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	31.92	0.63	30.40	<=38.45	Pass
		2 TX Slots	824.2	31.28	0.63	29.76	<=38.45	Pass
		3 TX Slots	824.2	29.51	0.63	27.99	<=38.45	Pass
		4 TX Slots	824.2	28.28	0.63	26.76	<=38.45	Pass
		1 TX Slot	836.6	31.81	0.63	30.29	<=38.45	Pass
		2 TX Slots	836.6	31.33	0.63	29.81	<=38.45	Pass
		3 TX Slots	836.6	29.61	0.63	28.09	<=38.45	Pass
		4 TX Slots	836.6	28.40	0.63	26.88	<=38.45	Pass
		1 TX Slot	848.8	31.82	0.63	30.30	<=38.45	Pass
		2 TX Slots	848.8	31.30	0.63	29.78	<=38.45	Pass
		3 TX Slots	848.8	29.54	0.63	28.02	<=38.45	Pass
		4 TX Slots	848.8	28.35	0.63	26.83	<=38.45	Pass
	EGPRS	1 TX Slot	824.2	25.73	0.63	24.21	<=38.45	Pass
		2 TX Slots	824.2	26.18	0.63	24.66	<=38.45	Pass
		3 TX Slots	824.2	23.92	0.63	22.40	<=38.45	Pass
		4 TX Slots	824.2	19.07	0.63	17.55	<=38.45	Pass
		1 TX Slot	836.6	25.11	0.63	23.59	<=38.45	Pass
		2 TX Slots	836.6	24.23	0.63	22.71	<=38.45	Pass
		3 TX Slots	836.6	21.44	0.63	19.92	<=38.45	Pass
		4 TX Slots	836.6	18.86	0.63	17.34	<=38.45	Pass
		1 TX Slot	848.8	25.34	0.63	23.82	<=38.45	Pass
		2 TX Slots	848.8	24.47	0.63	22.95	<=38.45	Pass
		3 TX Slots	848.8	21.63	0.63	20.11	<=38.45	Pass
		4 TX Slots	848.8	19.05	0.63	17.53	<=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	7.329	0.0089	-2.5 to 2.5	Pass
			3.85	8.717	0.0106	-2.5 to 2.5	Pass
			4.43	7.103	0.0086	-2.5 to 2.5	Pass
		-30	3.85	7.264	0.0088	-2.5 to 2.5	Pass
		-20	3.85	6.683	0.0081	-2.5 to 2.5	Pass
		-10	3.85	9.137	0.0111	-2.5 to 2.5	Pass

		0	3.85	7.426	0.0090	-2.5 to 2.5	Pass
		10	3.85	5.230	0.0063	-2.5 to 2.5	Pass
		30	3.85	8.201	0.0100	-2.5 to 2.5	Pass
		40	3.85	7.490	0.0091	-2.5 to 2.5	Pass
		50	3.85	10.364	0.0126	-2.5 to 2.5	Pass
	836.6	20	3.27	5.489	0.0066	-2.5 to 2.5	Pass
			3.85	5.004	0.0060	-2.5 to 2.5	Pass
			4.43	2.195	0.0026	-2.5 to 2.5	Pass
		-30	3.85	6.748	0.0081	-2.5 to 2.5	Pass
		-20	3.85	6.005	0.0072	-2.5 to 2.5	Pass
		-10	3.85	6.167	0.0074	-2.5 to 2.5	Pass
		0	3.85	5.101	0.0061	-2.5 to 2.5	Pass
		10	3.85	8.071	0.0096	-2.5 to 2.5	Pass
		30	3.85	5.941	0.0071	-2.5 to 2.5	Pass
		40	3.85	6.941	0.0083	-2.5 to 2.5	Pass
		50	3.85	5.359	0.0064	-2.5 to 2.5	Pass
	848.8	20	3.27	3.551	0.0042	-2.5 to 2.5	Pass
			3.85	1.259	0.0015	-2.5 to 2.5	Pass
			4.43	-1.065	-0.0013	-2.5 to 2.5	Pass
		-30	3.85	3.229	0.0038	-2.5 to 2.5	Pass
		-20	3.85	1.550	0.0018	-2.5 to 2.5	Pass
		-10	3.85	3.842	0.0045	-2.5 to 2.5	Pass
		0	3.85	3.519	0.0041	-2.5 to 2.5	Pass
		10	3.85	3.229	0.0038	-2.5 to 2.5	Pass
		30	3.85	-0.032	0.0000	-2.5 to 2.5	Pass
		40	3.85	1.969	0.0023	-2.5 to 2.5	Pass
		50	3.85	-1.582	-0.0019	-2.5 to 2.5	Pass
EGPRS	824.2	20	3.27	10.783	0.0131	-2.5 to 2.5	Pass
			3.85	7.200	0.0087	-2.5 to 2.5	Pass
			4.43	11.171	0.0136	-2.5 to 2.5	Pass
		-30	3.85	9.524	0.0116	-2.5 to 2.5	Pass
		-20	3.85	7.910	0.0096	-2.5 to 2.5	Pass
		-10	3.85	8.136	0.0099	-2.5 to 2.5	Pass
		0	3.85	7.878	0.0096	-2.5 to 2.5	Pass
		10	3.85	9.008	0.0109	-2.5 to 2.5	Pass
		30	3.85	6.005	0.0073	-2.5 to 2.5	Pass
		40	3.85	5.811	0.0071	-2.5 to 2.5	Pass
		50	3.85	8.394	0.0102	-2.5 to 2.5	Pass
	836.6	20	3.27	6.941	0.0083	-2.5 to 2.5	Pass
			3.85	4.907	0.0059	-2.5 to 2.5	Pass
			4.43	6.715	0.0080	-2.5 to 2.5	Pass
		-30	3.85	4.843	0.0058	-2.5 to 2.5	Pass
		-20	3.85	5.037	0.0060	-2.5 to 2.5	Pass
		-10	3.85	8.588	0.0103	-2.5 to 2.5	Pass
		0	3.85	4.423	0.0053	-2.5 to 2.5	Pass
		10	3.85	6.586	0.0079	-2.5 to 2.5	Pass
		30	3.85	5.069	0.0061	-2.5 to 2.5	Pass
		40	3.85	3.487	0.0042	-2.5 to 2.5	Pass
		50	3.85	5.553	0.0066	-2.5 to 2.5	Pass
	848.8	20	3.27	8.136	0.0096	-2.5 to 2.5	Pass
			3.85	7.329	0.0086	-2.5 to 2.5	Pass
			4.43	6.037	0.0071	-2.5 to 2.5	Pass
		-30	3.85	8.136	0.0096	-2.5 to 2.5	Pass
		-20	3.85	5.069	0.0060	-2.5 to 2.5	Pass
		-10	3.85	8.523	0.0100	-2.5 to 2.5	Pass

		0	3.85	7.619	0.0090	-2.5 to 2.5	Pass
		10	3.85	7.942	0.0094	-2.5 to 2.5	Pass
		30	3.85	9.201	0.0108	-2.5 to 2.5	Pass
		40	3.85	8.975	0.0106	-2.5 to 2.5	Pass
		50	3.85	7.942	0.0094	-2.5 to 2.5	Pass

