EN 301 511
EN 301 908-1
EN 301 908-2

TEST REPORT

For

Electron 2G/3G Global

MODEL NUMBER: E310D, ELC314

REPORT NUMBER: 4789723883.1-3

ISSUE DATE: December 25, 2020

Prepared for

Particle Industries, Inc.
26 Post St, 4th floor, San Francisco, CA 94108, USA

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	12/25/2020	Initial Issue	

Note: This is a copy report base on 4788749548.1-3 which is issued by UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch on January 24, 2019. The customer need to add a new serial model ELC314 which is all the same with the original model E310D except for the manufacturer of the embedded SIM card. We update the test report directly without any test. For more informaton, please refer to the original report.

TEST REPORT CERTIFICATION

Applicant's name ..... Particle Industries, Inc.

Address ..... 26 Post St, 4th floor, San Francisco, CA 94108, USA

Manufacture's Name ..... Particle Industries, Inc.

Address ..... 26 Post St, 4th floor, San Francisco, CA 94108, USA

Product description

Product Name ..... Electron 2G/3G Global

Brand Name ..... Particle

Model Name E310D

Series Model ELC314

Model Difference ..... Please refer to clause 1.3 TEST ITEM

Test Standards ..... ETSI EN 301 511 V12.5.1 (2017-03)
ETSI TS 151 010-1 V12.8.0 (2016-05)
ETSI EN 301 908-1 V11.1.1 (2016-07)
ETSI EN 301 908-2 V11.1.2 (2017-08)

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the 2014/53/EU RE Directive Art.3.2 requirements. And it is applicable only to the tested sample identified in the report.
This report shall not be reproduced except in full, without the written approval of STS, this document only be altered or revised by STS, personal only, and shall be noted in the revision of the document

Date of Test ..... :

Date (s) of performance of tests ..... : 19 Nov. 2018 ~04 Dec. 2018

Date of Issue ..... : 24 Jan. 2019

Test Result ..... : **Pass**

Prepared by : 

(Engineer: Jacky Jiang)

Reviewed by : 

(Laboratory Leader: Shawn Wen)

Approved by : 

(Laboratory Manager: Stephen Guo)

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1. TESTING LABORATORY

1.1 LOCATION

Company Name:	Shenzhen STS Test Services Co., Ltd.
Address:	1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	+86-755 3688 6288
Fax:	+86-755 3688 6277
Registration No. :	FCC Registration No.: 625569
	IC Registration No.: 12108A; A2LA Certificate No.: 4338.01;

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**,where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**,providing a level of confidence of approximately **95** %。

No.	Item	Uncertainly
1	RF output power,conducted	±0.71dB
2	Unwanted Emissions,conducted	±0.63dB
3	All emissions,radiated 30-200MHz	±3.43dB
4	All emissions,radiated 200MHz-1GHz	±3.57dB
5	All emissions,radiated>1G	±4.13dB

1.3 TEST ITEM

Identification of the Equipment under Test

Product Name		Electron 2G/3G Global
Brand Name		Particle
Model Name		E310D
Series Model		ELC314
Model Difference		The schematic and PCB of the ELC314 is completely the same with E310D, and these two models of HW&SW is the same. Because changing the MVNO's E-SIM card (embedded SIM card) provider from Kore to Twilio. The differences are as follows: E310D uses eSIM of Kore. ELC314 uses eSIM of Twilio.
GSM	Frequency Bands	GSM 900: 880 ~ 915 MHz(TX), 925 ~ 960 MHz (RX) GSM 1800:1710 ~ 1785 MHz(TX), 1805 ~ 1880 MHz(RX)
	Modulation Mode	GMSK for GPRS; GMSK and 8PSK for EDGE
	Power Class	GSM900: 4, GSM1800: 1
	Multislot Class	GPRS: 12,EDGE: 12
WCDMA	Frequency Bands	WCDMA2100:1920-1980 MHz(TX), 2110-2170 MHz(RX) WCDMA900:880-915 MHz(TX), 925-960 MHz(RX)
	Modulation Mode	WCDMA: QPSK; HSDPA:QPSK/16QAM; HSUPA:BPSK
	Power Class	Class 3
SIM Card		Only support single SIM Card.
Power Rating		Input: DC 5V 500mA Output:DC3.6V to 5.5V
Battery		Battery(rating): Rated Voltage: 3.7V Capacity: 1800mAh
Antenna Type		PIFA
Hardware version number		N/A
Software version number		N/A

1.4 REFERENCE DOCUMENTS AND TEST STANDARDS

GSM

Document	Description	Version
ETSI TS 151 010-1	Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) conformance specification; Part 1: Conformance specification (ETSI TS 151 010-1 version 12.8.0 Release 12)	V12.8.0 (2016-05)
ETSI EN 301 511	Global System for Mobile communications (GSM); Mobile Stations (MS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	V12.5.1 (2017-03)

WCDMA

Document	Description	Version
ETSI EN 301908-1	IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 1: Introduction and common requirements	V11.1.1 (2016-07)
ETSI EN 301908-2	IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 2: CDMA Direct Spread (UTRA FDD) User Equipment (UE)	V11.1.2 (2017-08)
ETSI TS 134 121-1	Universal Mobile Telecommunications System (UMTS); User Equipment (UE) conformance specification; Radio transmission and reception (FDD); Part 1: Conformance specification (3GPP TS 34.121-1 version 12.1.0 Release 12).	V12.1.0 (2015-10)

1.5 ADDITIONAL INFORMATION

None

1.6 ABBREVIATIONS USED FOR THE TEST RESULT LIST

Pass	EUT passed this test standard limit
Fail	EUT failed this test standard limit
Inc.	EUT did not pass and did not fail this test case, therefore the verdict “Inconclusive”
N.A.	Test case not applicable for the EUT
A	Test fully available and fully validated, testing at an accredited test laboratory required
B	Testing at an accredited test laboratory with exceptions (related to PTCRB)
D	Manufacturer’s declaration without evidence
E	Tests validated, results are provided to CTIA; negative results will not cause loss of certification
N	Tests not applicable to a particular GSM frequency band
P	New test not yet validated

2. TECHNICAL TEST

2.1 SUMMARY OF TEST RESULTS

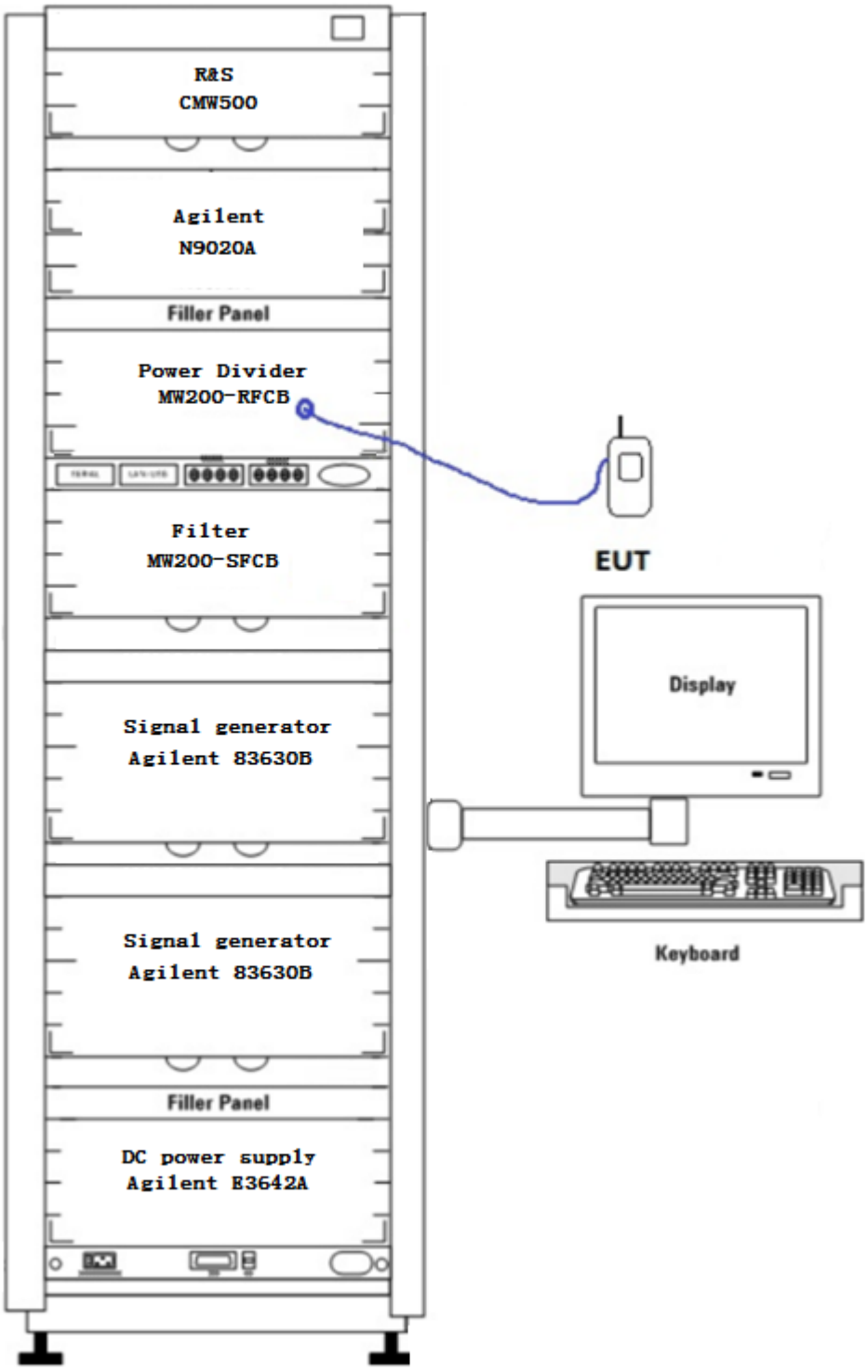
No deviations from the requirements were ascertained in the course of the test performed.	☒
The deviations from the requirements as shown in clause 3 were ascertained in the course of the test performed.	☐

2.2 TEST ENVIRONMENT

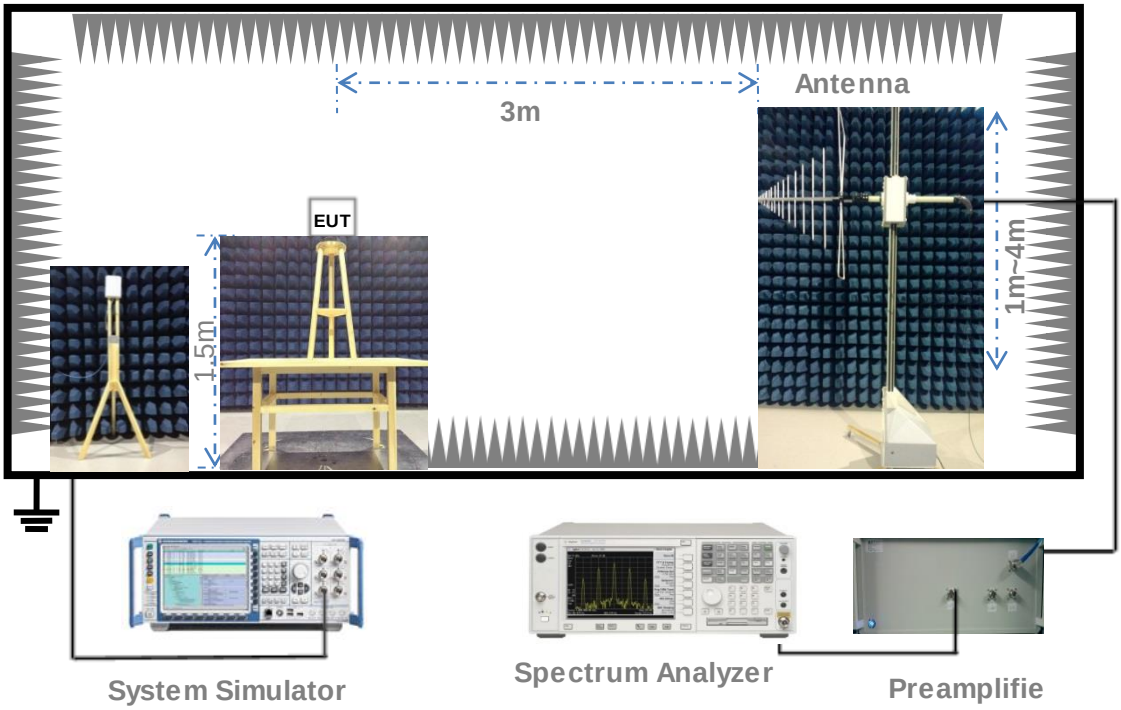
Temperature:	15 … 35 °C
Relative humidity content:	Up to 75 %
Details of power supply:	230 V AC
- Extreme test conditions:	Operating voltage of the mobile
	V_{nom} = 3.7 V DC
	V_{min} = 3.33V DC
	V_{max} = 4.07 V DC
- Extreme temperature:	-10°C / 55°C

2.3 MEASUREMENT AND TEST SETUP

2.3.1 Conducted Test Setup



2.3.2 RADIATED TEST SETUP



2.4 TEST EQUIPMENT UTILISED

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Signal Analyzer	Agilent	N9020A	MY49100060	2018.10.13	2019.10.12
Bilog Antenna	TESEQ	CBL6111D	34678	2017.11.02	2020.11.01
Horn Antenna	Schwarzbeck	BBHA 9120D(1201)	9120D-1343	2017.10.27	2020.10.26
Power Amplifier	SKET	LNPA-01018 G-45	SK2018080901	2018.10.13	2019.10.12
USB RF power sensor	DARE	RPR3006W	15I00041SNO03	2018.10.13	2019.10.12
Low frequency cable	EM	R01	N/A	2018.03.11	2019.03.10
Low frequency cable	EM	R06	N/A	2018.03.11	2019.03.10
High frequency cable	SCHWARZBECK	R04	N/A	2018.03.11	2019.03.10
High frequency cable	SCHWARZBECK	R02	N/A	2018.03.11	2019.03.10
turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	N/A	2018.03.11	2019.03.10
Pre-mplifier (0.1M-3GHz)	EM	EM330	60538	2018.03.11	2019.03.10
Semi-anechoic chamber	Changling	966	N/A	2018.10.24	2020.10.23
Universal Radio Communication Tester	R&S	CMW500	131428	2018.03.11	2019.03.10
Unversal radio communication tester	R&S	CMU200	111764	2018.10.13	2019.10.12
EMI Test Receiver	R&S	ESPI	102086	2018.10.13	2019.10.12
Programmable power supply	Agilent	E3642A	MY40002025	2018.10.13	2019.10.12
Temperature& humidity test chamber	Safety test	AG80L	171200018	2018.03.09	2019.03.08
Signal Generator	Agilent	N5182A	MY46240556	2018.10.16	2019.10.15
AC Power Source	APC	KDF-11010G	F214050035	N.C.R	N.C.R
6dB Attenuator	Mini-Circuits	NAT-6-2W	15542-1	N.C.R	N.C.R
Wireless Communications Test Set	R&S	CMW 500	131428	2018.03.11	2019.03.10
Highpass Filter	WHKX7.0/18G -8SS	Wainwright	18	2018.10.14	2019.10.13

