FCC RADIO TEST REPORT

FCC ID	:	**A4RG8HHN**
Equipment	:	**Phone**
Model Name	:	**G8HHN**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC 47 CFR Part 2, 22(H), 24(E), 27(L)**

The product was received on Aug. 25, 2023 and testing was performed from Aug. 30, 2023 to Dec. 06, 2023. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issue Date
FG380306A	01	Initial issue of report	Dec. 01, 2023
FG380306A	02	1. Revise Test Date, Test Mode and Appendix A2 2. Add Antenna Information Remark 2 This report is an updated version, replacing the report issued on Dec. 01, 2023.	Dec. 07, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
	§22.913 (a)(5)	Effective Radiated Power (GSM850) (WCDMA Band V)		
	§24.232 (c)	Equivalent Isotropic Radiated Power (GSM1900) (WCDMA Band II)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (WCDMA Band IV)		
3.3	§24.232 (d)	Peak-to-Average Ratio	Pass	-
3.4	§2.1049 §22.917 (b) §24.238 (b) §27.53 (g)	Occupied Bandwidth (GSM850) (WCDMA Band V) (GSM1900) (WCDMA Band II) (WCDMA Band IV)	Pass	-
3.5	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Band Edge Measurement (GSM850) (WCDMA Band V) (GSM1900) (WCDMA Band II) (WCDMA Band IV)	Pass	-
3.6	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Conducted Emission (GSM850) (WCDMA Band V) (GSM1900) (WCDMA Band II) (WCDMA Band IV)	Pass	-
3.7	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	Pass	-
4.4	§2.1053 §22.917 (a) §24.238 (a) §27.53 (h)	Field Strength of Spurious Radiation (GSM850) (WCDMA Band V) (GSM1900) (WCDMA Band II) (WCDMA Band IV)	Pass	21.63 dB under the limit at 2480.00 MHz for Tx0 Antenna 27.05 dB under the limit at 2552.00 MHz for Tx1 Antenna

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”.
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: William Chen

Report Producer: Rachel Hsieh

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs GSM/WCDMA/LTE/5G NR, Bluetooth, BLE, BLE channel sounding, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, Wi-Fi 6GHz 802.11a/ax, NFC, WPC Rx and GNSS Rx. **Antenna Type** WWAN: **<Ant. 0>:** ILA Antenna **<Ant. 1>:** ILA Antenna **<Ant. 2>:** IFA Antenna **<Ant. 5>:** IFA Antenna **<Ant. 6>:** IFA Antenna

Remark: The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.

Antenna information					
Band	**Ant0**	**Ant1**	**Ant2**	**Main Ant. #**	**Sub Ant. #**
GSM 850	-4.3	-4.5		0	1
GSM 1900	-2.6		-0.8	2	0
WCDMA B5	-4.3	-4.5		0	1
WCDMA B2	-2.6		-0.8	2	0
WCDMA B4	-2.2		-0.1	2	0

Remark:
1. For Test Items, Main Ant. means Tx0 and Sub Ant. means Tx1.
2. After preliminary scan, the main antenna TX0 is selected as the worst mode to be reported for conducted test in the test report.

EUT Information List	
S/N	**Performed Test Item**
38011JEKB00251	Conducted Measurement ERP/EIRP
38031JEKB01581	Radiated Spurious Emission

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH03-HY
Test Engineer	Eric Wu
Temperature (℃)	22.2~24.2
Relative Humidity (%)	38.9~40.9

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH20-HY (TAF Code: 3786)
Test Engineer	John Chuang, David Dai and Howard Huang
Temperature (℃)	18.6~21.5
Relative Humidity (%)	68.6~70.3
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW3786

1.4 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- ANSI C63.26-2015
- ANSI / TIA-603-E
- FCC 47 CFR Part 2, 22(H), 24(E), 27(L)
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape) and accessory (Adapter or Earphone), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and find Y plane with Adapter as worst plane.

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V
2. 30 MHz to 18000 MHz for WCDMA Band IV
3. 30 MHz to 19100 MHz for GSM1900 and WCDMA Band II

All modes, data rates and positions were investigated.

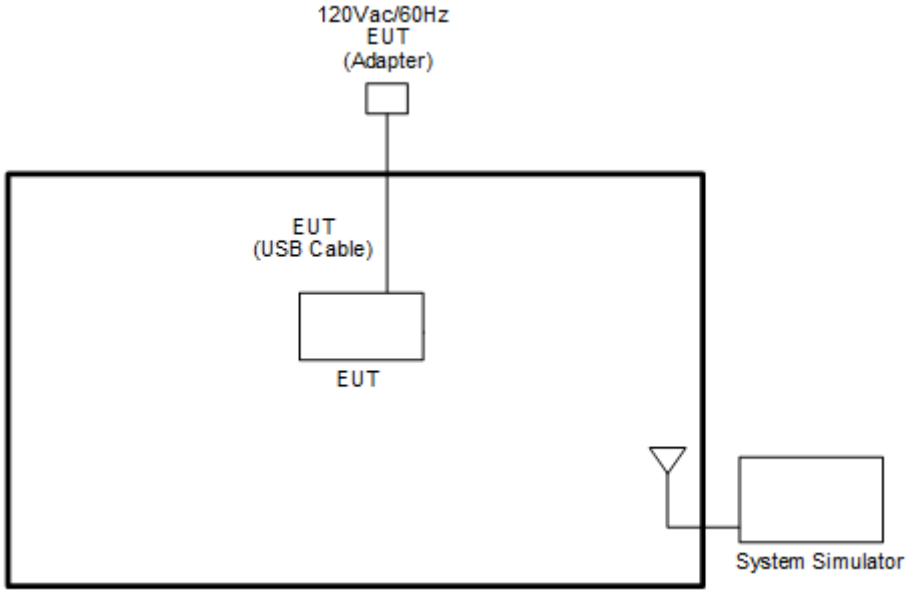
Test modes are chosen to be reported as the worst case configuration below:

Test Modes		
Band	**Radiated TCs**	**Conducted TCs**
GSM850	■ GPRS Class 8 Link ■ EDGE Class 8 Link	■ GPRS Class 8 Link ■ EDGE Class 8 Link
GSM1900	■ GPRS Class 8 Link ■ EDGE Class 8 Link	■ GPRS Class 8 Link ■ EDGE Class 8 Link
WCDMA Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band IV	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link

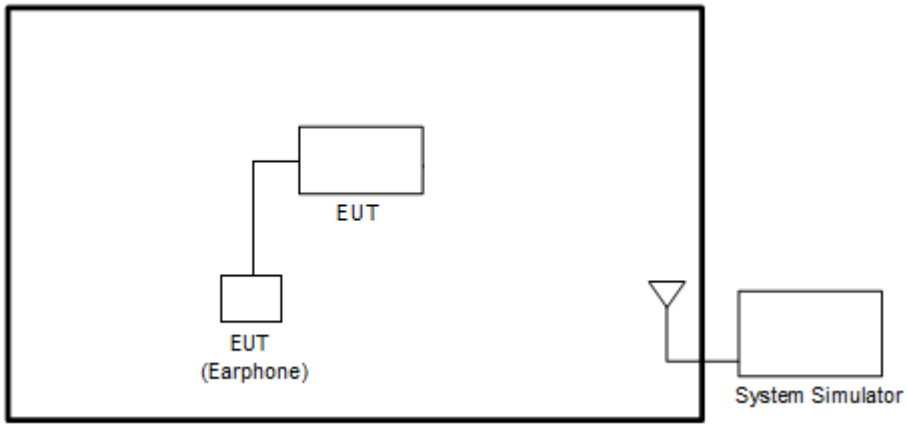
Remark: All the radiated test cases were performed with Adapter 1 and USB Cable 3.

