

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	GSM	GSM	824.2	31.99	0.4	30.24	<=38.45	Pass		
			836.6	32.40	0.4	30.65	<=38.45	Pass		
			848.8	31.99	0.4	30.24	<=38.45	Pass		
	GPRS	1 TX Slot	824.2	32.00	0.4	30.25	<=38.45	Pass		
			2 TX Slots	824.2	31.10	0.4	29.35	<=38.45	Pass	
			3 TX Slots	824.2	29.11	0.4	27.36	<=38.45	Pass	
			4 TX Slots	824.2	27.99	0.4	26.24	<=38.45	Pass	
			1 TX Slot	836.6	32.42	0.4	30.67	<=38.45	Pass	
				2 TX Slots	836.6	31.51	0.4	29.76	<=38.45	Pass
				3 TX Slots	836.6	29.54	0.4	27.79	<=38.45	Pass
				4 TX Slots	836.6	28.57	0.4	26.82	<=38.45	Pass
			1 TX Slot	848.8	32.24	0.4	30.49	<=38.45	Pass	
				2 TX Slots	848.8	31.28	0.4	29.53	<=38.45	Pass
				3 TX Slots	848.8	29.41	0.4	27.66	<=38.45	Pass
				4 TX Slots	848.8	28.30	0.4	26.55	<=38.45	Pass
	EGPRS	1 TX Slot	824.2	26.78	0.4	25.03	<=38.45	Pass		
			2 TX Slots	824.2	25.71	0.4	23.96	<=38.45	Pass	
			3 TX Slots	824.2	23.63	0.4	21.88	<=38.45	Pass	
			4 TX Slots	824.2	21.92	0.4	20.17	<=38.45	Pass	
			1 TX Slot	836.6	26.84	0.4	25.09	<=38.45	Pass	
				2 TX Slots	836.6	25.74	0.4	23.99	<=38.45	Pass
				3 TX Slots	836.6	23.51	0.4	21.76	<=38.45	Pass
				4 TX Slots	836.6	22.23	0.4	20.48	<=38.45	Pass
			1 TX Slot	848.8	26.81	0.4	25.06	<=38.45	Pass	
				2 TX Slots	848.8	25.78	0.4	24.03	<=38.45	Pass
				3 TX Slots	848.8	23.55	0.4	21.8	<=38.45	Pass
				4 TX Slots	848.8	22.28	0.4	20.53	<=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	
GSM	824.2	20	3.23	3.777	0.0046	-2.5 to 2.5	Pass
			3.8	-2.841	-0.0034	-2.5 to 2.5	Pass
			4.37	0.387	0.0005	-2.5 to 2.5	Pass

	836.6	-30	3.8	11.591	0.0141	-2.5 to 2.5	Pass		
		-20	3.8	4.229	0.0051	-2.5 to 2.5	Pass		
		-10	3.8	7.264	0.0088	-2.5 to 2.5	Pass		
		0	3.8	5.489	0.0067	-2.5 to 2.5	Pass		
		10	3.8	-3.261	-0.0040	-2.5 to 2.5	Pass		
		30	3.8	11.752	0.0143	-2.5 to 2.5	Pass		
		40	3.8	10.105	0.0123	-2.5 to 2.5	Pass		
		50	3.8	6.296	0.0076	-2.5 to 2.5	Pass		
		20	3.23	12.139	0.0145	-2.5 to 2.5	Pass		
			3.8	11.558	0.0138	-2.5 to 2.5	Pass		
			4.37	6.134	0.0073	-2.5 to 2.5	Pass		
		-30	3.8	18.629	0.0223	-2.5 to 2.5	Pass		
		-20	3.8	14.464	0.0173	-2.5 to 2.5	Pass		
		-10	3.8	10.170	0.0122	-2.5 to 2.5	Pass		
	0	3.8	7.361	0.0088	-2.5 to 2.5	Pass			
	10	3.8	7.652	0.0091	-2.5 to 2.5	Pass			
	30	3.8	5.456	0.0065	-2.5 to 2.5	Pass			
	40	3.8	3.648	0.0044	-2.5 to 2.5	Pass			
	50	3.8	10.590	0.0127	-2.5 to 2.5	Pass			
	848.8	20	3.23	3.745	0.0044	-2.5 to 2.5	Pass		
			3.8	7.749	0.0091	-2.5 to 2.5	Pass		
			4.37	2.873	0.0034	-2.5 to 2.5	Pass		
		-30	3.8	3.455	0.0041	-2.5 to 2.5	Pass		
		-20	3.8	5.359	0.0063	-2.5 to 2.5	Pass		
		-10	3.8	0.194	0.0002	-2.5 to 2.5	Pass		
		0	3.8	6.199	0.0073	-2.5 to 2.5	Pass		
		10	3.8	3.067	0.0036	-2.5 to 2.5	Pass		
		30	3.8	1.388	0.0016	-2.5 to 2.5	Pass		
		40	3.8	8.556	0.0101	-2.5 to 2.5	Pass		
		50	3.8	5.069	0.0060	-2.5 to 2.5	Pass		
		GPRS	824.2	20	3.23	4.585	0.0056	-2.5 to 2.5	Pass
					3.8	-1.937	-0.0024	-2.5 to 2.5	Pass
					4.37	3.390	0.0041	-2.5 to 2.5	Pass
-30	3.8			-0.549	-0.0007	-2.5 to 2.5	Pass		
-20	3.8			-0.420	-0.0005	-2.5 to 2.5	Pass		
-10	3.8			-3.777	-0.0046	-2.5 to 2.5	Pass		
0	3.8			3.455	0.0042	-2.5 to 2.5	Pass		
10	3.8			0.000	0.0000	-2.5 to 2.5	Pass		
30	3.8			-0.807	-0.0010	-2.5 to 2.5	Pass		
40	3.8			2.486	0.0030	-2.5 to 2.5	Pass		
50	3.8			-2.099	-0.0025	-2.5 to 2.5	Pass		
836.6	20			3.23	6.877	0.0082	-2.5 to 2.5	Pass	
				3.8	8.523	0.0102	-2.5 to 2.5	Pass	
				4.37	9.105	0.0109	-2.5 to 2.5	Pass	
	-30	3.8	10.945	0.0131	-2.5 to 2.5	Pass			
	-20	3.8	4.585	0.0055	-2.5 to 2.5	Pass			
	-10	3.8	4.746	0.0057	-2.5 to 2.5	Pass			
	0	3.8	4.100	0.0049	-2.5 to 2.5	Pass			
	10	3.8	2.228	0.0027	-2.5 to 2.5	Pass			
	30	3.8	5.585	0.0067	-2.5 to 2.5	Pass			
	40	3.8	1.324	0.0016	-2.5 to 2.5	Pass			
50	3.8	4.488	0.0054	-2.5 to 2.5	Pass				
848.8	20	3.23	3.422	0.0040	-2.5 to 2.5	Pass			
		3.8	5.779	0.0068	-2.5 to 2.5	Pass			
		4.37	2.938	0.0035	-2.5 to 2.5	Pass			

		-30	3.8	7.490	0.0088	-2.5 to 2.5	Pass
		-20	3.8	2.228	0.0026	-2.5 to 2.5	Pass
		-10	3.8	3.810	0.0045	-2.5 to 2.5	Pass
		0	3.8	6.812	0.0080	-2.5 to 2.5	Pass
		10	3.8	4.811	0.0057	-2.5 to 2.5	Pass
		30	3.8	3.487	0.0041	-2.5 to 2.5	Pass
		40	3.8	5.392	0.0064	-2.5 to 2.5	Pass
		50	3.8	3.713	0.0044	-2.5 to 2.5	Pass
EGPRS	824.2	20	3.23	4.133	0.0050	-2.5 to 2.5	Pass
			3.8	-0.581	-0.0007	-2.5 to 2.5	Pass
			4.37	3.325	0.0040	-2.5 to 2.5	Pass
		-30	3.8	0.194	0.0002	-2.5 to 2.5	Pass
		-20	3.8	3.455	0.0042	-2.5 to 2.5	Pass
		-10	3.8	3.648	0.0044	-2.5 to 2.5	Pass
		0	3.8	2.841	0.0034	-2.5 to 2.5	Pass
		10	3.8	1.356	0.0016	-2.5 to 2.5	Pass
		30	3.8	1.743	0.0021	-2.5 to 2.5	Pass
		40	3.8	1.453	0.0018	-2.5 to 2.5	Pass
	50	3.8	3.229	0.0039	-2.5 to 2.5	Pass	
	836.6	20	3.23	2.163	0.0026	-2.5 to 2.5	Pass
			3.8	-1.776	-0.0021	-2.5 to 2.5	Pass
			4.37	2.712	0.0032	-2.5 to 2.5	Pass
		-30	3.8	-2.357	-0.0028	-2.5 to 2.5	Pass
		-20	3.8	-0.484	-0.0006	-2.5 to 2.5	Pass
		-10	3.8	3.035	0.0036	-2.5 to 2.5	Pass
		0	3.8	5.650	0.0068	-2.5 to 2.5	Pass
		10	3.8	1.421	0.0017	-2.5 to 2.5	Pass
		30	3.8	3.229	0.0039	-2.5 to 2.5	Pass
		40	3.8	2.841	0.0034	-2.5 to 2.5	Pass
	50	3.8	1.195	0.0014	-2.5 to 2.5	Pass	
	848.8	20	3.23	0.807	0.0010	-2.5 to 2.5	Pass
			3.8	2.841	0.0033	-2.5 to 2.5	Pass
			4.37	10.977	0.0129	-2.5 to 2.5	Pass
		-30	3.8	-0.291	-0.0003	-2.5 to 2.5	Pass
		-20	3.8	7.716	0.0091	-2.5 to 2.5	Pass
		-10	3.8	5.424	0.0064	-2.5 to 2.5	Pass
		0	3.8	4.391	0.0052	-2.5 to 2.5	Pass
		10	3.8	1.453	0.0017	-2.5 to 2.5	Pass
30		3.8	6.102	0.0072	-2.5 to 2.5	Pass	
40		3.8	1.743	0.0021	-2.5 to 2.5	Pass	
50	3.8	6.522	0.0077	-2.5 to 2.5	Pass		

3. Modulation Characteristics

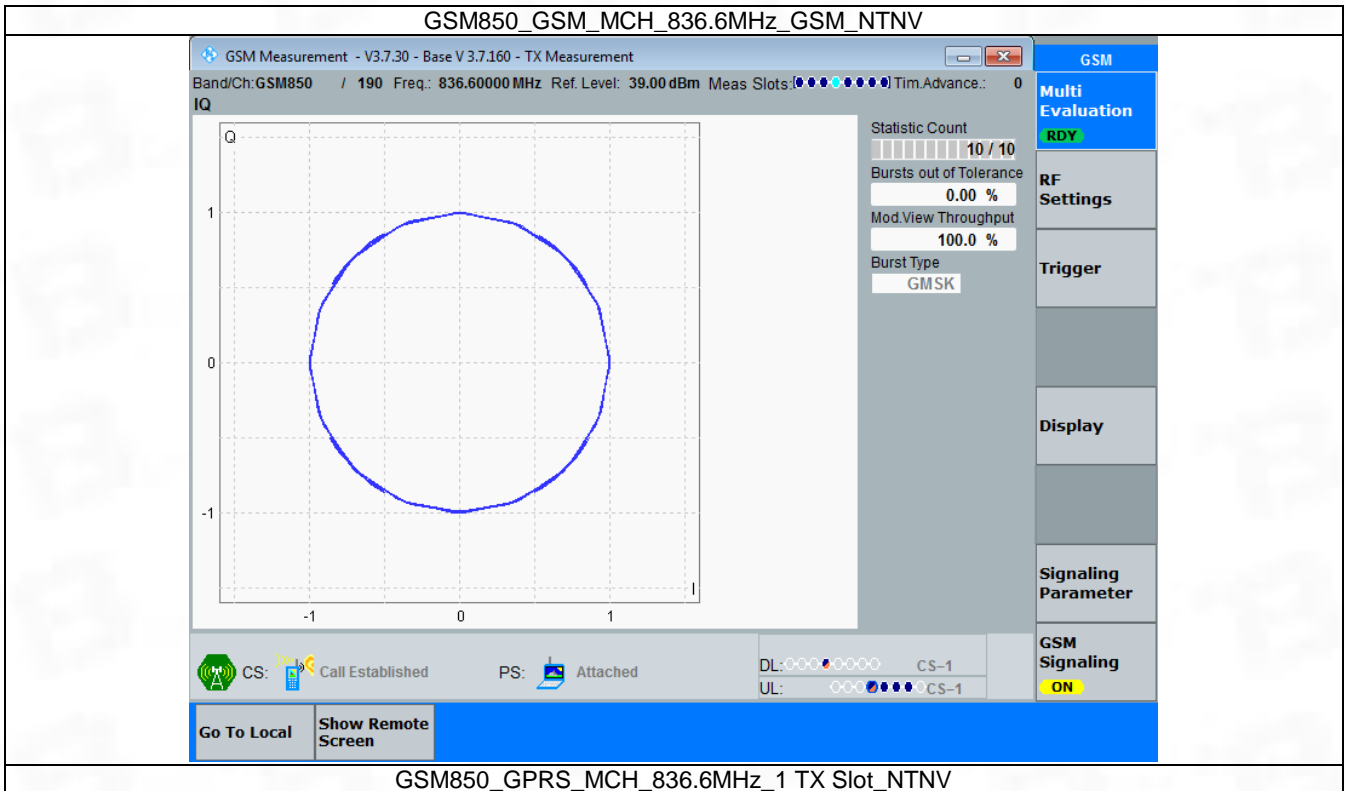
3.1 GSM850

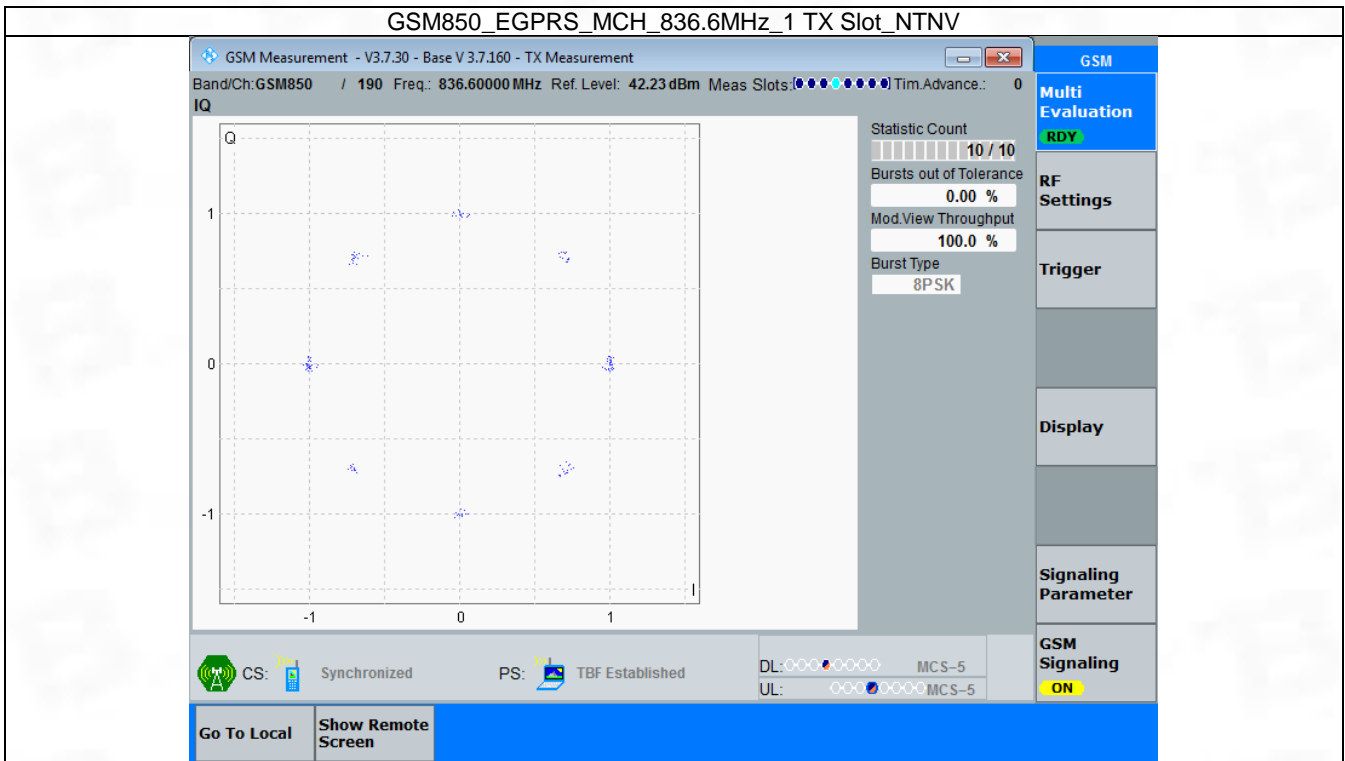
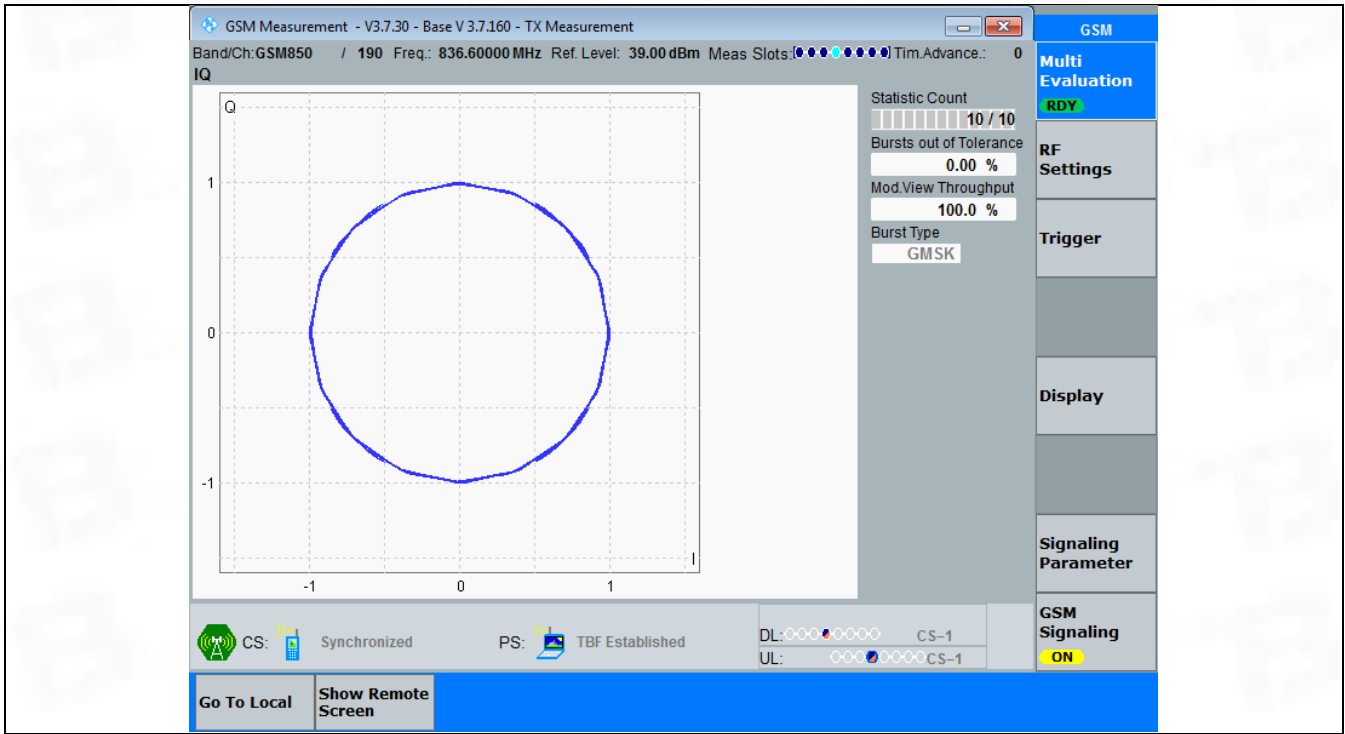
3.1.1 Test Result

Band: GSM850						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	836.6	Refer To Test Graph		Pass

