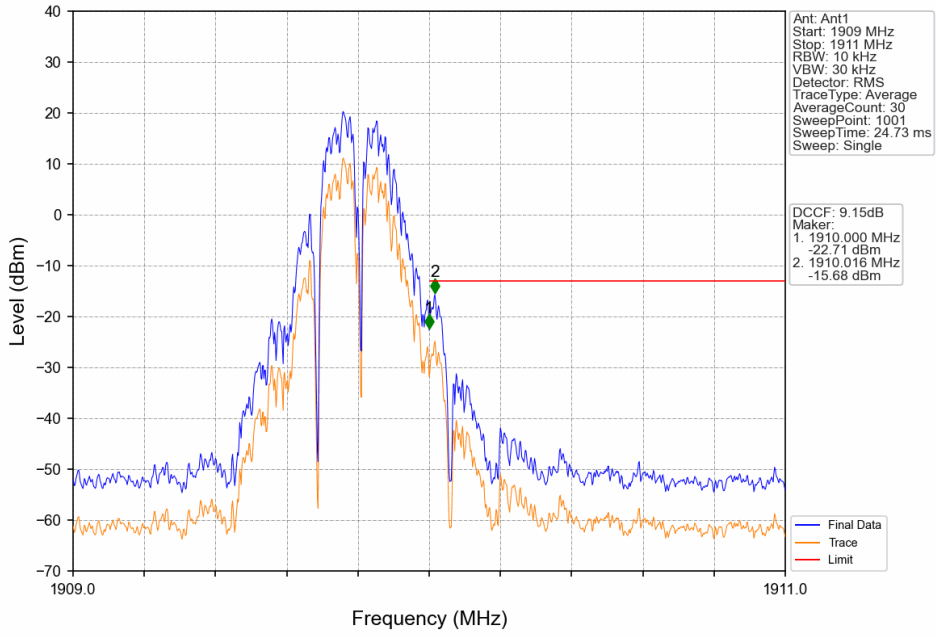
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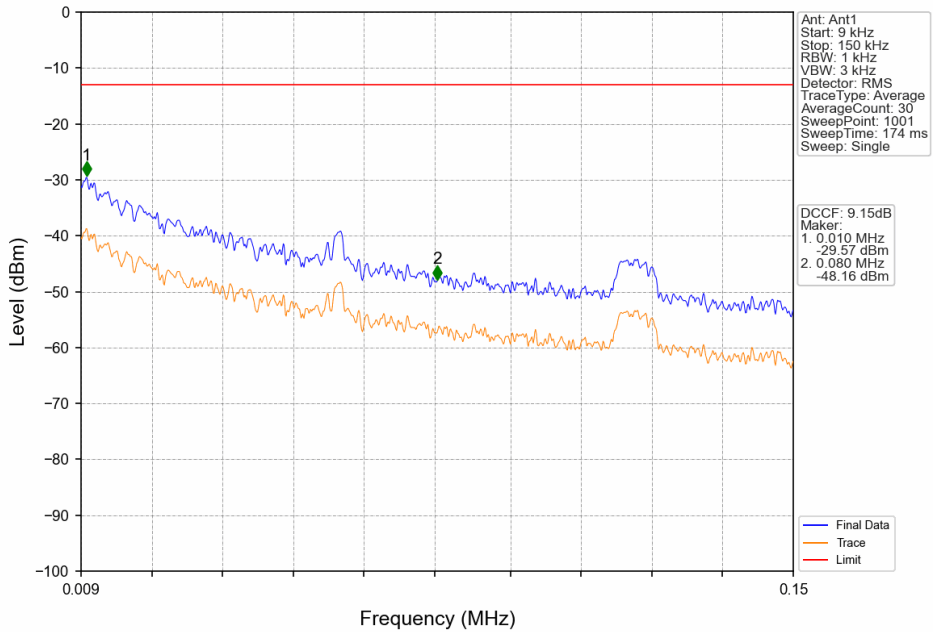
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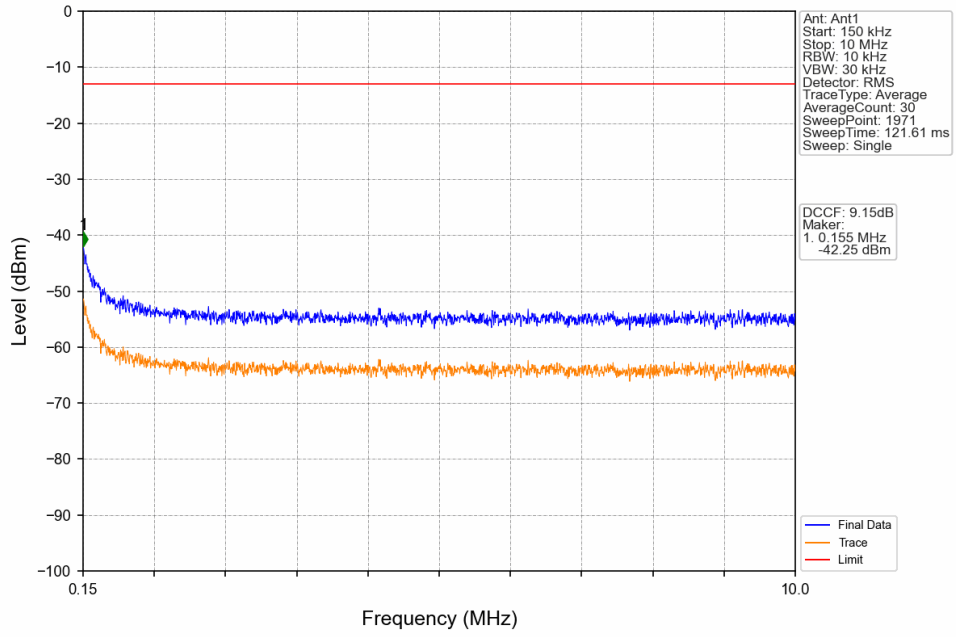