3. TESTS UNDER NORMAL AND EXTREME TEST CONDITIONS

ETSI TS 151 010-1	ETSI EN 301511	Test Description	GSM 900 Verdict	DCS 1800 Verdict
12.1.1	4.2.12	Conducted spurious emissions - MS allocated a channel	--	--
		Normal Temperature/Normal Voltage	P	P
		Normal Temperature /High Voltage	P	P
		Normal Temperature /Low Voltage	P	P
12.1.2	4.2.13	Conducted spurious emissions - MS in idle mode	--	--
		Normal Temperature/Normal Voltage	P	P
		Normal Temperature /High Voltage	P	P
		Normal Temperature /Low Voltage	P	P
12.2.1	4.2.16	Radiated spurious emissions - MS allocated a channel	--	--
		Normal Temperature/Normal Voltage	P	P
		Normal Temperature /High Voltage	P	P
		Normal Temperature /Low Voltage	P	P
12.2.2	4.2.17	Radiated spurious emissions - MS in idle mode	--	--
		Normal Temperature/Normal Voltage	P	P
		Normal Temperature /High Voltage	P	P
		Normal Temperature /Low Voltage	P	P
13.1	4.2.1	Frequency error and phase error	--	--
		Normal Temperature/Normal Voltage	--	--
		High Temperature/High Voltage	--	--
		High Temperature/Low Voltage	--	--
		Low Temperature/High Voltage	--	--
		Low Temperature/Low Voltage	--	--
		Vibration - X Axis	--	--
		Vibration - Y Axis	--	--
		Vibration - Z Axis	--	--
13.2	4.2.2	Frequency error under multipath and interference conditions	--	--
		Normal Temperature/Normal Voltage	--	--
		High Temperature/High Voltage	--	--
		High Temperature/Low Voltage	--	--
		Low Temperature/High Voltage	--	--
		Low Temperature/Low Voltage	--	--

ETSI TS 151 010-1	ETSI EN 301511	Test Description	GSM 900 Verdict	DCS 1800 Verdict
13.3	4.2.5	Transmitter output power and burst timing	--	--
		Normal Temperature/Normal Voltage	--	--
		High Temperature/High Voltage	--	--
		High Temperature/Low Voltage	--	--
		Low Temperature/High Voltage	--	--
		Low Temperature/Low Voltage	--	--
13.4	4.2.6	Output RF spectrum	--	--
		Normal Temperature/Normal Voltage	--	--
		High Temperature/High Voltage	--	--
		High Temperature/Low Voltage	--	--
		Low Temperature/High Voltage	--	--
		Low Temperature/Low Voltage	--	--
13.16.1	4.2.4	Frequency error and phase error in GPRS multislot configuration	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
		Vibration - X Axis	P	P
		Vibration - Y Axis	P	P
		Vibration - Z Axis	P	P
13.16.2	4.2.10	Transmitter output power in GPRS multislot configuration	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
13.16.3	4.2.11	Output RF spectrum in GPRS multislot configuration	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P

ETSI TS 151 010-1	ETSI EN 301511	Test Description	GSM 900 Verdict	DCS 1800 Verdict
13.17.1	4.2.22	Frequency error and Modulation accuracy in EGPRS Configuration	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
13.17.2	4.2.23	Frequency error under multipath and interference conditions	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
13.17.3	4.24	EGPRS Transmitter output power	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
13.17.4	4.2.20	Output RF spectrum in EGPRS configuration	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
14.2.1	4.2.42	Reference sensitivity - TCH/FS	--	--
		Normal Temperature/Normal Voltage	--	--
		High Temperature/High Voltage	--	--
		High Temperature/Low Voltage	--	--
		Low Temperature/High Voltage	--	--
		Low Temperature/Low Voltage	--	--

ETSI TS 151 010-1 V12.8.0	ETSI EN 301511 V12.5.1	Test Description	GSM 900 Verdict	DCS 1800 Verdict
14.5.1	4.2.38	Adjacent channel rejection – speech Channels (TCH/FS)	--	--
		Normal Temperature/Normal Voltage	--	--
		High Temperature/High Voltage	--	--
		High Temperature/Low Voltage	--	--
		Low Temperature/High Voltage	--	--
		Low Temperature/Low Voltage	--	--
14.6.1	4.2.32	Intermodulation rejection - speech channels	--	--
		Normal Temperature/Normal Voltage	--	--
		High Temperature/High Voltage	--	--
		High Temperature/Low Voltage	--	--
		Low Temperature/High Voltage	--	--
		Low Temperature/Low Voltage	--	--
14.7.1	4.2.20	Blocking and spurious response - speech channels	--	--
		Normal Temperature/Normal Voltage	--	--
14.8.1	4.2.35	AM suppression - speech channels	--	--
		Normal Temperature/Normal Voltage	--	--
14.16.1	4.2.44	Minimum Input level for Reference Performance - GPRS	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
14.18.1	4.2.45	Minimum Input level for Reference Performance - EGPRS	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P

ETSI TS 151 010-1 V12.8.0	ETSI EN 301511 V12.5.1	Test Description	GSM 900 Verdict	DCS 1800 Verdict
14.18.3	4.2.40	Adjacent channel rejection - EGPRS	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
14.18.4	4.2.34	Intermodulation rejection - EGPRS	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
14.18.5	4.2.30	Blocking and spurious response in EGPRS configuration	--	--
		Normal Temperature/Normal Voltage	P	P

Note: The test data please reference to attachment “4788749548.1-3_ Appendix GSM ”.

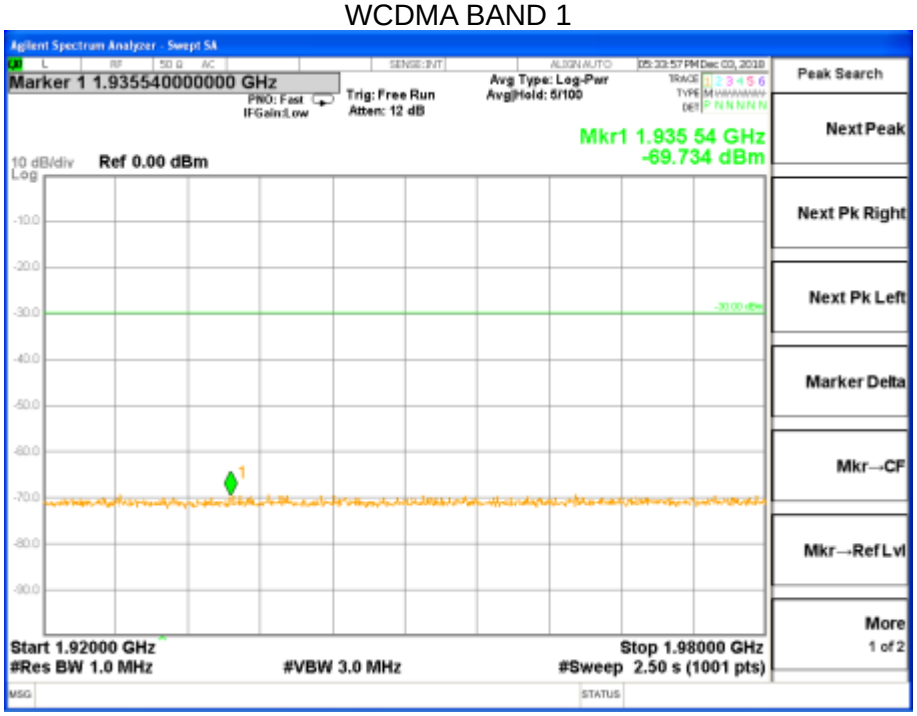
ETSI TS 134121-1	ETSI EN 301908-1/-2	Test Description	BAND 1 Verdict	BAND 8 Verdict
5.2	4.2.2	Transmitter maximum output power	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
5.2A	4.2.2	Transmitter maximum output power with HS-DPCCH	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
5.2B	4.2.2	Transmitter maximum output power with HS-DPCCH and E-DCH	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
5.4.3	4.2.5	Transmitter minimum output power	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
5.4.4	4.2.11	Out-of-synchronization handling of output power	P	P
5.9	4.2.3	Transmitter spectrum emission mask	P	P
5.9A	4.2.3	Transmitter spectrum emission mask with HS-DPCCH	P	P
5.9B	4.2.3	Transmitter spectrum emission mask with E-DCH	P	P
5.10	4.2.12	Adjacent Channel Leakage Power Ratio (ACLR)	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P

ETSI TS 134121-1	ETSI EN 301908-1/-2	Test Description	BAND 1 Verdict	BAND 8 Verdict
		Low Temperature/Low Voltage	P	P
5.10A	4.2.12	Adjacent Channel Leakage Power Ratio (ACLR) with HS-DPCCH	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
5.10.B	4.2.12	Adjacent Channel Leakage Power Ratio (ACLR) with E-DCH	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
5.11	4.2.4	Transmitter spurious emissions- Conducted	P	P
--	301908-1 4.2.2	Transmitter spurious emissions- Radiated	P	P
6.2	4.2.13	Receiver Reference Sensitivity level	--	--
		Normal Temperature/Normal Voltage	P	P
		High Temperature/High Voltage	P	P
		High Temperature/Low Voltage	P	P
		Low Temperature/High Voltage	P	P
		Low Temperature/Low Voltage	P	P
6.4	4.2.6	Receiver Adjacent Channel Selectivity (ACS) (Rel-99 and Rel-4)	P	P
6.4A	4.2.6	Receiver Adjacent Channel Selectivity (ACS) (Rel-5 and later releases)	P	P
6.5	4.2.7	Receiver blocking characteristics	P	P
6.6	4.2.8	Receiver spurious response	P	P
6.7	4.2.9	Receiver intermodulation characteristics	P	P
6.8	4.2.10	Receiver spurious emissions	P	P
6.9	4.2.4	Control and monitoring functions (UE)	P	P

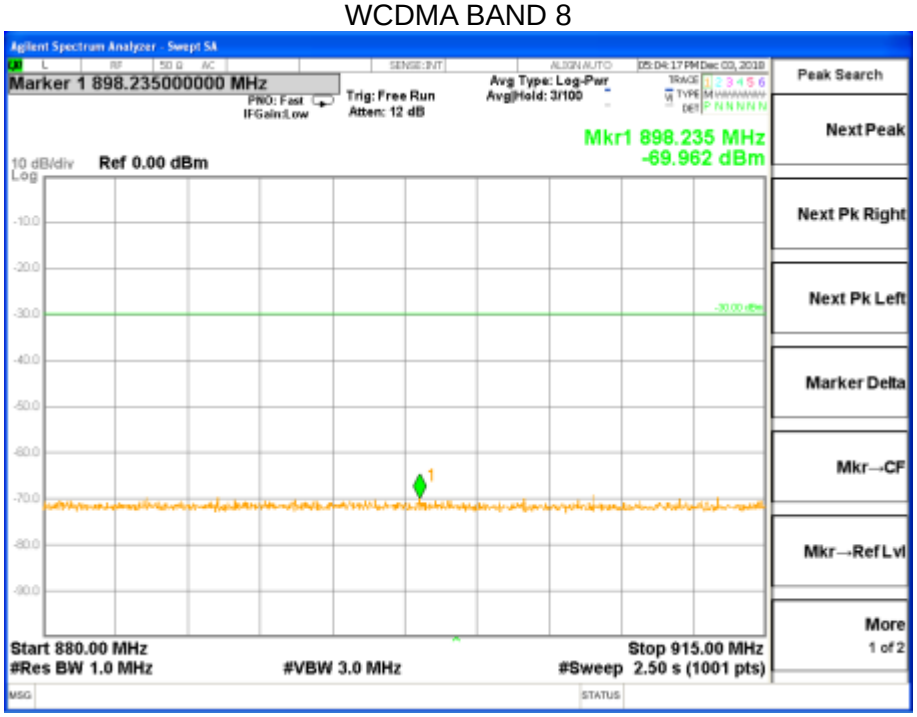
Note: The test data please reference to attachment “4788749548.1-3_ Appendix WCMDA” .

Control and monitoring functions (UE)

WCDMA BAND 1



WCDMA BAND 8



Clause 4.2.30 Blocking and spurious response in EGPRS configuration

EGPRS900-PDTCH-MCS-4

Channel (MHz)	Test condition	time slot	number of samples	BLER(%)	Limit(%)	Result
880.2	normal	1	3221	0.000	10	PASS
898.4			3221	0.000		
914.8			3221	0.000		
880.2		2	3221	0.000		PASS
898.4			3221	0.000		
914.8			3221	0.000		
880.2		3	3221	0.000		PASS
898.4			3221	0.000		
914.8			3221	0.000		
880.2		4	3221	0.000		PASS
898.4			3221	0.000		
914.8			3221	0.000		

EGPRS900-PDTCH-MCS-9

Channel (MHz)	Test condition	time slot	number of samples	BLER(%)	Limit(%)	Result
880.2	normal	1	3221	0.000	10	PASS
898.4			3221	0.000		
914.8			3221	0.000		
880.2		2	3221	0.000		PASS
898.4			3221	0.000		
914.8			3221	0.000		
880.2		3	3221	0.000		PASS
898.4			3221	0.000		
914.8			3221	0.000		
880.2		4	3221	0.000		PASS
898.4			3221	0.000		
914.8			3221	0.000		

EGPRS900-USF-MCS-4

Channel (MHz)	Test condition	time slot	number of samples	BLER(%)	Limit(%)	Result
880.2	normal	1	32214	0.000	1	PASS
898.4			32214	0.000		
914.8			32214	0.000		
880.2		2	32214	0.000		PASS
898.4			32214	0.000		
914.8			32214	0.000		
880.2		3	32214	0.000		PASS
898.4			32214	0.000		
914.8			32214	0.000		
880.2		4	32214	0.000		PASS
898.4			32214	0.000		
914.8			32214	0.000		

EGPRS900-USF-MCS-9

Channel (MHz)	Test condition	time slot	number of samples	BLER(%)	Limit(%)	Result
880.2	normal	1	32214	0.000	1	PASS
898.4			32214	0.000		
914.8			32214	0.000		
880.2		2	32214	0.000		PASS
898.4			32214	0.000		
914.8			32214	0.000		
880.2		3	32214	0.000		PASS
898.4			32214	0.000		
914.8			32214	0.000		
880.2		4	32214	0.000		PASS
898.4			32214	0.000		
914.8			32214	0.000		

EGPRS1800-PDTCH-MCS-4

Channel (MHz)	Test condition	time slot	number of samples	BLER(%)	Limit(%)	Result
1710.2	normal	1	3221	0.000	10	PASS
1747.8			3221	0.000		
1784.8			3221	0.000		
1710.2		2	3221	0.000		PASS
1747.8			3221	0.000		
1784.8			3221	0.000		
1710.2		3	3221	0.000		PASS
1747.8			3221	0.000		
1784.8			3221	0.000		
1710.2		4	3221	0.000		PASS
1747.8			3221	0.000		
1784.8			3221	0.000		

EGPRS1800-PDTCH-MCS-9

Channel (MHz)	Test condition	time slot	number of samples	BLER(%)	Limit(%)	Result
1710.2	normal	1	3221	0.000	10	PASS
1747.8			3221	0.000		
1784.8			3221	0.000		
1710.2		2	3221	0.000		PASS
1747.8			3221	0.000		
1784.8			3221	0.000		
1710.2		3	3221	0.000		PASS
1747.8			3221	0.000		
1784.8			3221	0.000		
1710.2		4	3221	0.000		PASS
1747.8			3221	0.000		
1784.8			3221	0.000		

EGPRS1800-USF-MCS-4

Channel (MHz)	Test condition	time slot	number of samples	BLER(%)	Limit(%)	Result
1710.2	normal	1	32214	0.000	1	PASS
1747.8			32214	0.000		
1784.8			32214	0.000		
1710.2		2	32214	0.000		PASS
1747.8			32214	0.000		
1784.8			32214	0.000		
1710.2		3	32214	0.000		PASS
1747.8			32214	0.000		
1784.8			32214	0.000		
1710.2		4	32214	0.000		PASS
1747.8			32214	0.000		
1784.8			32214	0.000		

