

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 GSM850_ERP

Band: GSM850								
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
	Network	Subset				Result	Limit	
NTNV	GSM	GSM	824.2	33.92	-0.31	31.46	<=38.45	Pass
			836.6	34.00	-0.31	31.54	<=38.45	Pass
			848.8	33.97	-0.31	31.51	<=38.45	Pass
	GPRS	1 TX Slot	824.2	32.88	-0.31	30.42	<=38.45	Pass
		2 TX Slots	824.2	32.79	-0.31	30.33	<=38.45	Pass
		3 TX Slots	824.2	32.57	-0.31	30.11	<=38.45	Pass
		4 TX Slots	824.2	32.28	-0.31	29.82	<=38.45	Pass
		1 TX Slot	836.6	32.77	-0.31	30.31	<=38.45	Pass
		2 TX Slots	836.6	32.68	-0.31	30.22	<=38.45	Pass
		3 TX Slots	836.6	32.44	-0.31	29.98	<=38.45	Pass
		4 TX Slots	836.6	32.12	-0.31	29.66	<=38.45	Pass
		1 TX Slot	848.8	32.77	-0.31	30.31	<=38.45	Pass
		2 TX Slots	848.8	32.61	-0.31	30.15	<=38.45	Pass
		3 TX Slots	848.8	32.36	-0.31	29.90	<=38.45	Pass
		4 TX Slots	848.8	31.95	-0.31	29.49	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 Test Result

2.1.1 GSM850

Band: GSM850							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
GSM	824.2	20	3.27	5.037	0.0061	-2.5 to 2.5	Pass
			3.85	0.775	0.0009	-2.5 to 2.5	Pass
			4.43	9.266	0.0112	-2.5 to 2.5	Pass
		-30	3.85	8.588	0.0104	-2.5 to 2.5	Pass
		-20	3.85	9.653	0.0117	-2.5 to 2.5	Pass
		-10	3.85	5.682	0.0069	-2.5 to 2.5	Pass
		0	3.85	3.293	0.0040	-2.5 to 2.5	Pass
		10	3.85	10.751	0.0130	-2.5 to 2.5	Pass
		30	3.85	2.131	0.0026	-2.5 to 2.5	Pass
		40	3.85	17.434	0.0212	-2.5 to 2.5	Pass
		50	3.85	4.714	0.0057	-2.5 to 2.5	Pass
	836.6	20	3.27	1.130	0.0014	-2.5 to 2.5	Pass
			3.85	1.356	0.0016	-2.5 to 2.5	Pass
			4.43	-2.906	-0.0035	-2.5 to 2.5	Pass
		-30	3.85	4.455	0.0053	-2.5 to 2.5	Pass
		-20	3.85	8.136	0.0097	-2.5 to 2.5	Pass
		-10	3.85	6.070	0.0073	-2.5 to 2.5	Pass
		0	3.85	-0.936	-0.0011	-2.5 to 2.5	Pass
		10	3.85	-0.743	-0.0009	-2.5 to 2.5	Pass
		30	3.85	-4.617	-0.0055	-2.5 to 2.5	Pass

TCT	848.8	40	3.85	8.814	0.0105	-2.5 to 2.5	Pass
		50	3.85	5.166	0.0062	-2.5 to 2.5	Pass
		20	3.27	-0.194	-0.0002	-2.5 to 2.5	Pass
			3.85	8.846	0.0104	-2.5 to 2.5	Pass
			4.43	-2.647	-0.0031	-2.5 to 2.5	Pass
		-30	3.85	-1.324	-0.0016	-2.5 to 2.5	Pass
		-20	3.85	8.685	0.0102	-2.5 to 2.5	Pass
		-10	3.85	1.356	0.0016	-2.5 to 2.5	Pass
		0	3.85	1.130	0.0013	-2.5 to 2.5	Pass
		10	3.85	8.007	0.0094	-2.5 to 2.5	Pass
		30	3.85	-1.195	-0.0014	-2.5 to 2.5	Pass
		40	3.85	4.294	0.0051	-2.5 to 2.5	Pass
		50	3.85	4.811	0.0057	-2.5 to 2.5	Pass
		20	3.27	10.525	0.0128	-2.5 to 2.5	Pass
			3.85	12.269	0.0149	-2.5 to 2.5	Pass
			4.43	11.332	0.0137	-2.5 to 2.5	Pass
GPRS	824.2	-30	3.85	11.849	0.0144	-2.5 to 2.5	Pass
		-20	3.85	9.718	0.0118	-2.5 to 2.5	Pass
		-10	3.85	14.173	0.0172	-2.5 to 2.5	Pass
		0	3.85	13.851	0.0168	-2.5 to 2.5	Pass
		10	3.85	8.685	0.0105	-2.5 to 2.5	Pass
		30	3.85	8.523	0.0103	-2.5 to 2.5	Pass
		40	3.85	16.240	0.0197	-2.5 to 2.5	Pass
		50	3.85	7.329	0.0089	-2.5 to 2.5	Pass
	836.6	20	3.27	7.103	0.0085	-2.5 to 2.5	Pass
			3.85	6.909	0.0083	-2.5 to 2.5	Pass
			4.43	3.164	0.0038	-2.5 to 2.5	Pass
		-30	3.85	10.138	0.0121	-2.5 to 2.5	Pass
		-20	3.85	8.814	0.0105	-2.5 to 2.5	Pass
		-10	3.85	11.881	0.0142	-2.5 to 2.5	Pass
		0	3.85	8.814	0.0105	-2.5 to 2.5	Pass
		10	3.85	7.071	0.0085	-2.5 to 2.5	Pass
		30	3.85	9.686	0.0116	-2.5 to 2.5	Pass
		40	3.85	11.106	0.0133	-2.5 to 2.5	Pass
	848.8	50	3.85	7.845	0.0094	-2.5 to 2.5	Pass
		20	3.27	5.424	0.0064	-2.5 to 2.5	Pass
			3.85	8.394	0.0099	-2.5 to 2.5	Pass
			4.43	8.330	0.0098	-2.5 to 2.5	Pass
		-30	3.85	6.167	0.0073	-2.5 to 2.5	Pass
		-20	3.85	8.685	0.0102	-2.5 to 2.5	Pass
		-10	3.85	6.167	0.0073	-2.5 to 2.5	Pass
		0	3.85	7.975	0.0094	-2.5 to 2.5	Pass
		10	3.85	6.683	0.0079	-2.5 to 2.5	Pass
		30	3.85	7.297	0.0086	-2.5 to 2.5	Pass
		40	3.85	7.458	0.0088	-2.5 to 2.5	Pass
		50	3.85	3.293	0.0039	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 GSM850

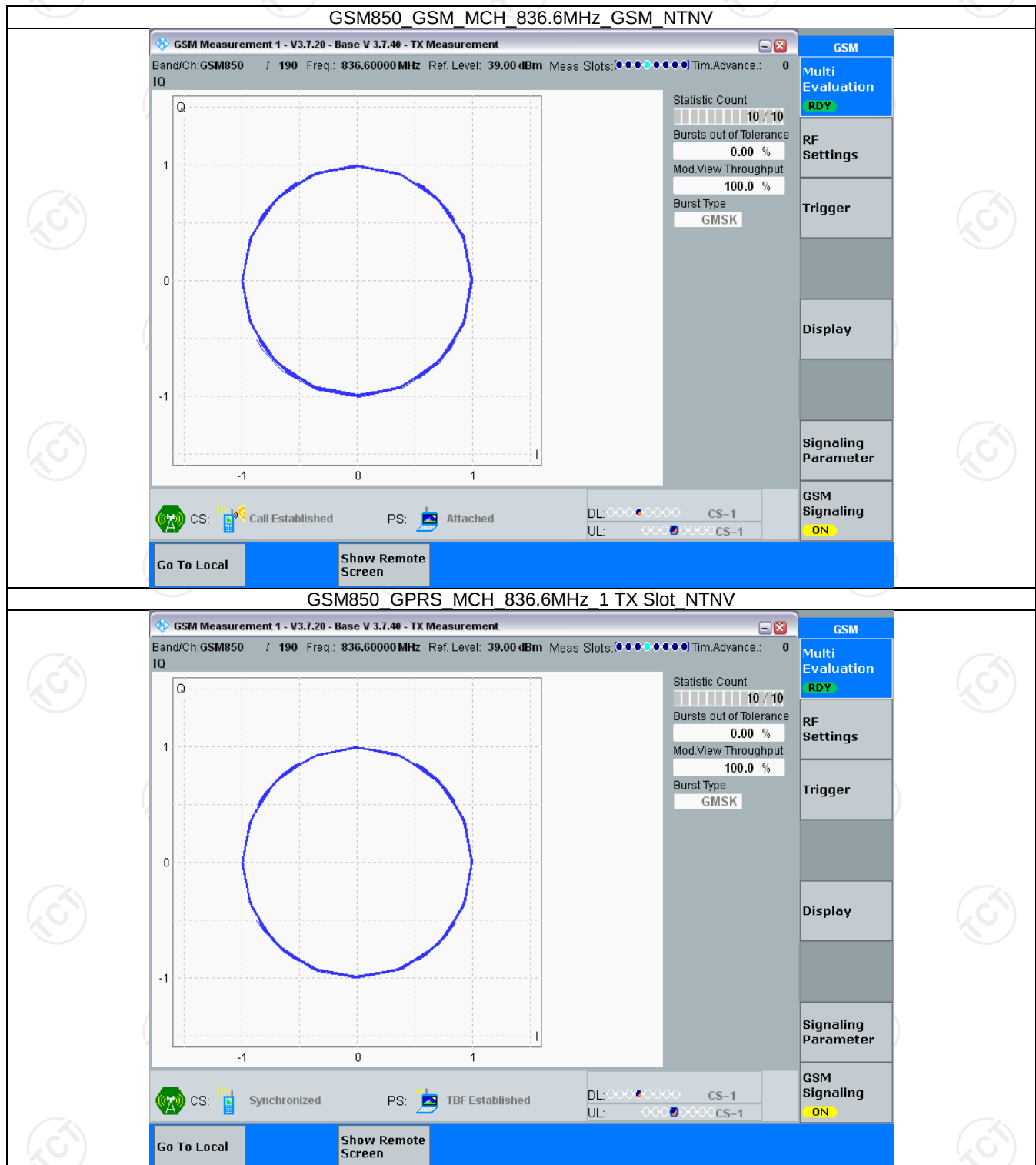
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ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	

NTNV	GSM	GSM	836.6	Refer To Test Graph	Pass
	GPRS	1 TX Slot	836.6	Refer To Test Graph	Pass



3.2 Test Graph

3.2.1 GSM850



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 GSM850_OBW

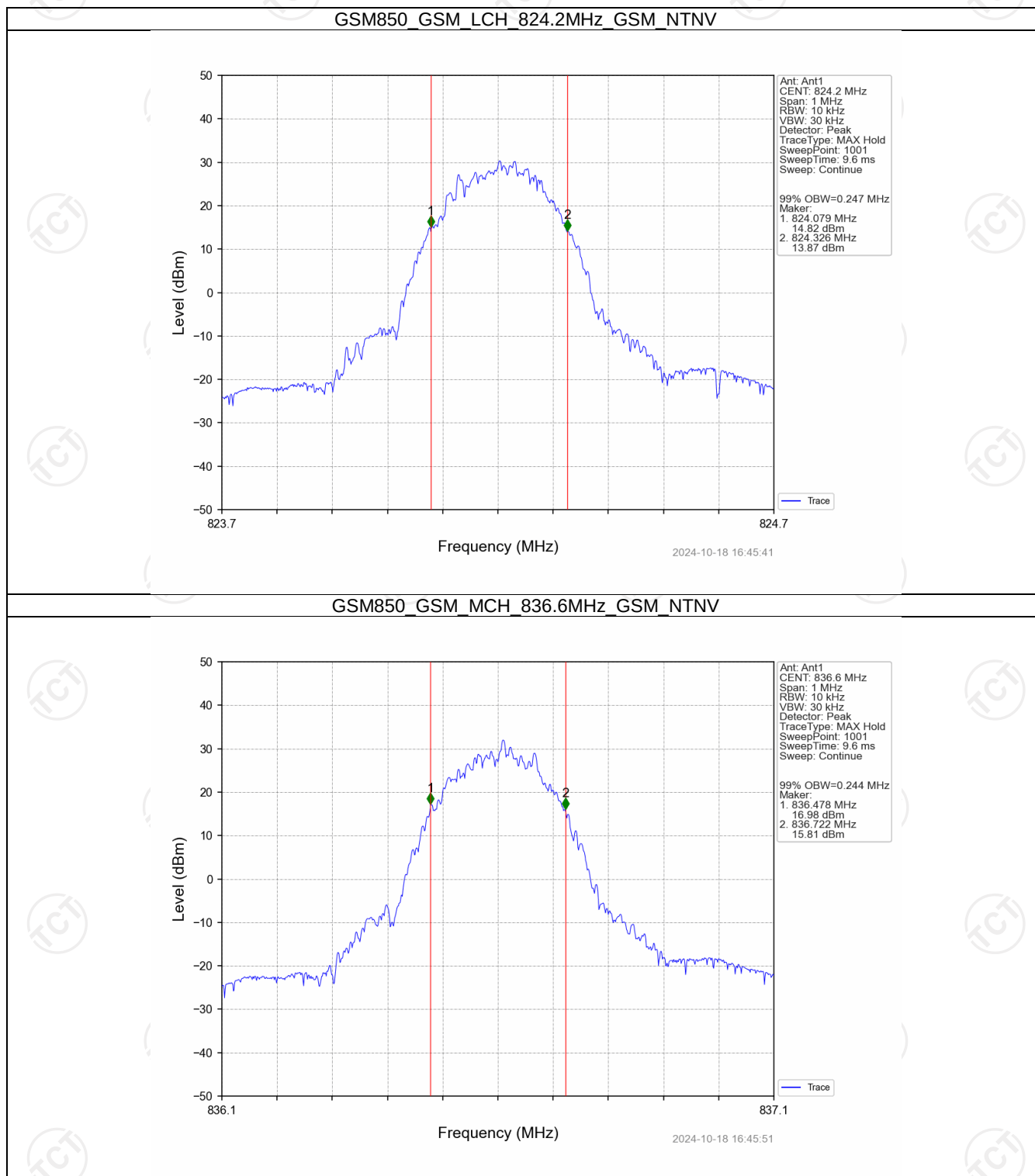
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ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	824.2	0.247	/	Pass
			836.6	0.244	/	Pass
			848.8	0.245	/	Pass
	GPRS	1 TX Slot	824.2	0.242	/	Pass
			836.6	0.245	/	Pass
			848.8	0.247	/	Pass

