



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	31.68	0.68	30.21	<=38.45	Pass
		2 TX Slots	824.2	31.24	0.68	29.77	<=38.45	Pass
		3 TX Slots	824.2	29.51	0.68	28.04	<=38.45	Pass
		4 TX Slots	824.2	28.32	0.68	26.85	<=38.45	Pass
		1 TX Slot	836.6	31.60	0.68	30.13	<=38.45	Pass
		2 TX Slots	836.6	31.21	0.68	29.74	<=38.45	Pass
		3 TX Slots	836.6	29.51	0.68	28.04	<=38.45	Pass
		4 TX Slots	836.6	28.34	0.68	26.87	<=38.45	Pass
		1 TX Slot	848.8	31.54	0.68	30.07	<=38.45	Pass
		2 TX Slots	848.8	31.11	0.68	29.64	<=38.45	Pass
		3 TX Slots	848.8	29.43	0.68	27.96	<=38.45	Pass
		4 TX Slots	848.8	28.27	0.68	26.80	<=38.45	Pass
	EGPRS	1 TX Slot	824.2	25.82	0.68	24.35	<=38.45	Pass
		2 TX Slots	824.2	24.43	0.68	22.96	<=38.45	Pass
		3 TX Slots	824.2	24.44	0.68	22.97	<=38.45	Pass
		4 TX Slots	824.2	20.18	0.68	18.71	<=38.45	Pass
		1 TX Slot	836.6	25.09	0.68	23.62	<=38.45	Pass
		2 TX Slots	836.6	24.17	0.68	22.70	<=38.45	Pass
		3 TX Slots	836.6	21.64	0.68	20.17	<=38.45	Pass
		4 TX Slots	836.6	19.80	0.68	18.33	<=38.45	Pass
		1 TX Slot	848.8	24.68	0.68	23.21	<=38.45	Pass
		2 TX Slots	848.8	23.81	0.68	22.34	<=38.45	Pass
		3 TX Slots	848.8	21.38	0.68	19.91	<=38.45	Pass
		4 TX Slots	848.8	19.64	0.68	18.17	<=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	4.100	0.0050	-2.5 to 2.5	Pass
			3.85	3.519	0.0043	-2.5 to 2.5	Pass
			4.43	3.648	0.0044	-2.5 to 2.5	Pass
		-30	3.85	5.327	0.0065	-2.5 to 2.5	Pass
		-20	3.85	5.876	0.0071	-2.5 to 2.5	Pass
		-10	3.85	6.263	0.0076	-2.5 to 2.5	Pass

		0	3.85	3.681	0.0045	-2.5 to 2.5	Pass	
		10	3.85	4.294	0.0052	-2.5 to 2.5	Pass	
		30	3.85	1.324	0.0016	-2.5 to 2.5	Pass	
		40	3.85	5.553	0.0067	-2.5 to 2.5	Pass	
		50	3.85	4.262	0.0052	-2.5 to 2.5	Pass	
	836.6	20	3.27	3.745	0.0045	-2.5 to 2.5	Pass	
			3.85	2.454	0.0029	-2.5 to 2.5	Pass	
			4.43	3.713	0.0044	-2.5 to 2.5	Pass	
		-30	3.85	4.488	0.0054	-2.5 to 2.5	Pass	
		-20	3.85	3.745	0.0045	-2.5 to 2.5	Pass	
		-10	3.85	8.362	0.0100	-2.5 to 2.5	Pass	
		0	3.85	5.133	0.0061	-2.5 to 2.5	Pass	
		10	3.85	1.195	0.0014	-2.5 to 2.5	Pass	
		30	3.85	4.746	0.0057	-2.5 to 2.5	Pass	
		40	3.85	5.489	0.0066	-2.5 to 2.5	Pass	
		50	3.85	4.714	0.0056	-2.5 to 2.5	Pass	
		848.8	20	3.27	4.455	0.0052	-2.5 to 2.5	Pass
				3.85	0.065	0.0001	-2.5 to 2.5	Pass
	4.43			4.843	0.0057	-2.5 to 2.5	Pass	
	-30		3.85	8.556	0.0101	-2.5 to 2.5	Pass	
	-20		3.85	6.296	0.0074	-2.5 to 2.5	Pass	
	-10		3.85	4.778	0.0056	-2.5 to 2.5	Pass	
	0		3.85	4.875	0.0057	-2.5 to 2.5	Pass	
	10		3.85	6.037	0.0071	-2.5 to 2.5	Pass	
	30		3.85	6.489	0.0076	-2.5 to 2.5	Pass	
40	3.85		4.746	0.0056	-2.5 to 2.5	Pass		
50	3.85		4.133	0.0049	-2.5 to 2.5	Pass		
EGPRS	824.2		20	3.27	3.584	0.0043	-2.5 to 2.5	Pass
		3.85		7.684	0.0093	-2.5 to 2.5	Pass	
		4.43		4.811	0.0058	-2.5 to 2.5	Pass	
		-30	3.85	4.940	0.0060	-2.5 to 2.5	Pass	
		-20	3.85	5.779	0.0070	-2.5 to 2.5	Pass	
		-10	3.85	7.200	0.0087	-2.5 to 2.5	Pass	
		0	3.85	4.359	0.0053	-2.5 to 2.5	Pass	
		10	3.85	3.939	0.0048	-2.5 to 2.5	Pass	
		30	3.85	4.972	0.0060	-2.5 to 2.5	Pass	
		40	3.85	5.521	0.0067	-2.5 to 2.5	Pass	
	50	3.85	4.649	0.0056	-2.5 to 2.5	Pass		
	836.6	20	3.27	3.584	0.0043	-2.5 to 2.5	Pass	
			3.85	6.748	0.0081	-2.5 to 2.5	Pass	
			4.43	7.942	0.0095	-2.5 to 2.5	Pass	
		-30	3.85	8.104	0.0097	-2.5 to 2.5	Pass	
		-20	3.85	8.846	0.0106	-2.5 to 2.5	Pass	
		-10	3.85	6.393	0.0076	-2.5 to 2.5	Pass	
		0	3.85	4.133	0.0049	-2.5 to 2.5	Pass	
		10	3.85	8.265	0.0099	-2.5 to 2.5	Pass	
		30	3.85	6.393	0.0076	-2.5 to 2.5	Pass	
		40	3.85	5.327	0.0064	-2.5 to 2.5	Pass	
	50	3.85	6.167	0.0074	-2.5 to 2.5	Pass		
	848.8	20	3.27	5.779	0.0068	-2.5 to 2.5	Pass	
			3.85	7.361	0.0087	-2.5 to 2.5	Pass	
			4.43	10.105	0.0119	-2.5 to 2.5	Pass	
-30		3.85	8.685	0.0102	-2.5 to 2.5	Pass		
-20		3.85	4.940	0.0058	-2.5 to 2.5	Pass		

		-10	3.85	3.616	0.0043	-2.5 to 2.5	Pass
		0	3.85	9.298	0.0110	-2.5 to 2.5	Pass
		10	3.85	7.490	0.0088	-2.5 to 2.5	Pass
		30	3.85	7.684	0.0091	-2.5 to 2.5	Pass
		40	3.85	7.652	0.0090	-2.5 to 2.5	Pass
		50	3.85	3.551	0.0042	-2.5 to 2.5	Pass