3. Modulation Characteristics

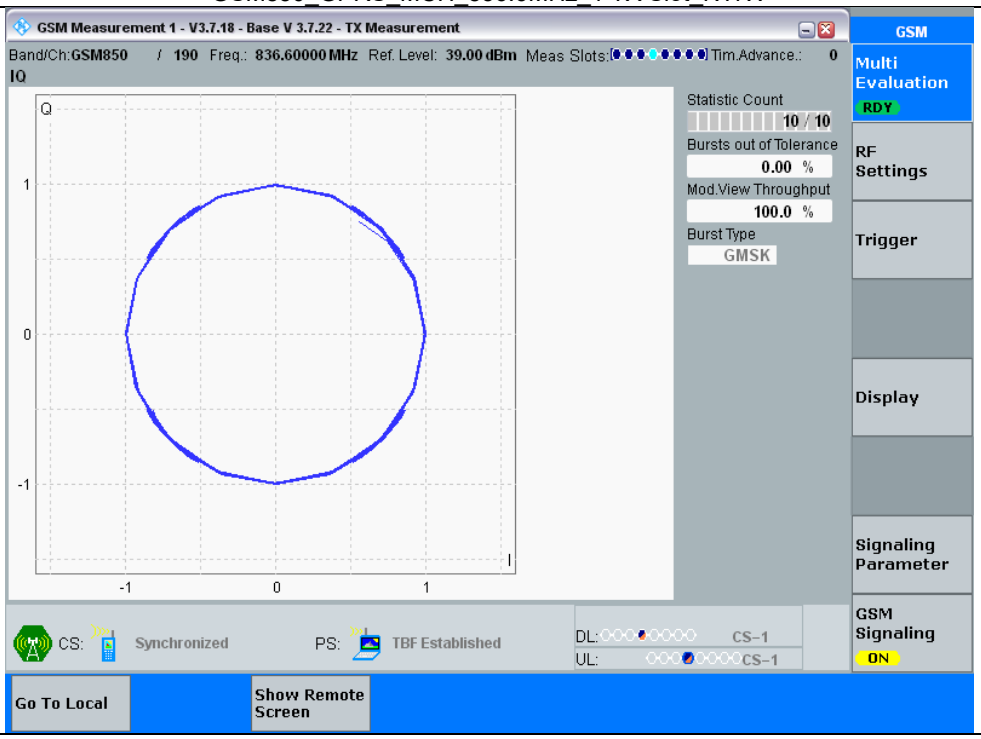
3.1 GSM850

3.1.1 Test Result

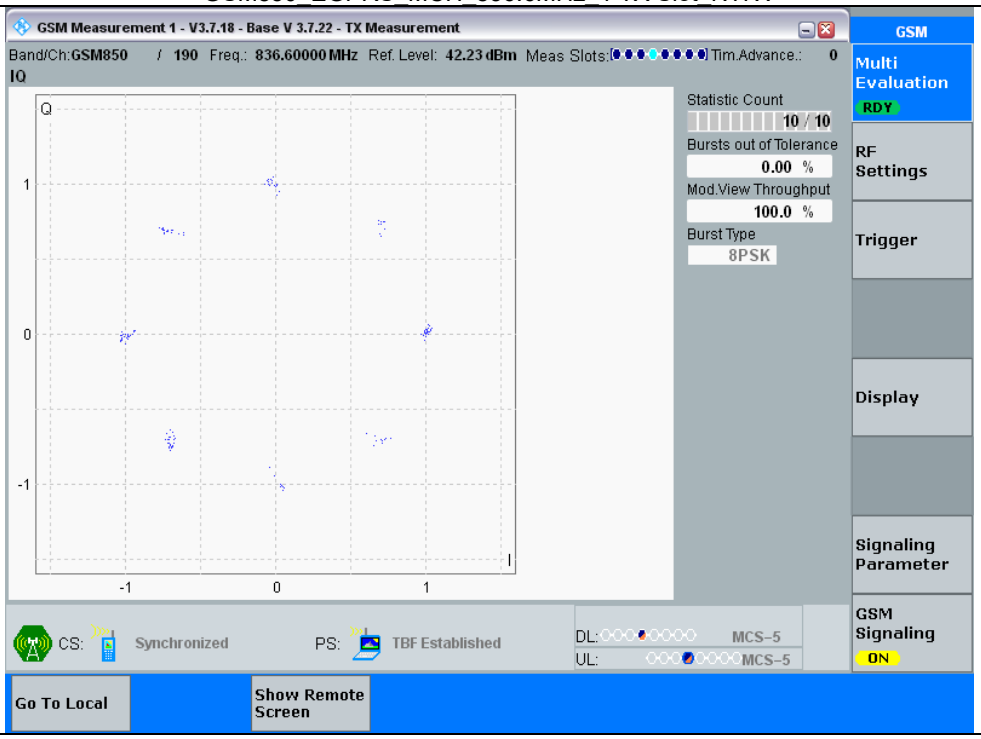
Band: GSM850						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	1 TX Slot	836.6	Refer To Test Graph		Pass
	EGPRS	1 TX Slot	836.6	Refer To Test Graph		Pass

3.1.2 Test Graph

GSM850_GPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



4. 99% & 26dB Bandwidth

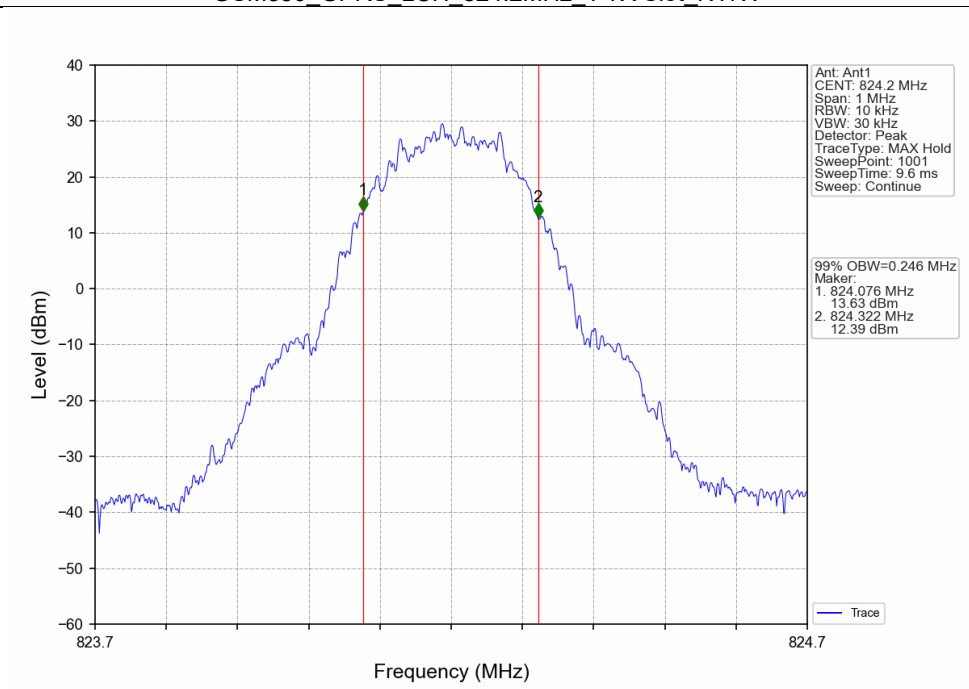
4.1 GSM850_OBW

4.1.1 Test Result

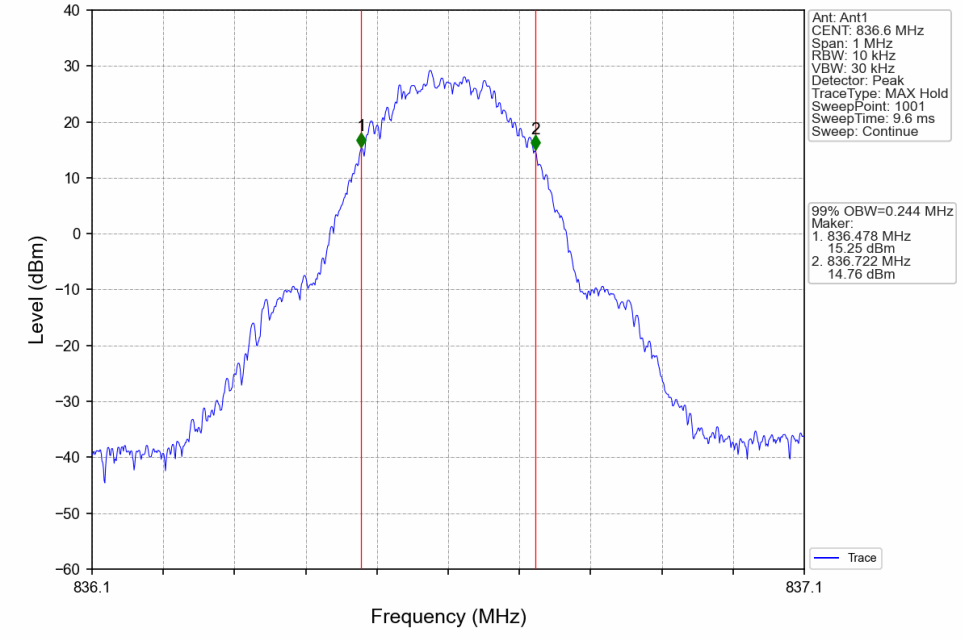
Band: GSM850					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GPRS	1 TX Slot	824.2	0.246	Pass
			836.6	0.244	Pass
			848.8	0.244	Pass
	EGPRS	1 TX Slot	824.2	0.244	Pass
			836.6	0.252	Pass
			848.8	0.240	Pass