4.1.2 GSM850_XDB

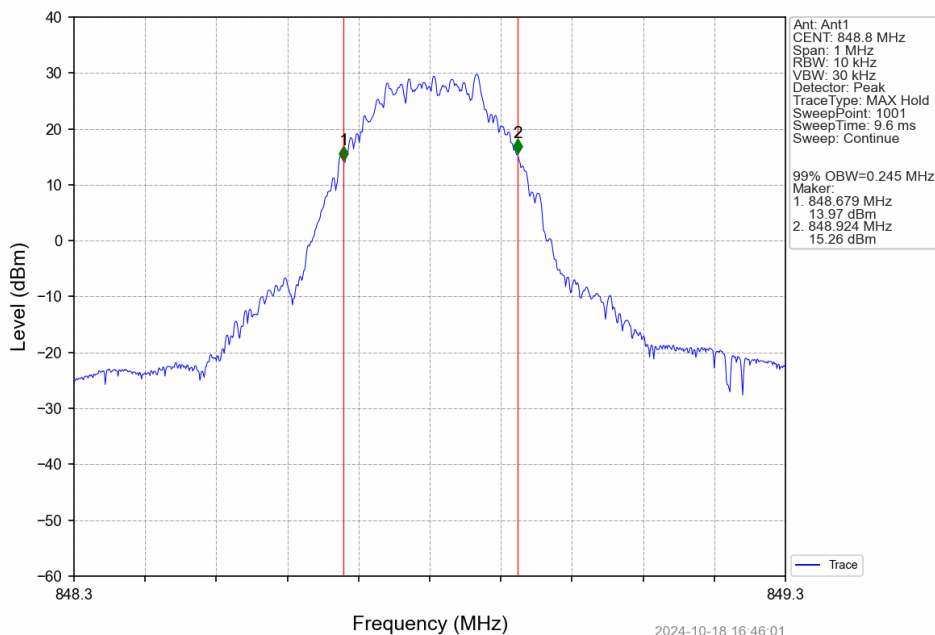
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	Network	Subset		Result	Limit	
NTNV	GSM	GSM	824.2	0.318	/	Pass
			836.6	0.313	/	Pass
			848.8	0.314	/	Pass
	GPRS	1 TX Slot	824.2	0.316	/	Pass
			836.6	0.319	/	Pass
			848.8	0.319	/	Pass

4.2 Test Graph

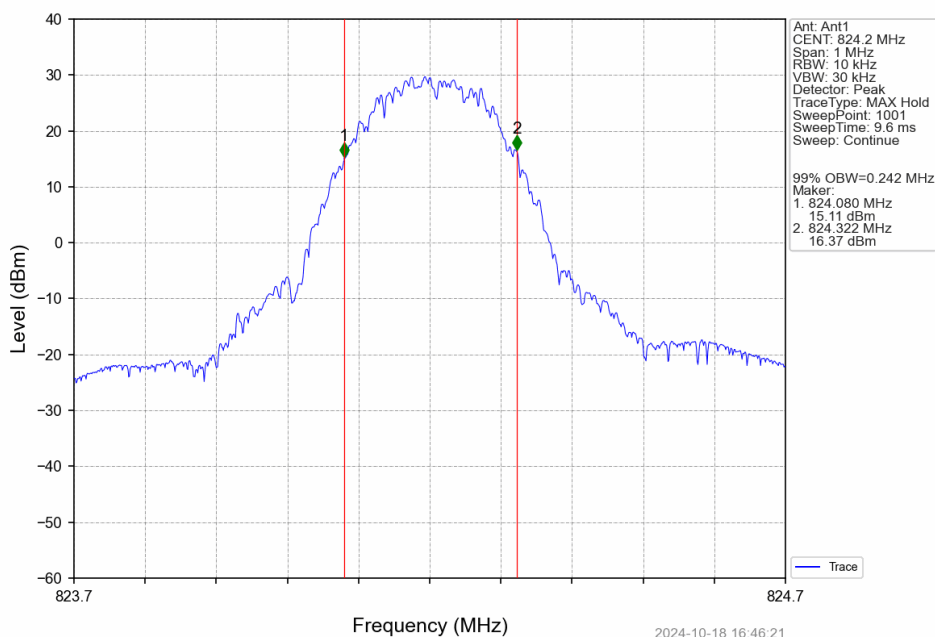
4.2.1 GSM850_OBW



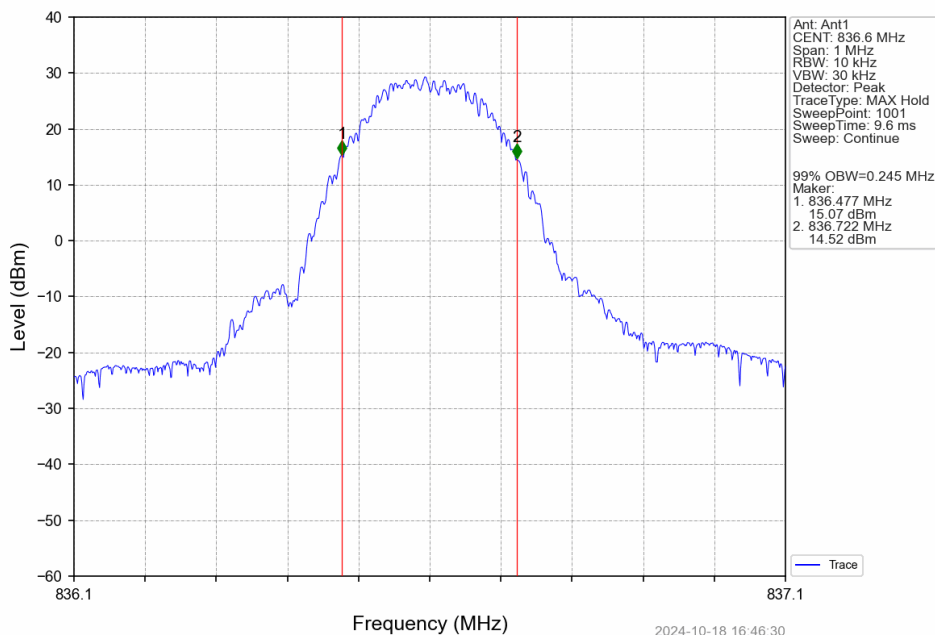
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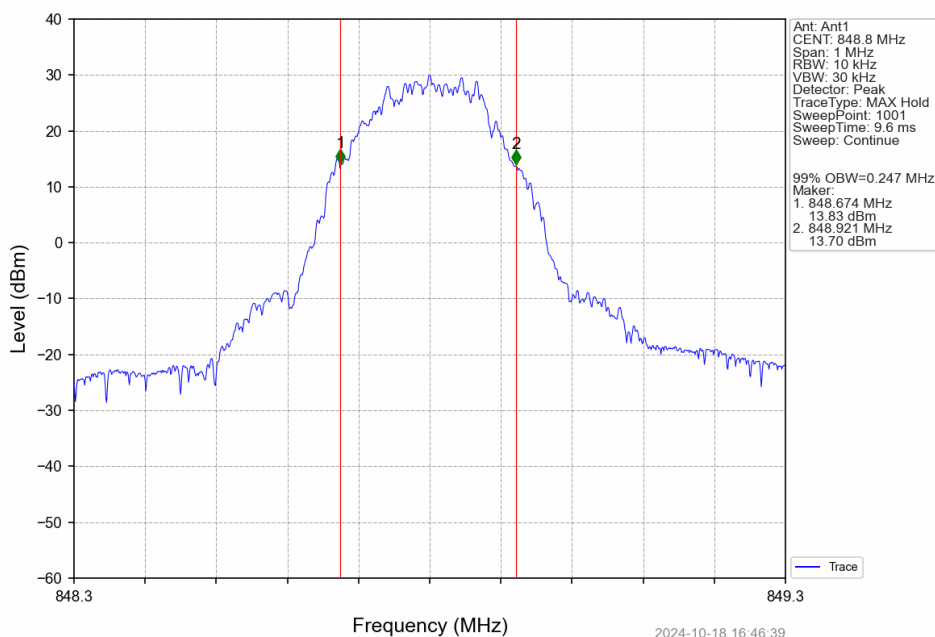
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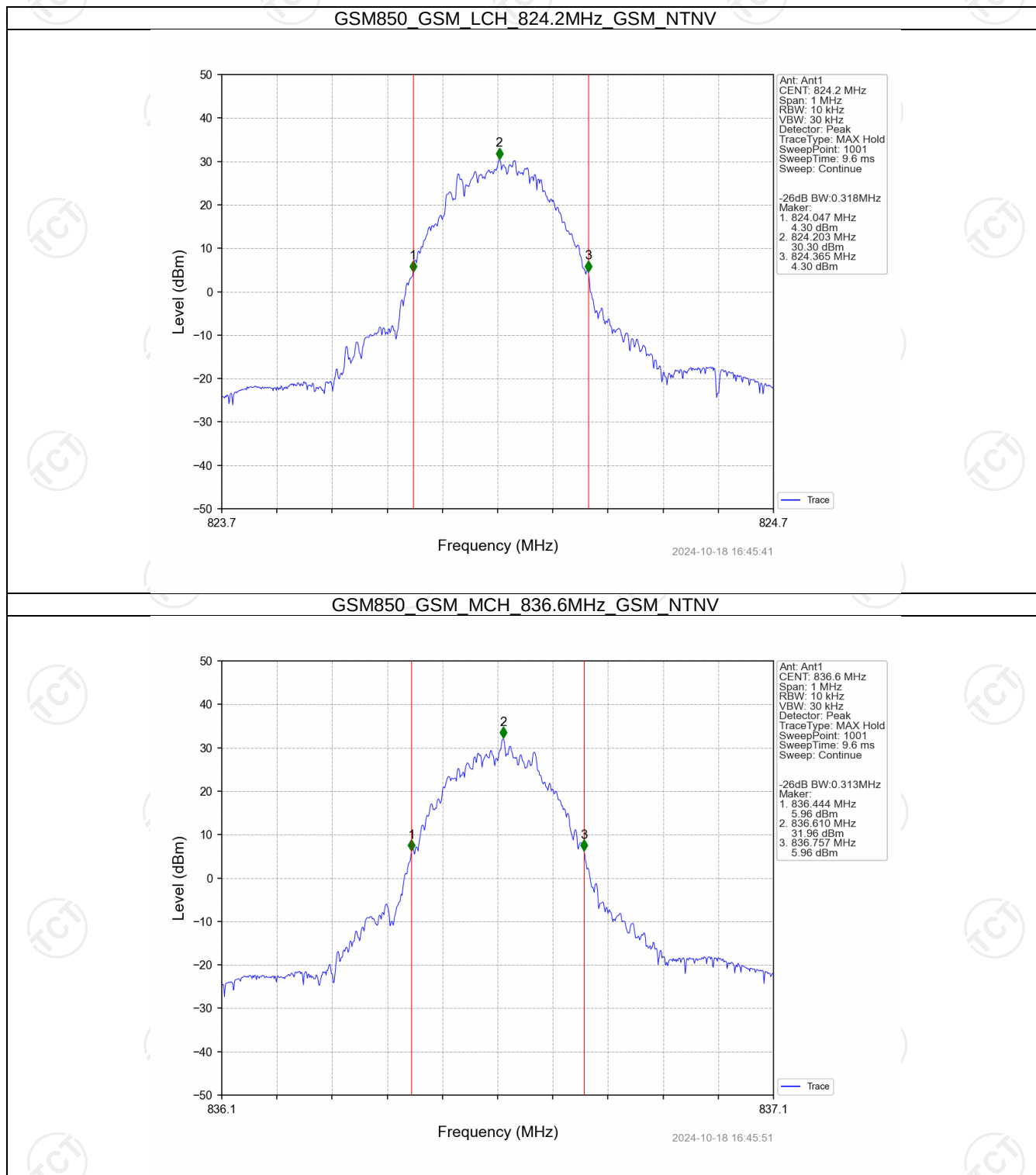
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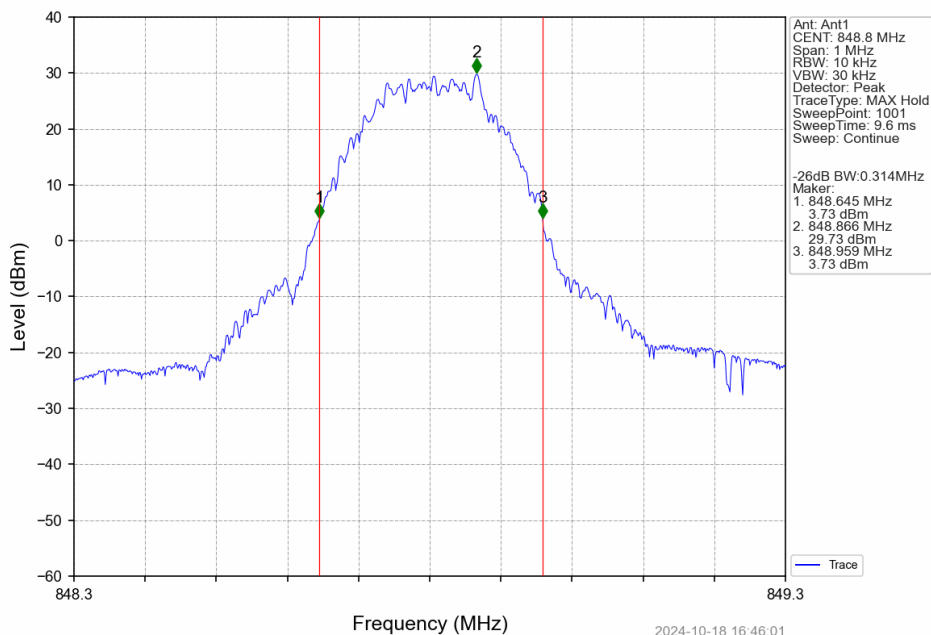
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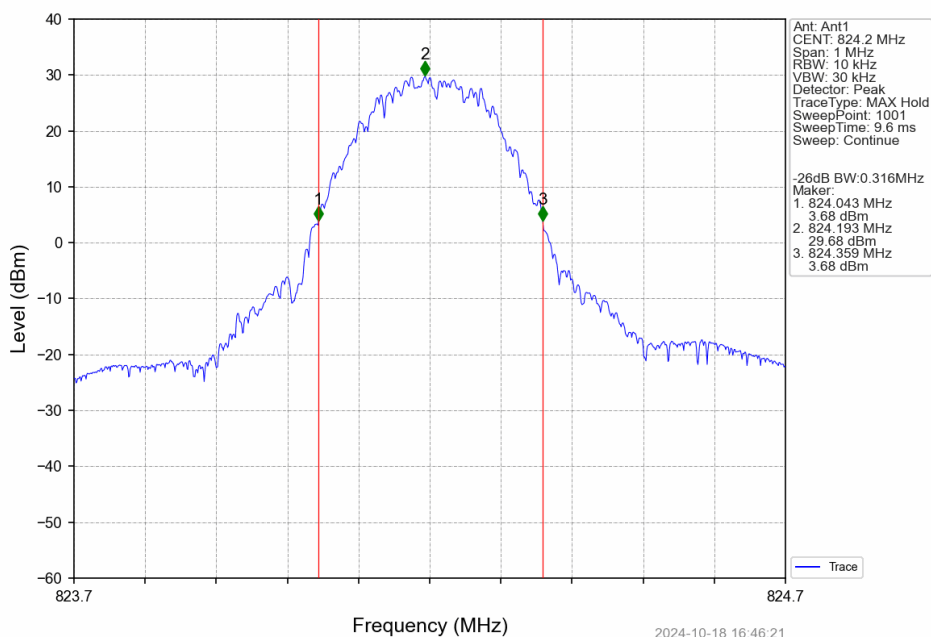
4.2.2 GSM850_XDB



