

Appendix G for GSM850

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

Test Band: GSM850											
Test Mode		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
		LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
EGPRS	1 TX Slot	27.87	28.83	29.17	0.65	2.80	28.52	29.48	29.82	38.45	PASS
	2 TX Slots	27.92	28.85	29.11	0.65	2.80	28.57	29.50	29.76	38.45	PASS
	3 TX Slots	27.89	28.78	29.07	0.65	2.80	28.54	29.43	29.72	38.45	PASS
	4 TX Slots	27.77	28.79	29.01	0.65	2.80	28.42	29.44	29.66	38.45	PASS
GPRS	1 TX Slot	30.63	30.51	30.45	0.65	2.80	31.28	31.16	31.10	38.45	PASS
	2 TX Slots	30.60	30.33	30.43	0.65	2.80	31.25	31.98	31.08	38.45	PASS
	3 TX Slots	30.55	30.27	30.37	0.65	2.80	31.20	31.92	31.02	38.45	PASS
	4 TX Slots	30.50	30.37	30.36	0.65	2.80	31.15	31.02	31.01	38.45	PASS

Note:
 1) dBd = dBi - 2.15
 2) EIRP = Conducted output power + Antenna gain (dBi)
 3) ERP = Conducted output power + Antenna gain (dBd)

2. Frequency stability

2.1 Test Result

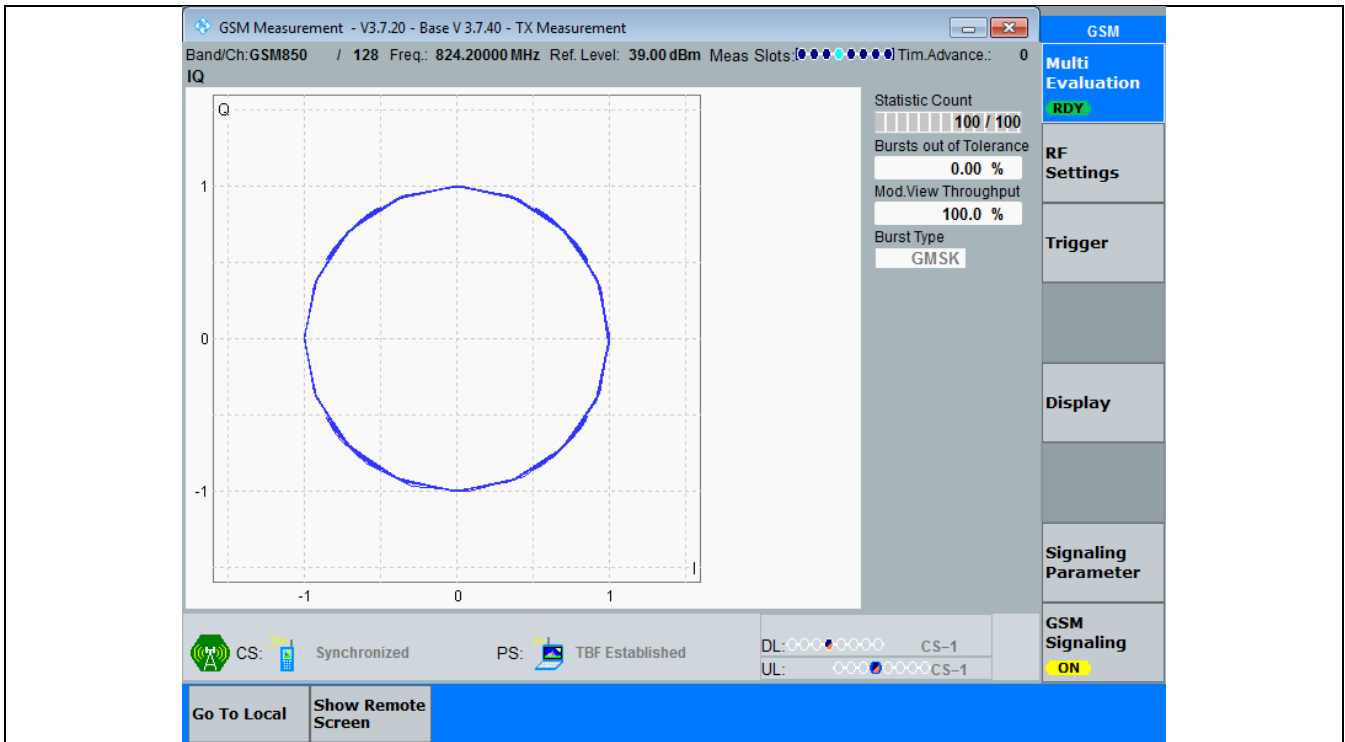
Test Band: GSM850 (Frequency Error VS. Voltage)										
Test Mode	Test Temp.	Test Volt.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
			LCH	MCH	HCH	LCH	MCH	HCH		
EGPRS	NT	LV	14.0000	22.0000	17.0000	0.0180	0.0267	0.0202	2.50	PASS
		NV	16.0000	24.0000	14.0000	0.0205	0.0289	0.0166	2.50	PASS
		HV	17.0000	27.0000	15.0000	0.0209	0.0326	0.0187	2.50	PASS
GPRS	NT	LV	23.0000	18.0000	21.0000	0.0280	0.0218	0.0253	2.50	PASS
		NV	21.0000	20.0000	19.0000	0.0261	0.0249	0.0227	2.50	PASS
		HV	22.0000	20.0000	23.0000	0.0277	0.0250	0.0271	2.50	PASS

Test Band: GSM850 (Frequency Error VS. Temperature)										
Test Mode	Test Volt.	Test Temp.	Freq. Error (Hz)			Freq. vs. rated (ppm)			Limit (ppm)	Verdict
			LCH	MCH	HCH	LCH	MCH	HCH		
EGPRS	NV	-30.00	18.0000	28.0000	17.0000	0.0230	0.0338	0.0209	2.50	PASS
		-20.00	17.0000	30.0000	15.0000	0.0217	0.0361	0.0182	2.50	PASS
		-10.00	17.0000	28.0000	15.0000	0.0213	0.0344	0.0184	2.50	PASS
		0.00	16.0000	29.0000	16.0000	0.0201	0.0349	0.0191	2.50	PASS
		10.00	16.0000	30.0000	18.0000	0.0199	0.0365	0.0219	2.50	PASS
		20.00	16.0000	29.0000	15.0000	0.0196	0.0350	0.0181	2.50	PASS
		30.00	17.0000	29.0000	18.0000	0.0214	0.0357	0.0218	2.50	PASS
		40.00	15.0000	28.0000	15.0000	0.0194	0.0344	0.0181	2.50	PASS
		50.00	15.0000	29.0000	17.0000	0.0186	0.0357	0.0209	2.50	PASS
GPRS	NV	-30.00	22.0000	20.0000	23.0000	0.0276	0.0243	0.0274	2.50	PASS
		-20.00	19.0000	23.0000	23.0000	0.0233	0.0279	0.0274	2.50	PASS
		-10.00	21.0000	19.0000	21.0000	0.0258	0.0233	0.0252	2.50	PASS
		0.00	20.0000	19.0000	20.0000	0.0248	0.0237	0.0236	2.50	PASS
		10.00	19.0000	21.0000	21.0000	0.0241	0.0261	0.0259	2.50	PASS
		20.00	20.0000	18.0000	21.0000	0.0243	0.0220	0.0250	2.50	PASS