EGPRS1800-USF-MCS-9

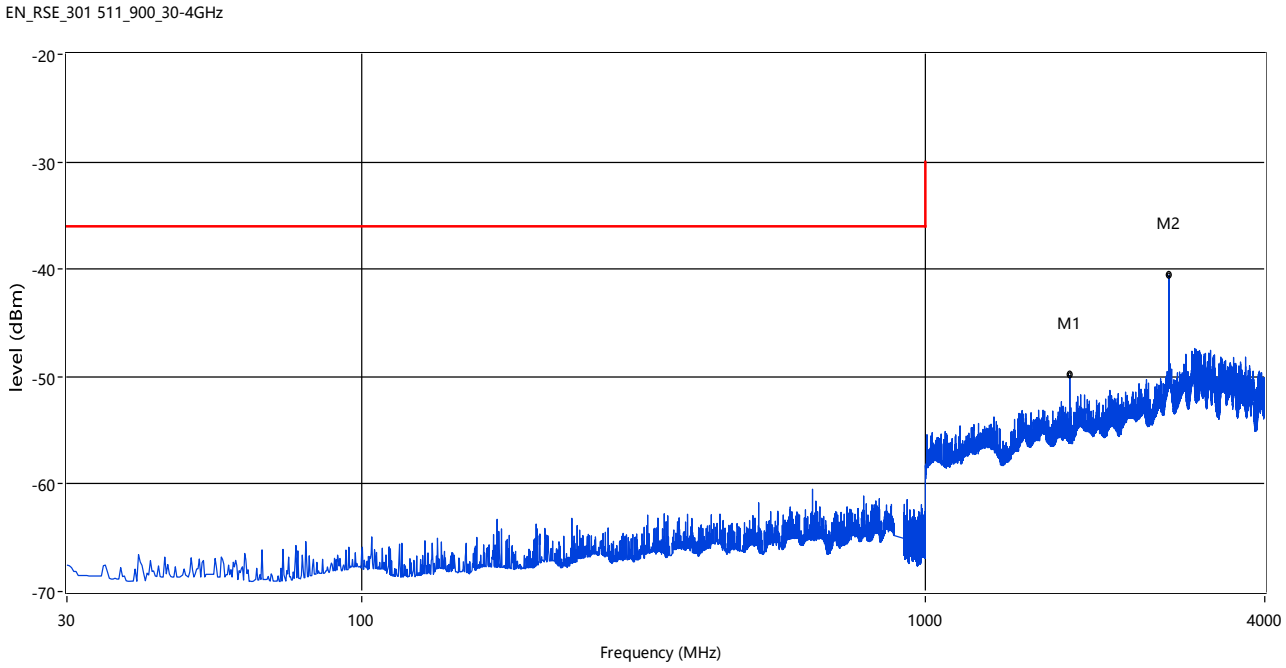
Channel (MHz)	Test condition	time slot	number of samples	BLER(%)	Limit(%)	Result
1710.2	normal	1	32214	0.000	1	PASS
1747.8			32214	0.000		
1784.8			32214	0.000		
1710.2		2	32214	0.000		PASS
1747.8			32214	0.000		
1784.8			32214	0.000		
1710.2		3	32214	0.000		PASS
1747.8			32214	0.000		
1784.8			32214	0.000		
1710.2		4	32214	0.000		PASS
1747.8			32214	0.000		
1784.8			32214	0.000		

Clause 4.2.16 Radiated spurious emissions - MS allocated a channel &

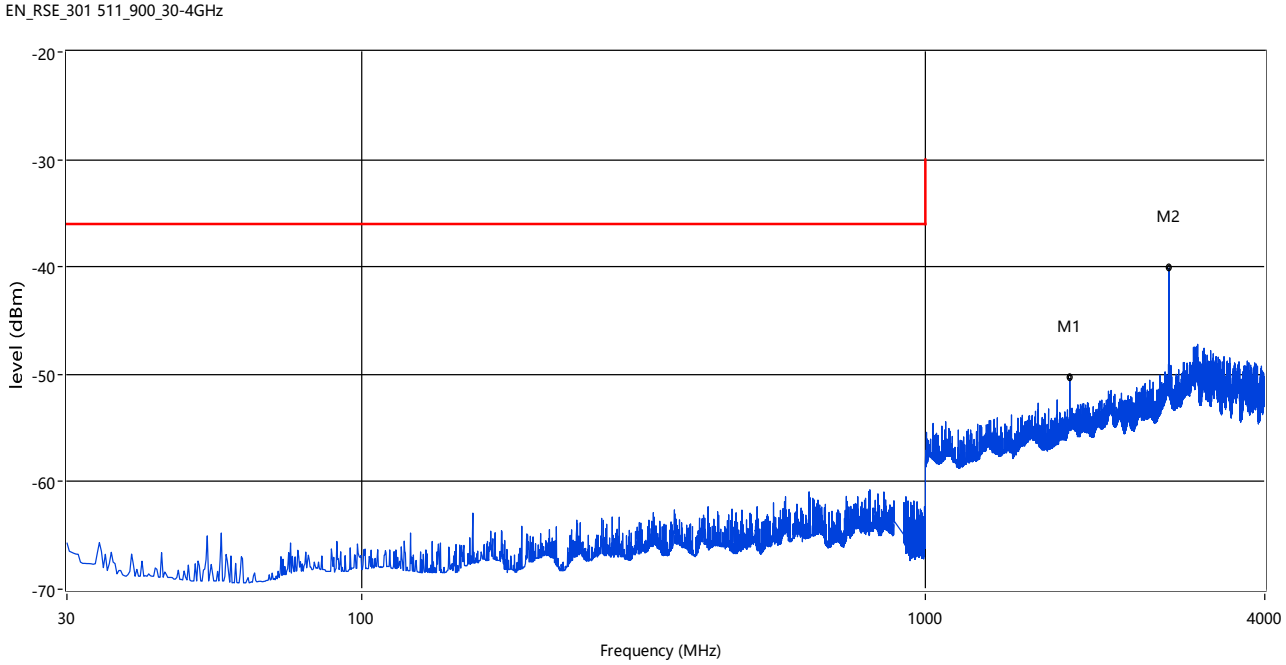
Clause 4.2.17 Radiated spurious emissions - MS in idle mode

MS allocated a channel(Normal)

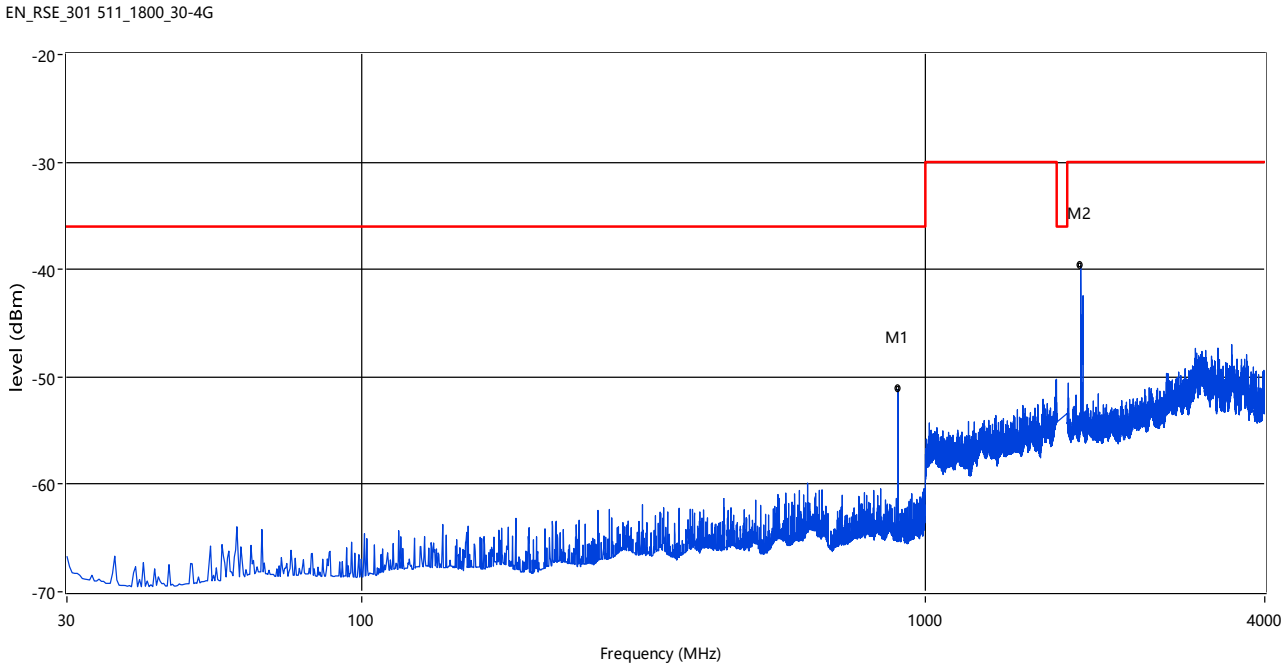
GPRS900 Horizontal



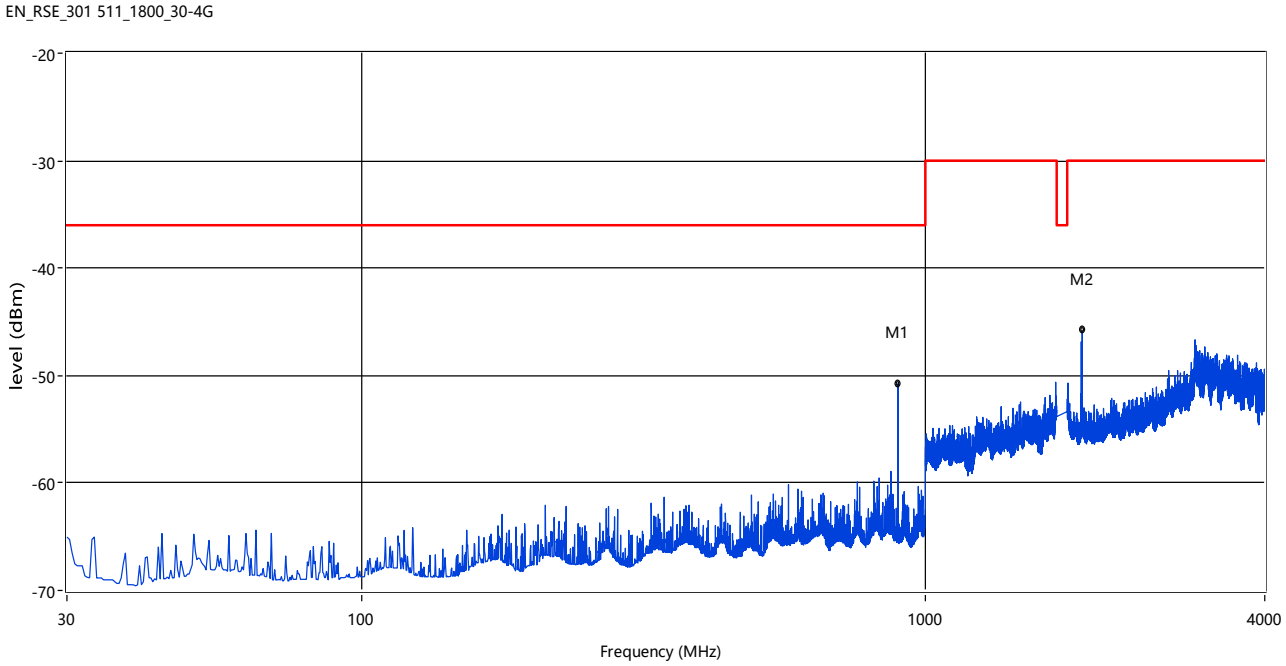
GPRS900 Vertical



GPRS1800 Horizontal



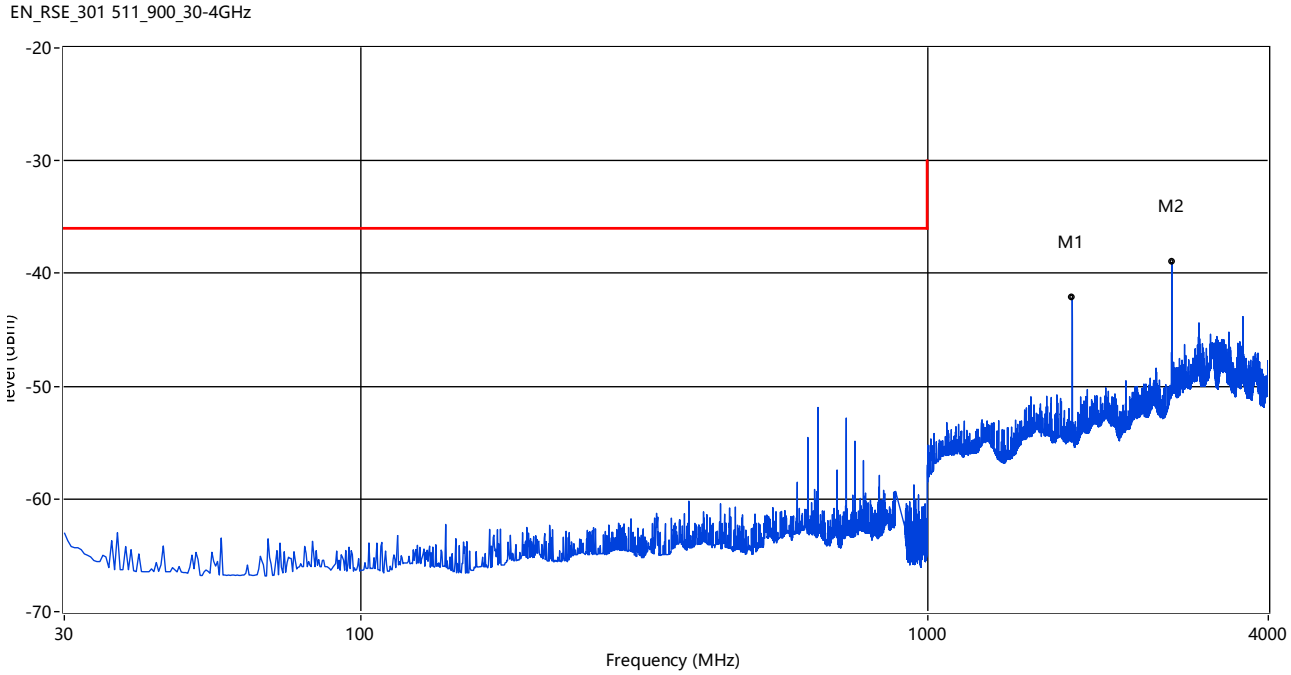
GPRS1800 Vertical



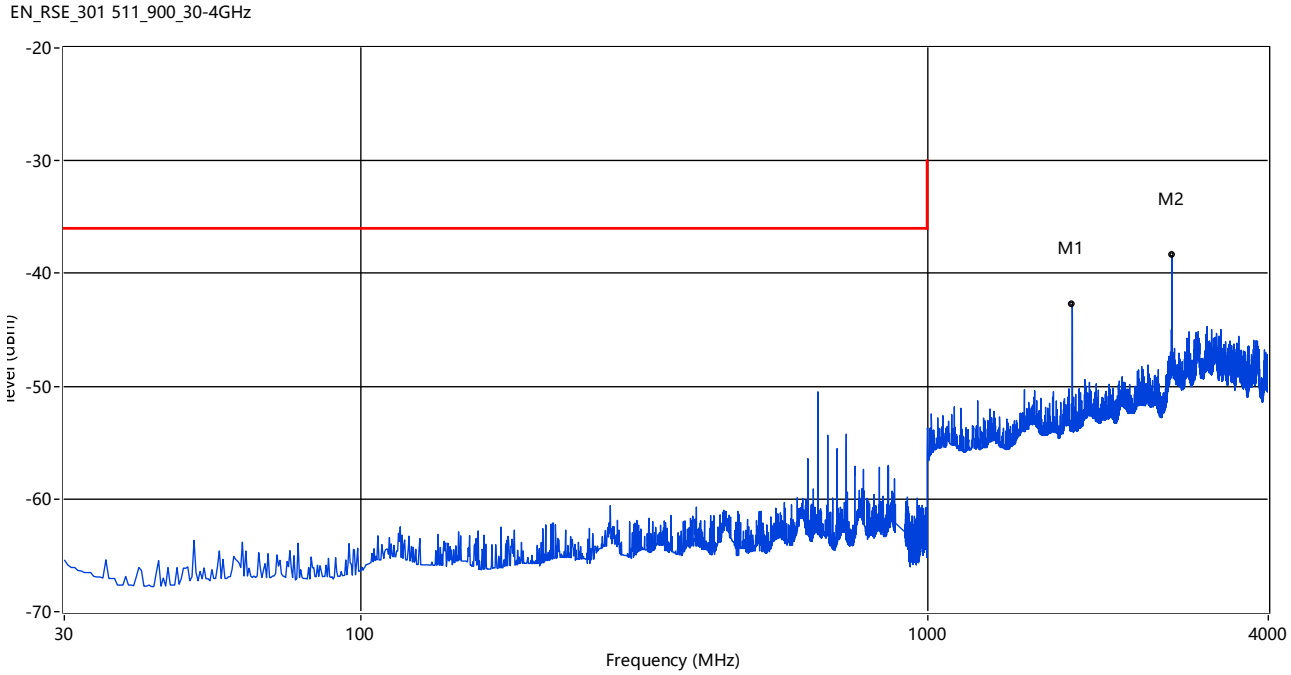
Note: The EUT is connected with the GSM base station when the BT is transmiting.

