

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	32.86	0.51	31.22	<=38.45	Pass
		2 TX Slots	824.2	32.09	0.51	30.45	<=38.45	Pass
		3 TX Slots	824.2	30.29	0.51	28.65	<=38.45	Pass
		4 TX Slots	824.2	29.12	0.51	27.48	<=38.45	Pass
		1 TX Slot	836.6	32.93	0.51	31.29	<=38.45	Pass
		2 TX Slots	836.6	32.18	0.51	30.54	<=38.45	Pass
		3 TX Slots	836.6	30.40	0.51	28.76	<=38.45	Pass
		4 TX Slots	836.6	29.25	0.51	27.61	<=38.45	Pass
		1 TX Slot	848.8	32.97	0.51	31.33	<=38.45	Pass
		2 TX Slots	848.8	32.23	0.51	30.59	<=38.45	Pass
		3 TX Slots	848.8	30.45	0.51	28.81	<=38.45	Pass
		4 TX Slots	848.8	29.29	0.51	27.65	<=38.45	Pass
	EGPRS	1 TX Slot	824.2	25.62	0.51	23.98	<=38.45	Pass
		2 TX Slots	824.2	24.41	0.51	22.77	<=38.45	Pass
		3 TX Slots	824.2	21.99	0.51	20.35	<=38.45	Pass
		4 TX Slots	824.2	20.52	0.51	18.88	<=38.45	Pass
		1 TX Slot	836.6	25.51	0.51	23.87	<=38.45	Pass
		2 TX Slots	836.6	27.32	0.51	25.68	<=38.45	Pass
		3 TX Slots	836.6	22.02	0.51	20.38	<=38.45	Pass
		4 TX Slots	836.6	20.60	0.51	18.96	<=38.45	Pass
		1 TX Slot	848.8	25.40	0.51	23.76	<=38.45	Pass
		2 TX Slots	848.8	24.25	0.51	22.61	<=38.45	Pass
		3 TX Slots	848.8	21.93	0.51	20.29	<=38.45	Pass
		4 TX Slots	848.8	20.49	0.51	18.85	<=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	3.27	-10.331	-0.0125	-2.5 to 2.5	Pass
			3.85	-8.653	-0.0105	-2.5 to 2.5	Pass
			4.43	-7.232	-0.0088	-2.5 to 2.5	Pass
		-30	3.85	-7.684	-0.0093	-2.5 to 2.5	Pass
		-20	3.85	-6.974	-0.0085	-2.5 to 2.5	Pass
		-10	3.85	-8.265	-0.0100	-2.5 to 2.5	Pass
		0	3.85	-11.139	-0.0135	-2.5 to 2.5	Pass
		10	3.85	-8.394	-0.0102	-2.5 to 2.5	Pass
		30	3.85	-8.943	-0.0109	-2.5 to 2.5	Pass
		40	3.85	-6.199	-0.0075	-2.5 to 2.5	Pass

	836.6	50	3.85	-5.779	-0.0070	-2.5 to 2.5	Pass
		20	3.27	-7.038	-0.0084	-2.5 to 2.5	Pass
			3.85	-9.847	-0.0118	-2.5 to 2.5	Pass
			4.43	-7.975	-0.0095	-2.5 to 2.5	Pass
		-30	3.85	-10.202	-0.0122	-2.5 to 2.5	Pass
		-20	3.85	-6.522	-0.0078	-2.5 to 2.5	Pass
		-10	3.85	-7.781	-0.0093	-2.5 to 2.5	Pass
		0	3.85	-5.682	-0.0068	-2.5 to 2.5	Pass
		10	3.85	-7.393	-0.0088	-2.5 to 2.5	Pass
		30	3.85	-6.619	-0.0079	-2.5 to 2.5	Pass
		40	3.85	-6.780	-0.0081	-2.5 to 2.5	Pass
		50	3.85	-2.195	-0.0026	-2.5 to 2.5	Pass
	848.8	20	3.27	-4.714	-0.0056	-2.5 to 2.5	Pass
			3.85	-4.617	-0.0054	-2.5 to 2.5	Pass
			4.43	-10.880	-0.0128	-2.5 to 2.5	Pass
		-30	3.85	-7.716	-0.0091	-2.5 to 2.5	Pass
		-20	3.85	-4.907	-0.0058	-2.5 to 2.5	Pass
		-10	3.85	-7.038	-0.0083	-2.5 to 2.5	Pass
		0	3.85	-6.167	-0.0073	-2.5 to 2.5	Pass
		10	3.85	-7.135	-0.0084	-2.5 to 2.5	Pass
		30	3.85	-4.972	-0.0059	-2.5 to 2.5	Pass
		40	3.85	-4.036	-0.0048	-2.5 to 2.5	Pass
		50	3.85	-1.001	-0.0012	-2.5 to 2.5	Pass
EGPRS	824.2	20	3.27	-0.839	-0.0010	-2.5 to 2.5	Pass
			3.85	-1.550	-0.0019	-2.5 to 2.5	Pass
			4.43	-2.518	-0.0031	-2.5 to 2.5	Pass
		-30	3.85	-1.421	-0.0017	-2.5 to 2.5	Pass
		-20	3.85	-1.033	-0.0013	-2.5 to 2.5	Pass
		-10	3.85	-2.325	-0.0028	-2.5 to 2.5	Pass
		0	3.85	-2.486	-0.0030	-2.5 to 2.5	Pass
		10	3.85	-1.711	-0.0021	-2.5 to 2.5	Pass
		30	3.85	-4.875	-0.0059	-2.5 to 2.5	Pass
		40	3.85	3.003	0.0036	-2.5 to 2.5	Pass
		50	3.85	-0.194	-0.0002	-2.5 to 2.5	Pass
	836.6	20	3.27	-1.614	-0.0019	-2.5 to 2.5	Pass
			3.85	-1.259	-0.0015	-2.5 to 2.5	Pass
			4.43	-3.616	-0.0043	-2.5 to 2.5	Pass
		-30	3.85	-3.003	-0.0036	-2.5 to 2.5	Pass
		-20	3.85	-3.584	-0.0043	-2.5 to 2.5	Pass
		-10	3.85	-2.712	-0.0032	-2.5 to 2.5	Pass
		0	3.85	-3.681	-0.0044	-2.5 to 2.5	Pass
		10	3.85	-1.905	-0.0023	-2.5 to 2.5	Pass
		30	3.85	-1.873	-0.0022	-2.5 to 2.5	Pass
		40	3.85	0.678	0.0008	-2.5 to 2.5	Pass
		50	3.85	3.358	0.0040	-2.5 to 2.5	Pass
	848.8	20	3.27	0.743	0.0009	-2.5 to 2.5	Pass
			3.85	-0.678	-0.0008	-2.5 to 2.5	Pass
			4.43	-0.323	-0.0004	-2.5 to 2.5	Pass
		-30	3.85	-1.065	-0.0013	-2.5 to 2.5	Pass
		-20	3.85	-1.647	-0.0019	-2.5 to 2.5	Pass
		-10	3.85	1.130	0.0013	-2.5 to 2.5	Pass
		0	3.85	1.969	0.0023	-2.5 to 2.5	Pass
		10	3.85	-4.972	-0.0059	-2.5 to 2.5	Pass
		30	3.85	-1.130	-0.0013	-2.5 to 2.5	Pass
		40	3.85	-2.970	-0.0035	-2.5 to 2.5	Pass
		50	3.85	1.388	0.0016	-2.5 to 2.5	Pass

