

1. Effective (Isotropic) Radiated Power Output Data

1.1 GSM850_ERP

1.1.1 Test Result

Band: GSM850								
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
	Network	Subset				Result	Limit	
NTNV	GPRS	1 TX Slot	824.2	32.71	1.90	32.46	<=38.45	Pass
		2 TX Slots	824.2	31.49	1.90	31.24	<=38.45	Pass
		3 TX Slots	824.2	29.61	1.90	29.36	<=38.45	Pass
		4 TX Slots	824.2	28.76	1.90	28.51	<=38.45	Pass
		1 TX Slot	836.6	32.06	1.90	31.81	<=38.45	Pass
		2 TX Slots	836.6	31.01	1.90	30.76	<=38.45	Pass
		3 TX Slots	836.6	29.53	1.90	29.28	<=38.45	Pass
		4 TX Slots	836.6	28.01	1.90	27.76	<=38.45	Pass
		1 TX Slot	848.8	32.34	1.90	32.09	<=38.45	Pass
		2 TX Slots	848.8	31.33	1.90	31.08	<=38.45	Pass
		3 TX Slots	848.8	29.91	1.90	29.66	<=38.45	Pass
		4 TX Slots	848.8	28.41	1.90	28.16	<=38.45	Pass
	EGPRS	1 TX Slot	824.2	27.40	1.90	27.15	<=38.45	Pass
		2 TX Slots	824.2	27.25	1.90	27.00	<=38.45	Pass
		3 TX Slots	824.2	25.58	1.90	25.33	<=38.45	Pass
		4 TX Slots	824.2	24.67	1.90	24.42	<=38.45	Pass
		1 TX Slot	836.6	26.75	1.90	26.50	<=38.45	Pass
		2 TX Slots	836.6	26.63	1.90	26.38	<=38.45	Pass
		3 TX Slots	836.6	25.12	1.90	24.87	<=38.45	Pass
		4 TX Slots	836.6	24.31	1.90	24.06	<=38.45	Pass
		1 TX Slot	848.8	26.80	1.90	26.55	<=38.45	Pass
		2 TX Slots	848.8	26.52	1.90	26.27	<=38.45	Pass
		3 TX Slots	848.8	25.27	1.90	25.02	<=38.45	Pass
		4 TX Slots	848.8	24.57	1.90	24.32	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 GSM850

2.1.1 Test Result

Band: GSM850							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
GPRS	824.2	20	3.3	24.957	0.0303	-2.5 to 2.5	Pass
			3.8	28.056	0.0340	-2.5 to 2.5	Pass
			4.3	34.675	0.0421	-2.5 to 2.5	Pass
		-30	3.8	31.188	0.0378	-2.5 to 2.5	Pass
		-20	3.8	32.867	0.0399	-2.5 to 2.5	Pass
		-10	3.8	27.701	0.0336	-2.5 to 2.5	Pass

		0	3.8	30.413	0.0369	-2.5 to 2.5	Pass
		10	3.8	31.543	0.0383	-2.5 to 2.5	Pass
		30	3.8	29.703	0.0360	-2.5 to 2.5	Pass
		40	3.8	25.280	0.0307	-2.5 to 2.5	Pass
		50	3.8	27.863	0.0338	-2.5 to 2.5	Pass
	836.6	20	3.3	29.864	0.0357	-2.5 to 2.5	Pass
			3.8	30.704	0.0367	-2.5 to 2.5	Pass
			4.3	25.861	0.0309	-2.5 to 2.5	Pass
		-30	3.8	26.604	0.0318	-2.5 to 2.5	Pass
		-20	3.8	32.447	0.0388	-2.5 to 2.5	Pass
		-10	3.8	33.287	0.0398	-2.5 to 2.5	Pass
		0	3.8	32.124	0.0384	-2.5 to 2.5	Pass
		10	3.8	32.318	0.0386	-2.5 to 2.5	Pass
		30	3.8	31.995	0.0382	-2.5 to 2.5	Pass
		40	3.8	28.993	0.0347	-2.5 to 2.5	Pass
		50	3.8	26.055	0.0311	-2.5 to 2.5	Pass
	848.8	20	3.3	24.214	0.0285	-2.5 to 2.5	Pass
			3.8	22.891	0.0270	-2.5 to 2.5	Pass
			4.3	22.019	0.0259	-2.5 to 2.5	Pass
		-30	3.8	27.185	0.0320	-2.5 to 2.5	Pass
		-20	3.8	24.537	0.0289	-2.5 to 2.5	Pass
		-10	3.8	30.736	0.0362	-2.5 to 2.5	Pass
		0	3.8	27.185	0.0320	-2.5 to 2.5	Pass
		10	3.8	22.665	0.0267	-2.5 to 2.5	Pass
		30	3.8	29.832	0.0351	-2.5 to 2.5	Pass
		40	3.8	25.409	0.0299	-2.5 to 2.5	Pass
		50	3.8	31.091	0.0366	-2.5 to 2.5	Pass
EGPRS	824.2	20	3.3	24.634	0.0299	-2.5 to 2.5	Pass
			3.8	29.090	0.0353	-2.5 to 2.5	Pass
			4.3	26.700	0.0324	-2.5 to 2.5	Pass
		-30	3.8	31.446	0.0382	-2.5 to 2.5	Pass
		-20	3.8	23.892	0.0290	-2.5 to 2.5	Pass
		-10	3.8	32.157	0.0390	-2.5 to 2.5	Pass
		0	3.8	29.477	0.0358	-2.5 to 2.5	Pass
		10	3.8	25.215	0.0306	-2.5 to 2.5	Pass
		30	3.8	30.349	0.0368	-2.5 to 2.5	Pass
		40	3.8	25.829	0.0313	-2.5 to 2.5	Pass
		50	3.8	30.768	0.0373	-2.5 to 2.5	Pass
	836.6	20	3.3	30.316	0.0362	-2.5 to 2.5	Pass
			3.8	32.286	0.0386	-2.5 to 2.5	Pass
			4.3	31.285	0.0374	-2.5 to 2.5	Pass
		-30	3.8	26.959	0.0322	-2.5 to 2.5	Pass
		-20	3.8	25.861	0.0309	-2.5 to 2.5	Pass
		-10	3.8	27.282	0.0326	-2.5 to 2.5	Pass
		0	3.8	29.316	0.0350	-2.5 to 2.5	Pass
		10	3.8	24.828	0.0297	-2.5 to 2.5	Pass
		30	3.8	31.898	0.0381	-2.5 to 2.5	Pass
		40	3.8	23.407	0.0280	-2.5 to 2.5	Pass
		50	3.8	33.158	0.0396	-2.5 to 2.5	Pass
	848.8	20	3.3	23.472	0.0277	-2.5 to 2.5	Pass
			3.8	27.895	0.0329	-2.5 to 2.5	Pass
			4.3	28.121	0.0331	-2.5 to 2.5	Pass
		-30	3.8	27.669	0.0326	-2.5 to 2.5	Pass
		-20	3.8	28.767	0.0339	-2.5 to 2.5	Pass
		-10	3.8	32.673	0.0385	-2.5 to 2.5	Pass
		0	3.8	27.637	0.0326	-2.5 to 2.5	Pass
		10	3.8	28.508	0.0336	-2.5 to 2.5	Pass

		30	3.8	29.897	0.0352	-2.5 to 2.5	Pass
		40	3.8	31.866	0.0375	-2.5 to 2.5	Pass
		50	3.8	22.665	0.0267	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 GSM850_OBW

3.1.1 Test Result

Band: GSM850						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	1 TX Slot	824.2	0.249	/	Pass
			836.6	0.245	/	Pass
			848.8	0.245	/	Pass
	EGPRS	1 TX Slot	824.2	0.244	/	Pass
			836.6	0.238	/	Pass
			848.8	0.242	/	Pass