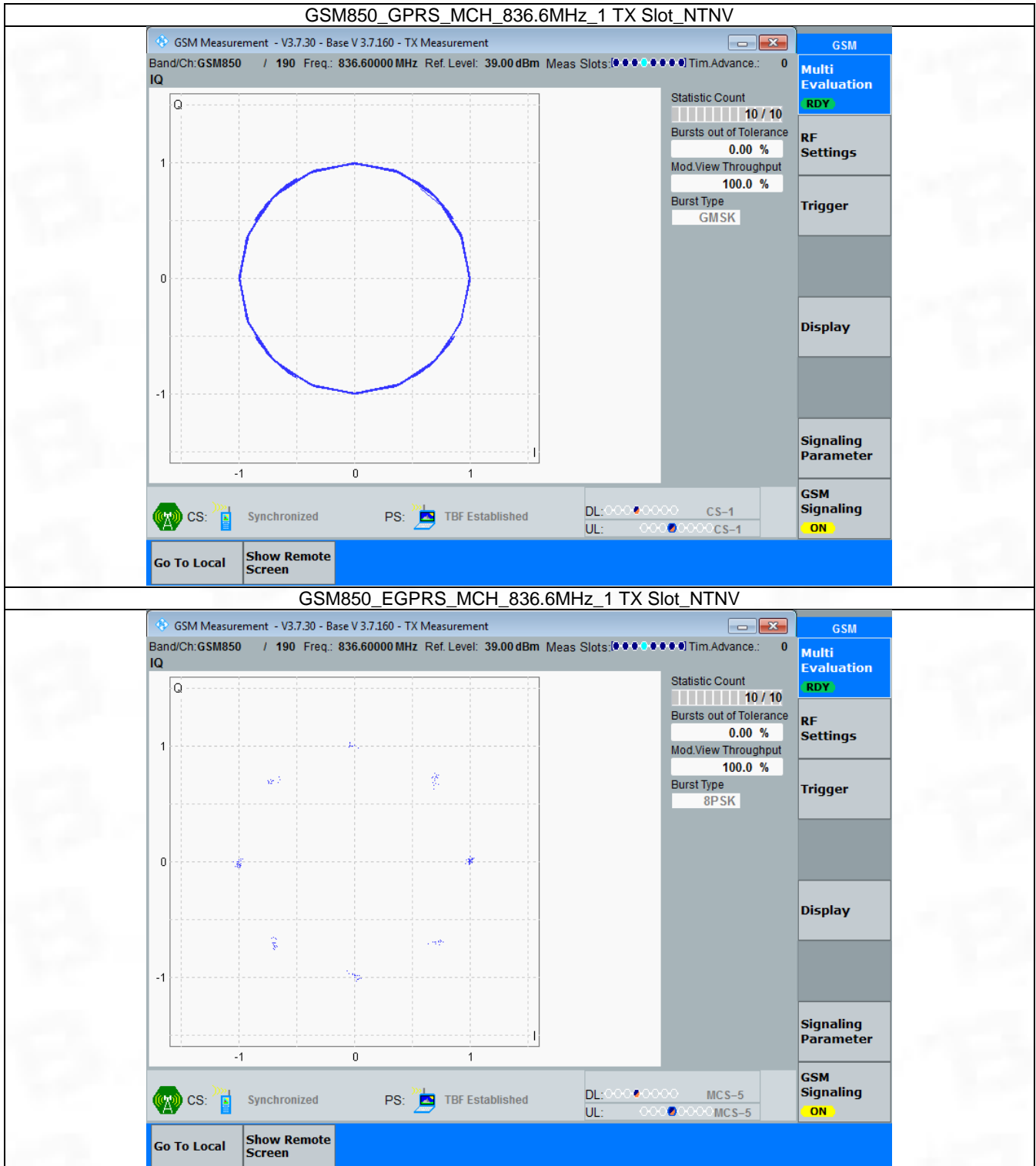
3. Modulation Characteristics

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



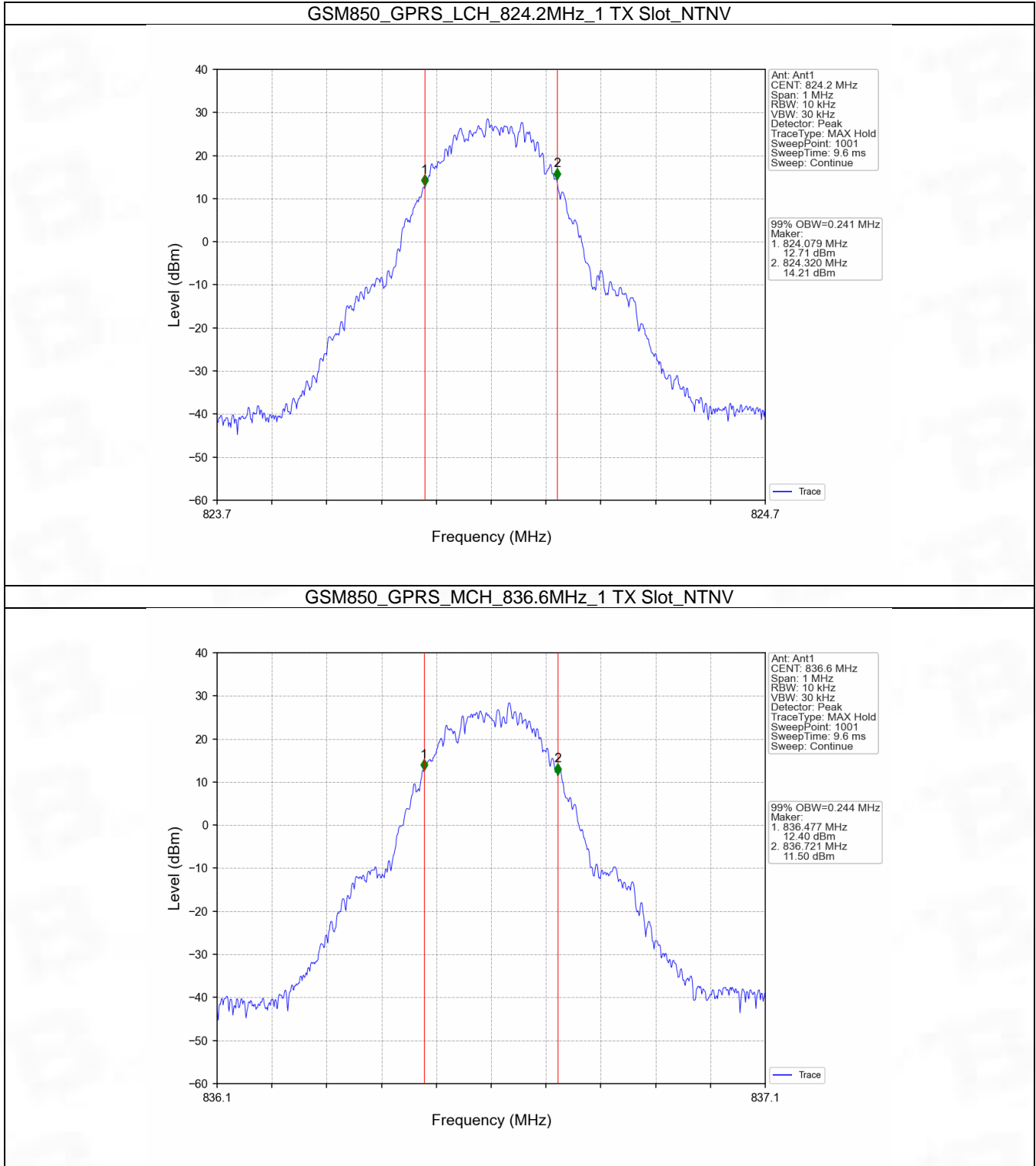
4. 99% & 26dB Bandwidth

4.1 GSM850_OBW

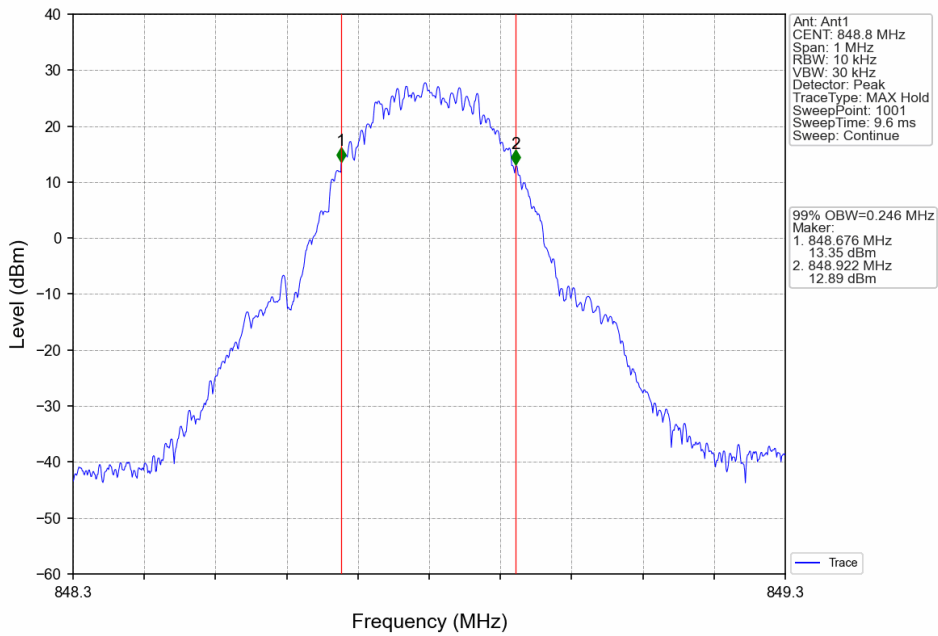
4.1.1 Test Result

Band: GSM850					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GPRS	1 TX Slot	824.2	0.241	Pass
			836.6	0.244	Pass
			848.8	0.246	Pass
	EGPRS	1 TX Slot	824.2	0.238	Pass
			836.6	0.246	Pass
			848.8	0.239	Pass