	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





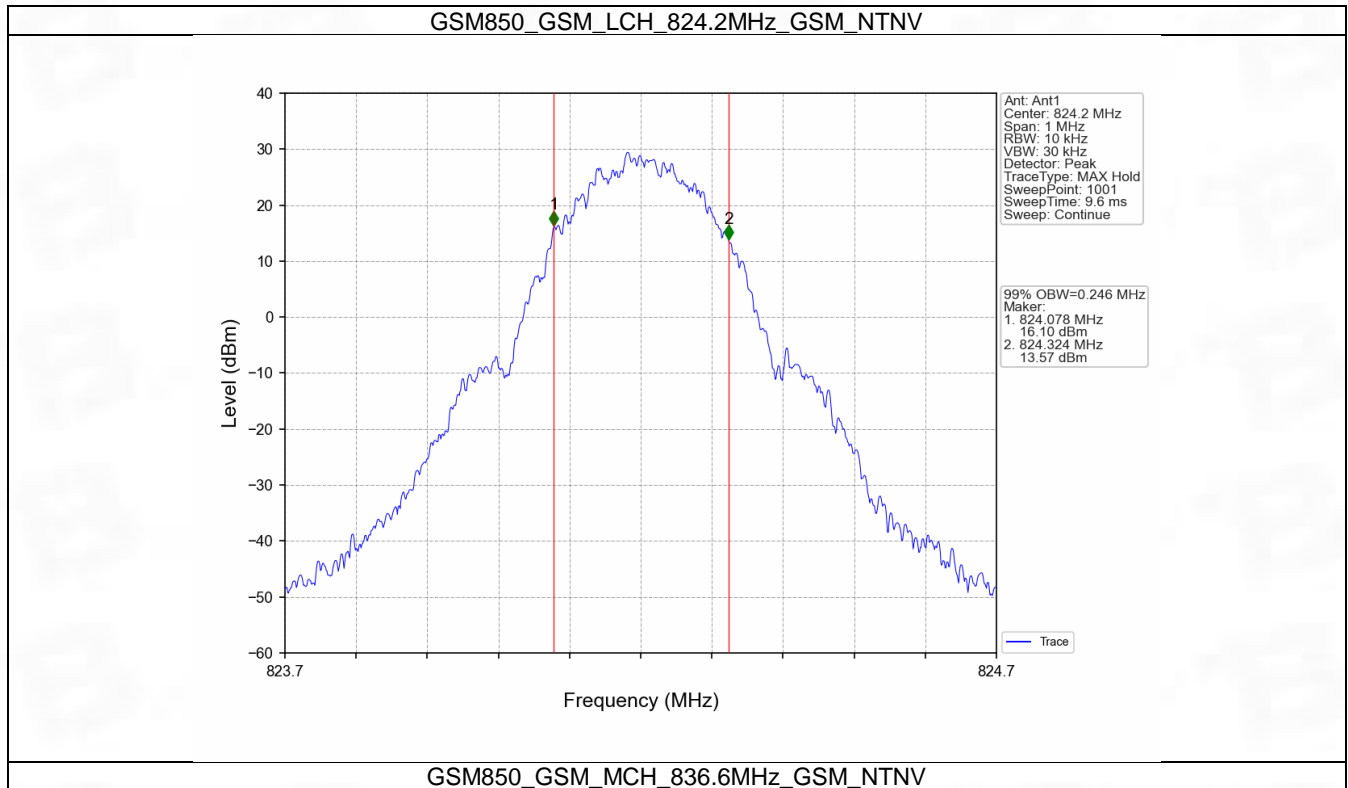
4. 99% & 26dB Bandwidth

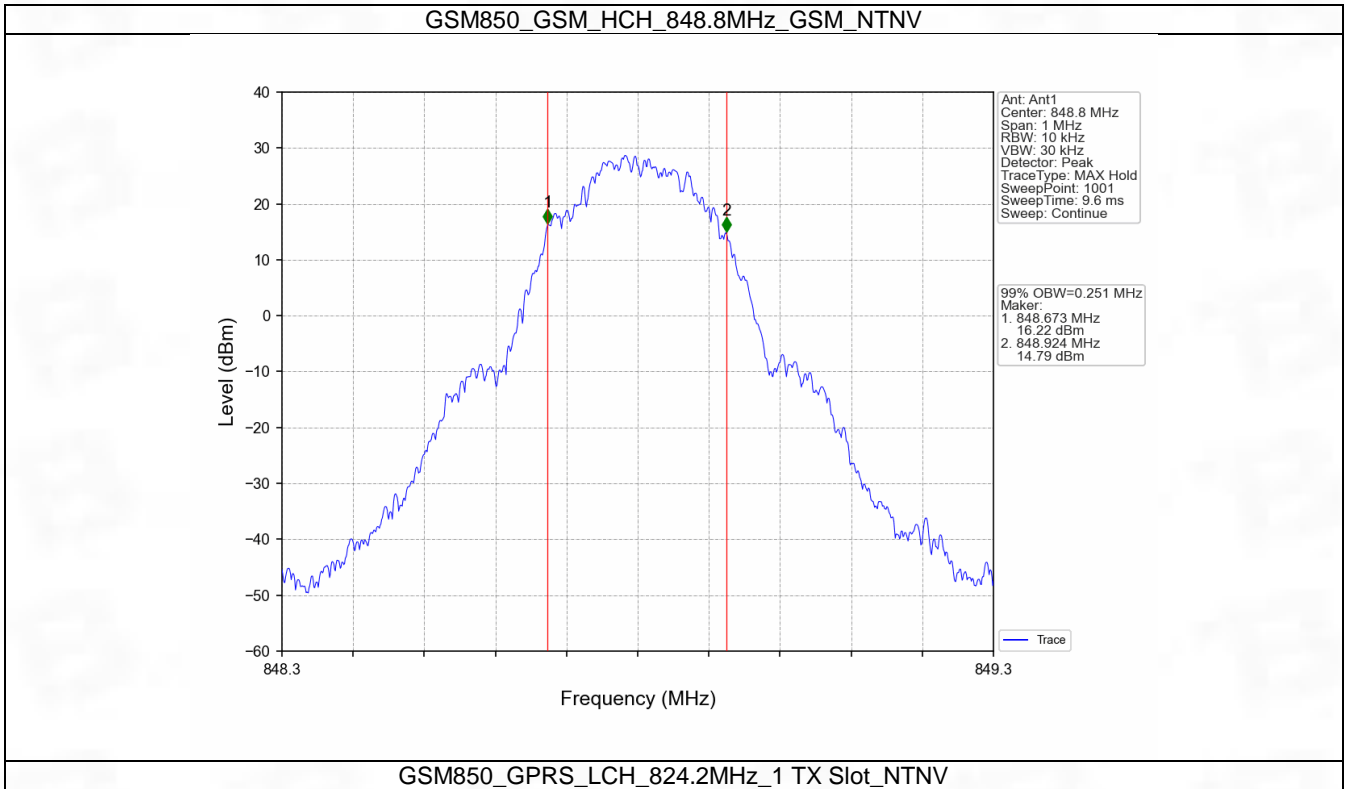
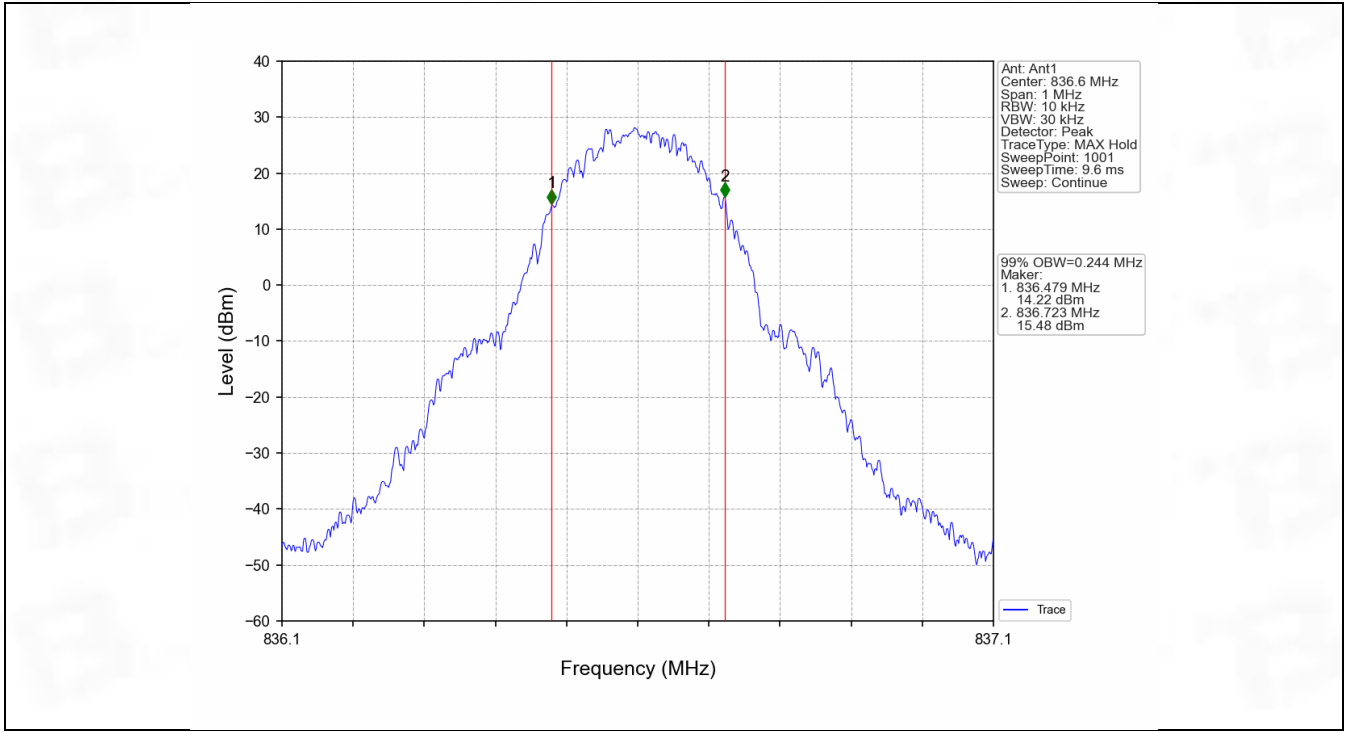
4.1 GSM850_OBW

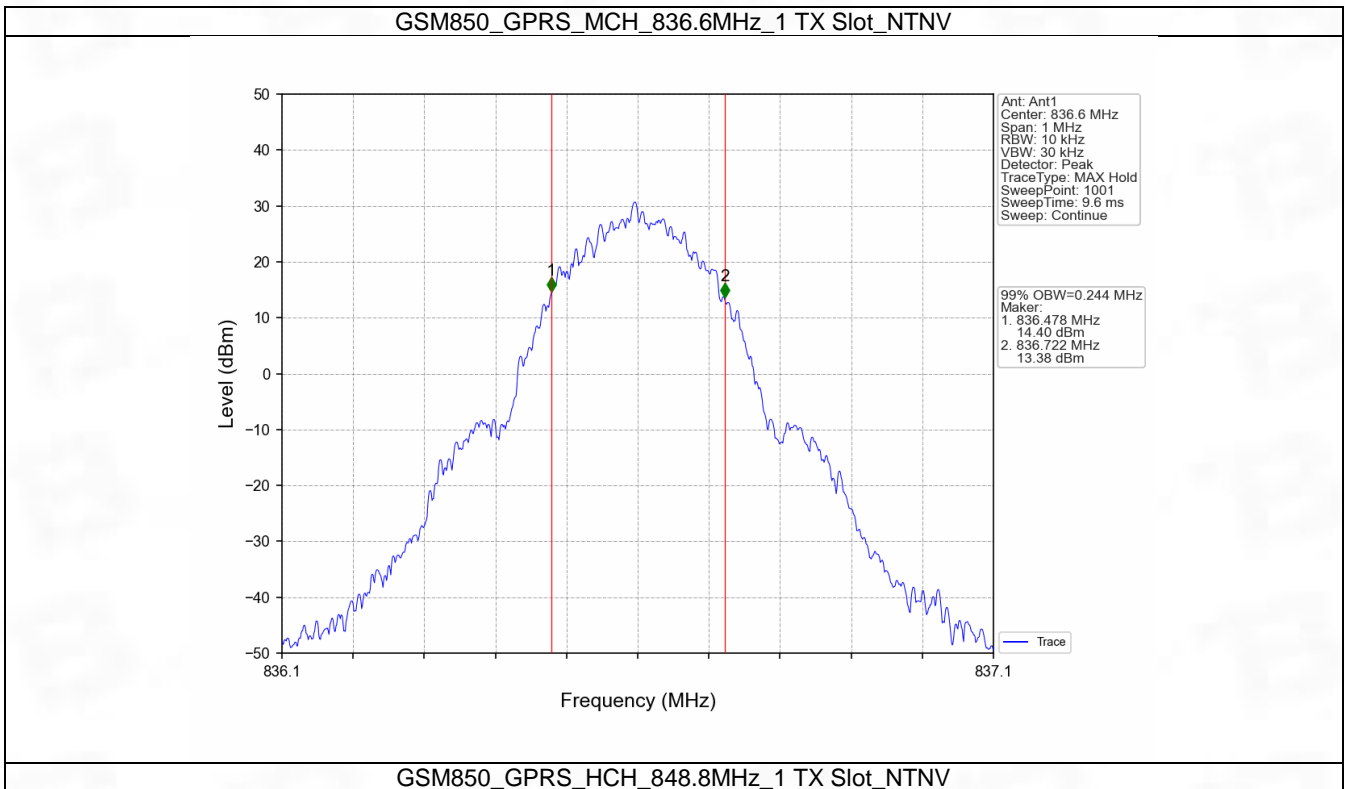
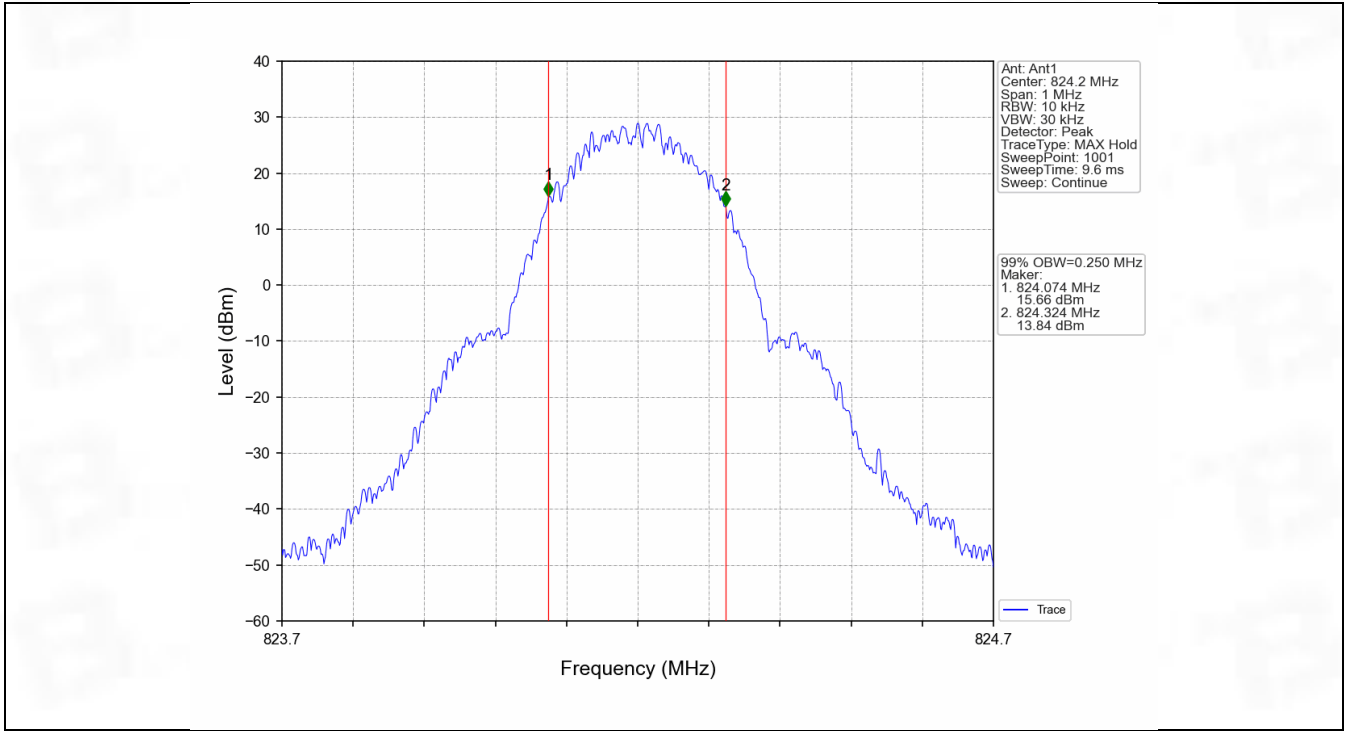
4.1.1 Test Result

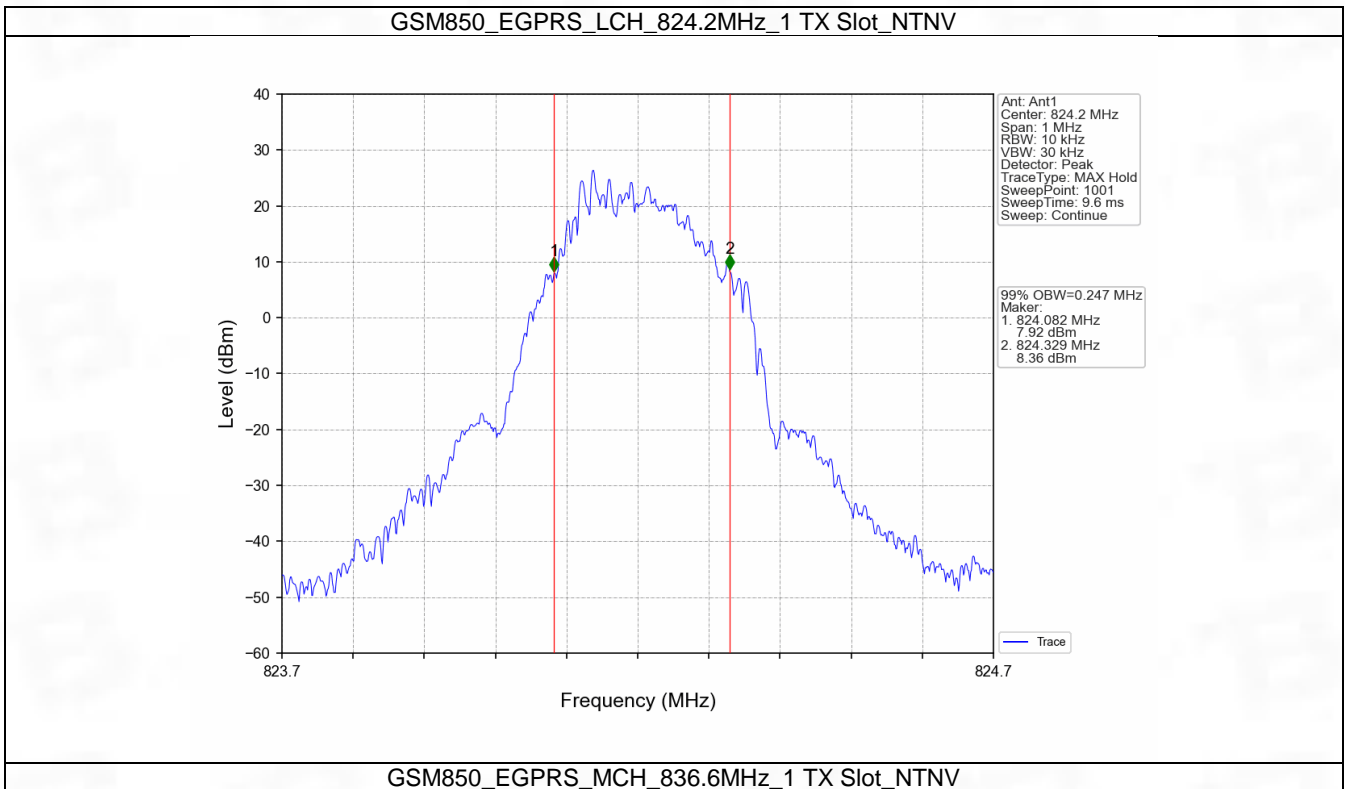
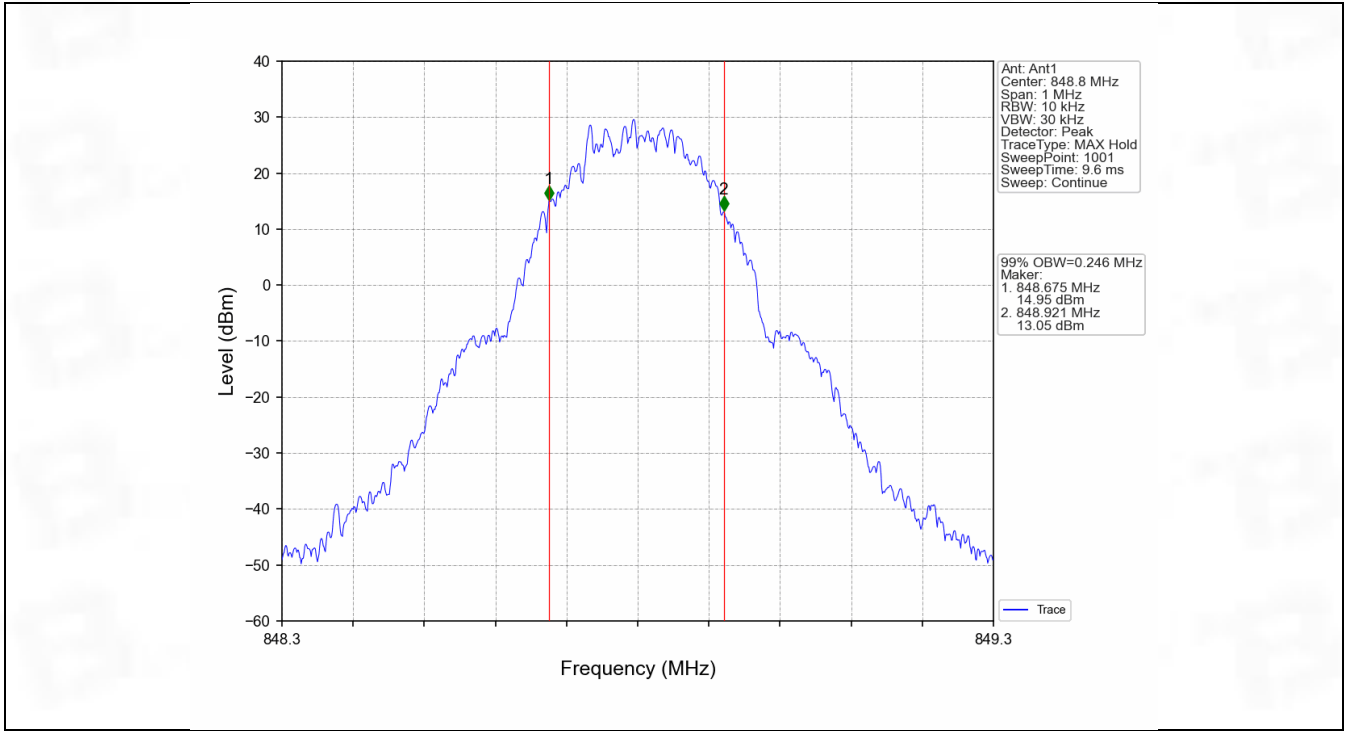
Band: GSM850					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GSM	GSM	824.2	0.246	Pass
			836.6	0.244	Pass
			848.8	0.251	Pass
	GPRS	1 TX Slot	824.2	0.250	Pass
			836.6	0.244	Pass
			848.8	0.246	Pass
	EGPRS	1 TX Slot	824.2	0.247	Pass
			836.6	0.233	Pass
			848.8	0.242	Pass