2.2 Connection Diagram of Test System

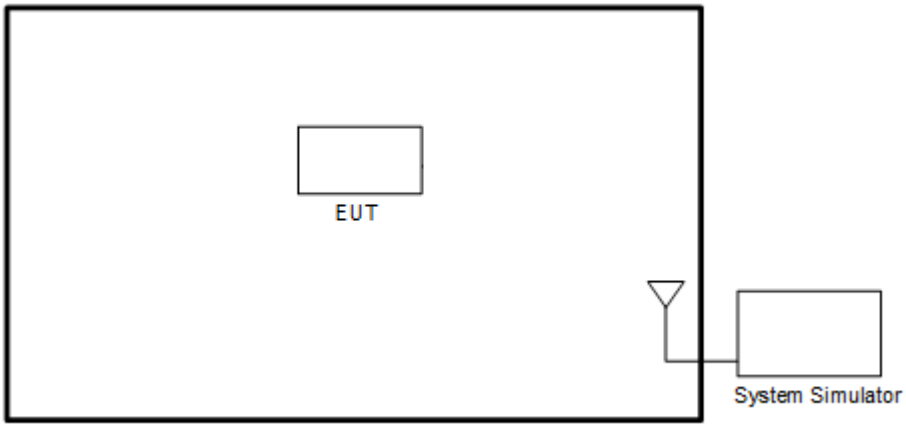
<EUT with Adapter>



<EUT with Earphone>



<EUT without Accessory>



2.3 Support Unit used in test configuration

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

The following shows an offset computation example with RF cable loss 4.2 dB and a 10 dB attenuator.

Example:

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

2.5 Frequency List of Low/Middle/High Channels

Frequency List				
Band	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
GSM850	Channel	128	189	251
	Frequency	824.2	836.4	848.8
WCDMA Band V	Channel	4132	4182	4233
	Frequency	826.4	836.4	846.6
GSM1900	Channel	512	661	810
	Frequency	1850.2	1880.0	1909.8
WCDMA Band II	Channel	9262	9400	9538
	Frequency	1852.4	1880.0	1907.6
WCDMA Band IV	Channel	1312	1413	1513
	Frequency	1712.4	1732.6	1752.6

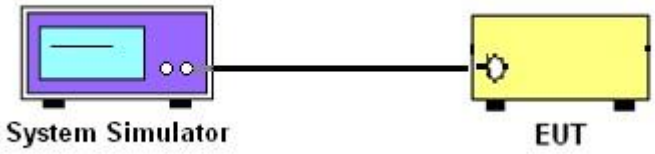
3 Conducted Test Result

3.1 Measuring Instruments

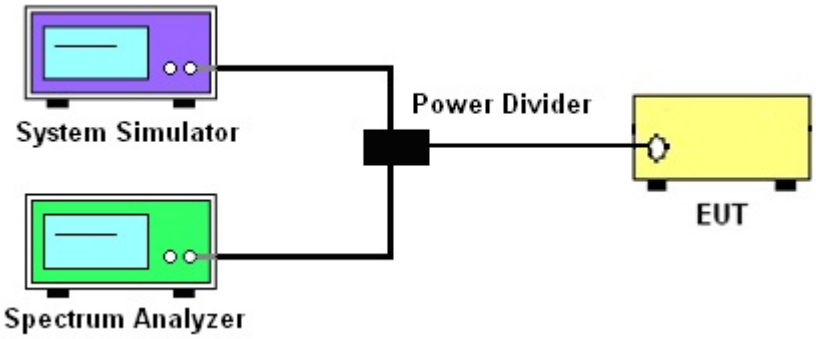
Please refer to the measuring equipment list in this test report.

3.1.1 Test Setup

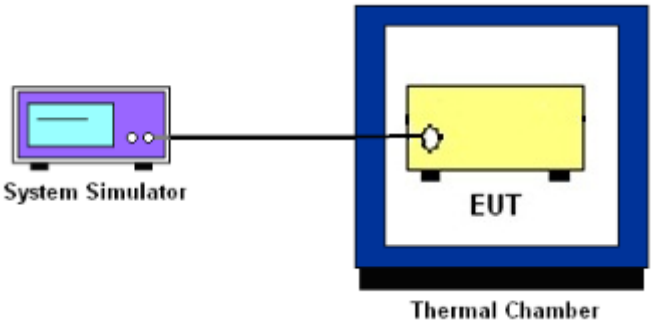
3.1.2 Conducted Output Power



3.1.3 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge and Conducted Spurious Emission



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power and ERP/EIRP

3.2.1 Description of the Conducted Output Power and ERP/EIRP

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for GSM850 and WCDMA Band V

The EIRP of mobile transmitters must not exceed 2 Watts for GSM1900 and WCDMA Band II

The EIRP of mobile transmitters must not exceed 1 Watts for WCDMA Band IV

According to KDB 412172 D01 Power Approach,

EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.2.2 Test Procedures

1. The transmitter output port is connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select the lowest, middle, and the highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.

3.3 Peak-to-Average Ratio

3.3.1 Description of the PAR Measurement

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.3.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

1. The EUT is connected to spectrum analyzer and system simulator via a power divider.
2. Set EUT to transmit at maximum output power.
3. When the duty cycle is less than 98%, then signal gating will be implemented on the spectrum analyzer by triggering from the system simulator.
4. Set the CCDF (Complementary Cumulative Distribution Function) option of the spectrum analyzer.
5. Record the maximum PAPR level associated with a probability of 0.1%.

3.4 99% Occupied Bandwidth and 26dB Bandwidth Measurement

3.4.1 Description of 99% Occupied Bandwidth and 26dB Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.4.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

1. The EUT is connected to spectrum analyzer and system simulator via a power divider.
2. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
3. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
4. Set the detection mode to peak, and the trace mode to max hold.
5. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
   (This is the reference value)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “–X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.5 Conducted Band Edge

3.5.1 Description of Conducted Band Edge Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

3.5.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT is connected to the spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT is connected to the spectrum analyzer by an RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. The band edges of low and high channels for the highest RF powers are measured.
4. The RF fundamental frequency shall be excluded against the limit line in the operating frequency band.
5. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

3.6 Conducted Spurious Emission

3.6.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.6.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT is connected to the spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT is connected to the spectrum analyzer by an RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency is measured.
4. The conducted spurious emission for the whole frequency range is taken.
5. The RF fundamental frequency shall be excluded against the limit line in the operating frequency band.
6. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

3.7 Frequency Stability

3.7.1 Description of Frequency Stability Measurement

22.355

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

24.235 & 27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

3.7.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT is set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature is decreased to -30°C and the EUT is stabilized before testing. Power is applied and the maximum change in frequency is recorded within one minute.
3. With power OFF, the temperature is raised in 10°C steps up to 50°C. The EUT is stabilized at each step for at least half an hour. Power is applied and the maximum frequency change is recorded within one minute.

3.7.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT is placed in a temperature chamber at 20±5° C and connected with the system simulator.
2. The power supply voltage to the EUT is varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency is measured for the worst case.