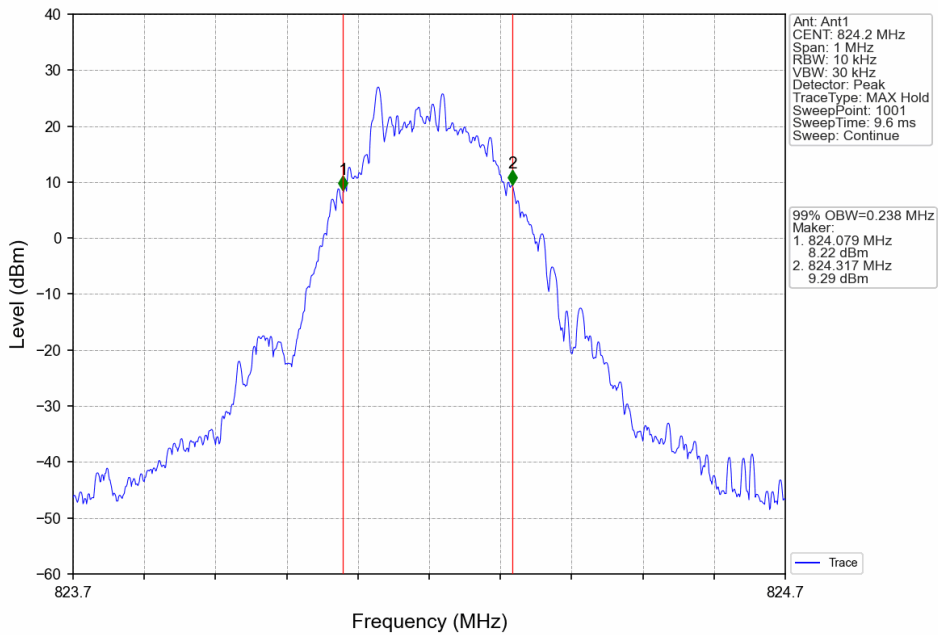
4.1.2 Test Graph



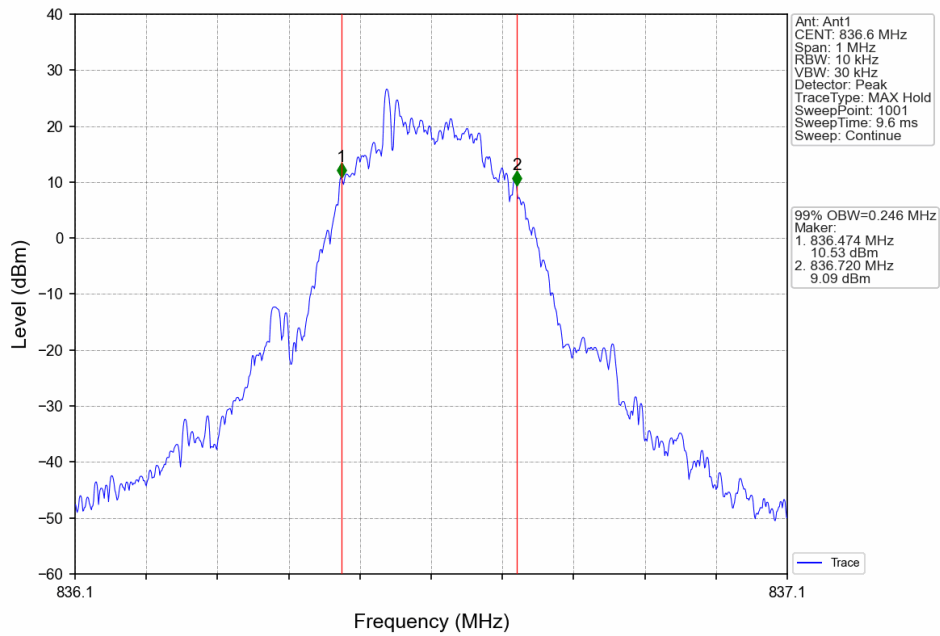
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



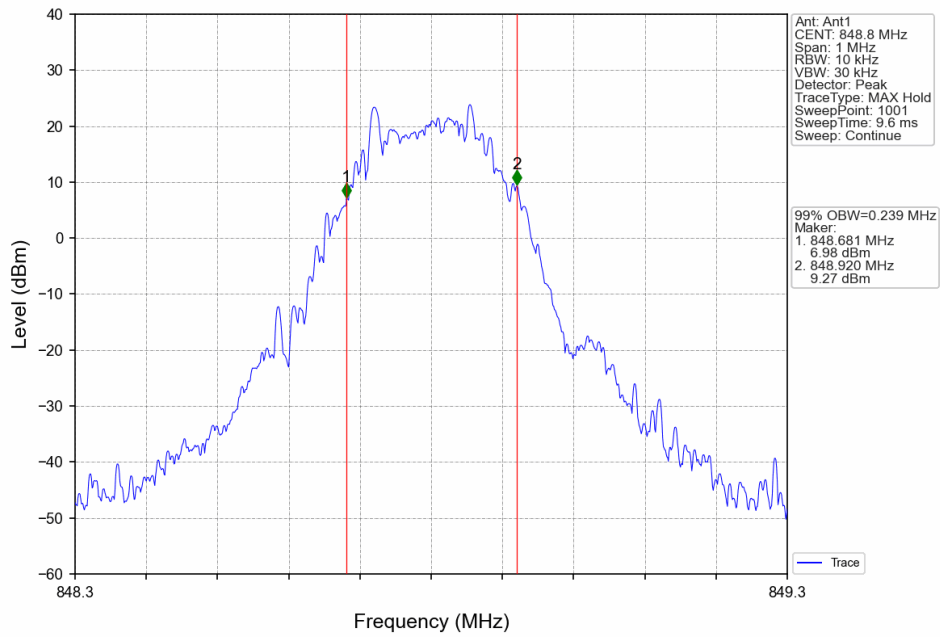
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GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV

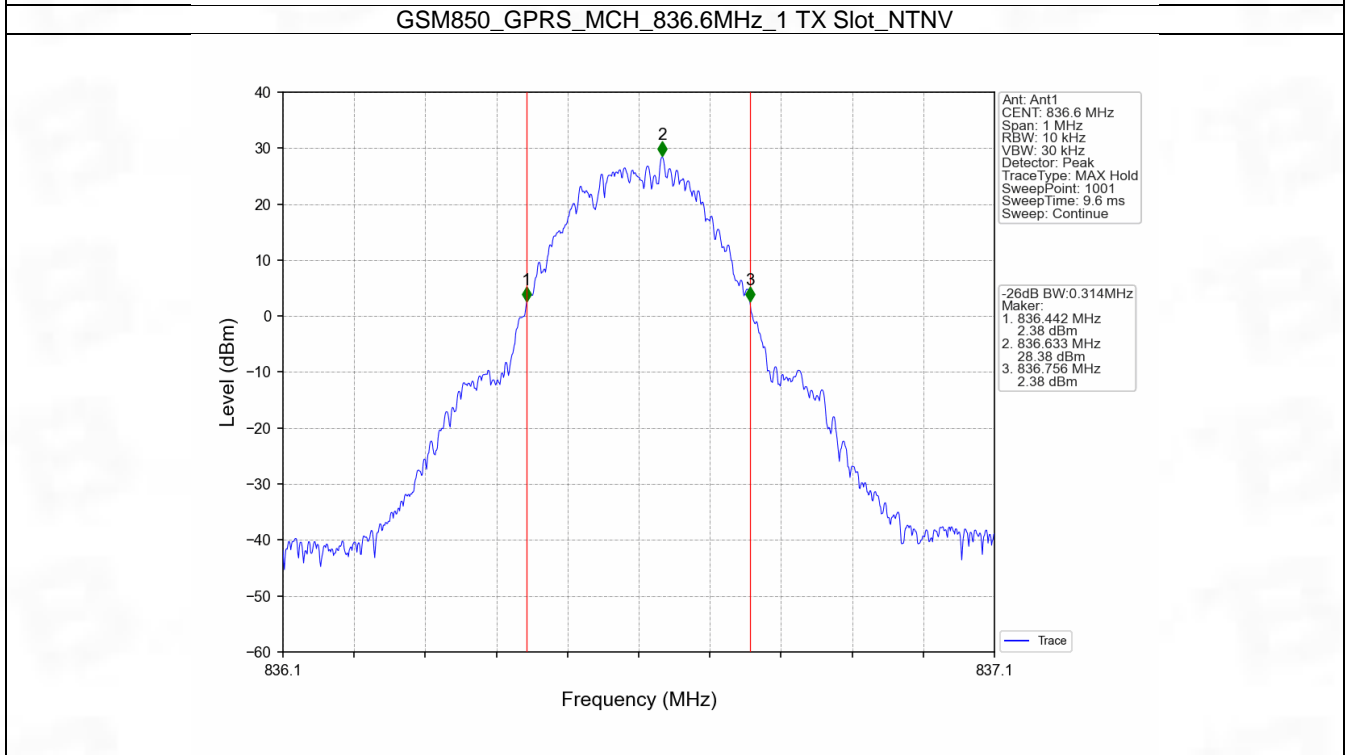
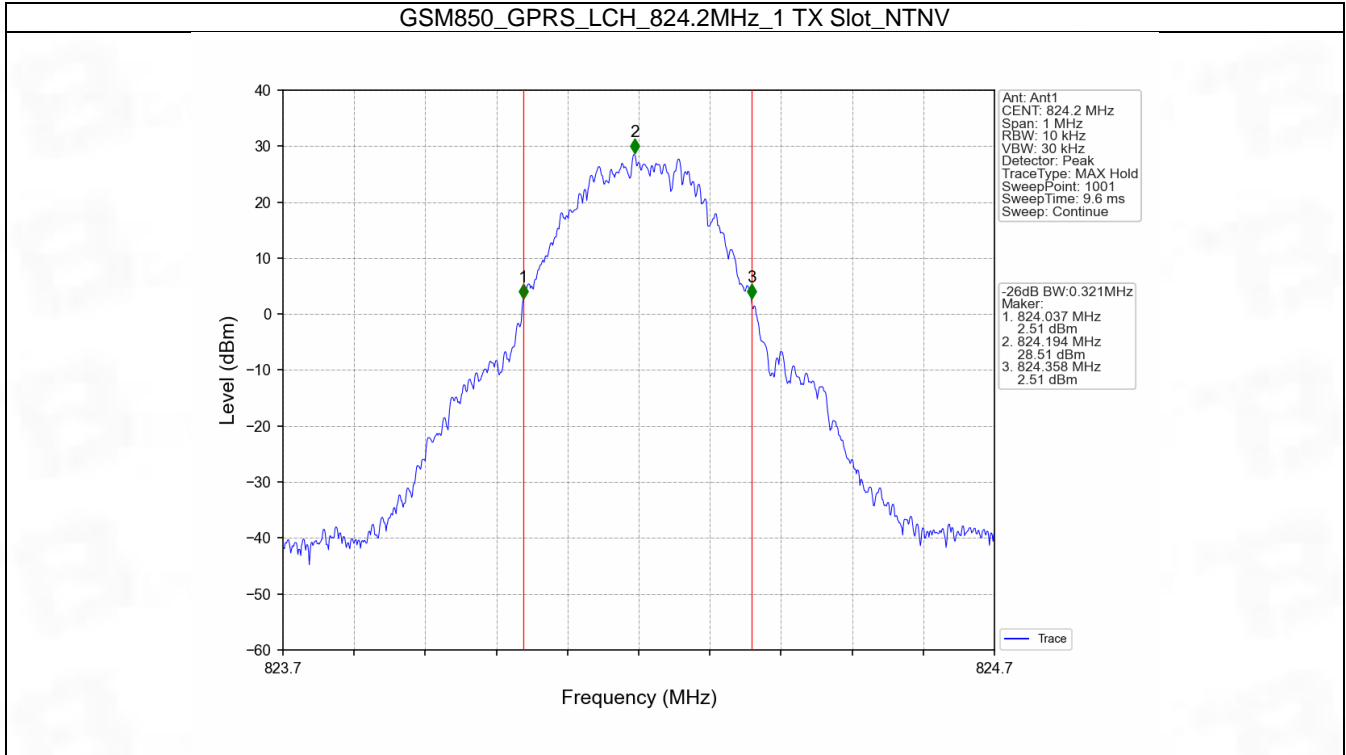