4.1.2 Test Graph

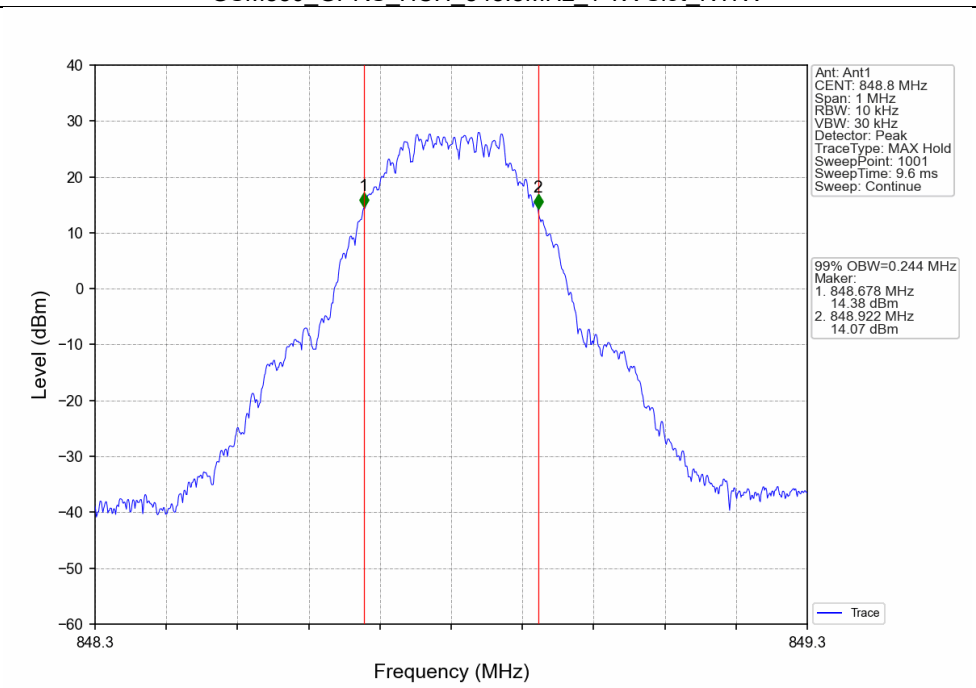
GSM850_GPRS_LCH_824.2MHz_1 TX Slot_NTNV



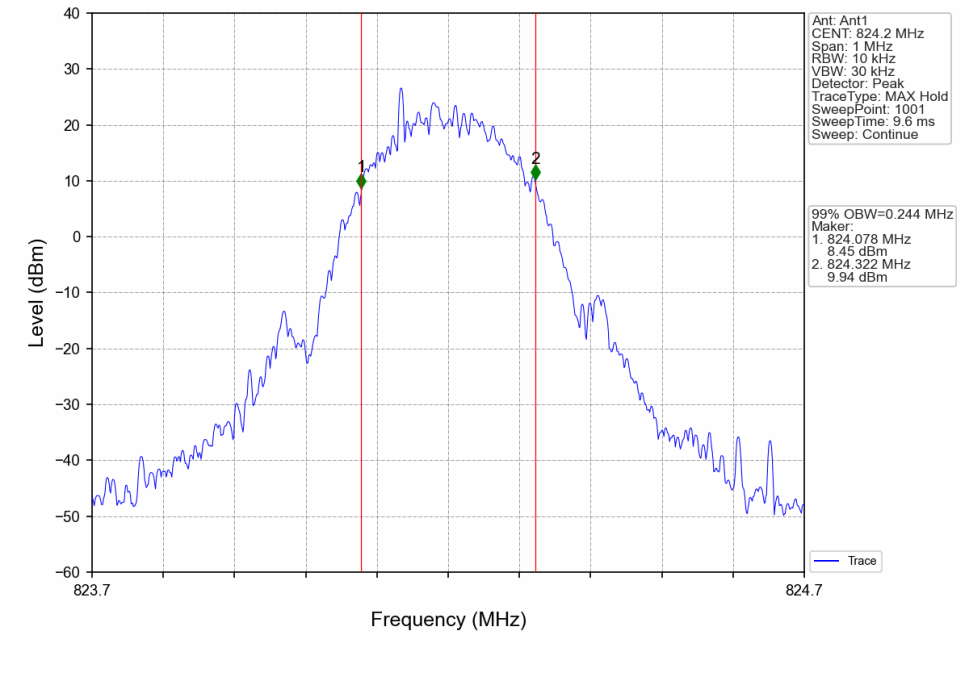
GSM850_GPRS_MCH_836.6MHz_1 TX Slot_NTNV



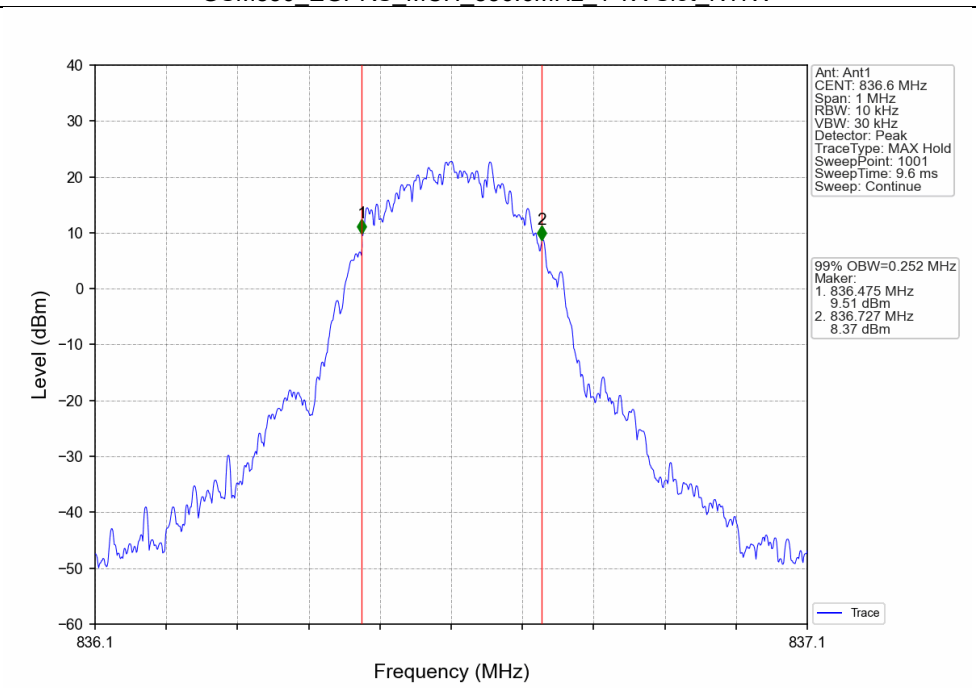
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



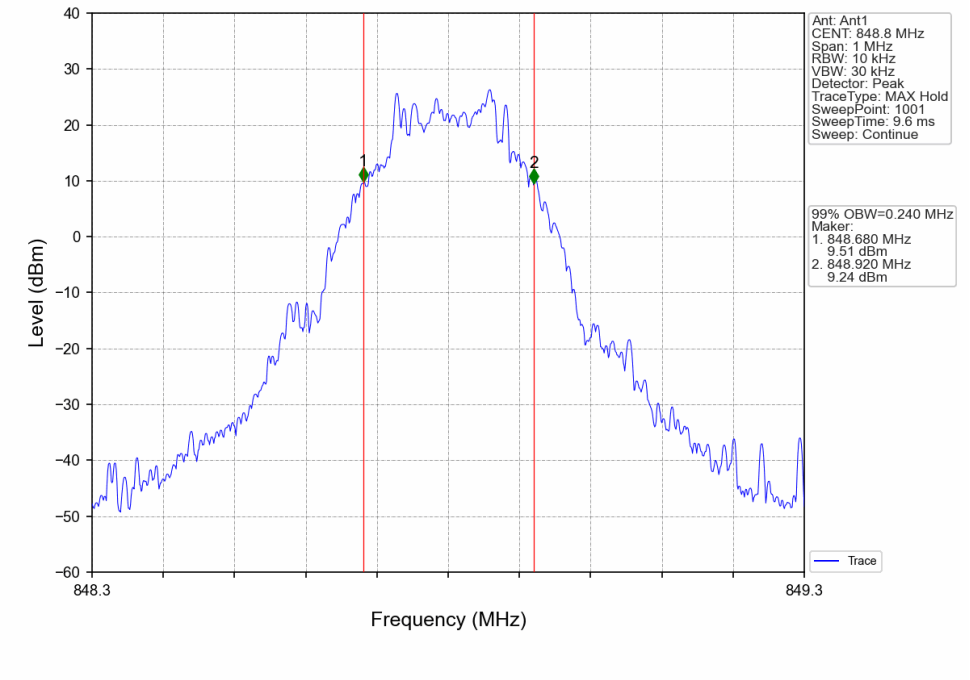
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV



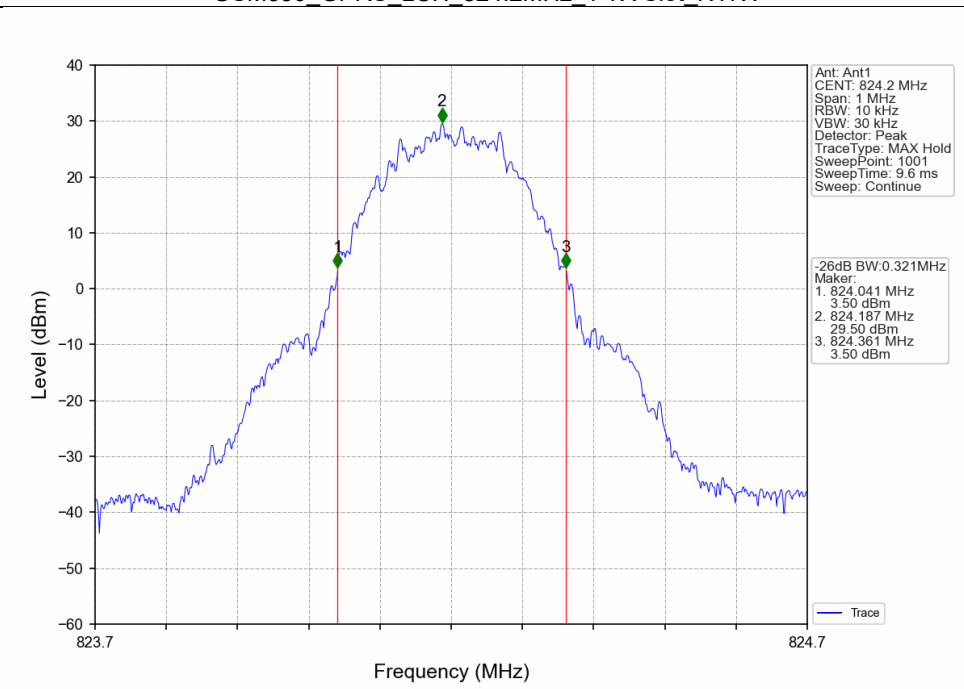
4.2 GSM850_XDB

4.2.1 Test Result

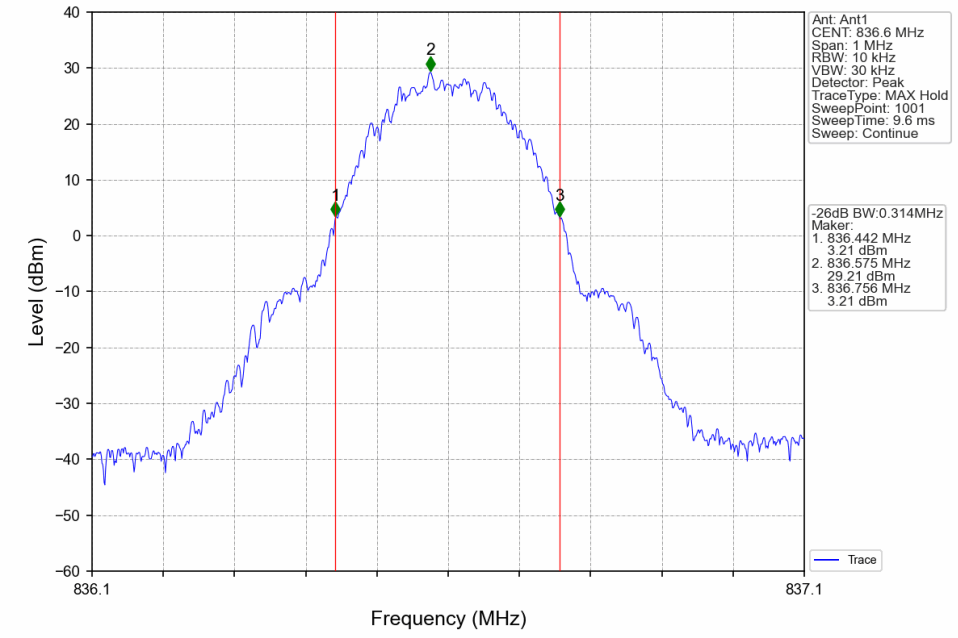
Band: GSM850					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GPRS	1 TX Slot	824.2	0.321	Pass
			836.6	0.314	Pass
			848.8	0.320	Pass
	EGPRS	1 TX Slot	824.2	0.299	Pass
			836.6	0.324	Pass
			848.8	0.310	Pass

4.2.2 Test Graph

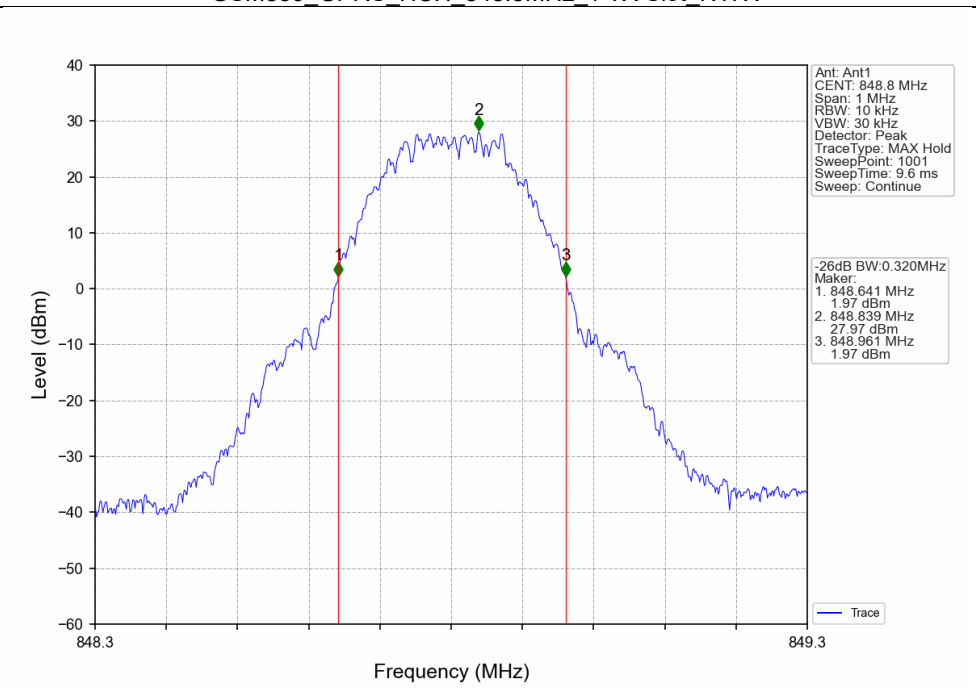
GSM850_GPRS_LCH_824.2MHz_1 TX Slot_NTNV



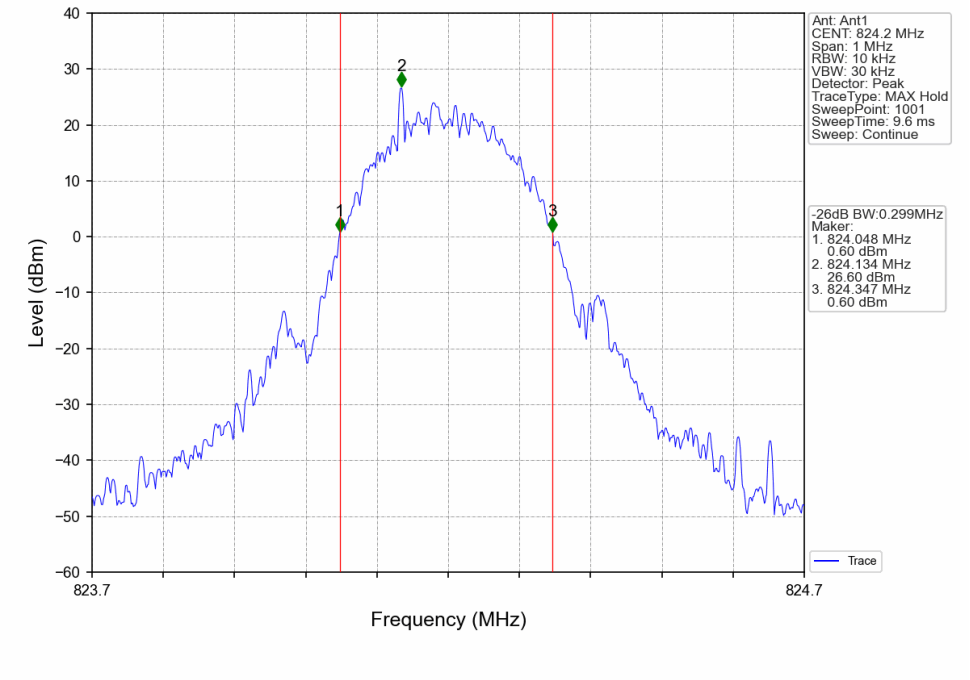
GSM850_GPRS_MCH_836.6MHz_1 TX Slot_NTNV



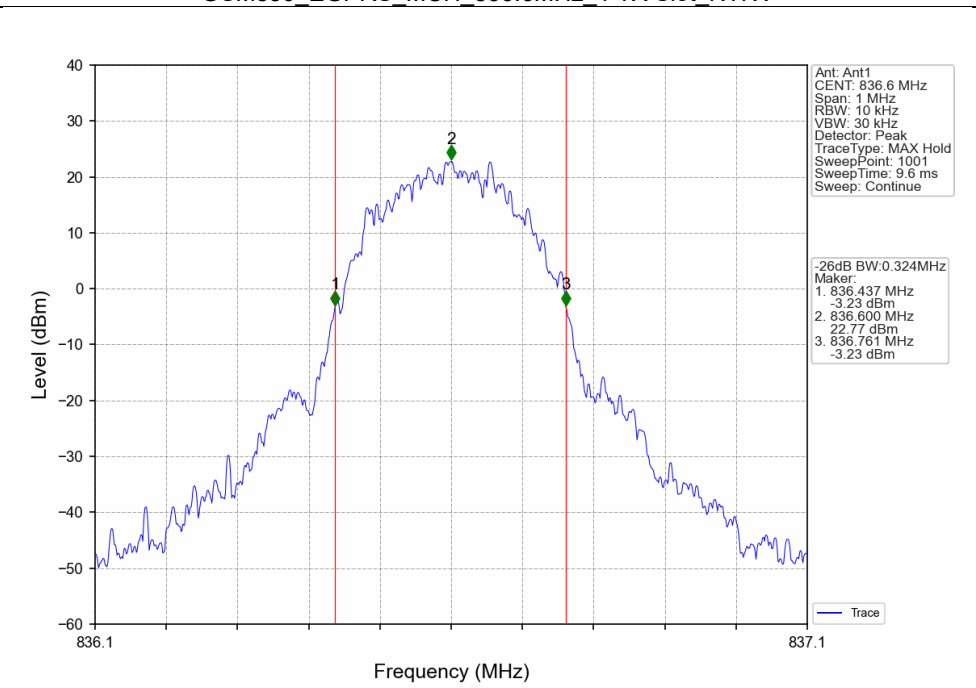
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