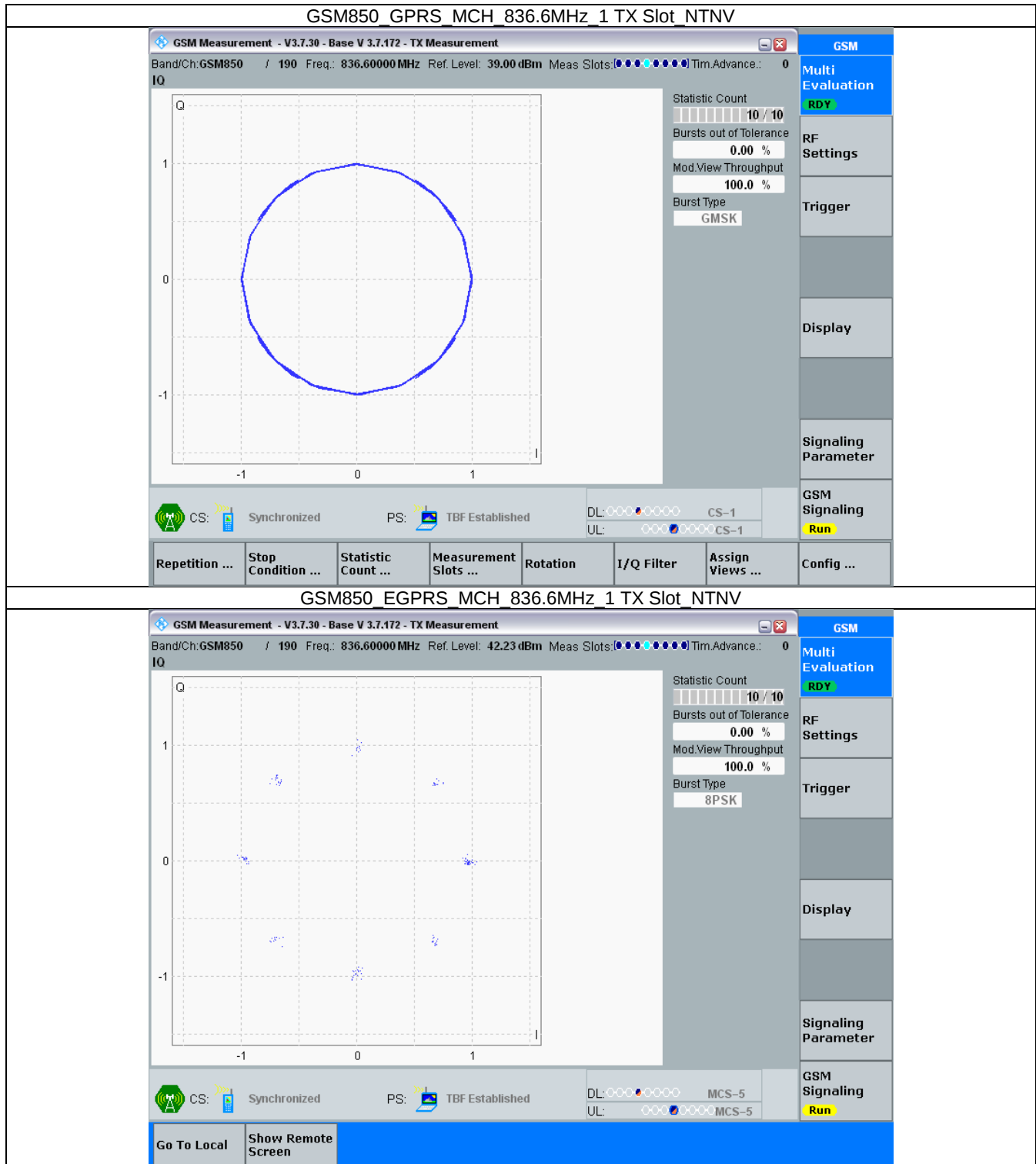
3. Modulation Characteristics

3.1 GSM850

3.1.1 Test Result

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

3.1.2 Test Graph



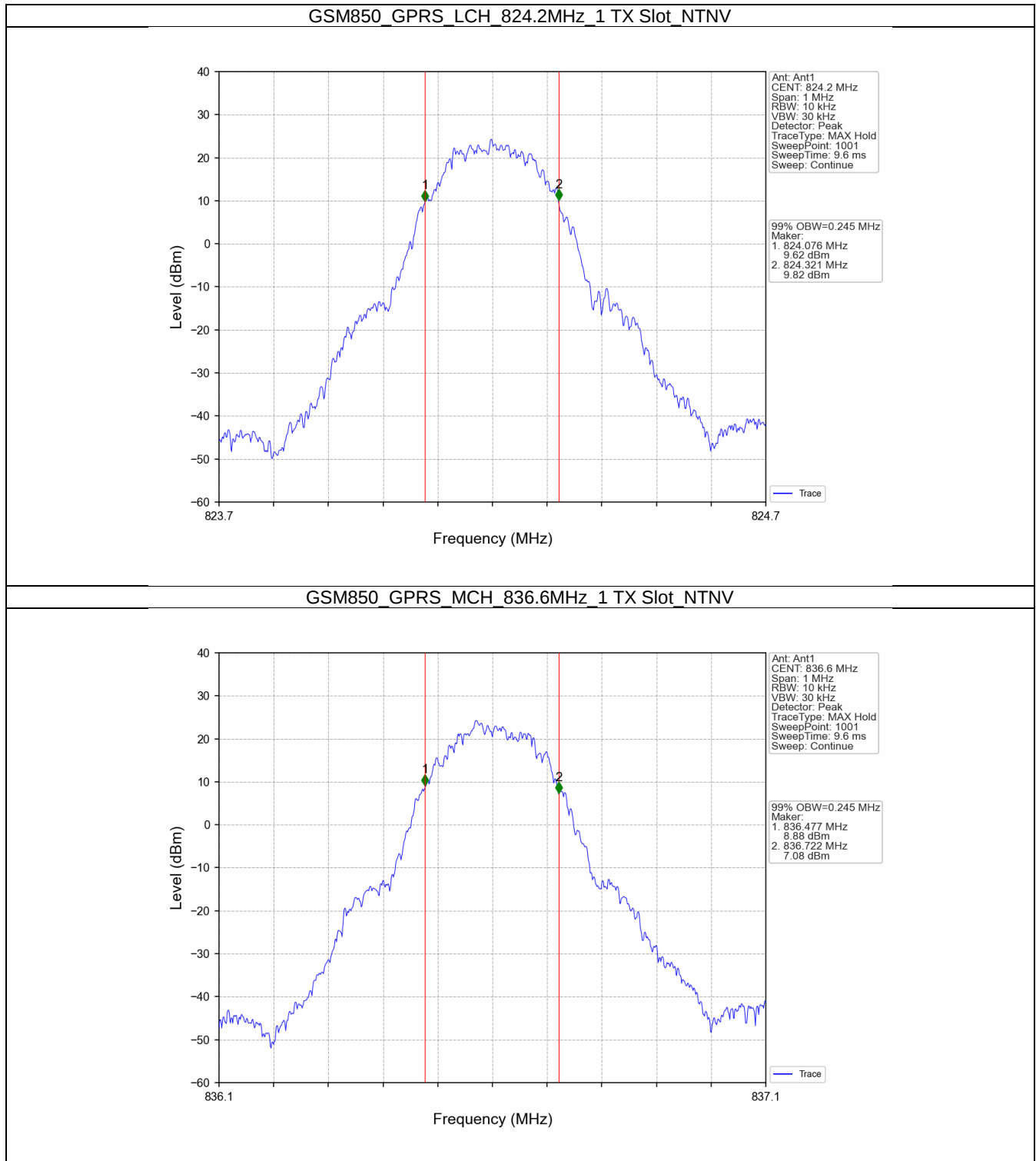
4. 99% & 26dB Bandwidth

4.1 GSM850_OBW

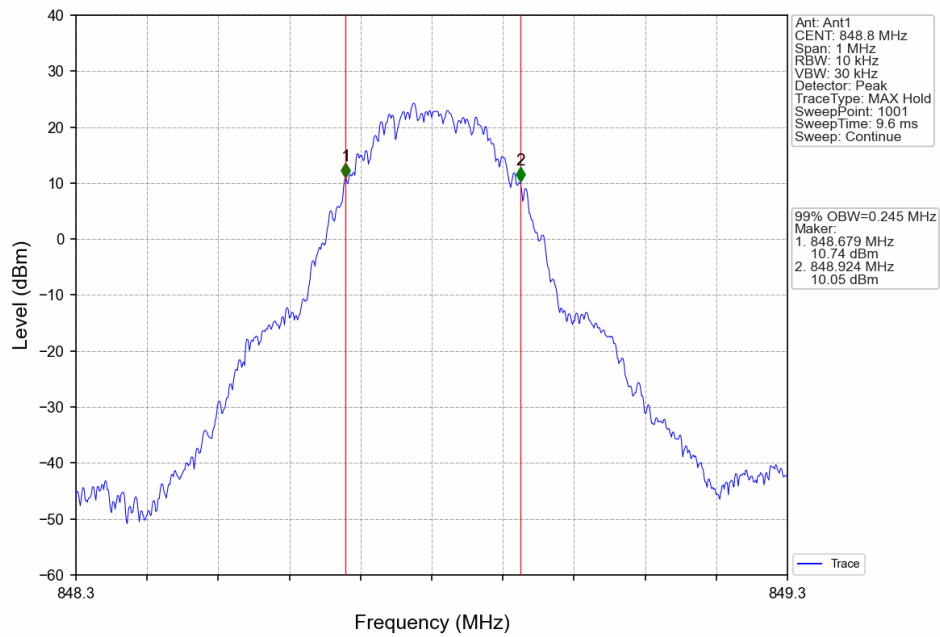
4.1.1 Test Result

Band: GSM850						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	1 TX Slot	824.2	0.245	/	Pass
