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Report No.: GTI20140444F-1

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TEST REPORT

Product Name: LTE mobile phone

Trademark: NUU

Model/Type reference: X1

Listed Model(s): X1 Series

Model difference: X1 other series model No. are all the same with main model
X1, except for body color, RAM and LOGO to meet different
customer requirements

FCC ID.....: 2ADINNUUX1

Test Standards: **FCC Part 22: PUBLIC MOBILE SERVICES**
FCC Part 24: PERSONAL COMMUNICATIONS SERVICES

Applicant: Sun Cupid Technology (HK) Ltd.

Address of Applicant.....: 16/F, CEO Tower, 77 Wing Hong St, Cheung Sha Wan,
Kowloon, Hong Kong

Date of Receipt: Nov.02, 2014

Date of Test Date.....: Nov.02, 2014 - Nov.28, 2014

Data of Issue.: Nov.28, 2014

Test result	Pass *
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* In the configuration tested, the EUT complied with the standards specified above

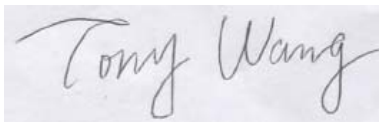
GENERAL DESCRIPTION OF EUT	
Equipment:	LTE Mobile Phone
Model Name:	X1
Manufacturer:	Sun Cupid Technology (Shenzhen) Ltd.
Manufacturer Address:	10A, No.3 Bldg, China Academy of Sci & Tech Development, No.1 High-Tech South St. Nanshan district, Shenzhen, China.
Power Source:	DC 3.8V from Li-ion battery
Power Rating:	Input: 100-240VAC, 50/60Hz 0.2A MAX Output: 5V---1.0A

Compiled By:



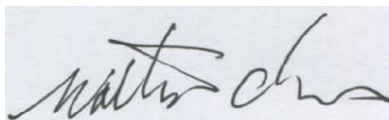
(Allen Wang)

Reviewed By:



(Tony Wang)

Approved By:



(Walter Chen)

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1. SUMMARY

1.1. Test Standards

[FCC Part 22 \(10-1-13 Edition\)](#): PRIVATE LAND MOBILE RADIO SERVICES.

[FCC Part 24\(10-1-13 Edition\)](#): PUBLIC MOBILE SERVICES

[TIA/EIA 603 D June 2010](#): Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

[47 CFR FCC Part 15 Subpart B](#): - Unintentional Radiators

[FCC Part 2](#): FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

[KDB971168 D01:2014-10-17](#) Procedures for Compliance Measurement of the Fundamental Emission Power of Licensed Wideband (> 1 MHz) Digital Transmission Systems

[ANSI C63.4:2009](#): Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

1.2. Test Description

Test Item	Section in CFR 47	Result
RF Output Power	Part 2.1046 Part 22.913 (a)(2) Part 24.232 (c)	Pass
Peak-to-Average Ratio	Part 24.232 (d)	N/A
Modulation Characteristics	Part 2.1047	N/A
99% & -26 dB Occupied Bandwidth	Part 2.1049 Part 22.917 Part 24.238	Pass
Spurious Emissions at Antenna Terminal	Part 2.1051 Part 22.917 (a) Part 24.238 (a)	Pass
Field Strength of Spurious Radiation	Part 2.1053 Part 22.917 (a) Part 24.238 (a)	Pass
Out of band emission, Band Edge	Part 22.917 (a) Part 24.238 (a)	Pass
Frequency stability vs. temperature	Part 2.1055(a)(1)(b)	Pass
Frequency stability vs. voltage	Part 2.1055(d)(1)(2)	Pass

Note:

1. The measurement uncertainty is not included in the test result.
2. This EUT owns two SIM cards, after we perform the pre-test for these two SIM cards; we found the SIM 1 is the worst case, so its result is recorded in this report.

1.3. Test Facility

1.3.1 Address of the test laboratory

Shenzhen General Testing & Inspection Technology Co., Ltd.

Add: 1F, 2 Block, Jiaquan Building, Guanlan High-tech Park Baoan District, Shenzhen, Guangdong, China

1.3.2 Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

IC Registration No.: 9783A

The 3m alternate test site of Shenzhen GTI Technology Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Aug, 2011.

FCC-Registration No.: 214666

Shenzhen GTI Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 214666, Sep 19, 2011

1.4. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements and is documented in the Shenzhen General Testing & Inspection Technology Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for General Testing & Inspection laboratory is reported:

Test Items	Measurement Uncertainty	Notes
Frequency stability	25 Hz	(1)
Transmitter power conducted	0.57 dB	(1)
Transmitter power Radiated	2.20 dB	(1)
Conducted spurious emission 9KHz-12.75 GHz	1.60 dB	(1)
Conducted Emission 9KHz-30MHz	3.39 dB	(1)
Radiated Emission 30~1000MHz	4.24 dB	(1)
Radiated Emission 1~18GHz	5.16 dB	(1)
Radiated Emission 18-40GHz	5.54 dB	(1)
Occupied Bandwidth	-----	(1)
Emission Mask	-----	(1)
Modulation Characteristic	-----	(1)
Transmitter Frequency Behavior	-----	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

2. GENERAL INFORMATION

2.1. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	-30~50°C
Relative Humidity:	30~60 %
Air Pressure:	950~1050mba

2.2. General Description of EUT

Product Name:	LTE Mobile Phone
Model/Type reference:	X1
Power supply:	DC 3.8V from Li-ion battery
Adapter information:	Model: HNFG050100UU Input: 100-240VAC, 50/60Hz 0.2A MAX Output: 5V---1.0A
Hardware version:	UALC04 VER E
Software version:	X1-US-01
2G	
Operation Band:	GSM850, PCS1900
Supported Type:	GSM/GPRS/EGPRS
Power Class:	GSM850:Power Class 4 DCS1900:Power Class 1
Modulation Type:	GMSK for GSM/GPRS,8PSK for EDGE
GSM Release Version	R99
GPRS /EGPRS Class	Class B
GPRS Multislot Class	12
EGPRS Multislot Class	12
WCDMA	
Operation Band:	FDD Band V, FDD II
Power Class:	Power Class 3
Modulation Type:	QPSK for WCDMA/HSUPA/HSDPA
WCDMA Release Version:	R8
HSDPA Release Version:	Release 8
HSUPA Release Version:	Release 6
DC-HSUPA Release Version:	Not Supported

2.3. Description of Test Modes and Test Frequency

The EUT has been tested under typical operating condition. The CUM200 used to control the EUT staying in continuous transmitting and receiving mode for testing.

Test Frequency:

GSM 850		PCS1900		FDD Band II		FDD Band V	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
128	824.20	512	1850.20	9262	1852.40	4132	826.40
190	836.60	661	1880.00	9400	1880.00	4182	836.60
251	848.80	810	1909.80	9538	1907.60	4233	846.60

2.4. Measurement Instruments List

Output Power (Radiated) & Radiated Spurious Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	EMI Test Receiver	R&S	ESCI	100658	Dec 26, 2014
2	High pass filter	Compliance Direction systems	BSU-6	34202	Oct 23,2015
3	Log-Bicon Antenna	Schwarzbeck	CBL6141A	4180	Dec 27, 2014
4	Log-Bicon Antenna	Schwarzbeck	CBL6141A	4181	Dec 27, 2014
5	Spectrum Analyzer	HP	8563E	02052	Dec 27, 2014
6	Horn Antenna	Schwarzbeck	BBHA 9120D	648	Dec 27, 2014
7	Horn Antenna	Schwarzbeck	BBHA 9120D	649	Dec 27, 2014
8	Ultra-Broadband Antenna	ShwarzBeck	BBHA9170	25841	Dec 27,2014
9	Ultra-Broadband Antenna	ShwarzBeck	BBHA9170	25842	Dec 27,2014
10	Pre-Amplifier	HP	8447D	1937A03050	Dec 26, 2014
11	Pre-Amplifier	EMCI	EMC051835	980075	Dec 27, 2014
12	Splitter	Mini-Circuit	ZAPD-4	400059	Dec. 26, 2014
13	Signal Generator	Agilent	N5182A	1019356	Dec. 26, 2014
14	UNIVERSAL RADIO COMMUNICATION	Rohde & Schwarz	CMU200	114694	March,15,2015
15	Antenna Mast	UC	UC3000	N/A	N/A
16	Turn Table	UC	UC3000	N/A	N/A
17	Cable	Schwarzbeck	Cable002	--	Dec. 26,2014
18	Cable	Schwarzbeck	Cable003	--	Dec. 26,2014
19	Loop Antenna	Rohde & Schwarz	HFH2-Z2	829324	Dec. 26,2014

Output Power(Conducted) & Occupied Bandwidth & Emission Bandwidth & Band Edge Compliance & Conducted Spurious Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	UNIVERSAL RADIO COMMUNICATION	Rohde & Schwarz	CMU200	114694	March,15,2015
2	Spectrum Analyzer	Rohde & Schwarz	FSU26	201141	Dec. 26, 2014
3	Splitter	Mini-Circuit	ZAPD-4	400059	Dec. 26, 2014

Frequency Stability					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	UNIVERSAL RADIO COMMUNICATION	Rohde & Schwarz	CMU200	114694	March,15,2015
2	Spectrum Analyzer	Rohde & Schwarz	FSU26	201141	Dec. 26, 2014
3	Splitter	Mini-Circuit	ZAPD-4	400059	Dec. 26, 2014
4	Climate Chamber	ESPEC	EL-10KA	05107008	Oct 25,2015

Note: 1. The Cal. Interval was one year.

2. The cable loss has calculated in test result which connection between each test instruments.

3. TEST ITEM AND RESULTS

3.1. Conducted Output Power

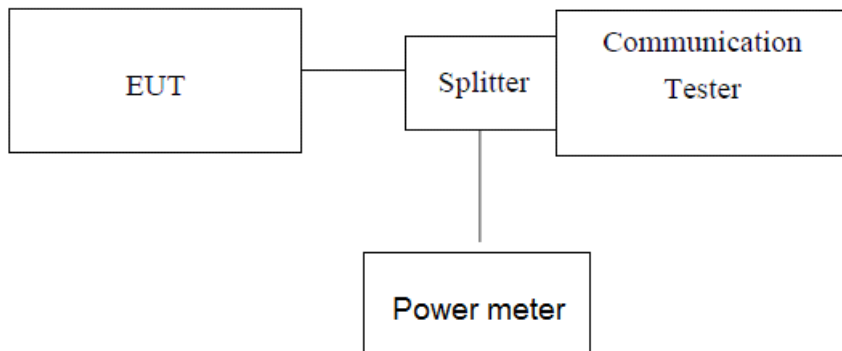
LIMIT

GSM850/WCDMA Band V: 7W

PCS1900/WCDMA Band II: 2W

The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

TEST CONFIGURATION



Note: Measurement setup for testing on Antenna connector

TEST PROCEDURE

1. The transmitter output port was connected to base station.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator, the path loss was compensated to the results for each measurement.
3. Set EUT at maximum power through base station.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure the maximum PK burst power using Peak detector by spectrum

TEST RESULTS

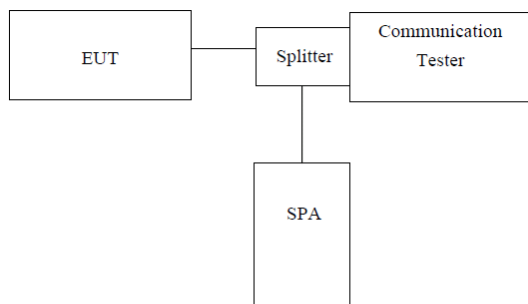
EUT Mode	Channel	Frequency (MHz)	Peak Output Power (dBm)	Limit(dBm)	Result
GSM 850 (GMSK)	128	824.20	32.59	38.45	Pass
	190	836.60	32.71	38.45	Pass
	251	848.80	32.85	38.45	Pass
GPR 850 (GMSK)	128	824.20	32.42	38.45	Pass
	190	836.60	32.58	38.45	Pass
	251	848.80	32.79	38.45	Pass
EGPRS 850 (8PSK)	128	824.20	27.36	38.45	Pass
	190	836.60	27.49	38.45	Pass
	251	848.80	27.65	38.45	Pass
PCS1900 (GMSK)	512	1850.20	29.74	33.01	Pass
	661	1880.00	29.89	33.01	Pass
	810	1909.80	29.53	33.01	Pass
PCS1900 (GMSK)	512	1850.20	29.71	33.01	Pass
	661	1880.00	29.85	33.01	Pass
	810	1909.80	29.53	33.01	Pass
EGPRS 1900 (8PSK)	512	1850.20	26.57	33.01	Pass
	661	1880.00	26.76	33.01	Pass
	810	1909.80	26.48	33.01	Pass

WCDMA Band II	9262	1852.40	24.61	33.01	Pass
	9400	1880.00	24.72	33.01	Pass
	9538	1907.60	24.55	33.01	Pass
WCDMA Band V	4132	826.40	24.59	38.45	Pass
	4183	836.60	24.66	38.45	Pass
	4233	846.60	24.23	38.45	Pass

Note: 1. According to KDB971168 D01 "If peak power or power density is used to demonstrate compliance, a PAPR measurement is not required"

3.2. Occupy Bandwidth

TEST CONFIGURATION



Note: Measurement setup for testing on Antenna connector

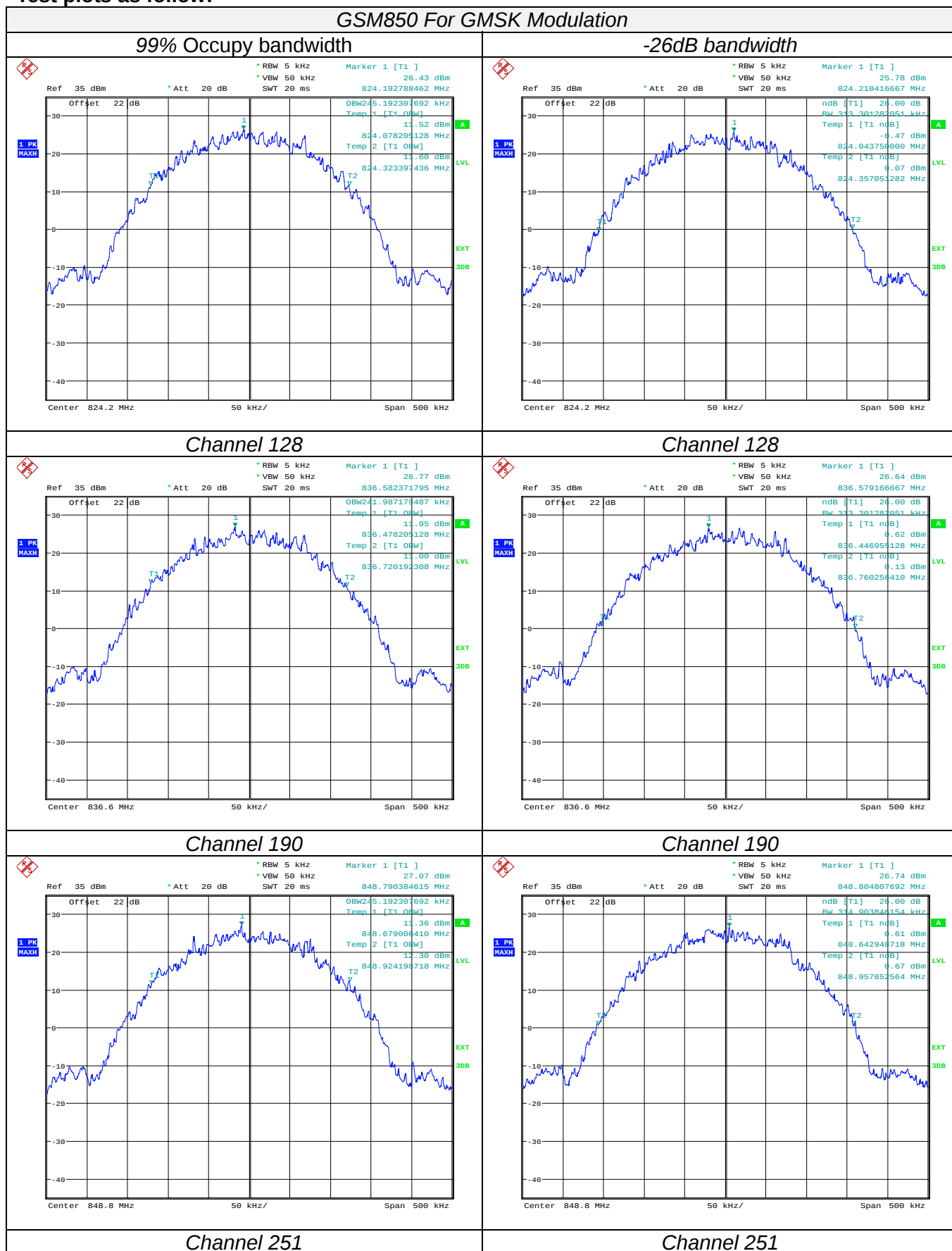
TEST PROCEDURE

1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer
2. RBW was set to about 1% of emission BW, VBW= 3 times RBW.
3. Set 99% bandwidth function for occupied bandwidth and -26dBc for Emission Bandwidth, the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