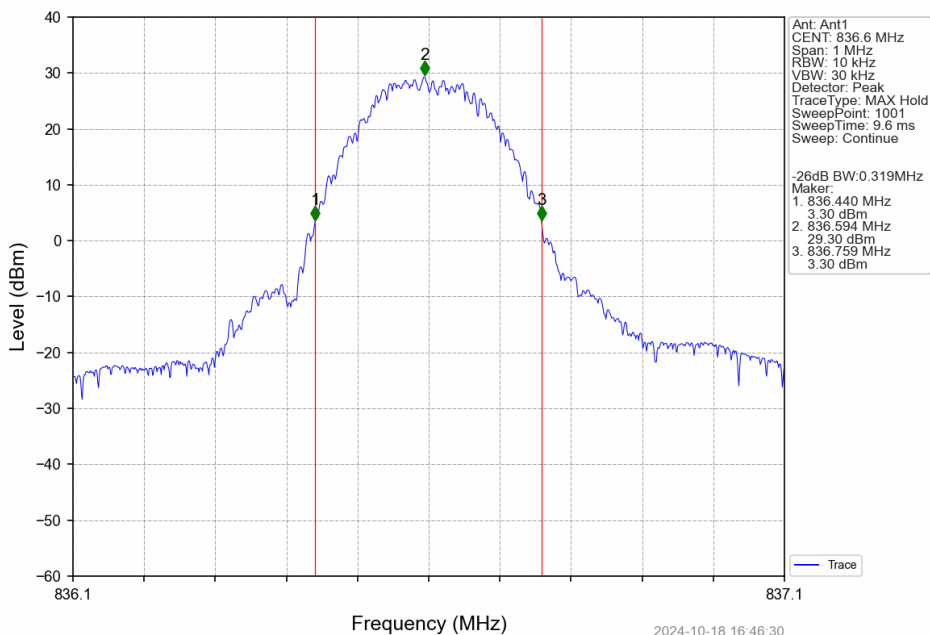
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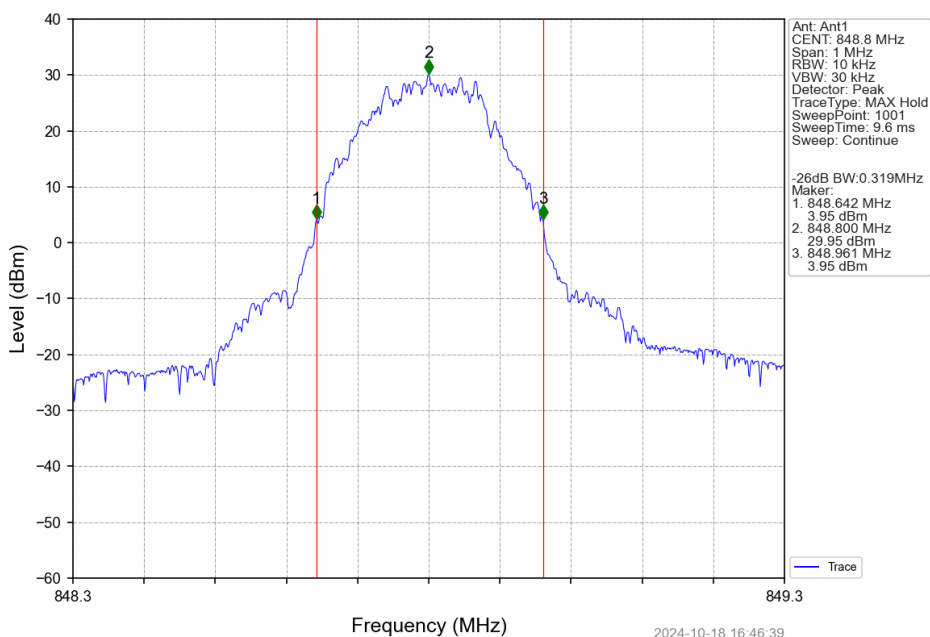
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GSM850 GPRS MCH 836.6MHz 1 TX Slot NTNV



GSM850 GPRS HCH 848.8MHz 1 TX Slot NTNV



5. Peak-Average Ratio

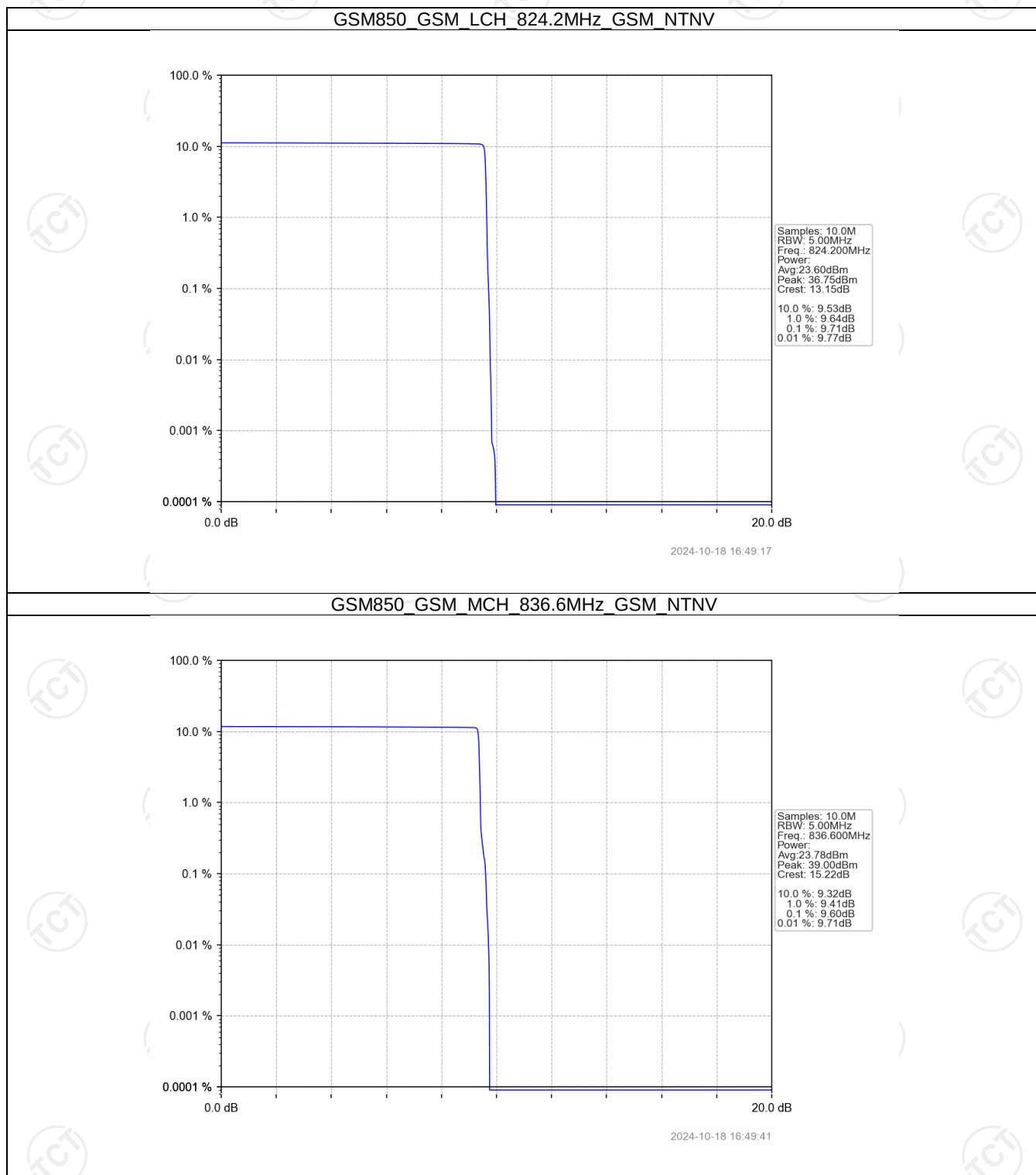
5.1 Test Result

5.1.1 GSM850

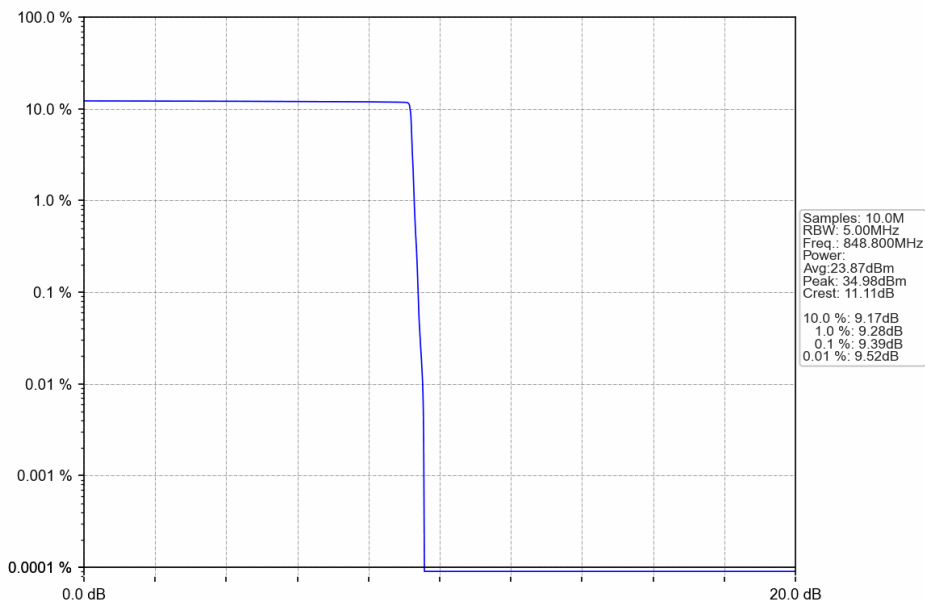
Band: GSM850						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	824.2	9.71	<=13	Pass
			836.6	9.60	<=13	Pass
			848.8	9.39	<=13	Pass
	GPRS	4 TX Slots	824.2	3.72	<=13	Pass
			836.6	3.73	<=13	Pass
			848.8	3.65	<=13	Pass