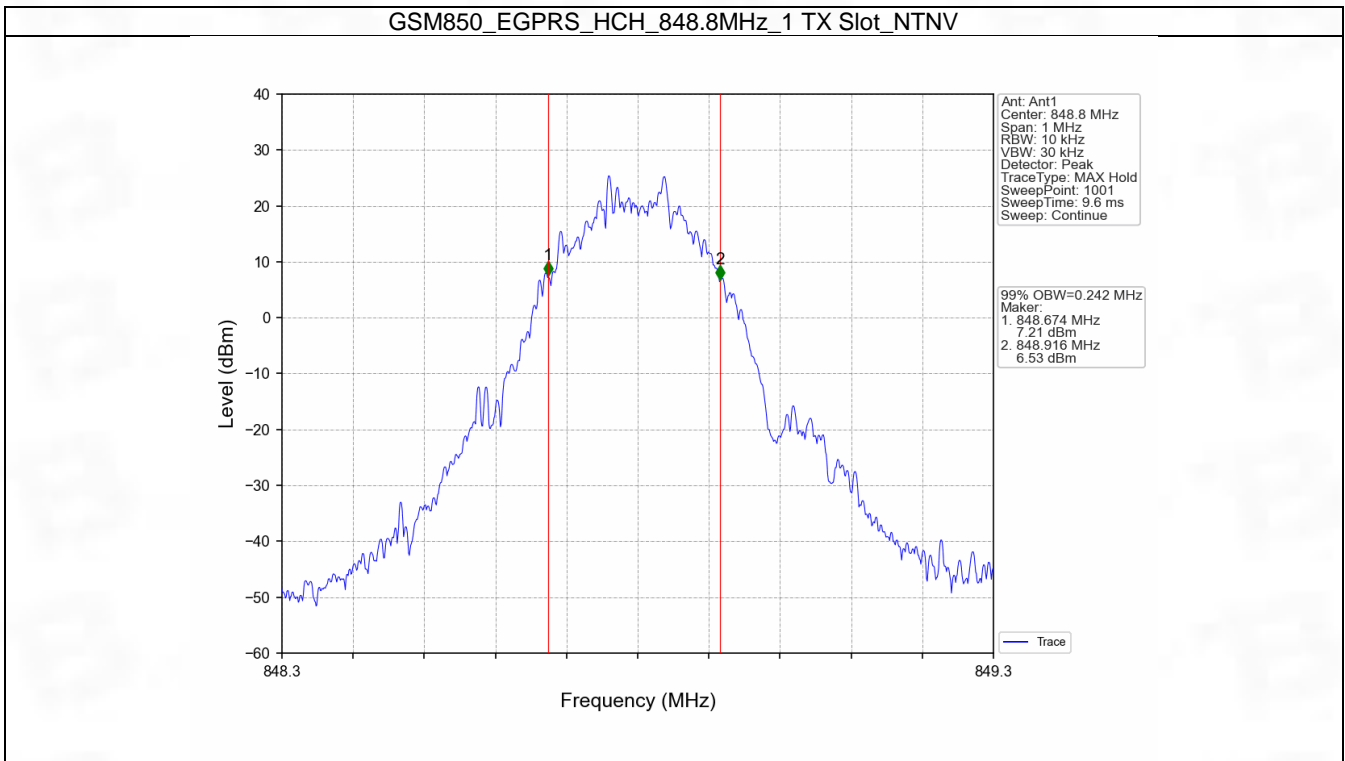
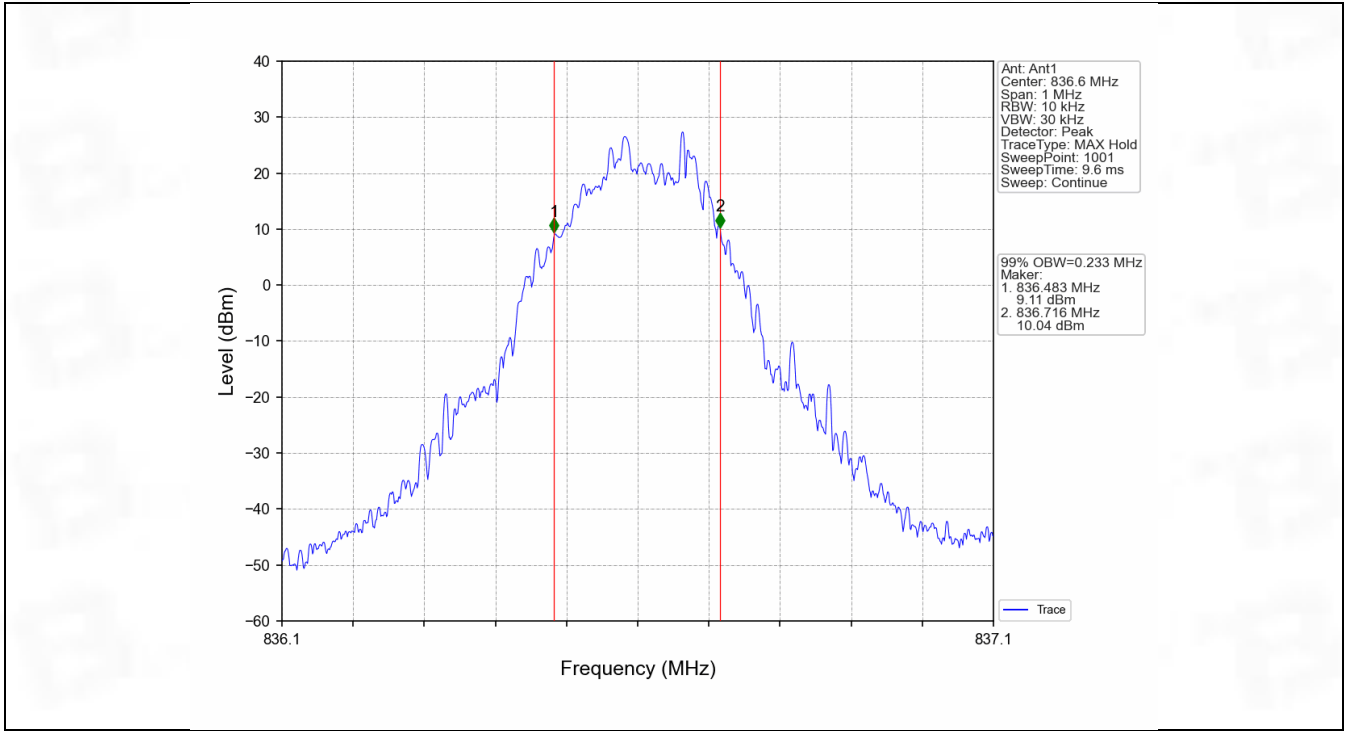
4.1.2 Test Graph









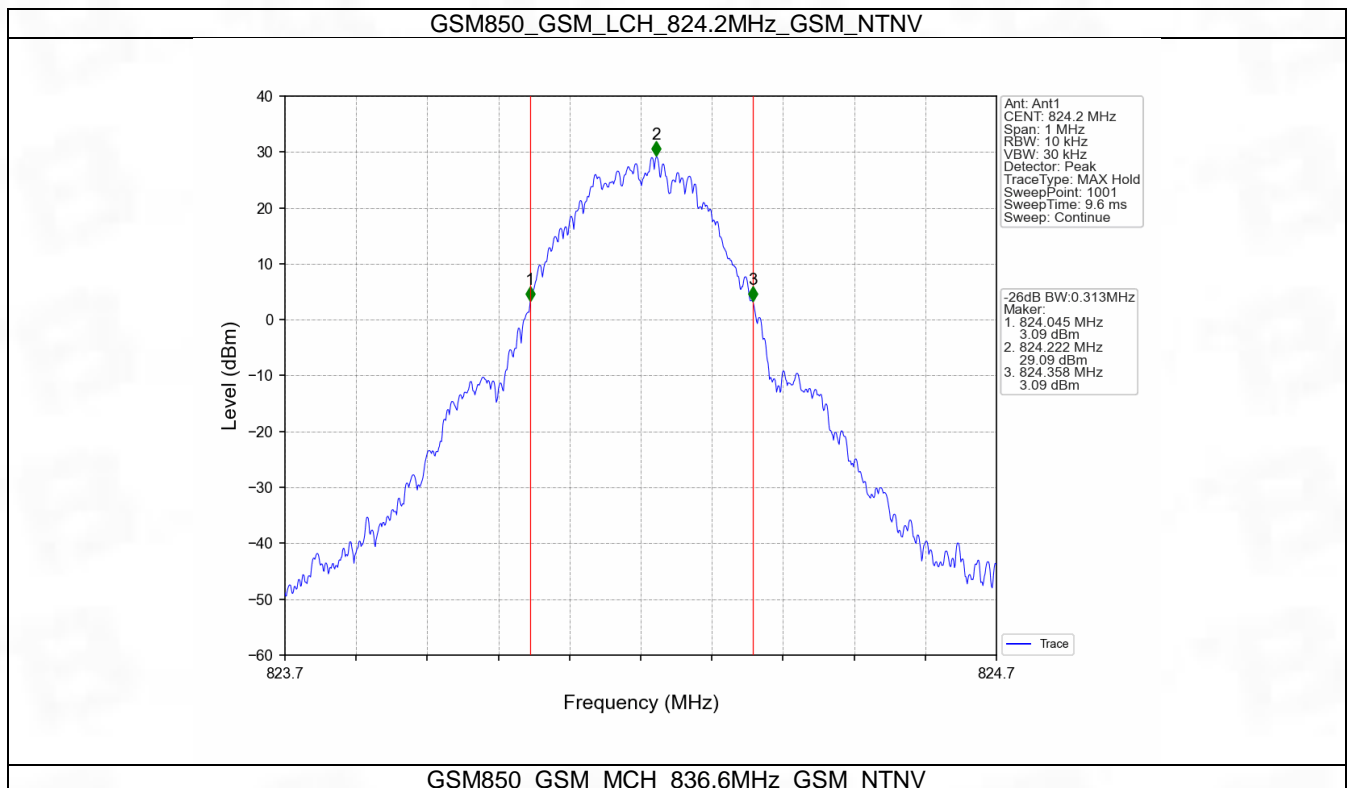


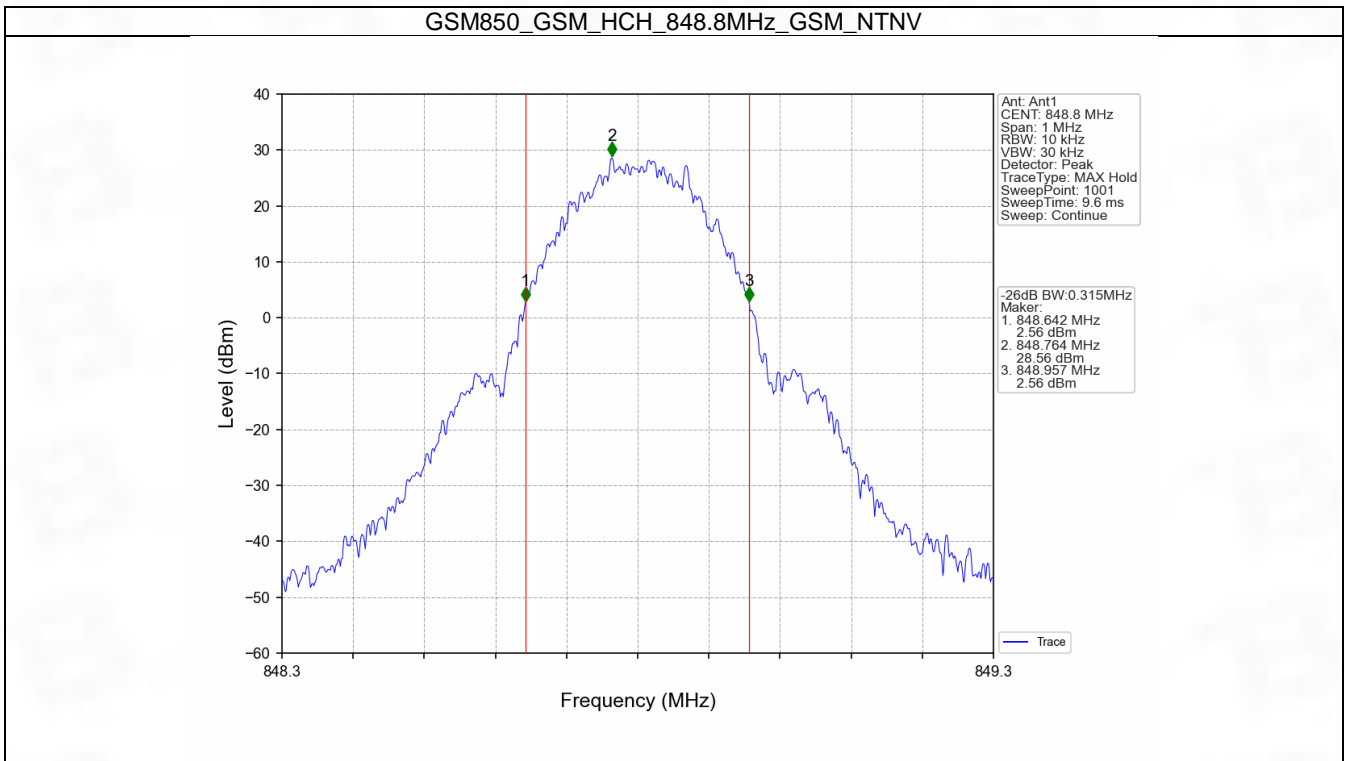
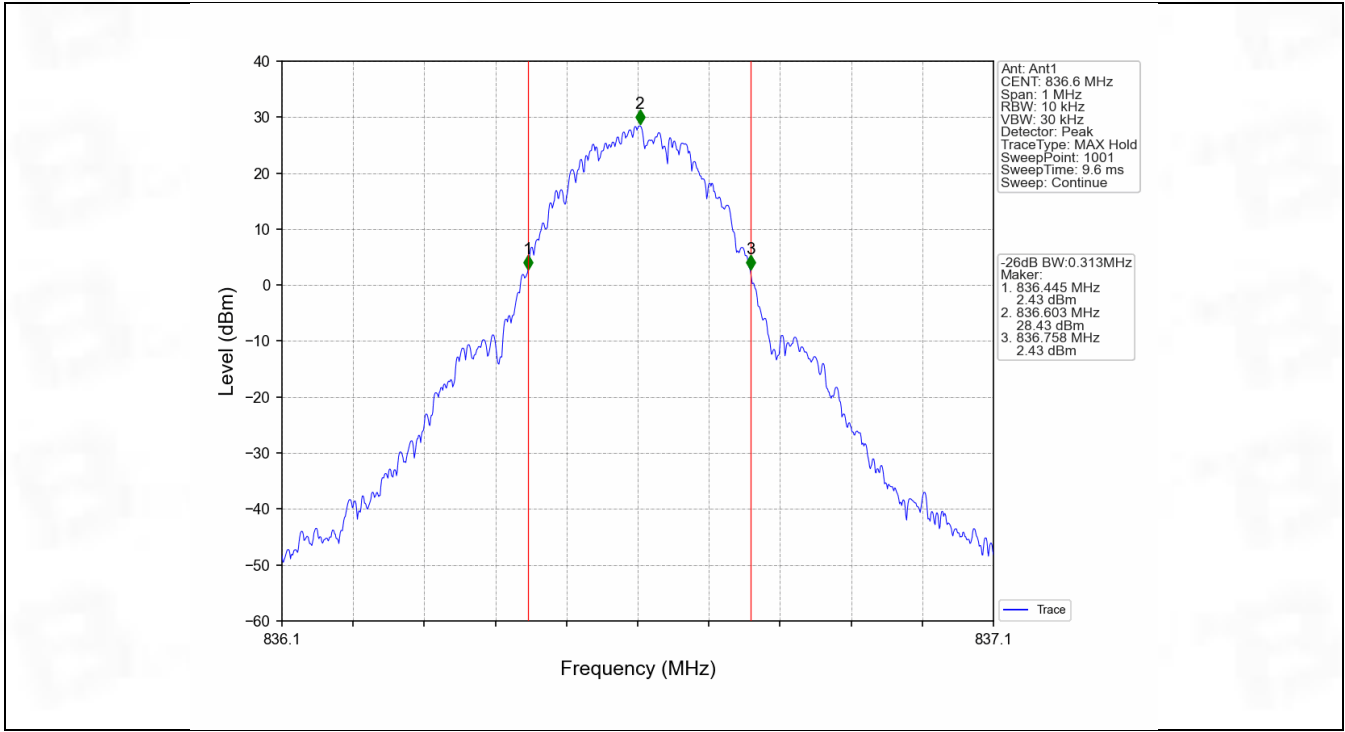
4.2 GSM850_XDB