TEST RESULTS

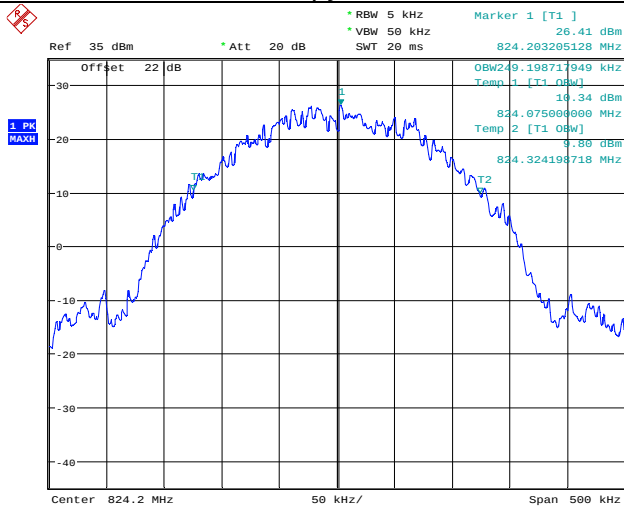
EUT Mode	Channel	Frequency (MHz)	99% Occupy bandwidth (KHz)	-26dB bandwidth (KHz)
GSM 850 (GMSK)	128	824.20	245.19	313.30
	190	836.60	241.99	313.30
	251	848.80	245.19	314.90
GPR 850 (GMSK)	128	824.20	249.20	310.90
	190	836.60	245.99	310.90
	251	848.80	245.99	312.50
EGPRS 850 (8PSK)	128	824.20	245.99	313.30
	190	836.60	246.79	319.71
	251	848.80	243.59	318.10
PCS 1900 (GMSK)	512	1850.20	247.60	313.30
	661	1880.00	243.59	313.30
	810	1909.80	242.79	312.50
GPRS1900 (GMSK)	512	1850.20	245.99	309.29
	661	1880.00	245.99	315.71
	810	1909.80	241.19	312.50
EGPRS 1900 (8PSK)	512	1850.20	240.38	318.91
	661	1880.00	240.38	318.91
	810	1909.80	240.38	314.90
WCDMA Band II	9262	1852.40	4214.74	4663.46
	9400	1880.00	4230.77	4727.56
	9538	1907.60	4246.79	4695.51
WCDMA Band V	4132	826.40	4182.69	4647.36
	4183	836.60	4166.67	4647.36
	4233	846.60	4166.67	4631.41

Test plots as follow:

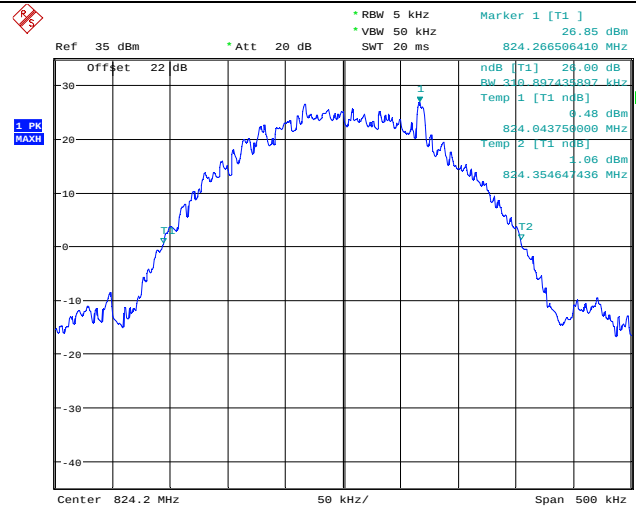


GPRS850 For GMSK Modulation

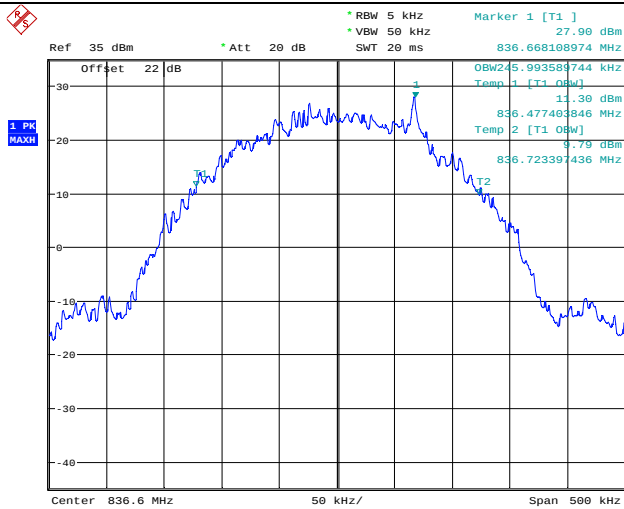
99% Occupancy bandwidth



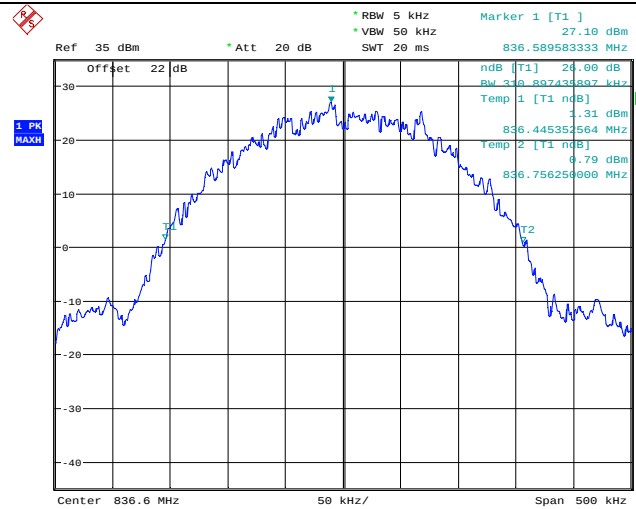
-26dB bandwidth



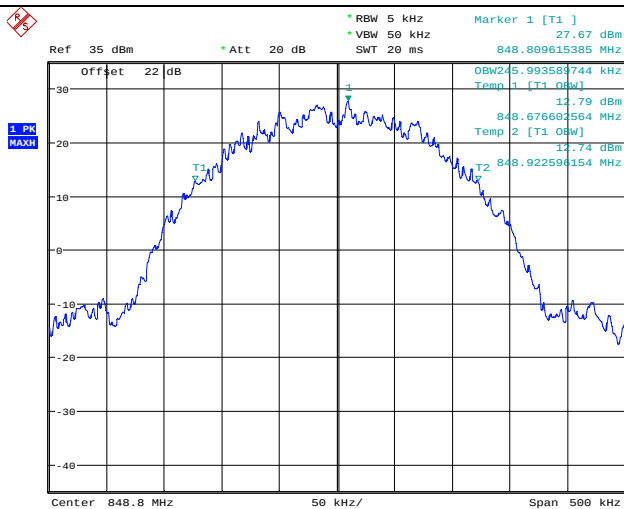
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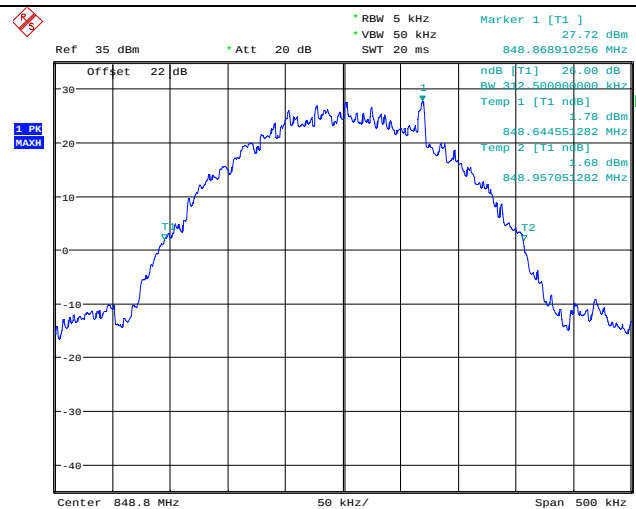
Channel 128



Channel 190



Channel 190

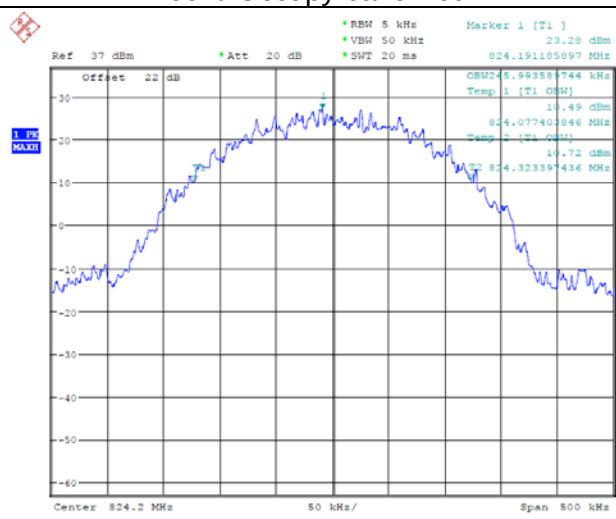


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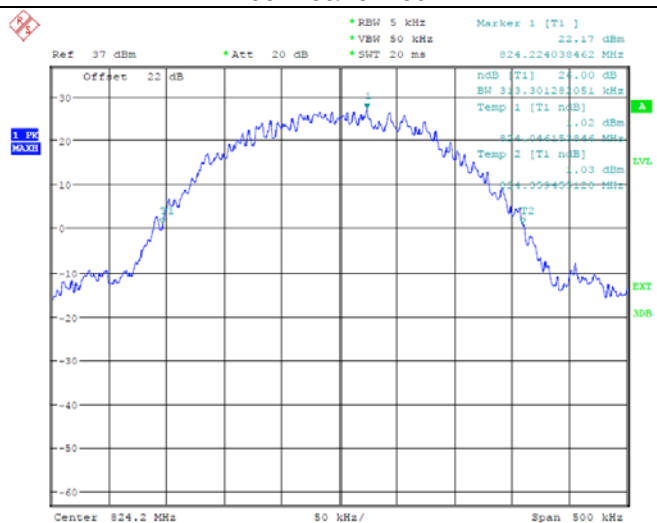
Channel 251

EGPRS850 For 8PSK Modulation

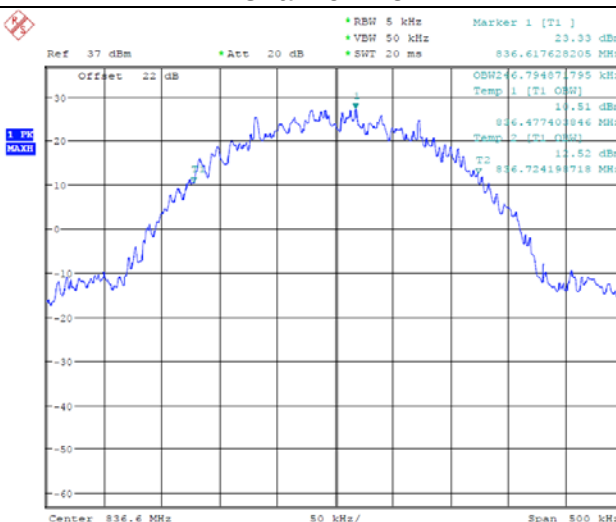
99% Occupancy bandwidth



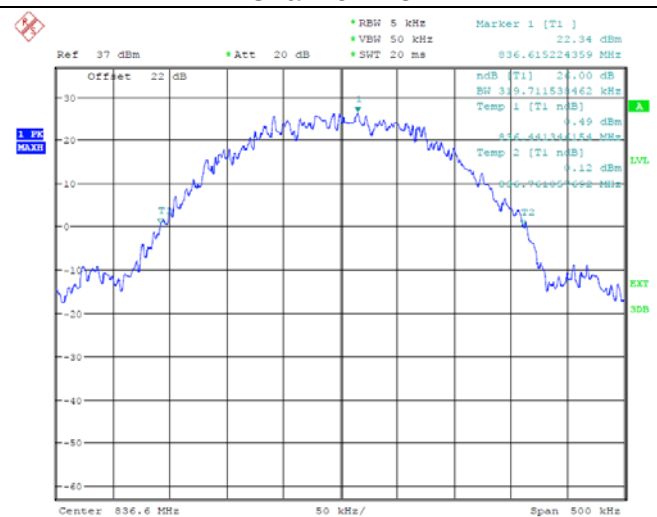
-26dB bandwidth



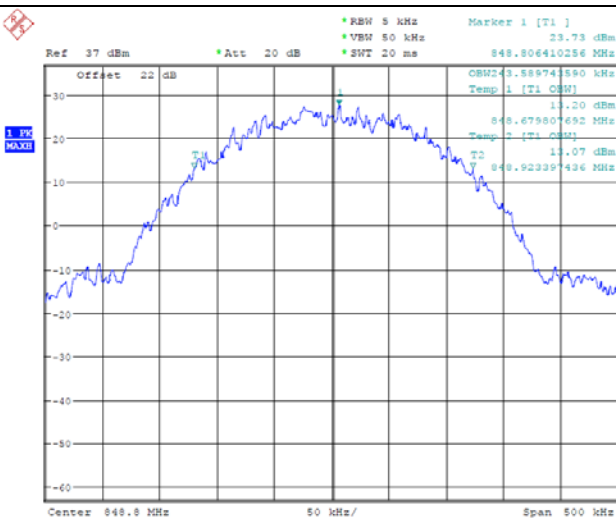
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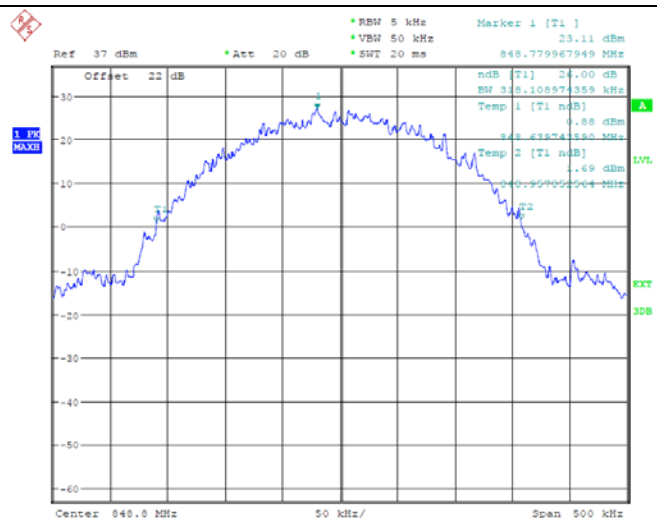
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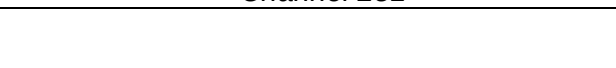
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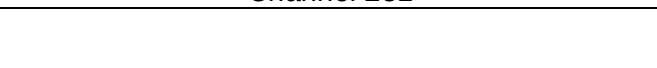
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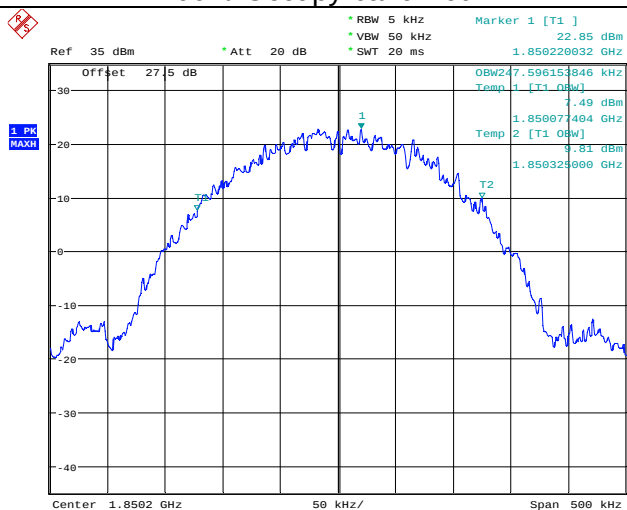


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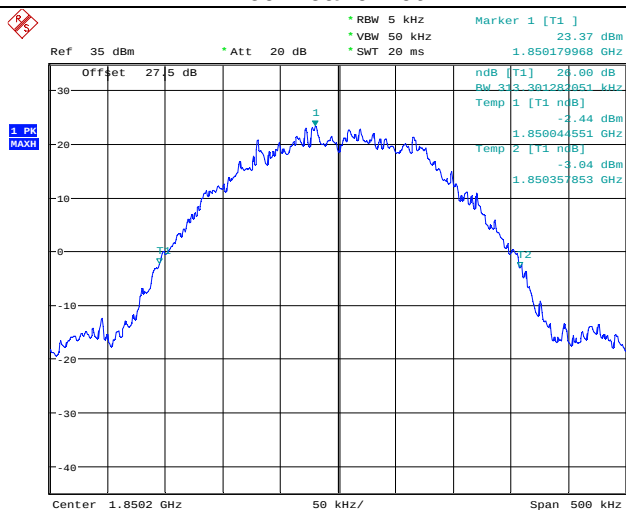