		30.00	20.0000	20.0000	22.0000	0.0245	0.0240	0.0266	2.50	PASS
		40.00	20.0000	20.0000	22.0000	0.0249	0.0240	0.0267	2.50	PASS
		50.00	20.0000	20.0000	22.0000	0.0247	0.0245	0.0270	2.50	PASS

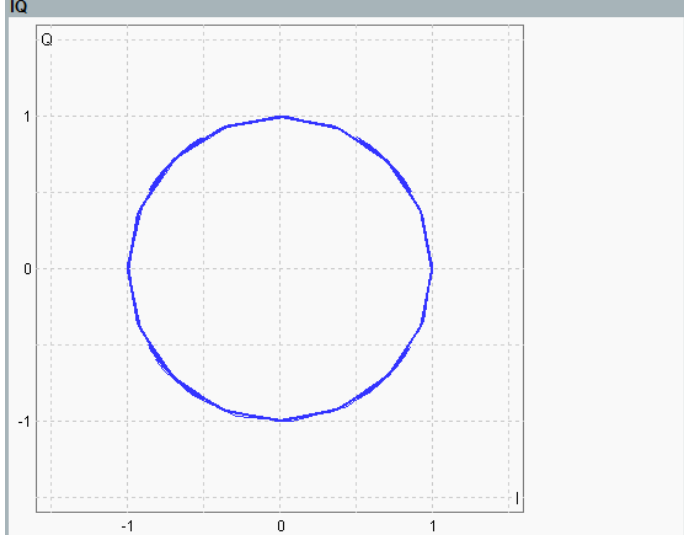
3. Modulation Characteristics

3.1 Test Graph



GSM Measurement - V3.7.20 - Base V 3.7.40 - TX Measurement

Band/Ch: GSM850 / 190 Freq.: 836.60000 MHz Ref. Level: 39.00 dBm Meas Slots: [Progress Bar] Tim. Advance.: 0



Statistic Count
[Progress Bar] 100 / 100
Bursts out of Tolerance
0.00 %
Mod.View Throughput
100.0 %
Burst Type
GMSK

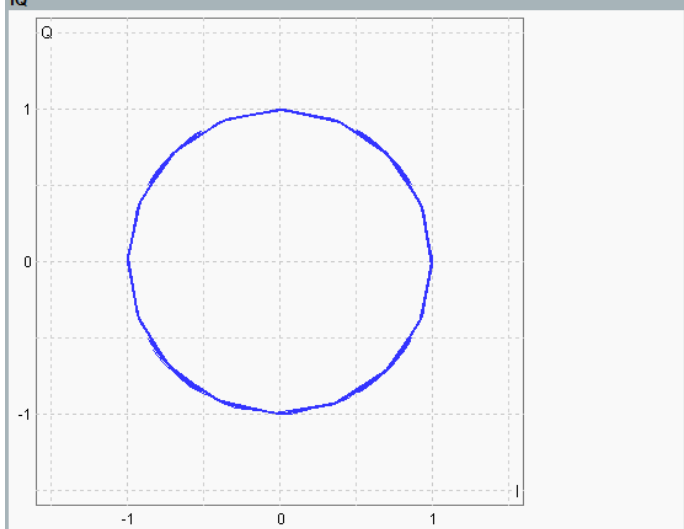
- GSM
- Multi Evaluation RDY
- RF Settings
- Trigger
- Display
- Signaling Parameter
- GSM Signaling ON

CS: Synchronized PS: TBF Established DL: [Progress Bar] CS-1 UL: [Progress Bar] CS-1

Go To Local Show Remote Screen

GSM Measurement - V3.7.20 - Base V 3.7.40 - TX Measurement

Band/Ch: GSM850 / 251 Freq.: 848.80000 MHz Ref. Level: 39.00 dBm Meas Slots: [Progress Bar] Tim. Advance.: 0



Statistic Count
[Progress Bar] 100 / 100
Bursts out of Tolerance
0.00 %
Mod.View Throughput
100.0 %
Burst Type
GMSK

- GSM
- Multi Evaluation RDY
- RF Settings
- Trigger
- Display
- Signaling Parameter
- GSM Signaling ON

CS: Synchronized PS: TBF Established DL: [Progress Bar] CS-1 UL: [Progress Bar] CS-1

Go To Local Show Remote Screen

GSM Measurement - V3.7.20 - Base V 3.7.40 - TX Measurement

Band/Ch: GSM850 / 128 Freq.: 824.20000 MHz Ref. Level: 39.00 dBm Meas Slots: [Progress Bar] Tim.Advance.: 0

IQ

Statistic Count: 100 / 100
 Bursts out of Tolerance: 0.00 %
 Mod.View Throughput: 100.0 %
 Burst Type: 8PSK

CS: Synchronized PS: TBF Established DL: MCS-9 UL: MCS-9

Go To Local Show Remote Screen

GSM
 Multi Evaluation RDY
 RF Settings
 Trigger
 Display
 Signaling Parameter
 GSM Signaling ON

GSM Measurement - V3.7.20 - Base V 3.7.40 - TX Measurement

Band/Ch: GSM850 / 190 Freq.: 836.60000 MHz Ref. Level: 39.00 dBm Meas Slots: [Progress Bar] Tim.Advance.: 0