MS allocated a channel(LVNT)

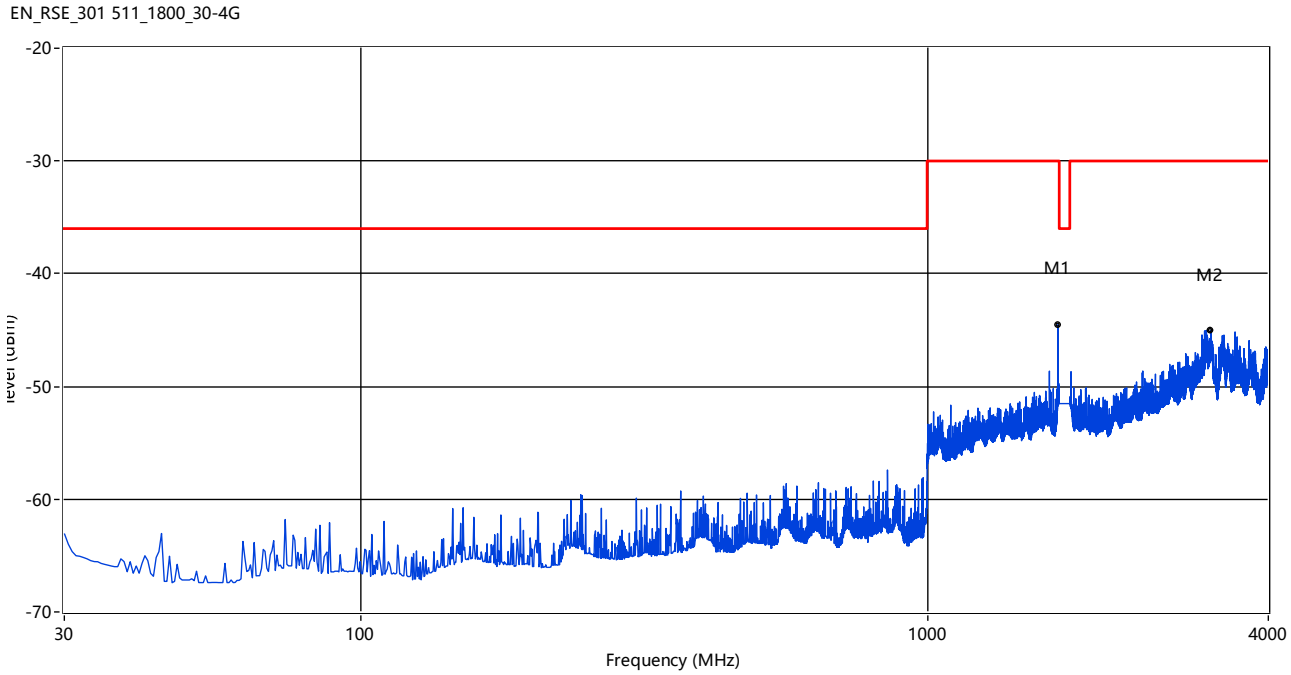
GPRS900 Horizontal



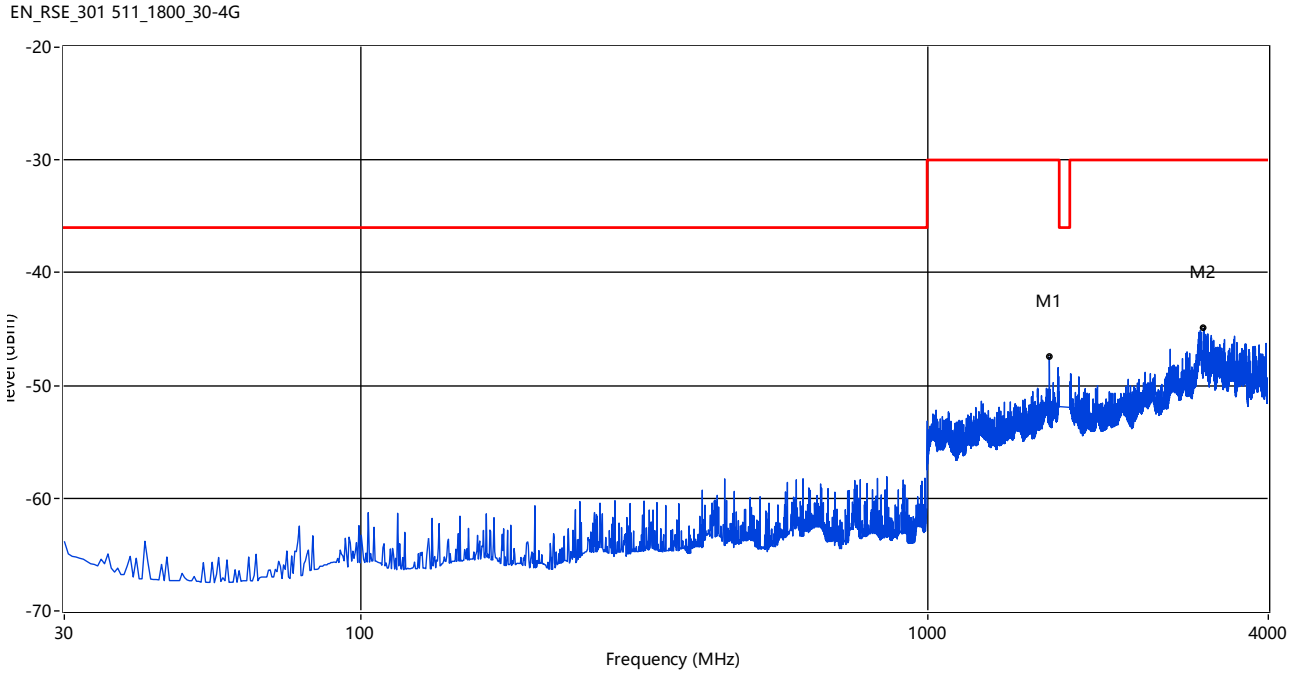
GPRS900 Vertical



GPRS1800 Horizontal



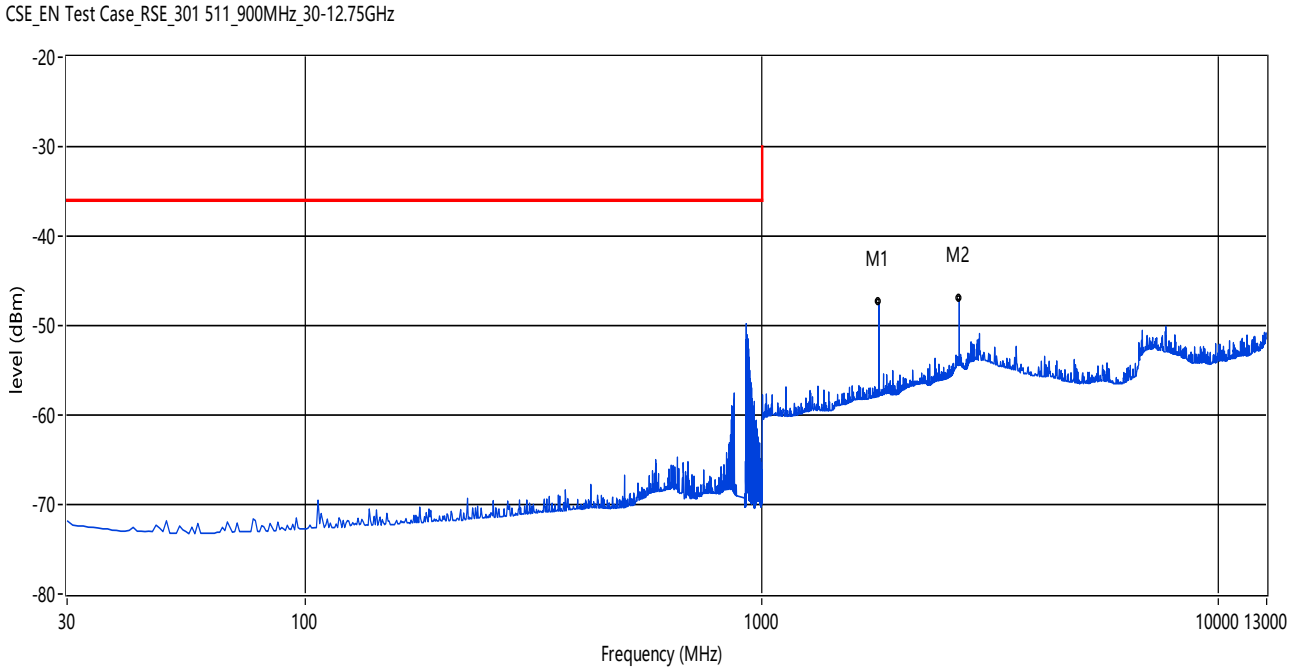
GPRS1800 Vertical



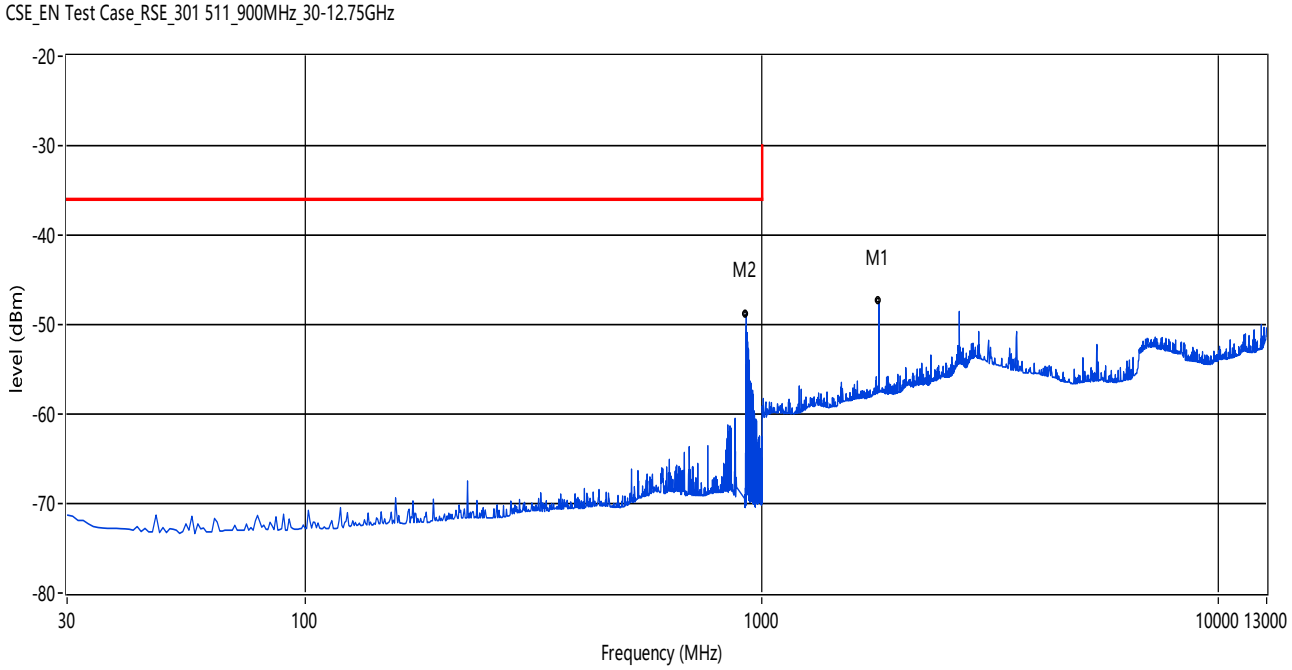
Note: The EUT is connected with the GSM base station when the BT is transmiting.

MS allocated a channel(HVNT)