PCS1900 For GMSK Modulation

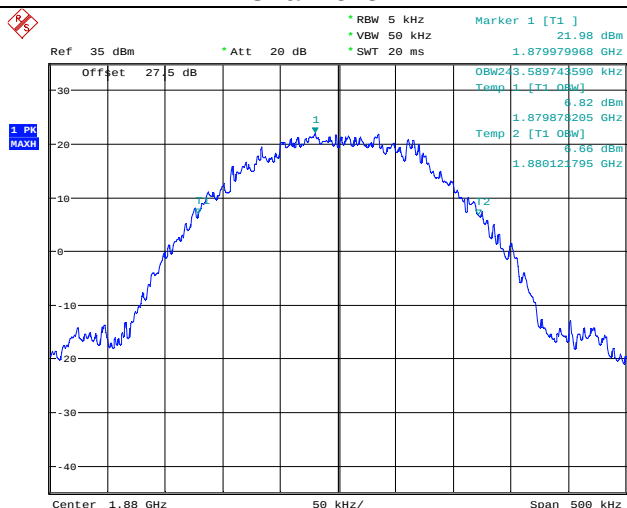
99% Occupancy bandwidth



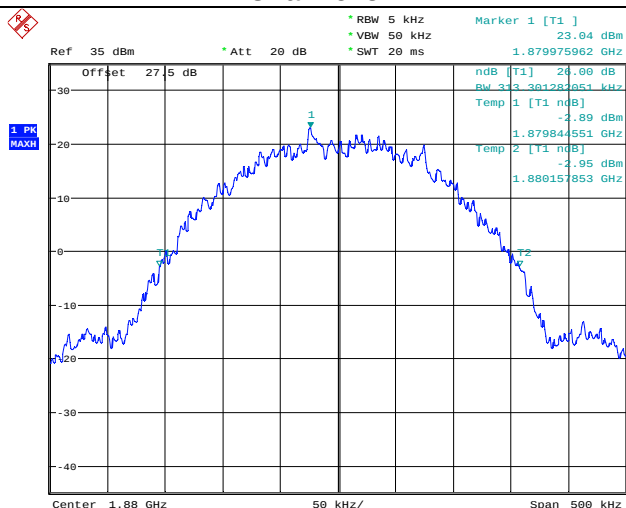
-26dB bandwidth



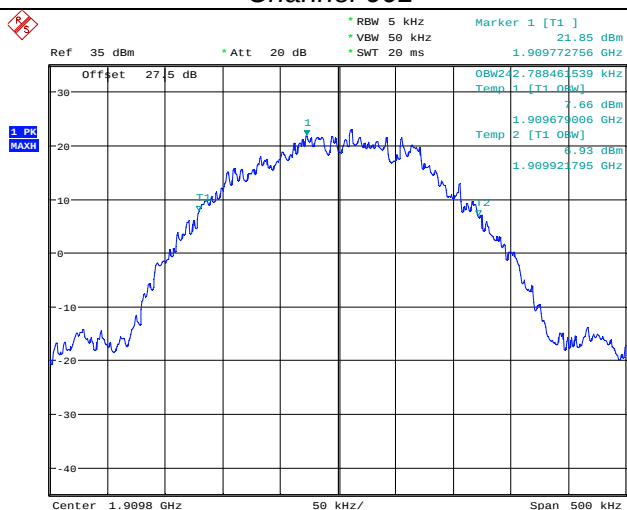
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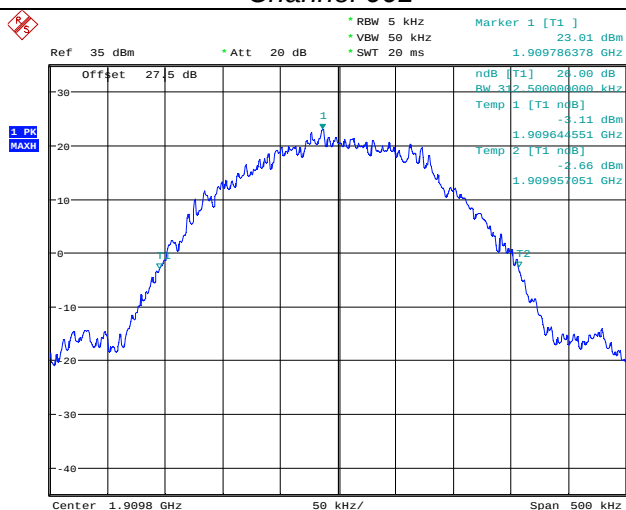
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Channel 661



Channel 661

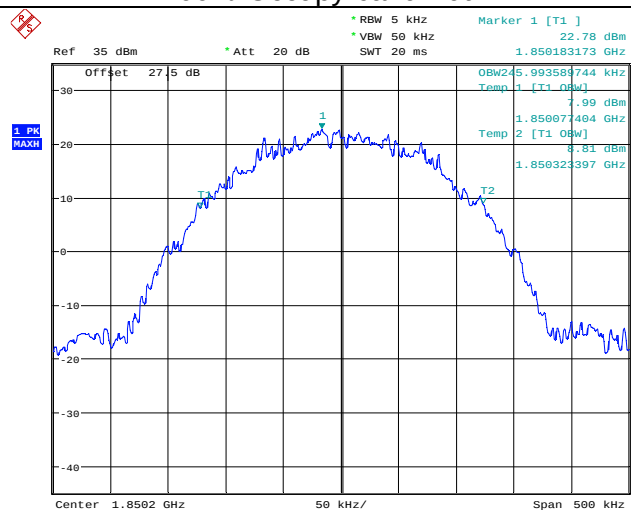


Channel 810

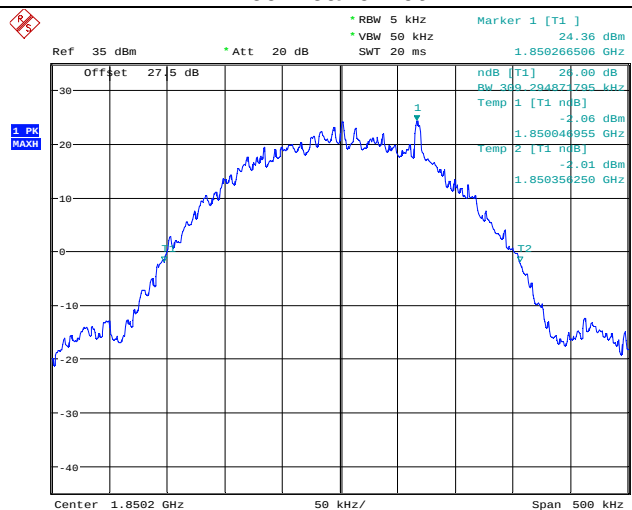
Channel 810

GPRS1900 For GMSK Modulation

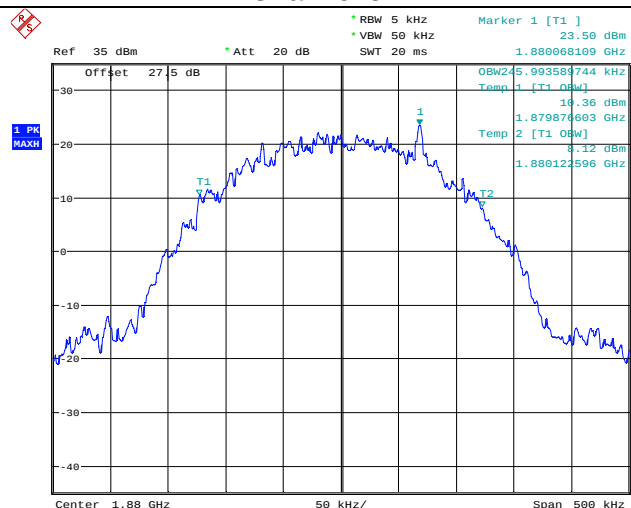
99% Occupancy bandwidth



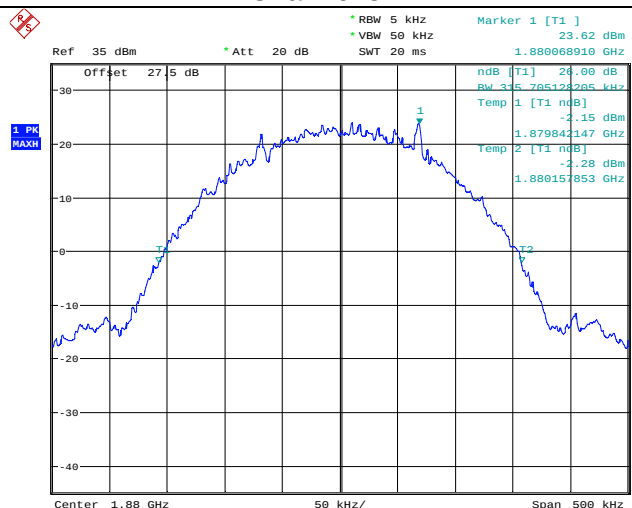
-26dB bandwidth



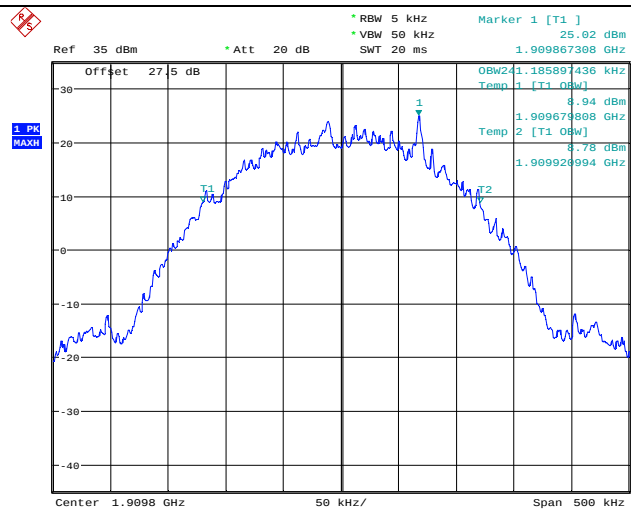
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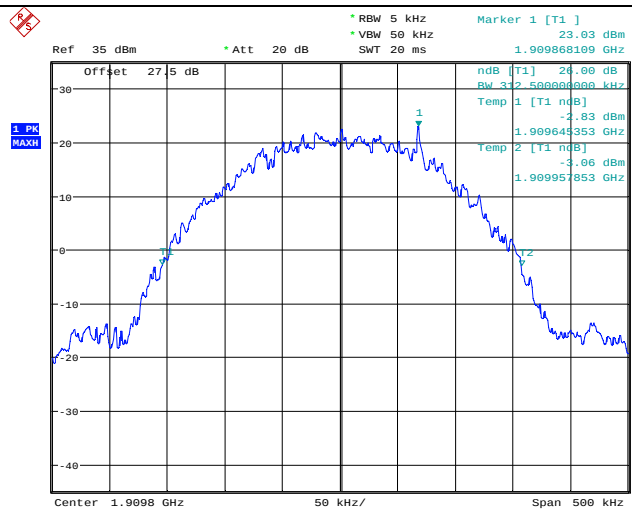
Channel 512