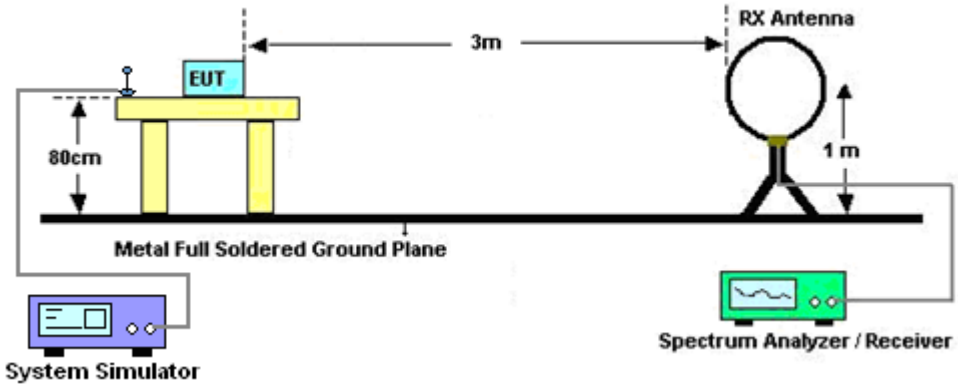
4 Radiated Test Items

4.1 Measuring Instruments

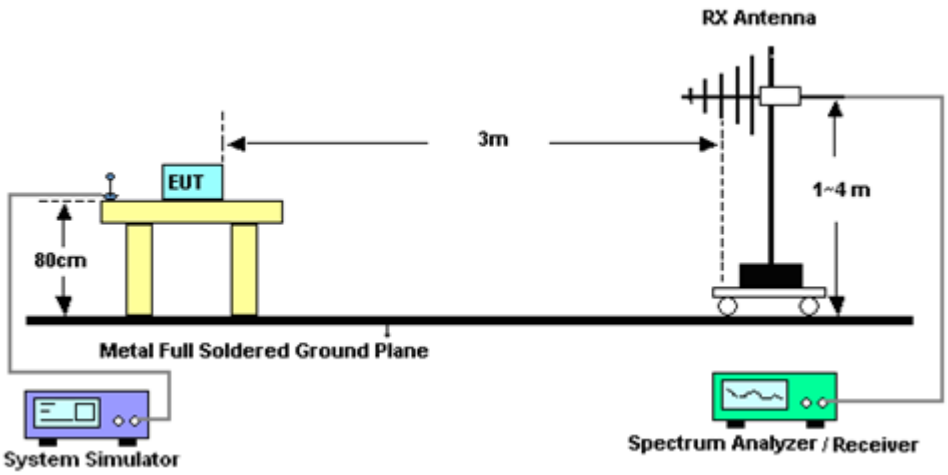
Please refer to the measuring equipment list in this test report.

4.2 Test Setup

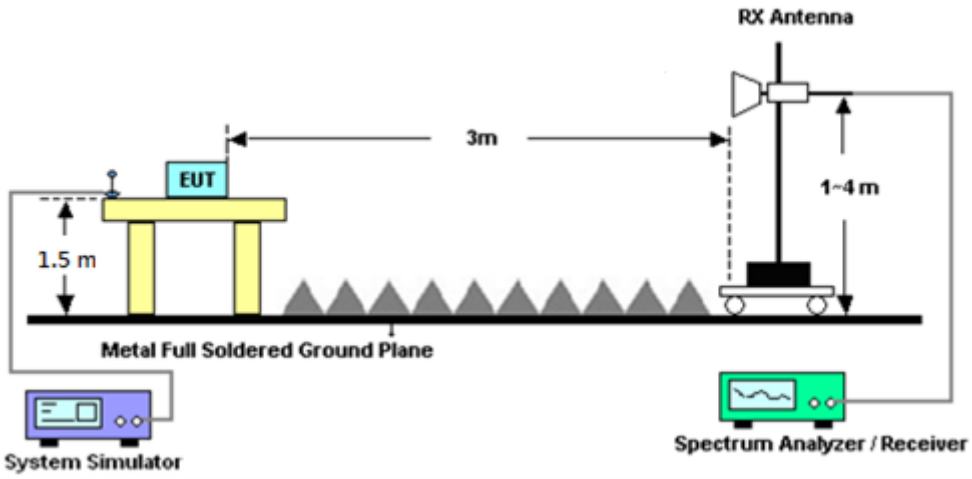
For radiated test below 30MHz



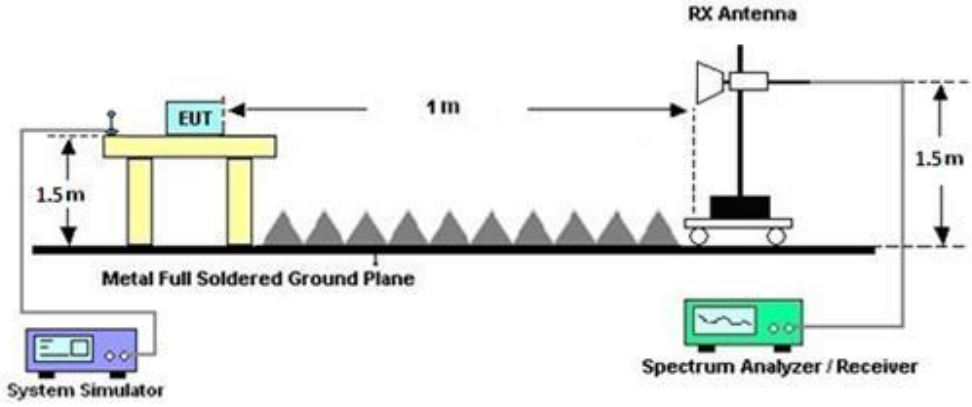
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

Note:

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

4.4 Field Strength of Spurious Radiation Measurement

4.4.1 Description of Field Strength of Spurious Radiated Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI C63.26-2015 section 5.5.4 Radiated measurement using the field strength method.

1. The EUT is placed on a rotatable wooden table 0.8 meters for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz above the ground.
2. The EUT is set 3 meters away from the receiving antenna, which is mounted on the antenna tower.
3. The table is rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1 MHz, VBW = 3 MHz, taking record of maximum spurious emission.
6. To convert spectrum reading E(dBuV/m) to EIRP(dBm)
   EIRP(dBm) = Level (dBuV/m) + 20log(d) -104.77, where d is the distance at which filed strength limit is specified in the rules
7. Field Strength Level (dBm) = Spectrum Reading (dBm) + Antenna Factor + Cable Loss + Read Level - Preamp Factor.
8. ERP (dBm) = EIRP (dBm) - 2.15
9. The RF fundamental frequency shall be excluded against the limit line in the operating frequency band.
10. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Keysight	N9038A	MY59053012	N/A	Nov. 18, 2022	Aug. 30, 2023~ Sep. 13, 2023	Nov. 17, 2023	Radiation (03CH20-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Aug. 30, 2023~ Sep. 13, 2023	Sep. 19, 2023	Radiation (03CH20-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 27, 2023	Aug. 30, 2023~ Sep. 13, 2023	Jun. 06, 2024	Radiation (03CH20-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Aug. 30, 2023~ Sep. 13, 2023	N/A	Radiation (03CH20-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Aug. 30, 2023~ Sep. 13, 2023	N/A	Radiation (03CH20-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Aug. 30, 2023~ Sep. 13, 2023	N/A	Radiation (03CH20-HY)
Signal Analyzer	Keysight	N9010B	MY60240520	N/A	Dec. 22, 2022	Aug. 30, 2023~ Sep. 13, 2023	Dec. 21, 2023	Radiation (03CH20-HY)
Bilog Antenna	TESEQ	CBL 6111D&00802N 1D01N-06	55606 & 08	30MHz~1GHz	Oct. 22, 2022	Aug. 30, 2023~ Sep. 13, 2023	Oct. 21, 2023	Radiation (03CH20-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	02360	1GHz-18GHz	Nov. 04, 2022	Aug. 30, 2023~ Sep. 13, 2023	Nov. 03, 2023	Radiation (03CH20-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	1223	18GHz-40GHz	Jul. 10, 2023	Aug. 30, 2023~ Sep. 13, 2023	Jul. 09, 2024	Radiation (03CH20-HY)
Preamplifier	COM-POWER	PAM-103	18020201	1MHz-1000MHz	Jan. 02, 2023	Aug. 30, 2023~ Sep. 13, 2023	Jan. 01, 2024	Radiation (03CH20-HY)
Amplifier	EMCI	EMC118A45SE	980792	N/A	Nov. 14, 2022	Aug. 30, 2023~ Sep. 13, 2023	Nov. 13, 2023	Radiation (03CH20-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519229/2,80 4015/2,8040 27/2	N/A	Jan. 18, 2023	Aug. 30, 2023~ Sep. 13, 2023	Jan. 17, 2024	Radiation (03CH20-HY)
Hygrometer	TECPEL	DTM-303B	TP200728	N/A	Mar. 28, 2023	Aug. 30, 2023~ Sep. 13, 2023	Mar. 27, 2024	Radiation (03CH20-HY)
Software	Audix	N/A	RK-002156	N/A	N/A	Aug. 30, 2023~ Sep. 13, 2023	N/A	Radiation (03CH20-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Sep. 27, 2022	Sep. 12, 2023~ Sep. 19, 2023	Sep. 26, 2023	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Sep. 20, 2023	Sep. 20, 2023~ Dec. 06, 2023	Sep. 19, 2024	Conducted (TH03-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	1V~20V 0.5A~4A	Sep. 12, 2023	Sep. 12, 2023~ Dec. 06, 2023	Sep. 11, 2024	Conducted (TH03-HY)
Base Station (Measure)	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Aug. 06, 2023	Sep. 12, 2023~ Dec. 06, 2023	Aug. 05, 2024	Conducted (TH03-HY)
Temperature & Humidity Cabinet Chamber	ESPEC	LHU-113	1012005860	-20℃~85℃	Dec. 05, 2022	Sep. 12, 2023~ Dec. 03, 2023	Dec. 04, 2023	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-40℃ ~90℃	Sep. 04, 2023	Dec. 04, 2023~ Dec. 06, 2023	Sep. 03, 2024	Conducted (TH03-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 17, 2022	Sep. 12, 2023~ Nov. 06, 2023	Nov. 16, 2023	Conducted (TH03-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 07, 2023	Nov. 07, 2023~ Dec. 06, 2023	Nov. 06, 2024	Conducted (TH03-HY)