5.2 Test Graph

5.2.1 GSM850

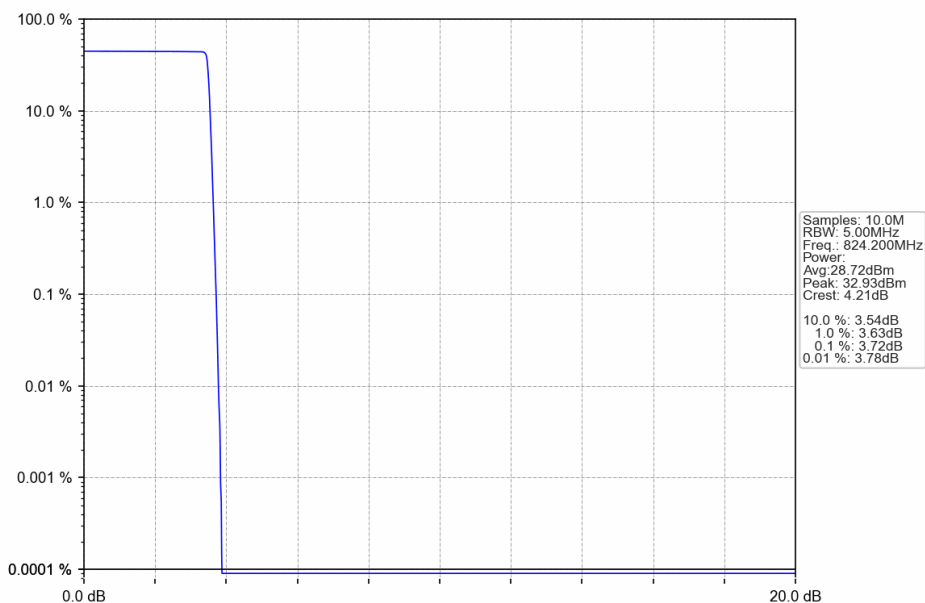


GSM850 GSM HCH 848.8MHz GSM NTN



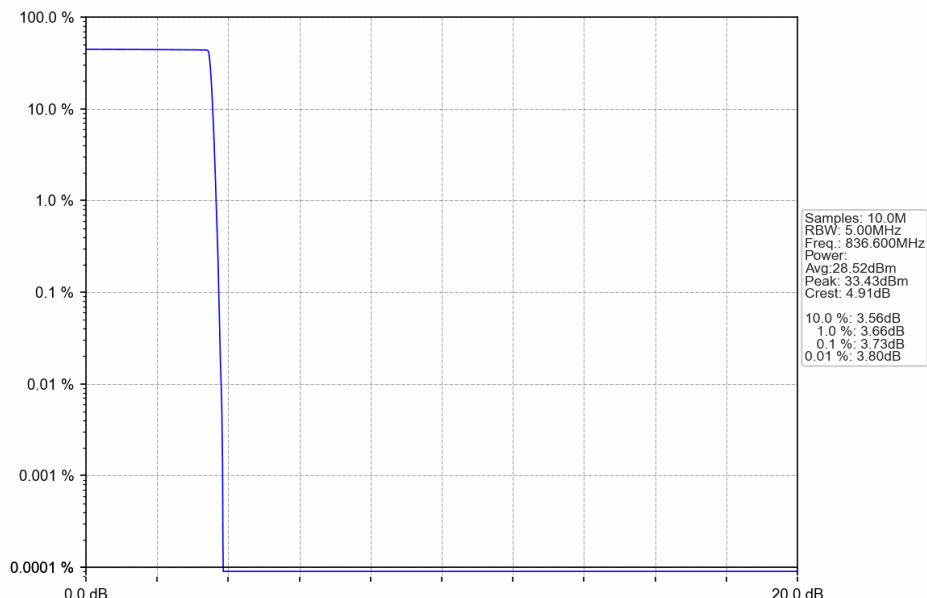
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GSM850 GPRS LCH 824.2MHz 4 TX Slots NTN



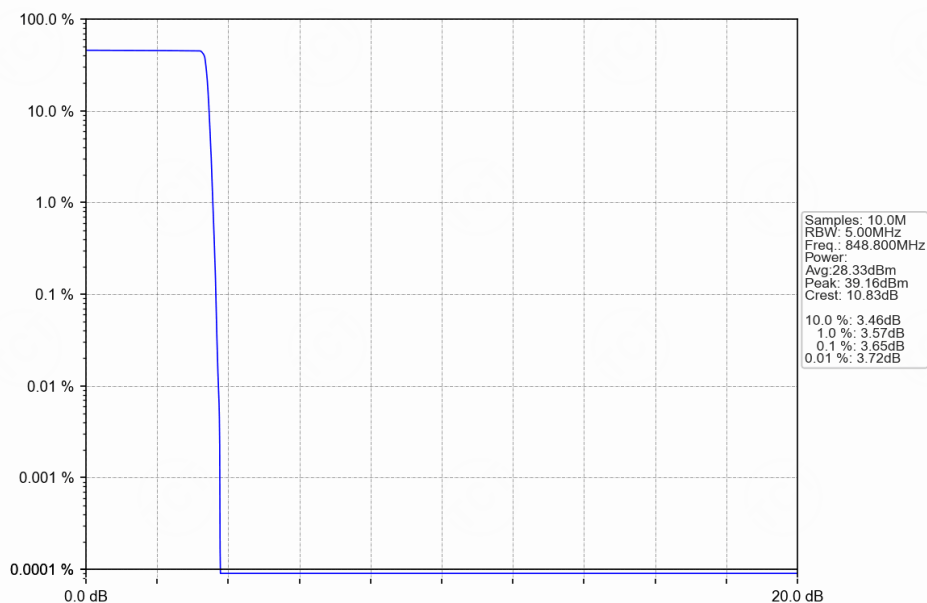
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2024-10-18 16:50:37

6. Spurious Emission

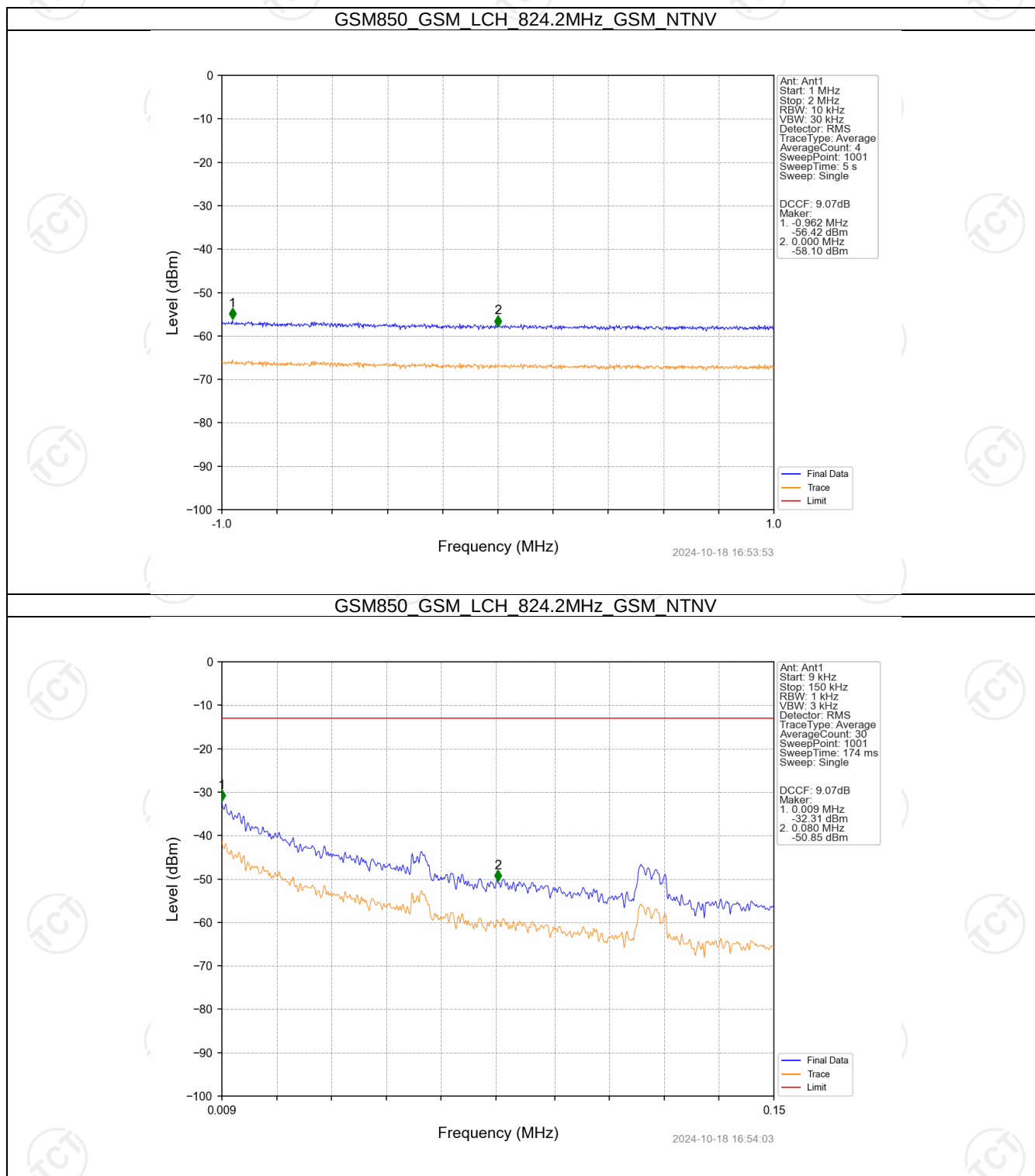
6.1 Test Result

6.1.1 GSM850

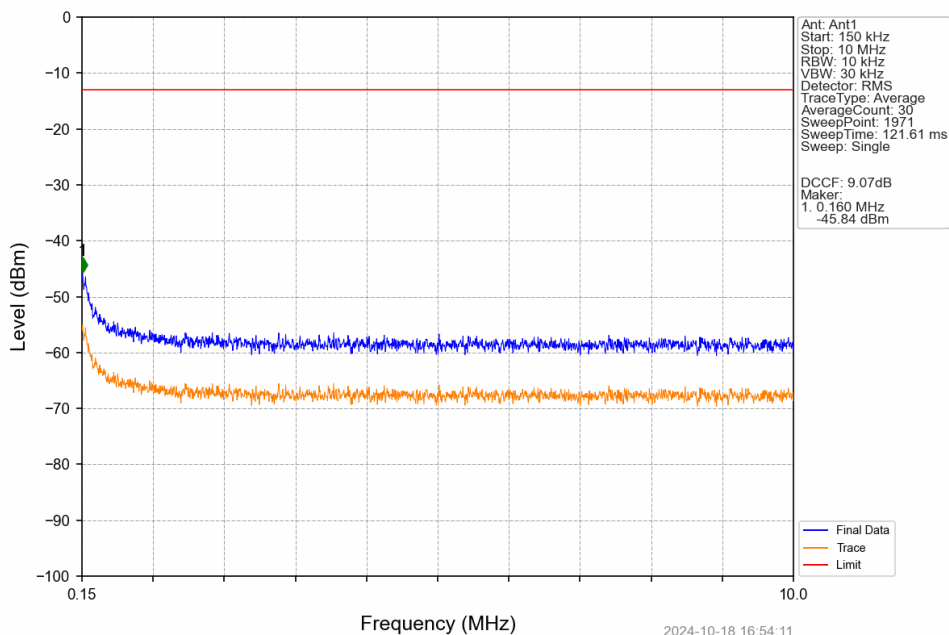
Band: GSM850					
ENV	Mode		Frequency (MHz)	Spurious Emission	
	Network	Subset		Result	Limit
NTNV	GSM	GSM	824.2	Refer To Test Graph	Pass
			836.6	Refer To Test Graph	Pass
			848.8	Refer To Test Graph	Pass
	GPRS	1 TX Slot	824.2	Refer To Test Graph	Pass
			836.6	Refer To Test Graph	Pass
			848.8	Refer To Test Graph	Pass