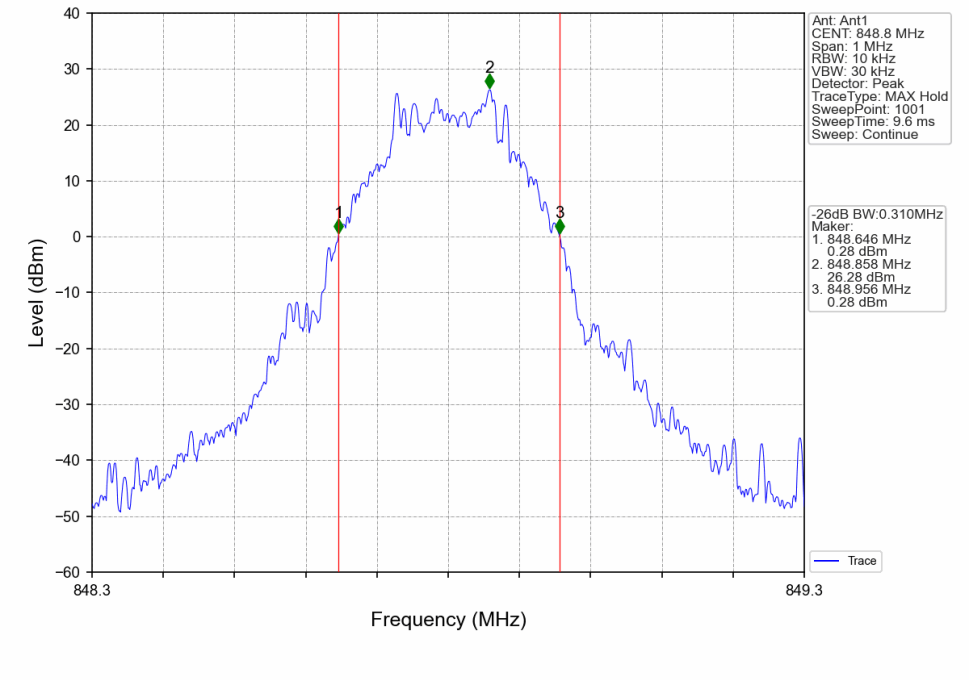
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



GSM850_EGPRS_HCH_848.8MHz_1 TX Slot_NTNV



5. Peak-Average Ratio

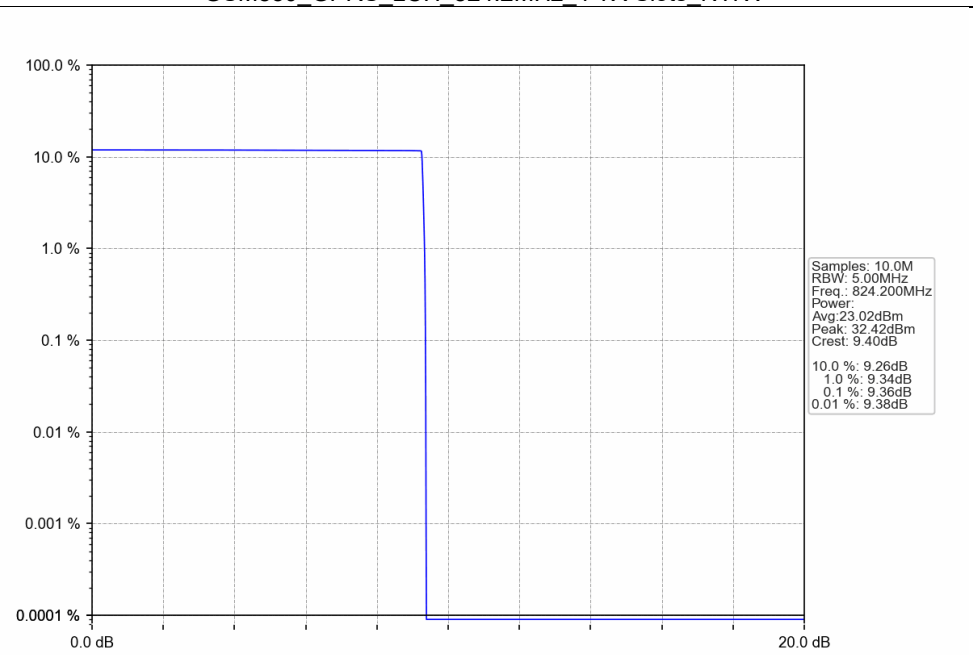
5.1 GSM850

5.1.1 Test Result

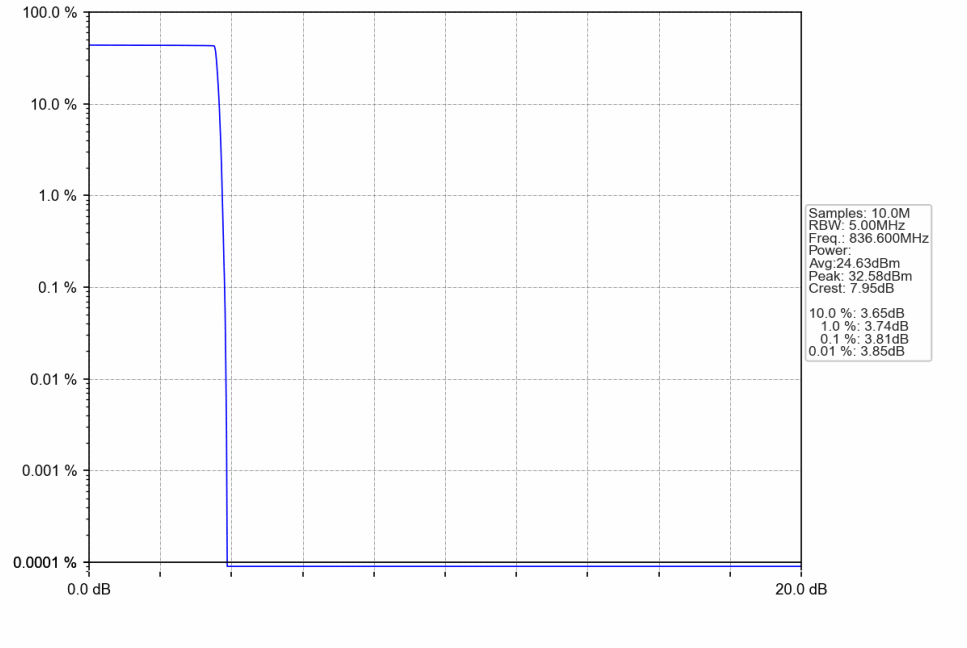
Band: GSM850						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	4 TX Slots	824.2	9.36	<=13	Pass
			836.6	3.81	<=13	Pass
			848.8	3.48	<=13	Pass
	EGPRS	4 TX Slots	824.2	11.84	<=13	Pass
			836.6	7.90	<=13	Pass
			848.8	10.69	<=13	Pass

5.1.2 Test Graph

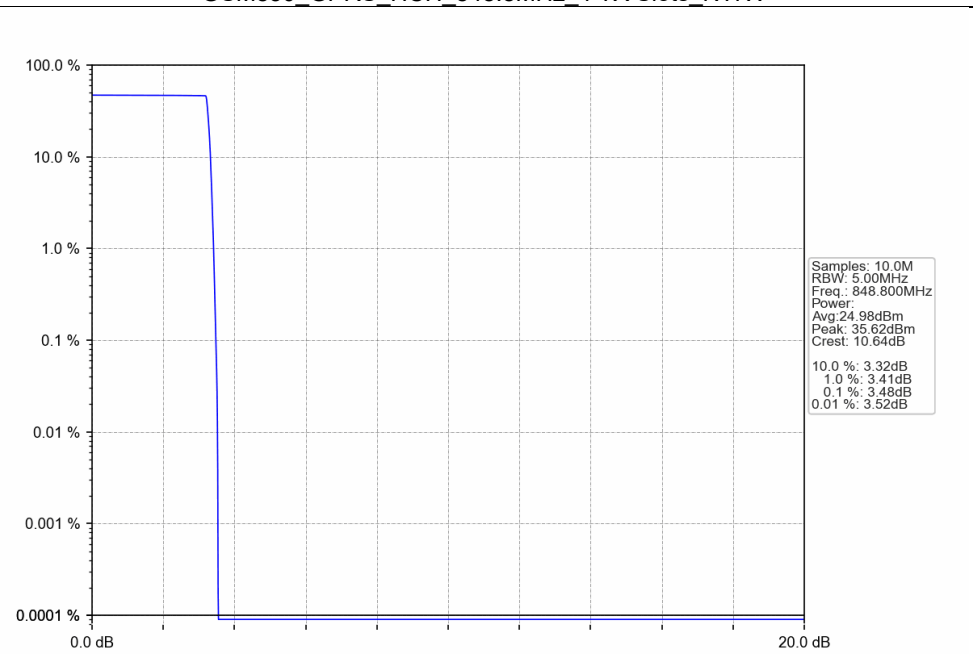
GSM850_GPRS_LCH_824.2MHz_4 TX Slots_NTNV