6 Measurement Uncertainty

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.33 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.40 dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.43 dB

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power) & ERP / EIRP

<Tx0>

GSM850 Maximum Average Power [dBm] (GT - LC = -4.3 dB)					
Channel	128	189	251	ERP (dBm)	ERP (W)
Frequency	824.2	836.4	848.8		
GSM	32.18	32.15	32.22	25.83	0.3828
GPRS class 8	32.21	32.22	32.28		
GPRS class 10	31.52	31.39	31.52		
GPRS class 11	29.98	29.81	30.00		
GPRS class 12	28.88	28.65	28.76		
EGPRS class 8	26.59	26.69	26.82	20.37	0.1089
EGPRS class 10	25.99	26.00	26.00		
EGPRS class 11	25.76	25.88	25.96		
EGPRS class 12	24.04	24.13	24.17		
Limit	ERP < 7W			Result	Pass

GSM1900 Maximum Average Power [dBm] (GT - LC = -0.8 dB)					
Channel	512	661	810	EIRP (dBm)	EIRP (W)
Frequency	1850.2	1880	1909.8		
GSM	29.38	29.51	29.44	28.79	0.7568
GPRS class 8	29.42	29.59	29.47		
GPRS class 10	28.82	28.72	28.59		
GPRS class 11	28.28	28.44	28.28		
GPRS class 12	26.94	27.01	26.74		
EGPRS class 8	25.23	25.07	25.01	24.43	0.2773
EGPRS class 10	23.89	23.93	23.67		
EGPRS class 11	23.71	23.67	23.62		
EGPRS class 12	22.36	22.67	22.66		
Limit	EIRP < 2W			Result	Pass

WCDMA Band V Maximum Average Power [dBm] (GT - LC = -4.3 dB)					
Channel	4132	4182	4233	ERP (dBm)	ERP (W)
Frequency	826.4	836.4	846.6		
RMC 12.2K	24.21	23.87	23.86	17.76	0.0597
HSDPA Subtest-1	24.19	23.79	23.70		
HSDPA Subtest-2	24.09	23.60	23.56		
HSDPA Subtest-3	23.65	23.14	23.07		
HSDPA Subtest-4	23.18	22.62	22.55		
HSUPA Subtest-1	23.39	23.01	22.99		
HSUPA Subtest-2	20.71	20.71	20.73		
HSUPA Subtest-3	23.45	21.75	23.04		
HSUPA Subtest-4	22.51	20.71	21.37		
HSUPA Subtest-5	24.20	24.00	24.20		
Limit	ERP < 7W			Result	Pass

WCDMA Band II Maximum Average Power [dBm] (GT - LC = -0.8 dB)					
Channel	9262	9400	9538	EIRP (dBm)	EIRP (W)
Frequency	1852.4	1880	1907.6		
RMC 12.2K	25.09	24.83	25.13	24.33	0.2710
HSDPA Subtest-1	24.69	24.66	24.65		
HSDPA Subtest-2	24.66	24.63	24.63		
HSDPA Subtest-3	24.16	24.18	24.16		
HSDPA Subtest-4	23.80	23.63	23.98		
HSUPA Subtest-1	23.80	23.67	23.93		
HSUPA Subtest-2	21.71	21.58	21.81		
HSUPA Subtest-3	22.23	22.05	22.38		
HSUPA Subtest-4	22.65	22.04	21.43		
HSUPA Subtest-5	24.60	24.60	24.60		
Limit	EIRP < 2W			Result	Pass

WCDMA Band IV Maximum Average Power [dBm] (GT - LC = -0.1 dB)					
Channel	1312	1413	1513	EIRP (dBm)	EIRP (W)
Frequency	1712.4	1732.6	1752.6		
RMC 12.2K	24.08	24.29	24.38	24.55	0.2851
HSDPA Subtest-1	24.65	24.40	24.30		
HSDPA Subtest-2	24.57	24.30	24.24		
HSDPA Subtest-3	24.08	23.85	23.81		
HSDPA Subtest-4	23.73	23.87	23.75		
HSUPA Subtest-1	23.64	23.61	23.49		
HSUPA Subtest-2	21.43	21.44	21.41		
HSUPA Subtest-3	22.00	21.96	21.97		
HSUPA Subtest-4	21.80	21.73	21.07		
HSUPA Subtest-5	24.60	24.60	24.60		
Limit	EIRP < 1W			Result	Pass

<Tx1>

GSM850 Maximum Average Power [dBm] (GT - LC = -4.5 dB)					
Channel	128	189	251	ERP (dBm)	ERP (W)
Frequency	824.2	836.4	848.8		
GSM	31.96	31.90	31.72	25.34	0.3420
GPRS class 8	31.99	31.93	31.78		
GPRS class 10	31.92	31.72	31.52		
GPRS class 11	29.31	28.98	28.71		
GPRS class 12	27.96	27.61	27.13		
EGPRS class 8	26.57	26.50	26.13	19.92	0.0982
EGPRS class 10	26.00	25.76	25.74		
EGPRS class 11	25.74	25.68	25.40		
EGPRS class 12	22.45	22.59	22.23		
Limit	ERP < 7W			Result	Pass

GSM1900 Maximum Average Power [dBm] (GT - LC = -2.6 dB)					
Channel	512	661	810	EIRP (dBm)	EIRP (W)
Frequency	1850.2	1880	1909.8		
GSM	29.48	29.33	29.35	26.93	0.4932
GPRS class 8	29.53	29.38	29.44		
GPRS class 10	29.43	29.25	29.30		
GPRS class 11	28.40	28.42	28.18		
GPRS class 12	27.16	27.48	27.42		
EGPRS class 8	24.88	24.95	24.76	22.35	0.1718
EGPRS class 10	23.66	23.57	23.46		
EGPRS class 11	23.49	23.27	23.16		
EGPRS class 12	22.01	22.17	21.88		
Limit	EIRP < 2W			Result	Pass

WCDMA Band V Maximum Average Power [dBm] (GT - LC = -4.5 dB)					
Channel	4132	4182	4233	ERP (dBm)	ERP (W)
Frequency	826.4	836.4	846.6		
RMC 12.2K	23.46	23.23	23.29	17.20	0.0525
HSDPA Subtest-1	23.85	23.30	23.28		
HSDPA Subtest-2	23.65	23.11	23.11		
HSDPA Subtest-3	22.79	22.59	22.59		
HSDPA Subtest-4	22.26	22.02	22.04		
HSUPA Subtest-1	22.51	22.38	22.33		
HSUPA Subtest-2	20.86	20.66	20.65		
HSUPA Subtest-3	21.82	21.71	21.69		
HSUPA Subtest-4	20.83	20.74	20.65		
HSUPA Subtest-5	23.50	23.40	23.40		
Limit	ERP < 7W			Result	Pass