6.2 Test Graph

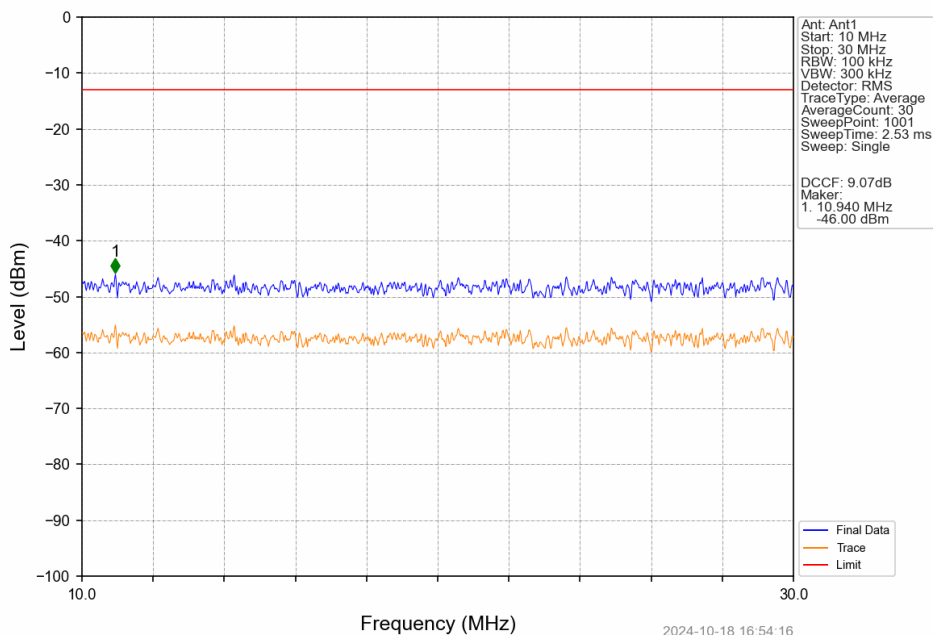
6.2.1 GSM850



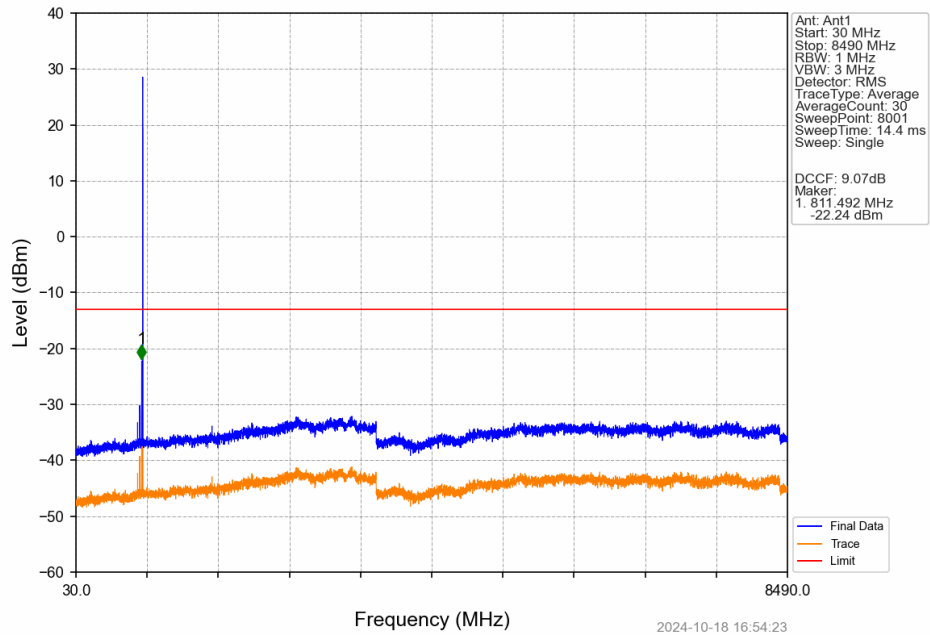
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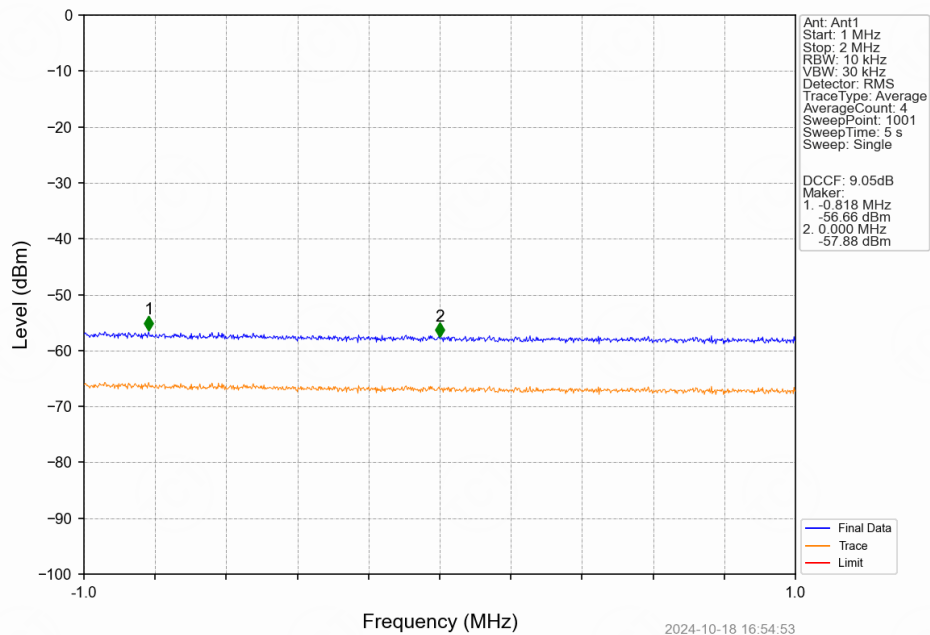
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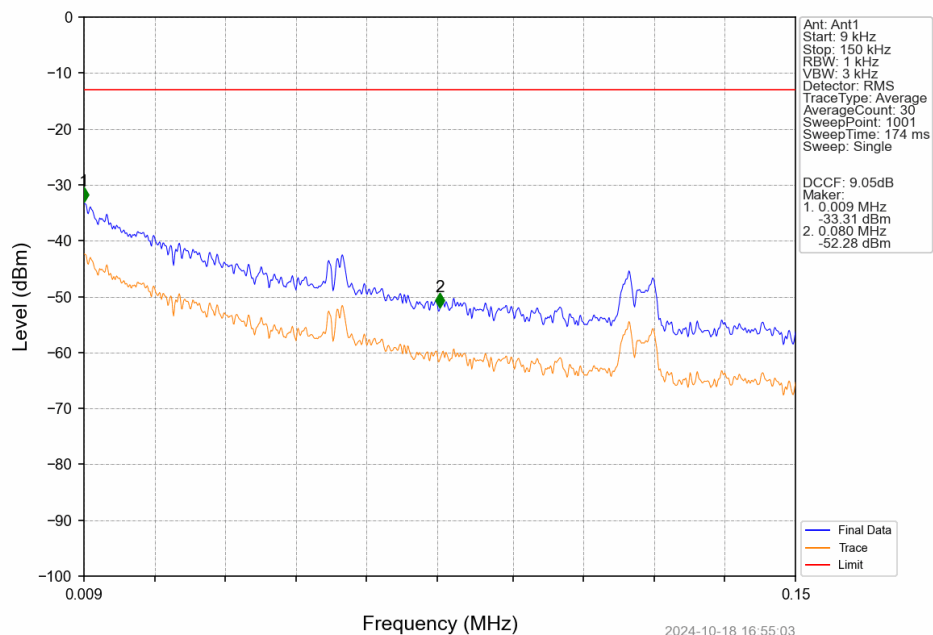
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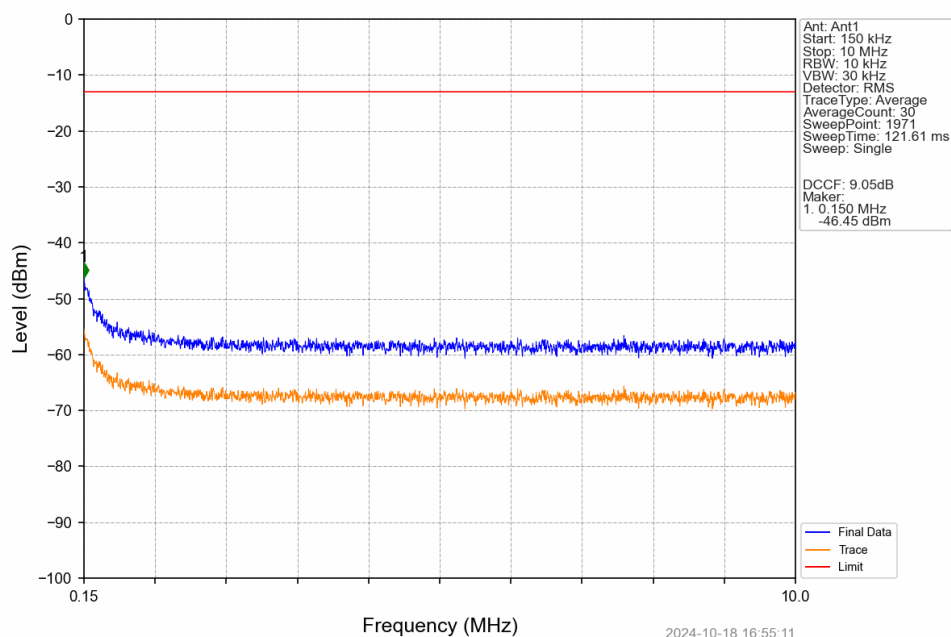
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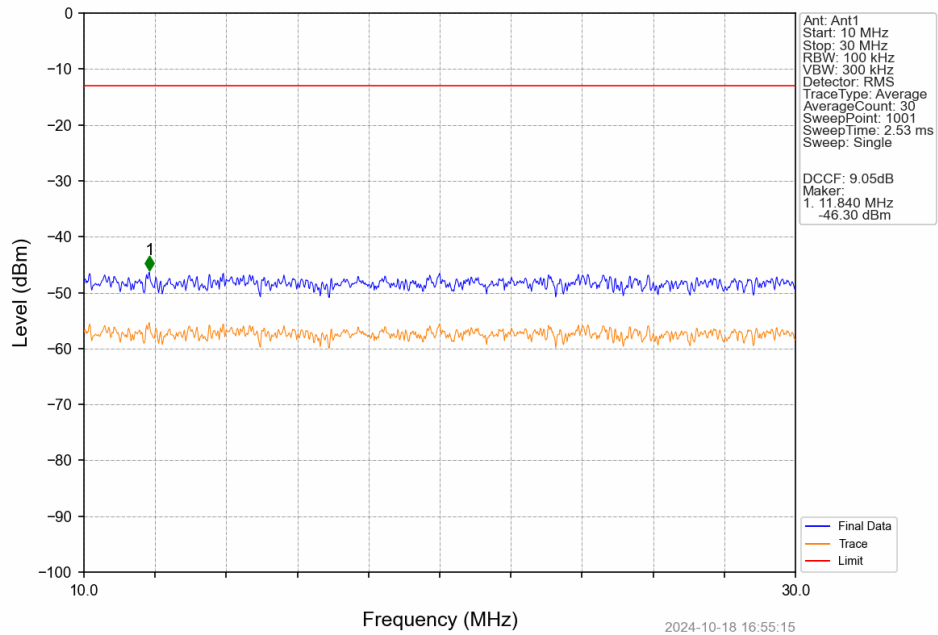