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



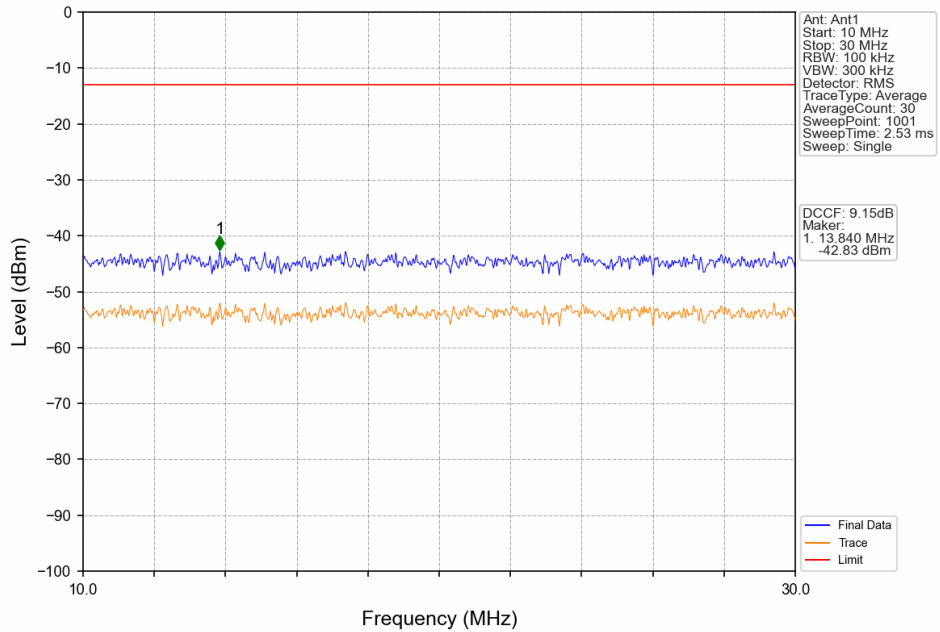
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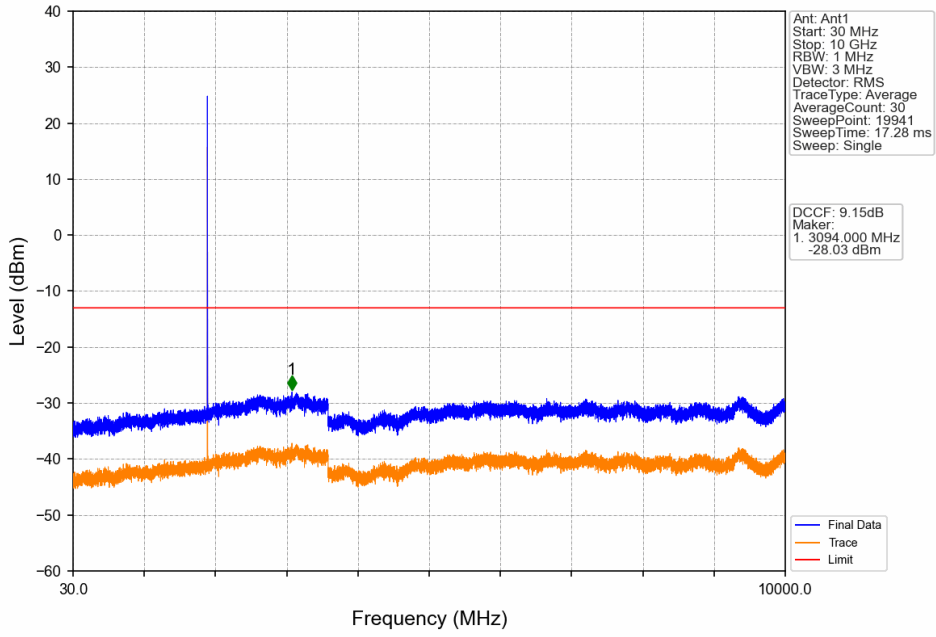
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