Channel 661



Channel 661

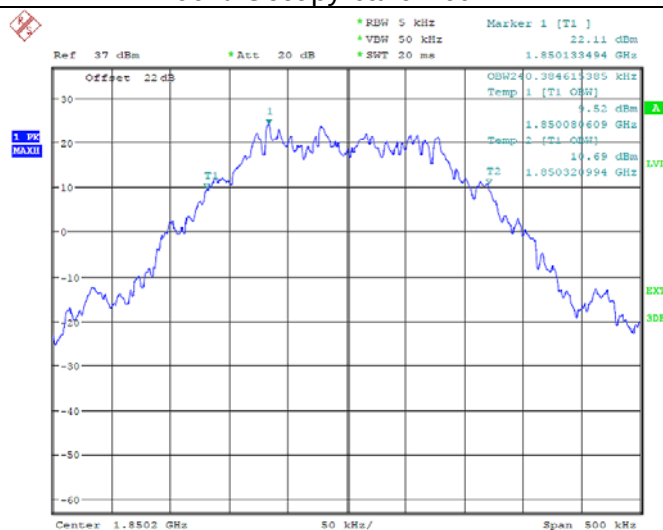


Channel 810

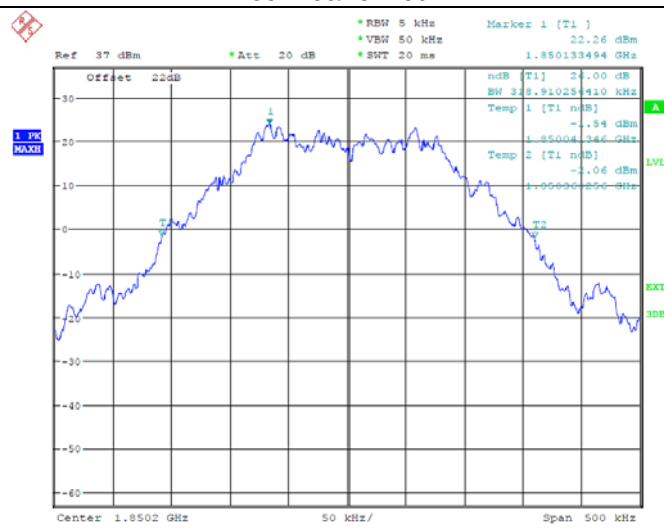
Channel 810

EGPRS1900 For 8PSK Modulation

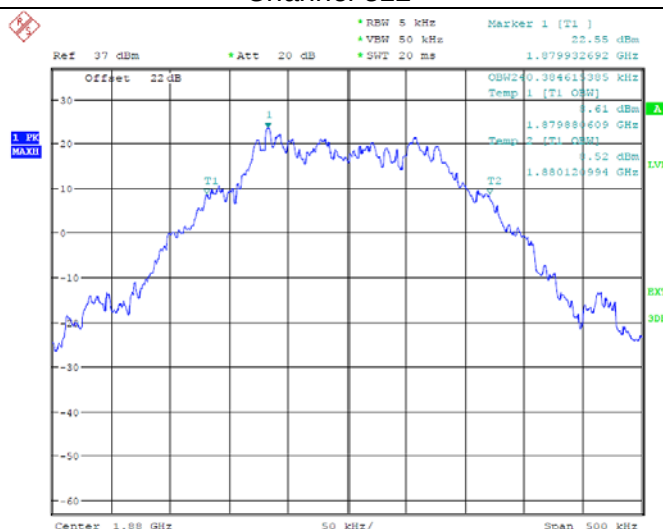
99% Occupancy bandwidth



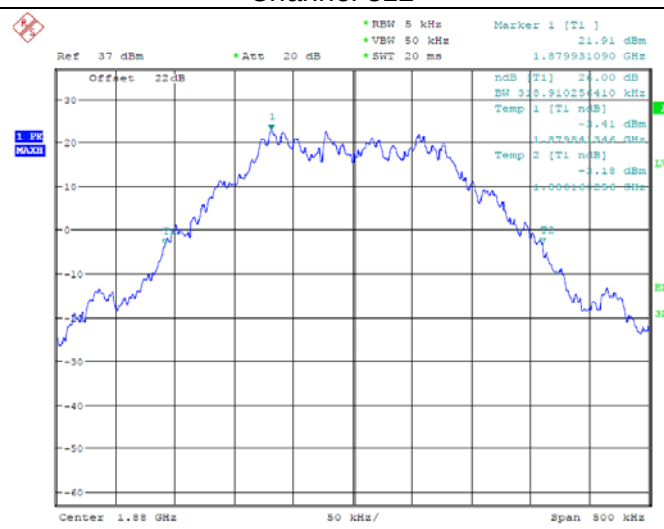
-26dB bandwidth



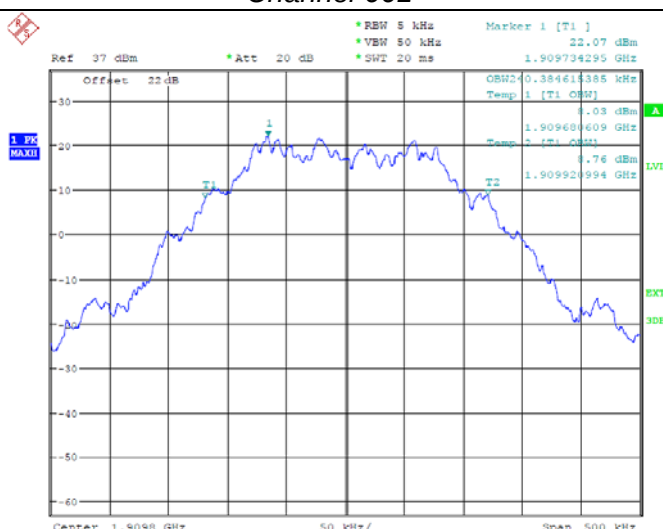
Channel 512



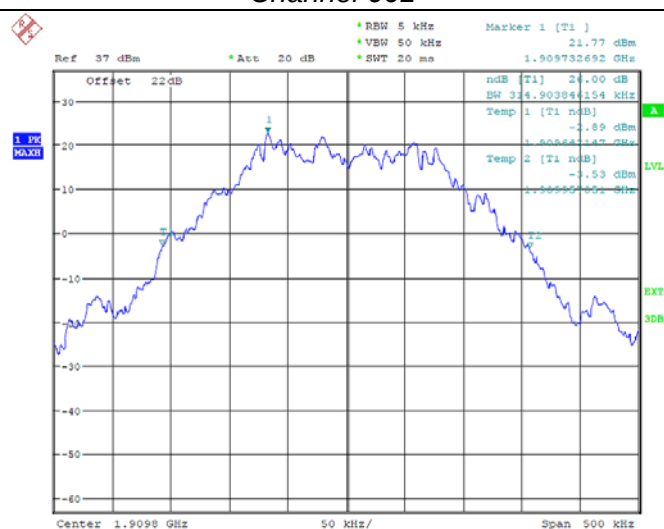
Channel 512



Channel 661

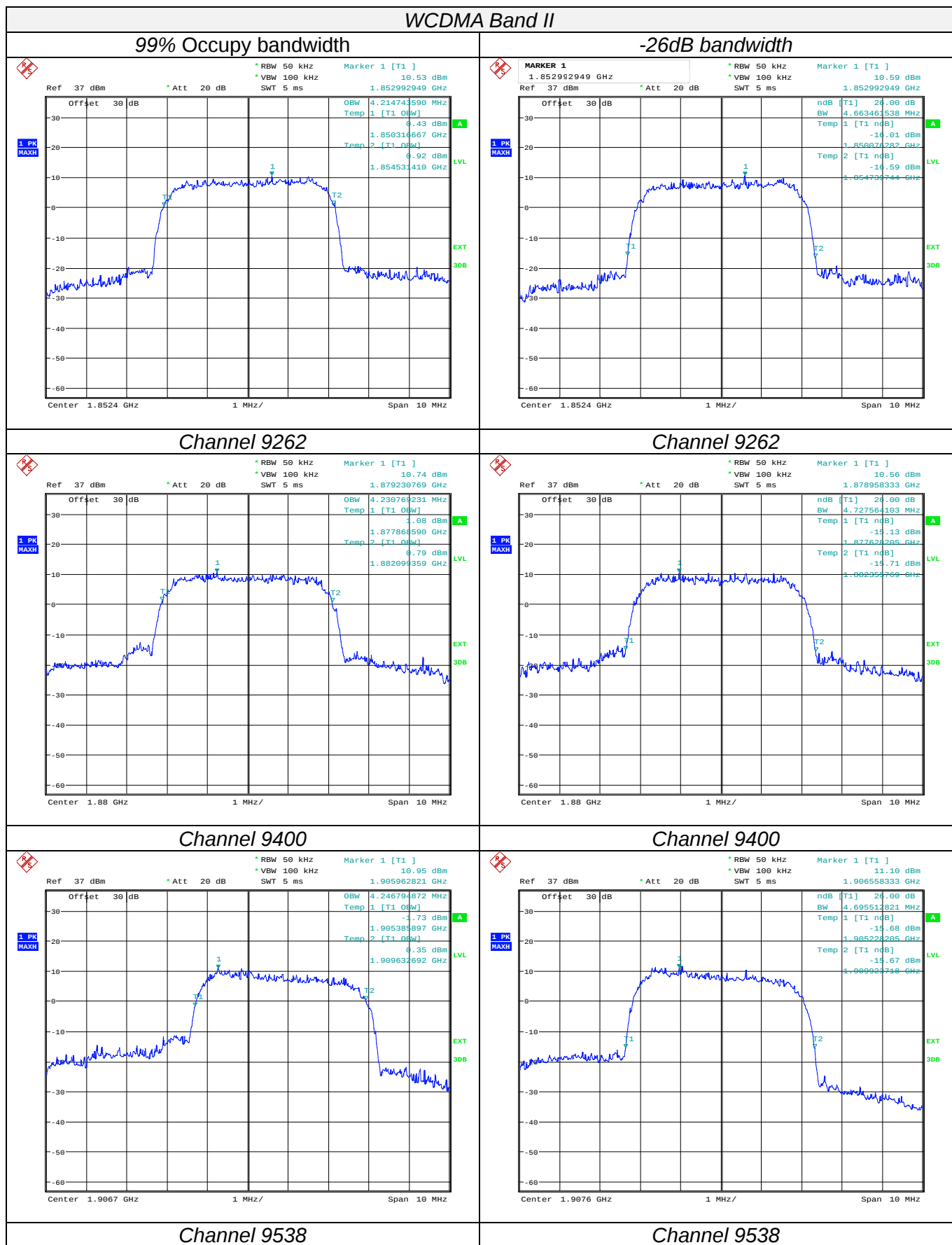


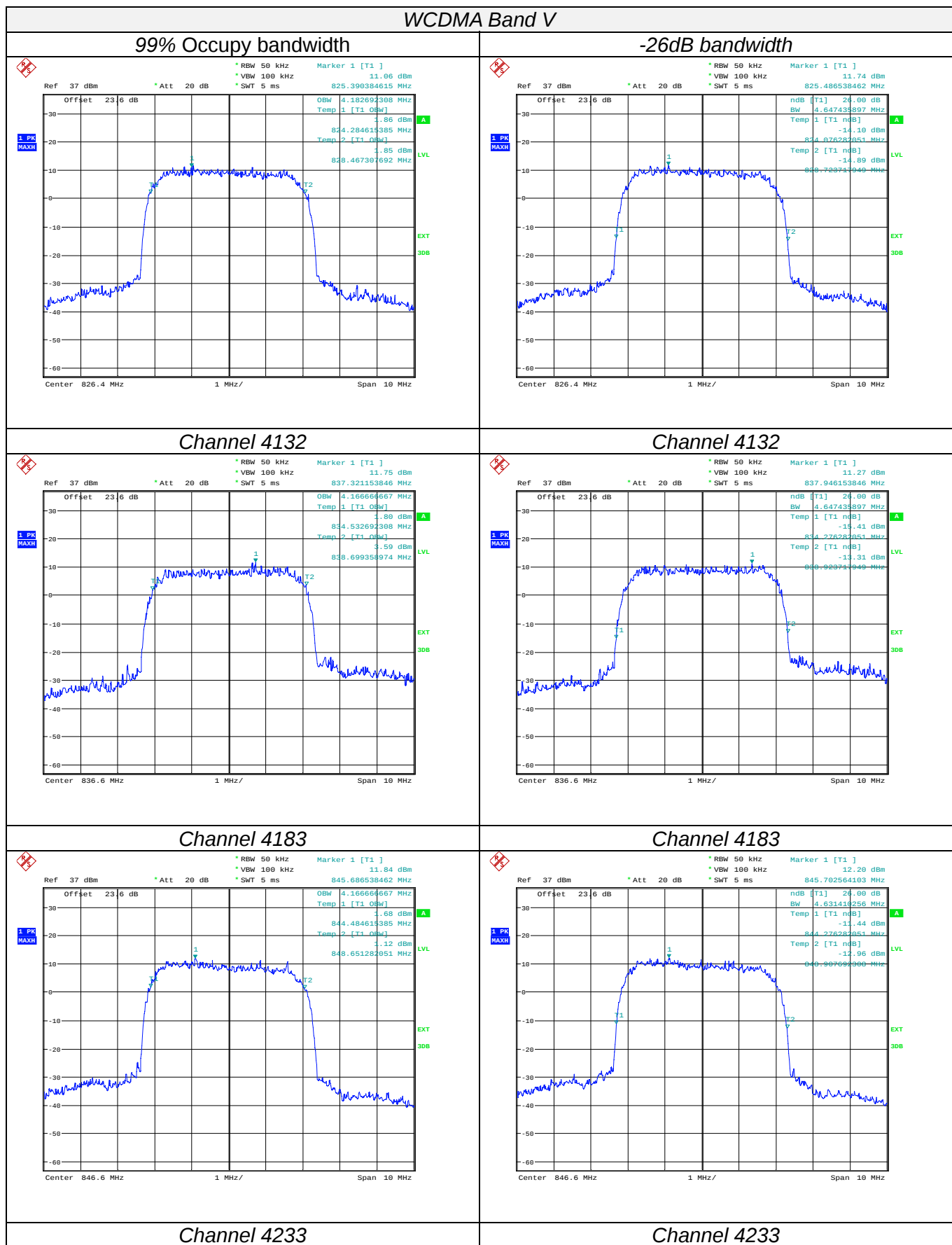
Channel 661



Channel 810

Channel 810





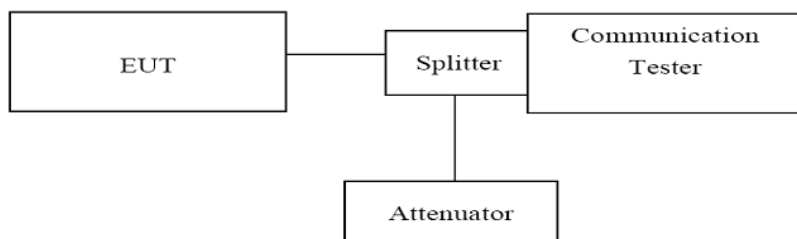
3.3. Out of band emission at antenna terminals

LIMIT

Part 24.238 and Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

The specification that emissions shall be attenuated below the transmitter power (P) by at least $43 + 10 \log (P)$ dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

TEST CONFIGURATION



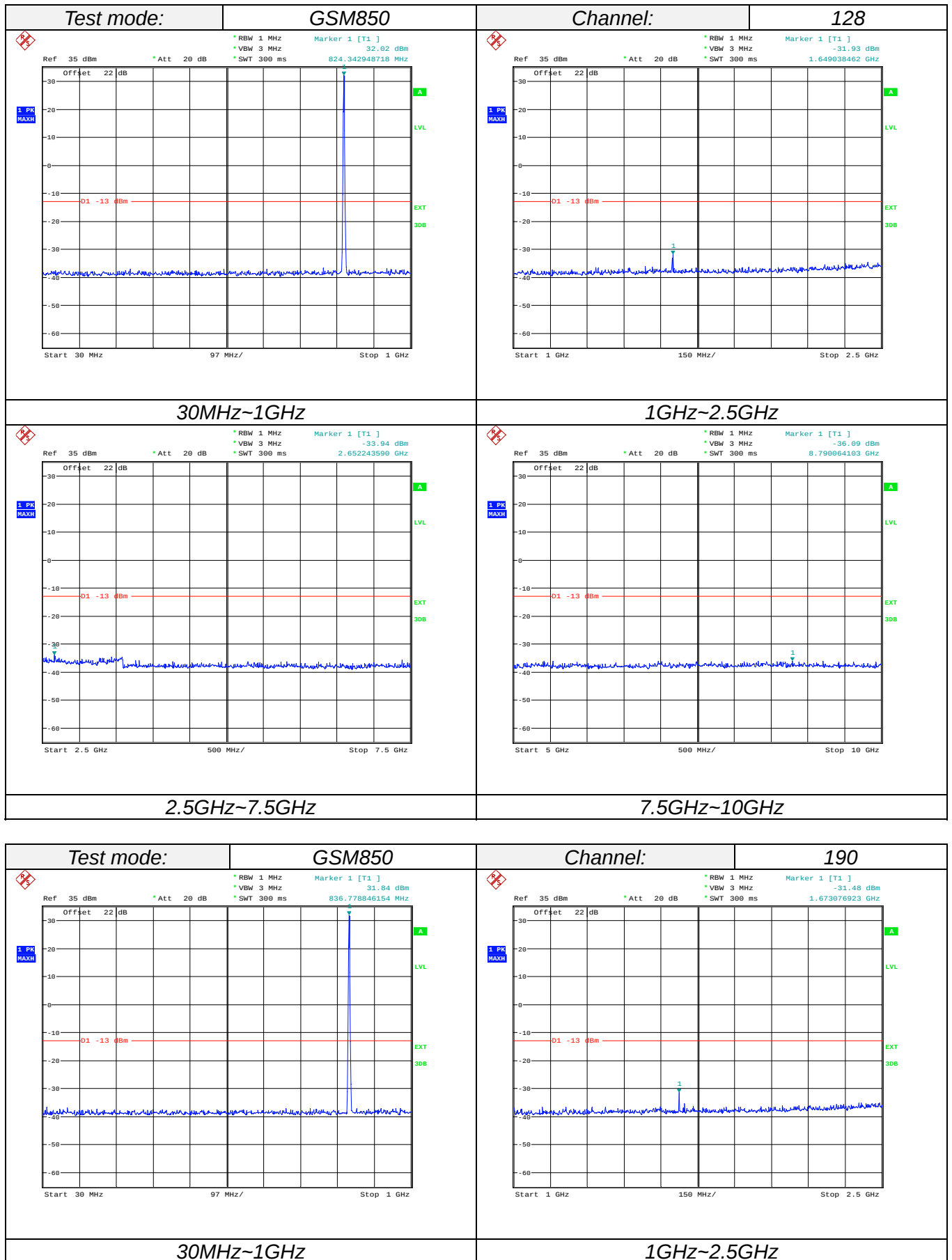
TEST PROCEDURE

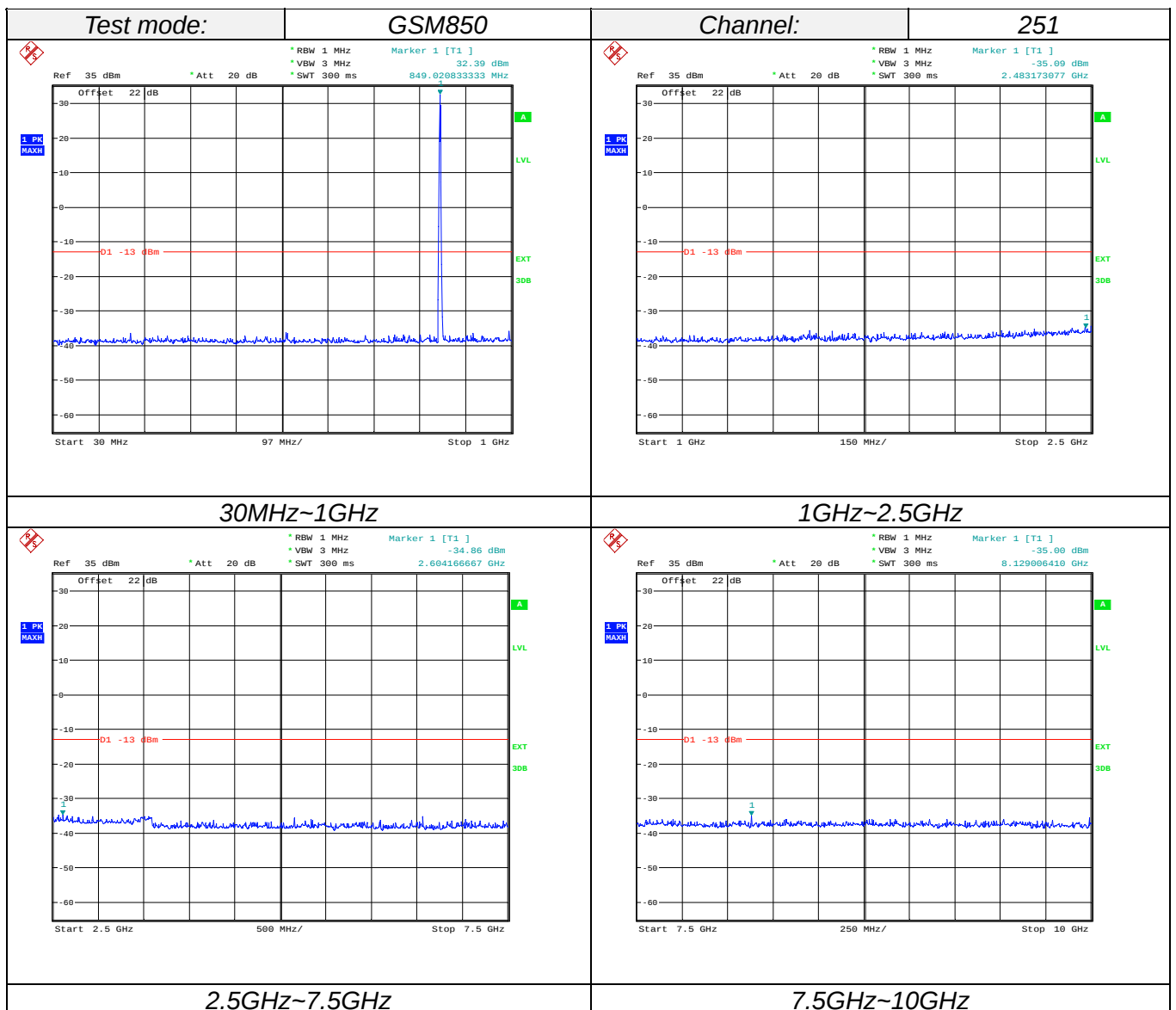
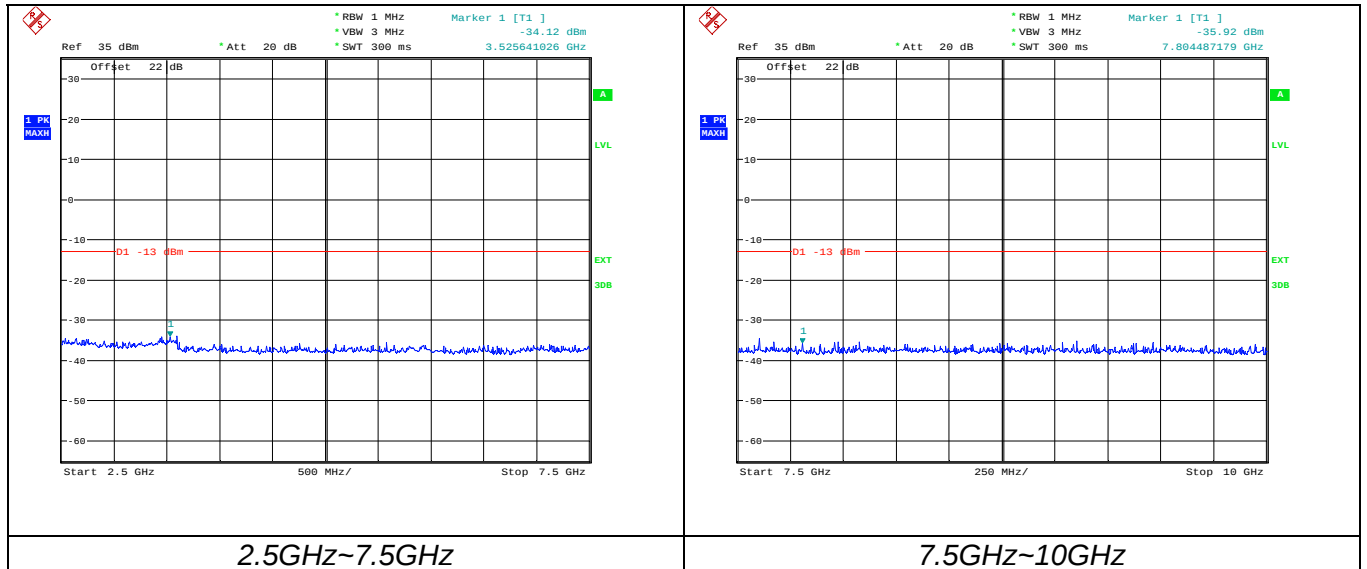
1. The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
2. Determine frequency range for measurements: From CFR 2.1057 the spectrum should be investigated from the lowest radio frequency generated in the equipment up to at least the 10th harmonic of the carrier frequency. For the equipment of PCS1900 and WCDMA Band II, this equates to a frequency range of 9 KHz to 19.1 GHz, data taken from 9 KHz to 20 GHz. For GSM850 and WCDMA Band V, data taken from 9 KHz to 10 GHz.
3. Please refer to following tables for test antenna conducted emissions.