			836.6	0.245	/	Pass
			848.8	0.245	/	Pass
	EGPRS	1 TX Slot	824.2	0.251	/	Pass
			836.6	0.253	/	Pass
			848.8	0.242	/	Pass

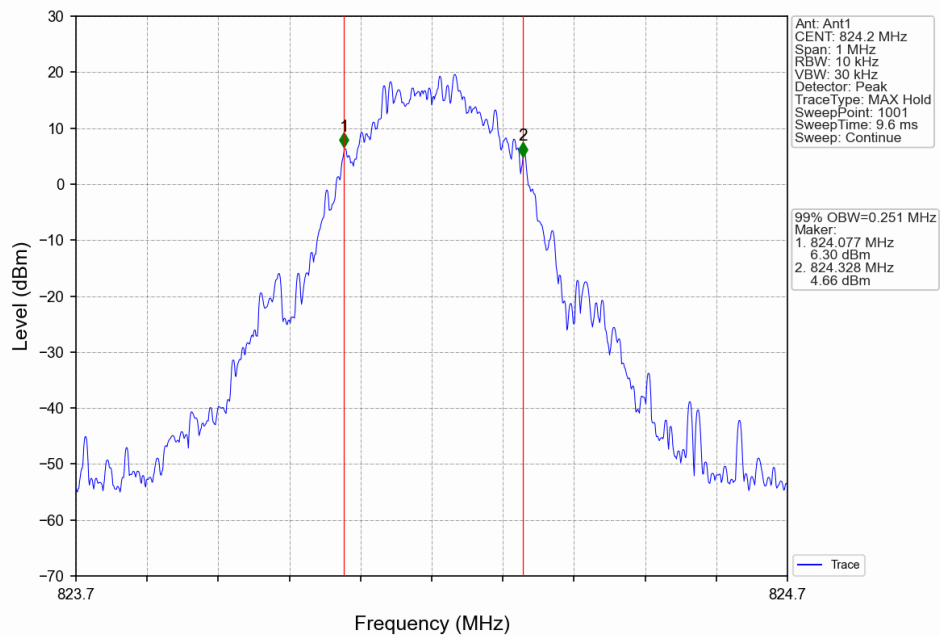
4.1.2 Test Graph



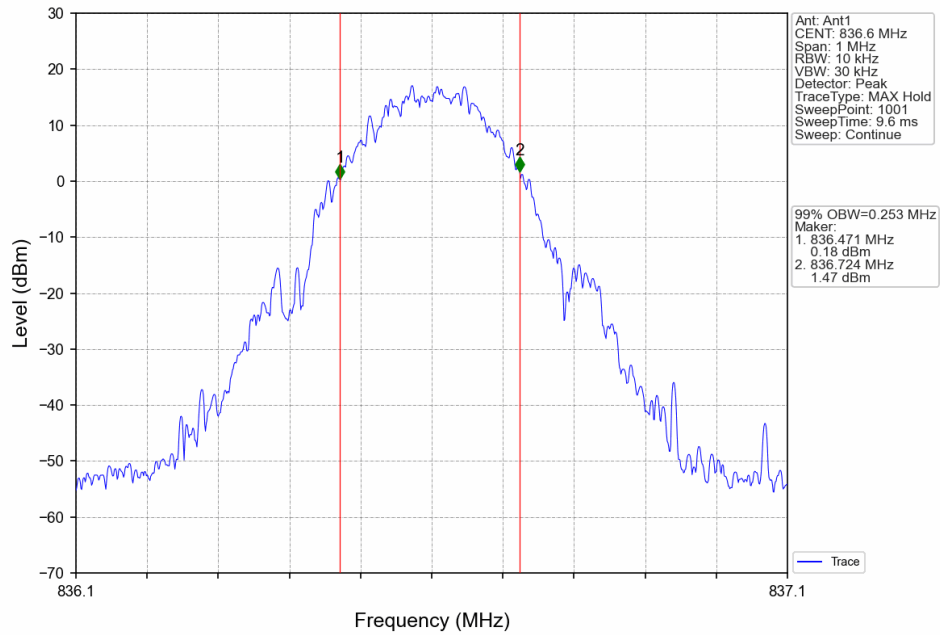
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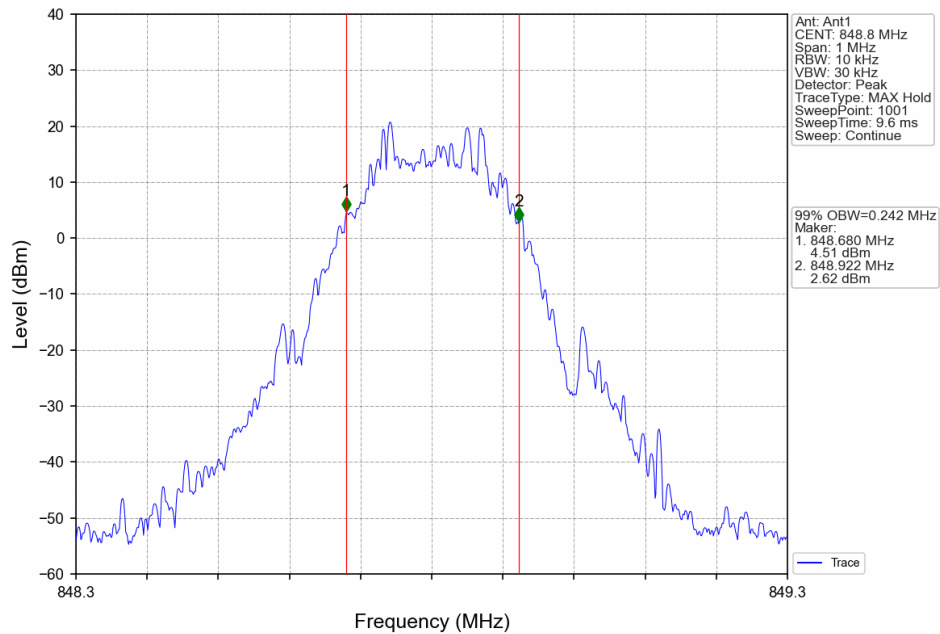
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV

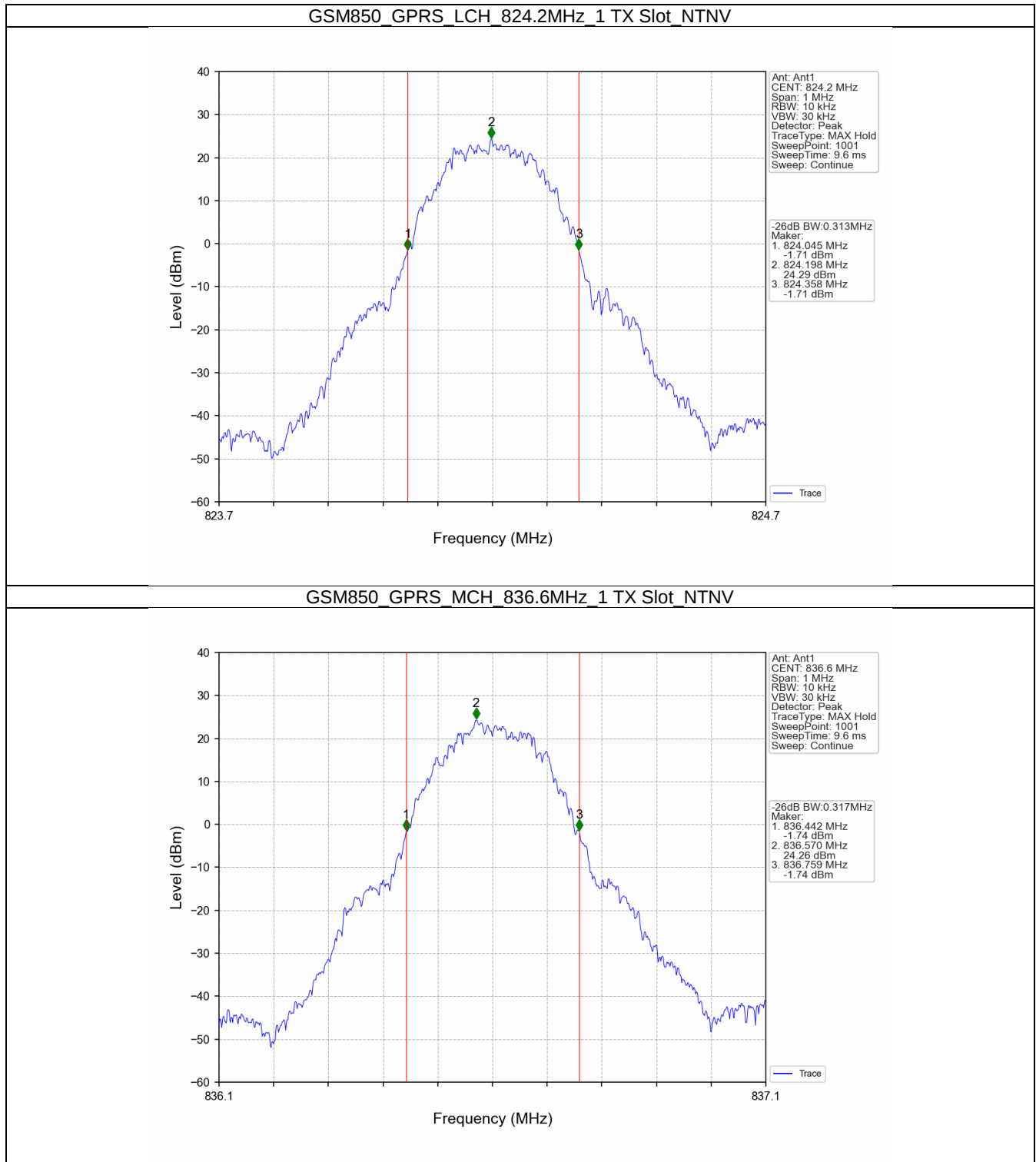


4.2 GSM850_XDB

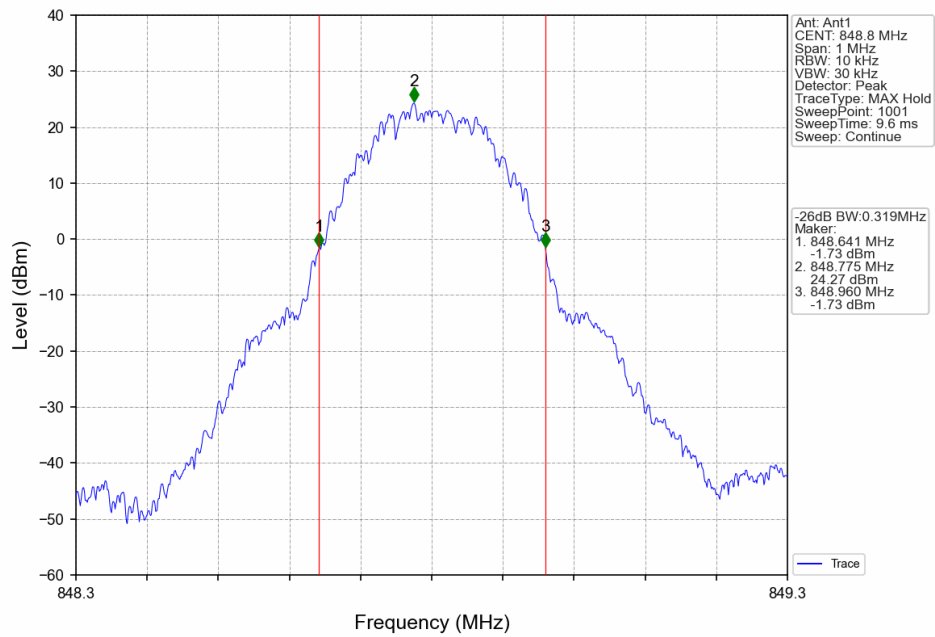
4.2.1 Test Result

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	0.317	/	Pass
			848.8	0.319	/	Pass
	EGPRS	1 TX Slot	824.2	0.303	/	Pass
			836.6	0.323	/	Pass
			848.8	0.295	/	Pass