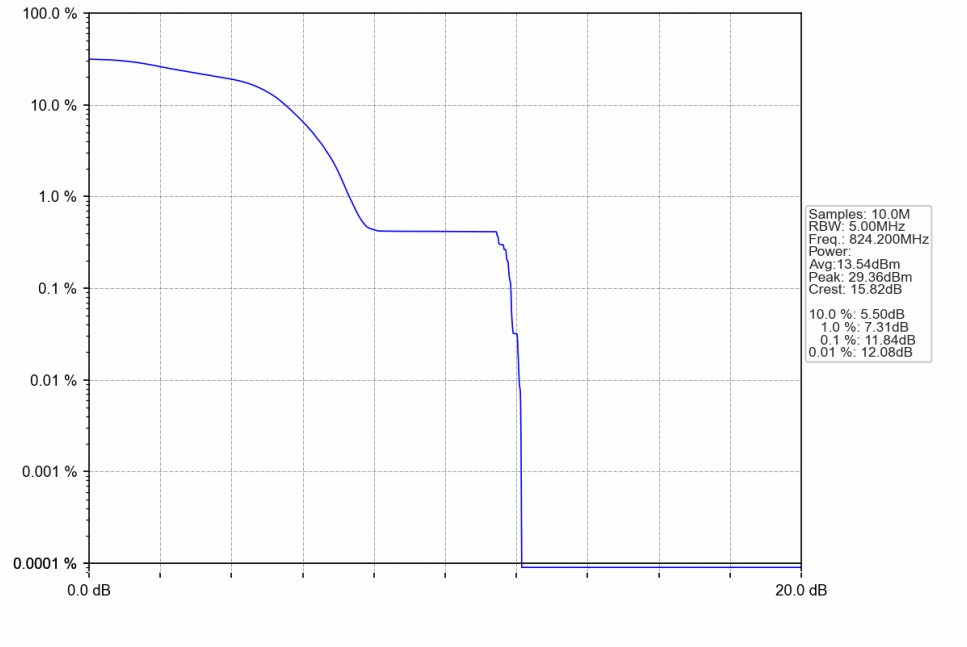
GSM850_GPRS_MCH_836.6MHz_4 TX Slots_NTNV



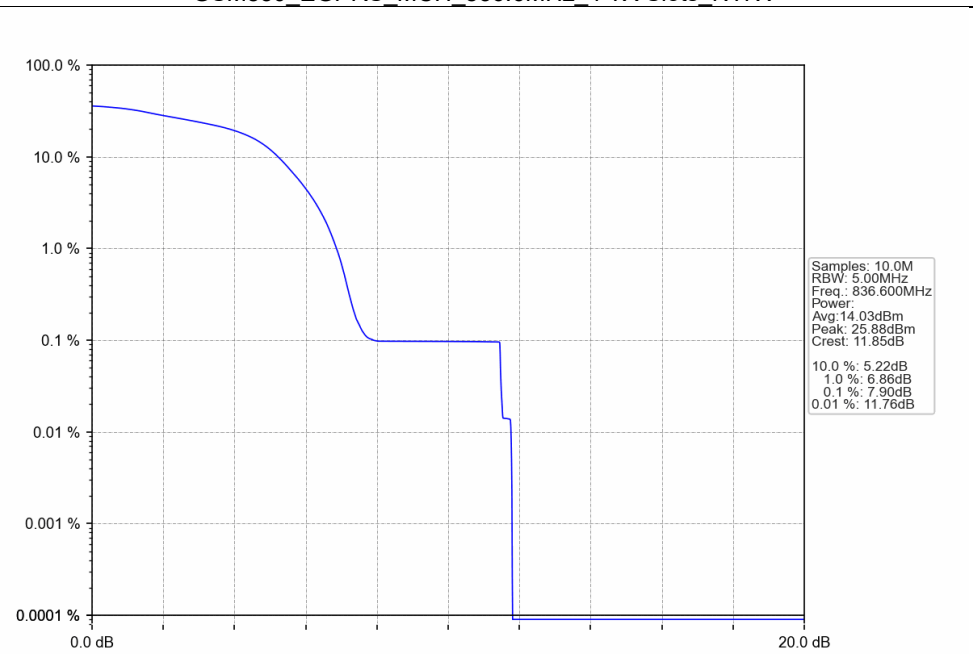
GSM850_GPRS_HCH_848.8MHz_4 TX Slots_NTNV



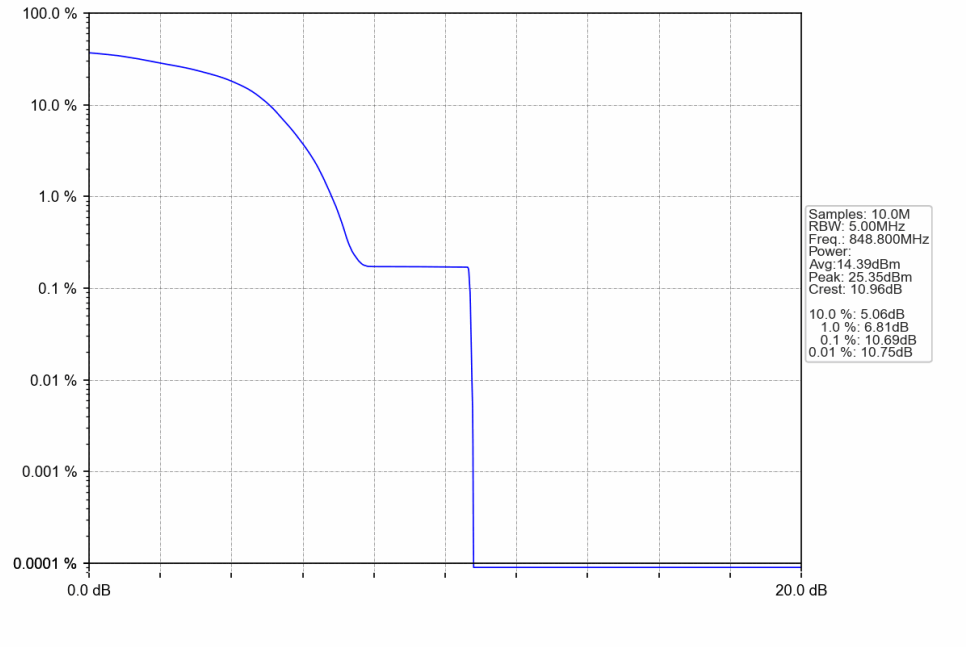
GSM850_EGPRS_LCH_824.2MHz_4 TX Slots_NTNV



GSM850_EGPRS_MCH_836.6MHz_4 TX Slots_NTNV



GSM850_EGPRS_HCH_848.8MHz_4 TX Slots_NTNV



6. Spurious Emission

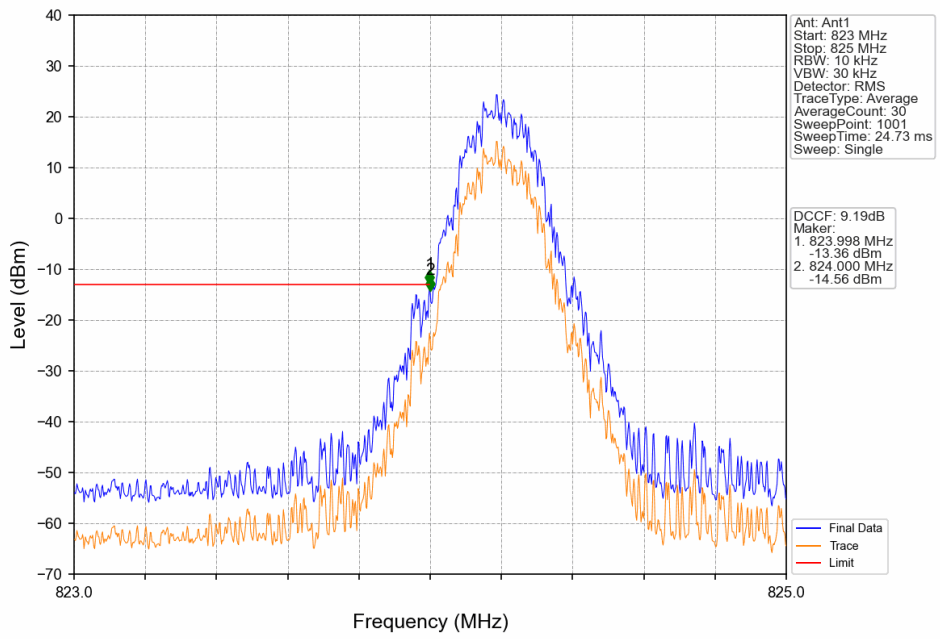
6.1 GSM850

6.1.1 Test Result

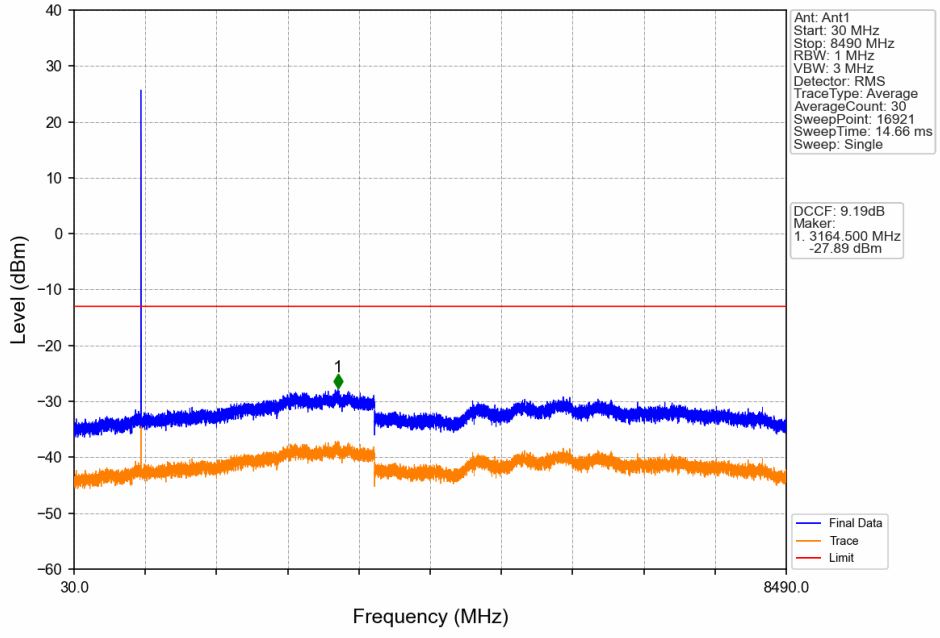
Band: GSM850						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	GPRS	1 TX Slot	824.2	Refer To Test Graph		Pass
			836.6	Refer To Test Graph		Pass
			848.8	Refer To Test Graph		Pass
	EGPRS	1 TX Slot	824.2	Refer To Test Graph		Pass
			836.6	Refer To Test Graph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