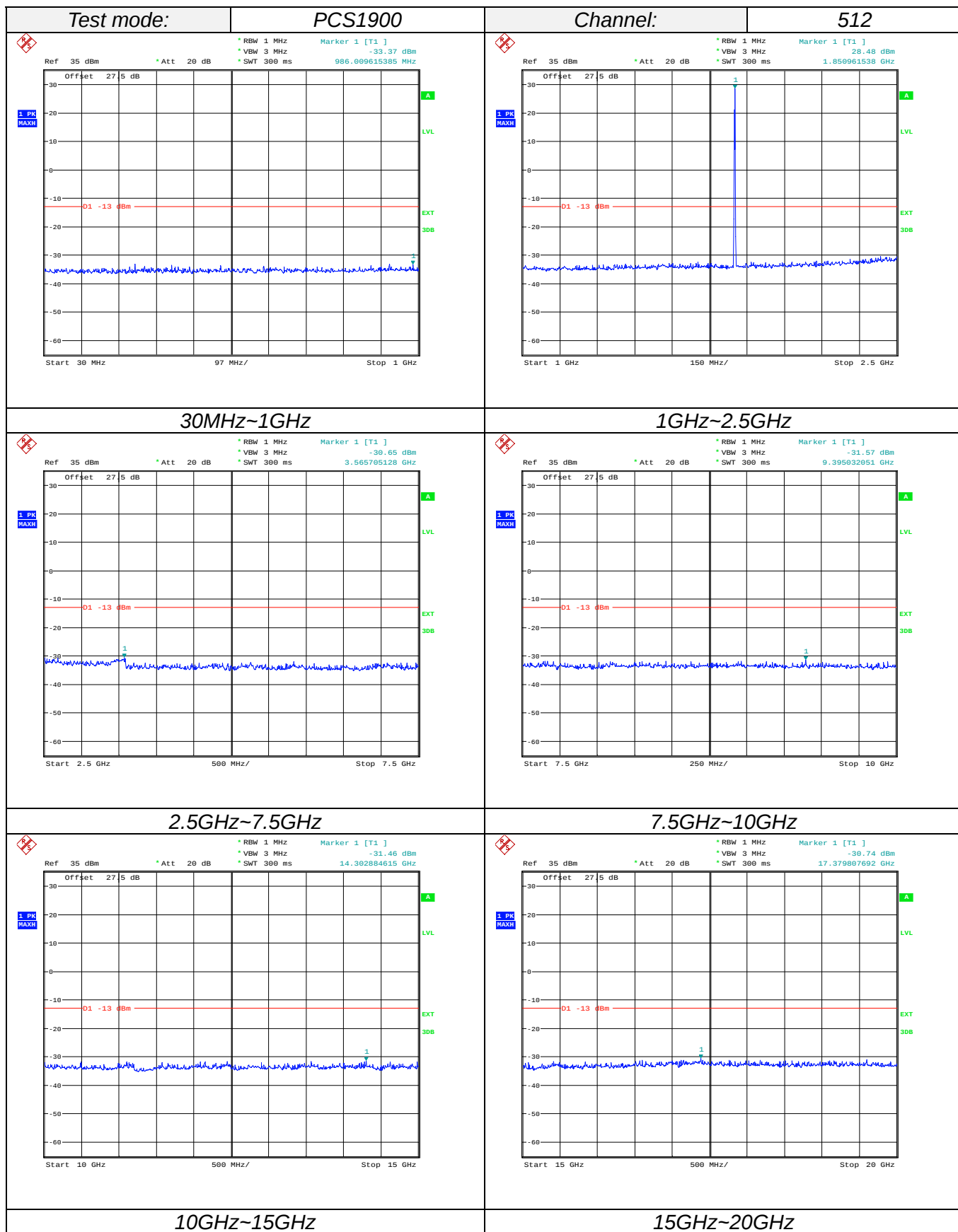
Working Frequency	Sub range (GHz)	RBW	VBW	Sweep time (s)
GSM850/ WCDMA Band V	0.000009~0.000015	1KHz	3KHz	Auto
	0.000015~0.03	10KHz	30KHz	Auto
	0.03~1	1 MHz	3 MHz	Auto
	1~2.5	1 MHz	3 MHz	Auto
	2.5~7.5	1 MHz	3 MHz	Auto
	7.5~10	1 MHz	3 MHz	Auto
PCS1900/ WCDMA Band II	0.000009~0.000015	1KHz	3KHz	Auto
	0.000015~0.03	10KHz	30KHz	Auto
	0.03~1	1 MHz	3 MHz	Auto
	1~2.5	1 MHz	3 MHz	Auto
	2.5~7.5	1 MHz	3 MHz	Auto
	7.5~10	1 MHz	3 MHz	Auto
	10~15	1 MHz	3 MHz	Auto
	15~20	1 MHz	3 MHz	Auto

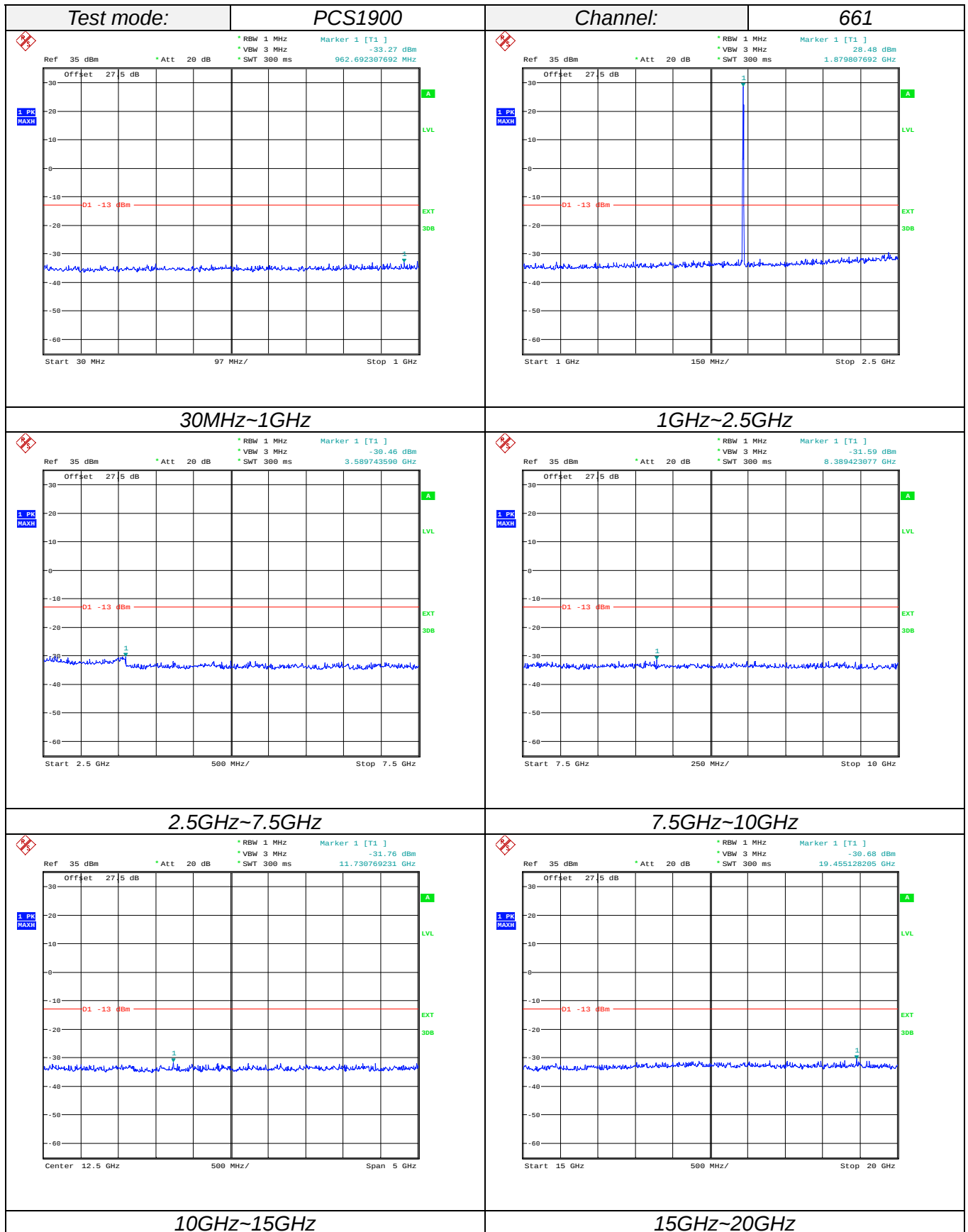
TEST RESULTS

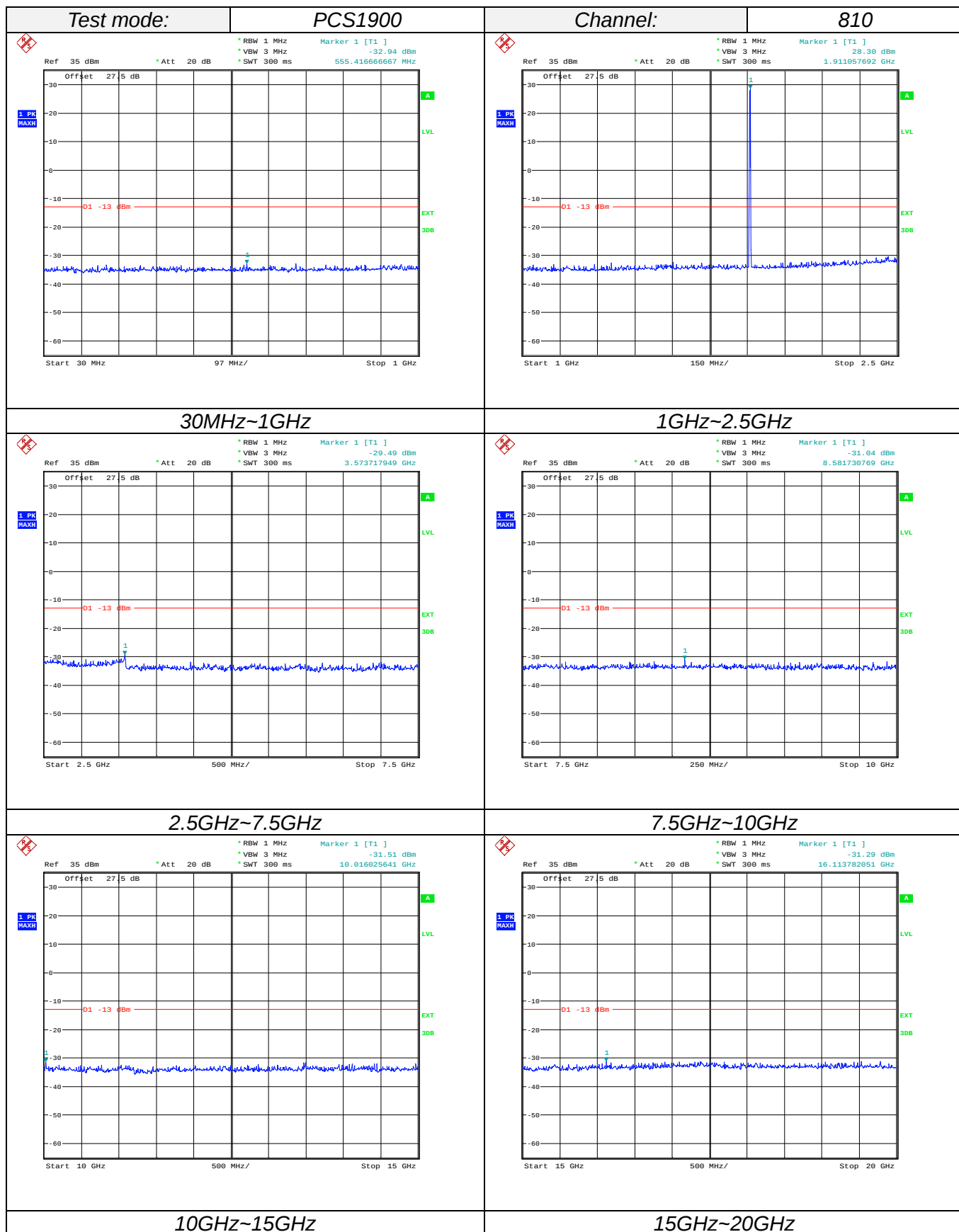
1. We were not recorded any values from 9 KHz to 30 MHz as values at least 20dB lower than limit.