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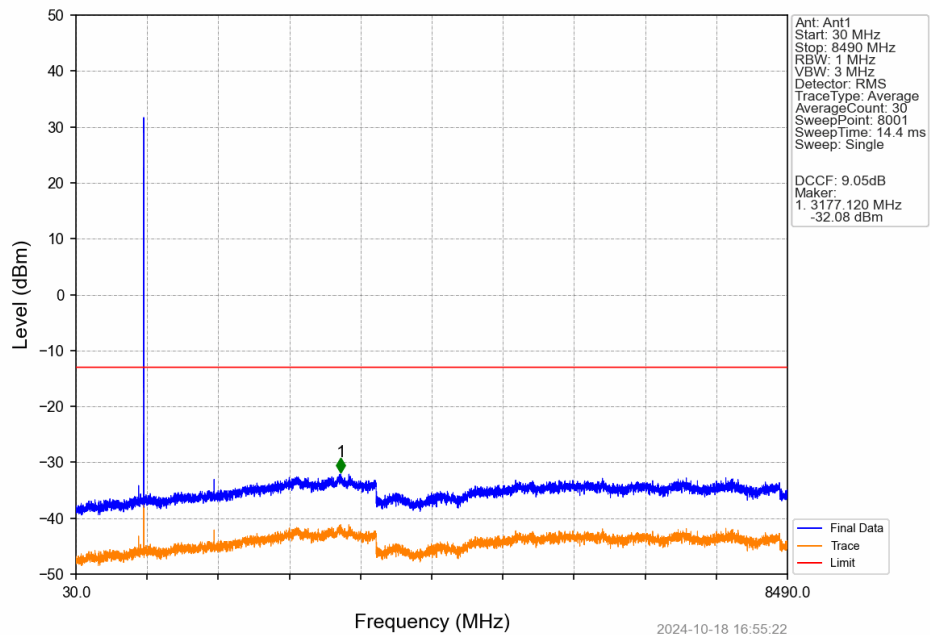
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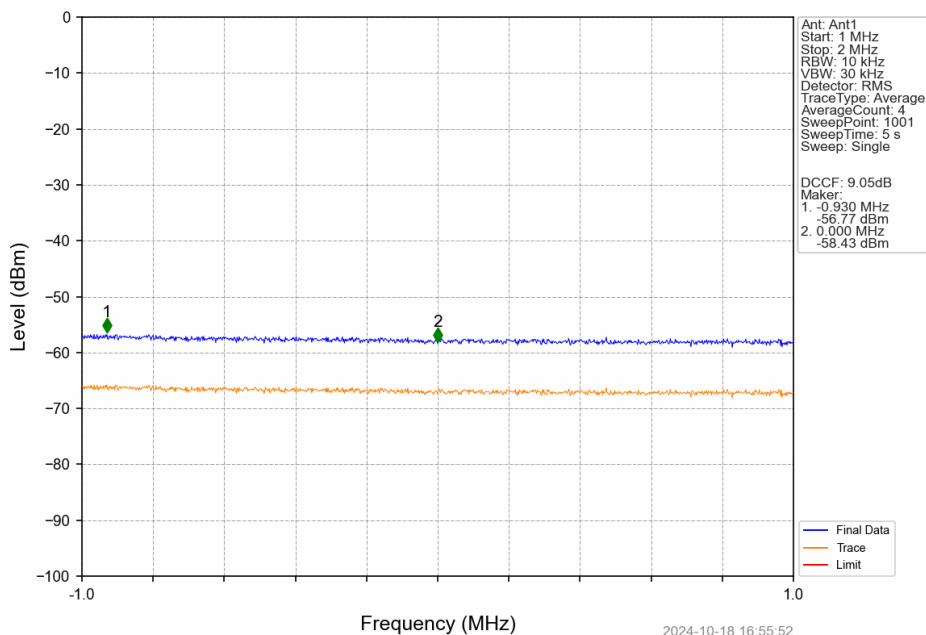
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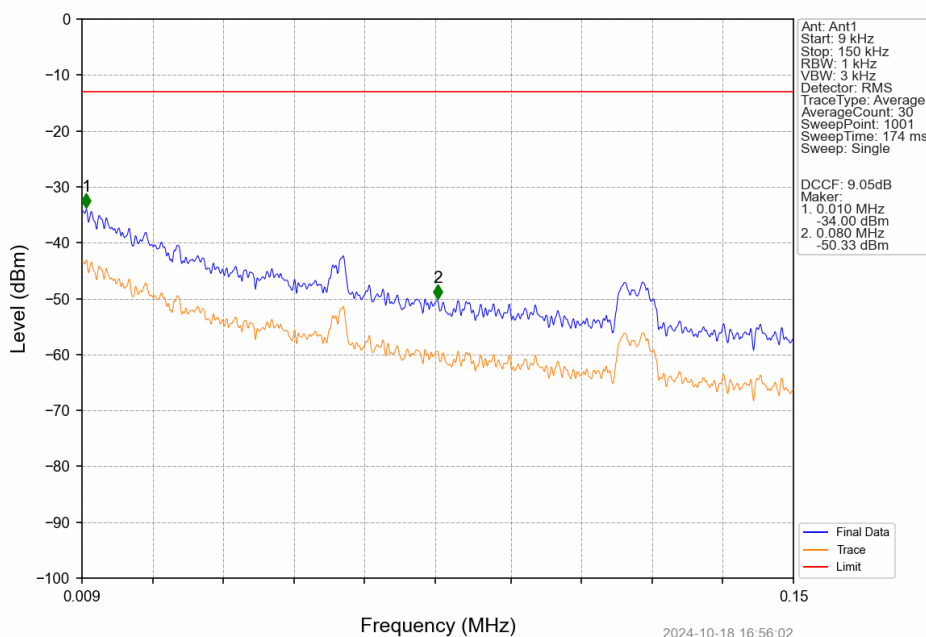
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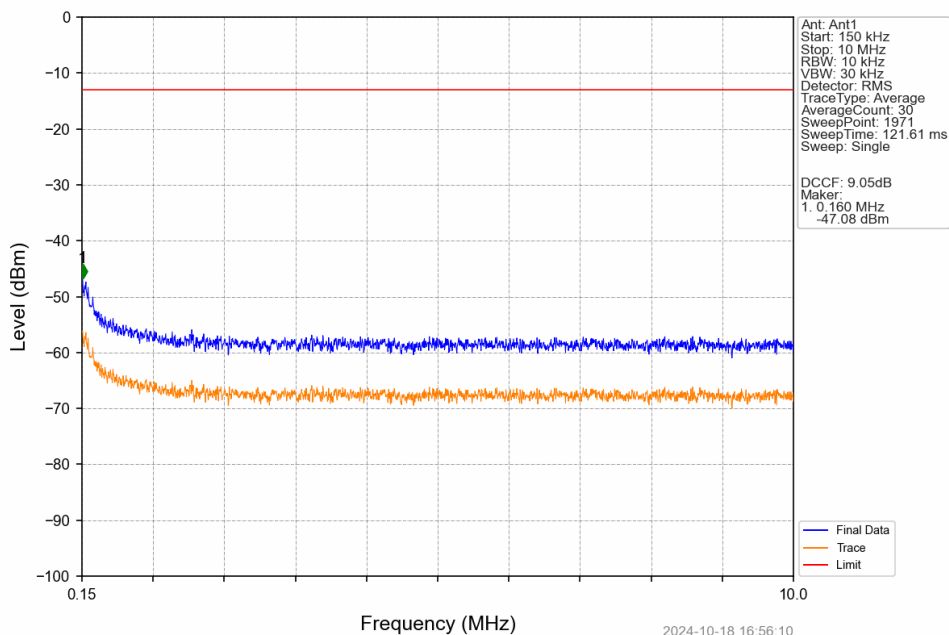
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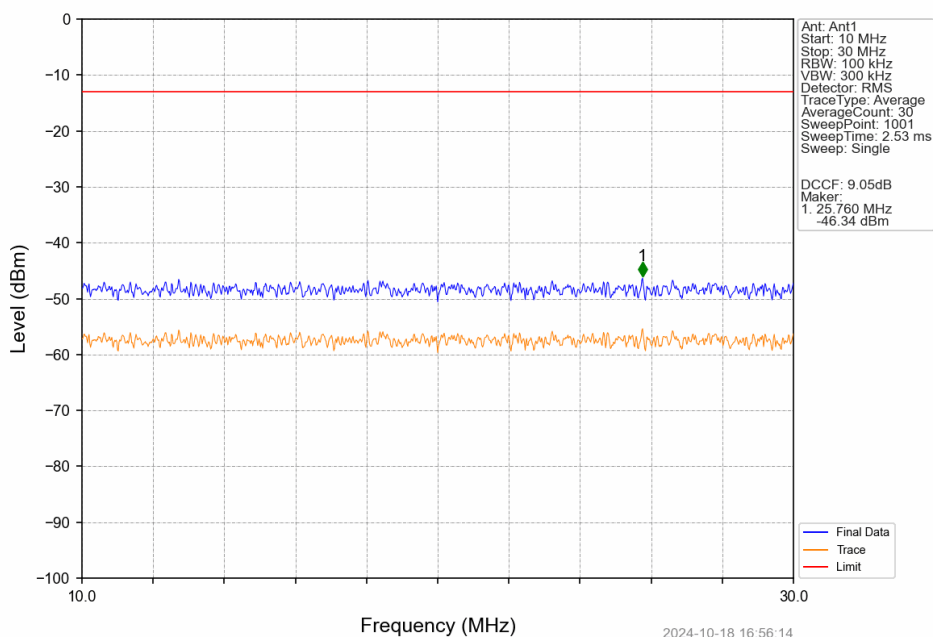
GSM850 GSM HCH 848.8MHz GSM NTNV