4.2 GSM850_XDB

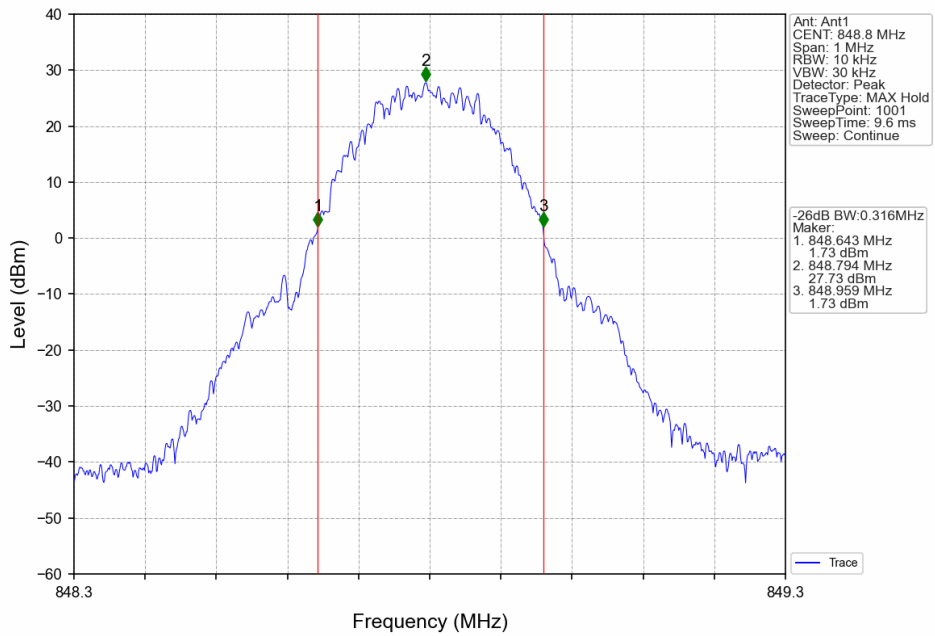
4.2.1 Test Result

Band: GSM850						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result		
NTNV	GPRS	1 TX Slot	824.2	0.321		Pass
			836.6	0.314		Pass
			848.8	0.316		Pass
	EGPRS	1 TX Slot	824.2	0.289		Pass
			836.6	0.293		Pass
			848.8	0.314		Pass

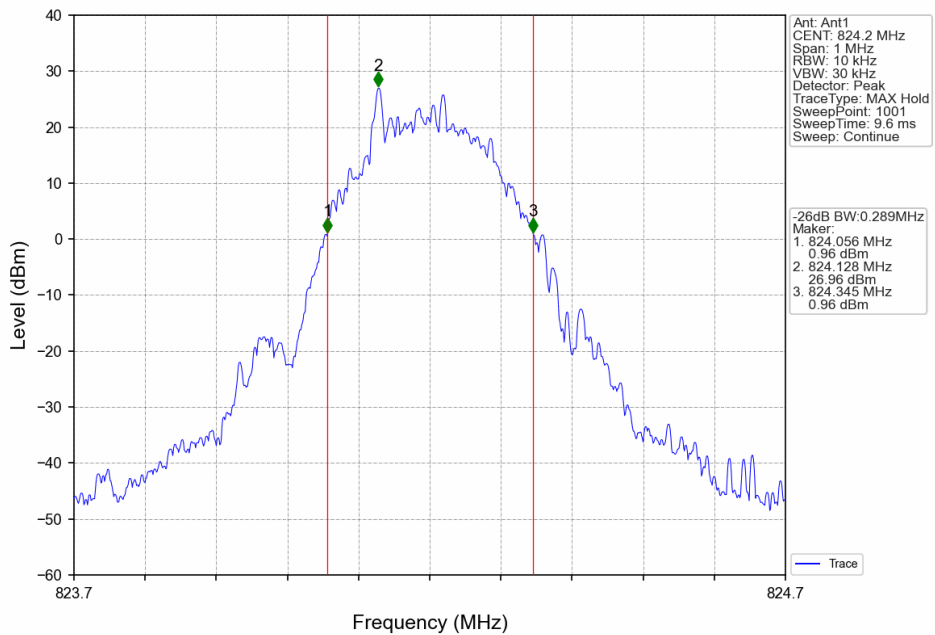
4.2.2 Test Graph



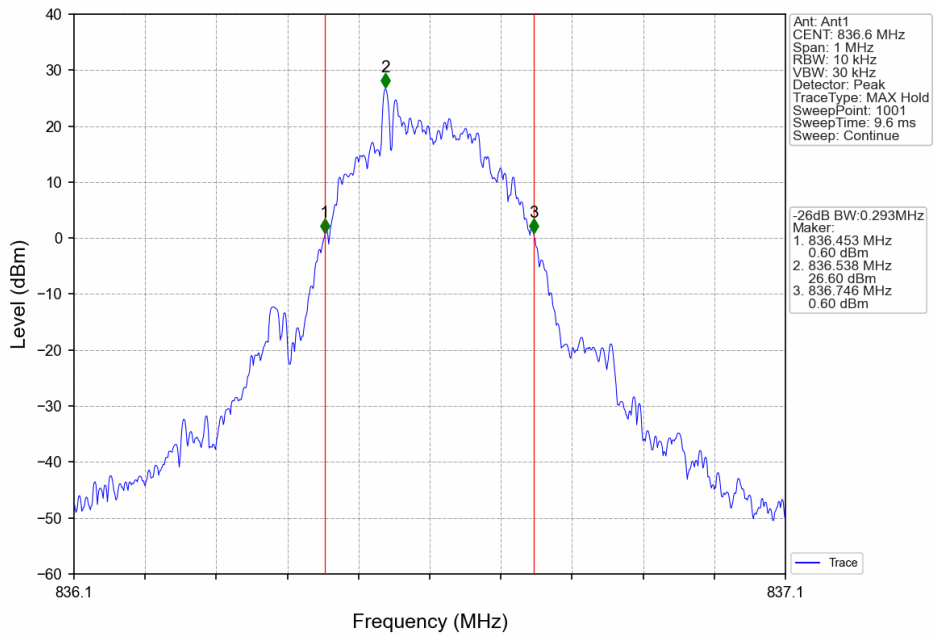
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