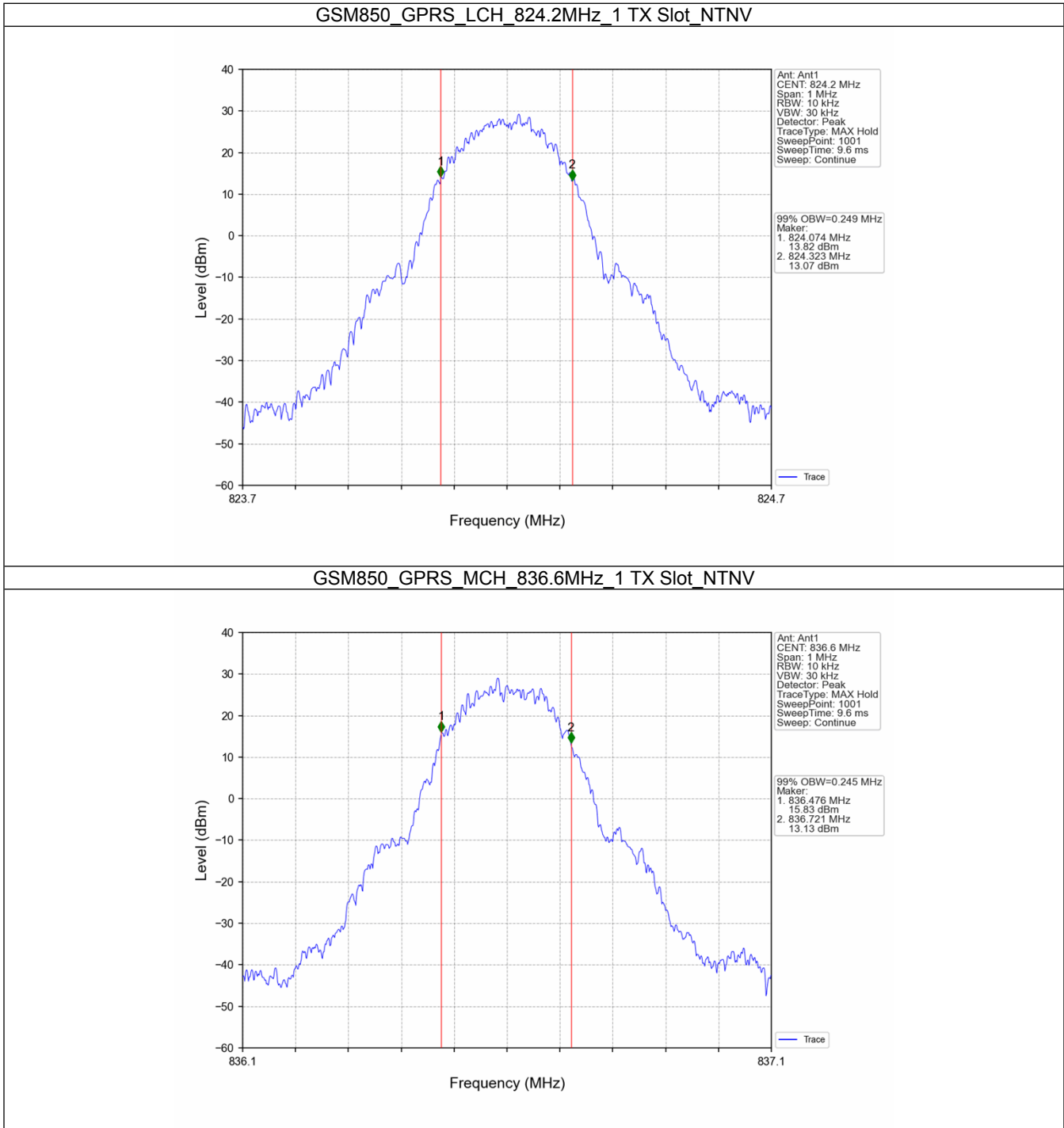
3.2 GSM850_XDB

3.2.1 Test Result

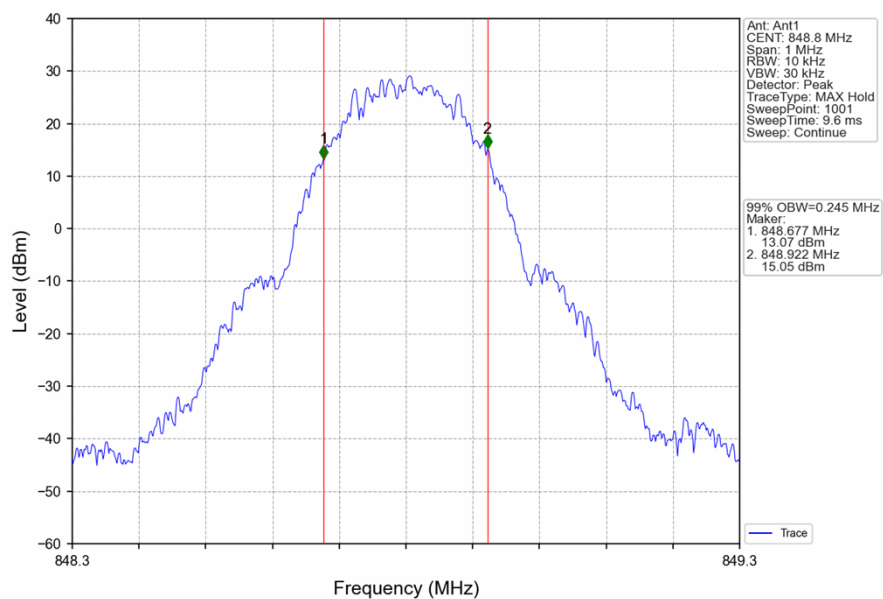
Band: GSM850						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	1 TX Slot	824.2	0.313	/	Pass
			836.6	0.316	/	Pass
			848.8	0.316	/	Pass
	EGPRS	1 TX Slot	824.2	0.302	/	Pass
			836.6	0.307	/	Pass
			848.8	0.311	/	Pass