WCDMA Band II Maximum Average Power [dBm] (GT - LC = -2.6 dB)					
Channel	9262	9400	9538	EIRP (dBm)	EIRP (W)
Frequency	1852.4	1880	1907.6		
RMC 12.2K	24.27	23.95	24.30	21.70	0.1479
HSDPA Subtest-1	24.05	23.86	24.19		
HSDPA Subtest-2	24.01	23.79	24.18		
HSDPA Subtest-3	23.48	23.35	23.66		
HSDPA Subtest-4	23.08	22.89	23.20		
HSUPA Subtest-1	23.18	22.89	23.17		
HSUPA Subtest-2	22.19	20.29	20.54		
HSUPA Subtest-3	23.16	21.26	21.52		
HSUPA Subtest-4	22.16	22.19	22.18		
HSUPA Subtest-5	24.20	24.00	24.20		
Limit	EIRP < 2W			Result	Pass

WCDMA Band IV Maximum Average Power [dBm] (GT - LC = -2.2 dB)					
Channel	1312	1413	1513	EIRP (dBm)	EIRP (W)
Frequency	1712.4	1732.6	1752.6		
RMC 12.2K	23.71	23.72	23.83	21.90	0.1549
HSDPA Subtest-1	23.77	23.85	23.73		
HSDPA Subtest-2	23.72	23.83	23.66		
HSDPA Subtest-3	23.29	23.29	23.17		
HSDPA Subtest-4	23.11	23.33	23.11		
HSUPA Subtest-1	22.96	23.03	22.95		
HSUPA Subtest-2	20.36	20.48	22.15		
HSUPA Subtest-3	21.78	21.87	21.88		
HSUPA Subtest-4	20.21	22.09	22.19		
HSUPA Subtest-5	23.70	24.10	24.10		
Limit	EIRP < 1W			Result	Pass

A2. GSM

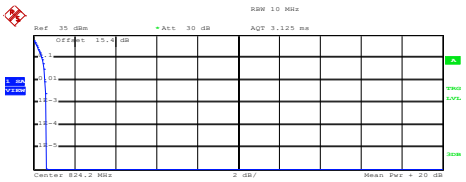
Peak-to-Average Ratio

Mode	GSM850	Limit: 13dB
Mod.	GPRS class 8	Result
Lowest CH	0.64	PASS
Middle CH	0.68	
Highest CH	0.68	

Mode	GSM1900	Limit: 13dB
Mod.	GPRS class 8	Result
Lowest CH	0.64	PASS
Middle CH	0.64	
Highest CH	0.68	

GSM850 (GPRS class 8)

Lowest Channel

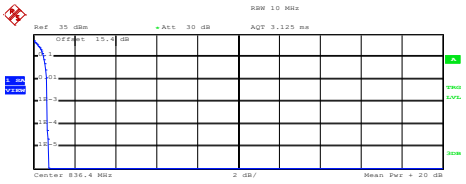


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	32.43 dBm
Peak	33.07 dBm
Crest	0.64 dB
10 %	0.40 dB
1 %	0.56 dB
.1 %	0.64 dB
.01 %	0.64 dB

Date: 12.SEP.2023 16:21:52

Middle Channel



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	32.18 dBm
Peak	32.92 dBm
Crest	0.75 dB
10 %	0.52 dB
1 %	0.64 dB
.1 %	0.68 dB
.01 %	0.68 dB

Date: 12.SEP.2023 16:22:34

Highest Channel

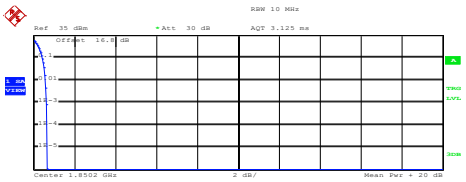
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	32.12 dBm
Peak	32.85 dBm
Crest	0.74 dB
10 %	0.52 dB
1 %	0.64 dB
.1 %	0.68 dB
.01 %	0.76 dB

Date: 12.SEP.2023 16:22:59

GSM1900 (GPRS class 8)

Lowest Channel

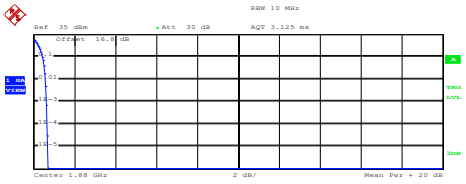


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	29.00 dBm
Peak	29.68 dBm
Crest	0.68 dB
10 %	0.44 dB
1 %	0.60 dB
.1 %	0.64 dB
.01 %	0.68 dB

Date: 12.SEP.2023 16:45:11

Middle Channel

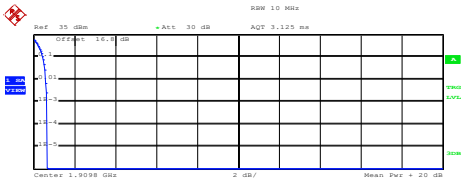


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	28.93 dBm
Peak	29.61 dBm
Crest	0.68 dB
10 %	0.44 dB
1 %	0.60 dB
.1 %	0.64 dB
.01 %	0.68 dB

Date: 12.SEP.2023 16:45:29

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	28.94 dBm
Peak	29.61 dBm
Crest	0.67 dB
10 %	0.44 dB
1 %	0.60 dB
.1 %	0.68 dB
.01 %	0.68 dB

Date: 12.SEP.2023 16:45:46

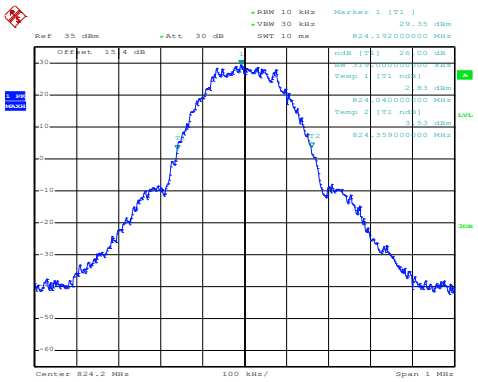
26dB Bandwidth

Mode	GSM850 : 26dB BW(MHz)
Mod.	GPRS class 8
Lowest CH	0.319
Middle CH	0.315
Highest CH	0.313

Mode	GSM1900 : 26dB BW(MHz)
Mod.	GPRS class 8
Lowest CH	0.312
Middle CH	0.319
Highest CH	0.316

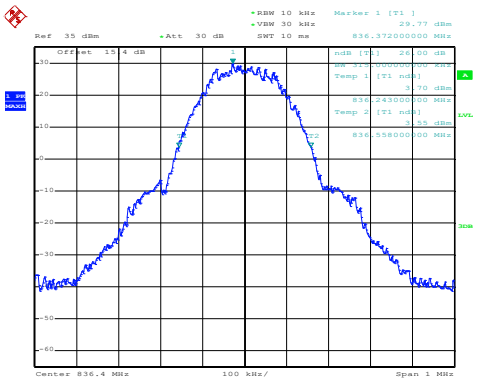
GSM850 (GPRS class 8)