6.1.2 Test Graph

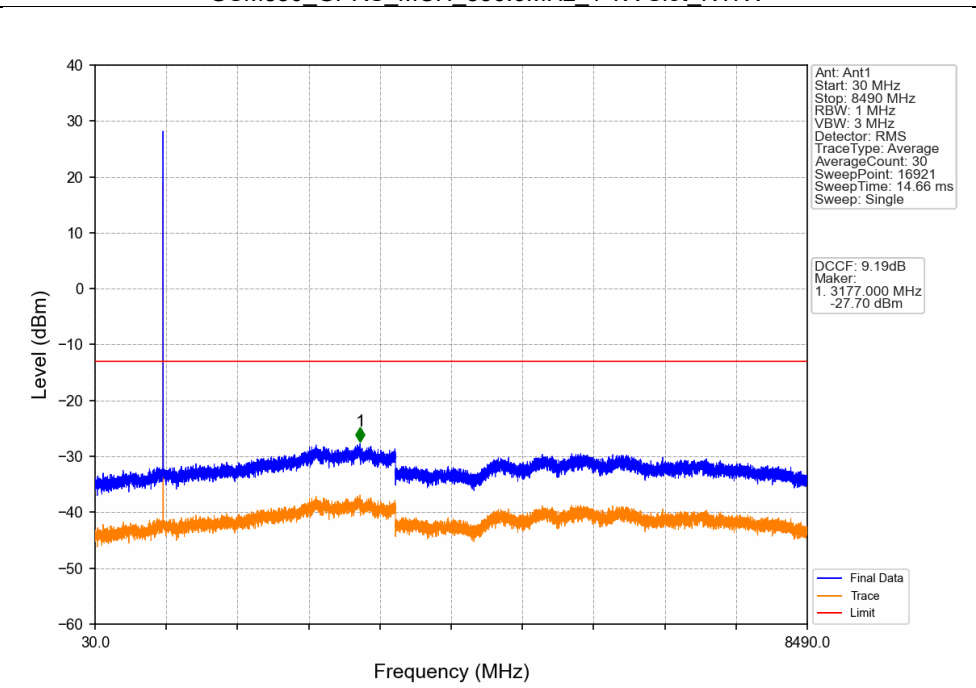
GSM850_GPRS_LCH_824.2MHz_1 TX Slot_NTNV



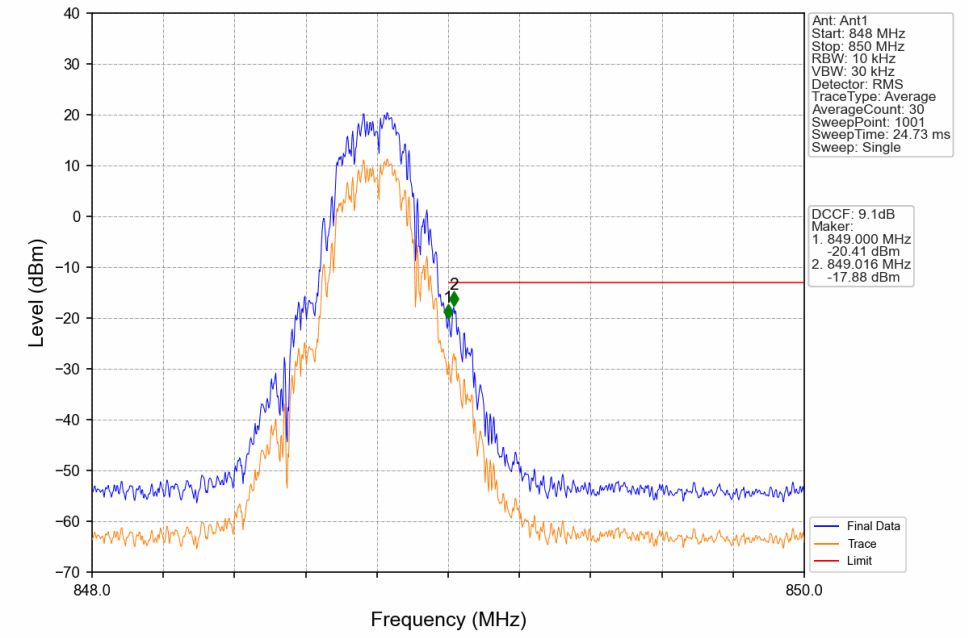
GSM850_GPRS_LCH_824.2MHz_1 TX Slot_NTNV



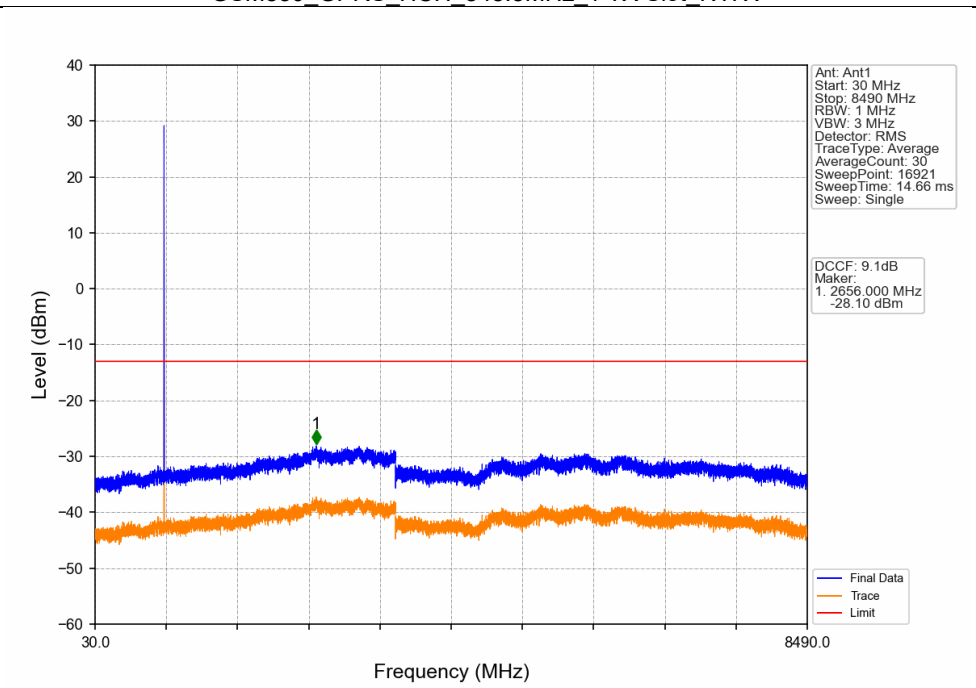
GSM850_GPRS_MCH_836.6MHz_1 TX Slot_NTNV



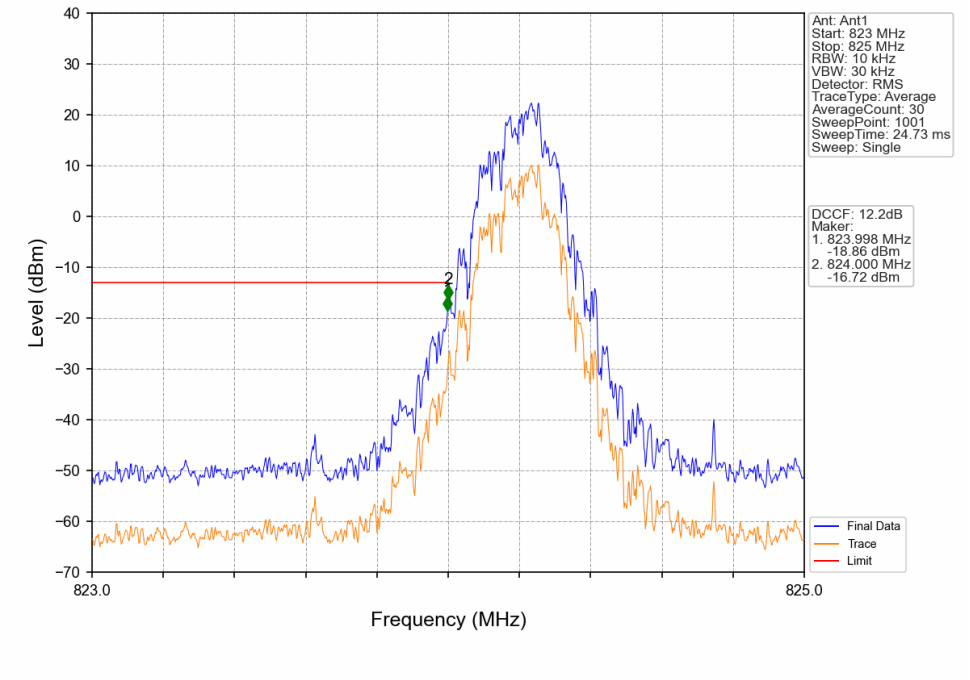
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