3.1 GSM850_OBW

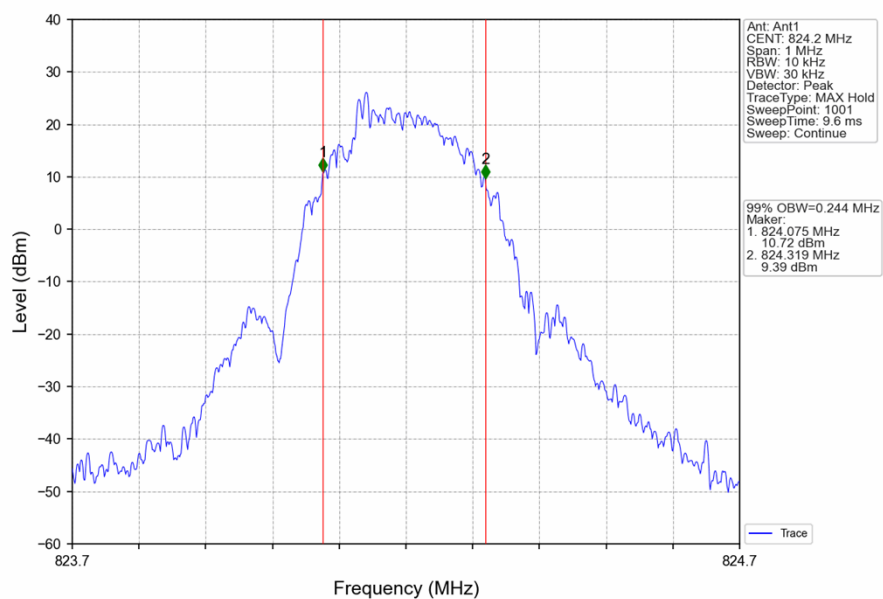
3.1.2 Test Graph



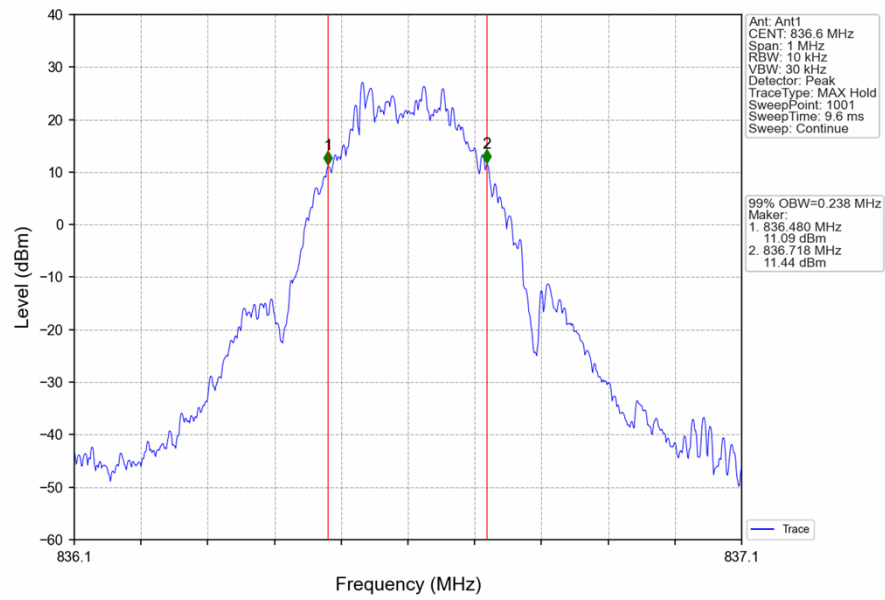
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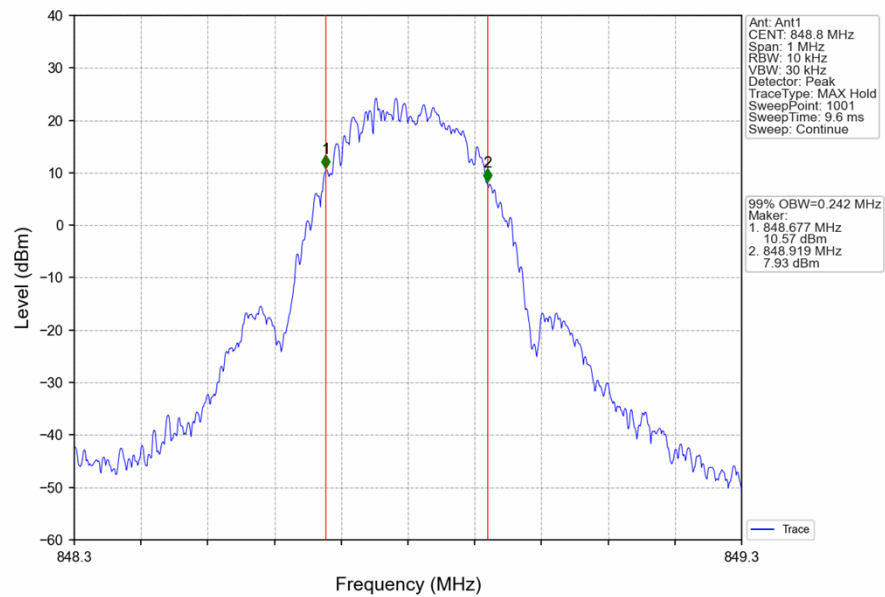
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GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV

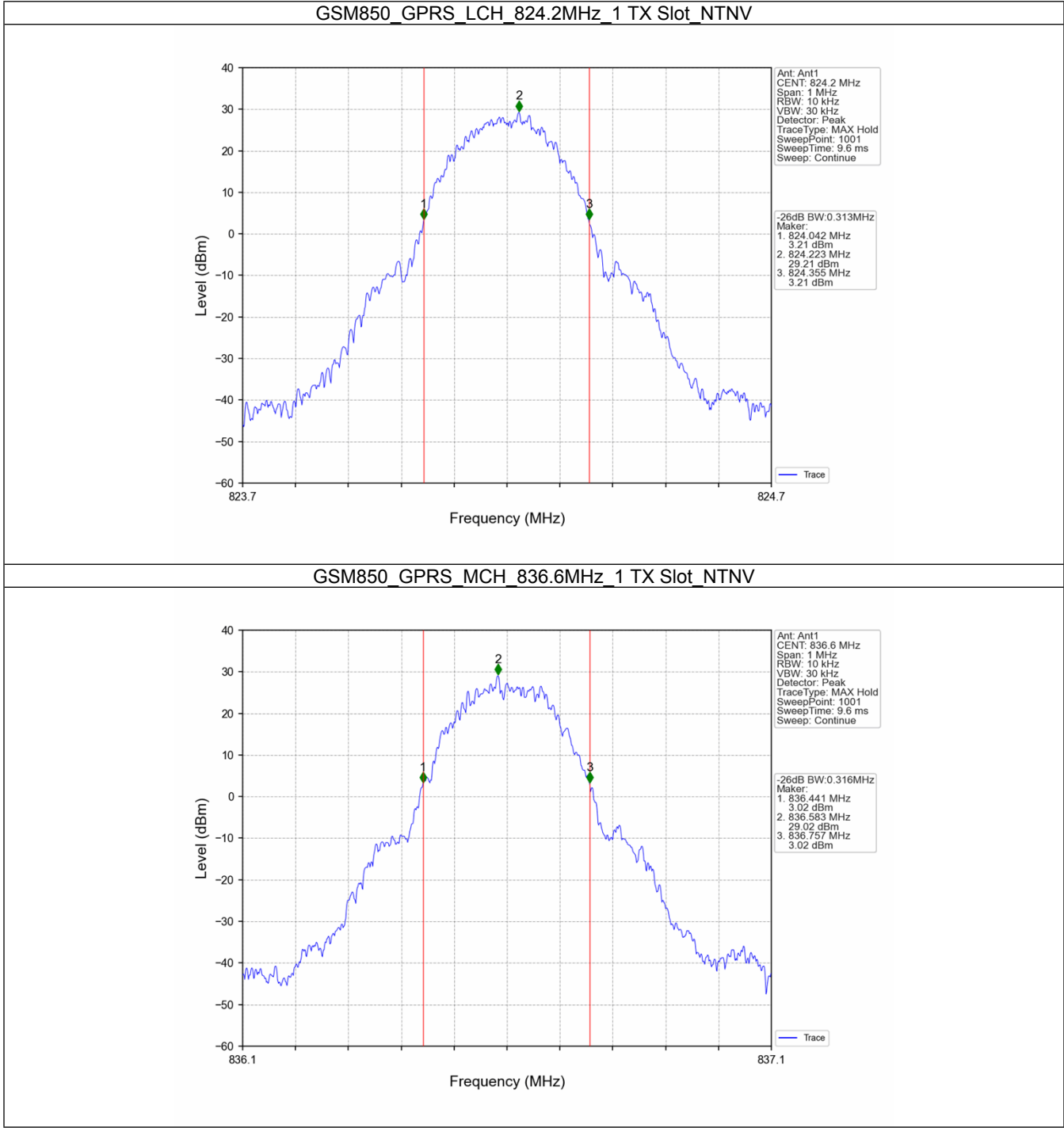


GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV

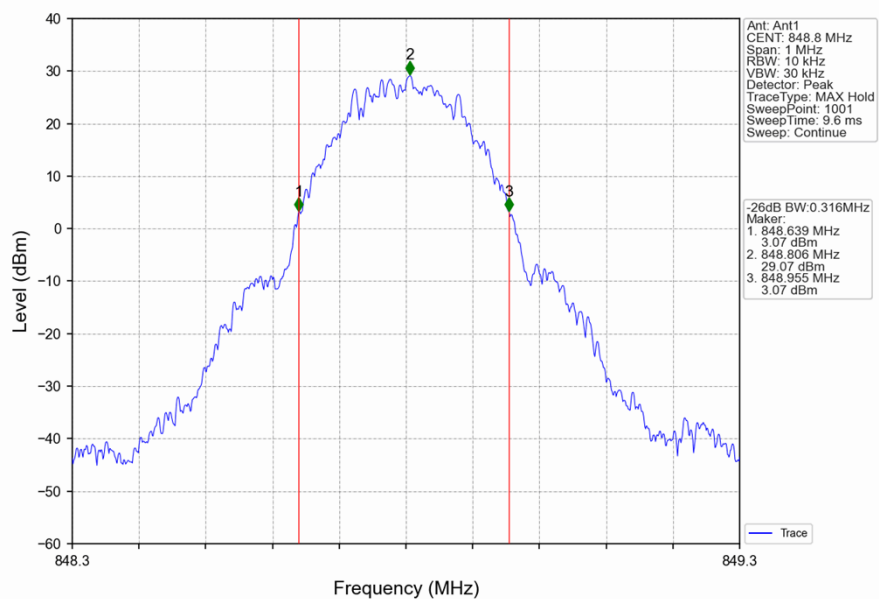


3.2 GSM850_XDB

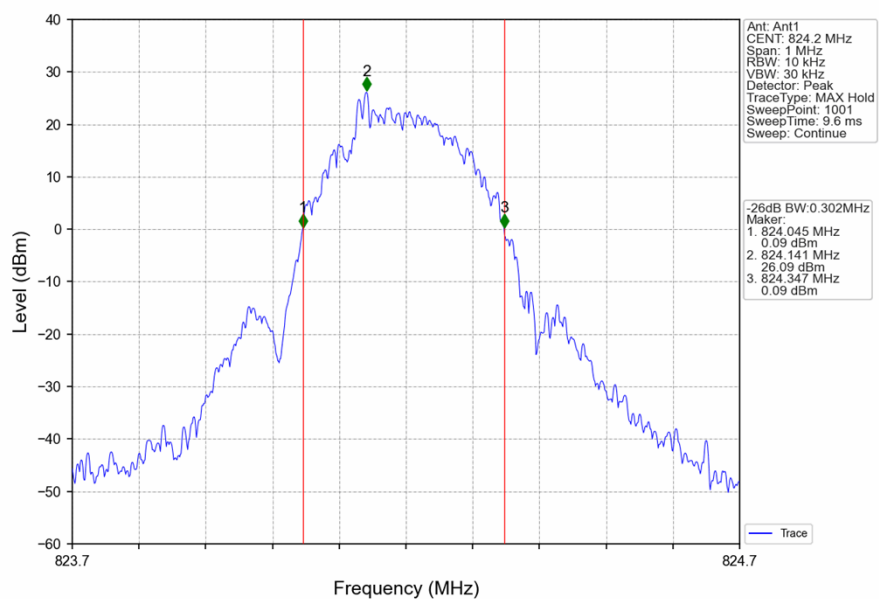
3.2.2 Test Graph



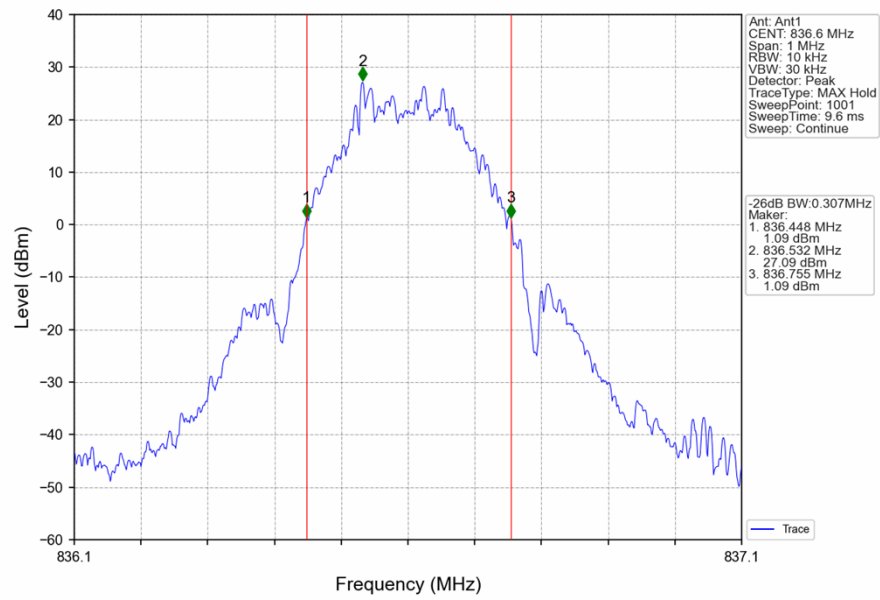
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



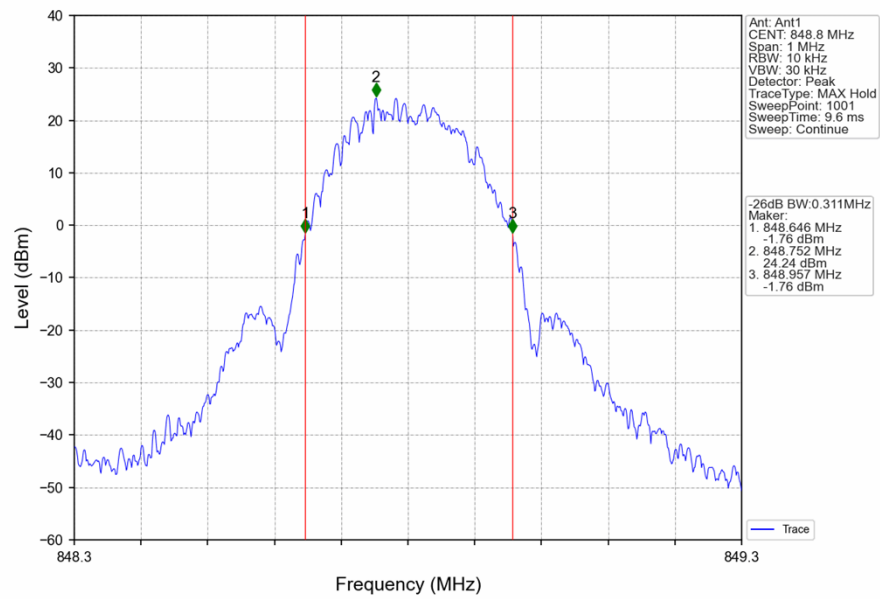
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV



4. Peak-Average Ratio

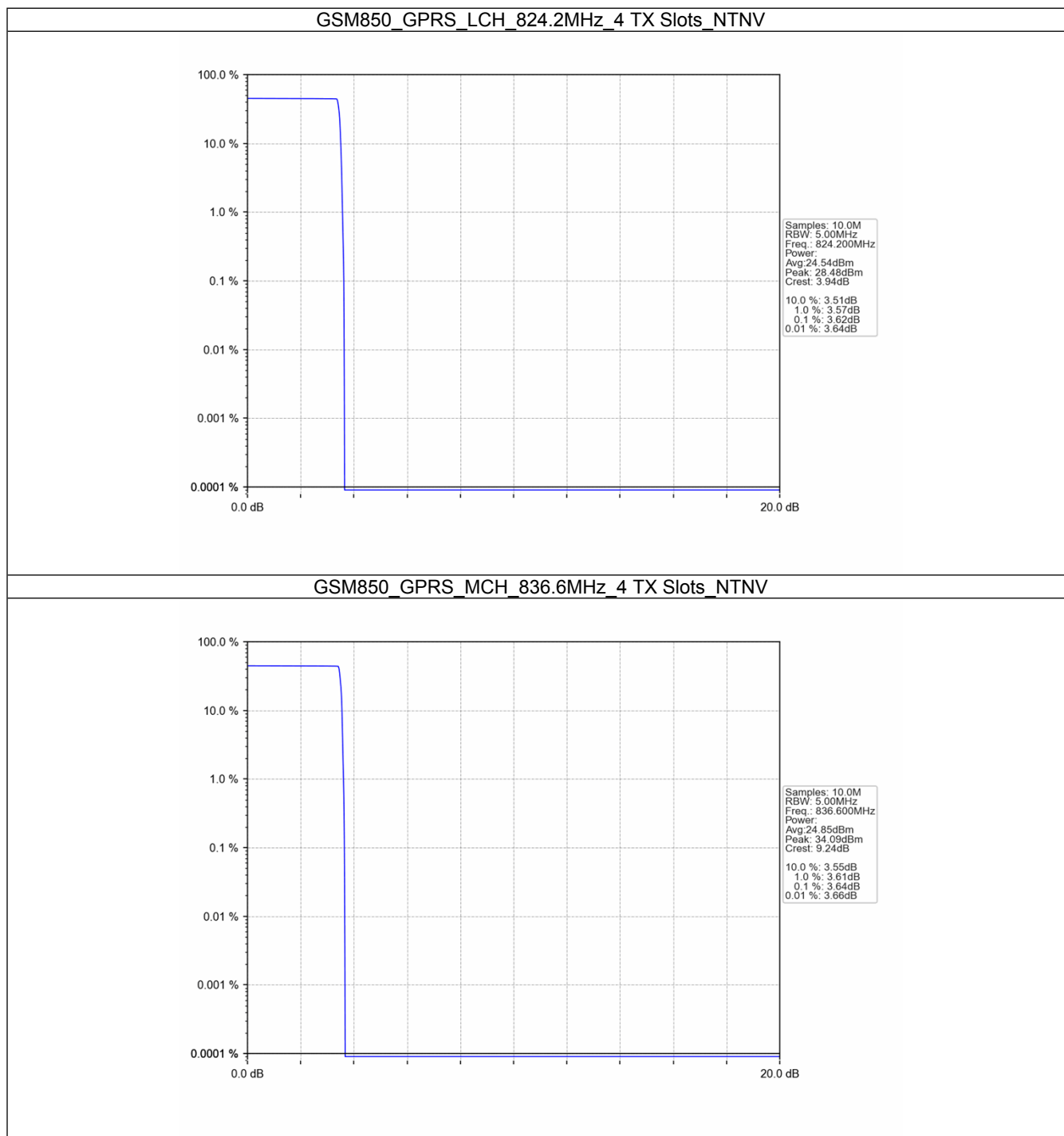
4.1 GSM850

4.1.1 Test Result

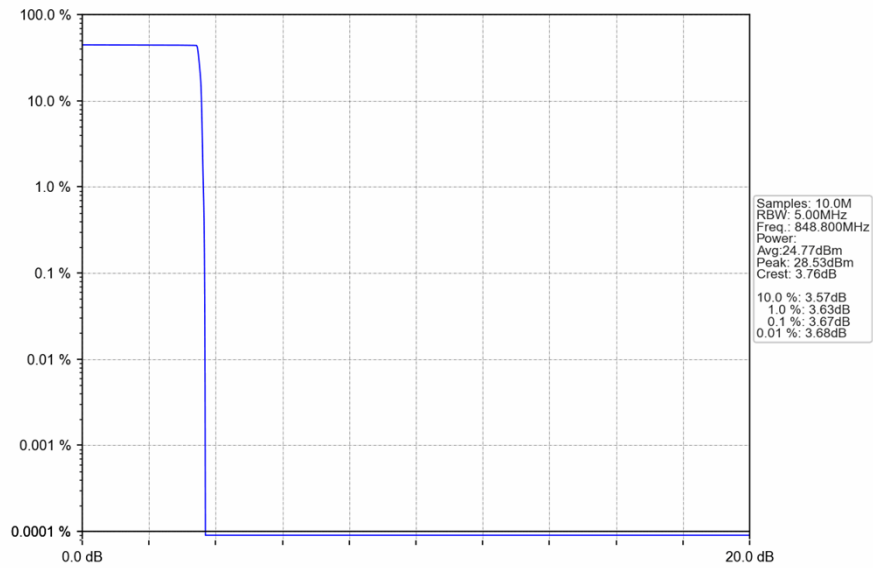
Band: GSM850						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	4 TX Slots	824.2	3.62	<=13	Pass
			836.6	3.64	<=13	Pass
			848.8	3.67	<=13	Pass
	EGPRS	4 TX Slots	824.2	7.39	<=13	Pass
			836.6	7.95	<=13	Pass
			848.8	7.99	<=13	Pass

4.1 GSM850

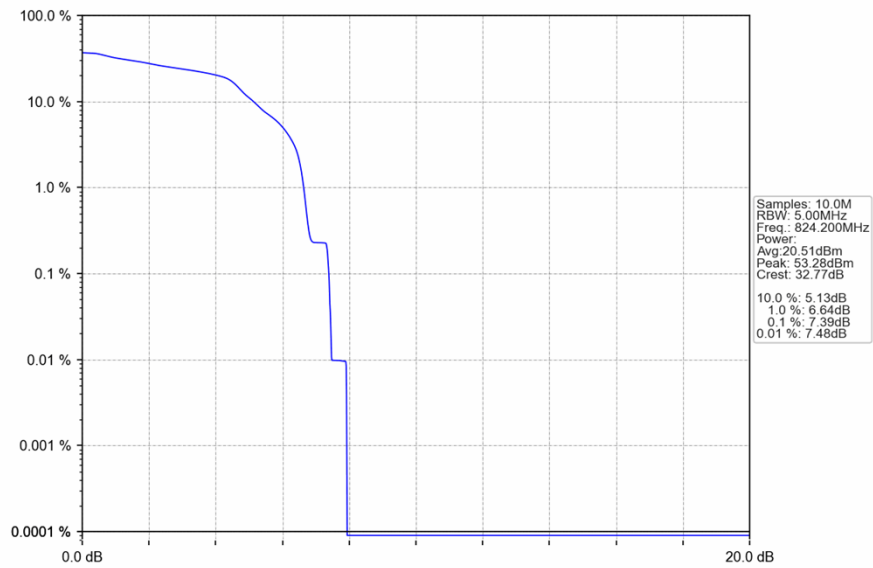
4.1.2 Test Graph



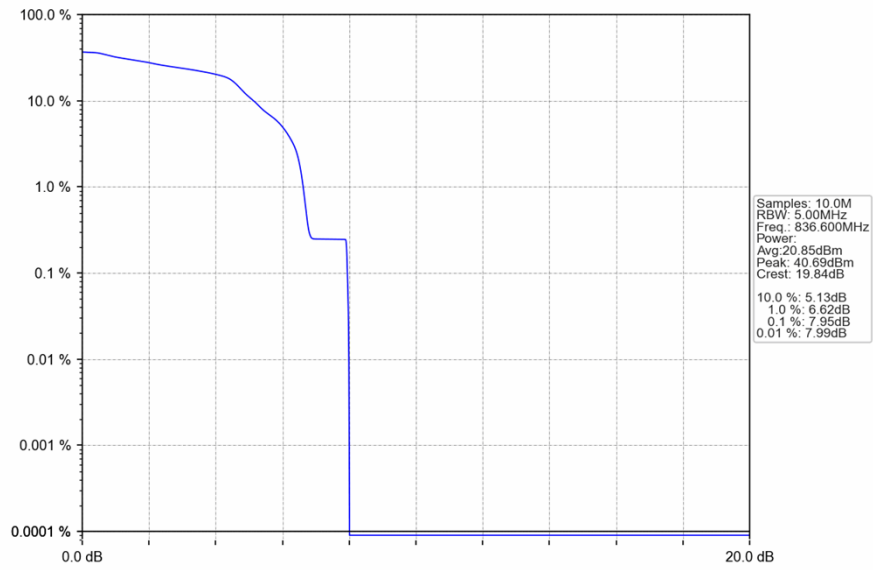
GSM850_GPRS_HCH_848.8MHz_4 TX Slots_NTNV