Lowest Channel



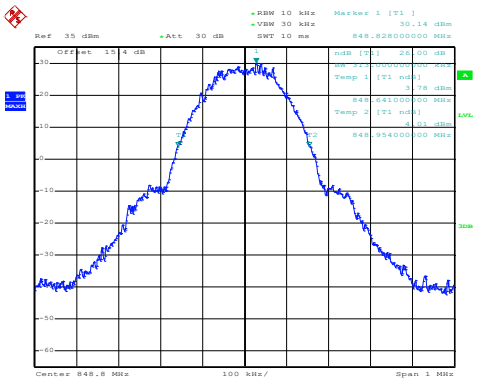
Date: 6.DEC.2023 14:36:59

Middle Channel



Date: 6.DEC.2023 14:37:37

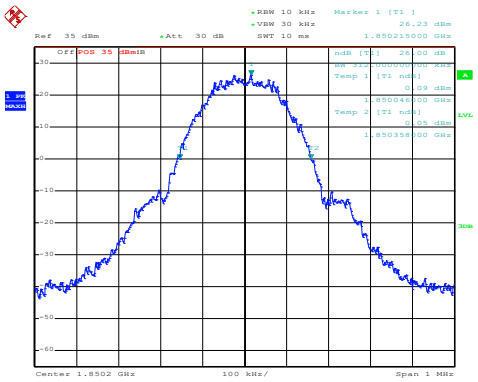
Highest Channel



Date: 6.DEC.2023 14:38:13

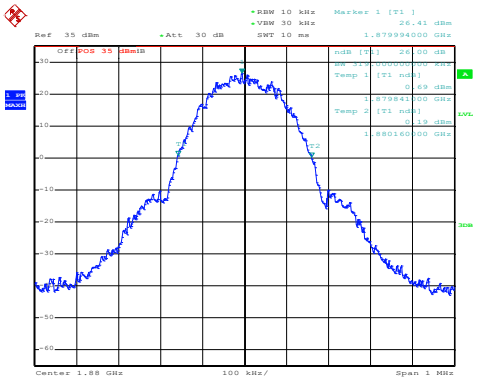
GSM1900 (GPRS class 8)

Lowest Channel



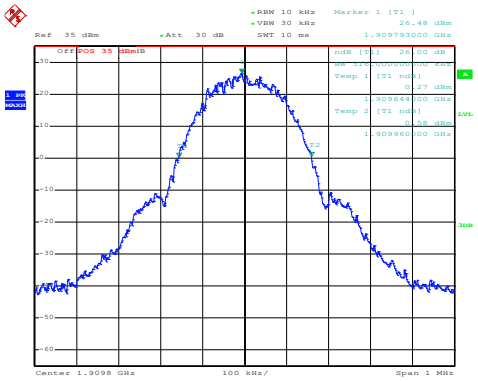
Date: 6.DEC.2023 14:46:31

Middle Channel



Date: 6.DEC.2023 14:47:16

Highest Channel



Date: 6.DEC.2023 14:47:52

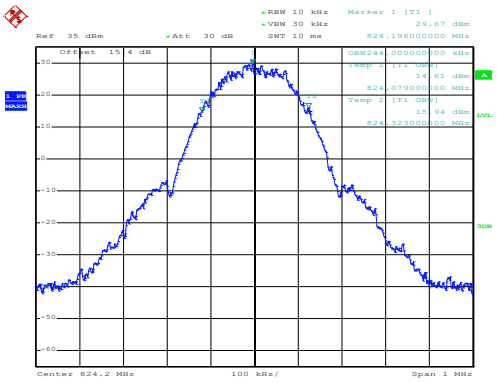
Occupied Bandwidth

Mode	GSM850 : 99%OBW(MHz)
Mod.	GPRS class 8
Lowest CH	0.244
Middle CH	0.248
Highest CH	0.248

Mode	GSM1900 : 99%OBW(MHz)
Mod.	GPRS class 8
Lowest CH	0.245
Middle CH	0.243
Highest CH	0.241

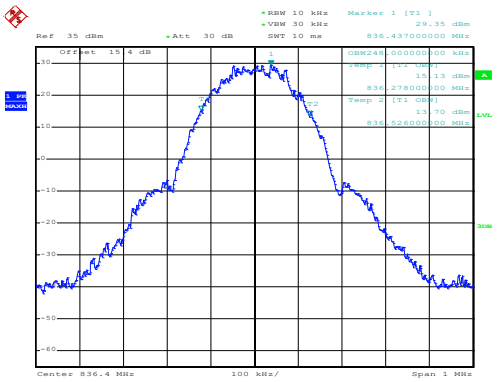
GSM850 (GPRS class 8)

Lowest Channel



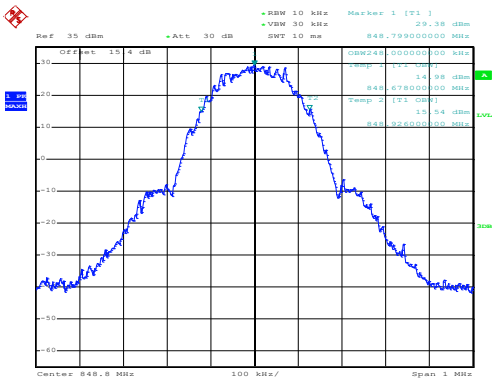
Date: 12.SEP.2023 16:11:48

Middle Channel



Date: 12.SEP.2023 16:12:28

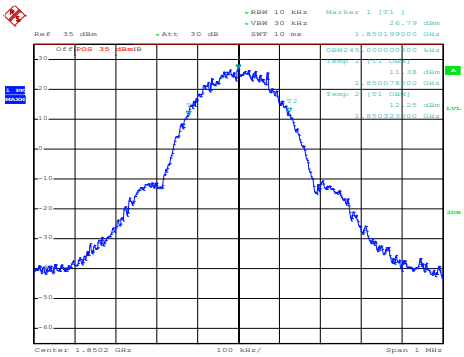
Highest Channel



Date: 12.SEP.2023 16:13:04

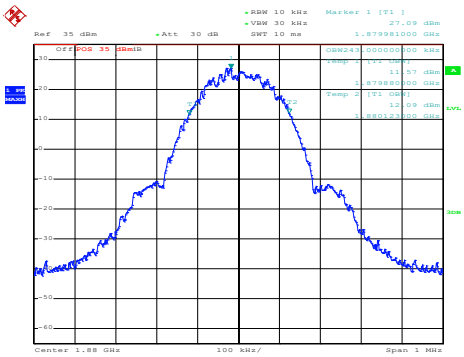
GSM1900 (GPRS class 8)

Lowest Channel



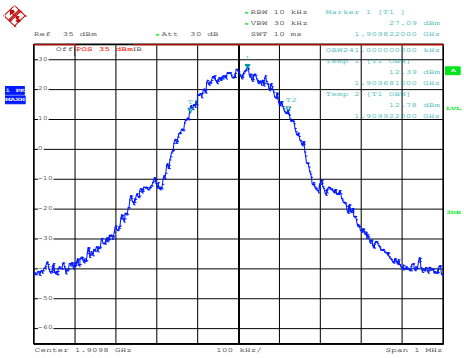
Date: 12.SEP.2023 16:36:35

Middle Channel



Date: 12.SEP.2023 16:37:12

Highest Channel

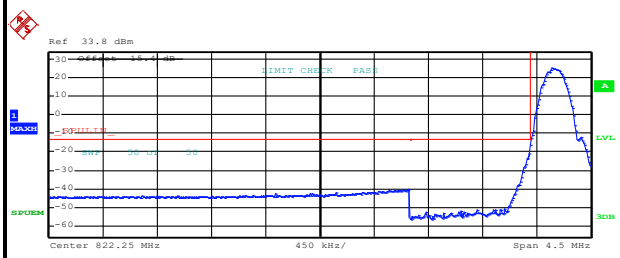


Date: 12.SEP.2023 16:37:49

Conducted Band Edge

GSM850 (GPRS class 8)

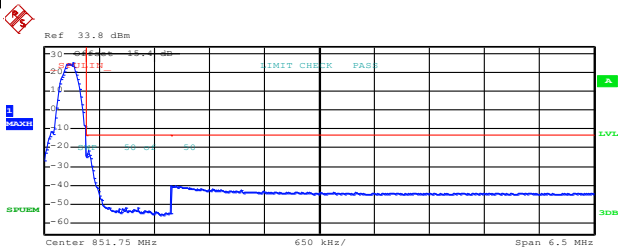
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.988000 M	-40.44	-27.44
823.000 M	824.000 M	3.00 k	823.996000 M	-20.80	-7.80
824.000 M	824.500 M	10.00 k	824.179500 M	25.14	-9.86