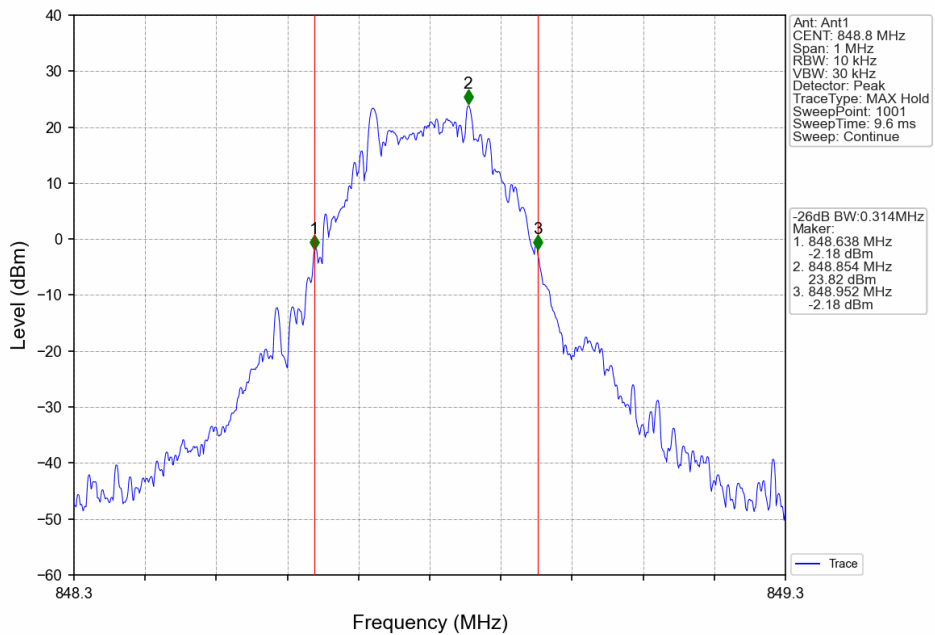
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV



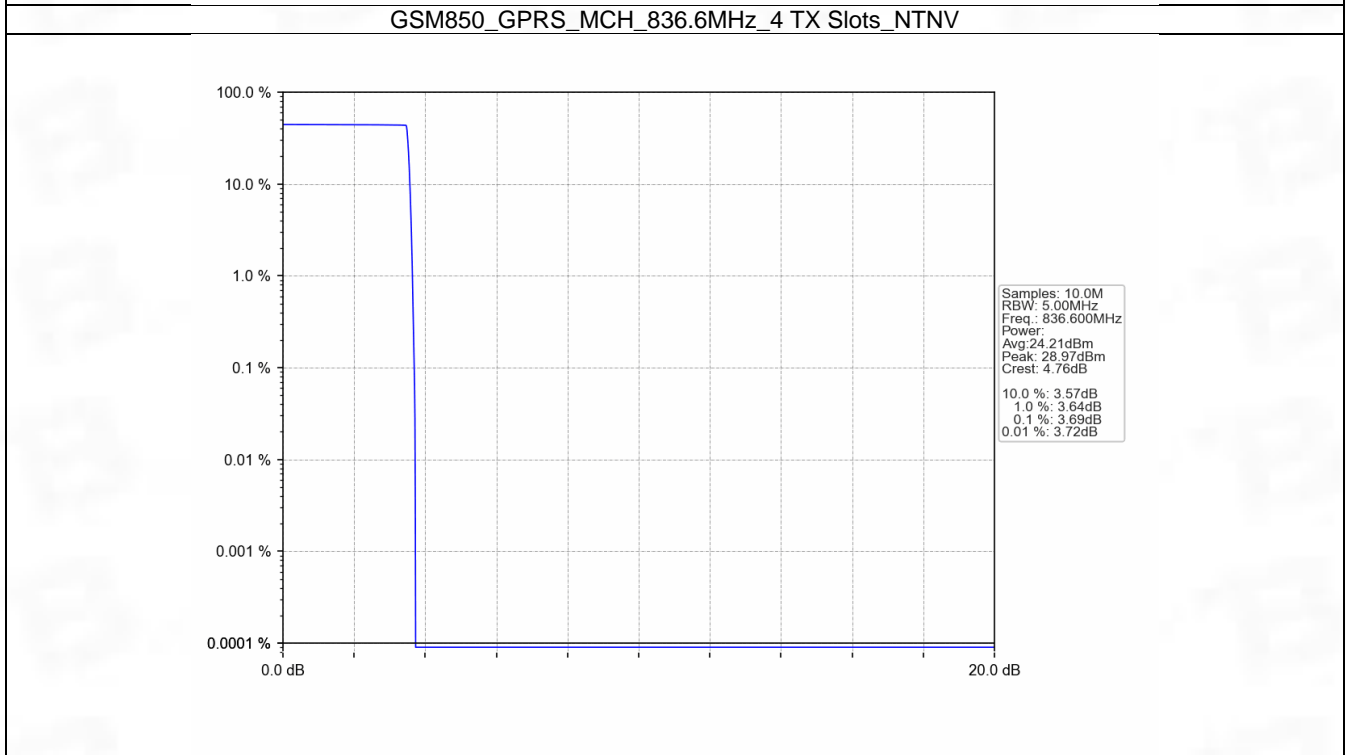
5. Peak-Average Ratio

5.1 GSM850

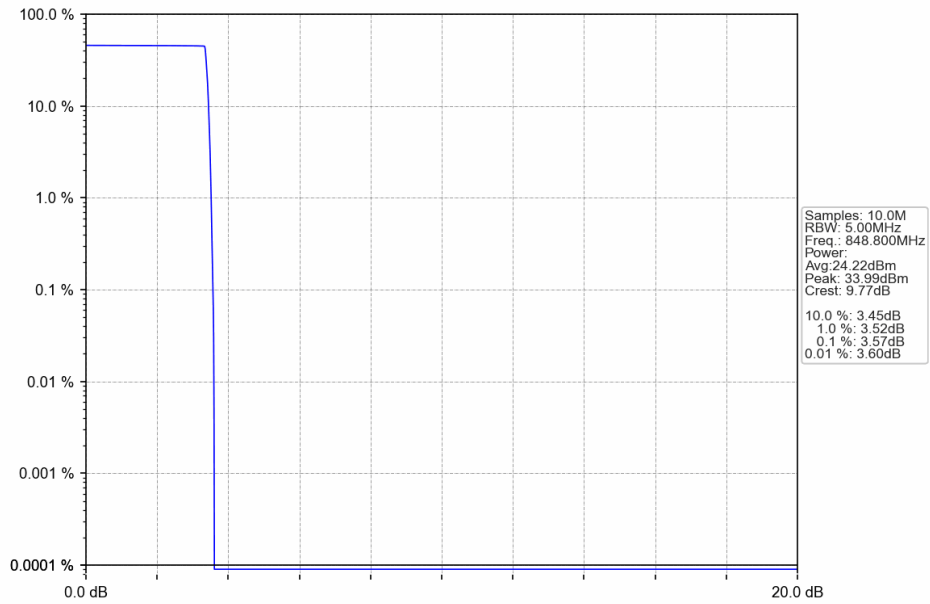
5.1.1 Test Result

Band: GSM850						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	4 TX Slots	824.2	3.88	<=13	Pass
			836.6	3.69	<=13	Pass
			848.8	3.57	<=13	Pass
	EGPRS	4 TX Slots	824.2	11.16	<=13	Pass
			836.6	11.16	<=13	Pass
			848.8	11.18	<=13	Pass