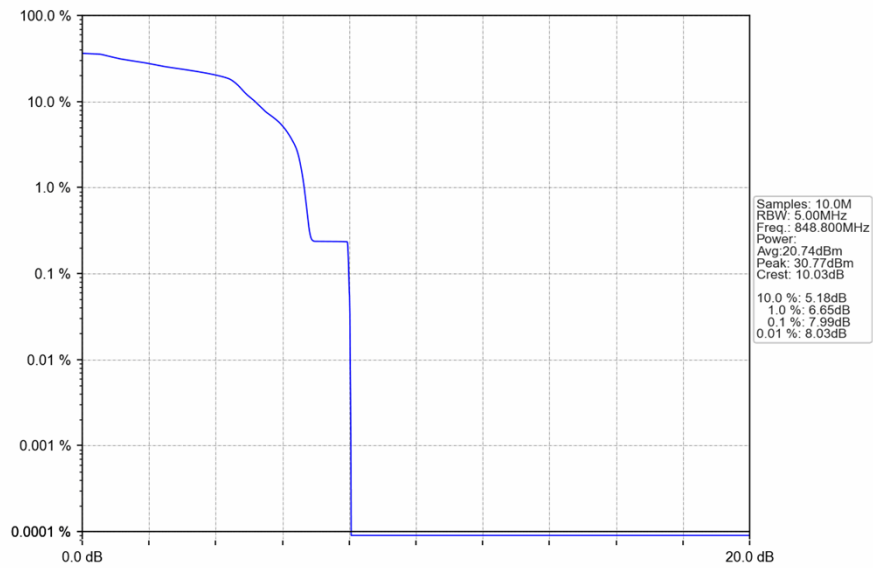
GSM850_EGPRS_LCH_824.2MHz_4 TX Slots_NTNV