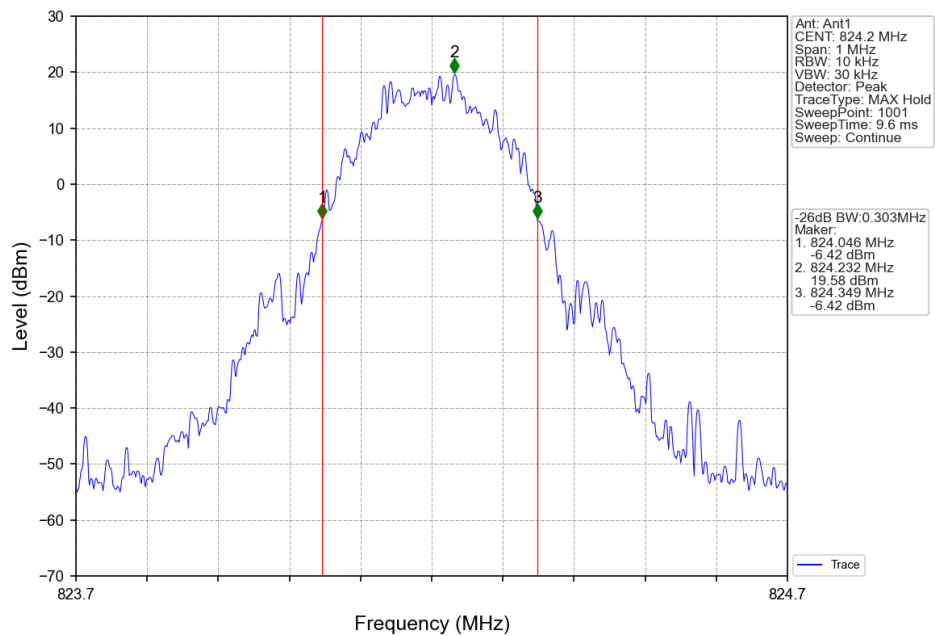
4.2.2 Test Graph



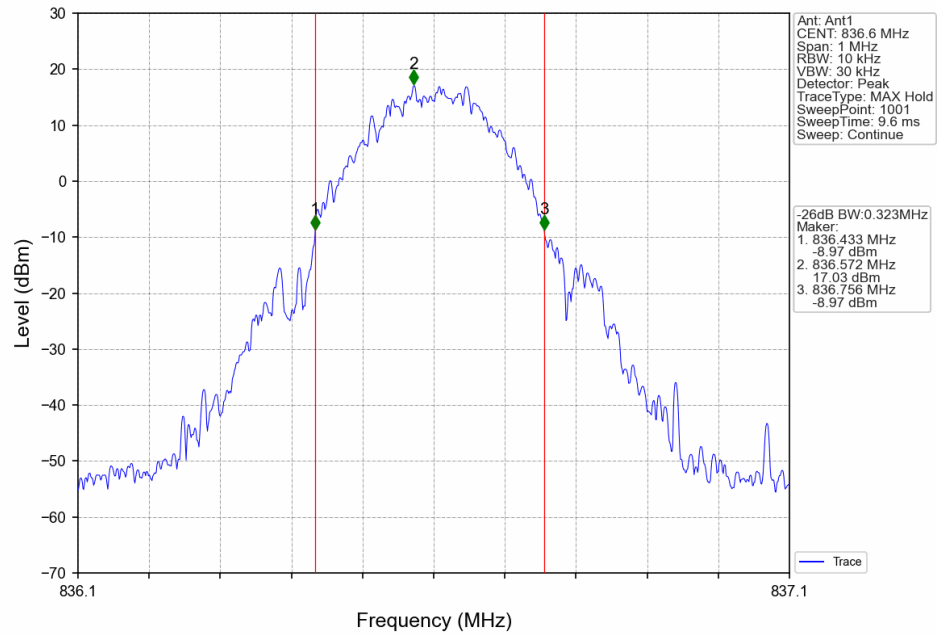
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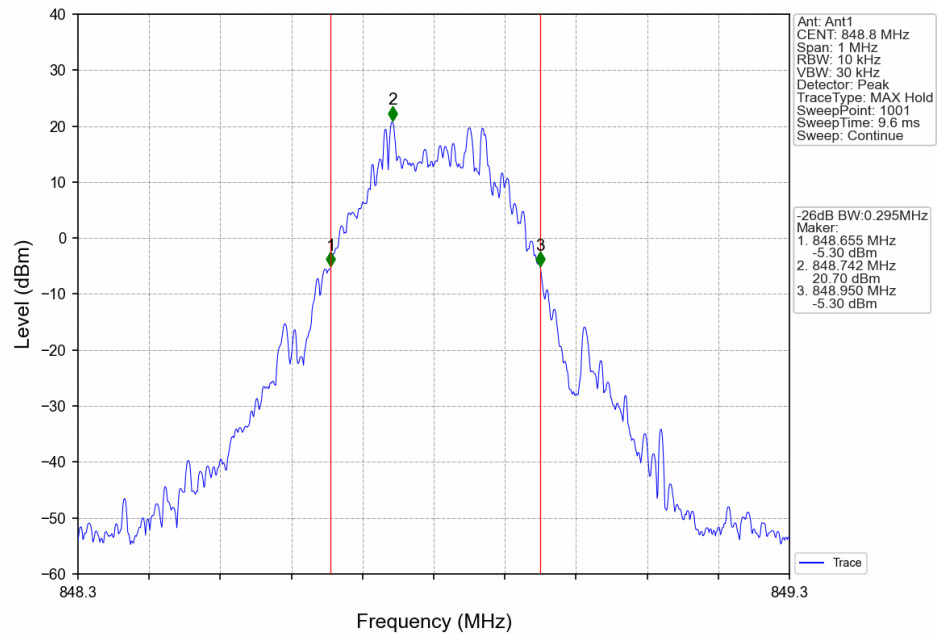
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV



5. Peak-Average Ratio

5.1 GSM850

5.1.1 Test Result

Band: GSM850						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	4 TX Slots	824.2	9.81	<=13	Pass
			836.6	3.63	<=13	Pass
			848.8	4.02	<=13	Pass
	EGPRS	4 TX Slots	824.2	12.60	<=13	Pass
			836.6	12.58	<=13	Pass
			848.8	12.80	<=13	Pass