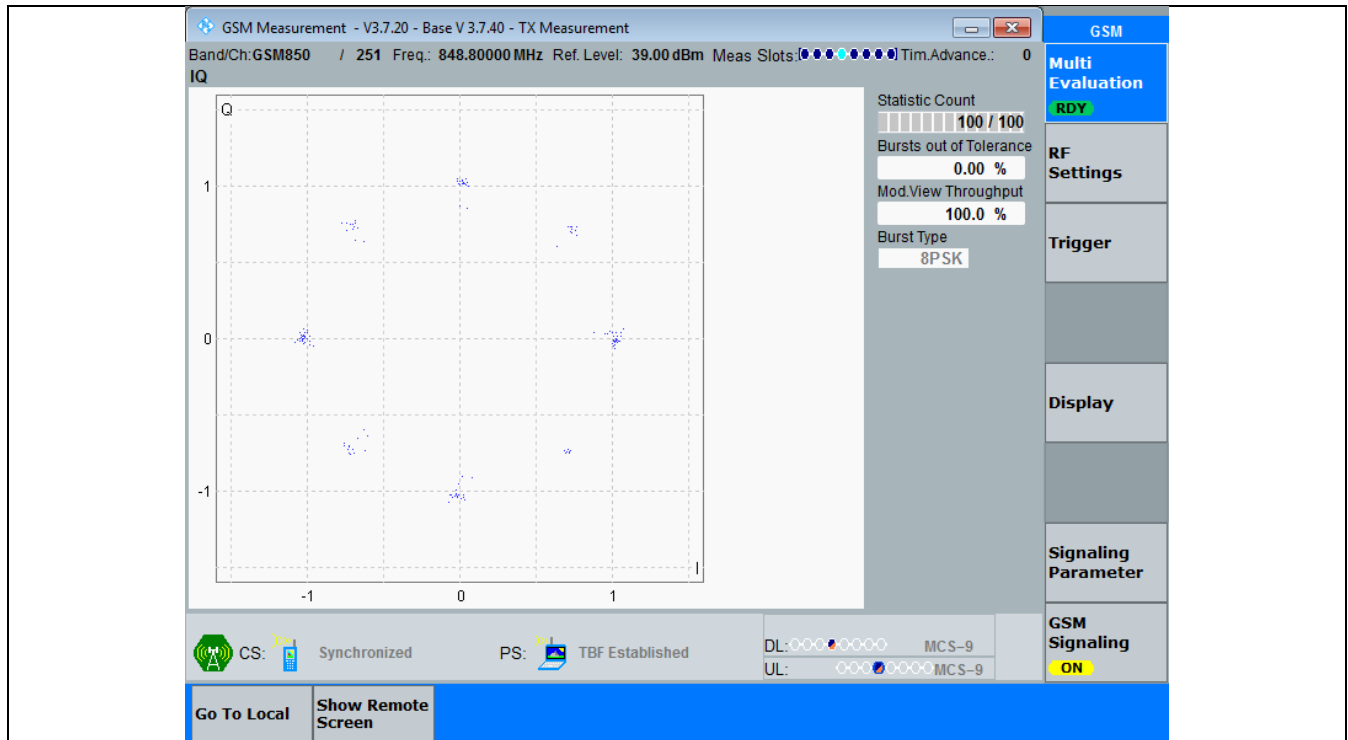
IQ

Statistic Count: 100 / 100
 Bursts out of Tolerance: 0.00 %
 Mod.View Throughput: 100.0 %
 Burst Type: 8PSK

CS: Synchronized PS: TBF Established DL: MCS-9 UL: MCS-9

Go To Local Show Remote Screen

GSM
 Multi Evaluation RDY
 RF Settings
 Trigger
 Display
 Signaling Parameter
 GSM Signaling ON

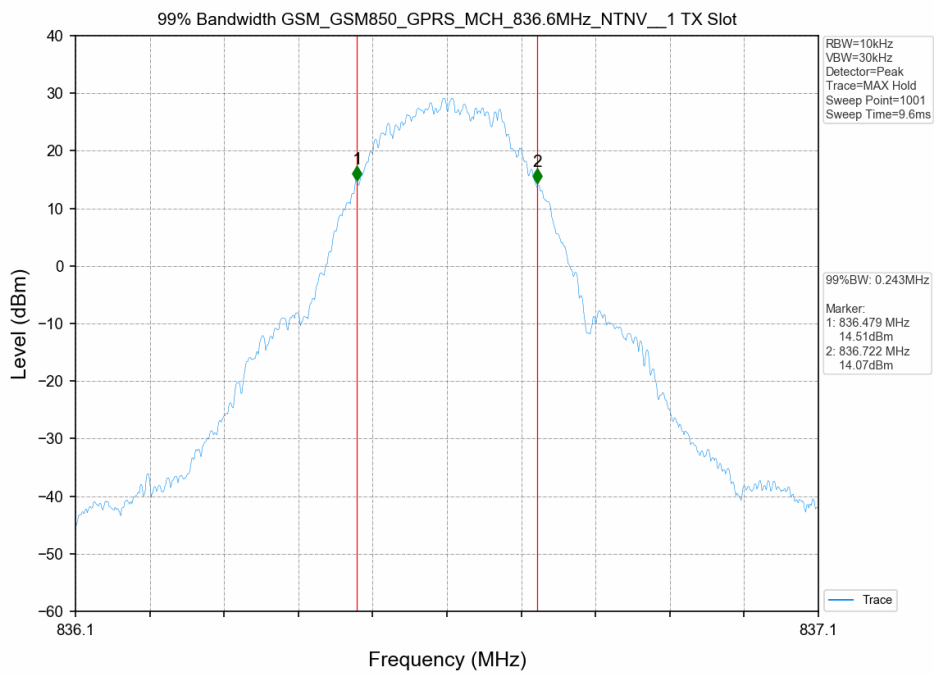
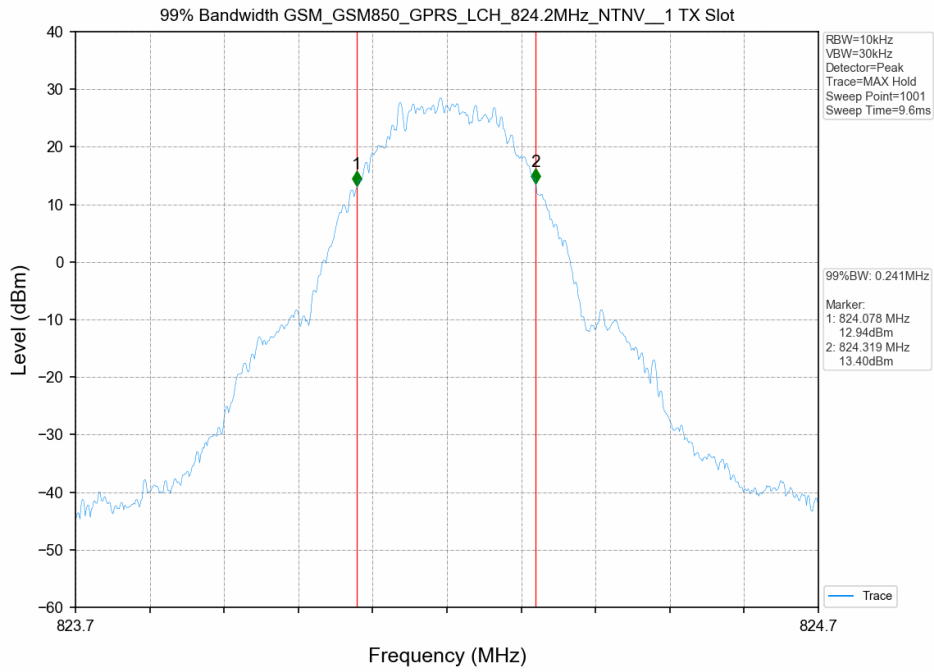