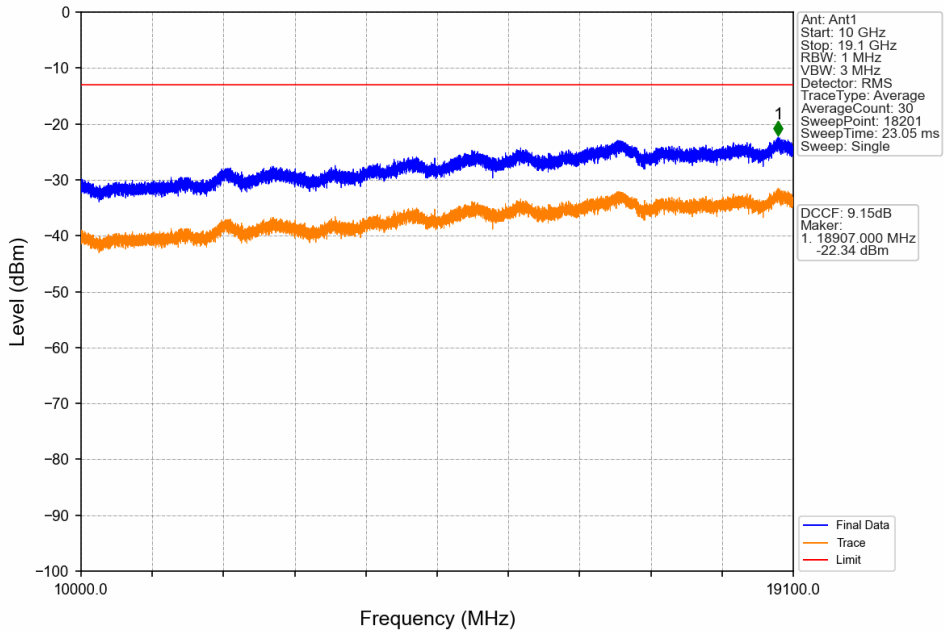
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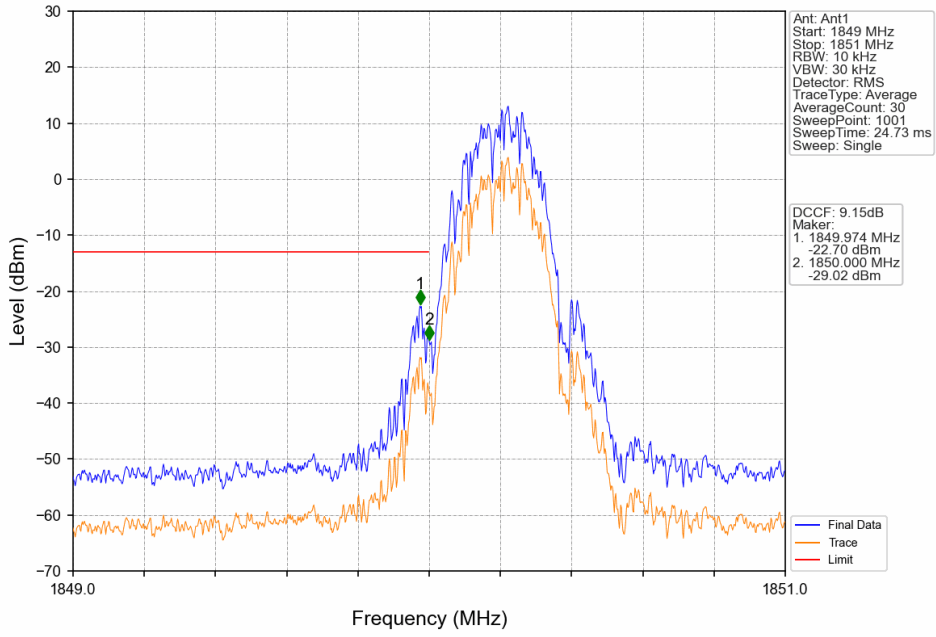
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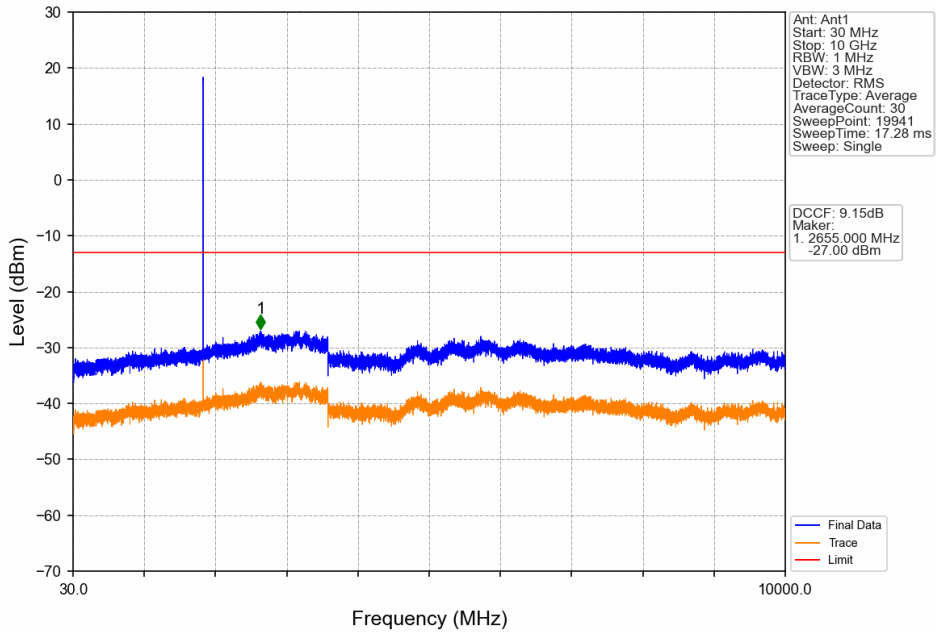