Date: 12.SEP.2023 16:15:04

Highest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.831500 M	25.30	-9.70
849.000 M	850.000 M	3.00 k	849.012000 M	-21.27	-8.27
850.000 M	855.000 M	100.00 k	850.000000 M	-40.01	-27.01

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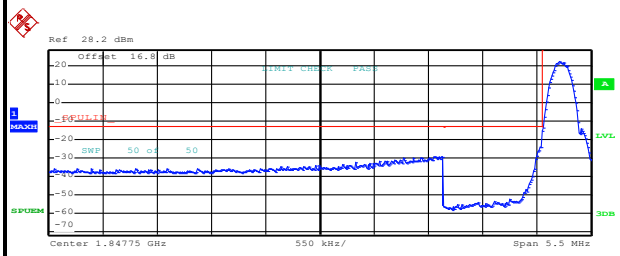
GSM1900 (GPRS class 8)

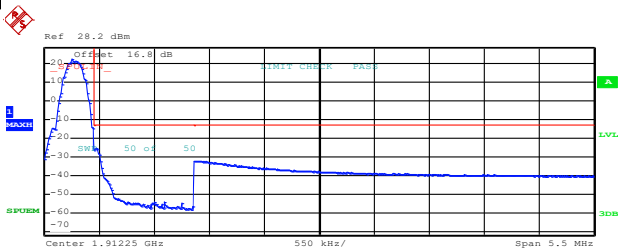
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848980 G	-29.44	-16.44
1.849 G	1.850 G	3.00 k	1.849980 G	-23.90	-10.90
1.850 G	1.851 G	10.00 k	1.850178 G	22.03	-12.97

Date: 12.SEP.2023 16:39:47

Highest Band Edge



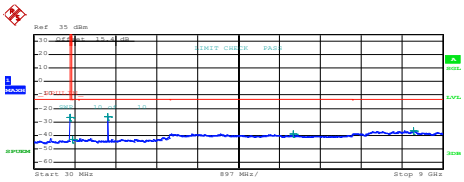
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909771 G	21.83	-13.17
1.910 G	1.911 G	3.00 k	1.910020 G	-24.22	-11.22
1.911 G	1.915 G	1.00 M	1.911004 G	-32.11	-19.11

Date: 12.SEP.2023 16:41:21

Conducted Spurious Emission

GSM850 (GPRS class 8)

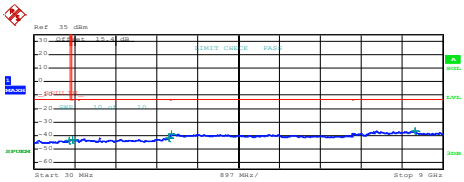
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.802500 M	-26.46	-13.46
855.000 M	1.000 G	1.00 M	878.018752 M	-43.21	-30.21
1.000 G	3.000 G	1.00 M	1.648500 G	-26.13	-13.13
3.000 G	7.000 G	1.00 M	5.720000 G	-38.89	-25.89
7.000 G	9.000 G	1.00 M	8.351500 G	-36.58	-23.58

Date: 12.SEP.2023 16:18:05

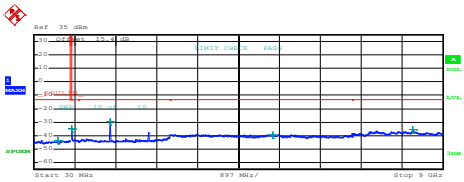
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	807.360000 M	-43.55	-30.55
855.000 M	1.000 G	1.00 M	864.932501 M	-42.87	-29.87
1.000 G	3.000 G	1.00 M	2.994000 G	-41.67	-28.67
3.000 G	7.000 G	1.00 M	3.050000 G	-38.94	-25.94
7.000 G	9.000 G	1.00 M	8.383000 G	-36.76	-23.76

Date: 12.SEP.2023 16:19:19

Highest Channel

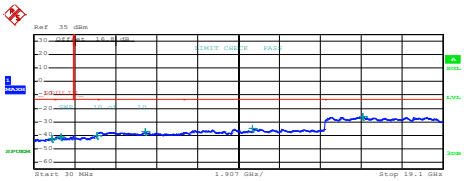


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	551.202500 M	-43.55	-30.55
855.000 M	1.000 G	1.00 M	855.036250 M	-35.17	-22.17
1.000 G	3.000 G	1.00 M	1.698000 G	-29.74	-16.74
3.000 G	7.000 G	1.00 M	5.267000 G	-39.29	-26.29
7.000 G	9.000 G	1.00 M	8.340000 G	-35.61	-22.61

Date: 12.SEP.2023 16:20:51

GSM1900 (GPRS class 8)

Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	868.322500 M	-42.41	-29.41
1.000 G	1.845 G	1.00 M	1.287723 G	-41.37	-28.37
1.915 G	3.000 G	1.00 M	2.982098 G	-39.92	-26.92
3.000 G	7.000 G	1.00 M	5.209000 G	-37.30	-24.30
7.000 G	13.600 G	1.00 M	10.217500 G	-34.81	-21.81
13.600 G	19.100 G	1.00 M	15.349688 G	-26.22	-13.22

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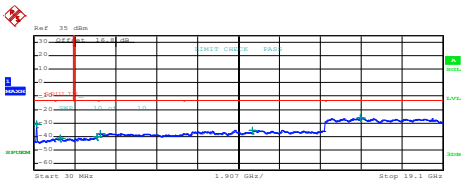
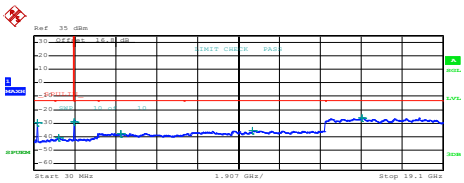
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	141.792500 M	-31.04	-18.04
1.000 G	1.845 G	1.00 M	1.240825 G	-41.29	-28.29
1.915 G	3.000 G	1.00 M	2.979656 G	-40.40	-27.40
3.000 G	7.000 G	1.00 M	3.130000 G	-37.71	-24.71
7.000 G	13.600 G	1.00 M	10.227400 G	-35.26	-22.26
13.600 G	19.100 G	1.00 M	15.239000 G	-26.12	-13.12

Date: 12.SEP.2023 16:43:25

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	171.620000 M	-29.40	-16.40
1.000 G	1.845 G	1.00 M	1.160339 G	-40.85	-27.85
1.915 G	3.000 G	1.00 M	1.915271 G	-29.20	-16.20
3.000 G	7.000 G	1.00 M	4.090000 G	-37.55	-24.55
7.000 G	13.600 G	1.00 M	10.231525 G	-35.70	-22.70
13.600 G	19.100 G	1.00 M	15.306375 G	-25.83	-12.83

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Frequency Stability

Test Conditions	Middle Channel	GSM850 (GPRS class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0096	PASS
40	Normal Voltage	0.0060	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0120	
0	Normal Voltage	0.0036	
-10	Normal Voltage	0.0132	
-20	Normal Voltage	0.0179	
-30	Normal Voltage	0.0108	
20	Maximum Voltage	0.0072	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0155	

Test Conditions	Middle Channel	GSM1900 (GPRS class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0037	PASS
40	Normal Voltage	0.0218	
30	Normal Voltage	0.0133	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0271	
0	Normal Voltage	0.0245	
-10	Normal Voltage	0.0186	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0027	
20	Battery End Point	0.0234	

Note:

1. Normal Voltage = 3.87V. ；Battery End Point (BEP) = 3.6 V.；Maximum Voltage =4.48 V
2. The frequency fundamental emissions stay within the authorized frequency block.