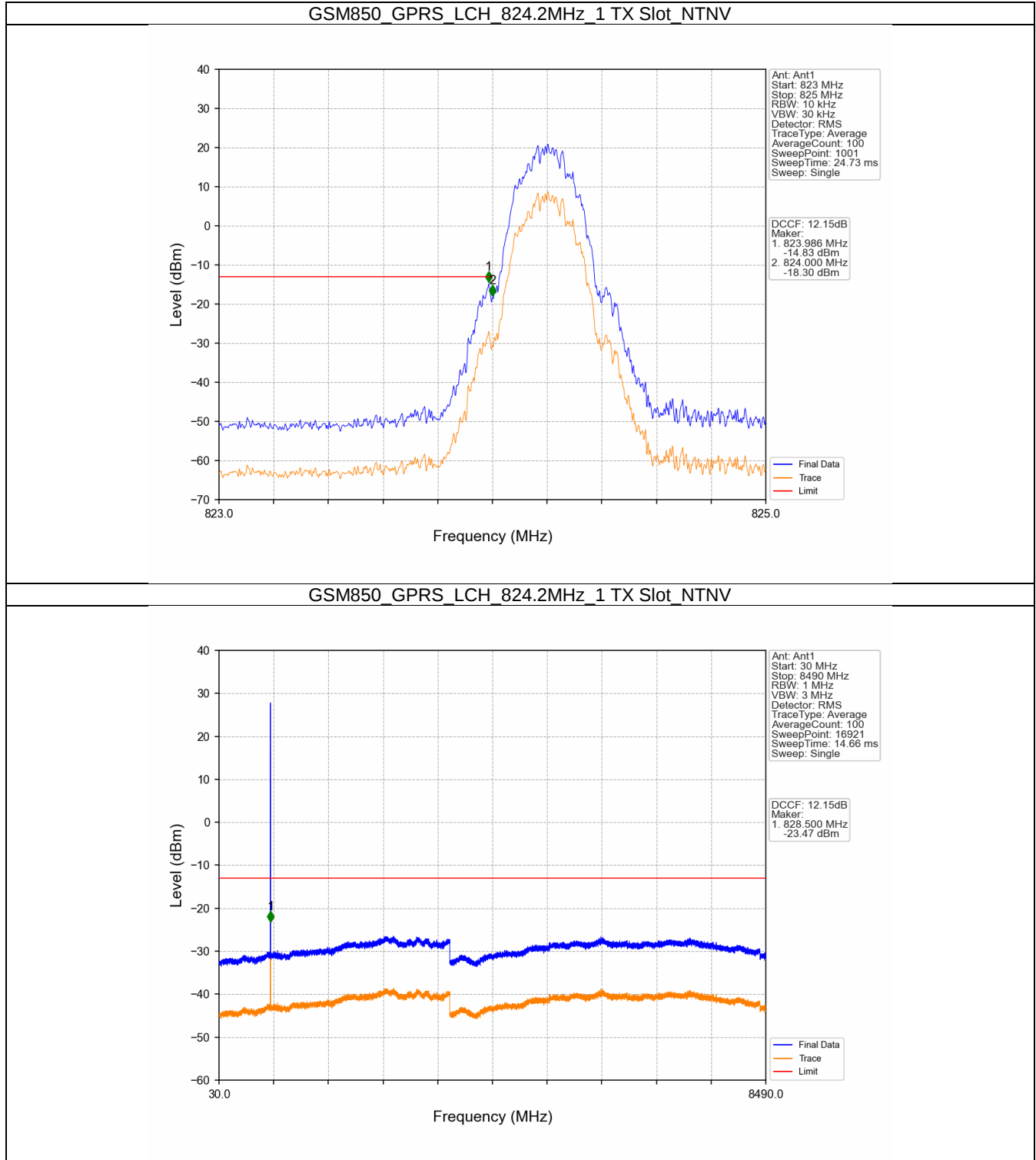
6. Spurious Emission

6.1 GSM850

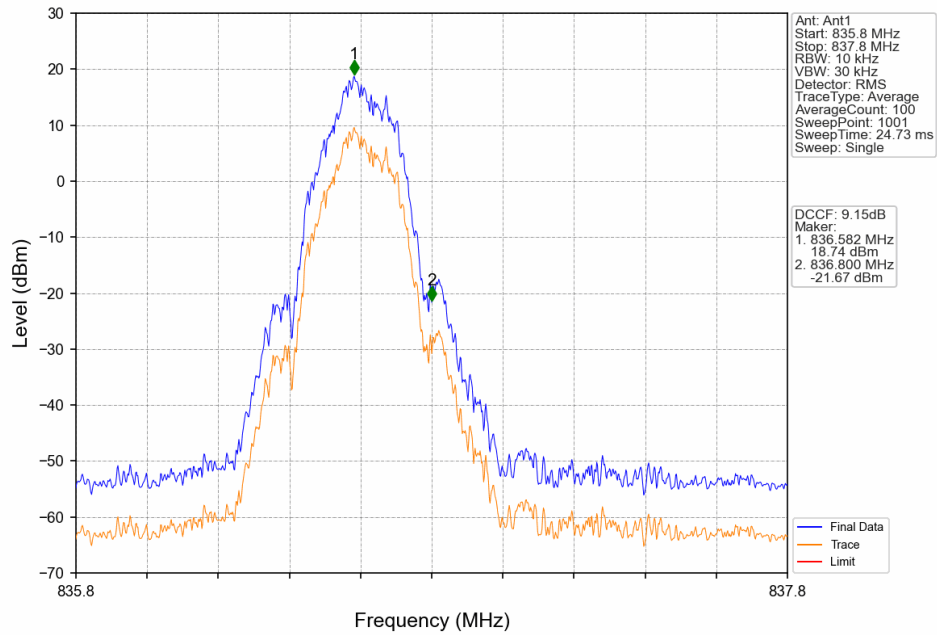
6.1.1 Test Result

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

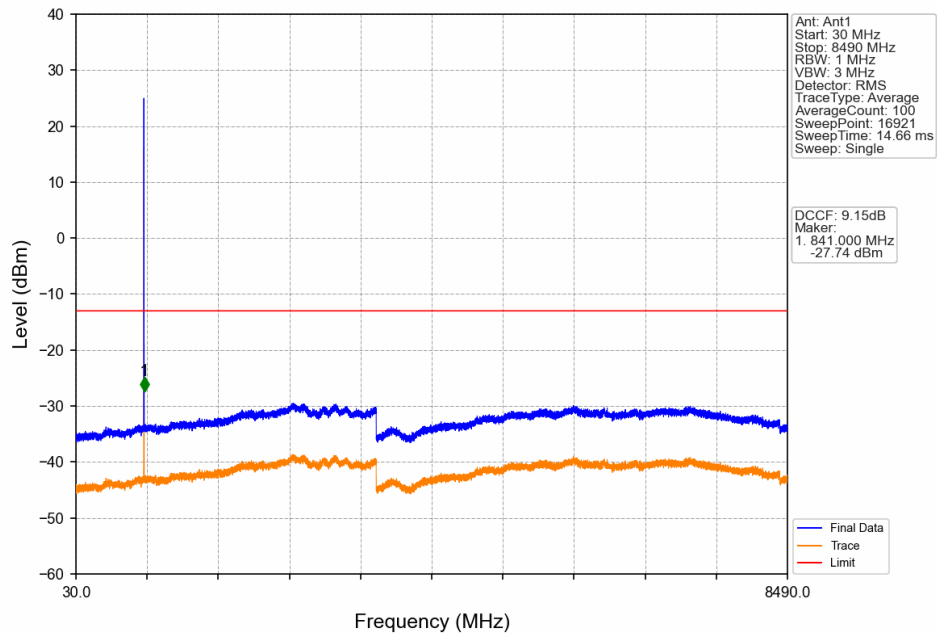
6.1.2 Test Graph



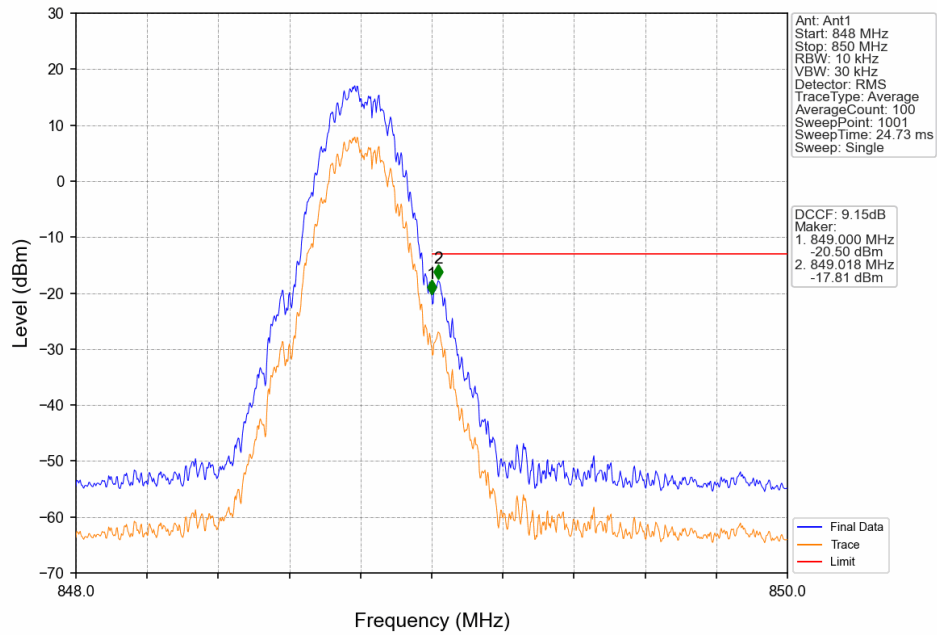