GSM850_EGPRS_MCH_836.6MHz_4 TX Slots_NTNV



GSM850_EGPRS_HCH_848.8MHz_4 TX Slots_NTNV



5. Spurious Emission

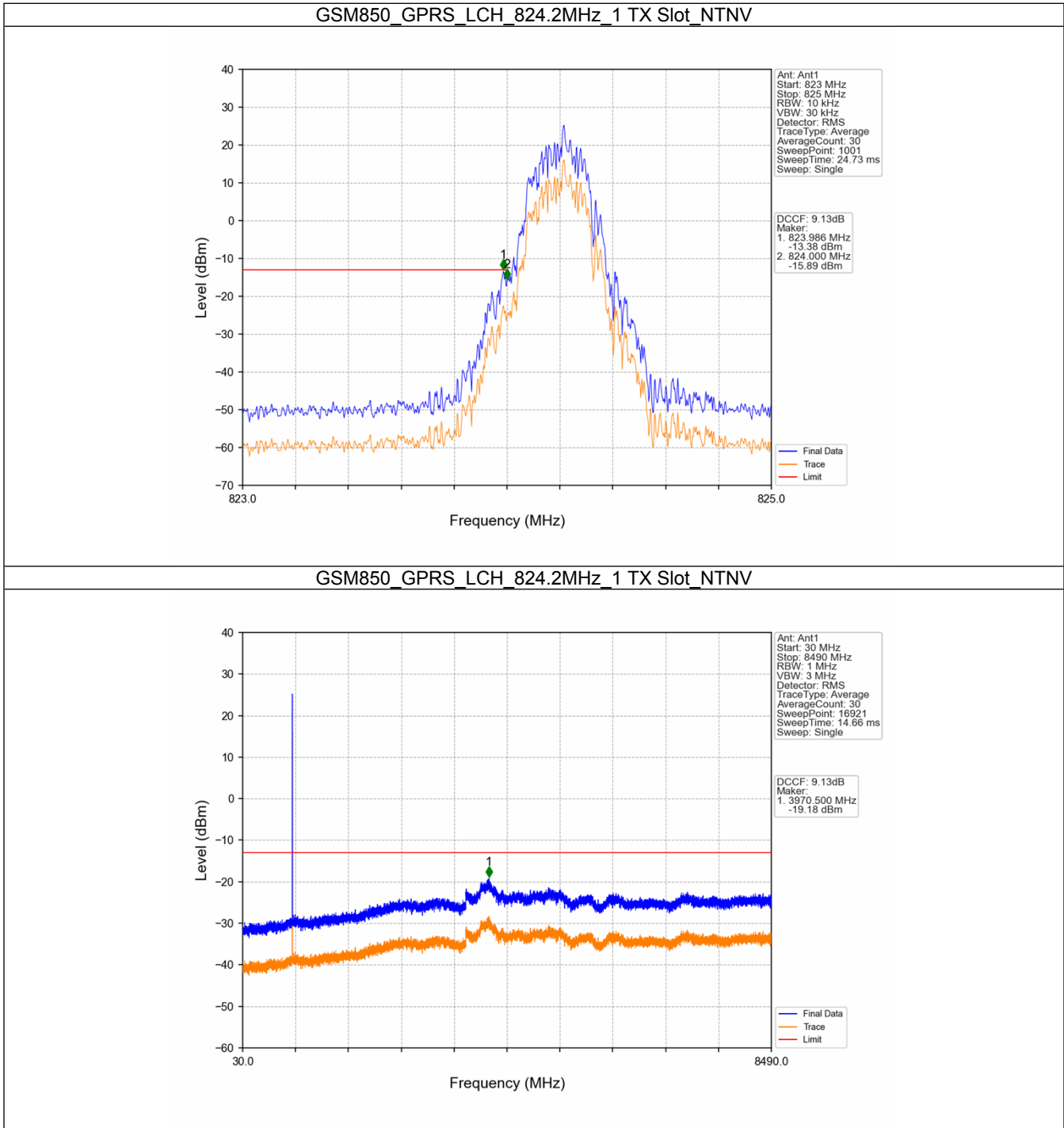
5.1 GSM850

5.1.1 Test Result

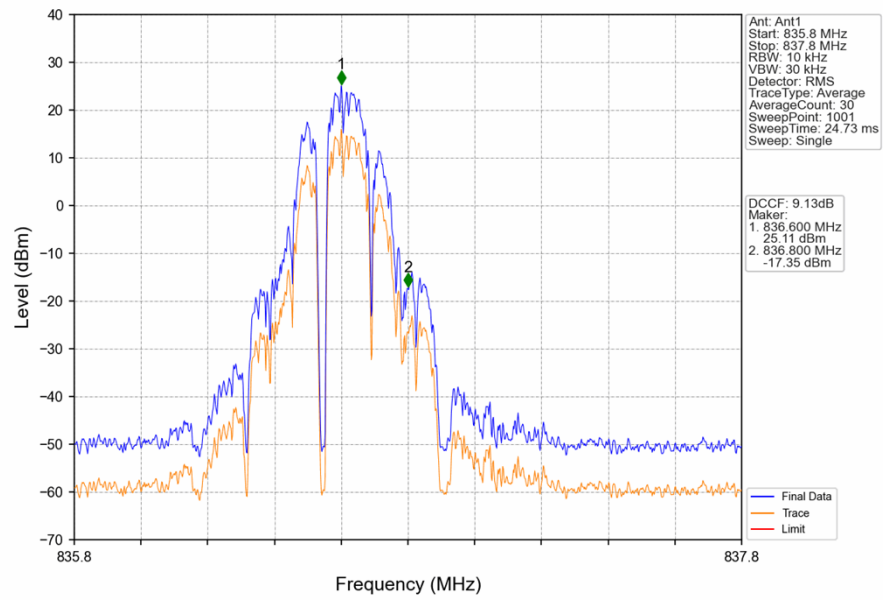
Band: GSM850						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	1 TX Slot	824.2	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph	Pass	
			848.8	Refer To Test Graph	Pass	
	EGPRS	1 TX Slot	824.2	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph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

5.1 GSM850

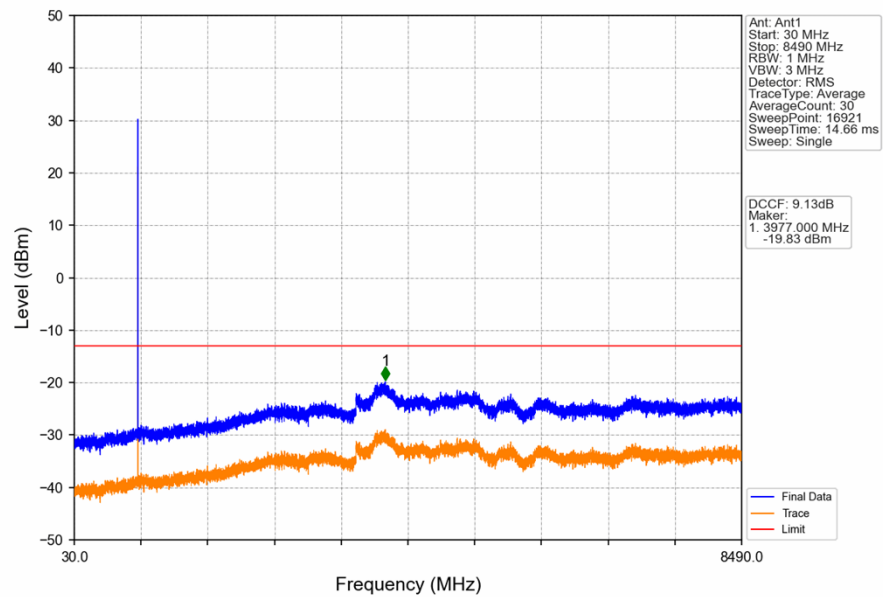
5.1.2 Test Graph



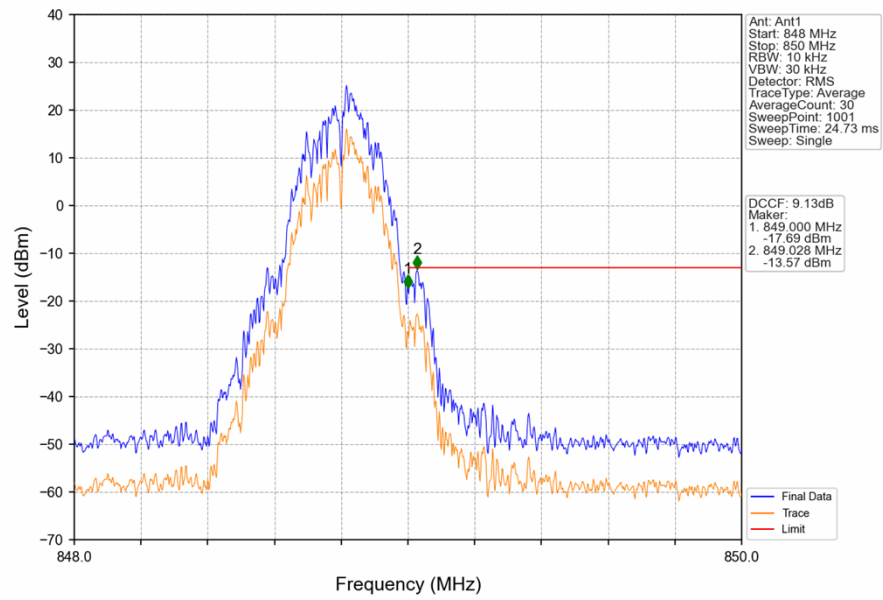
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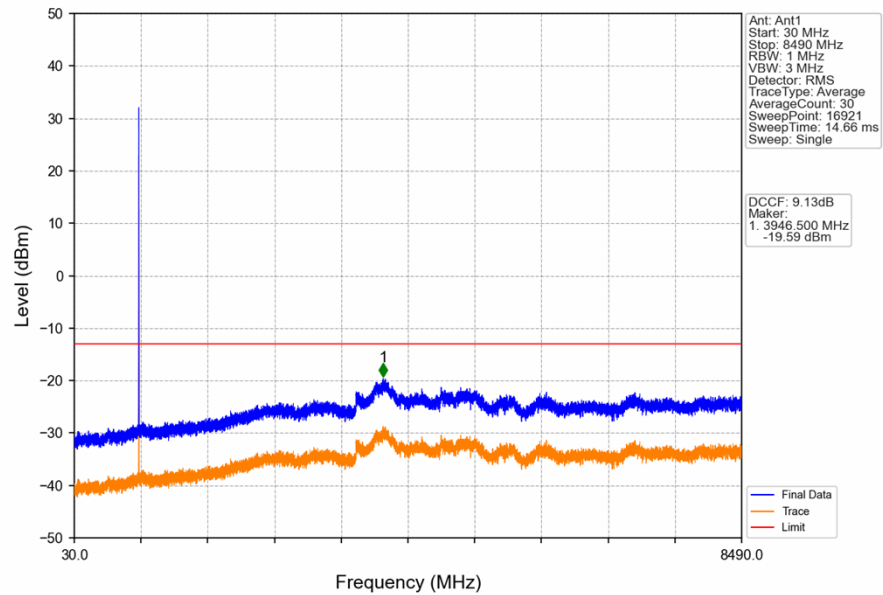
GSM850_GPRS_MCH_836.6MHz_1 TX Slot_NTNV



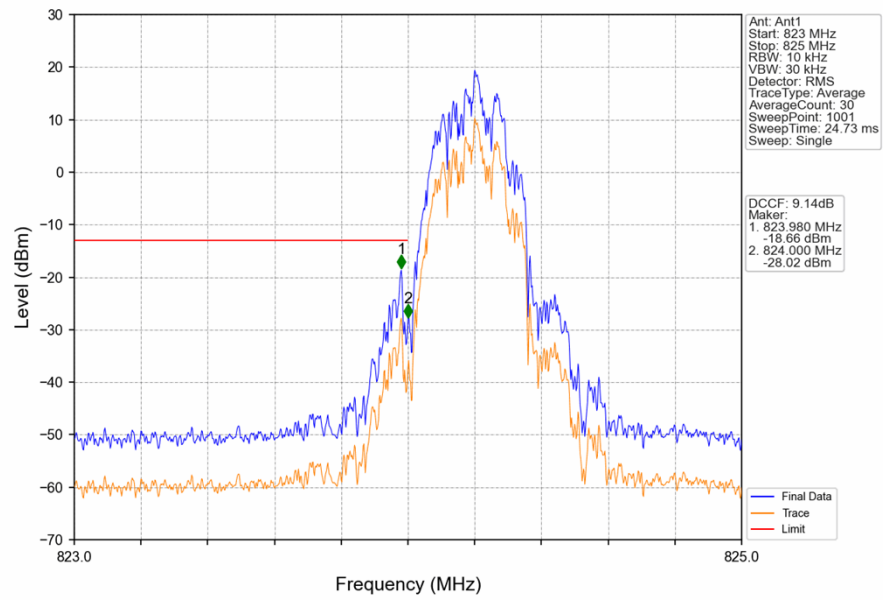
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