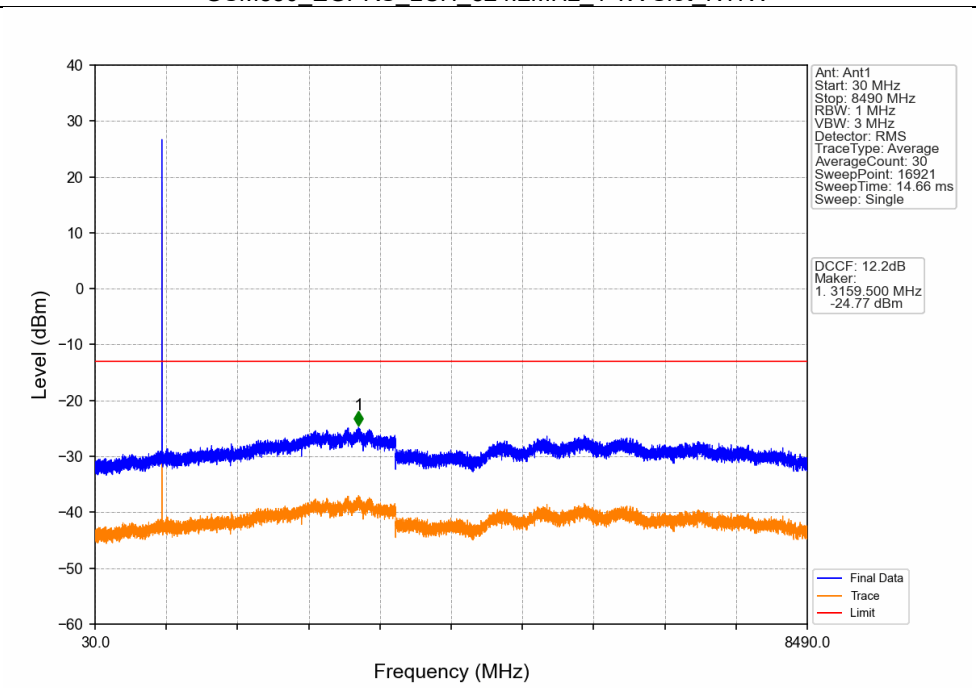
GSM850_GPRS_HCH_848.8MHz_1 TX Slot_NTNV



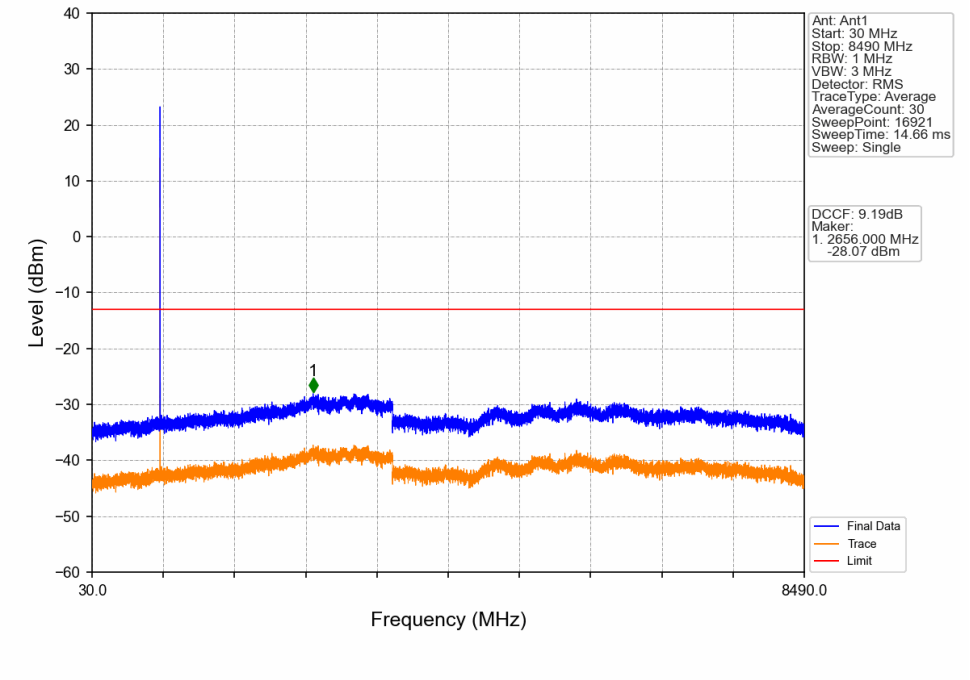
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



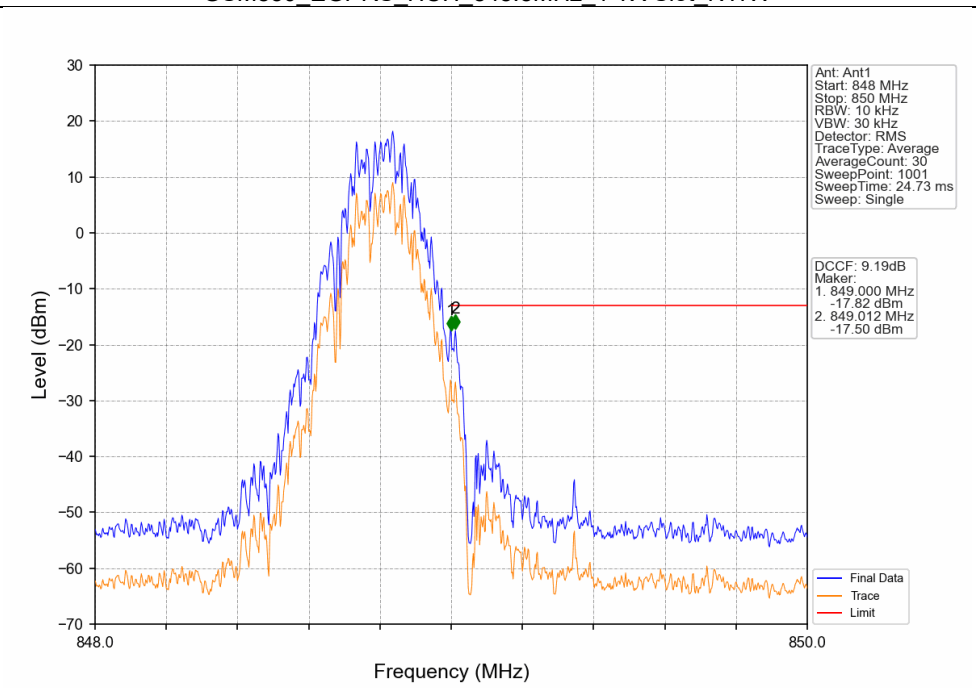
GSM850_EGPRS_LCH_824.2MHz_1 TX Slot_NTNV



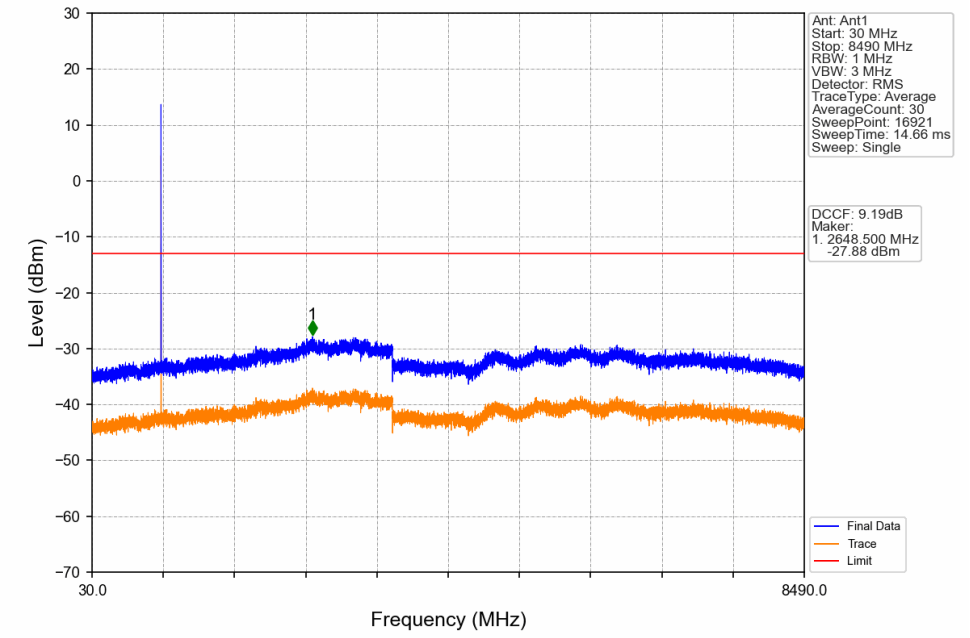
GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



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	1.5560	0.0126	ppm	246KGXW	22H	31.92
GSM850	0.2	824.2	848.8	0.4150	0.0136	ppm	252KG7W	22H	26.18

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	1.0965	0.0126	ppm	246KGXW	22H	30.40
GSM850	0.2	824.2	848.8	0.2924	0.0136	ppm	252KG7W	22H	24.66