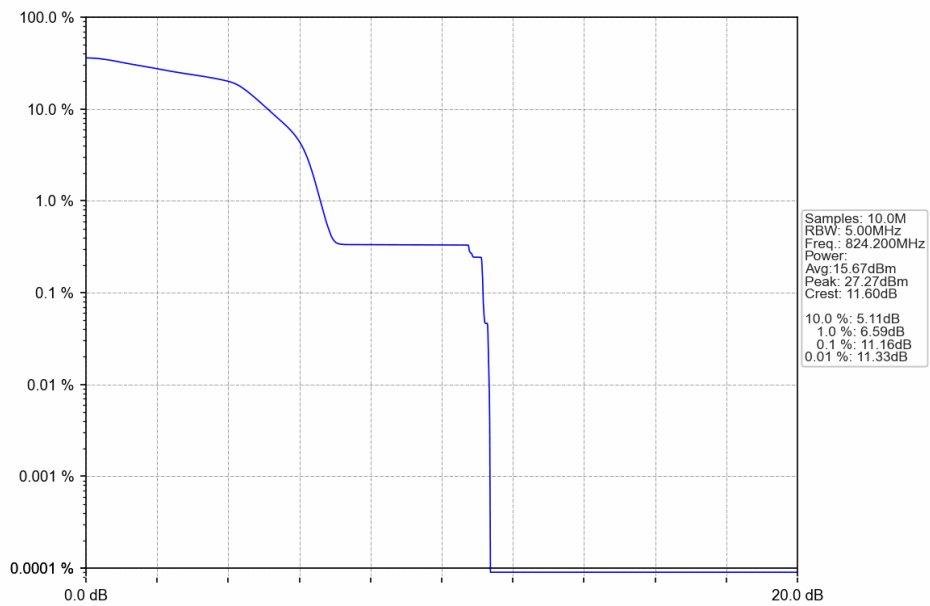
5.1.2 Test Graph



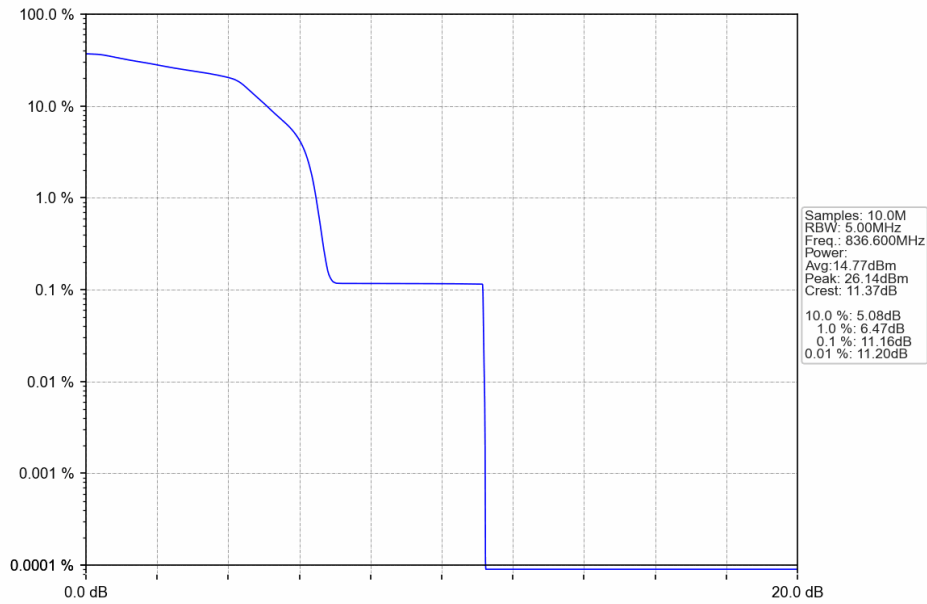
GSM850_GPRS_HCH_848.8MHz_4 TX Slots_NTNV



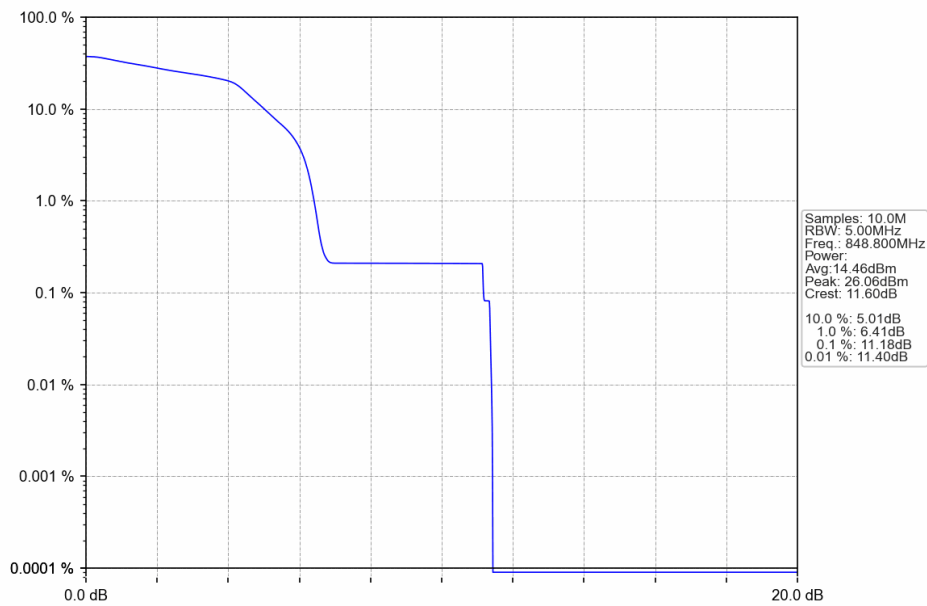
GSM850_EGPRS_LCH_824.2MHz_4 TX Slots_NTNV



GSM850_EGPRS_MCH_836.6MHz_4 TX Slots_NTNV



GSM850_EGPRS_HCH_848.8MHz_4 TX Slots_NTNV



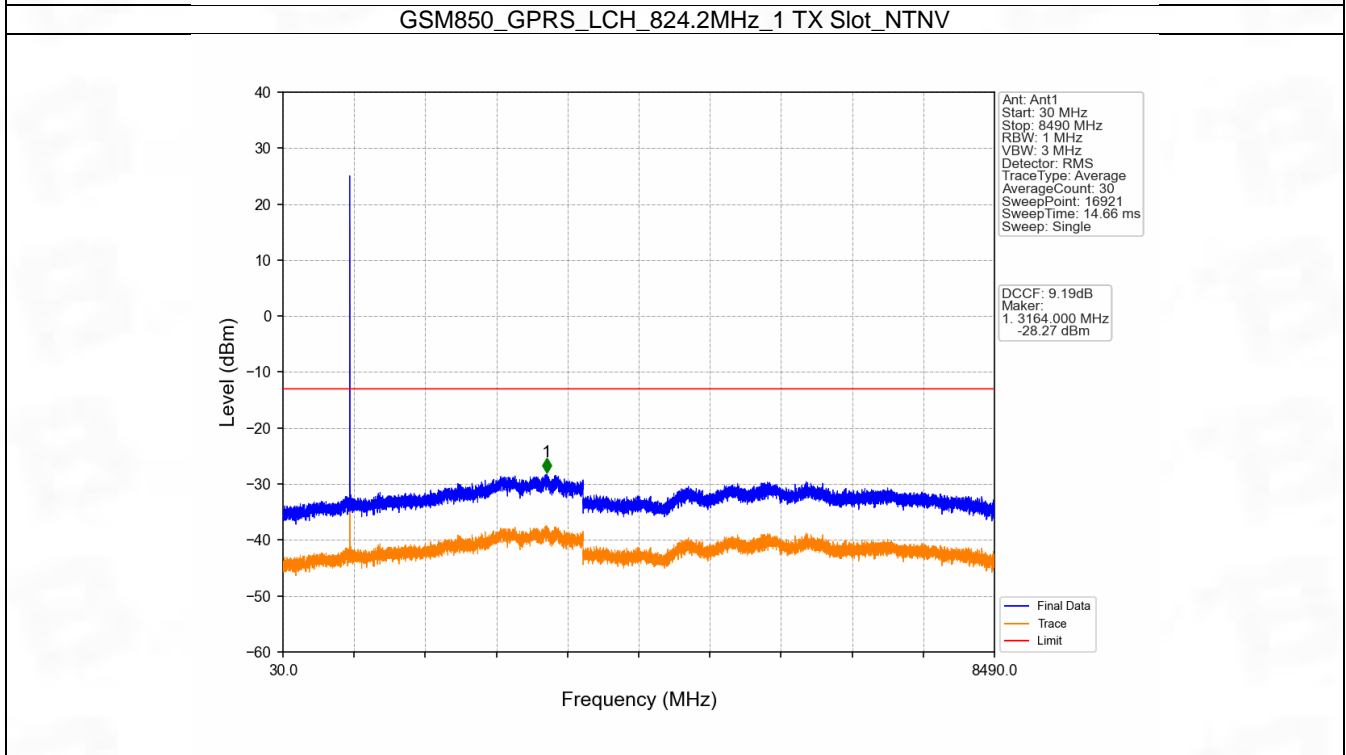
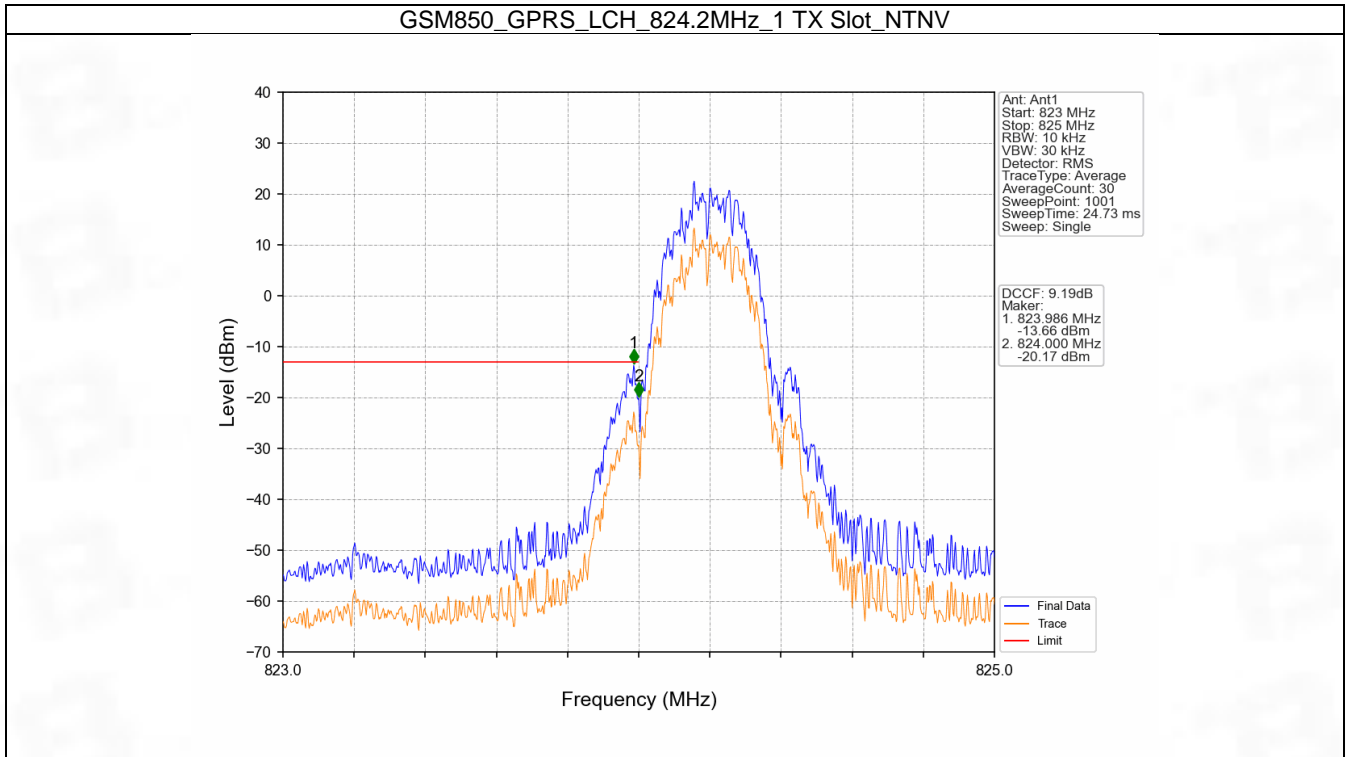
6. Spurious Emission