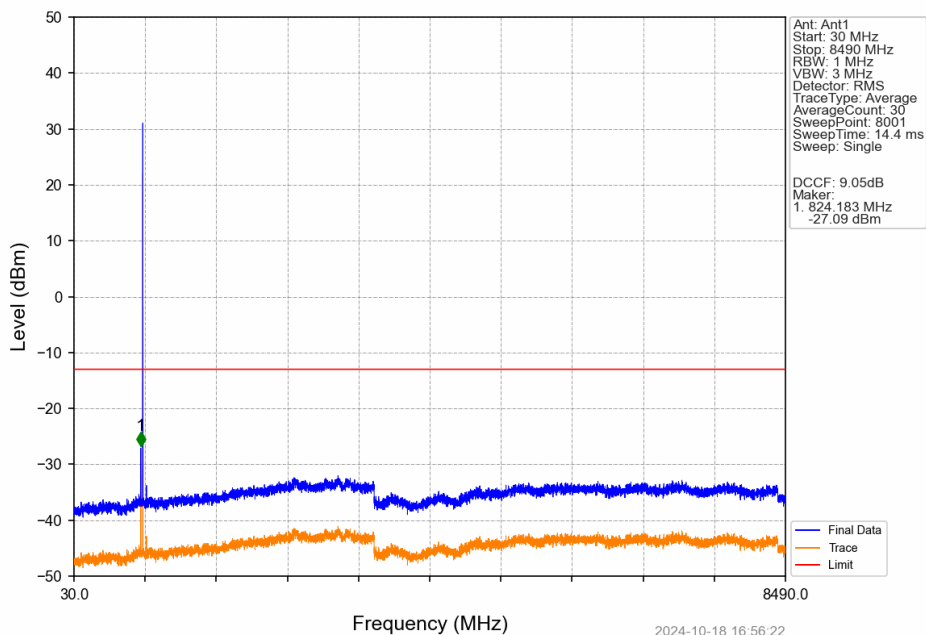
GSM850 GSM HCH 848.8MHz GSM NTN



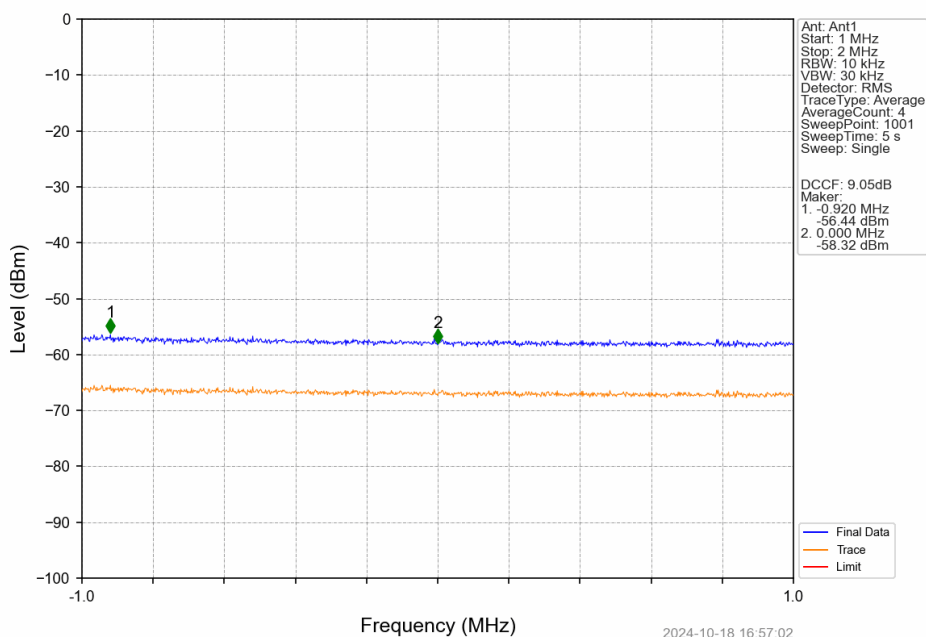
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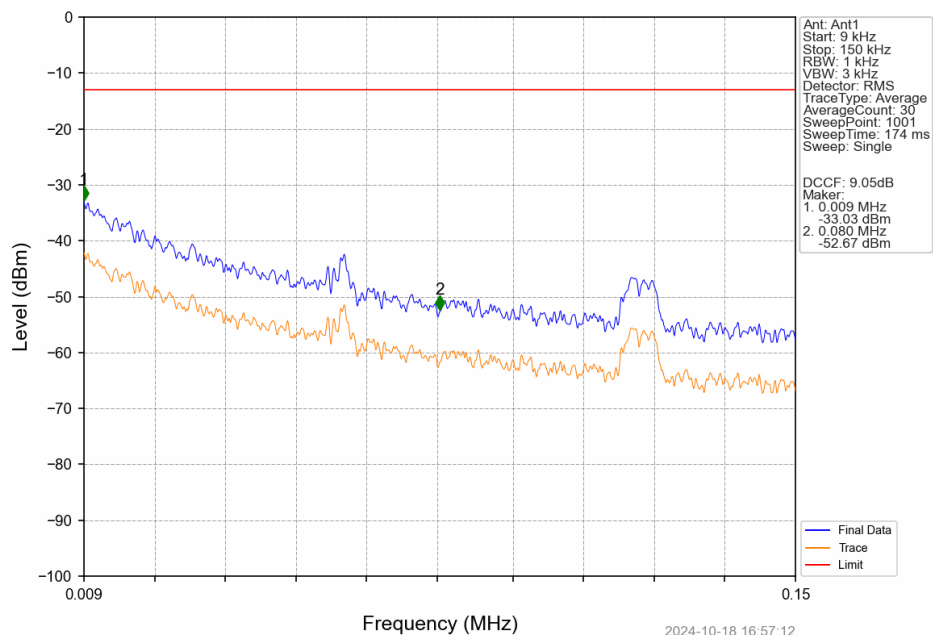
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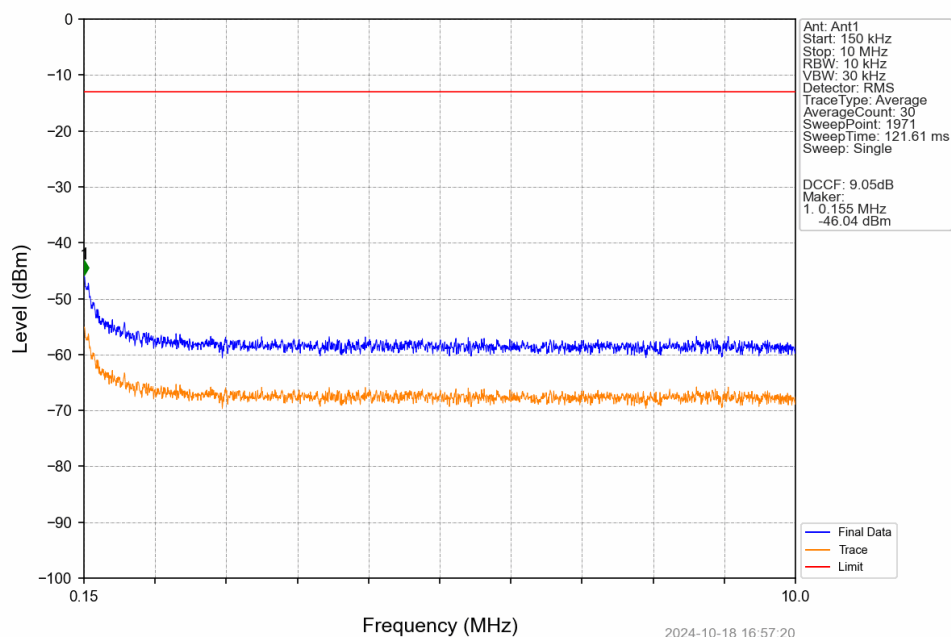
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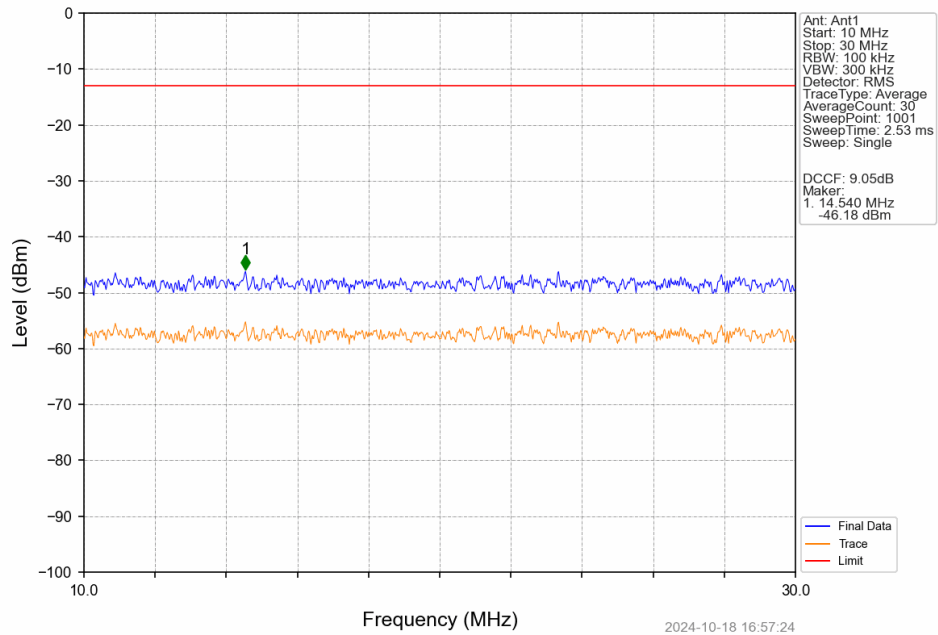
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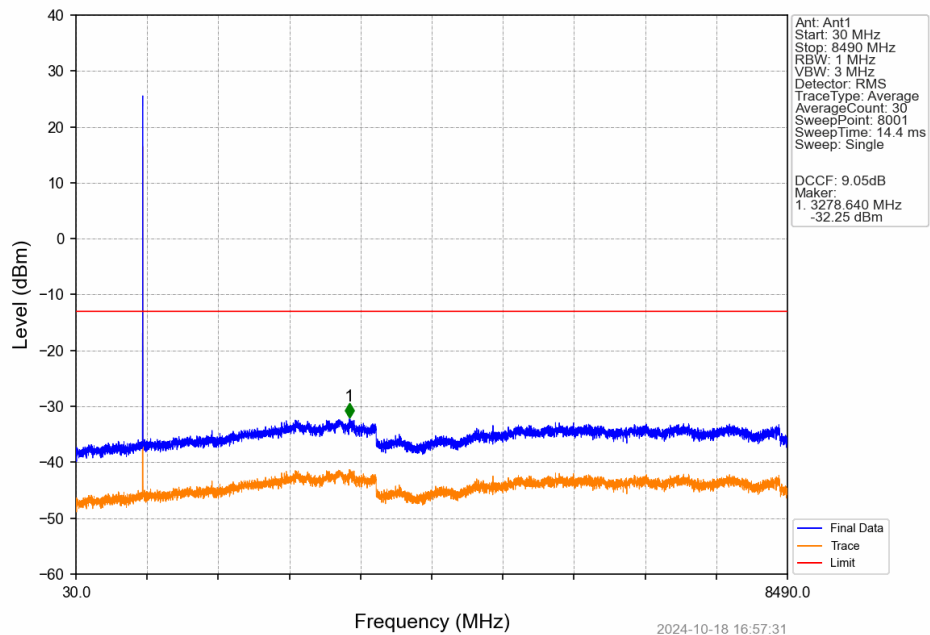
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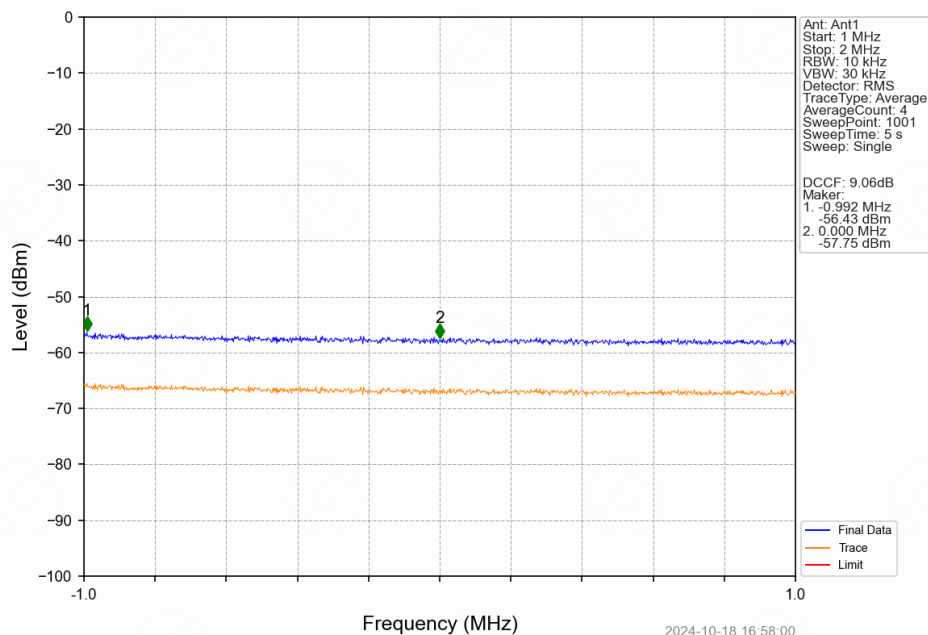
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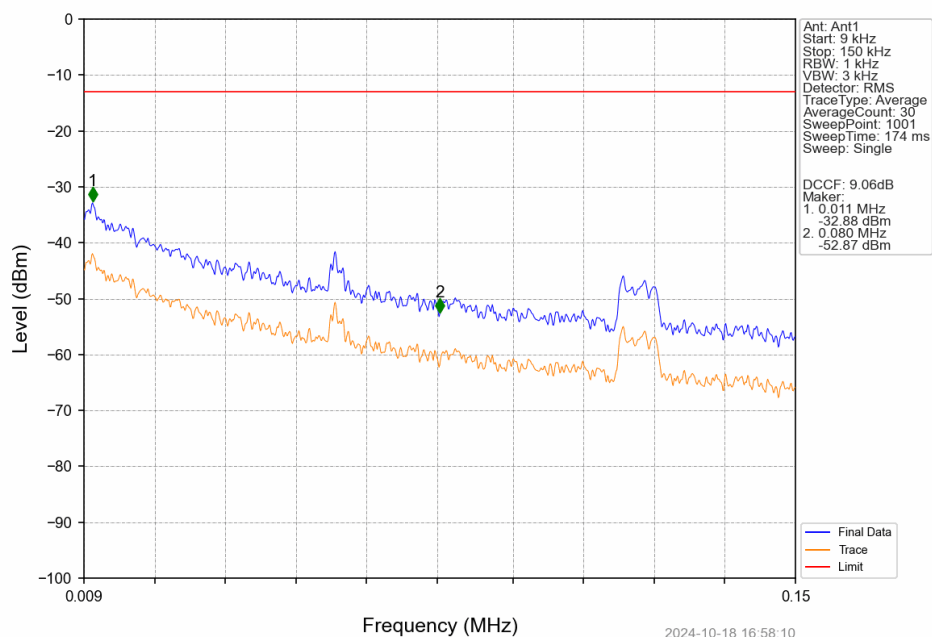
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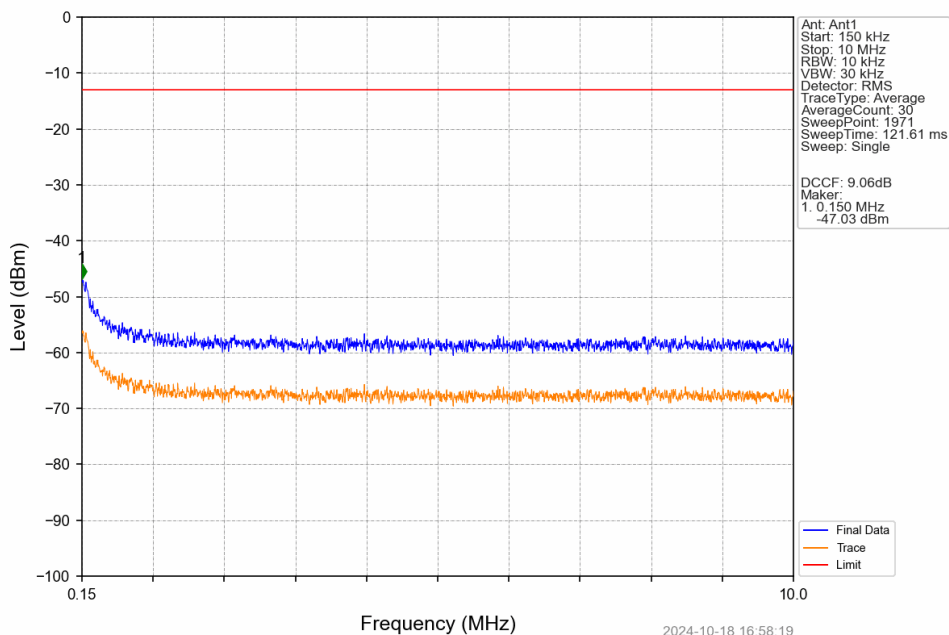
GSM850 GPRS MCH 836.6MHz 1 TX Slot NTNV