4.2.1 Test Result

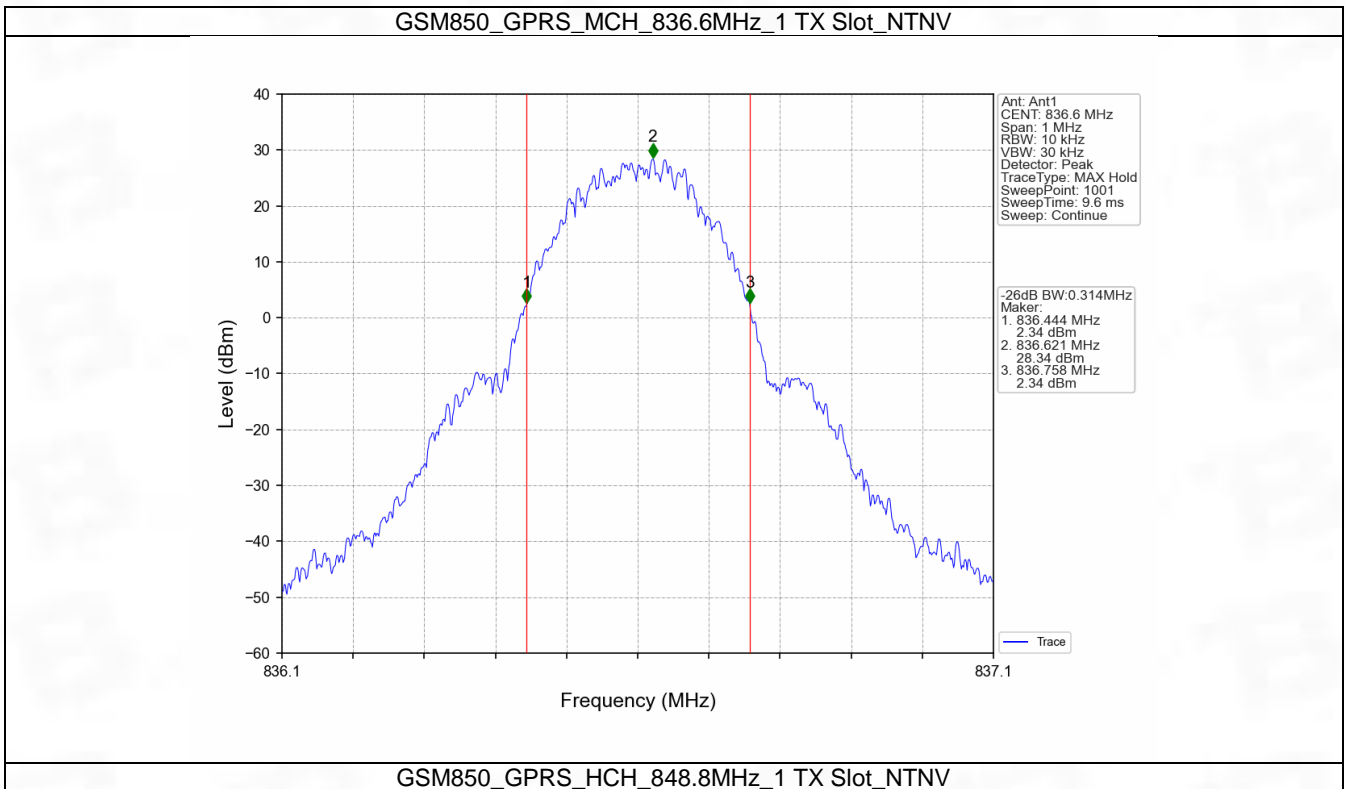
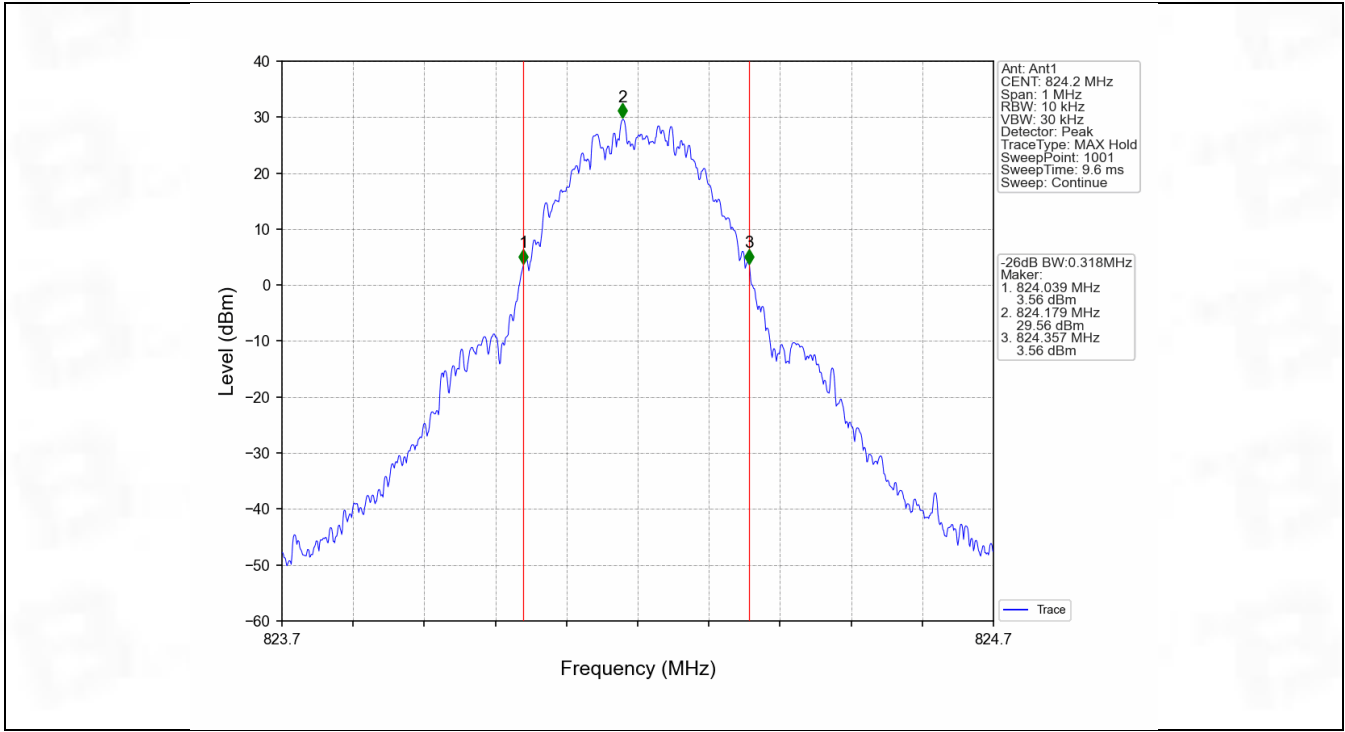
Band: GSM850					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GSM	GSM	824.2	0.313	Pass
			836.6	0.313	Pass
			848.8	0.315	Pass
	GPRS	1 TX Slot	824.2	0.318	Pass
			836.6	0.314	Pass
			848.8	0.311	Pass
	EGPRS	1 TX Slot	824.2	0.307	Pass
			836.6	0.294	Pass
			848.8	0.308	Pass

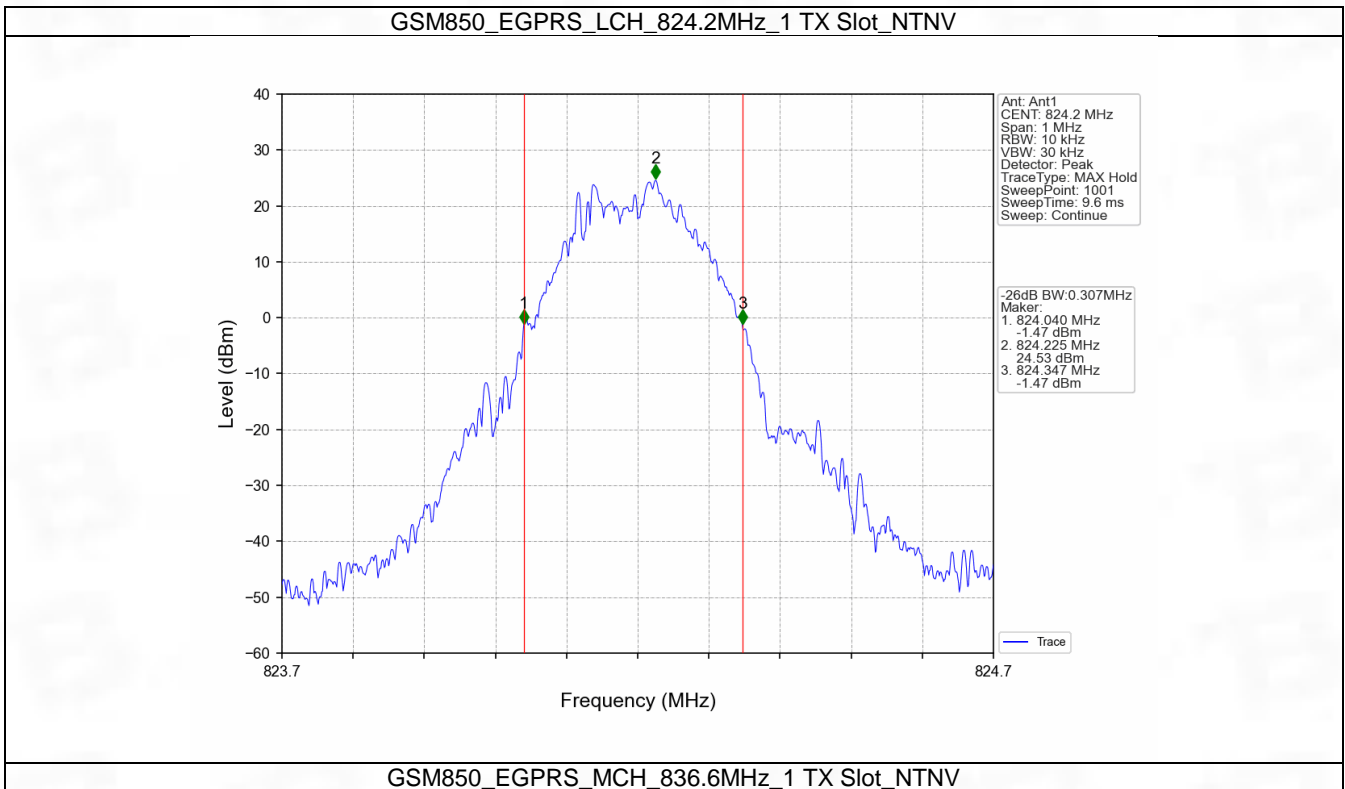
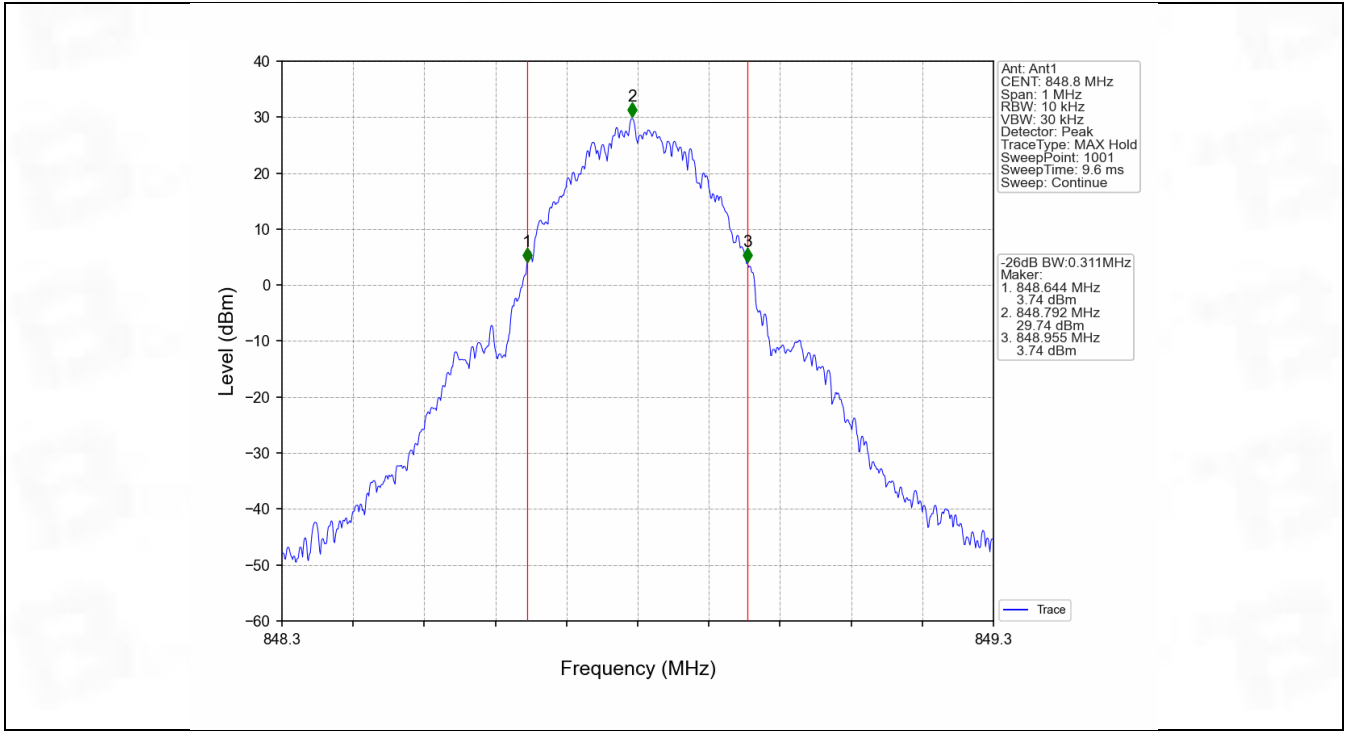
4.2.2 Test Graph

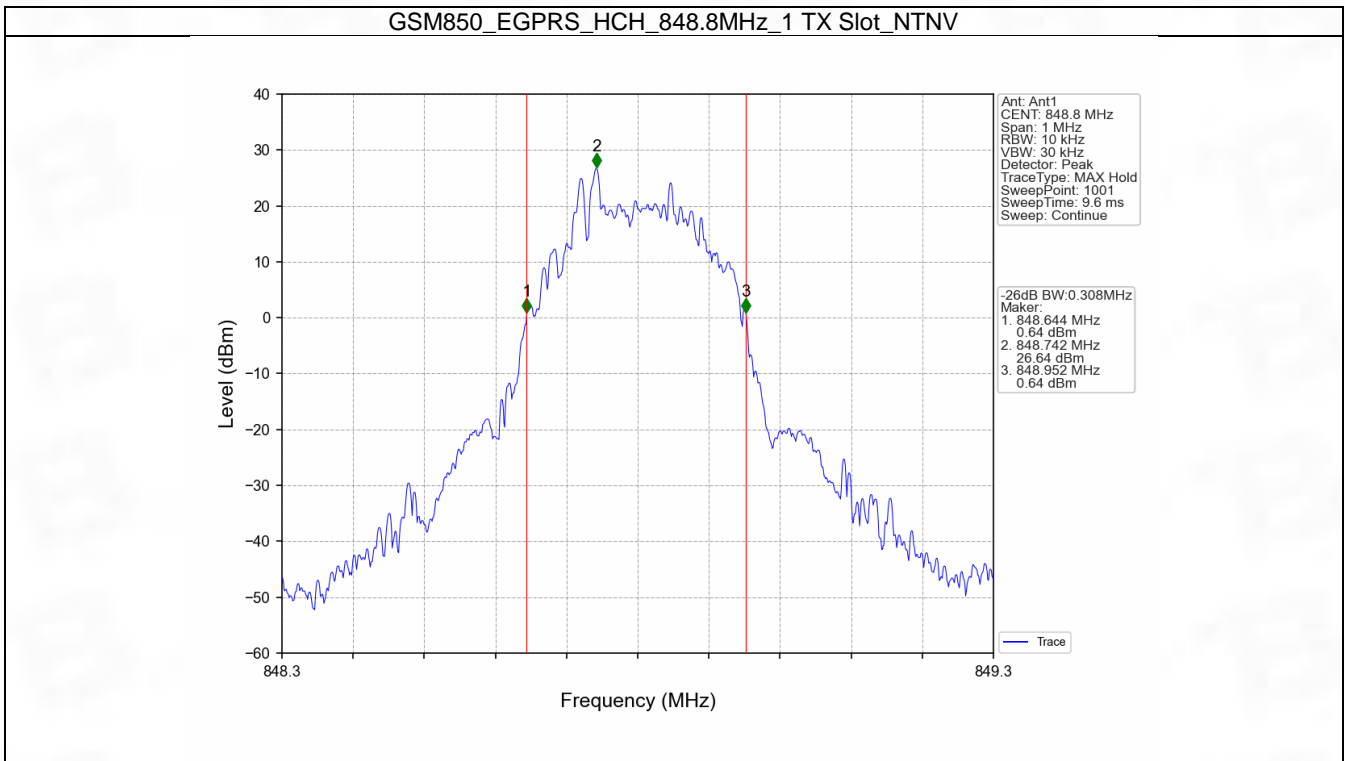
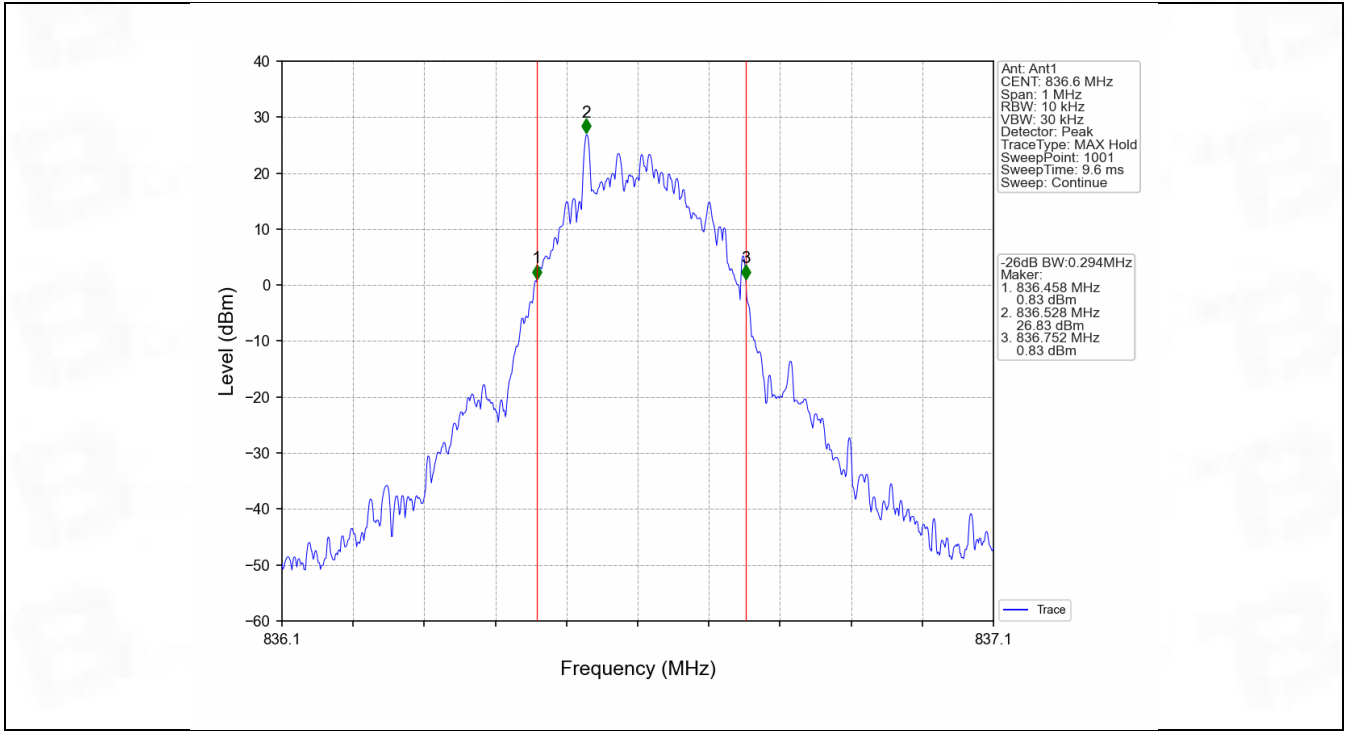