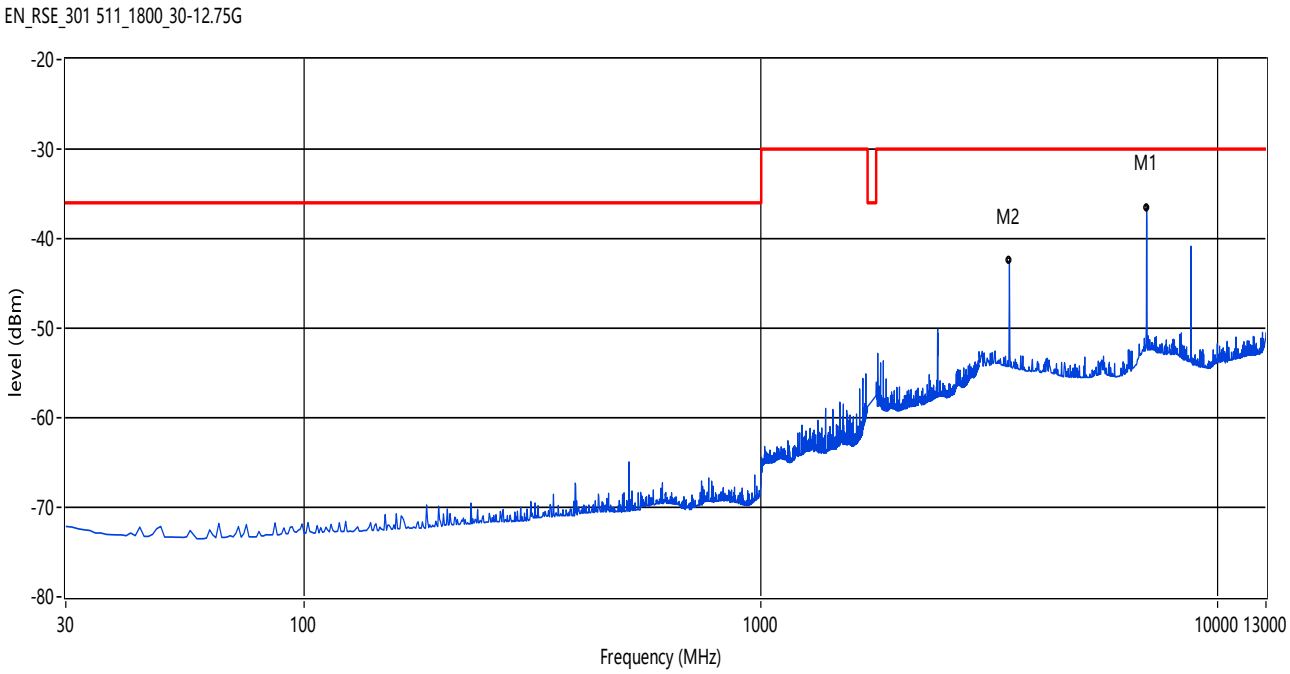
GPRS900 Horizontal



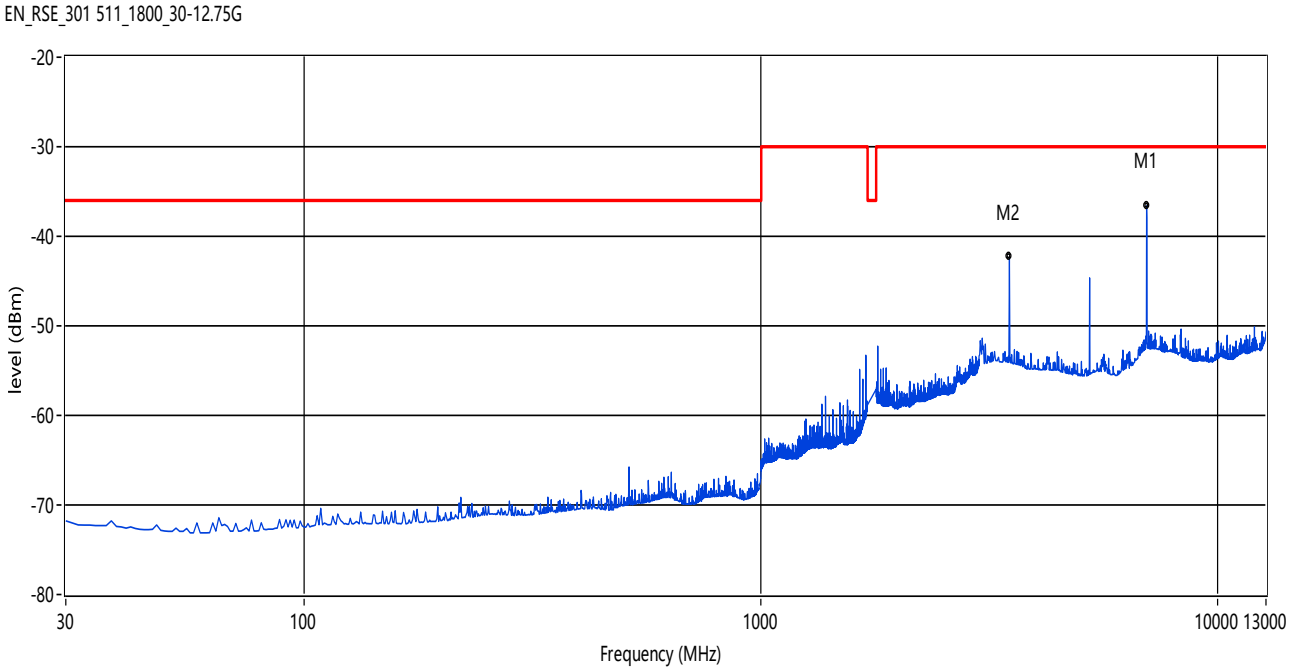
GPRS900 Vertical



GPRS1800 Horizontal



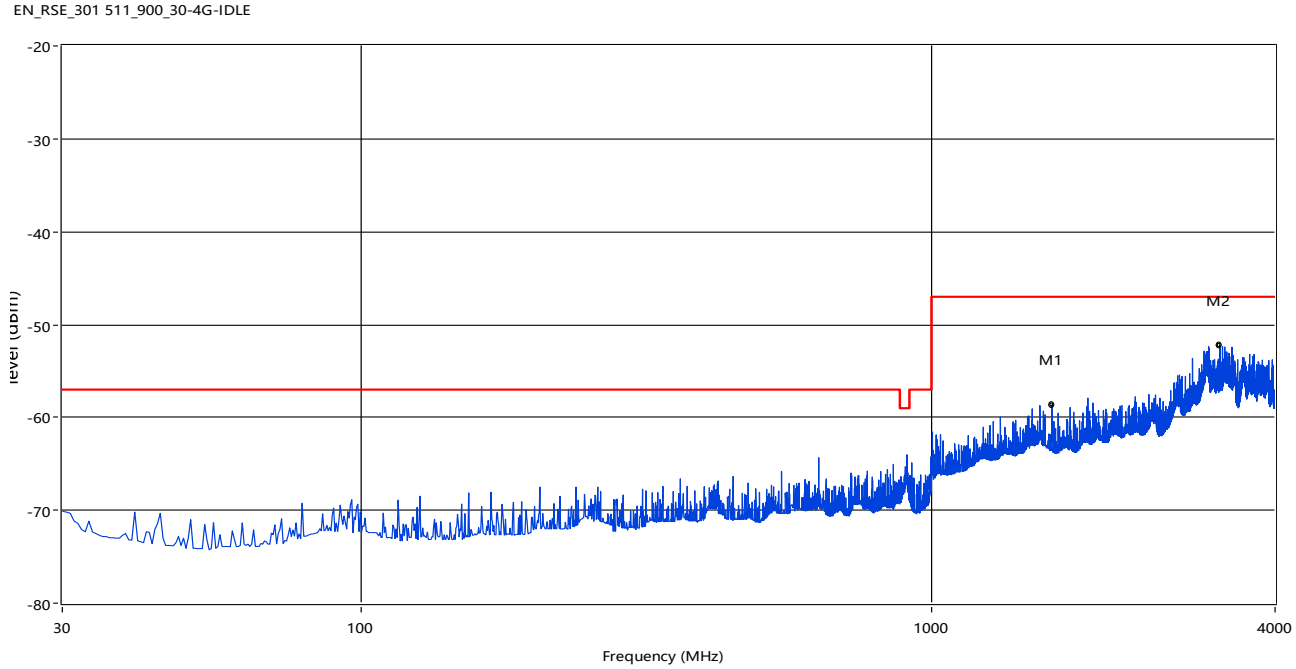
GPRS1800 Vertical



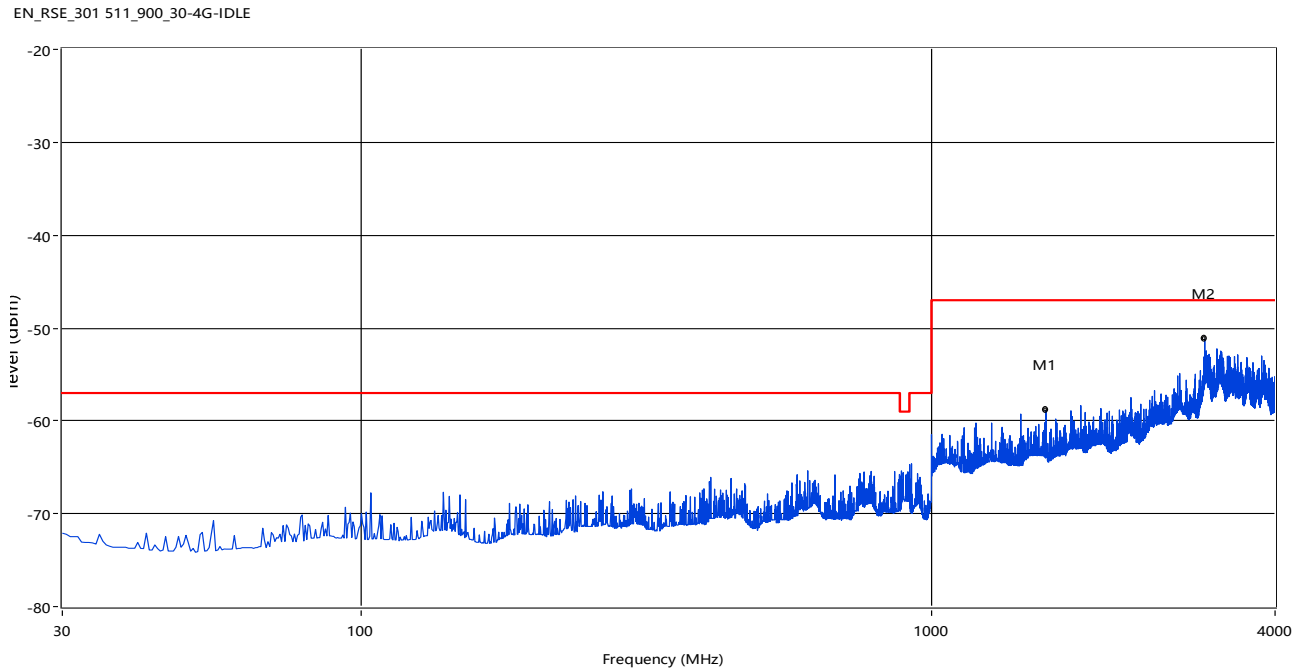
Note: The EUT is connected with the GSM base station when the BT is transmiting.

MS in idle mode(Normal)