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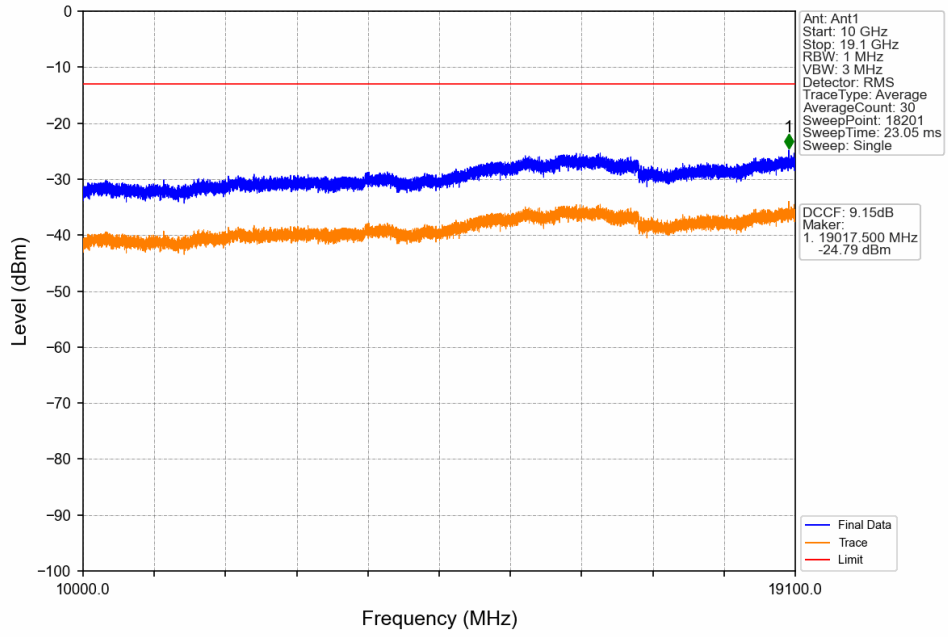
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



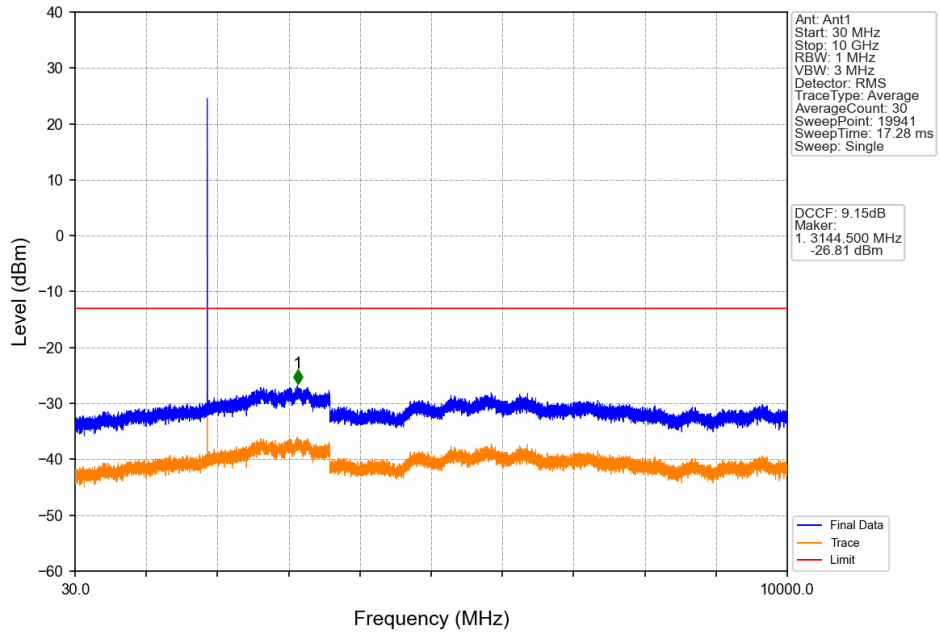
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