GSM850_GPRS_LCH_824.2MHz_1 TX Slot_NTNV







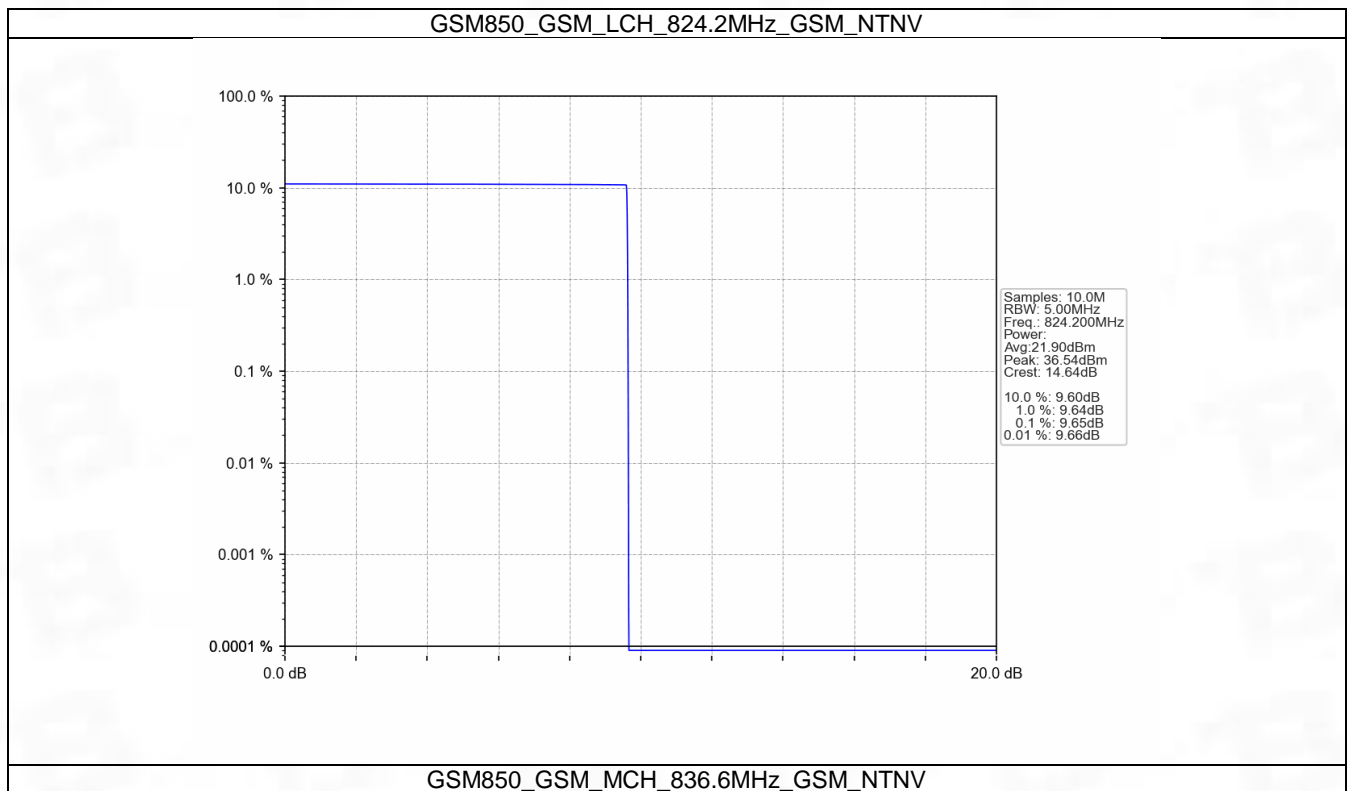
5. Peak-Average Ratio

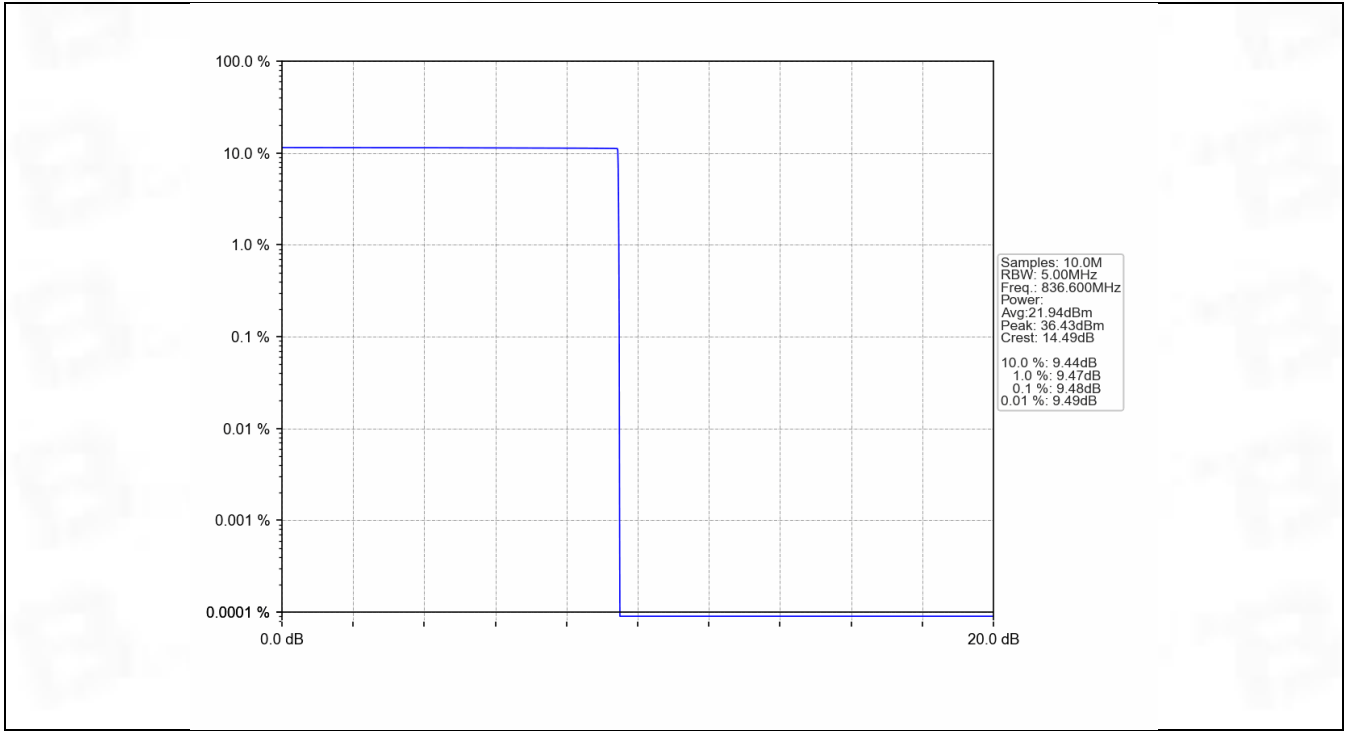
5.1 GSM850

5.1.1 Test Result

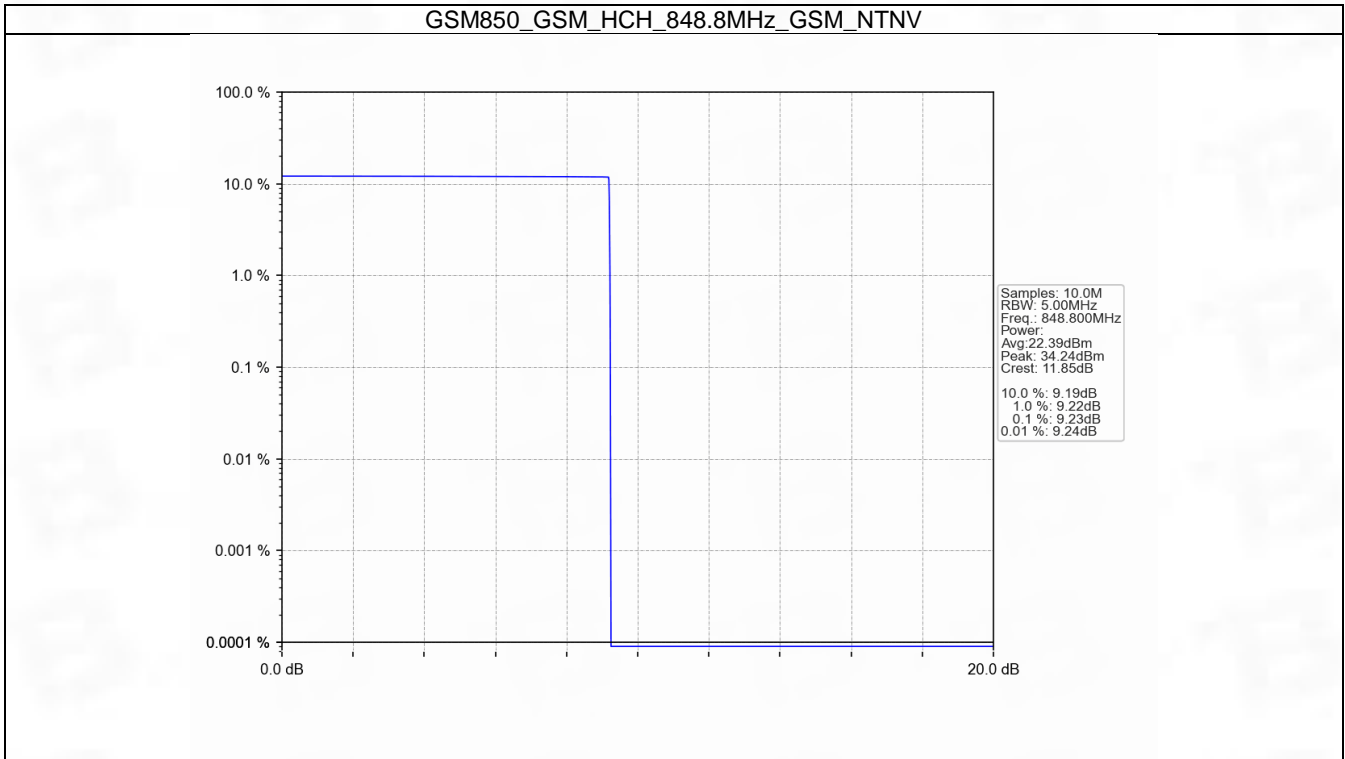
Band: GSM850						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	824.2	9.65	<=13	Pass
			836.6	9.48	<=13	Pass
			848.8	9.23	<=13	Pass
	GPRS	4 TX Slots	824.2	9.75	<=13	Pass
			836.6	3.57	<=13	Pass
			848.8	3.61	<=13	Pass
	EGPRS	4 TX Slots	824.2	6.71	<=13	Pass
			836.6	6.75	<=13	Pass
			848.8	10.95	<=13	Pass

5.1.2 Test Graph

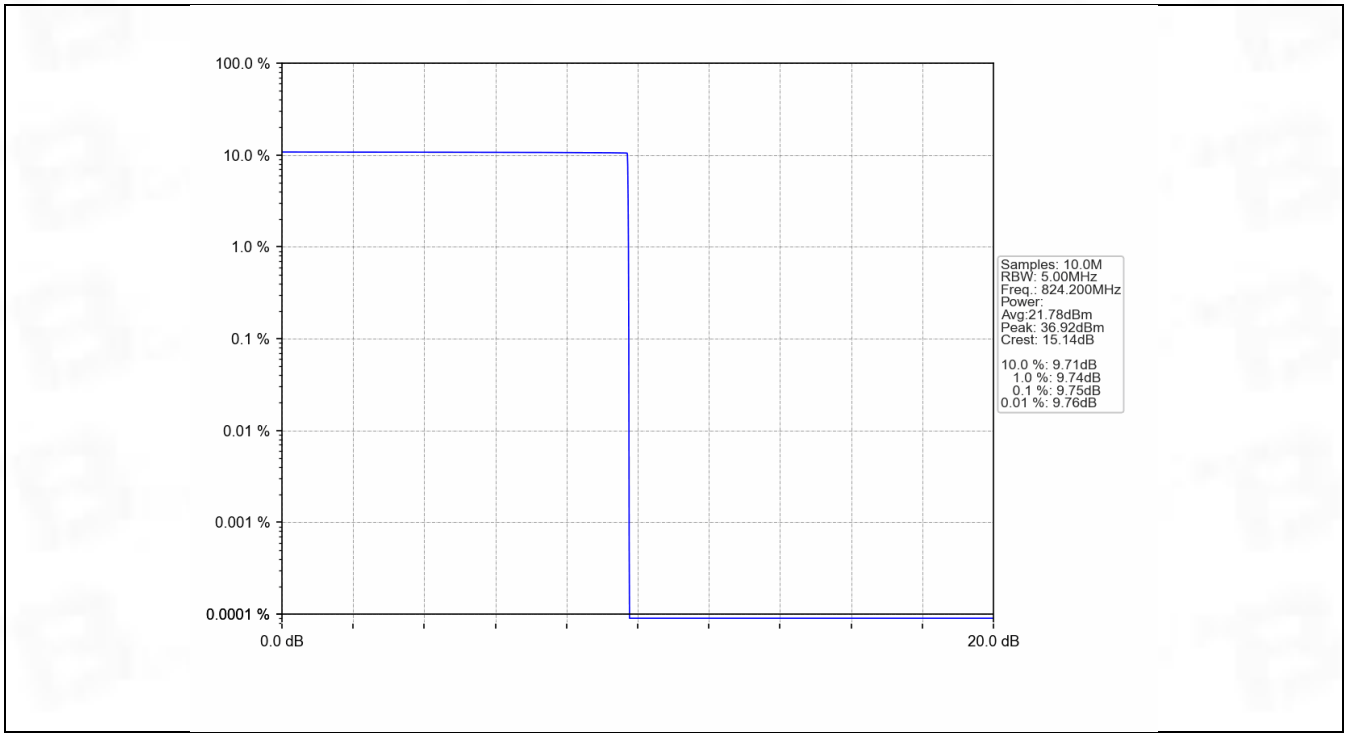




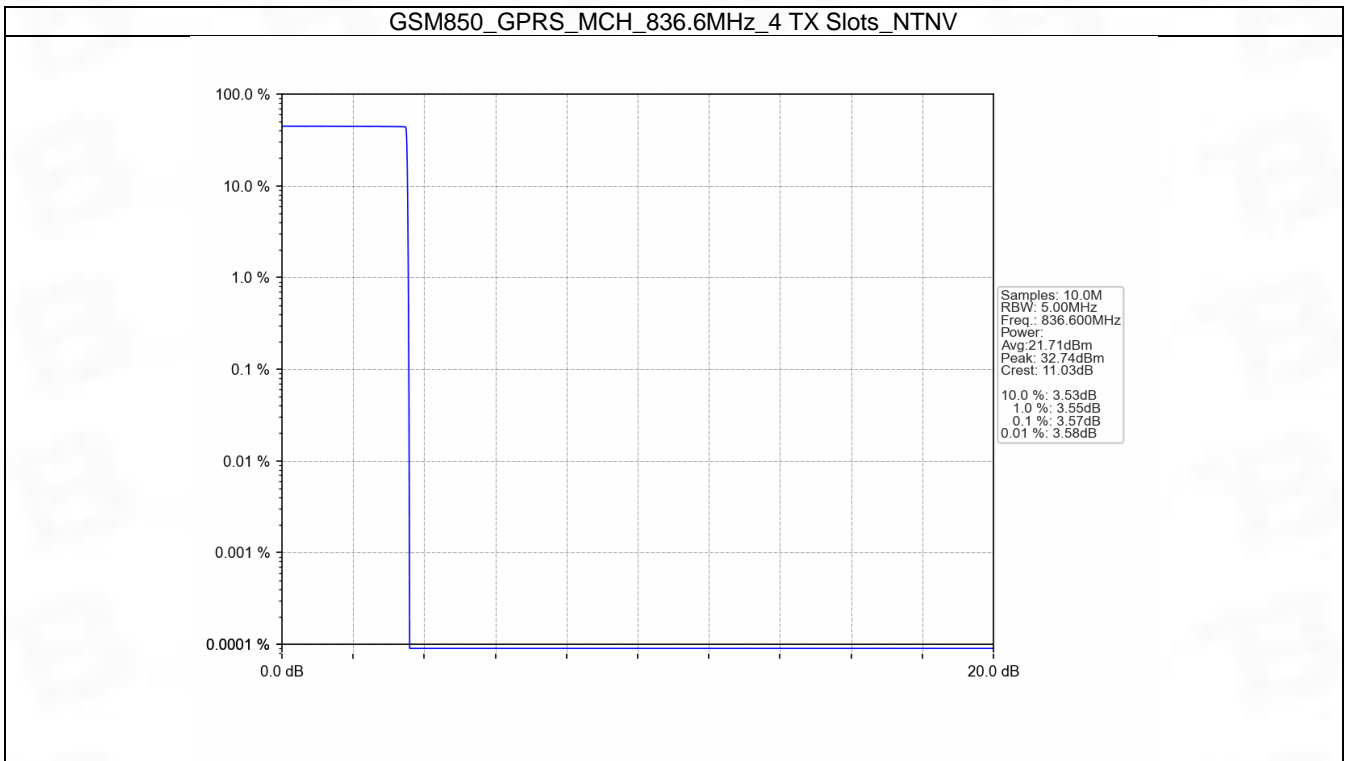
GSM850_GSM_HCH_848.8MHz_GSM_NTNV



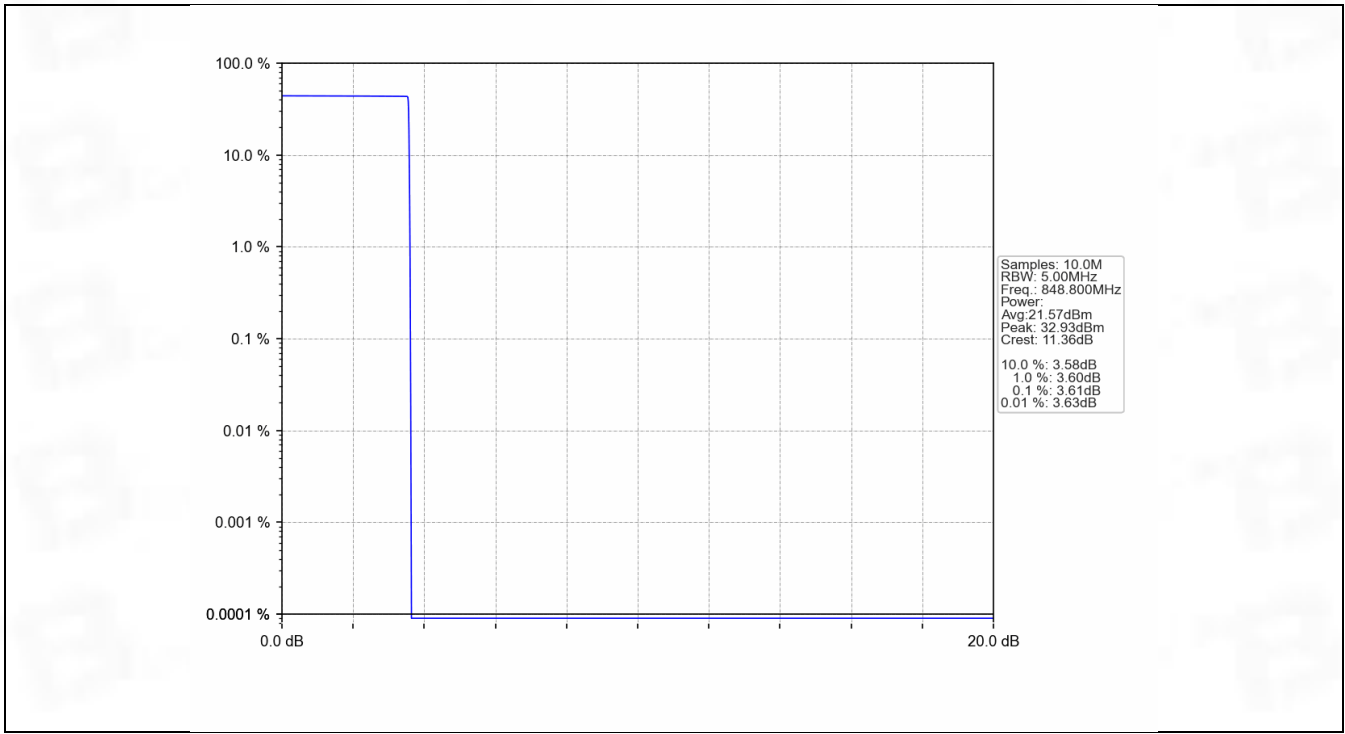
GSM850_GPRS_LCH_824.2MHz_4 TX Slots_NTNV