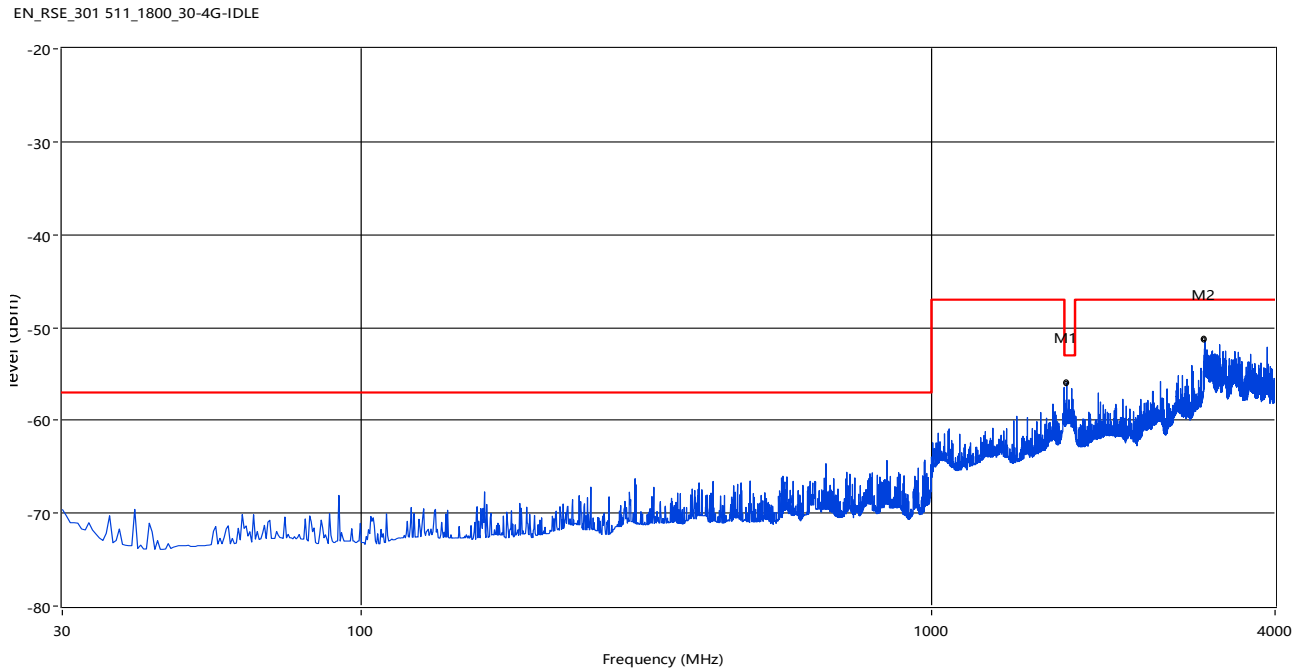
GPRS900 Horizontal



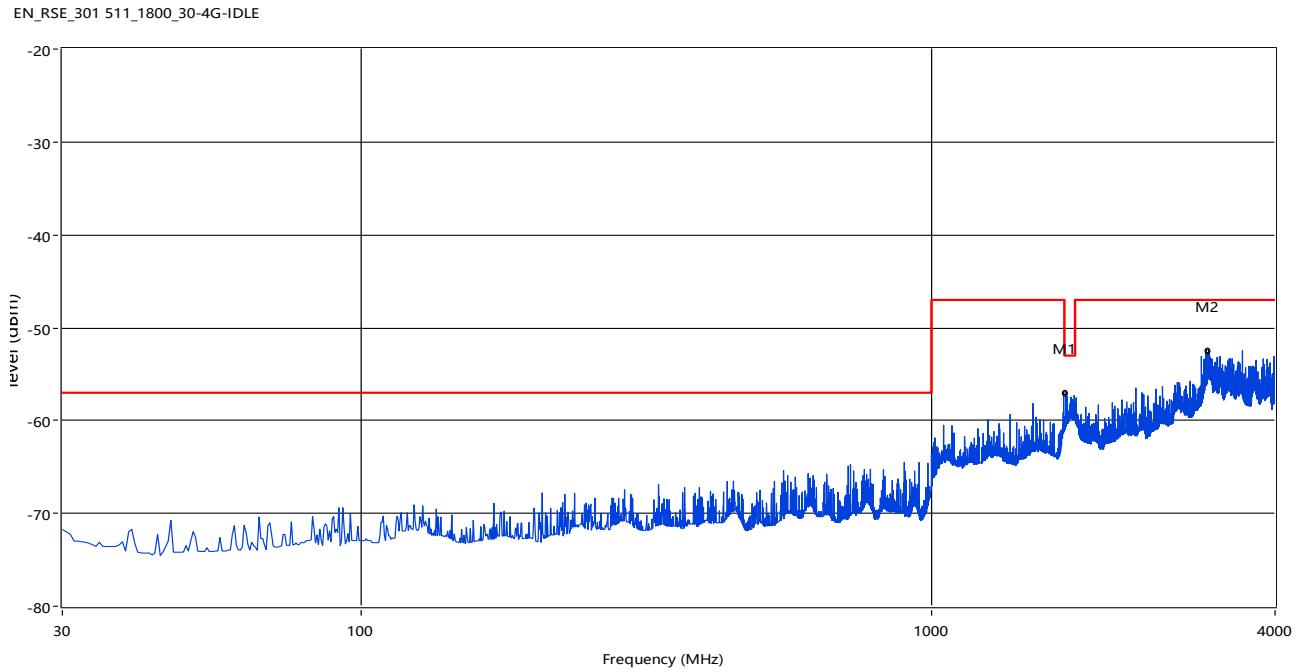
GPRS900 Vertical



GPRS1800 Horizontal

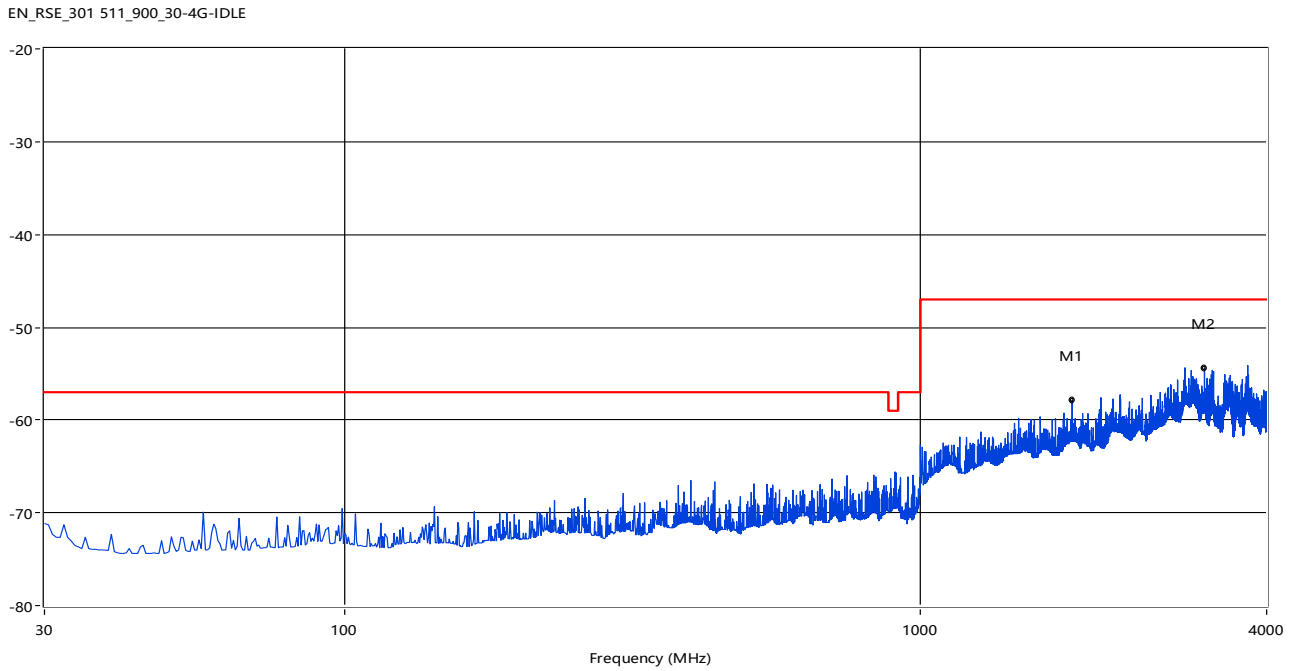


GPRS1800 Vertical

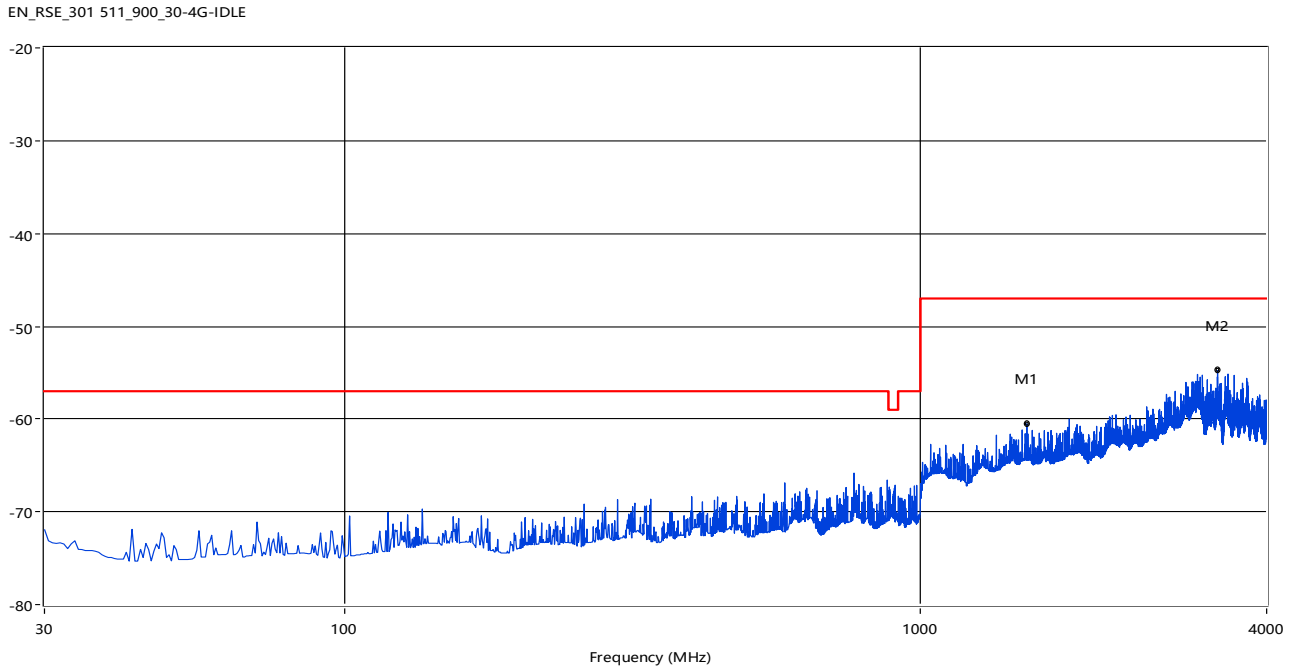


MS in idle mode(LVNT)

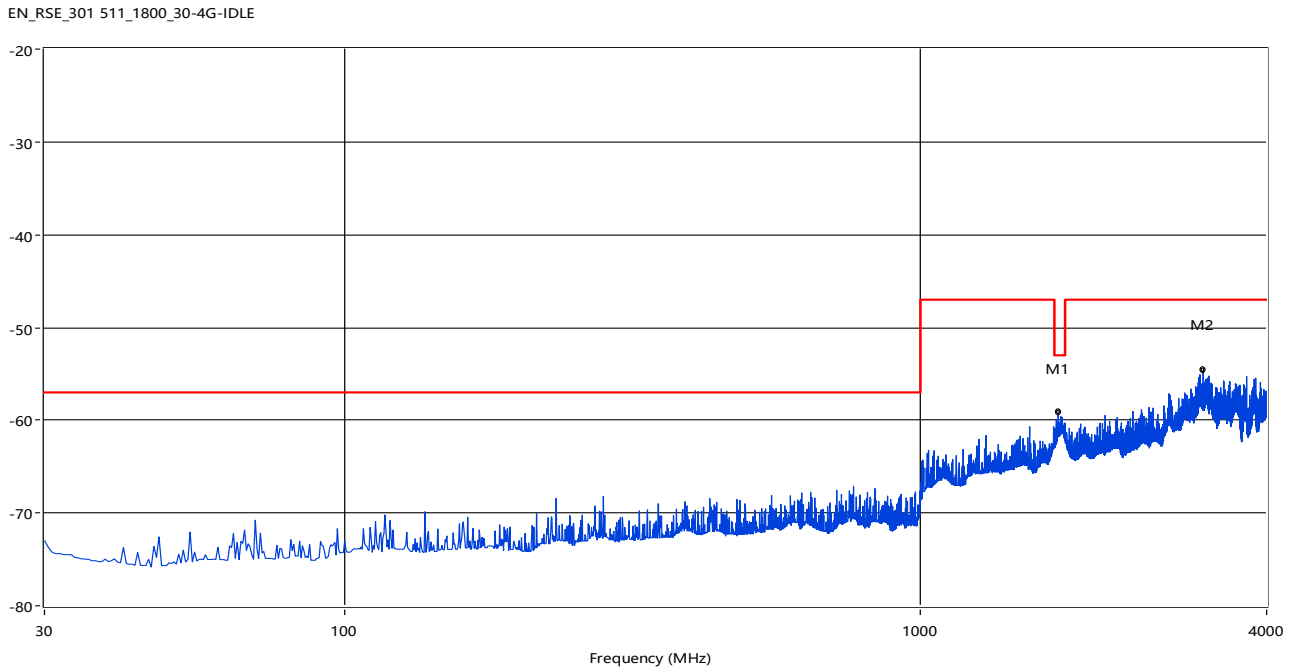
GPRS900 Horizontal



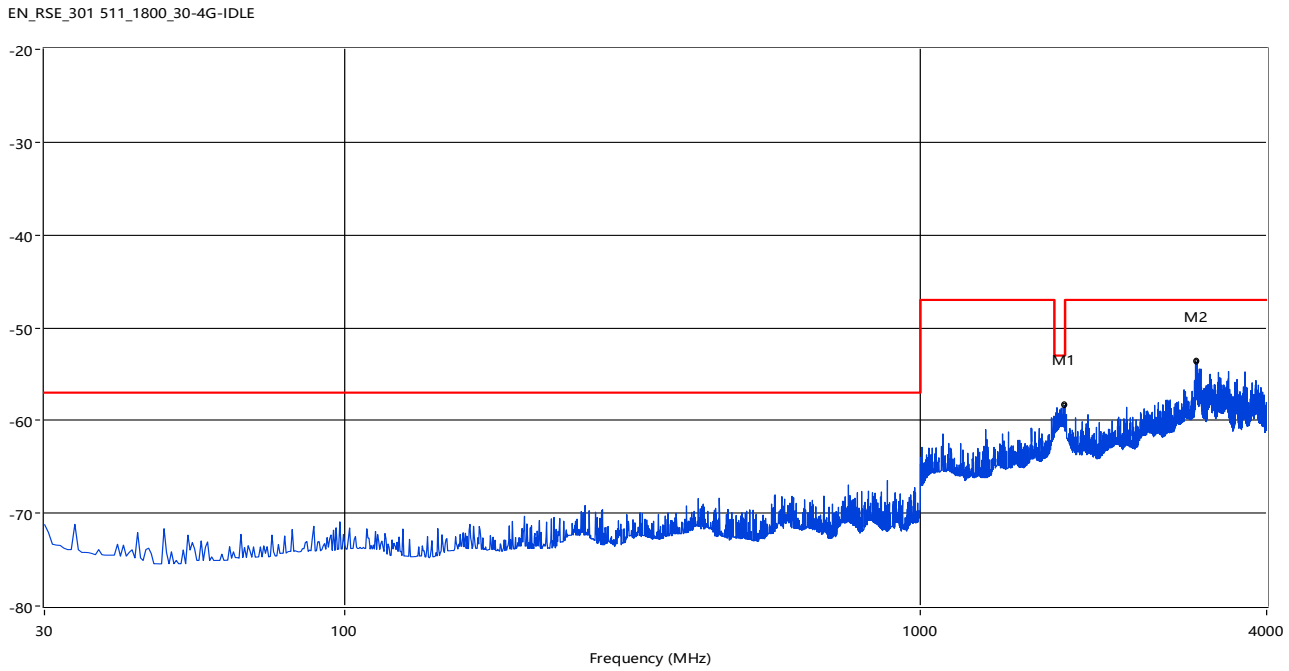
GPRS900 Vertical



GPRS1800 Horizontal

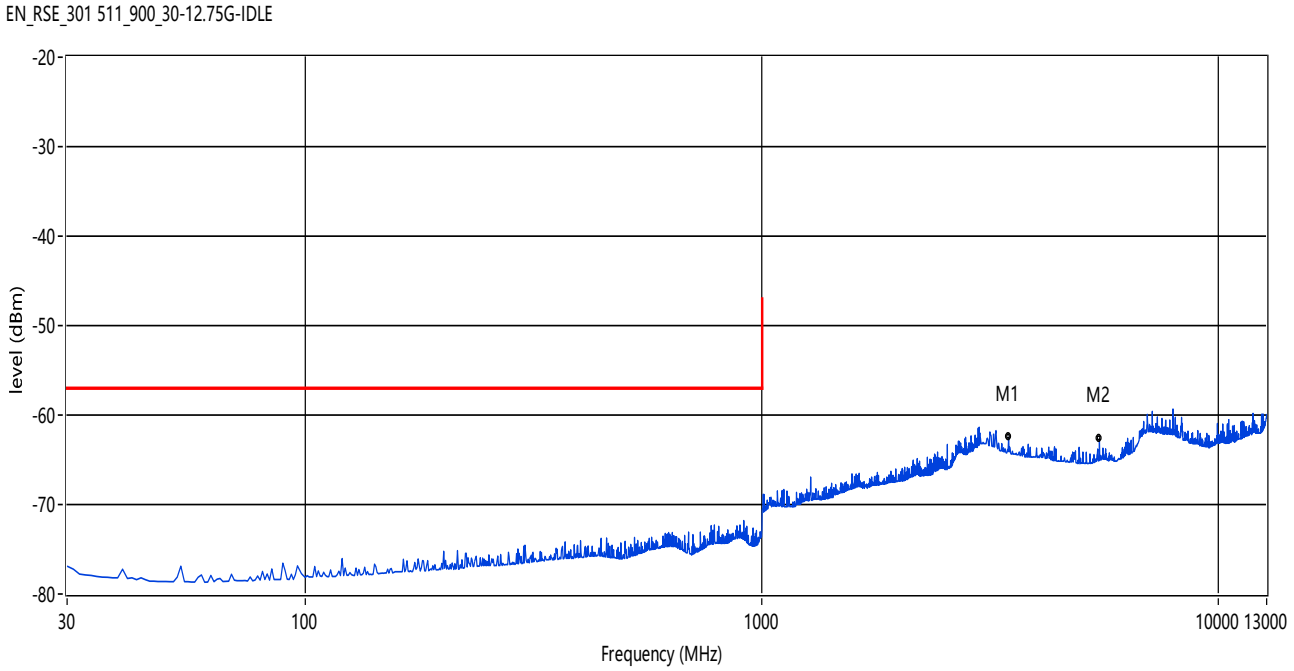


GPRS1800 Vertical

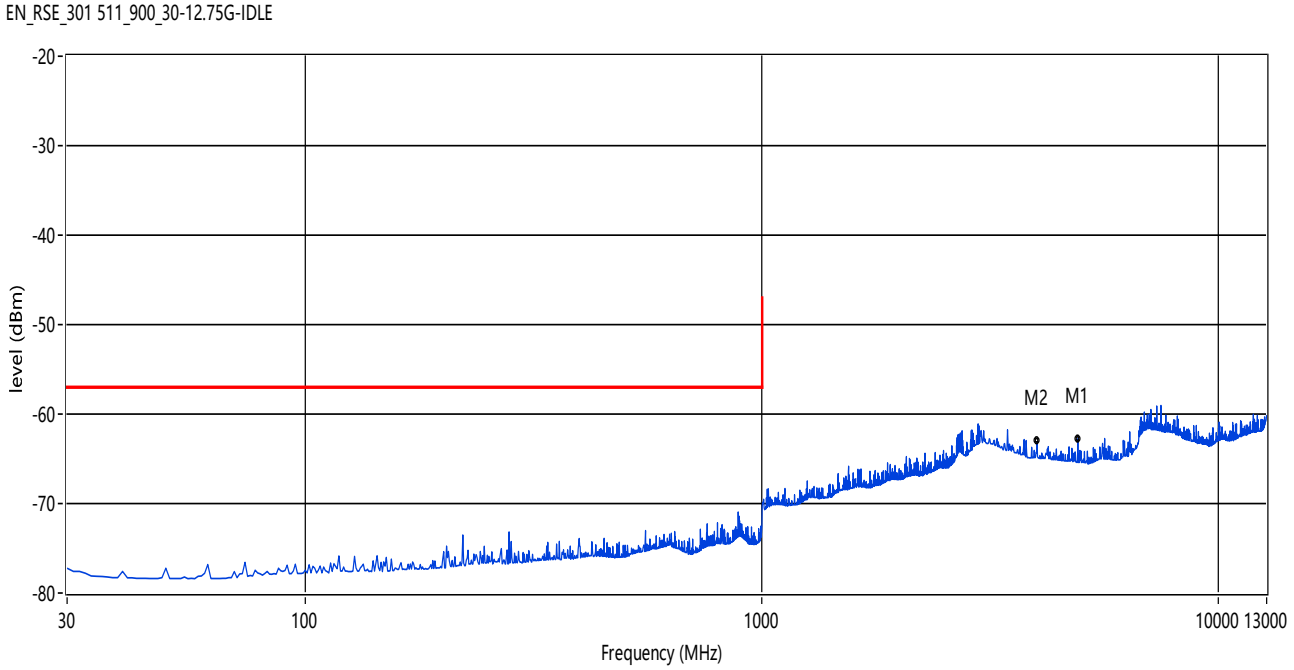


MS in idle mode(HVNT)