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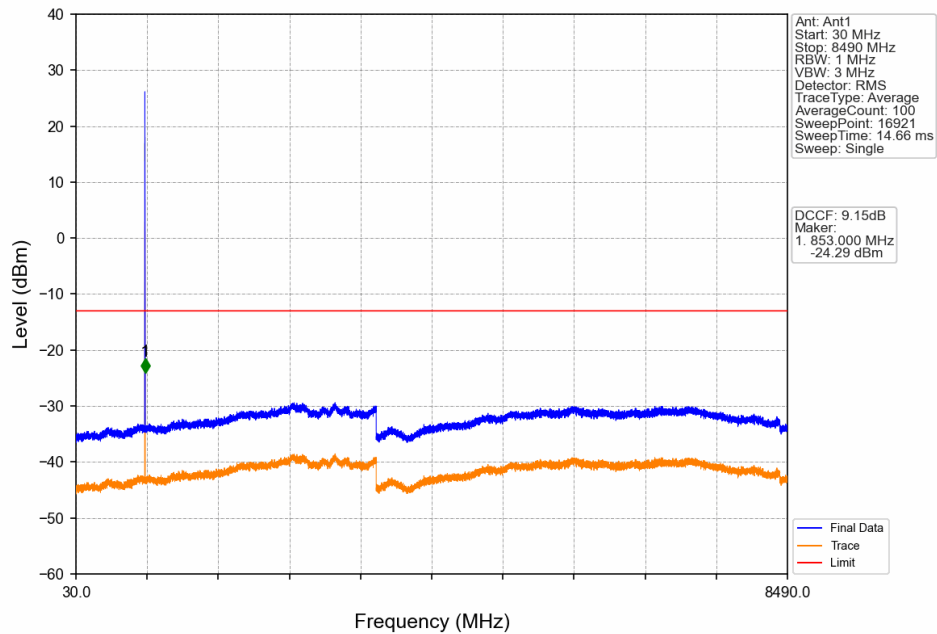
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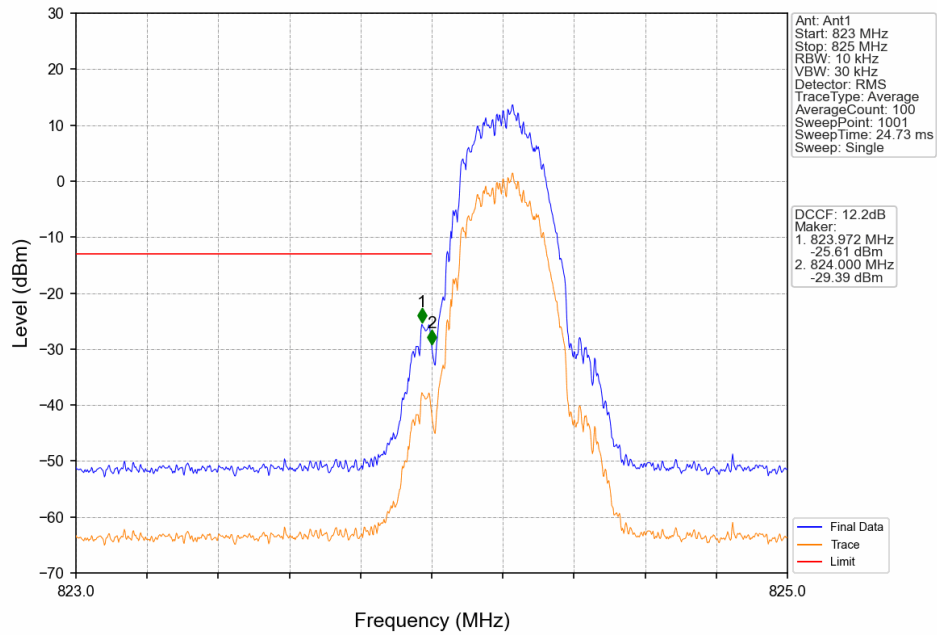
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



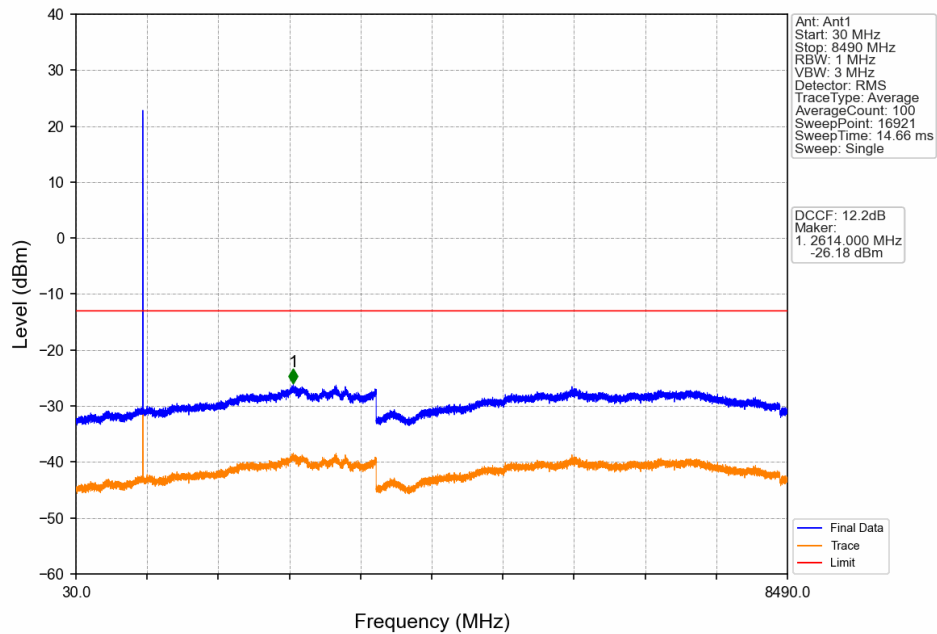
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