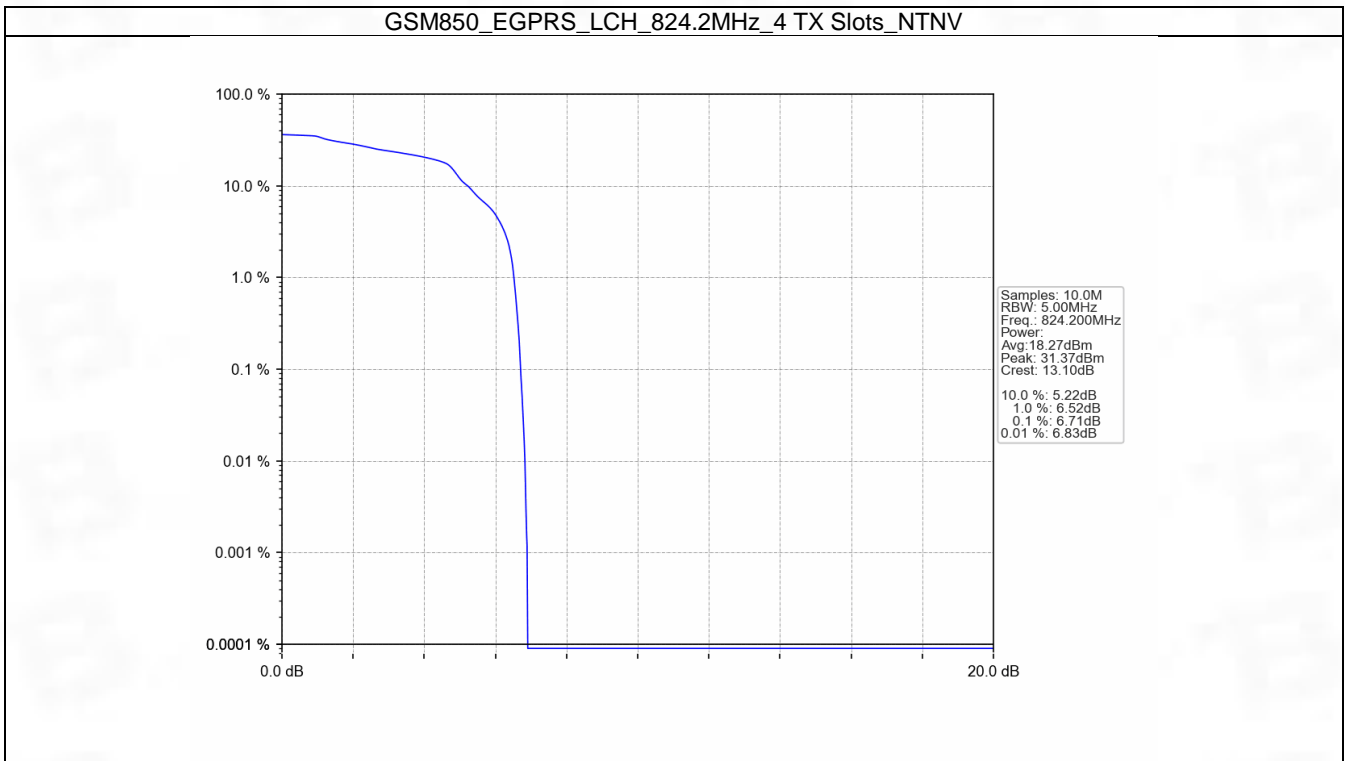
GSM850_GPRS_MCH_836.6MHz_4 TX Slots_NTNV



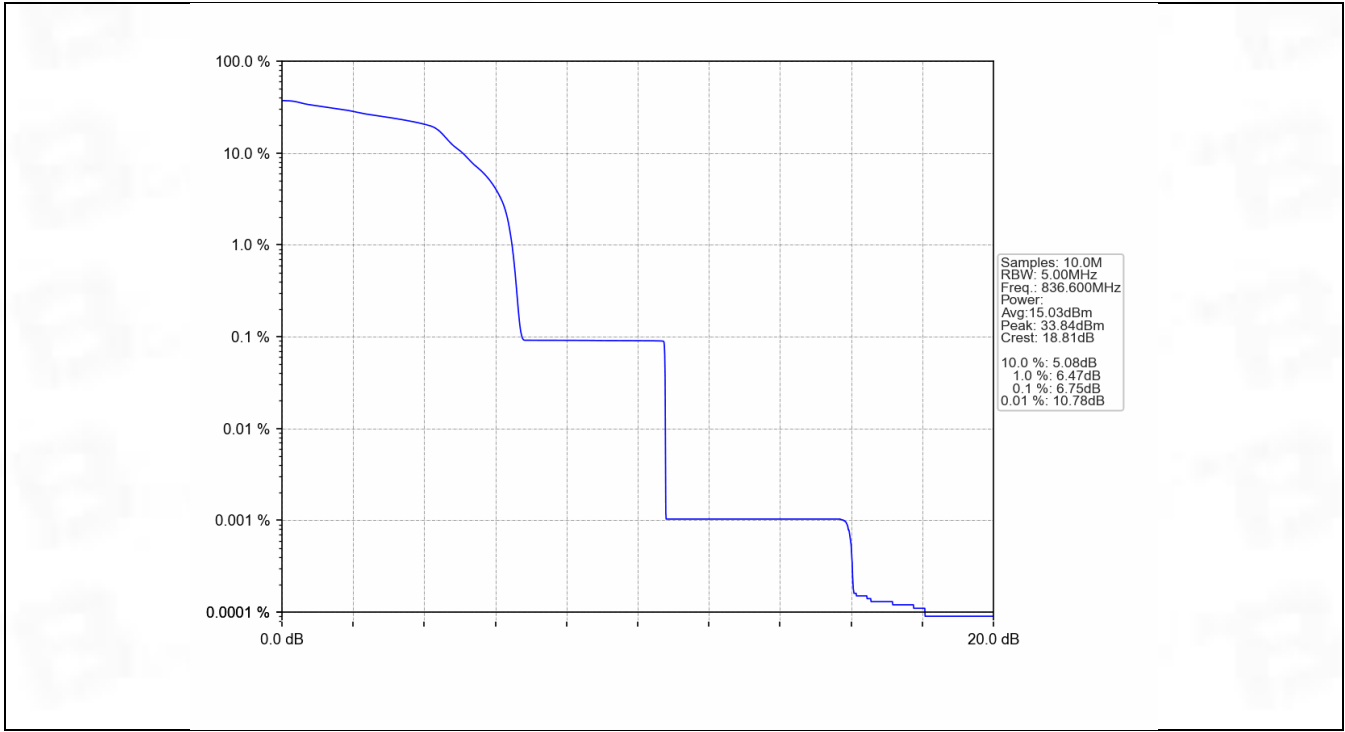
GSM850_GPRS_HCH_848.8MHz_4 TX Slots_NTNV



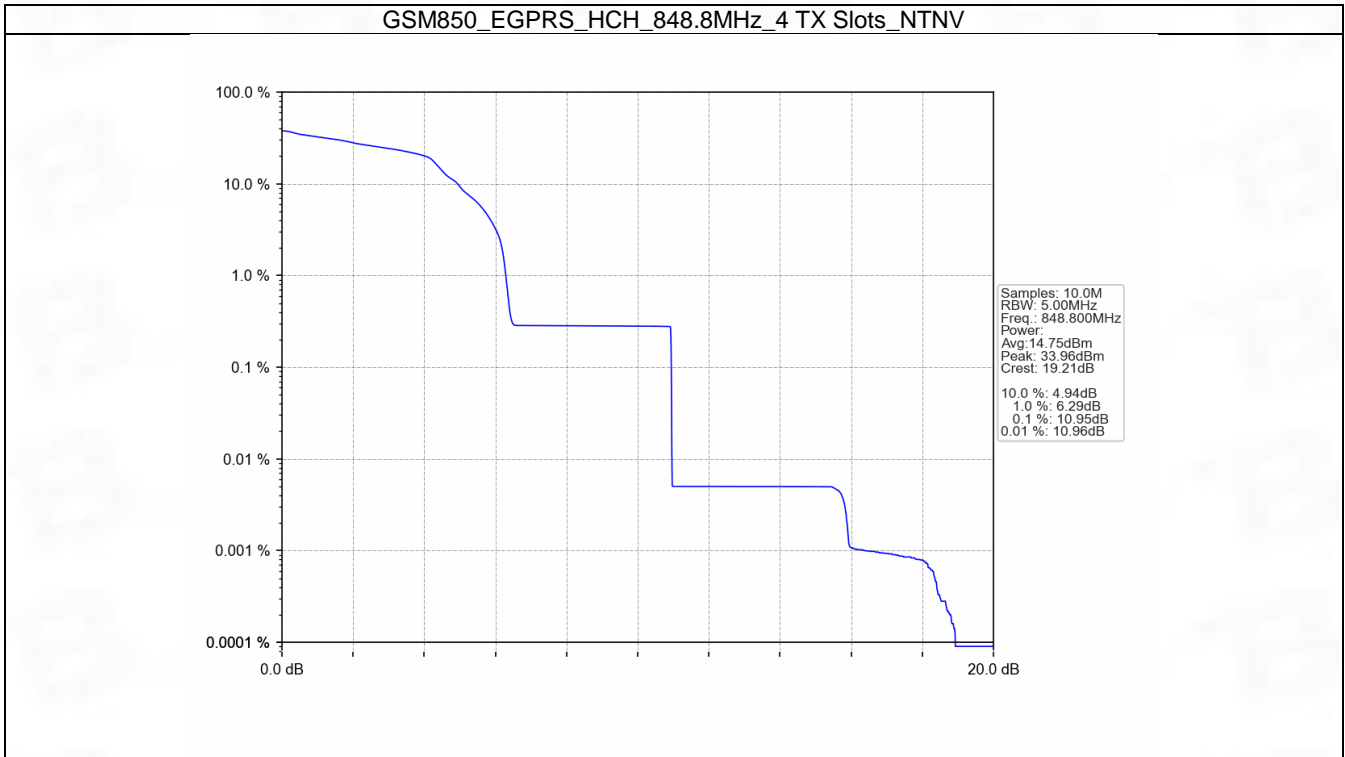
GSM850_EGPRS_LCH_824.2MHz_4 TX Slots_NTNV



GSM850_EGPRS_MCH_836.6MHz_4 TX Slots_NTNV



GSM850_EGPRS_HCH_848.8MHz_4 TX Slots_NTNV



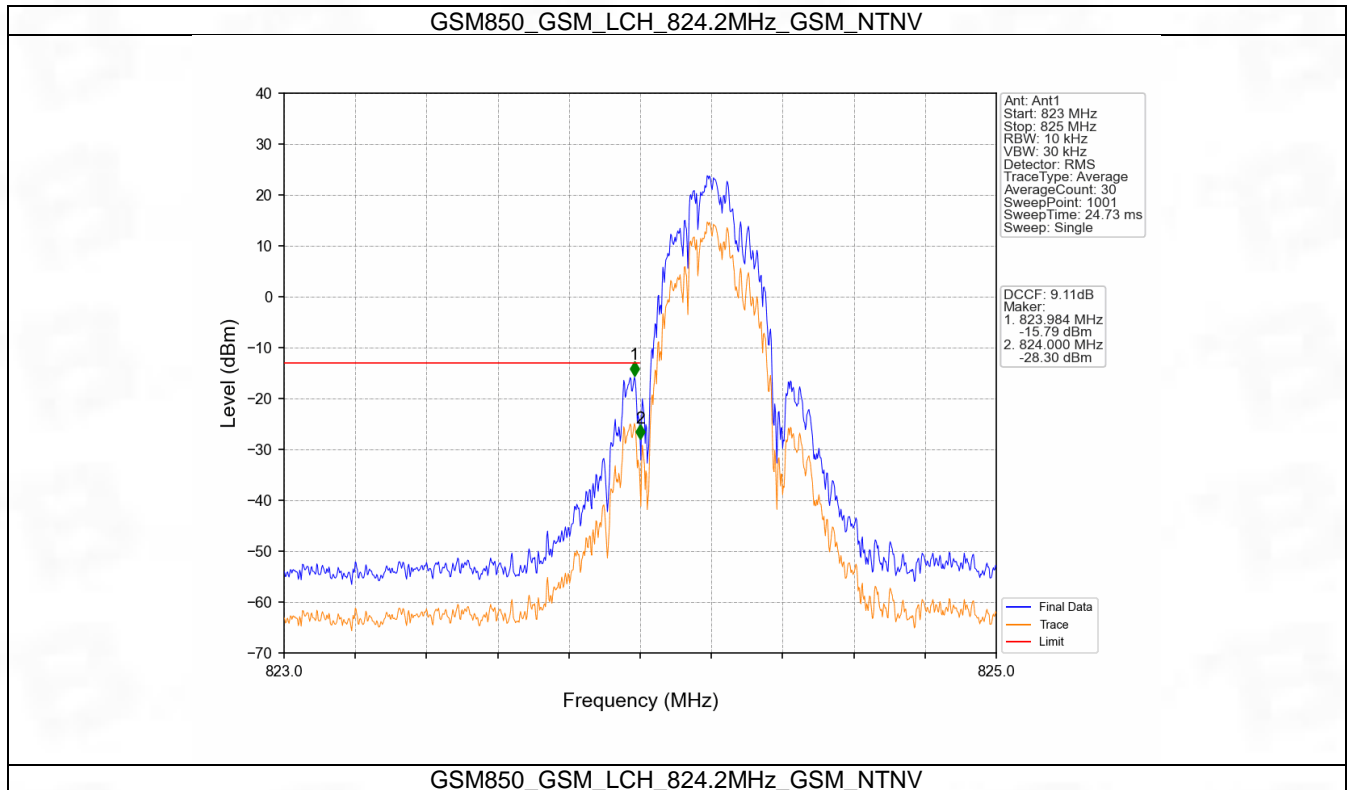
6. Spurious Emission

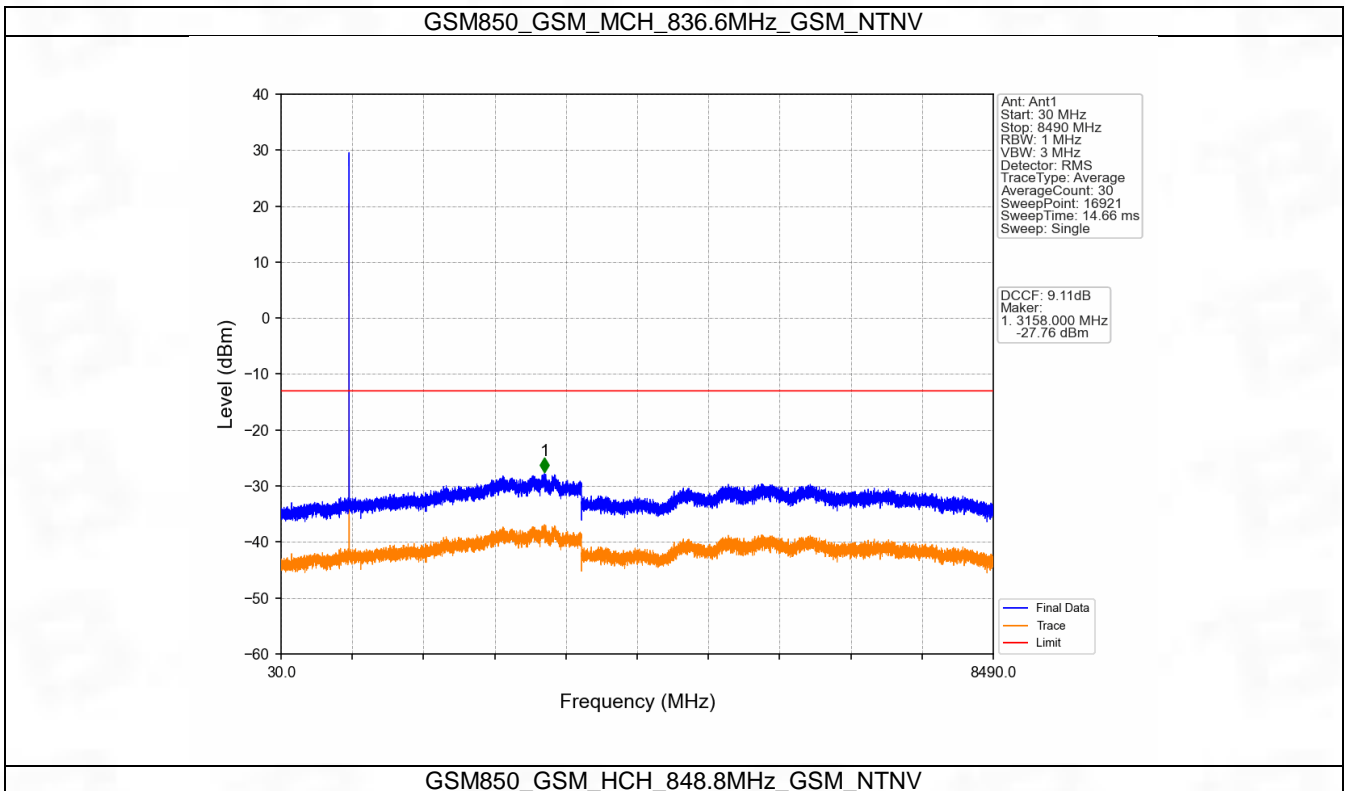
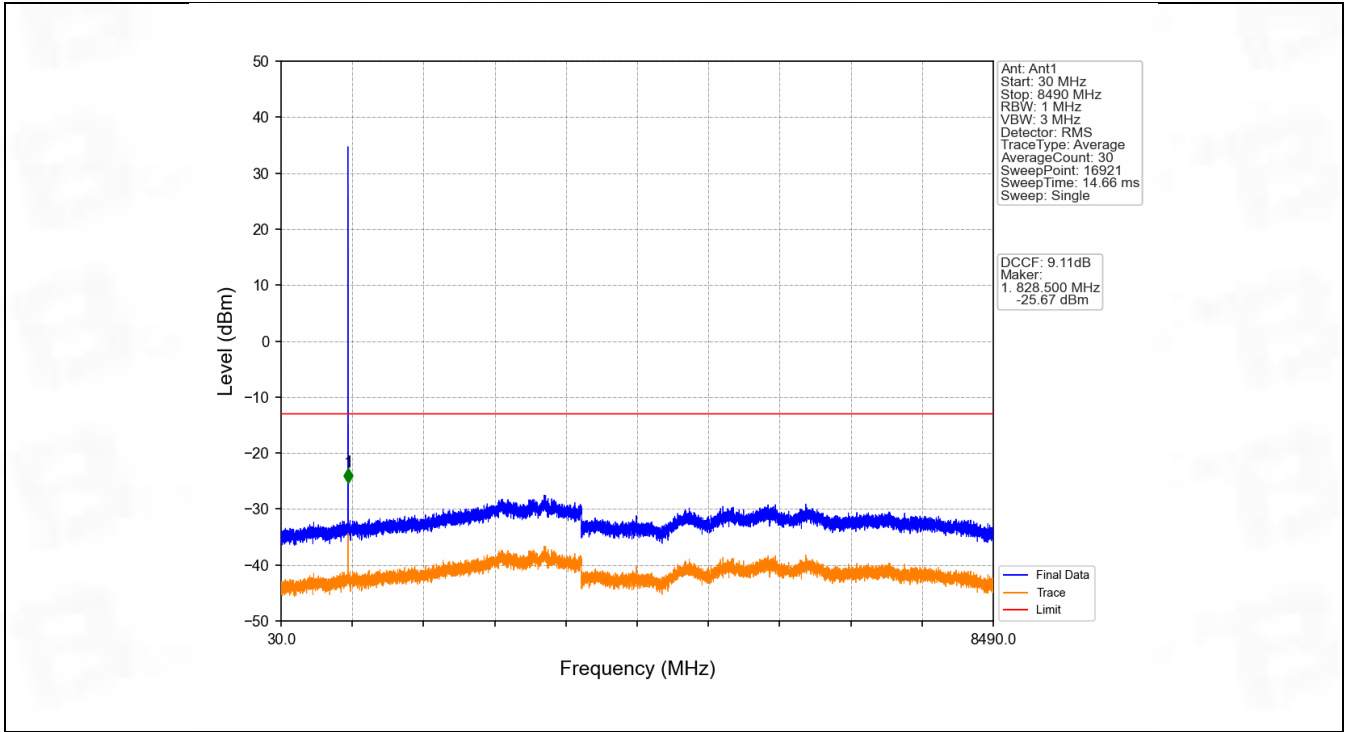
6.1 GSM850