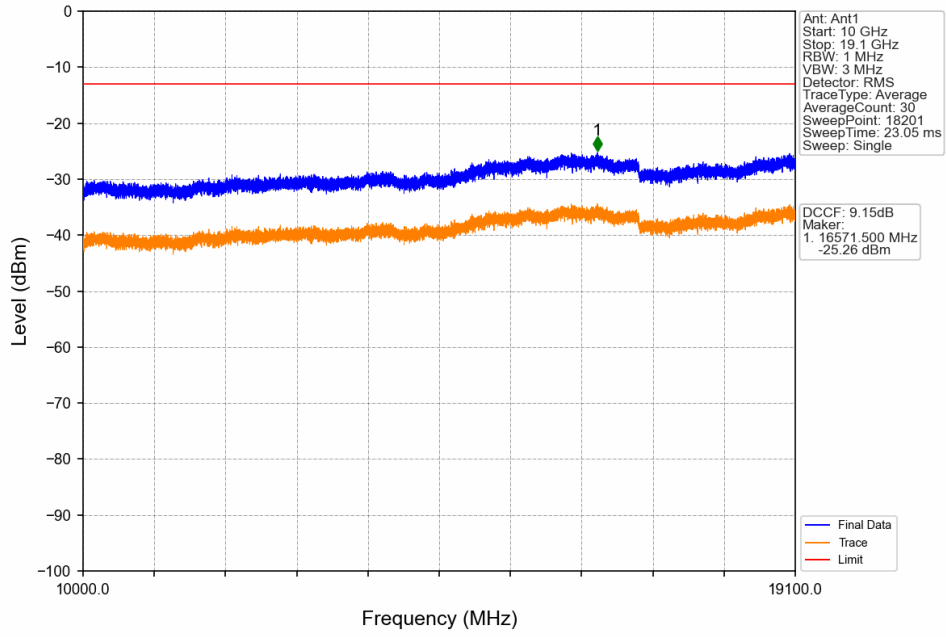
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



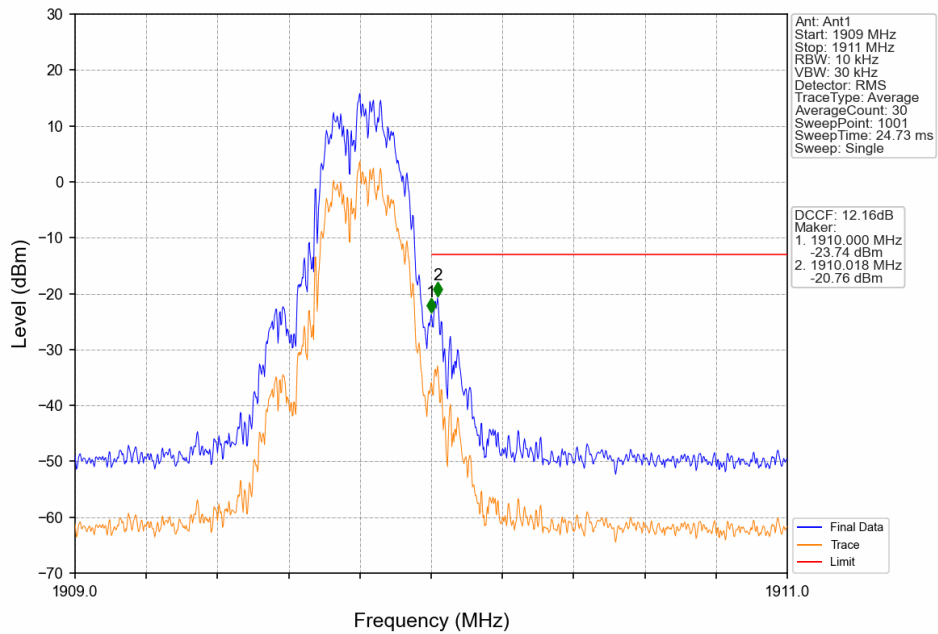
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



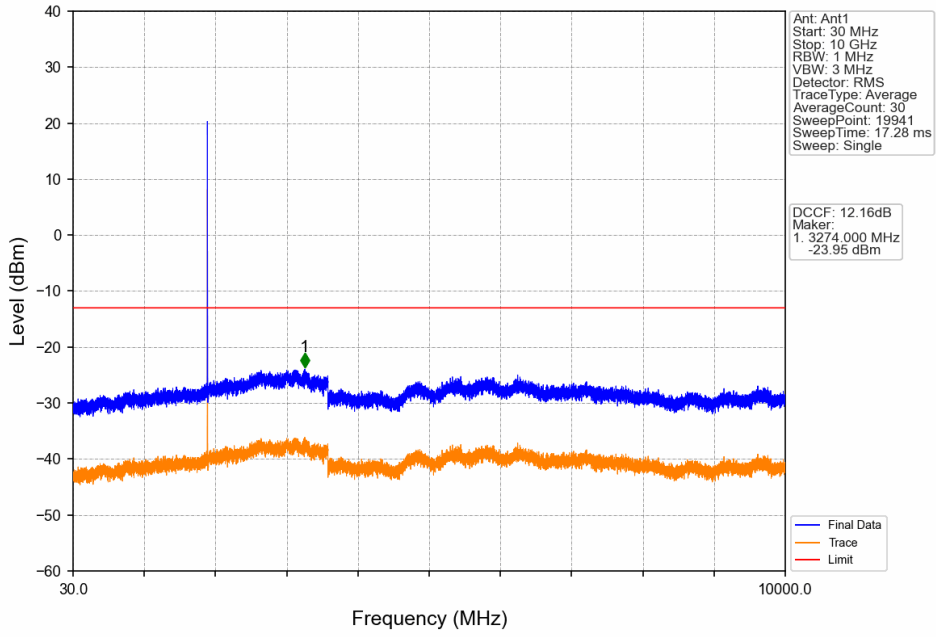