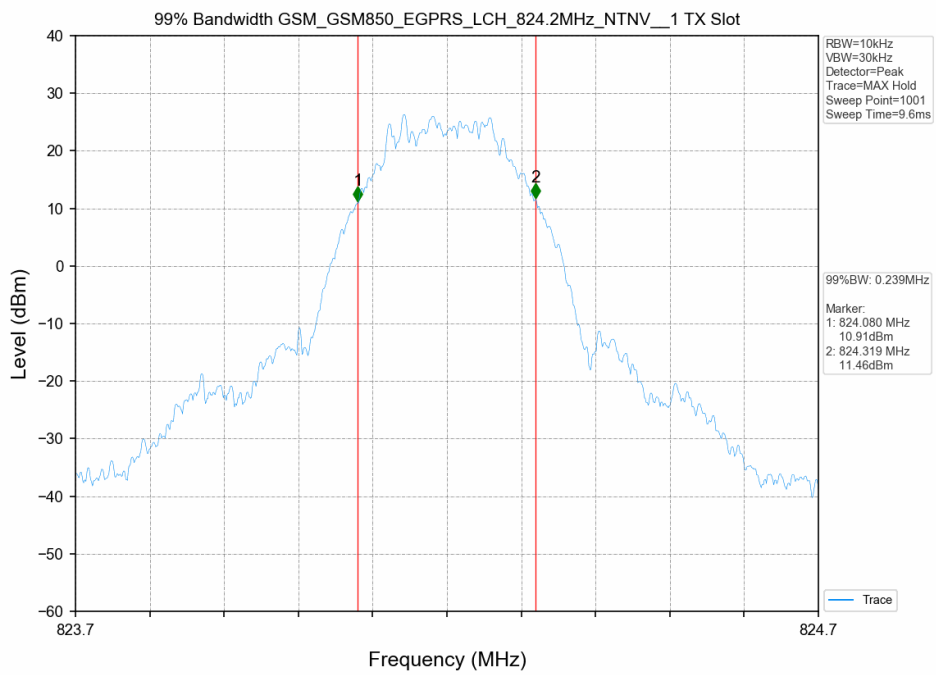
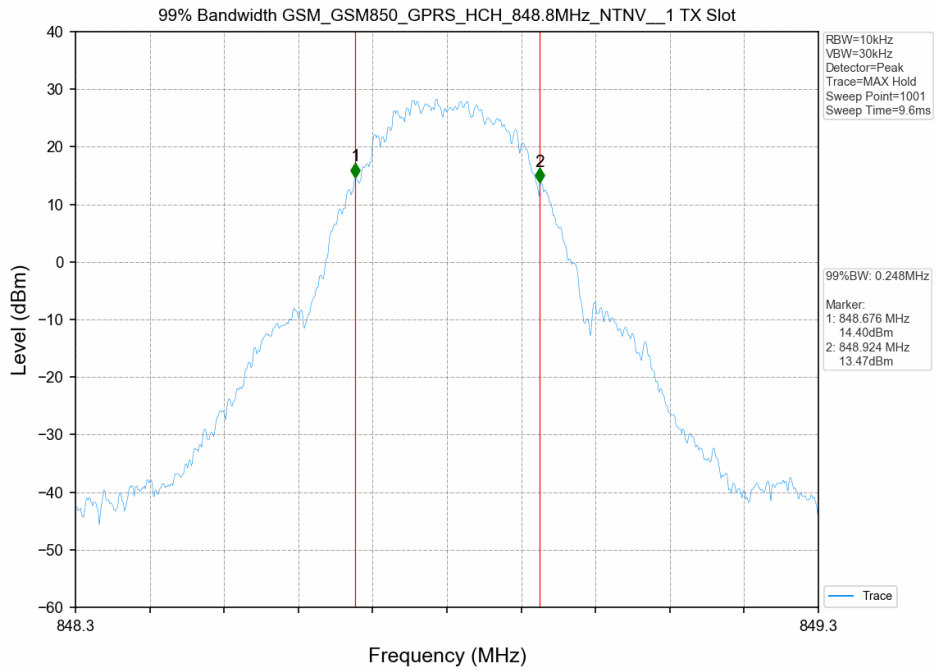
4. 99% & 26dB Bandwidth

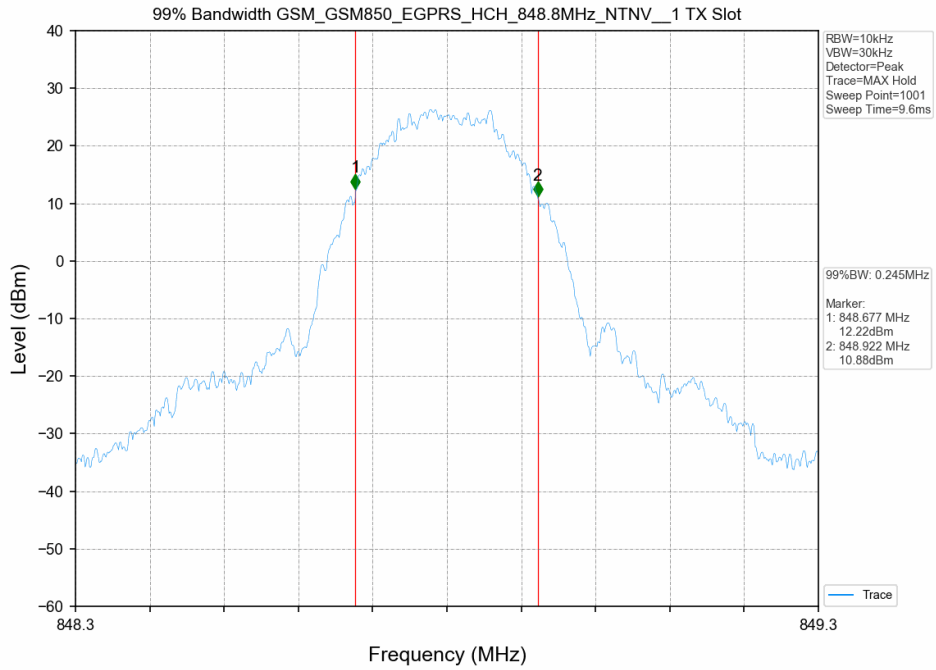
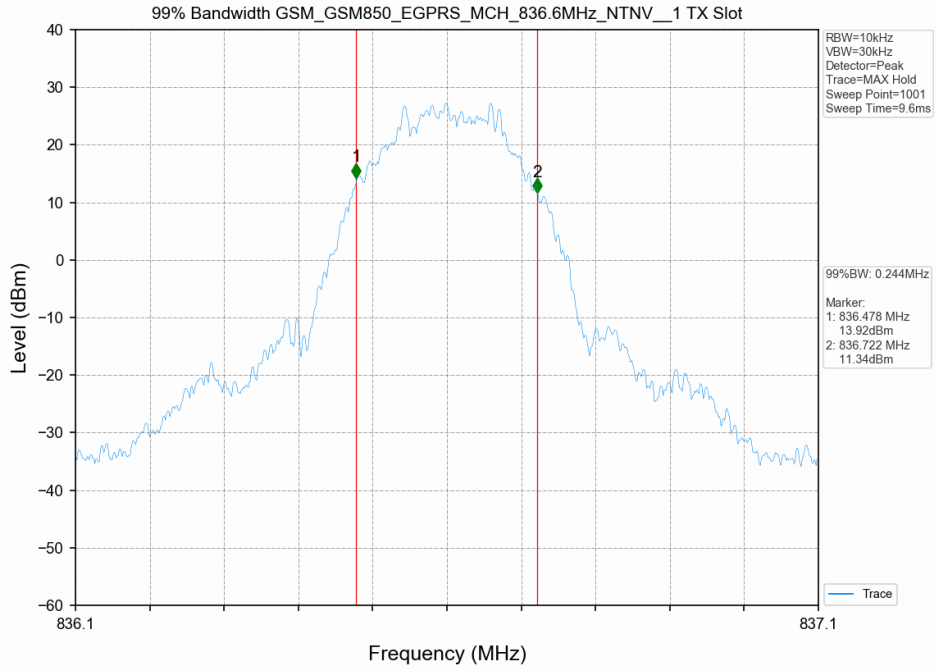
4.1 Test Result

Test Band: GSM850					
Test Mode	99% Occupied Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
GPRS	0.240	0.240	0.250	N/A	PASS
EGPRS	0.240	0.240	0.240	N/A	PASS

4.2 Test Graph

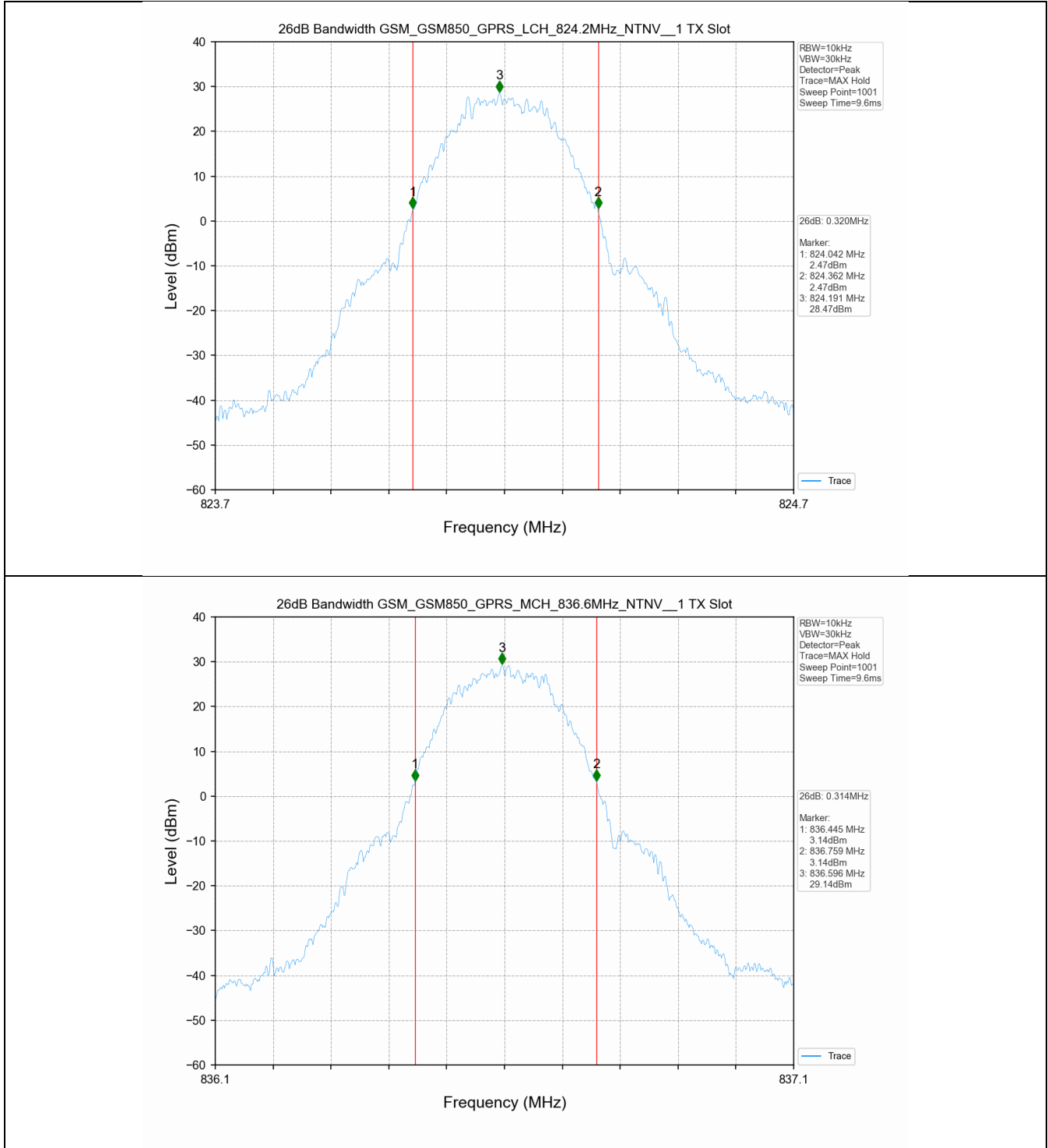


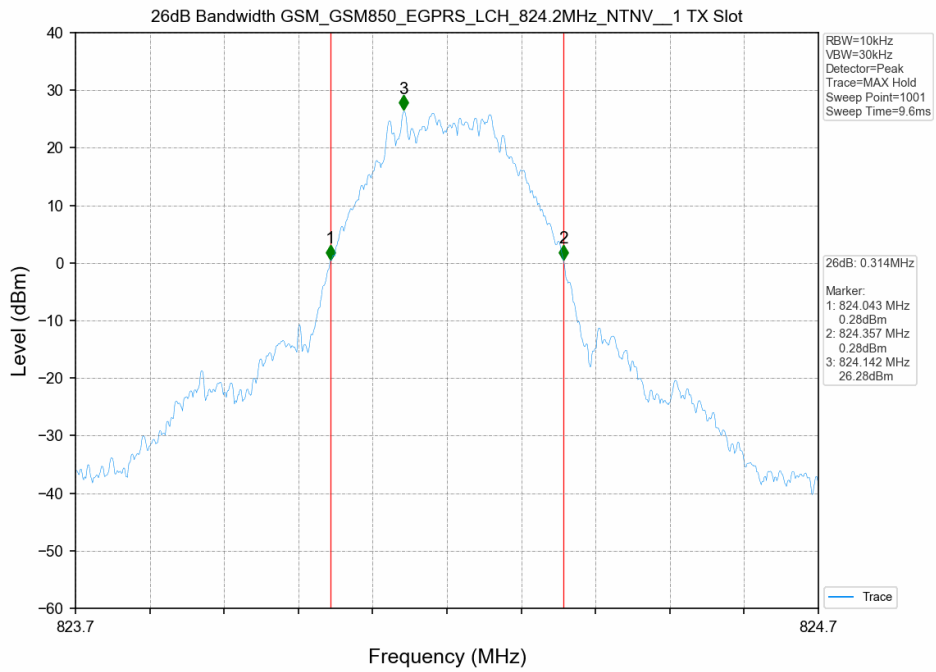
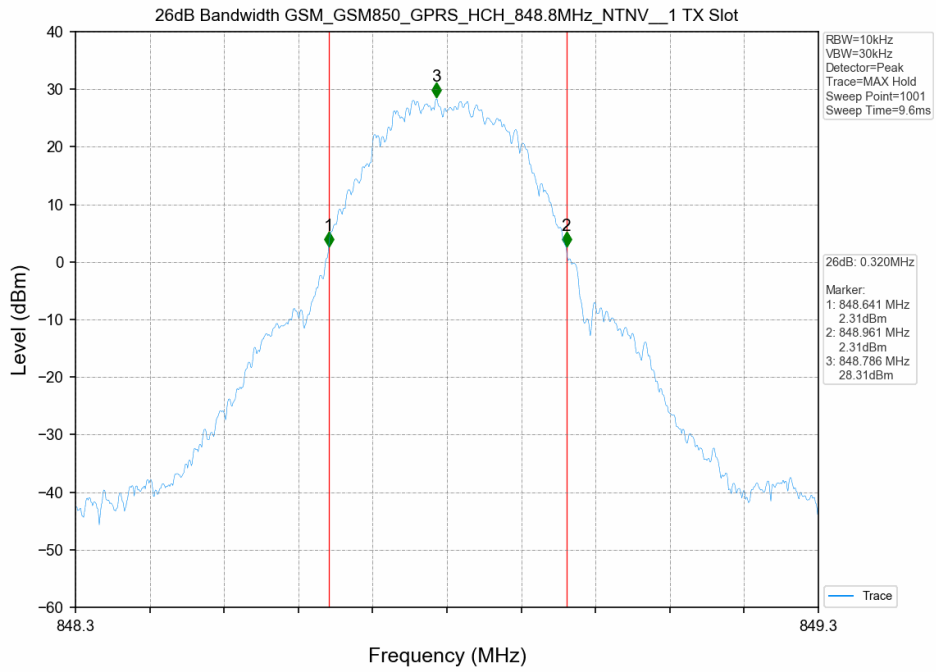


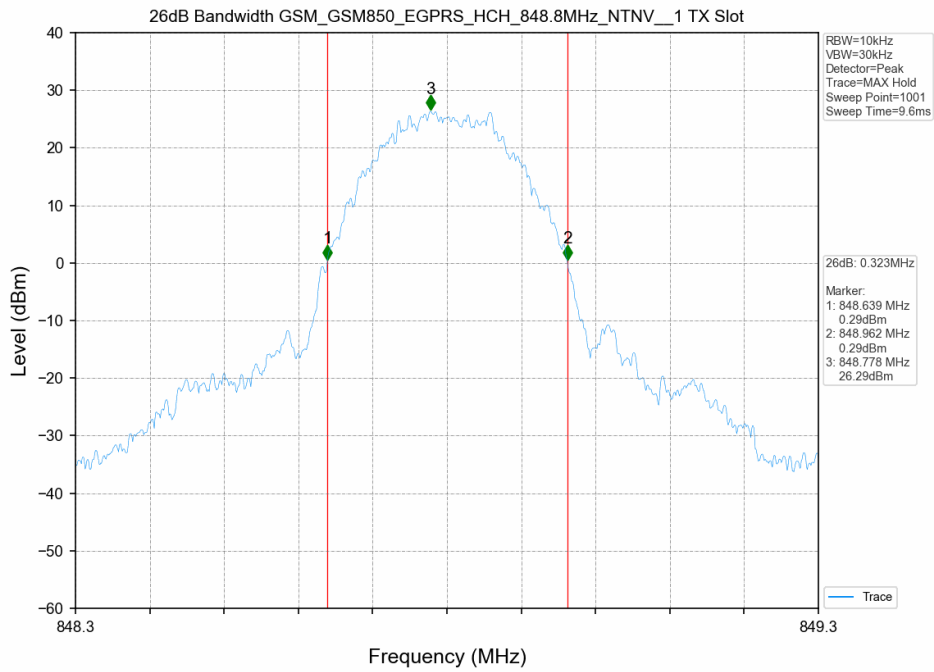
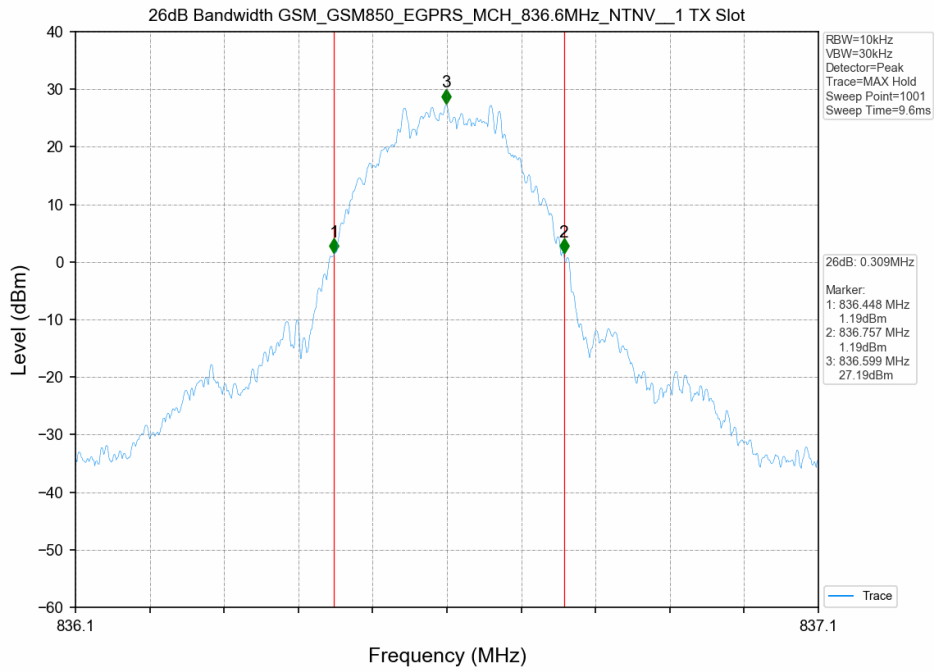


Test Band: GSM850					
Test Mode	26dB Bandwidth (MHz)			Limit	Verdict
	LCH	MCH	HCH		
GPRS	0.320	0.310	0.320	N/A	PASS
EGPRS	0.310	0.310	0.320	N/A	PASS

4.2 Test Graph







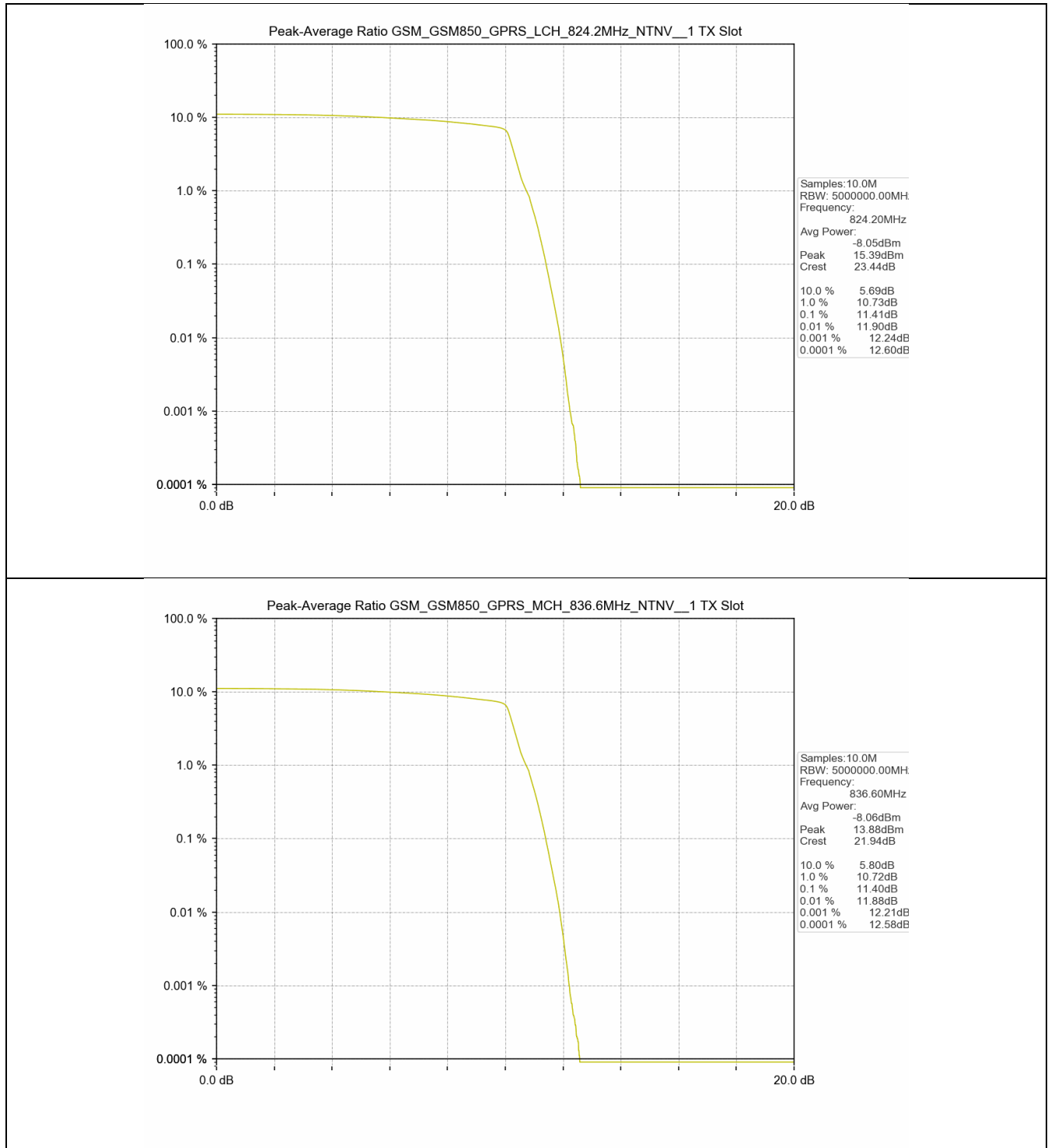
5. Peak-Average Ratio

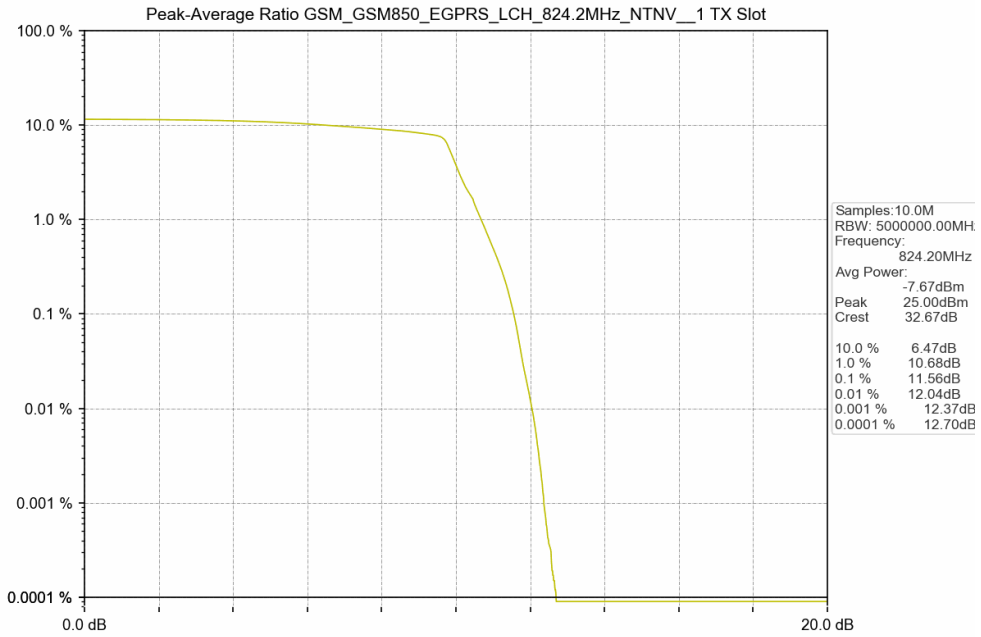
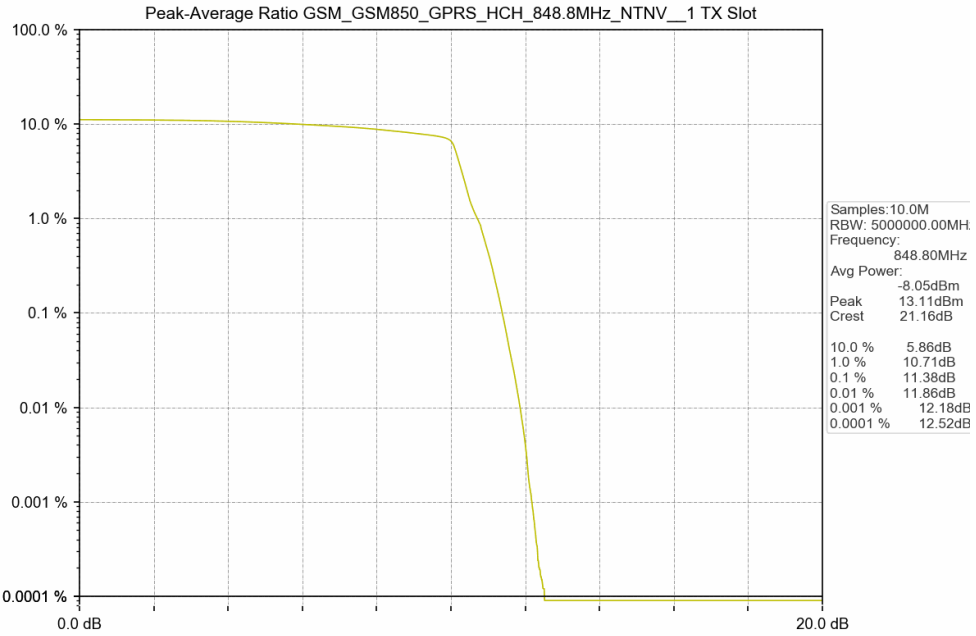
5.1 Test Result

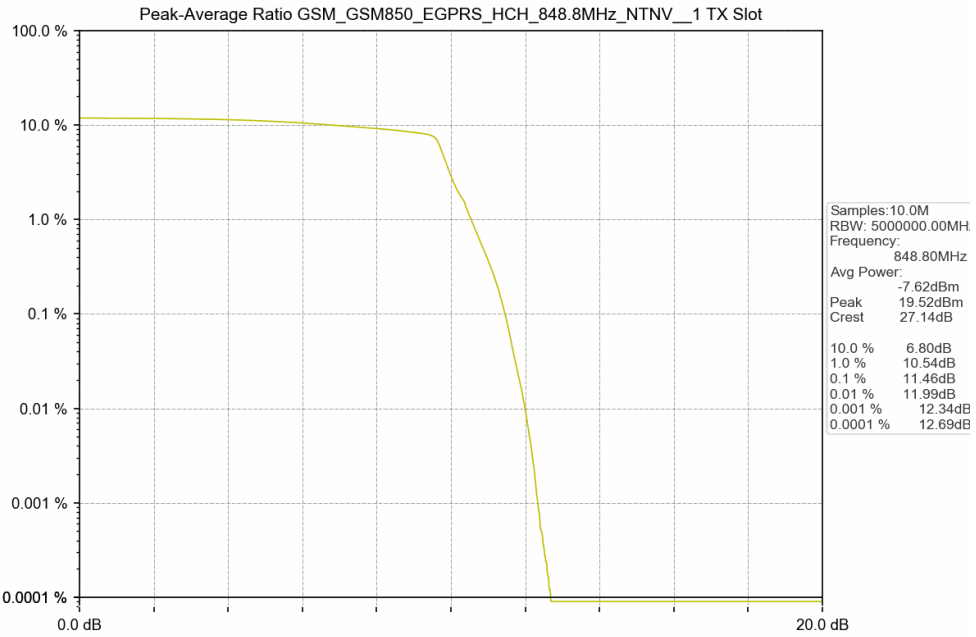
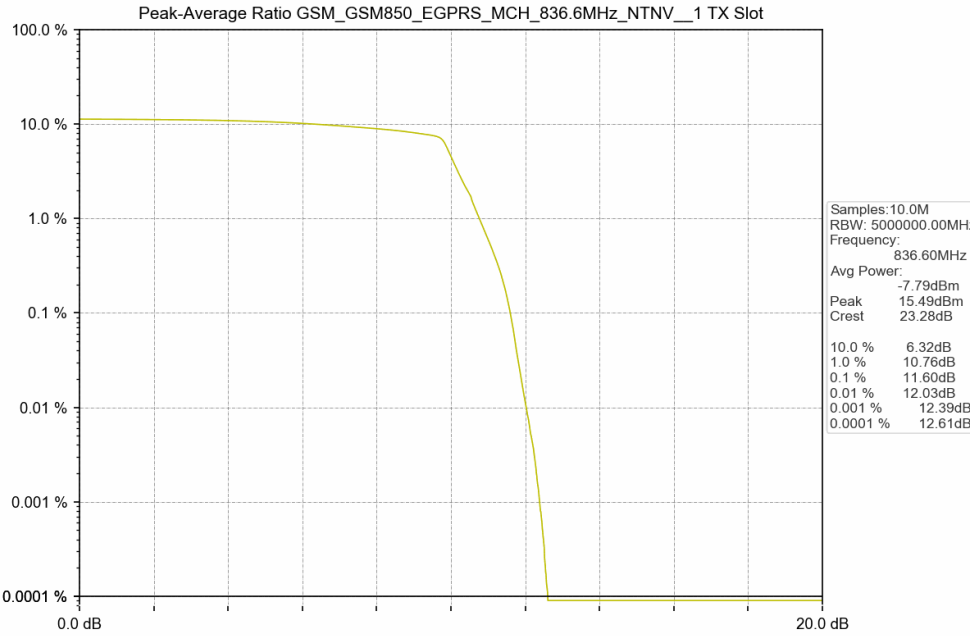
Test Band: GSM850

Test Mode	Test result (dB)			Limit (dB)	Verdict
	LCH	MCH	HCH		
GPRS	11.41	11.40	11.38	13	PASS
EGPRS	11.56	11.60	11.46	13	PASS

5.2 Test Graph







6. Spurious Emission

6.1 Test Graph