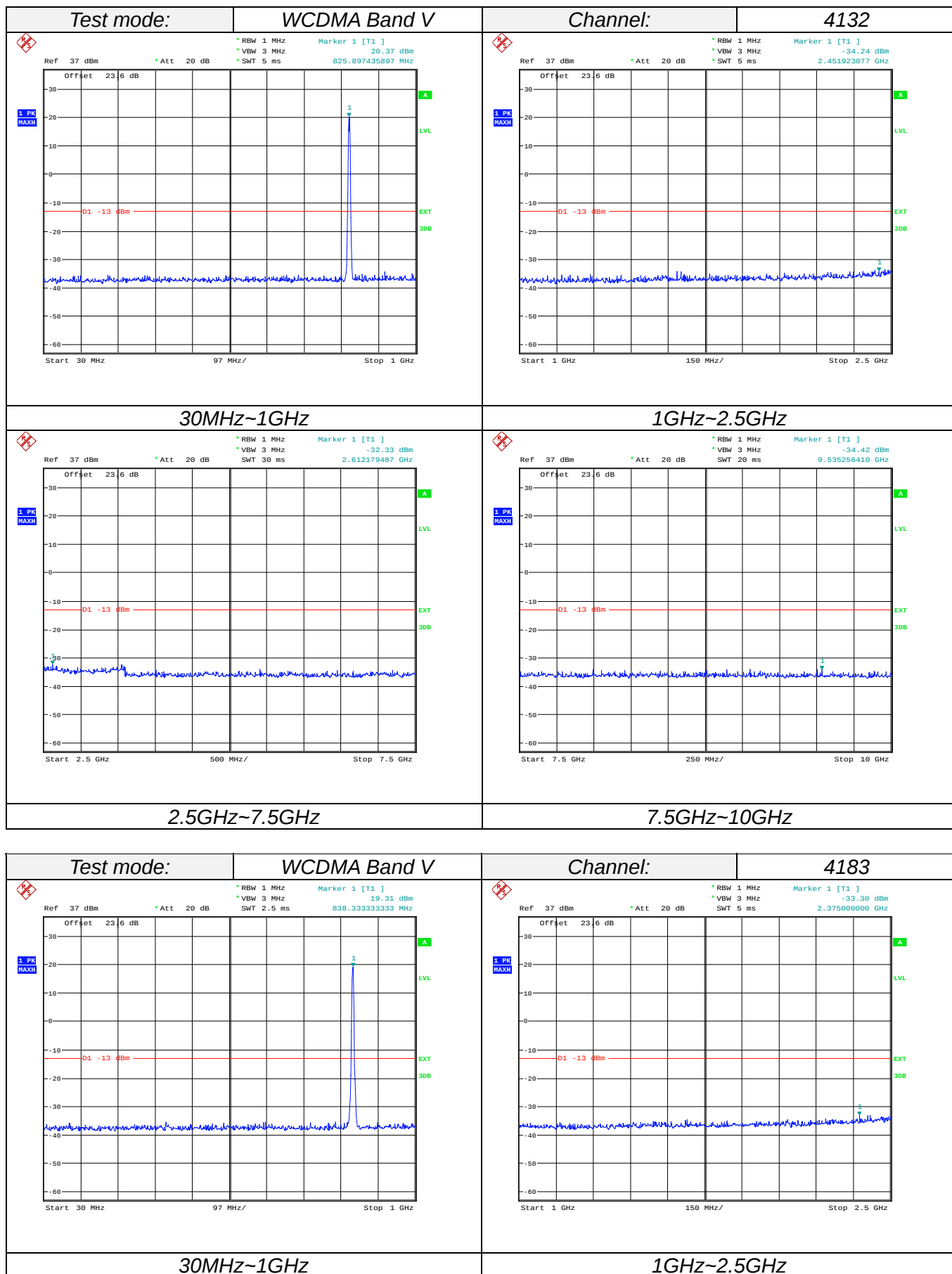


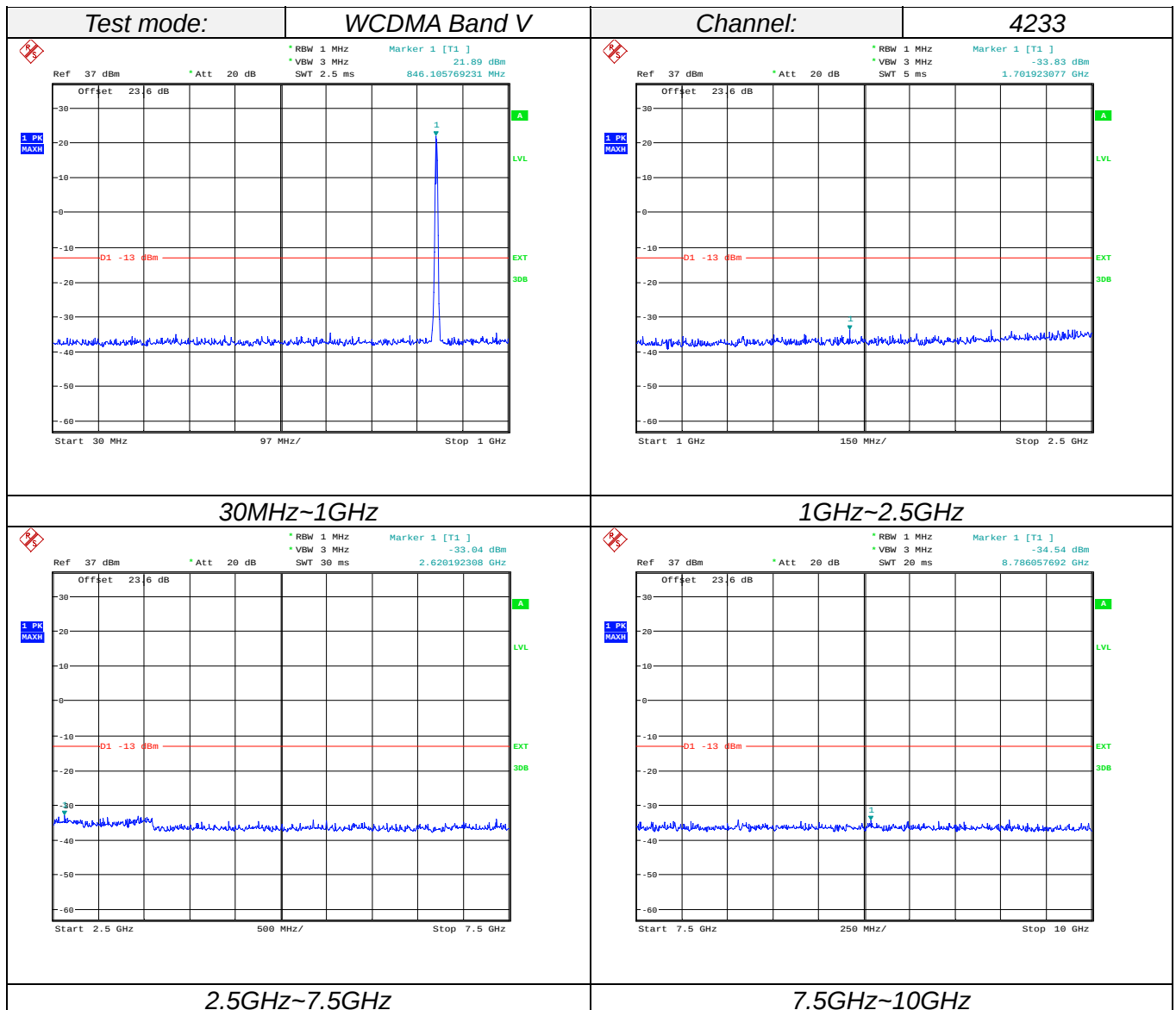
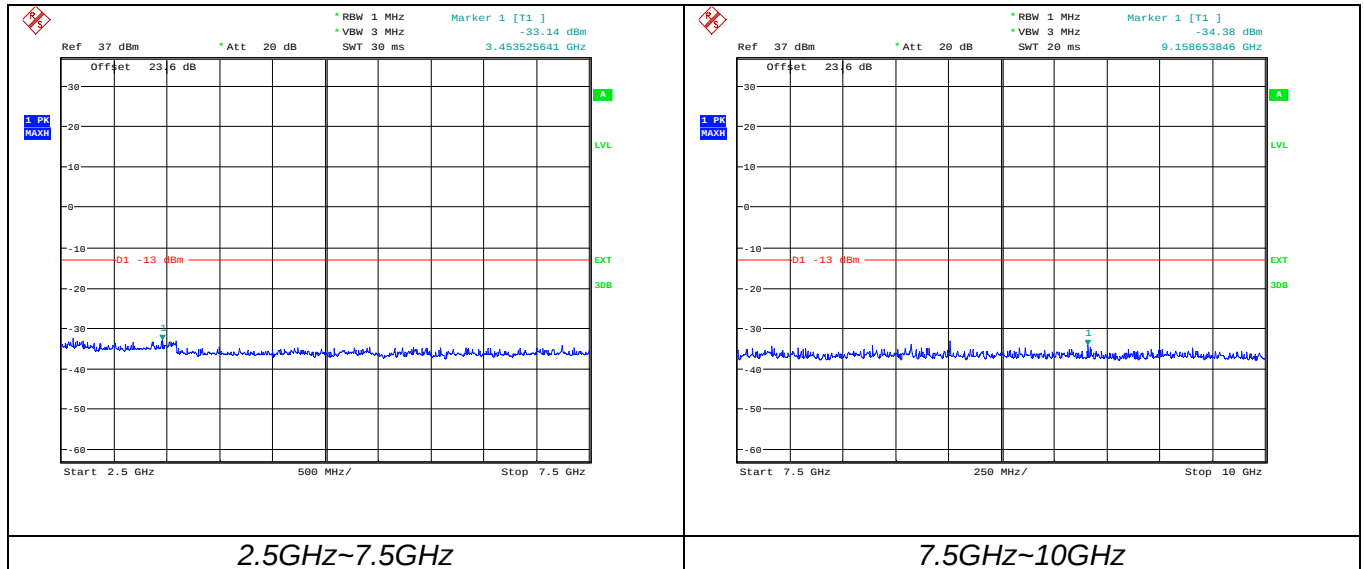