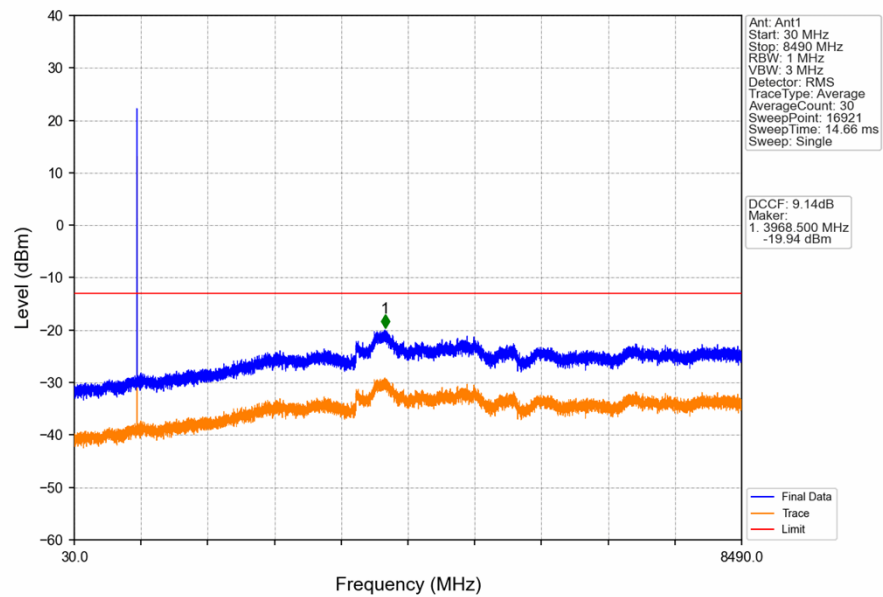
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



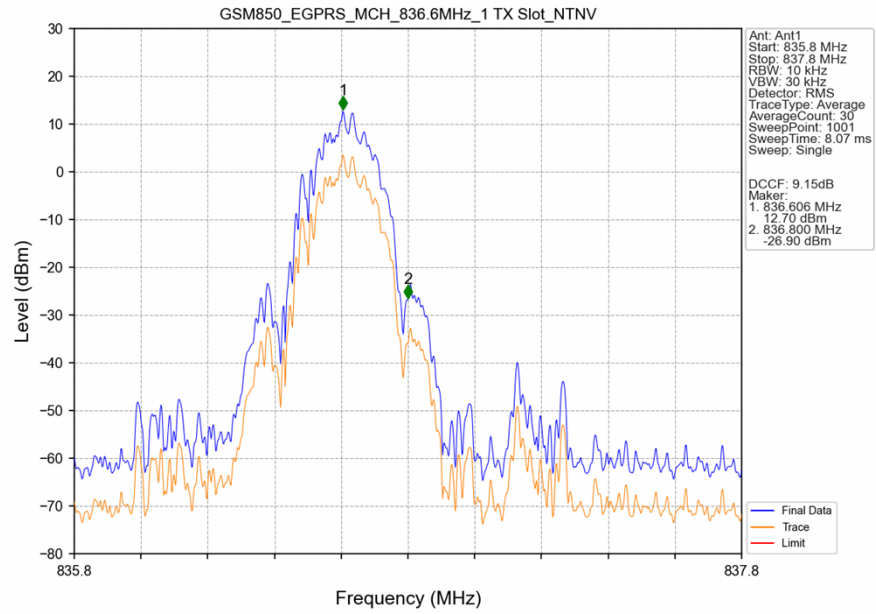
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



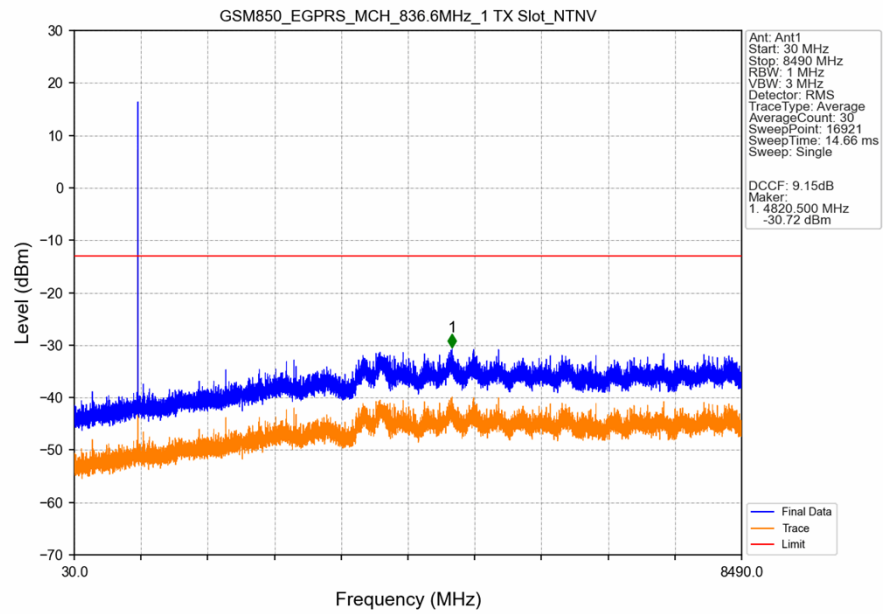
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



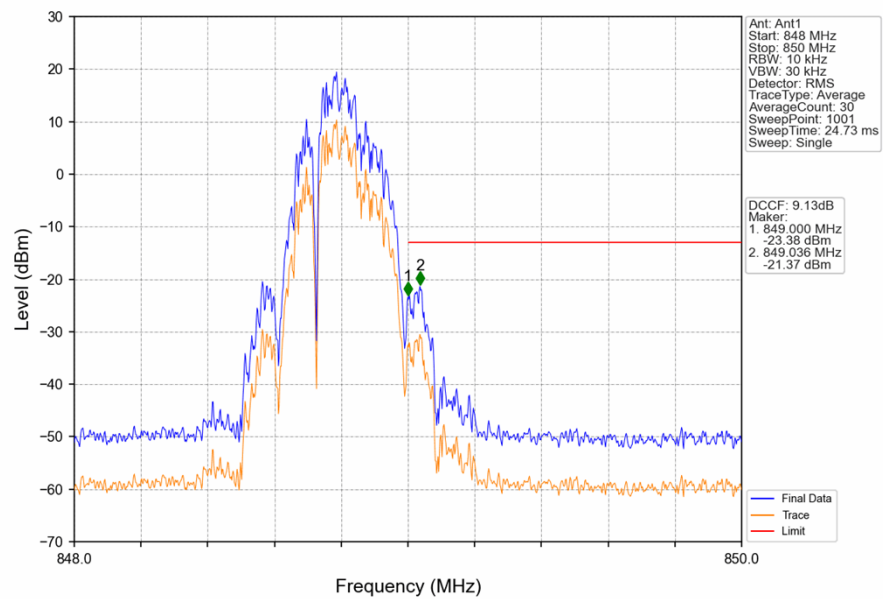
GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV