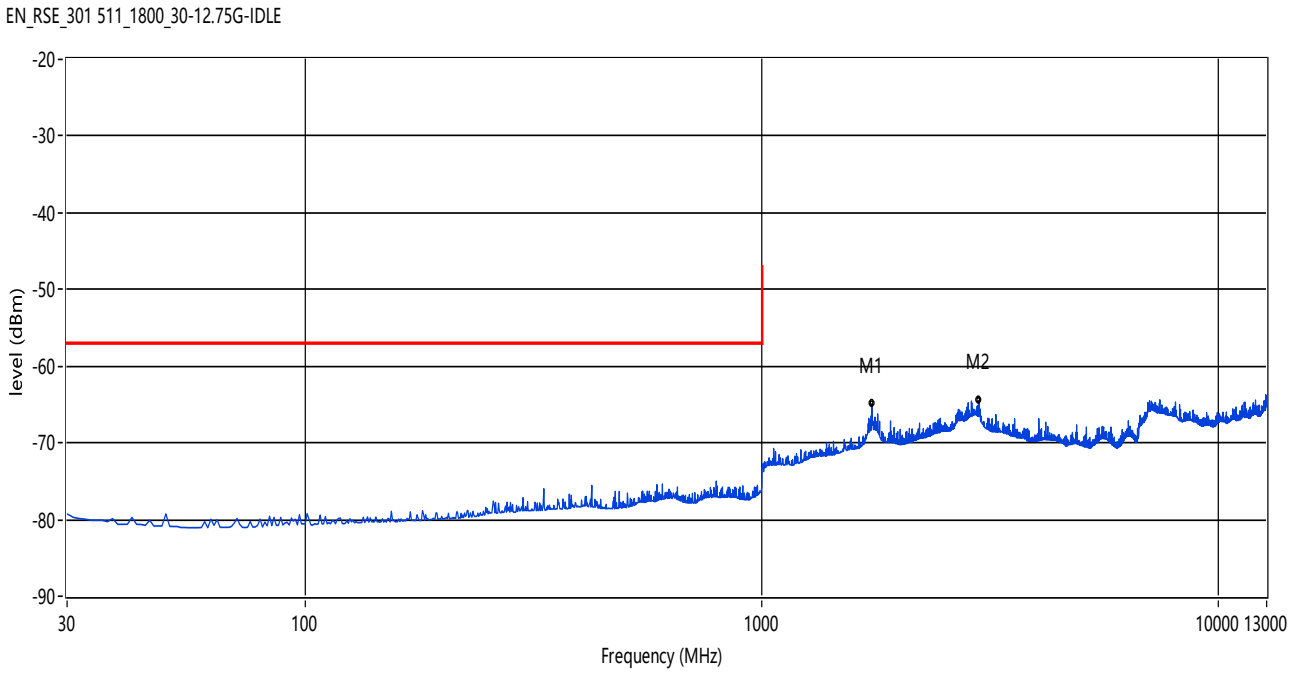
GPRS900 Horizontal



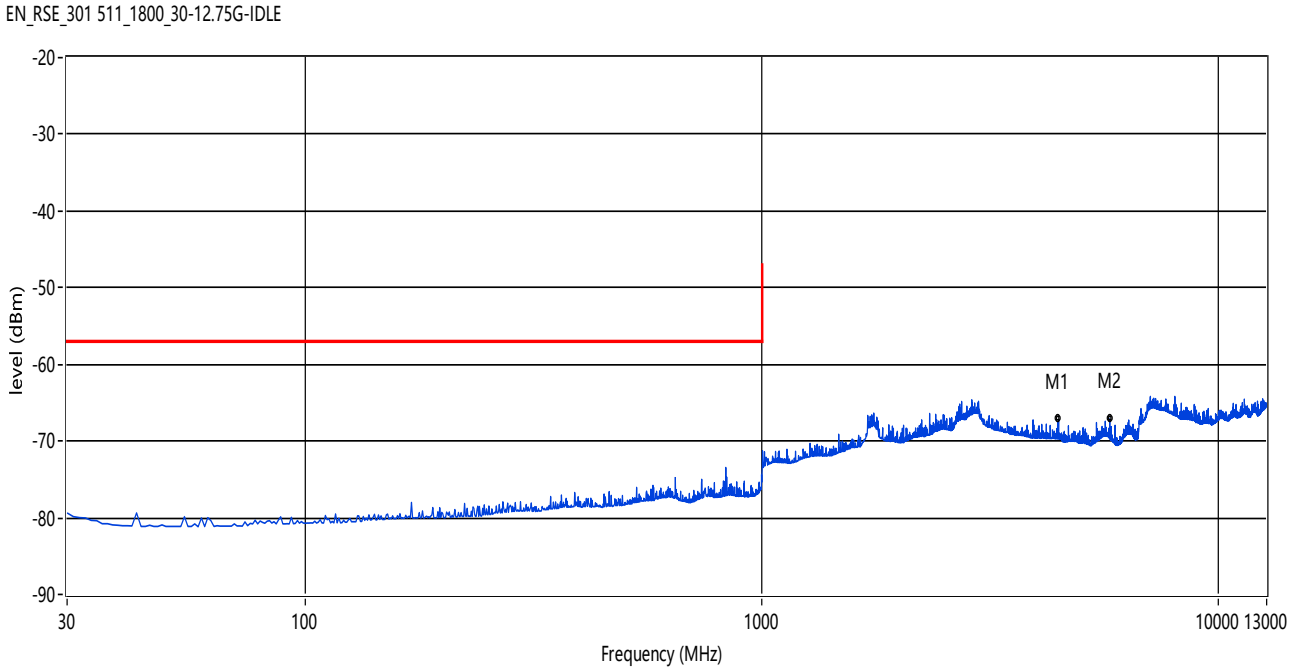
GPRS900 Vertical



GPRS1800 Horizontal



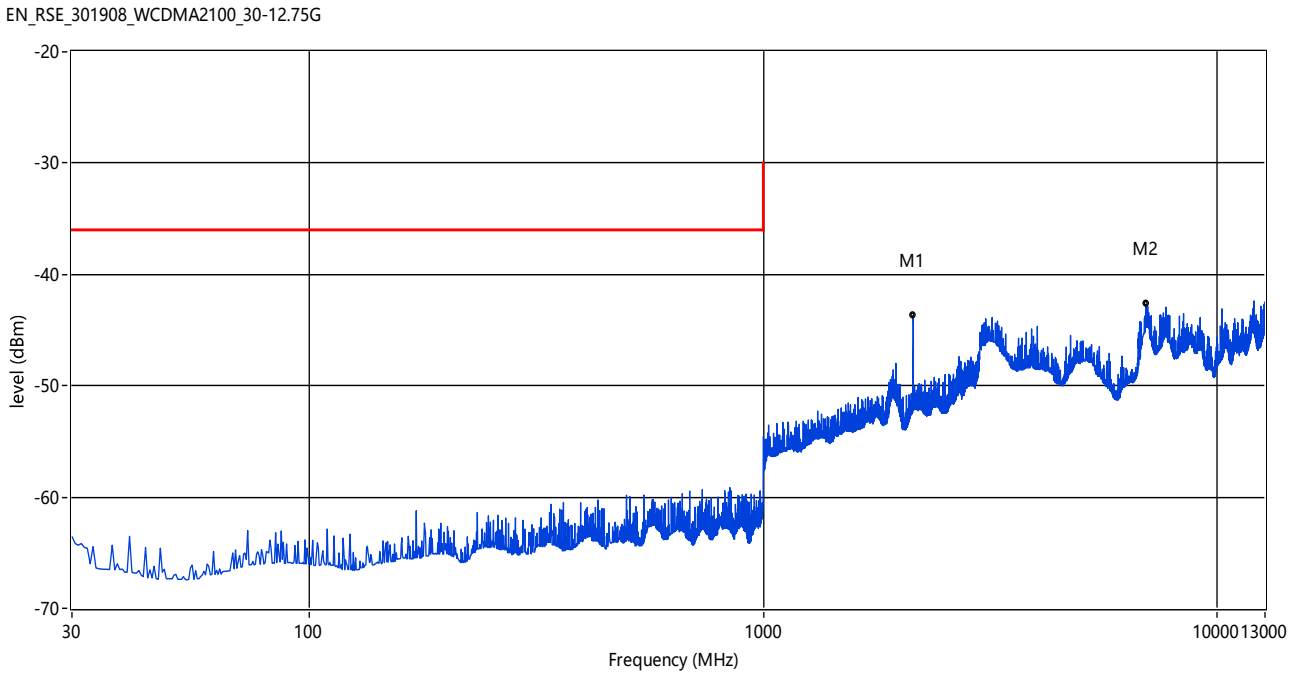
GPRS1800 Vertical



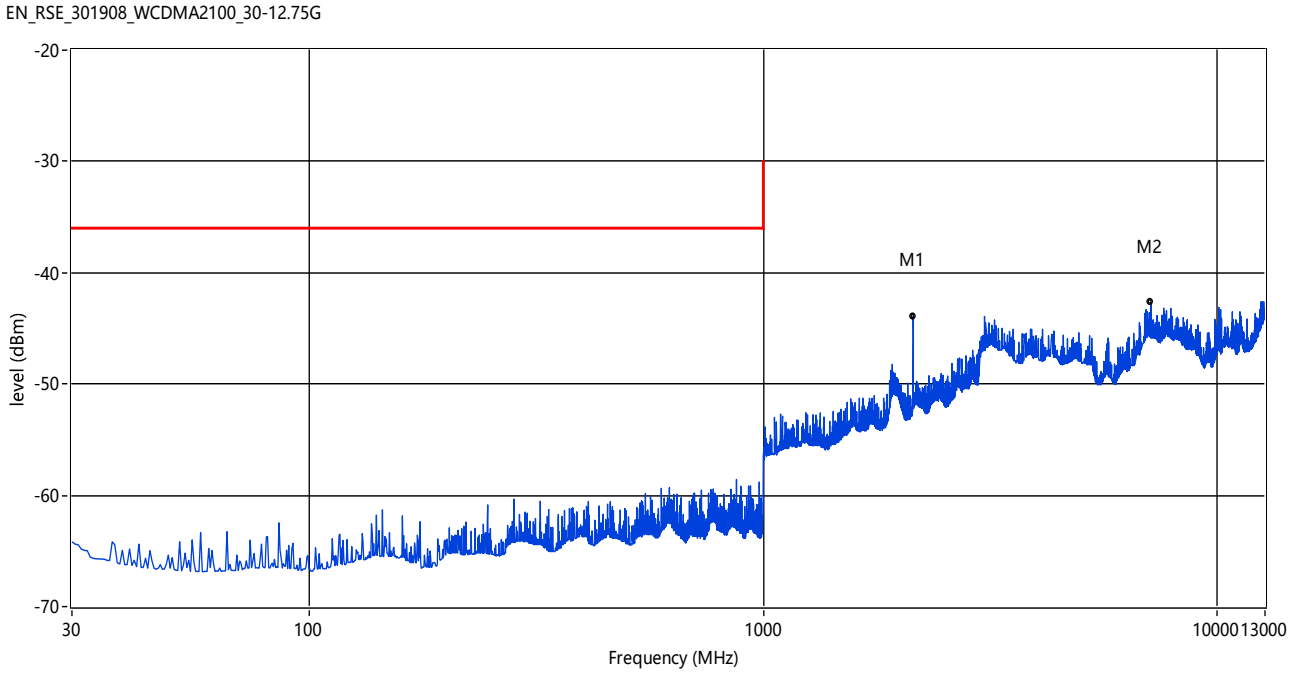
Clause 4.2.2(EN 301 908-1) Transmitter spurious emissions- Radiated