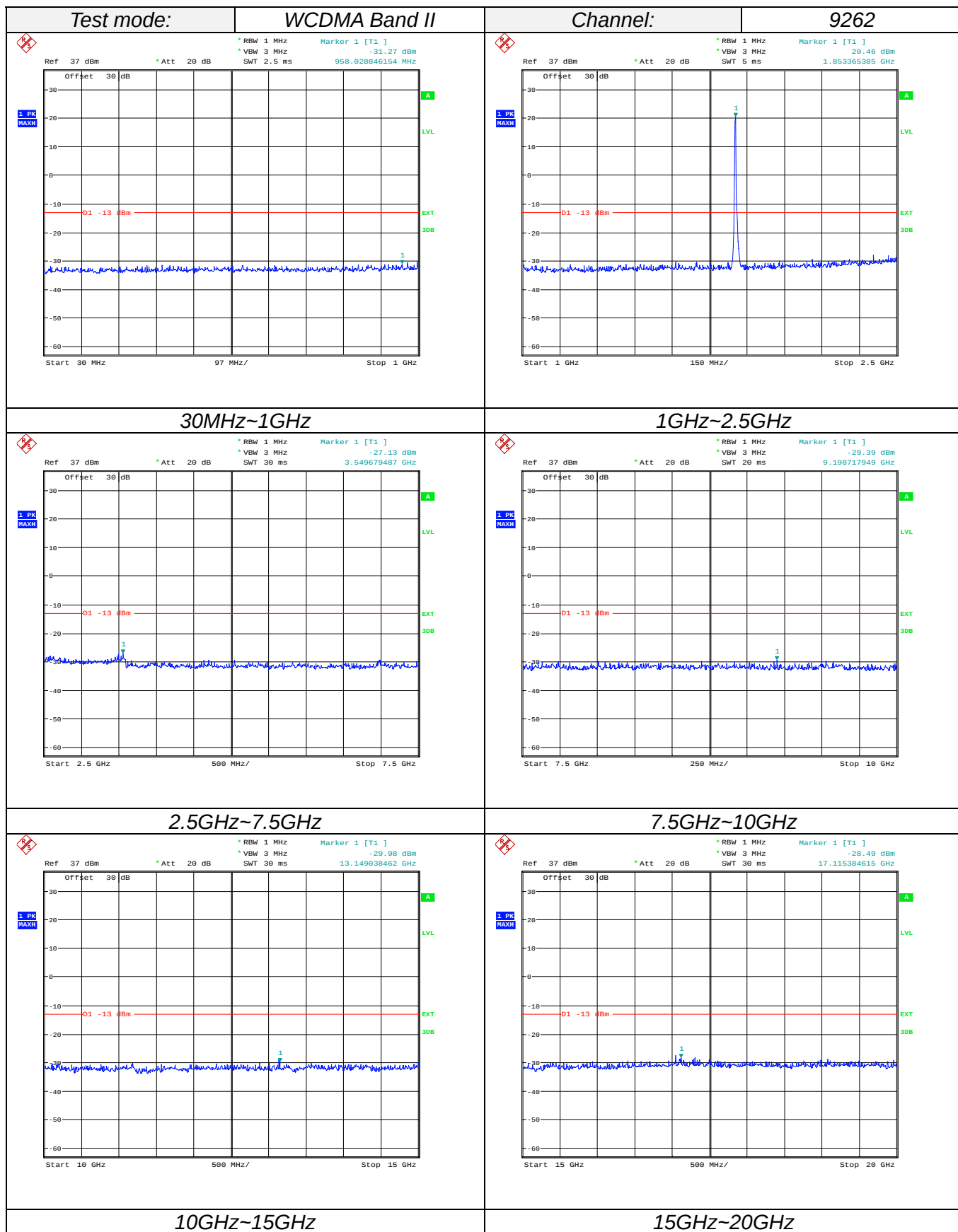


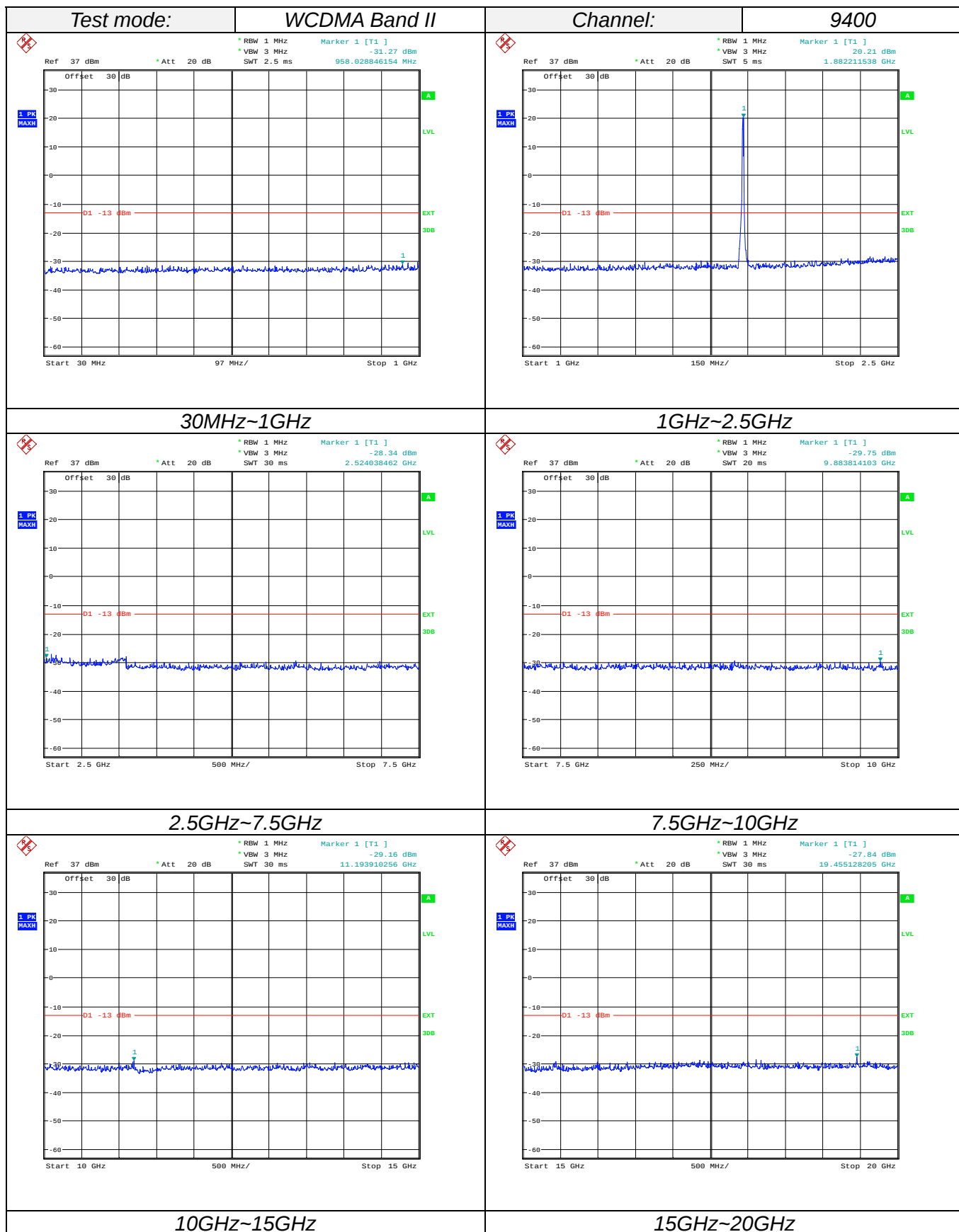


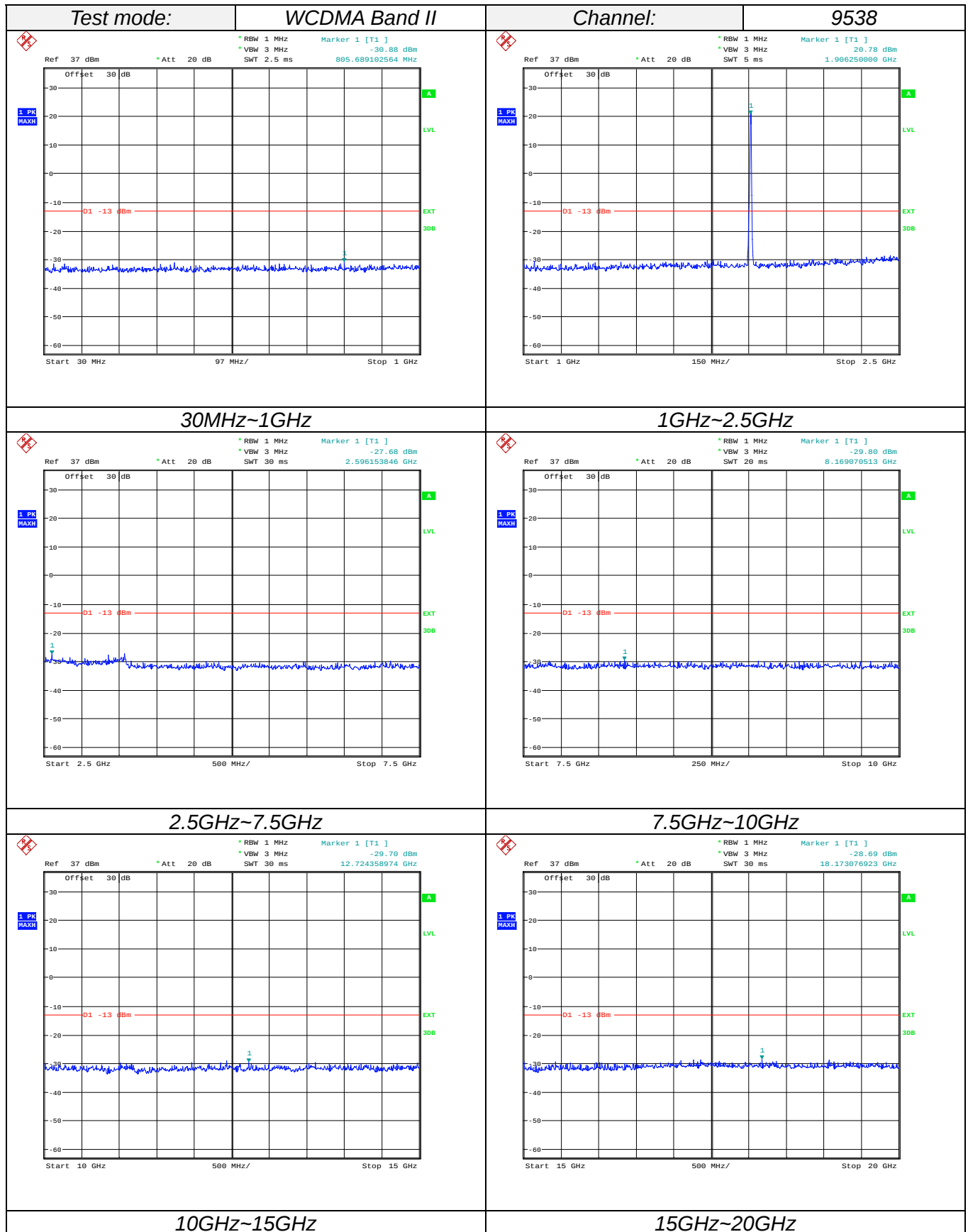












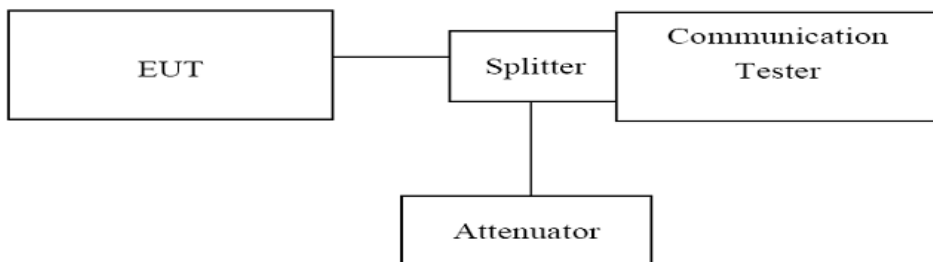
3.4. Band Edge compliance

LIMIT

Part 24.238 and Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

The specification that emissions shall be attenuated below the transmitter power (P) by at least $43 + 10 \log(P)$ dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

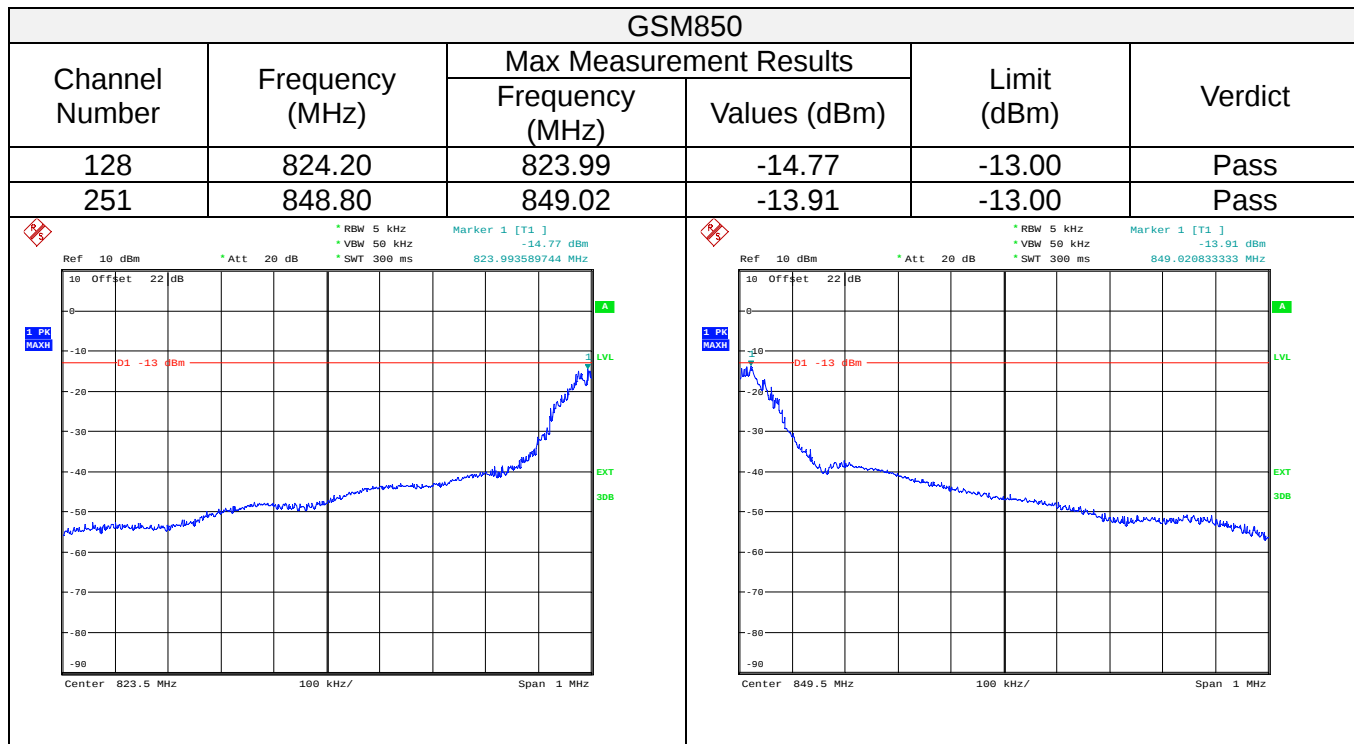
TEST CONFIGURATION

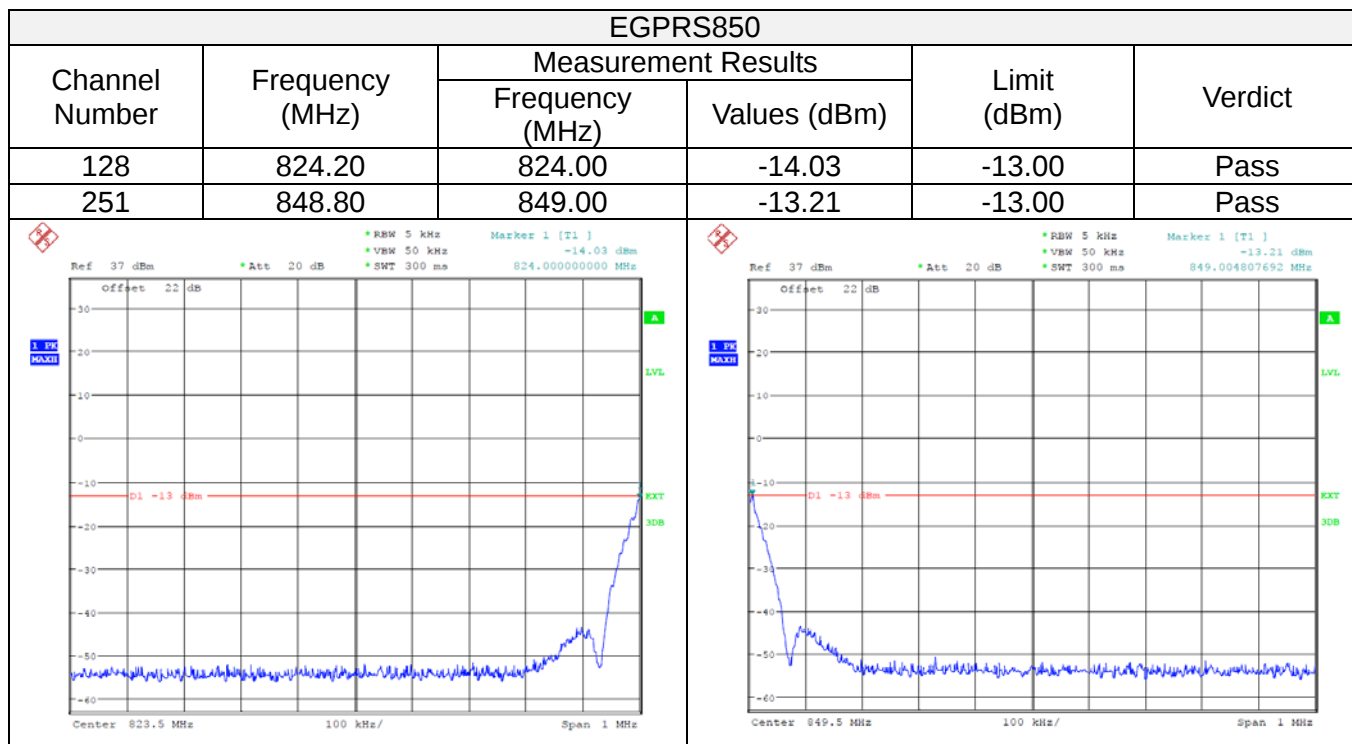
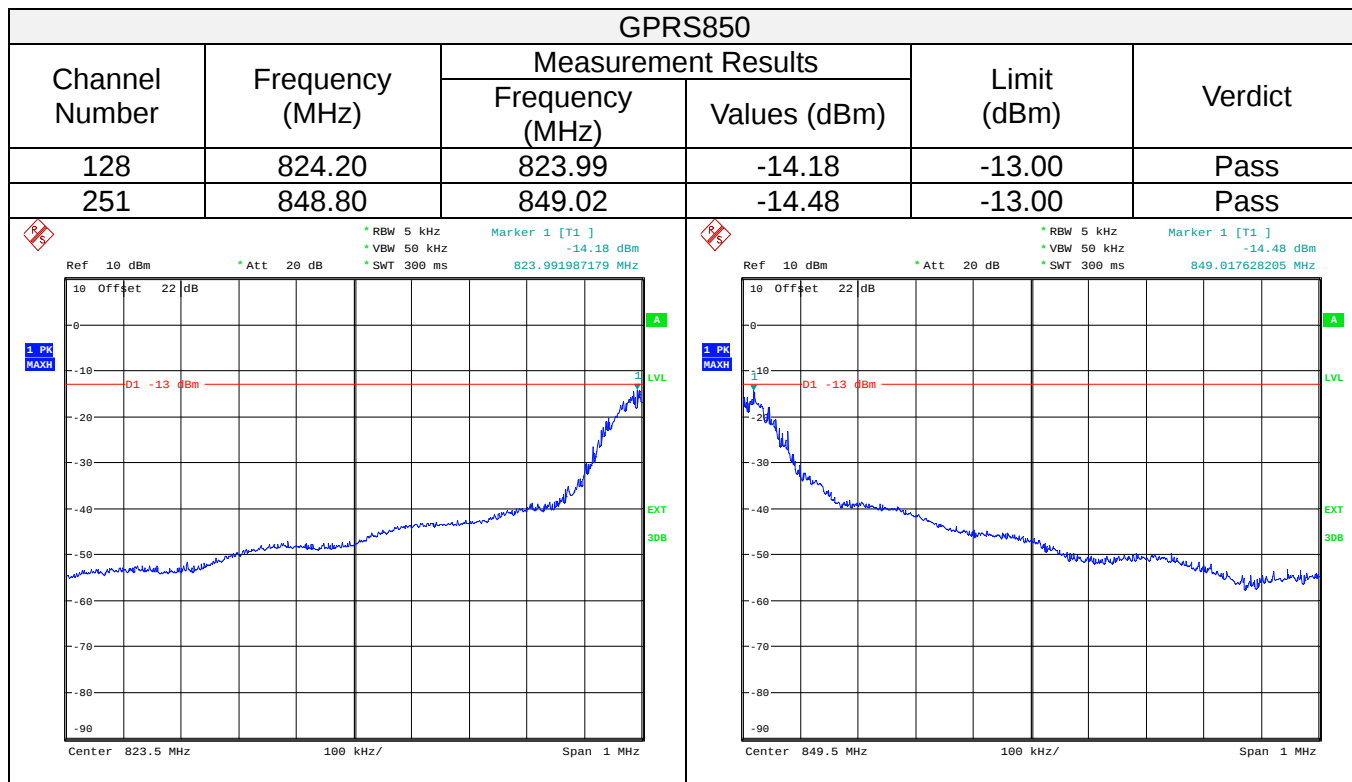


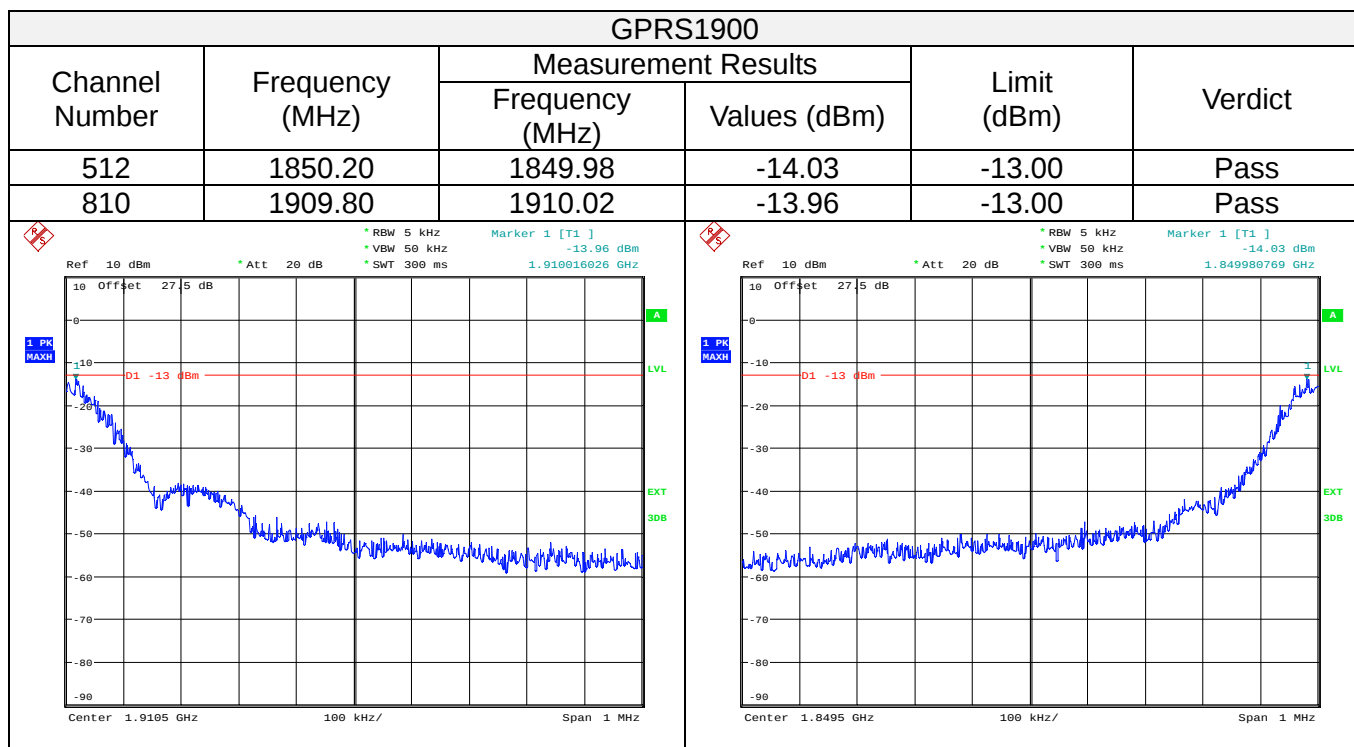
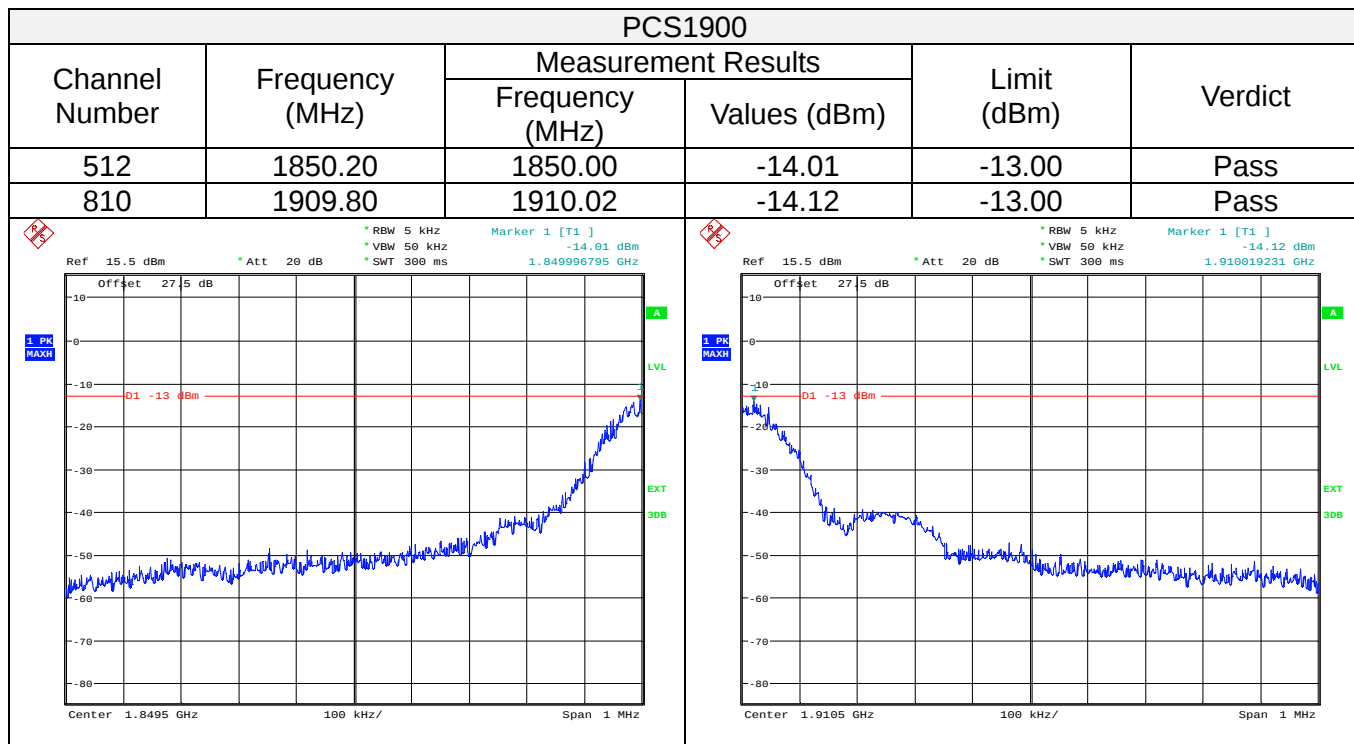
TEST PROCEDURE