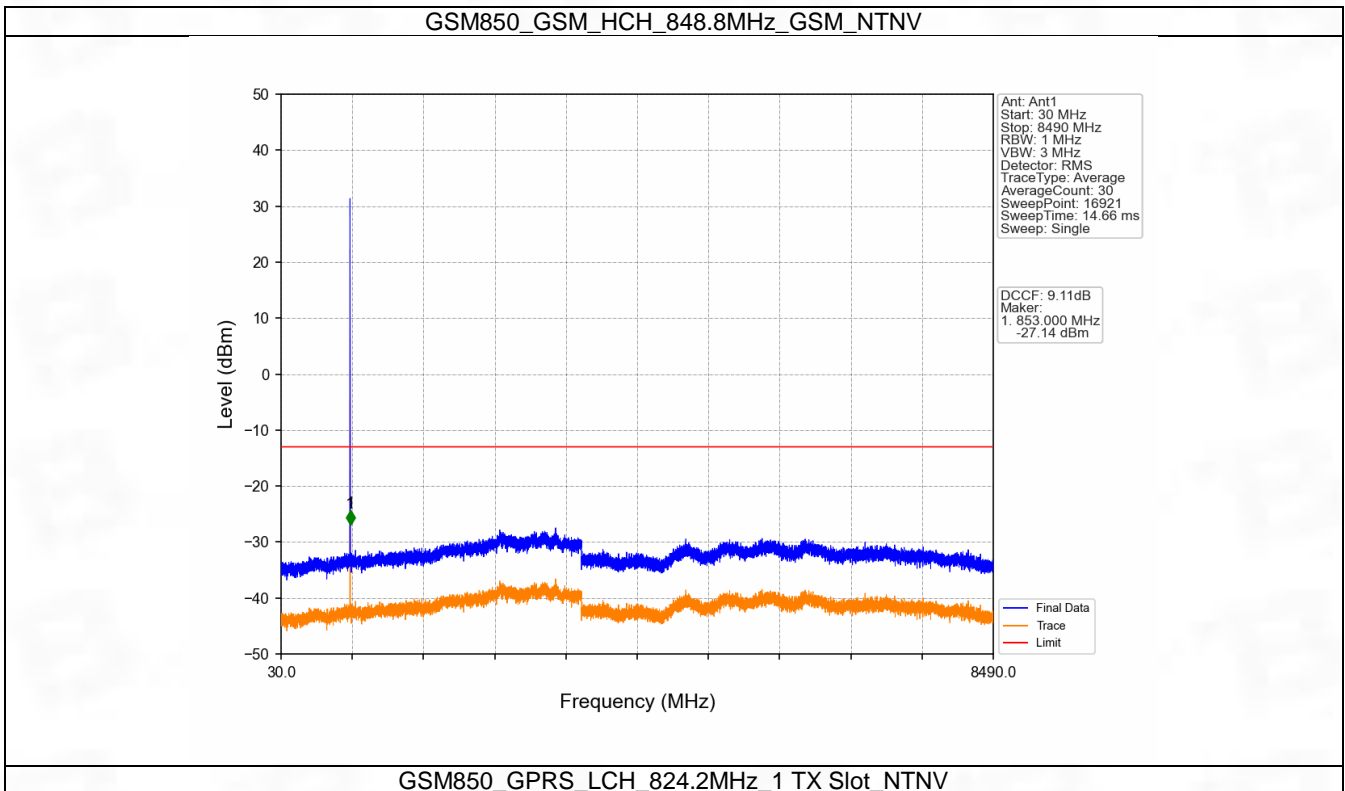
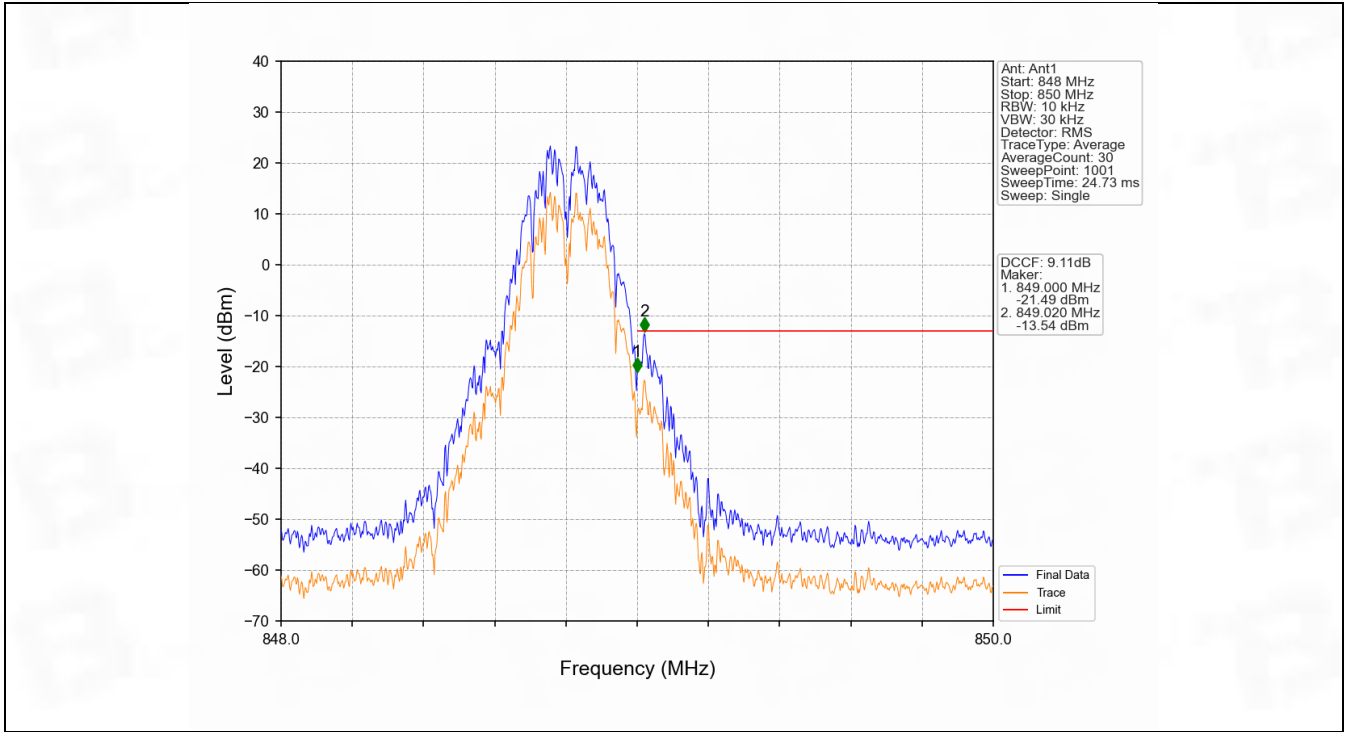
6.1.1 Test Result

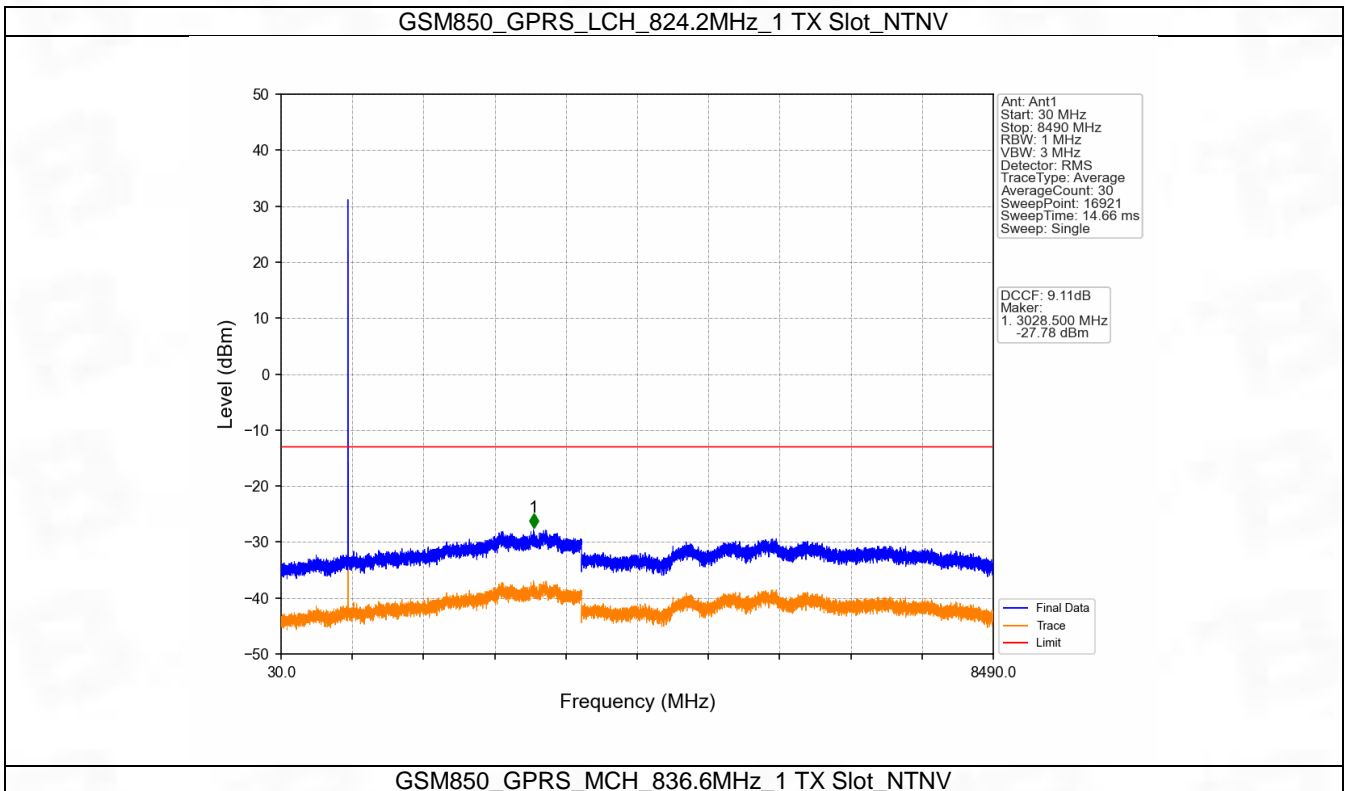
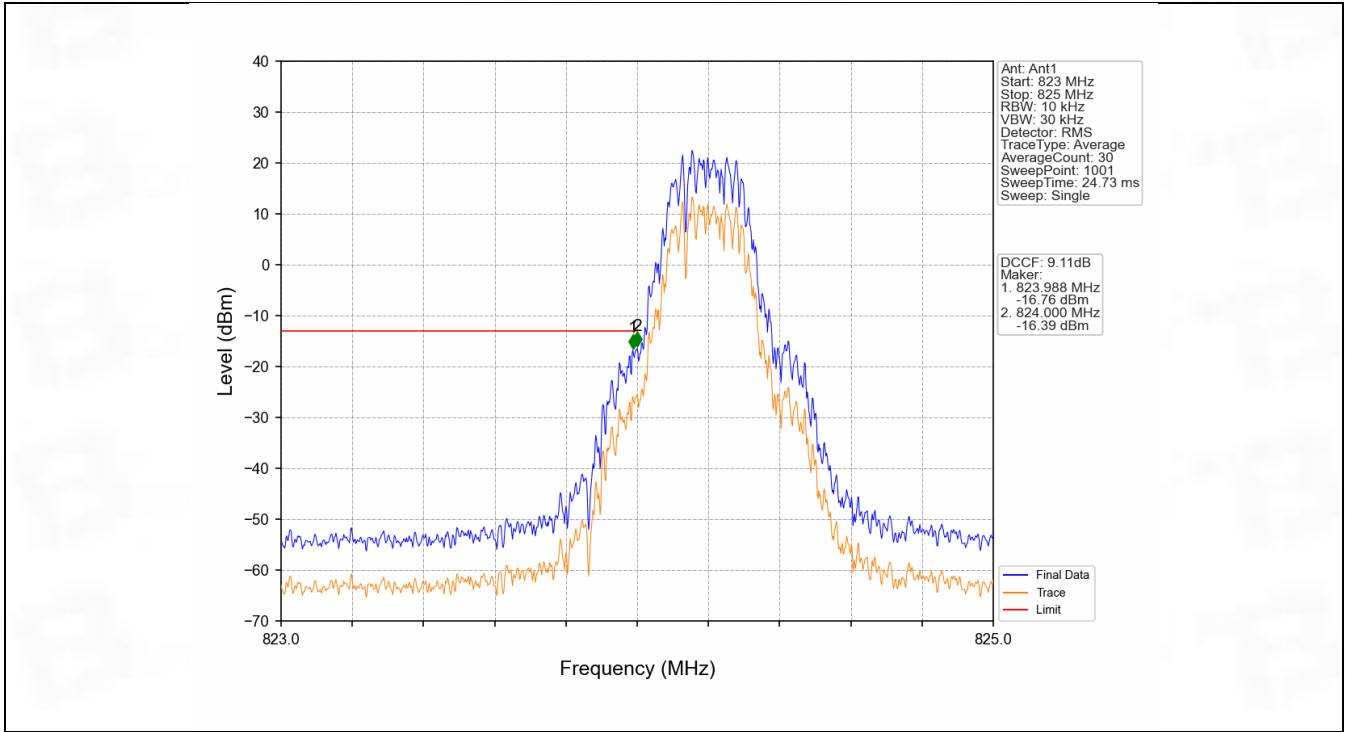
Band: GSM850						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	824.2	Refer To Test Graph		Pass
			836.6	Refer To Test Graph		Pass
			848.8	Refer To Test Graph		Pass
	GPRS	1 TX Slot	824.2	Refer To Test Graph		Pass
			836.6	Refer To Test Graph		Pass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

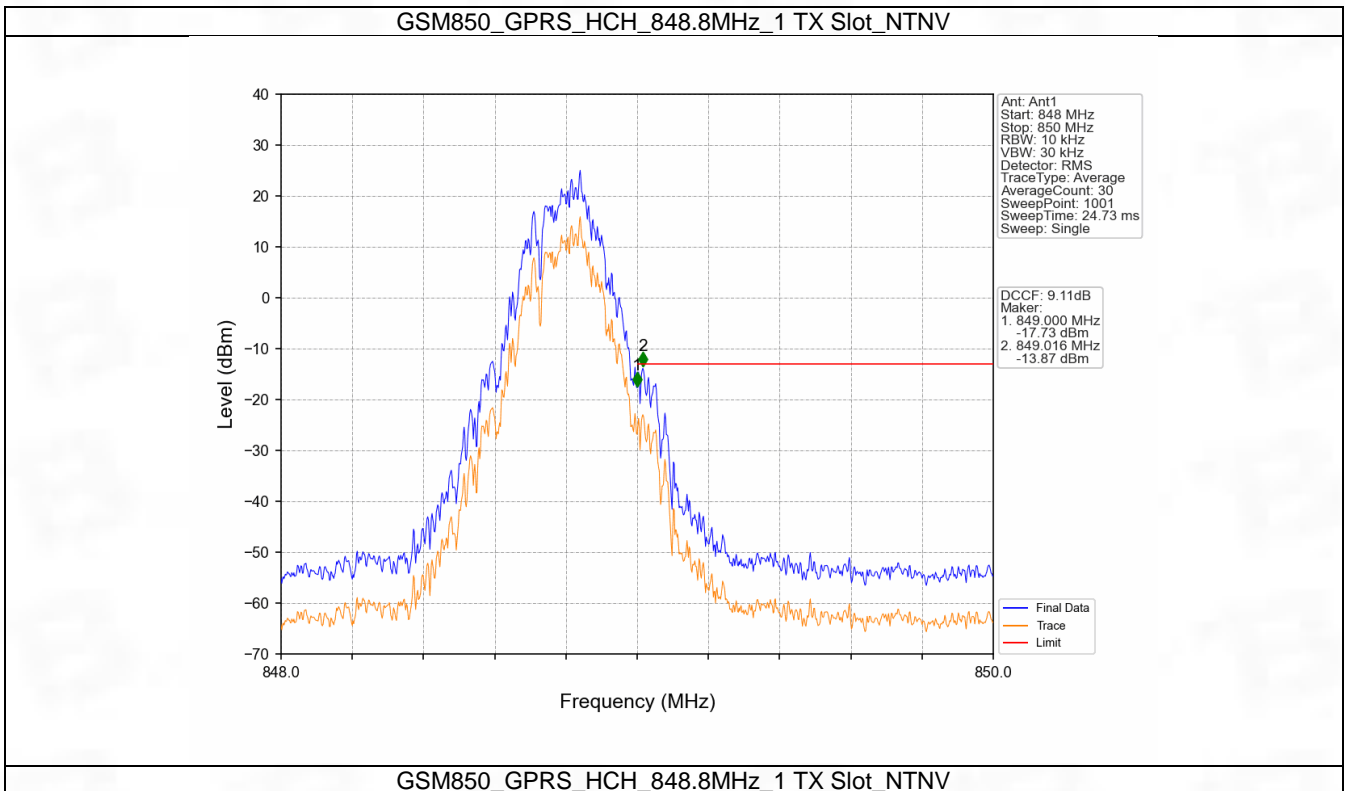
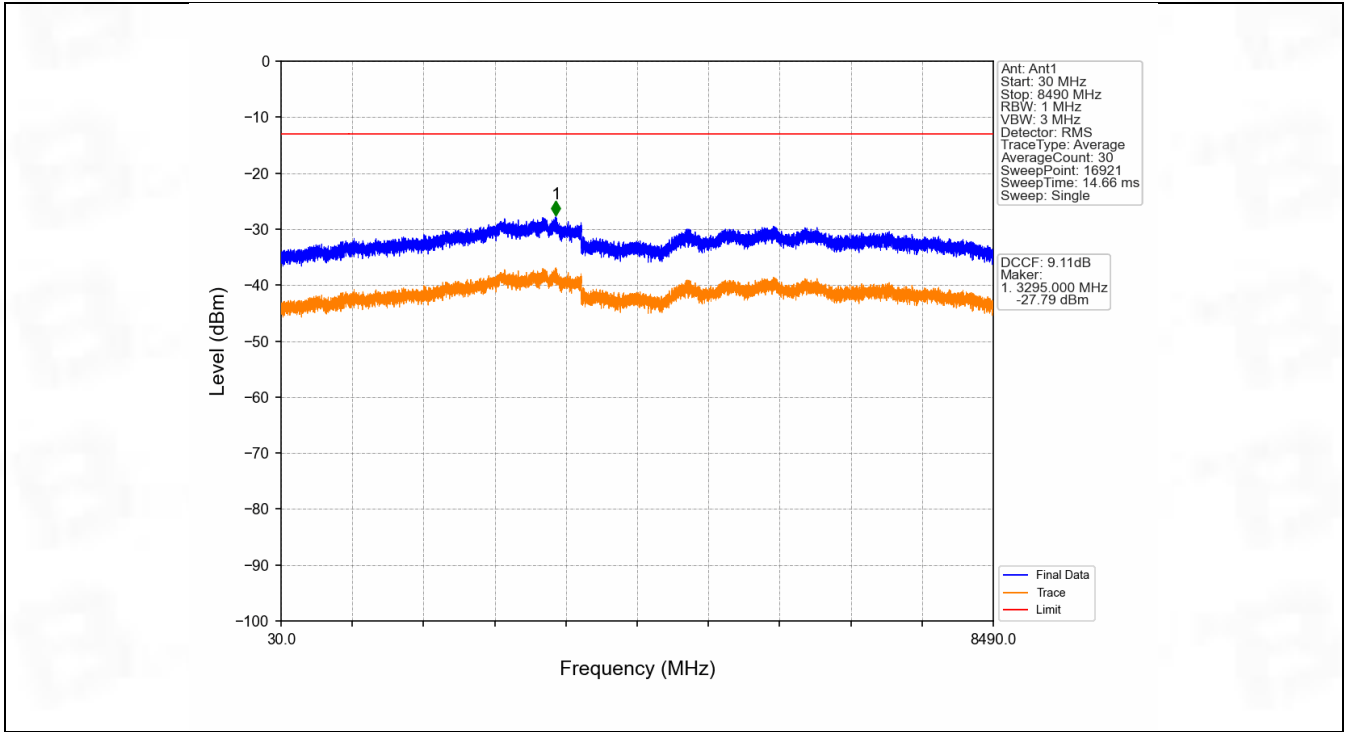
6.1.2 Test Graph