6.1 GSM850

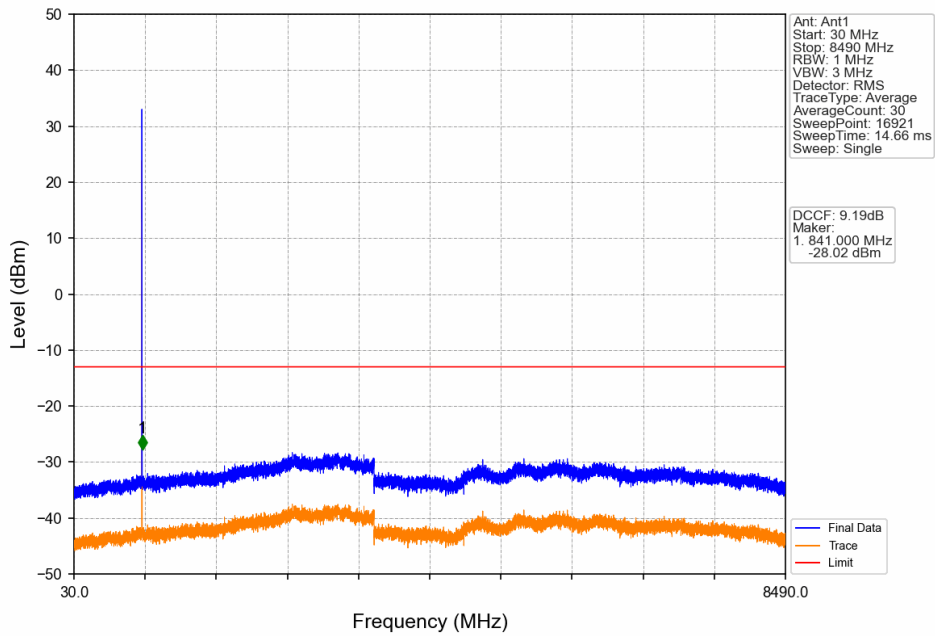
6.1.1 Test Result

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

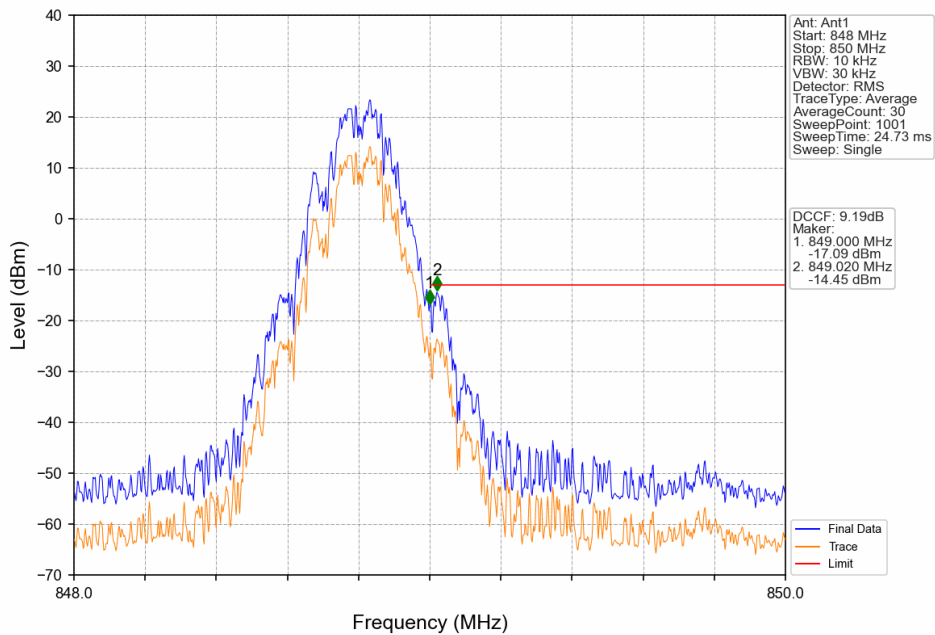
6.1.2 Test Graph



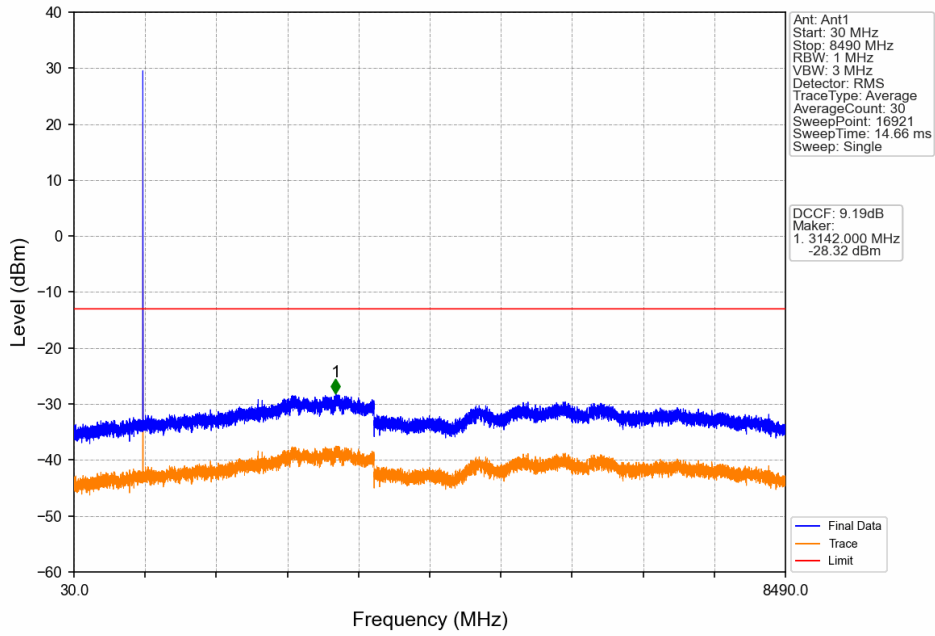
GSM850_GPRS_MCH_836.6MHz_1 TX Slot_NTNV



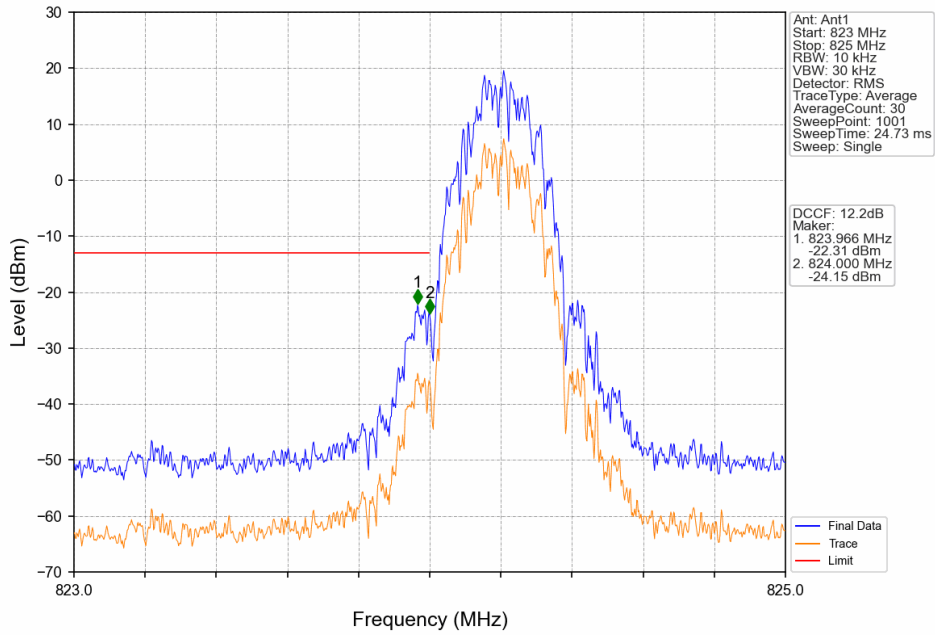
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