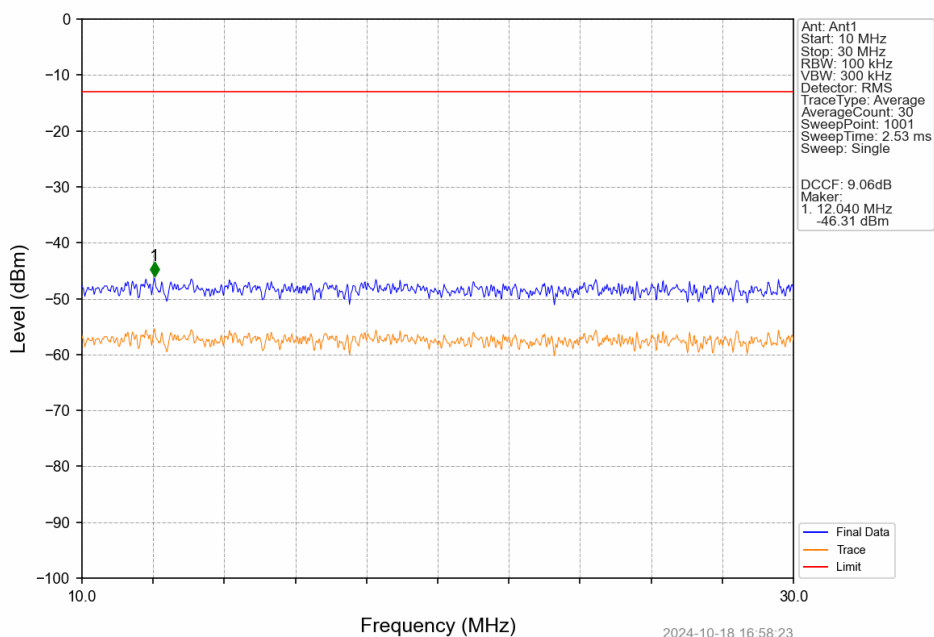
GSM850 GPRS MCH 836.6MHz 1 TX Slot NTNV



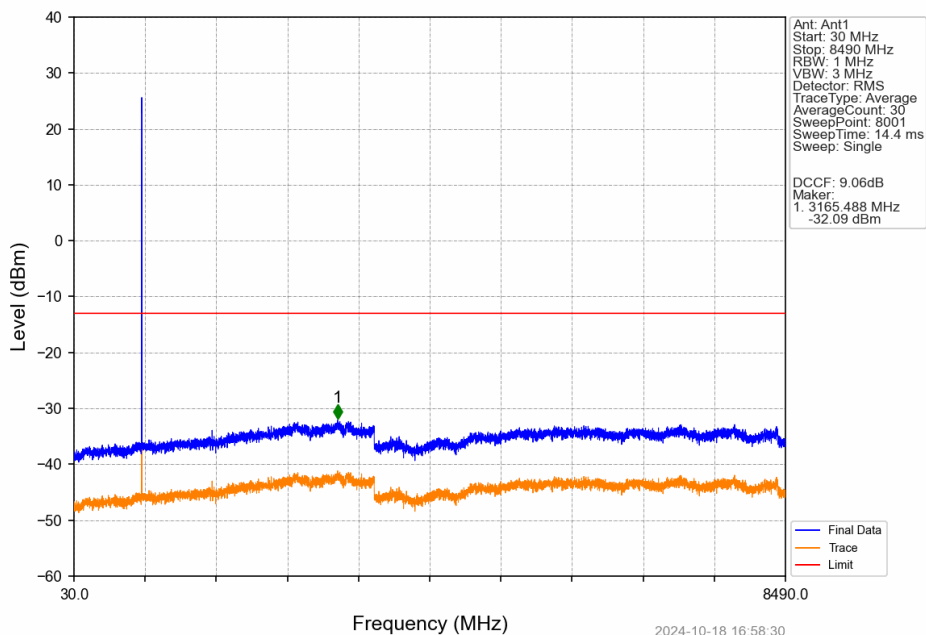
GSM850 GPRS MCH 836.6MHz 1 TX Slot NTV



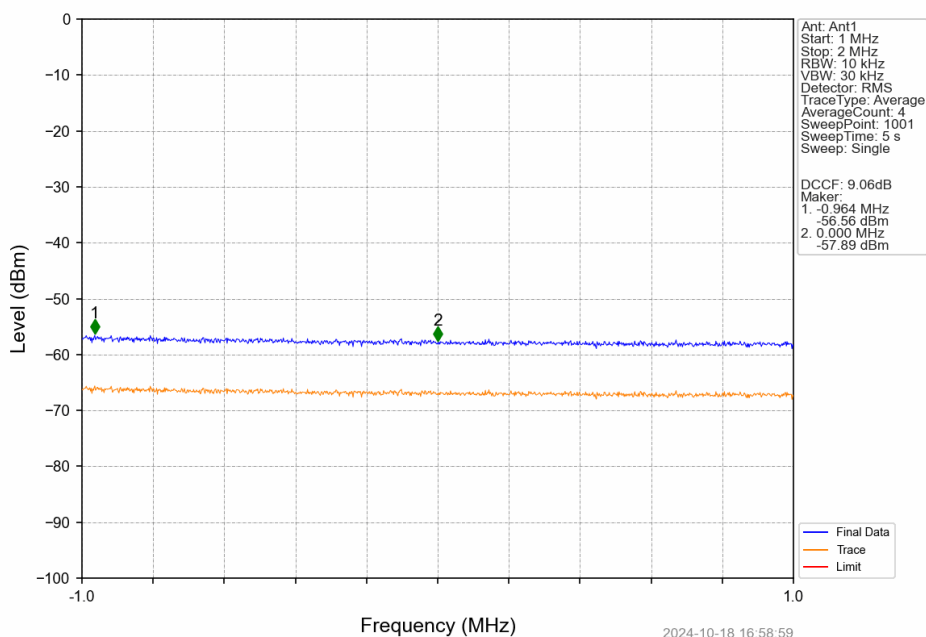
GSM850 GPRS MCH 836.6MHz 1 TX Slot NTV



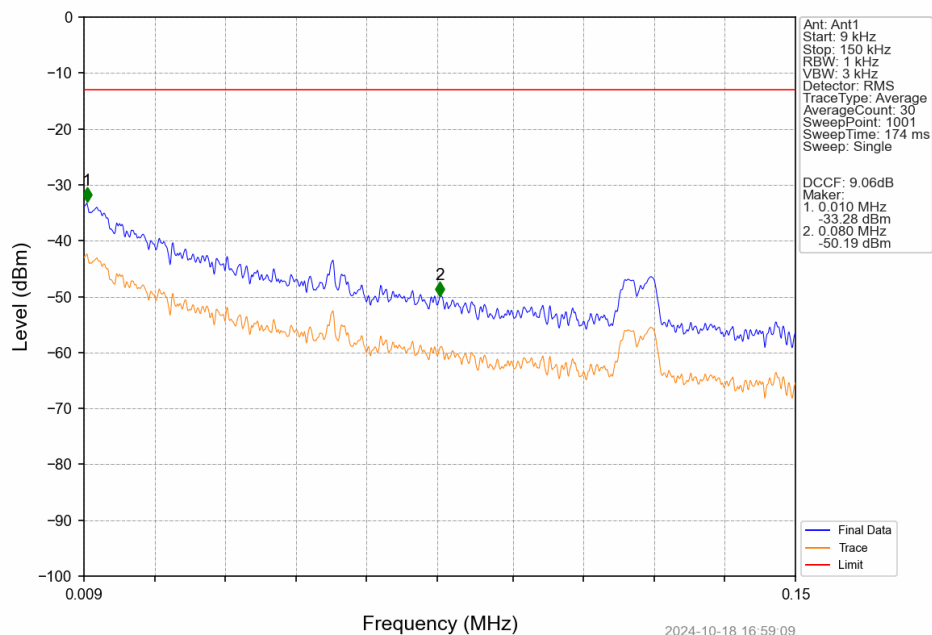
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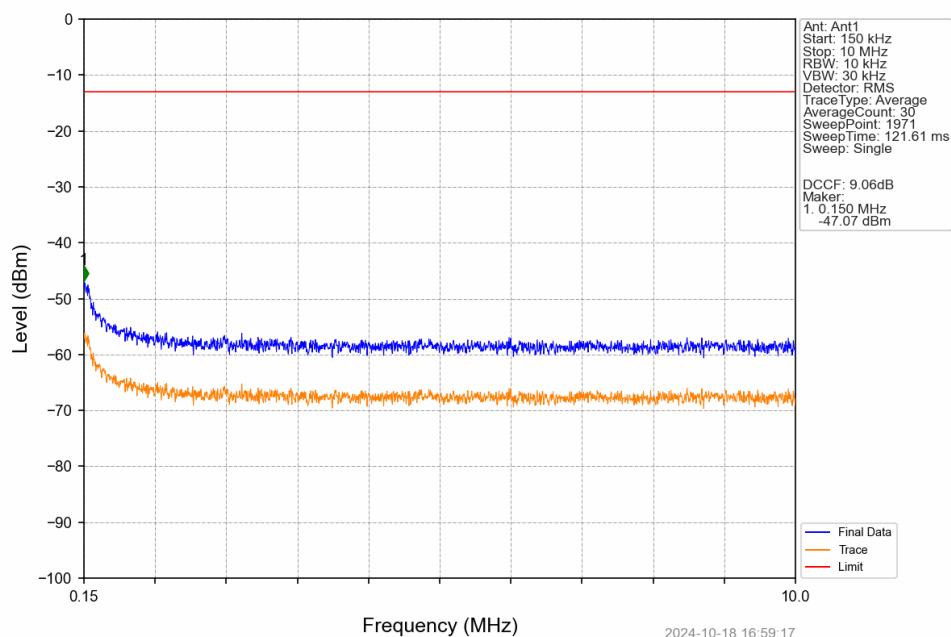
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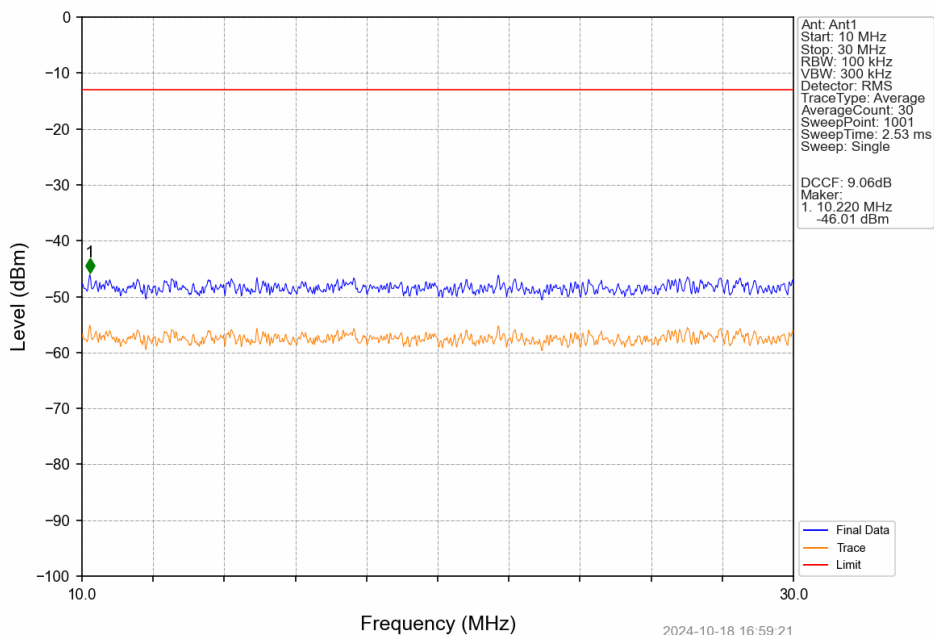
GSM850 GPRS HCH 848.8MHz 1 TX Slot NTV



GSM850 GPRS HCH 848.8MHz 1 TX Slot NTV



GSM850 GPRS HCH 848.8MHz 1 TX Slot NTNV



GSM850 GPRS HCH 848.8MHz 1 TX Slot NTNV