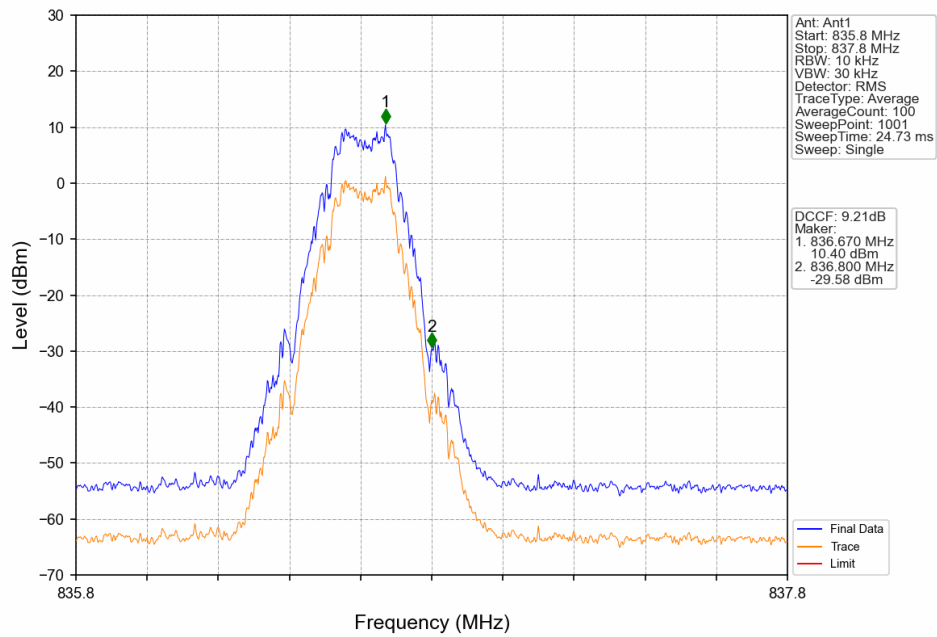
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



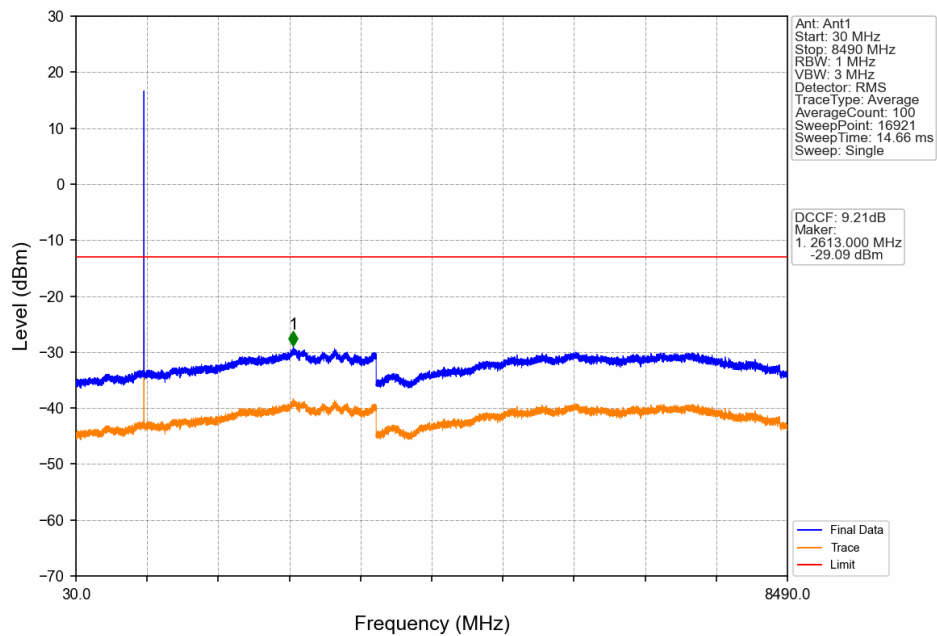
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



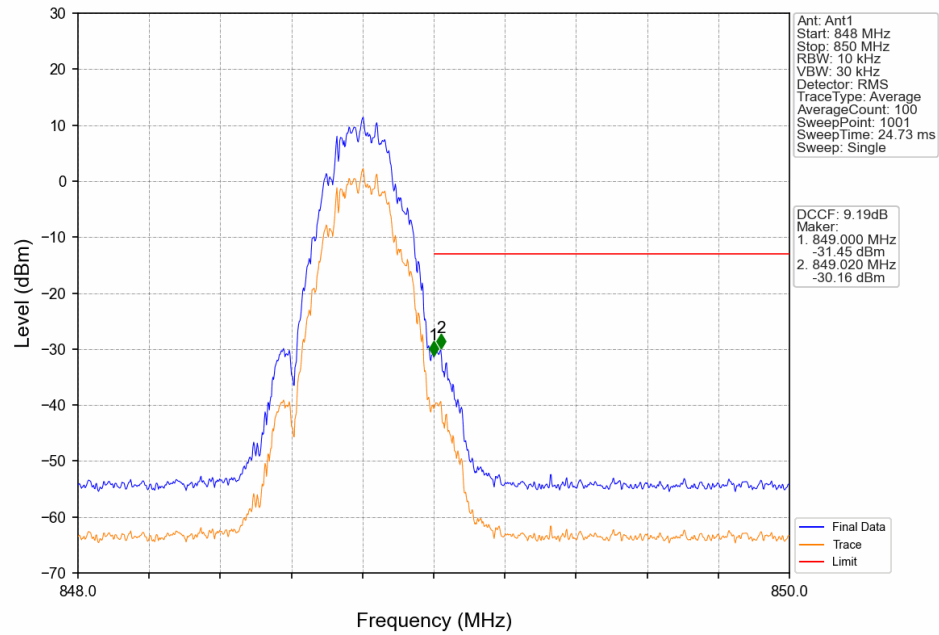
GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



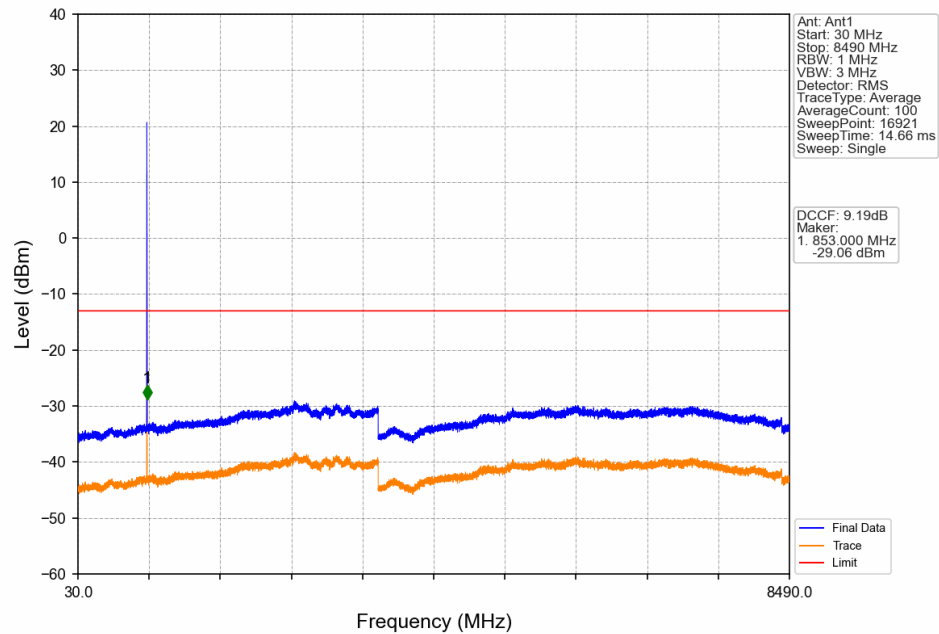
GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV



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)
GSM850	0.2	824.2	848.8	1.9815	0.0135	ppm	245KGXW	22H	32.97
GSM850	0.2	824.2	848.8	0.5395	0.0059	ppm	253KG7W	22H	27.32

7.2 Form731_ERP

7.2.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
GSM850	0.2	824.2	848.8	1.3583	0.0135	ppm	245KGXW	22H	31.33
GSM850	0.2	824.2	848.8	0.3698	0.0059	ppm	253KG7W	22H	25.68