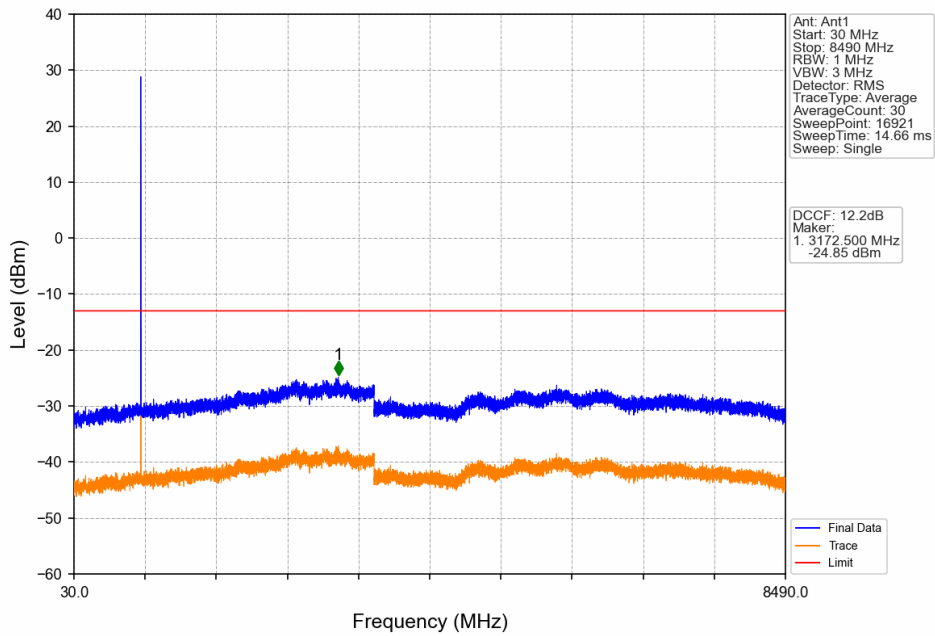
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



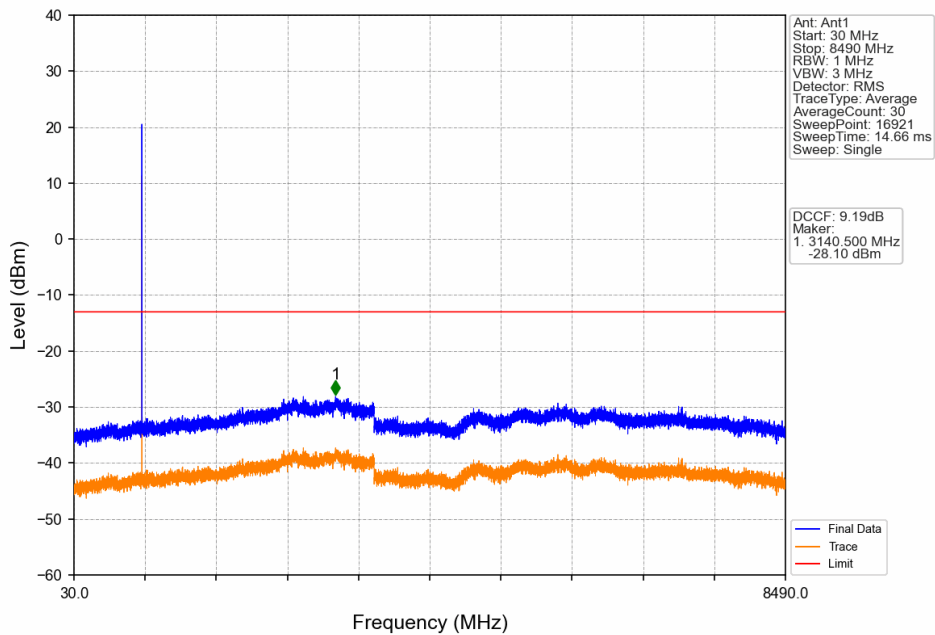
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



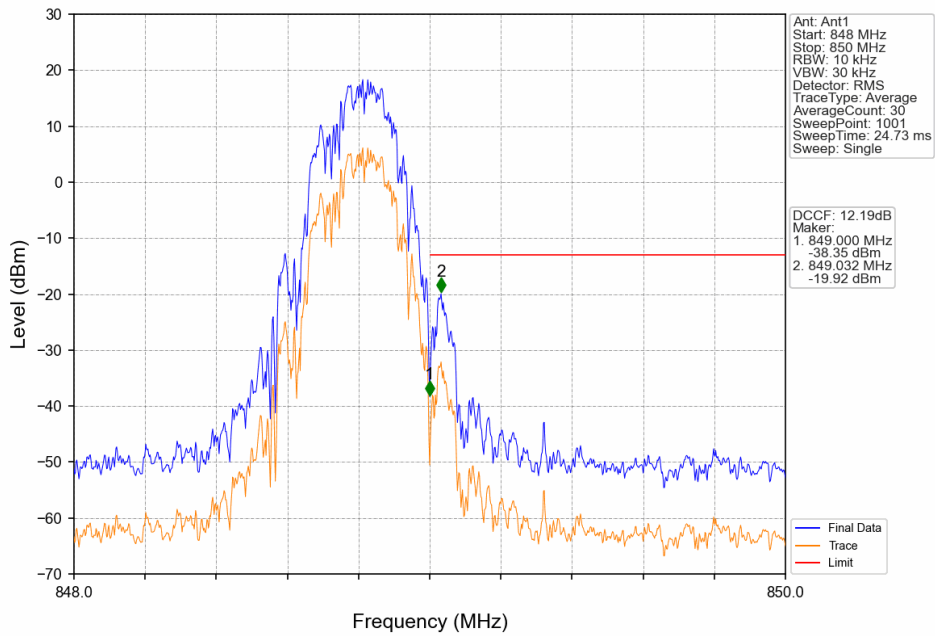
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



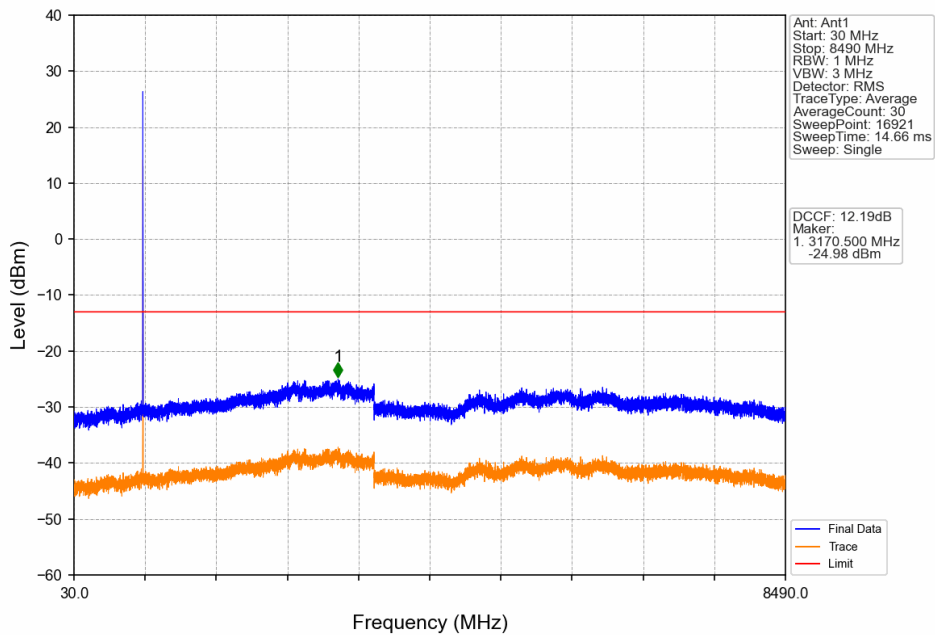
GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_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	1.4723	0.0101	ppm	246KGXW	22H	31.68
GSM850	0.2	824.2	848.8	0.3819	0.0119	ppm	246KG7W	22H	25.82

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	1.0495	0.0101	ppm	246KGXW	22H	30.21
GSM850	0.2	824.2	848.8	0.2723	0.0119	ppm	246KG7W	22H	24.35