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



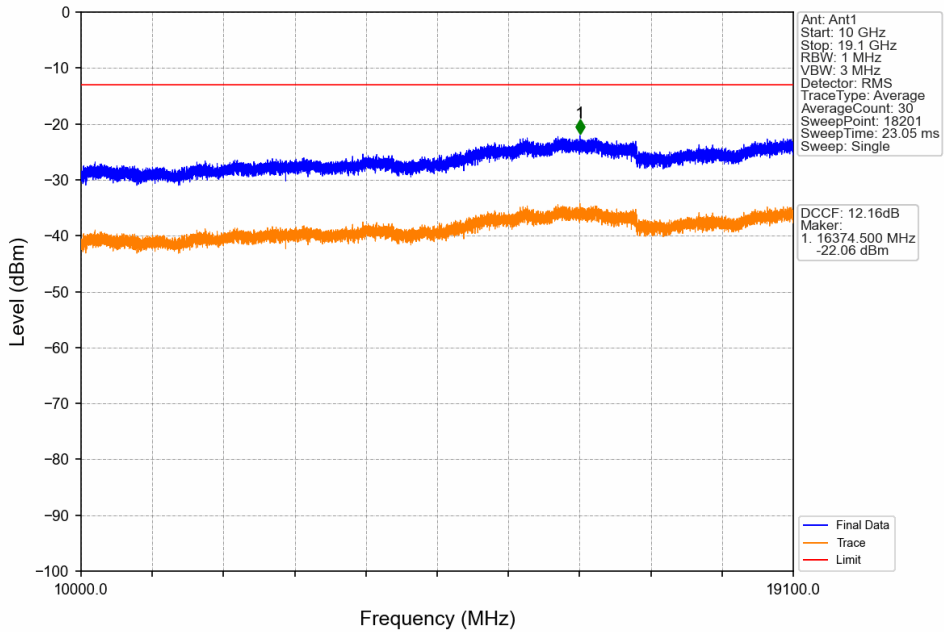
PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



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	0.6457	0.0172	ppm	248KGXW	24E	28.10
PCS1900	0.2	1850.2	1909.8	0.2264	0.008	ppm	258KG7W	24E	23.55

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	0.5984	0.0172	ppm	248KGXW	24E	27.77
PCS1900	0.2	1850.2	1909.8	0.2098	0.008	ppm	258KG7W	24E	23.22