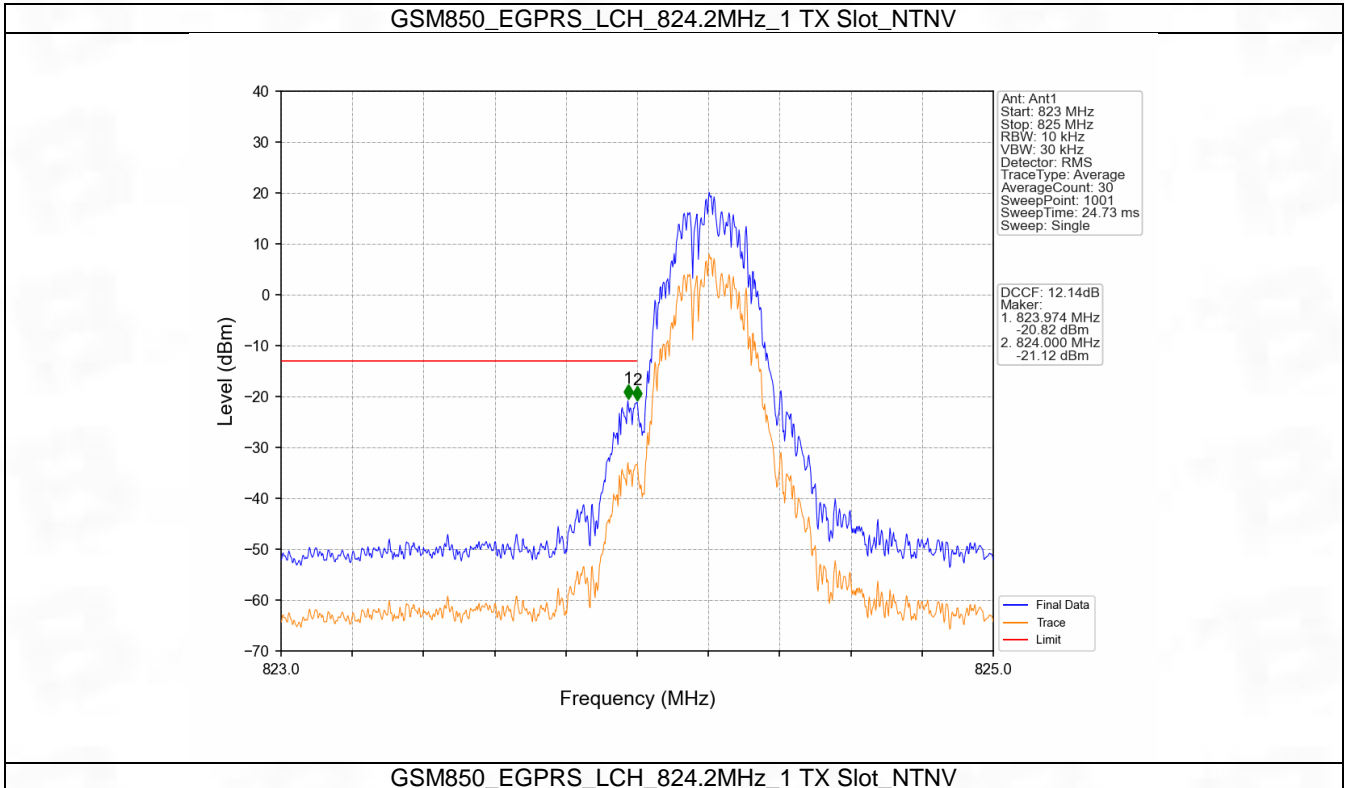
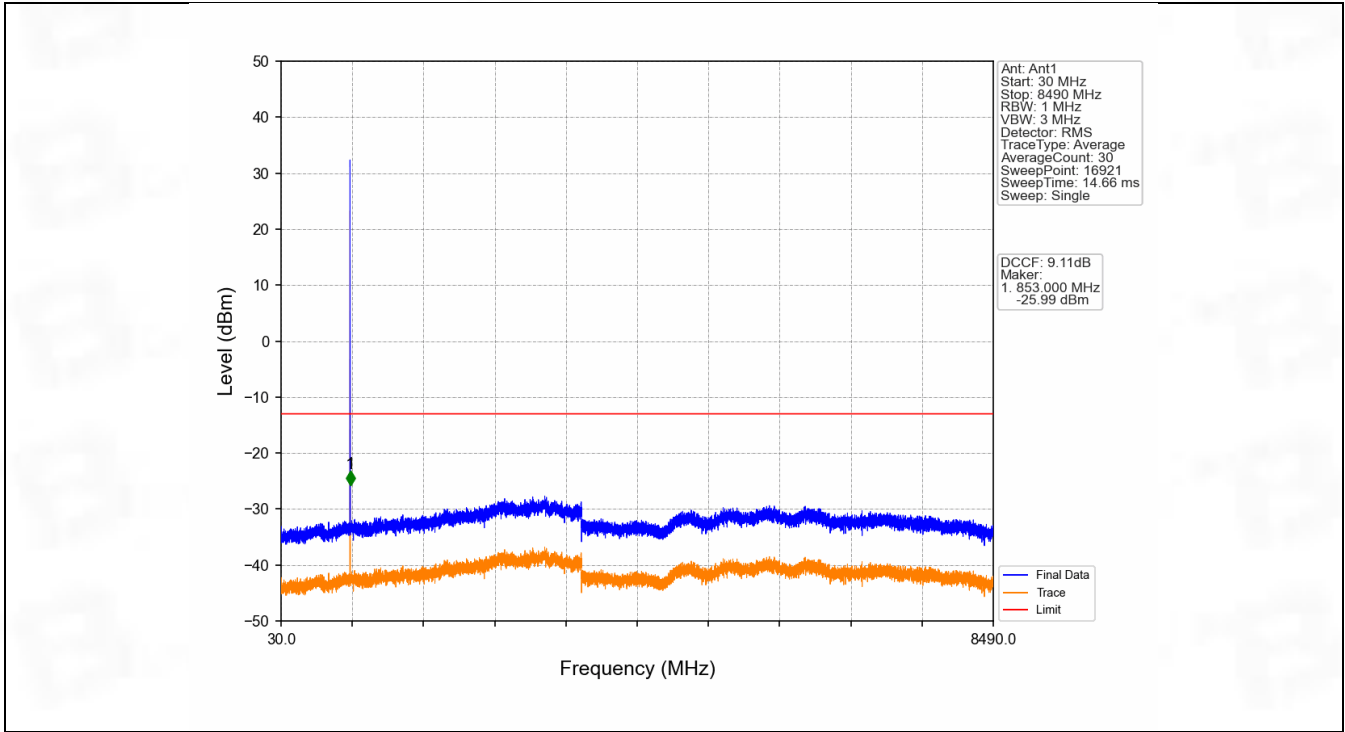


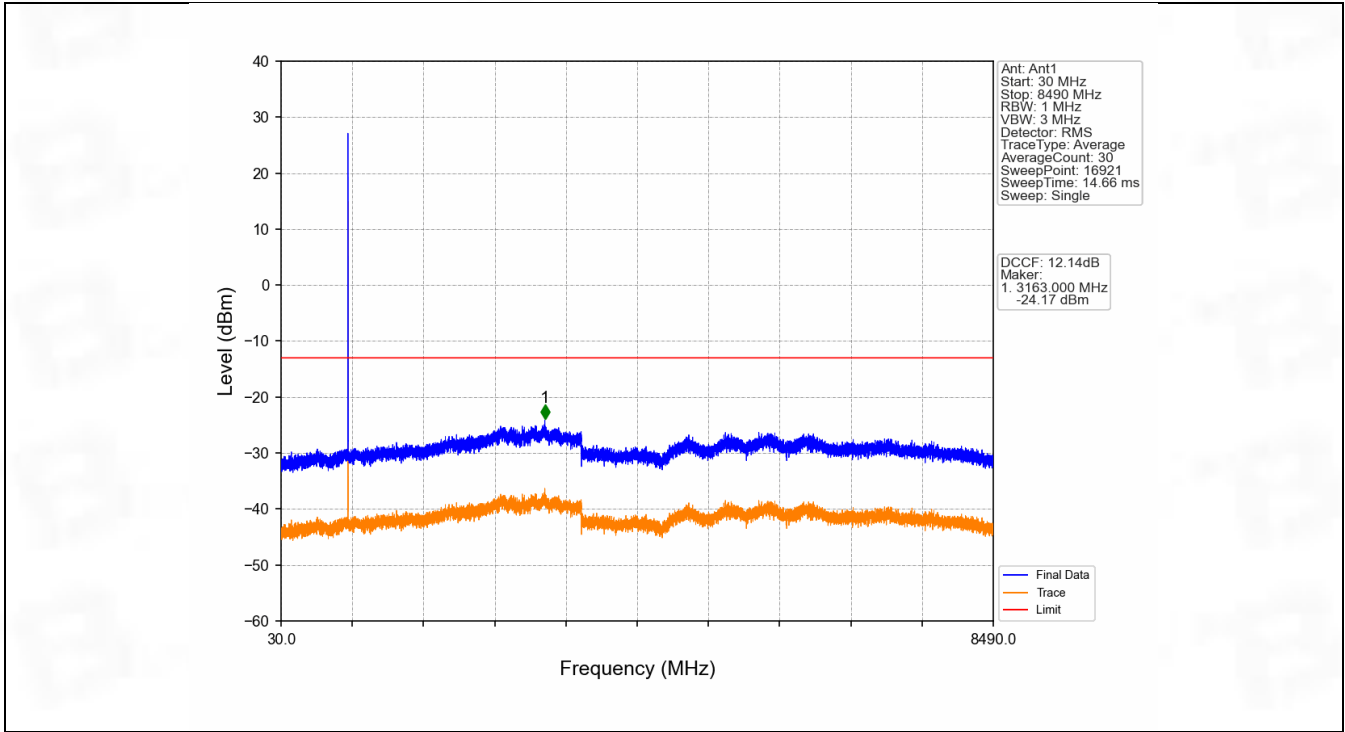




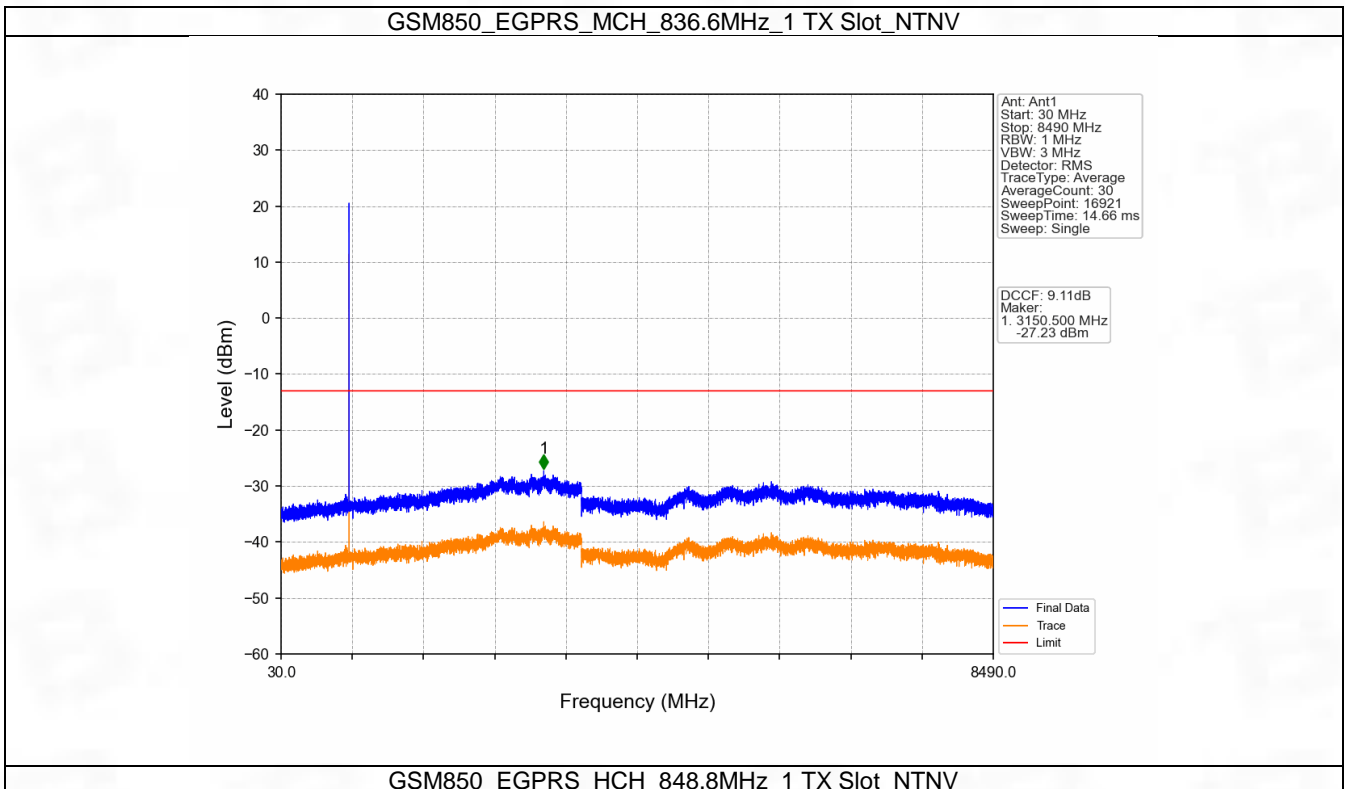




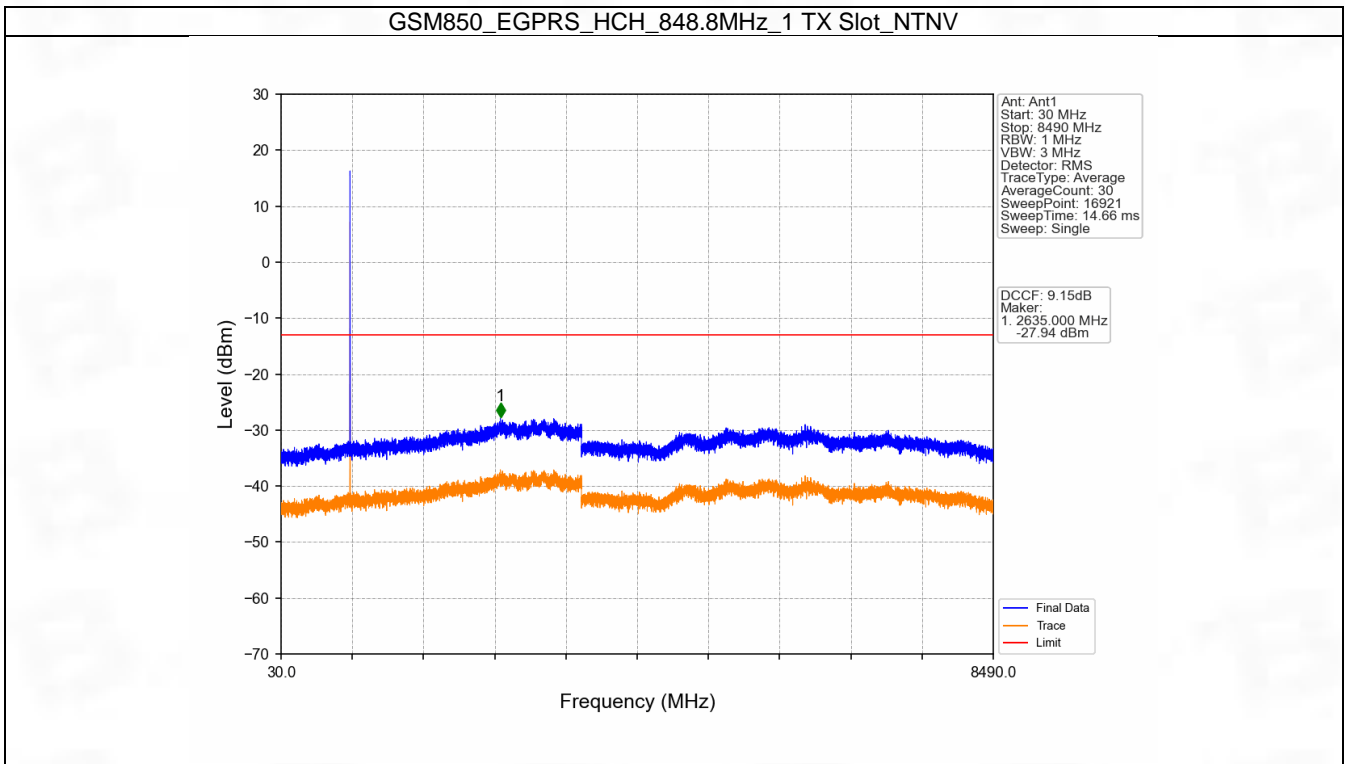
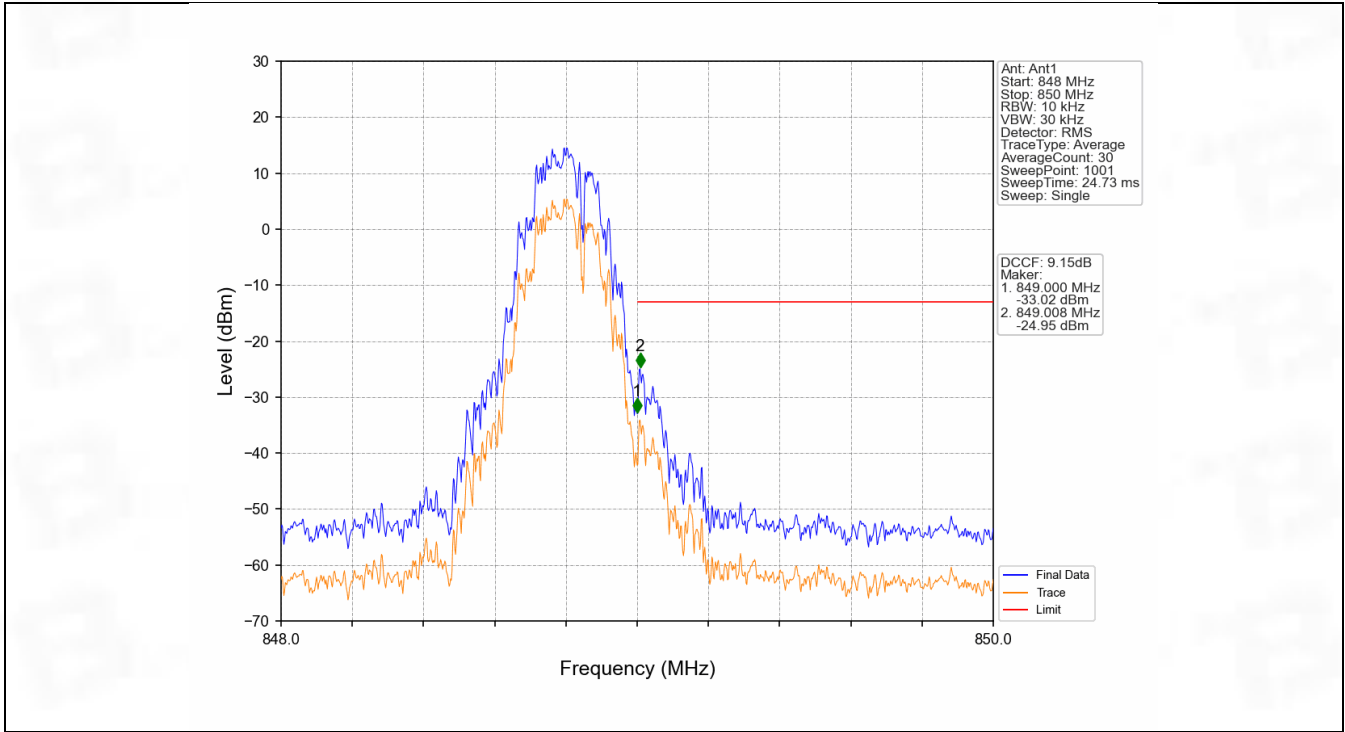




GSM850_EGPRS_MCH_836.6MHz_1 TX Slot_NTNV



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	1.7458	0.0223	ppm	248KGXW	22H	32.42
GSM850	0.2	824.2	848.8	0.4831	0.0129	ppm	253KG7W	22H	26.84

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	1.1668	0.0223	ppm	248KGXW	22H	30.67
GSM850	0.2	824.2	848.8	0.3228	0.0129	ppm	253KG7W	22H	25.09