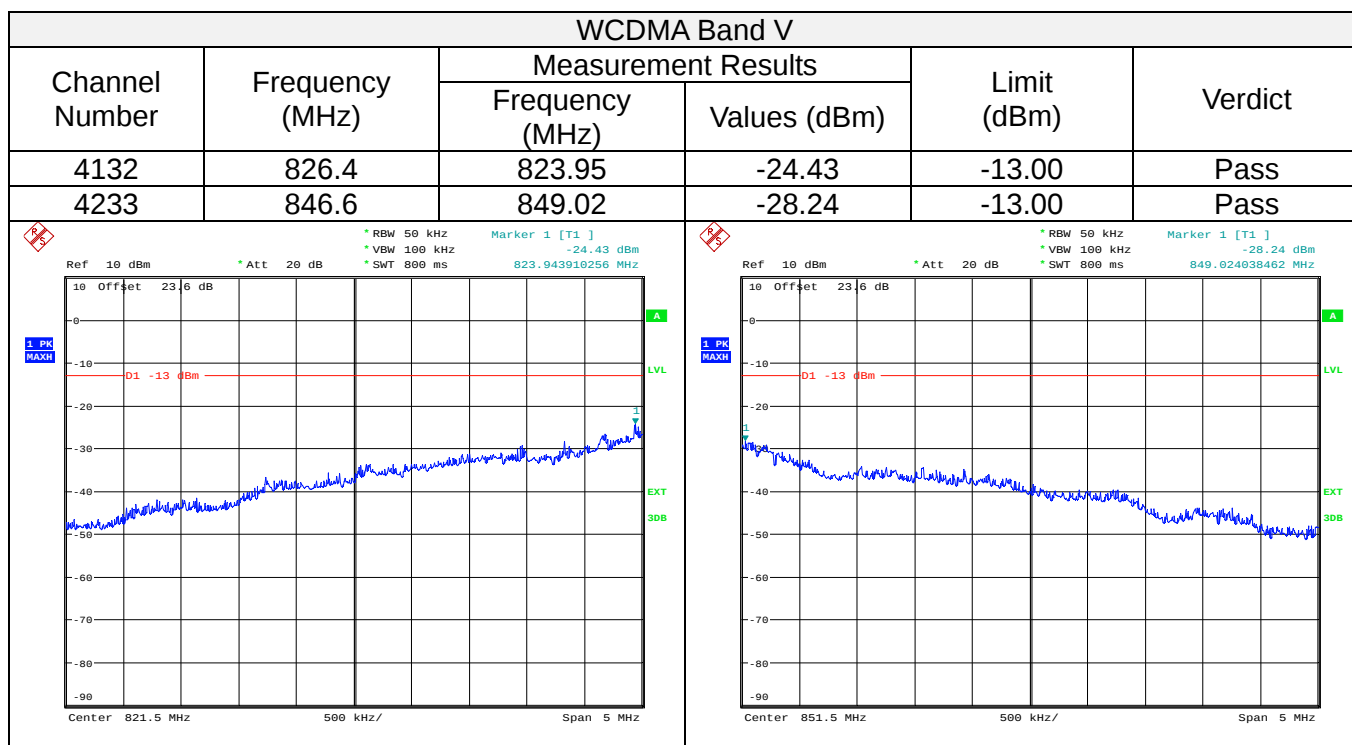
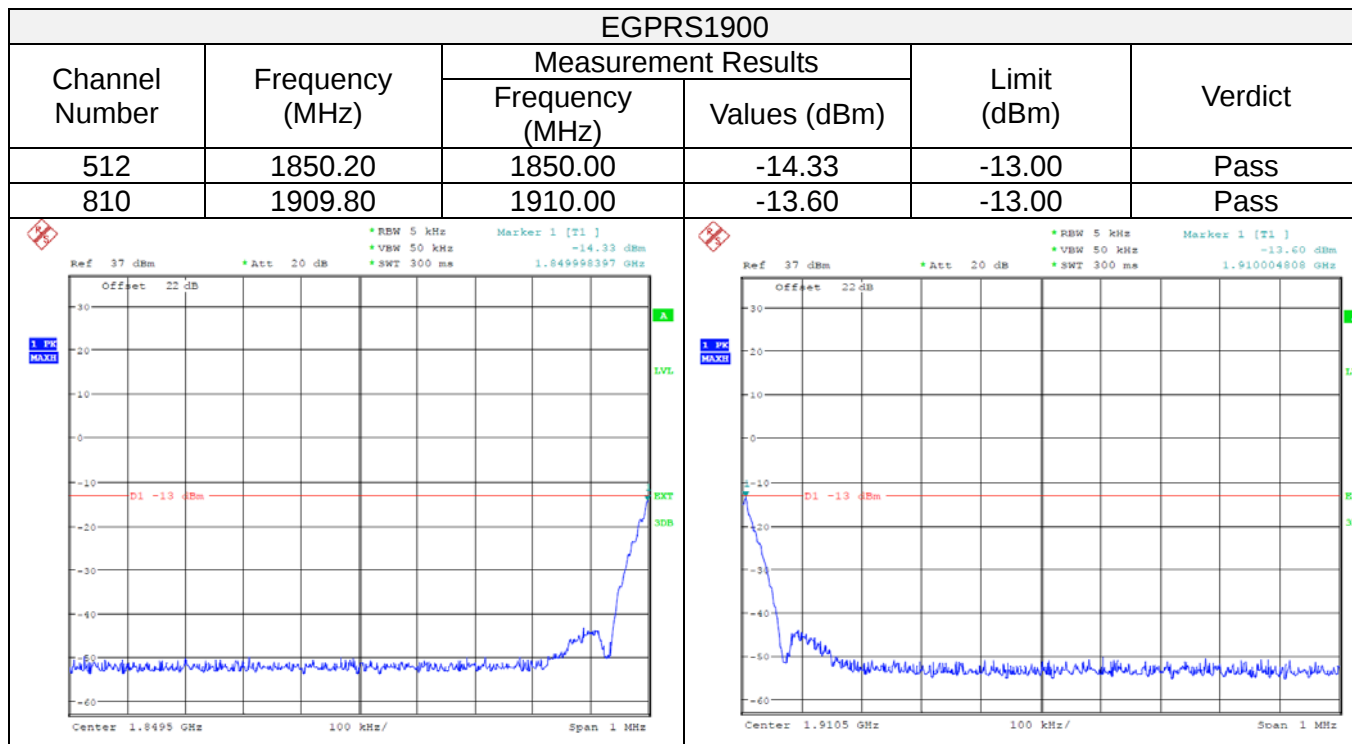
1. The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
2. Set the RBW=5 KHz, VBW = 50 KHz, Span=1MHz Sweep time= Auto for 2G system measurement.
3. Set the RBW=50 KHz, VBW = 100 KHz, Span=5MHz Sweep time= Auto for 3G system measurement.

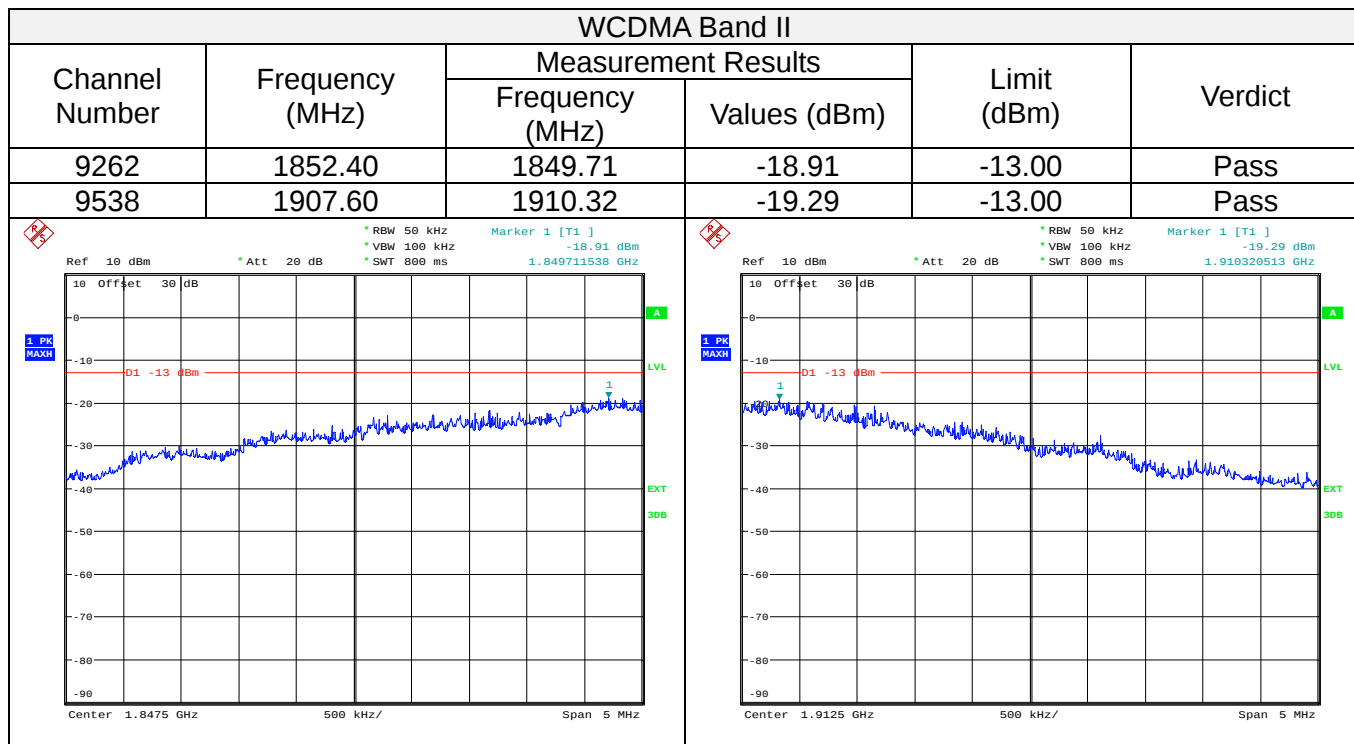
TEST RESULTS











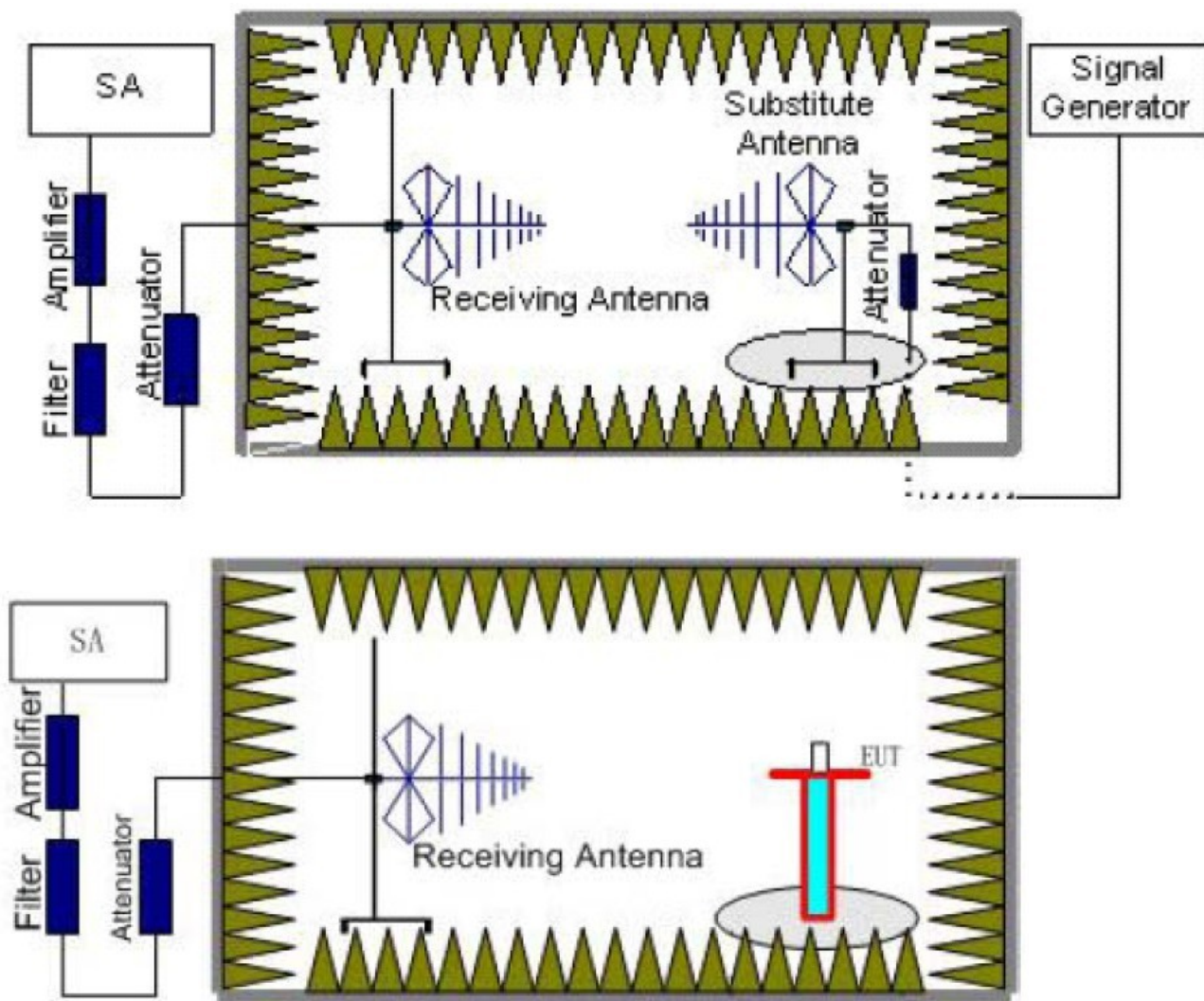
3.5. Radiated Power Measurement

LIMIT

GSM850/WCDMA Band V: 7W ERP

PCS1900/WCDMA Band II: 2W EIRP

TEST CONFIGURATION



TEST PROCEDURE

1. EUT was placed on a 0.80 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 0.80m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.

3. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz, VBW=3MHz, and the maximum value of the receiver should be recorded as (Pr).
4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
5. An amplifier should be connected to the Signal Source output port. And the cable should be connecting between the Amplifier and the Substitution Antenna. The cable loss (Pcl), the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
6. The measurement results are obtained as described below:

$$\text{Power(EIRP)} = \text{PMea} - \text{PAg} - \text{Pcl} + \text{Ga}$$

We used SMF100A microwave signal generator which signal level can up to 33dBm,so we not used power Amplifier for substitution test; The measurement results are amend as described below:

$$\text{Power(EIRP)} = \text{PMea} - \text{Pcl} + \text{Ga}$$
7. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
ERP can be calculated from EIRP by subtracting the gain of the dipole, $\text{ERP} = \text{EIRP} - 2.15\text{dBi}$.

TEST RESULTS

GSM:

Mode	Channel	Antenna Pol.	ERP	Limit (dBm)	Result
GSM850	128	V	29.92	38.45	Pass
		H	25.64		
	190	V	31.55		
		H	26.73		
	251	V	30.97		
		H	26.44		
GPRS850	128	V	29.37	38.45	Pass
		H	25.12		
	190	V	31.08		
		H	26.24		
	251	V	30.46		
		H	26.38		
EGPRS850	128	V	23.45	38.45	Pass
		H	19.96		
	190	V	24.78		
		H	20.54		
	251	V	24.07		
		H	20.13		