TX MODE

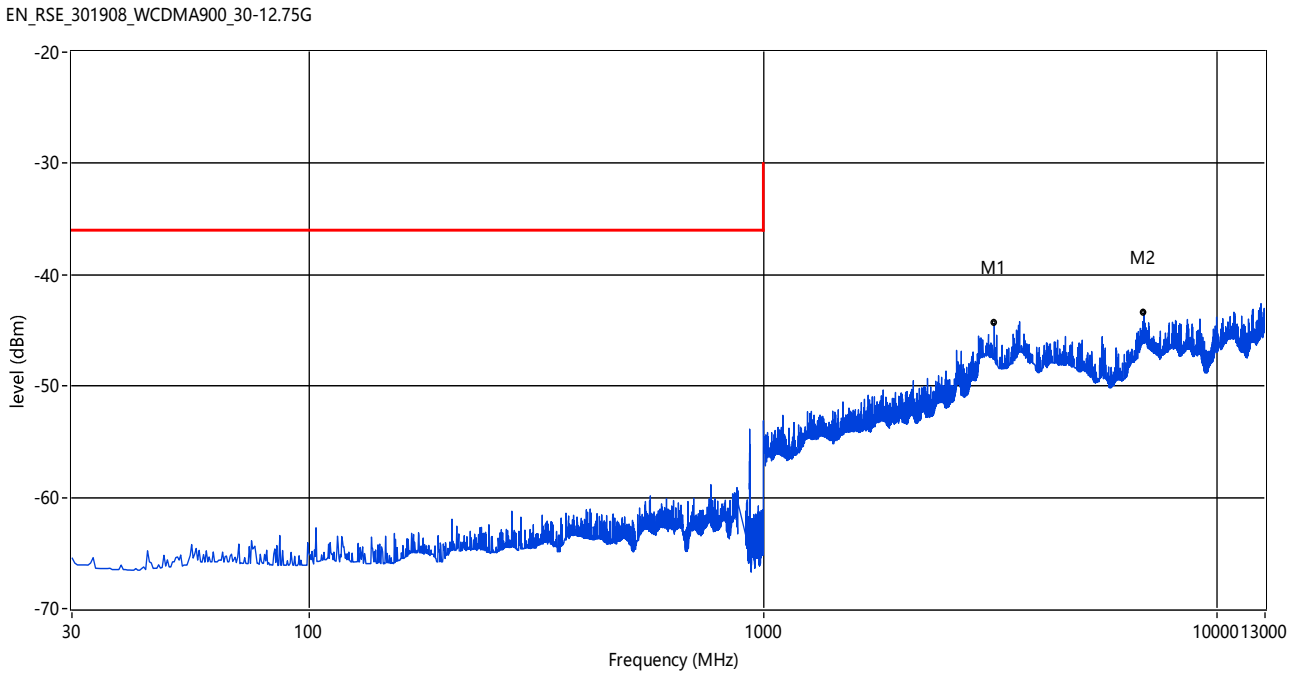
WCDMA Band 1 Horizontal



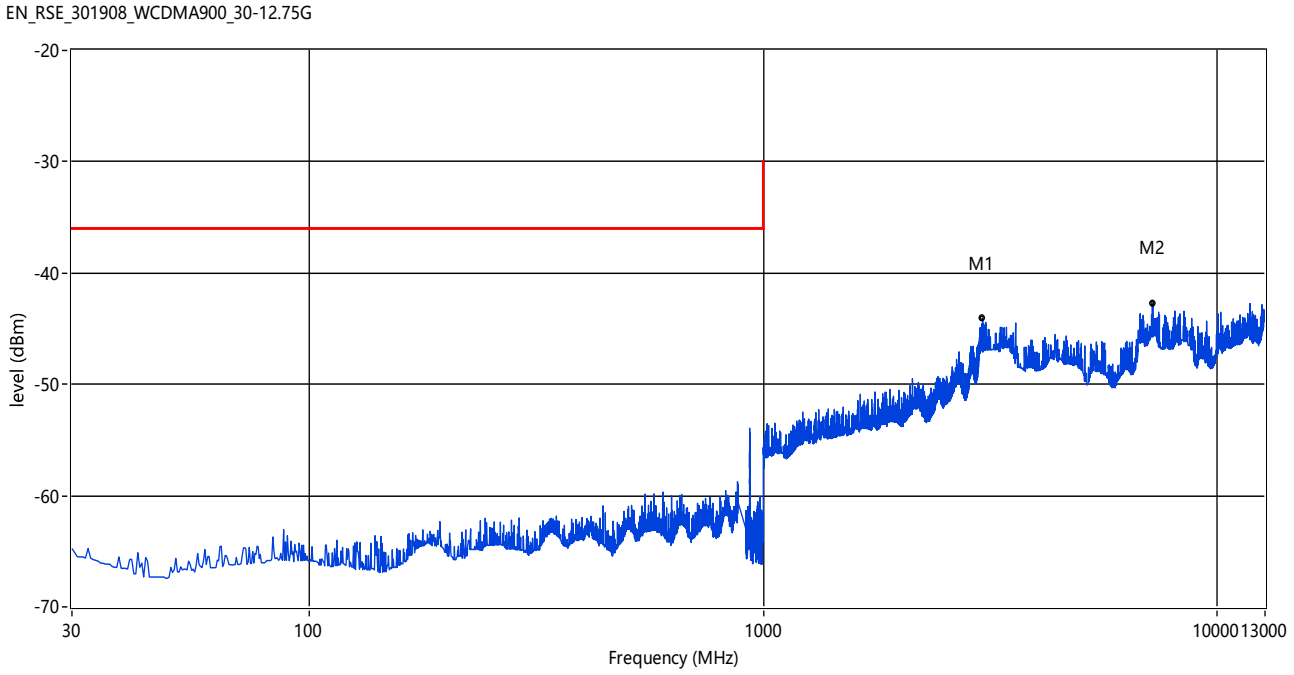
WCDMA Band 1 Vertical



WCDMA Band 8 Horizontal



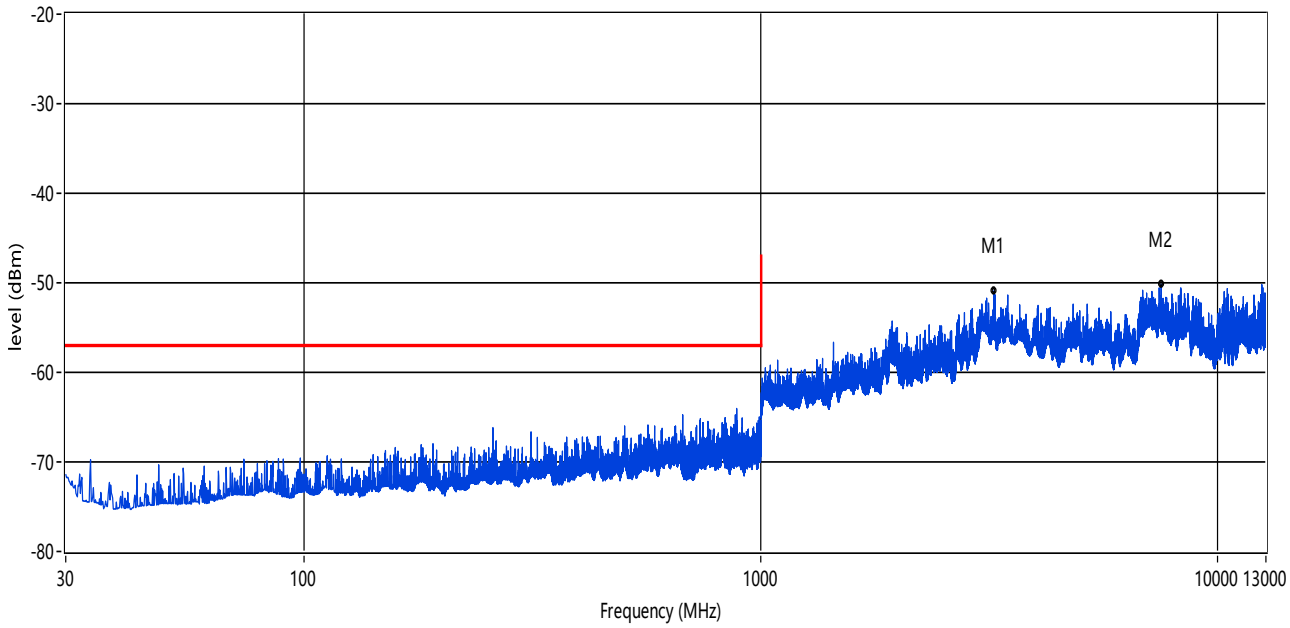
WCDMA Band 8 Vertical



IDLE MODE

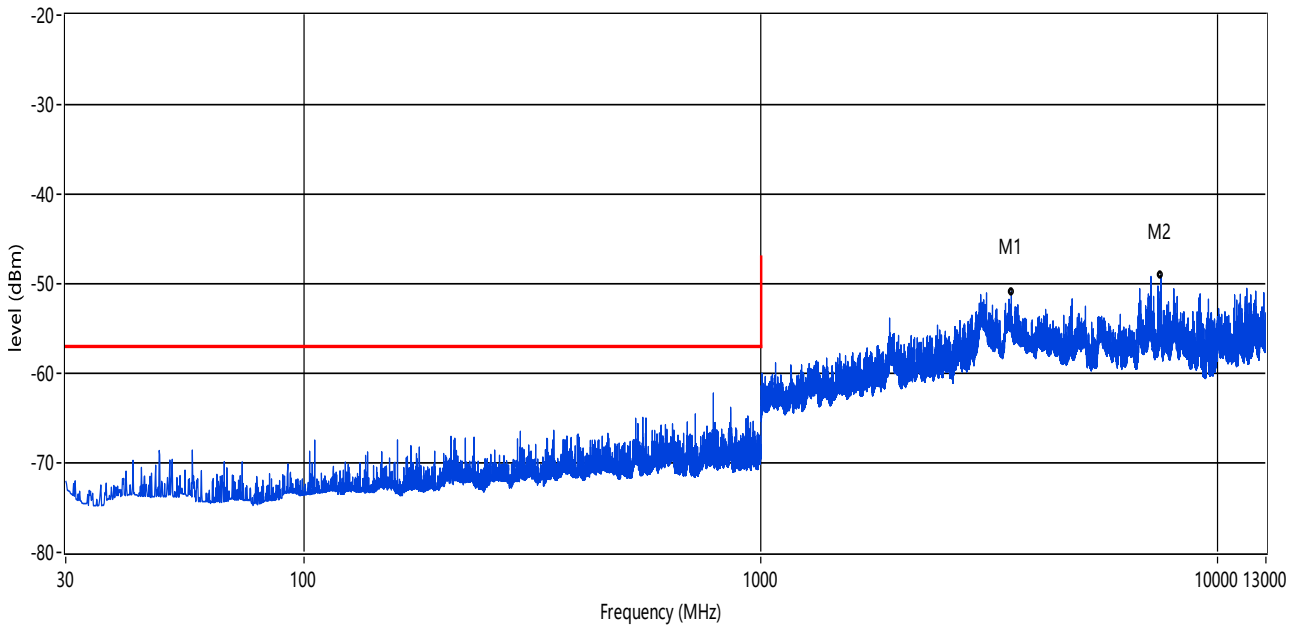
WCDMA Band 1 Horizontal

EN_RSE_301908_WCDMA2100_30-12.75G-IDLE

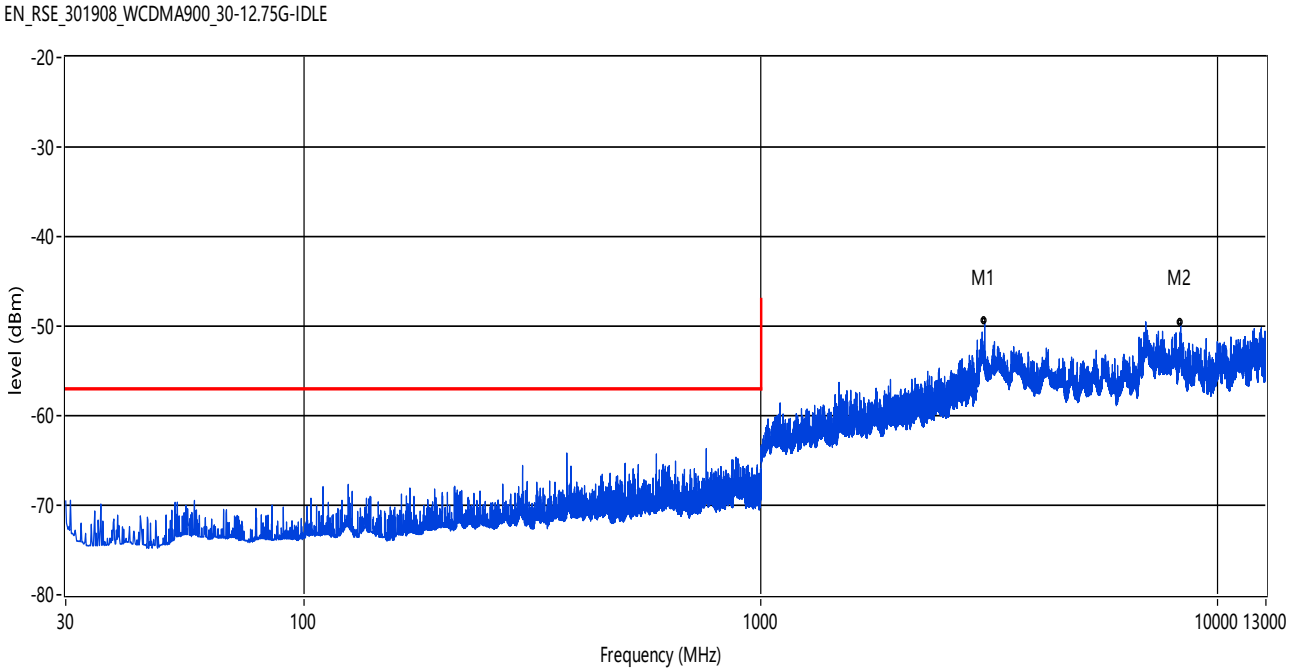


WCDMA Band 1 Vertical

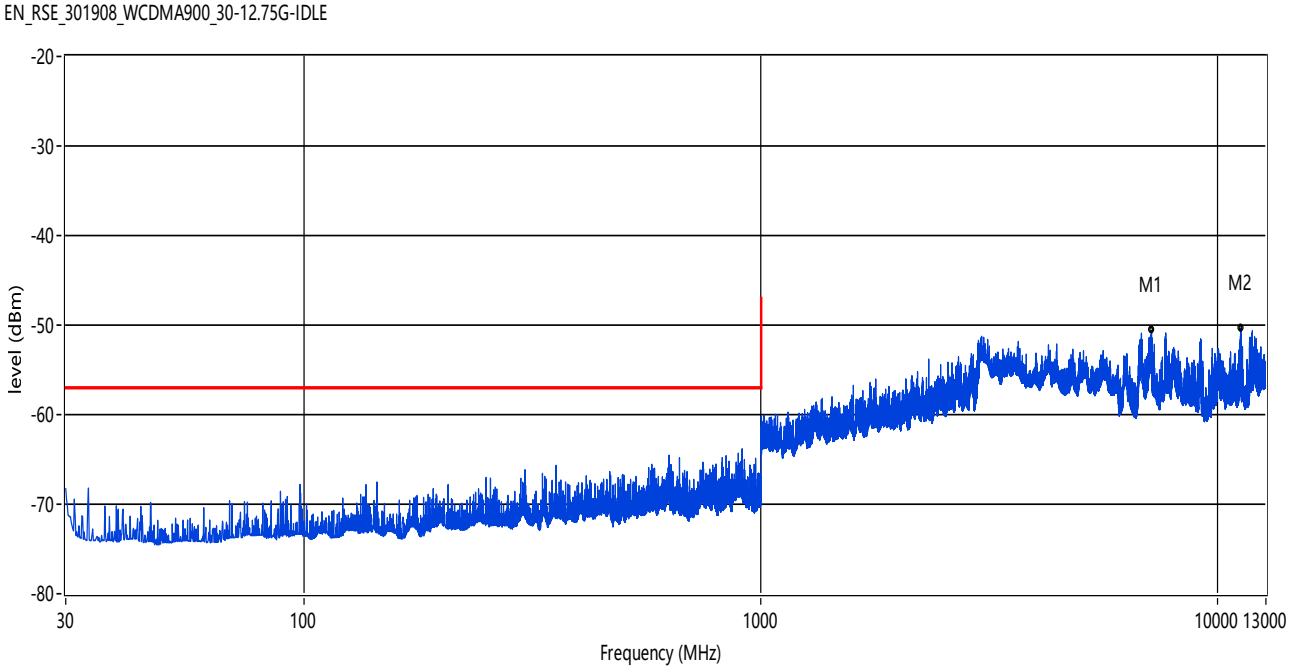
EN_RSE_301908_WCDMA2100_30-12.75G-IDLE



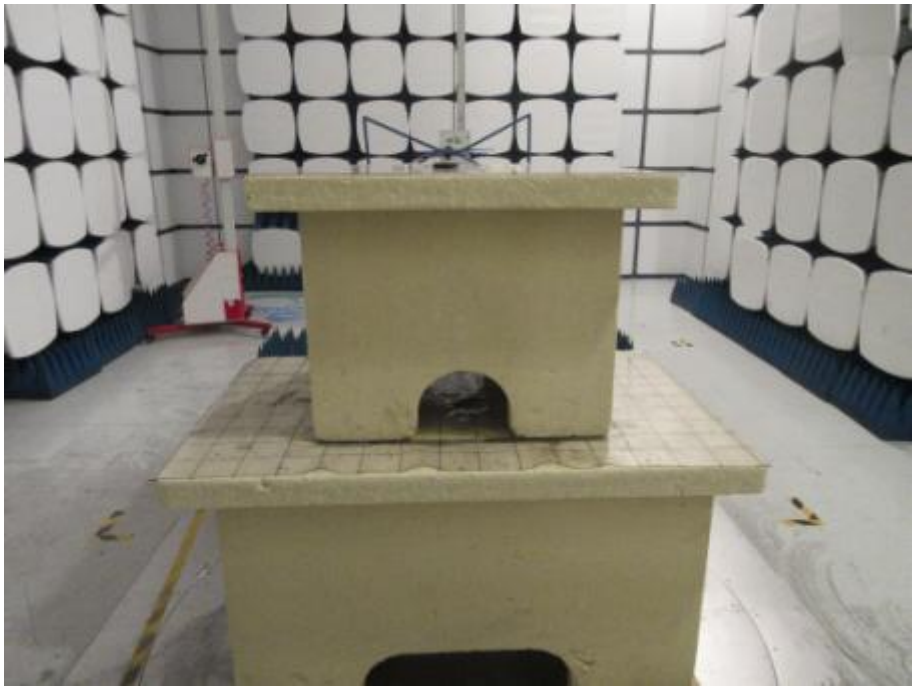
WCDMA Band 8 Horizontal

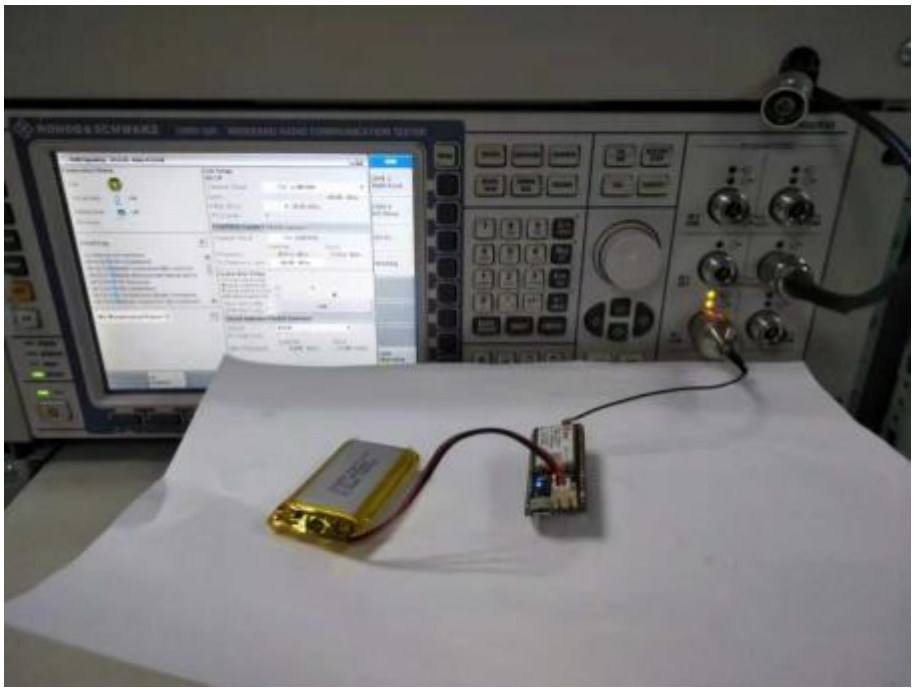


WCDMA Band 8 Vertical



Test Setup Photos





END OF THE REPORT