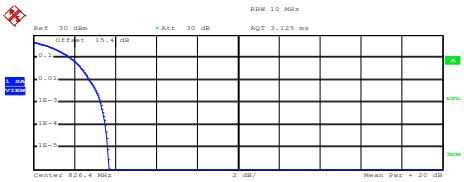
A2. WCDMA

Peak-to-Average Ratio

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	3.28	3.56	3.24	PASS
Middle CH	3.12	3.60	3.48	
Highest CH	3.28	3.36	3.36	

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.96 dBm
Peak	26.65 dBm
Crest	3.69 dB
10 %	1.80 dB
1 %	2.76 dB
.1 %	3.28 dB
.01 %	3.52 dB

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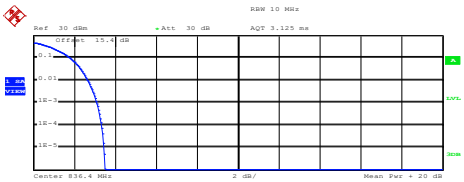
Middle Channel



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	23.16 dBm
Peak	26.65 dBm
Crest	3.49 dB
10 %	1.80 dB
1 %	2.64 dB
.1 %	3.12 dB
.01 %	3.36 dB

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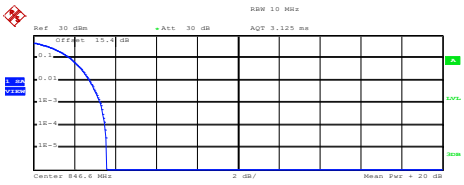
Highest Channel



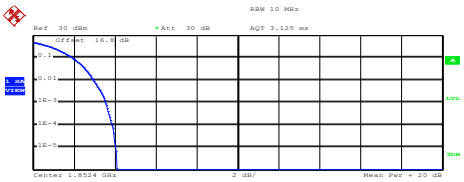
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	23.00 dBm
Peak	26.58 dBm
Crest	3.59 dB
10 %	1.80 dB
1 %	2.76 dB
.1 %	3.28 dB
.01 %	3.52 dB

Date: 13.SEP.2023 10:19:58

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel

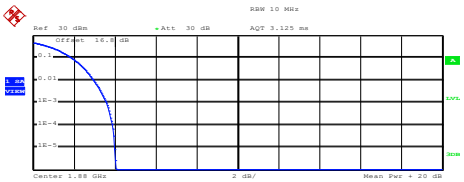


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.75 dBm
Peak	26.87 dBm
Crest	4.12 dB
10 %	1.92 dB
1 %	2.96 dB
.1 %	3.56 dB
.01 %	3.88 dB

Date: 12.SEP.2023 17:24:20

Middle Channel



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.74 dBm
Peak	26.80 dBm
Crest	4.05 dB
10 %	1.88 dB
1 %	2.96 dB
.1 %	3.60 dB
.01 %	3.88 dB

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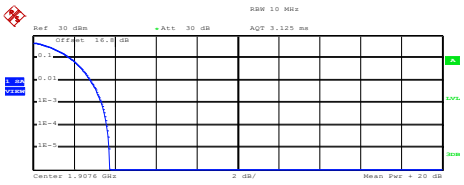
Highest Channel



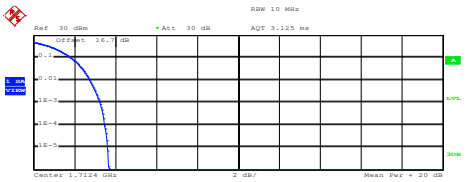
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.86 dBm
Peak	26.58 dBm
Crest	3.73 dB
10 %	1.80 dB
1 %	2.80 dB
.1 %	3.36 dB
.01 %	3.60 dB

Date: 12.SEP.2023 17:25:02

WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.83 dBm
Peak	26.51 dBm
Crest	3.68 dB
10 %	1.84 dB
1 %	2.76 dB
.1 %	3.24 dB
.01 %	3.48 dB

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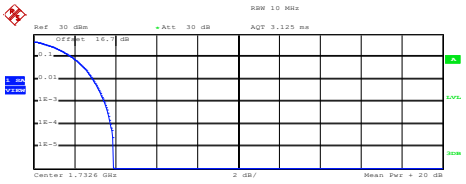
Middle Channel



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.81 dBm
Peak	26.72 dBm
Crest	3.91 dB
10 %	1.88 dB
1 %	2.92 dB
.1 %	3.48 dB
.01 %	3.76 dB

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Highest Channel

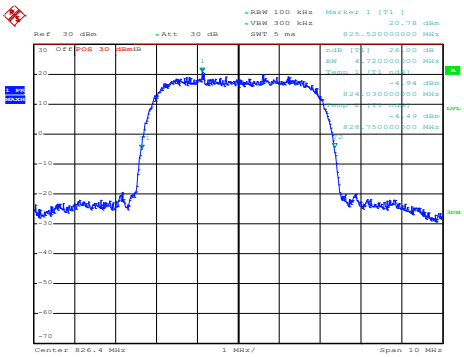
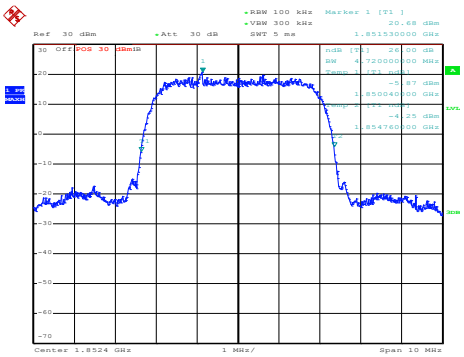
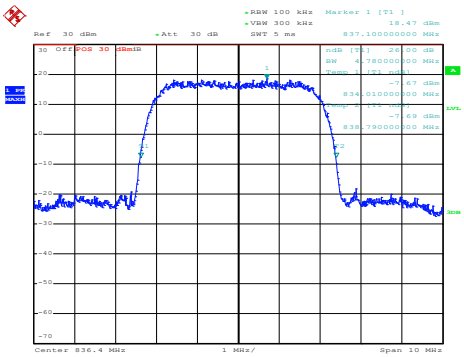
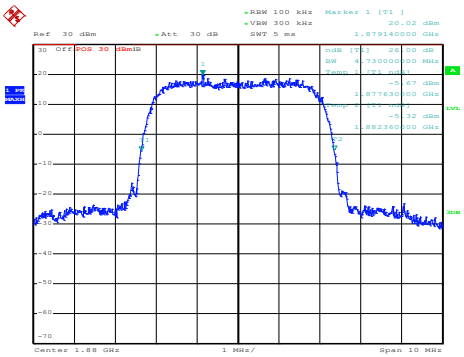
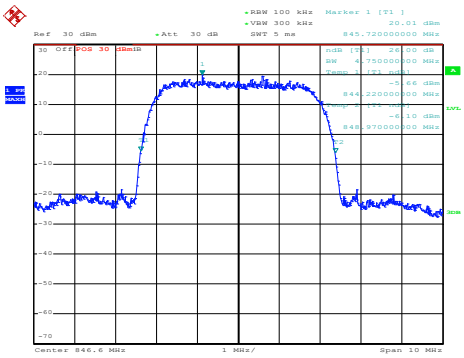
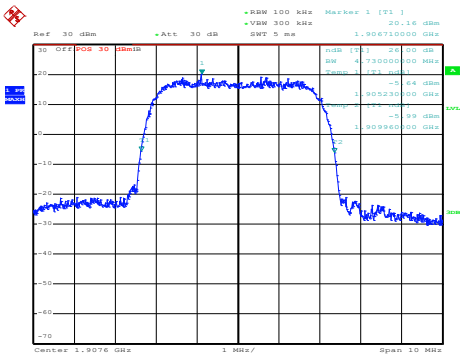
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	22.61 dBm
Peak	26.79 dBm
Crest	4.18 dB
10 %	1.80 dB
1 %	2.80 dB
.1 %	3.36 dB
.01 %	3.68 dB

Date: 13.SEP.2023 09:48:36

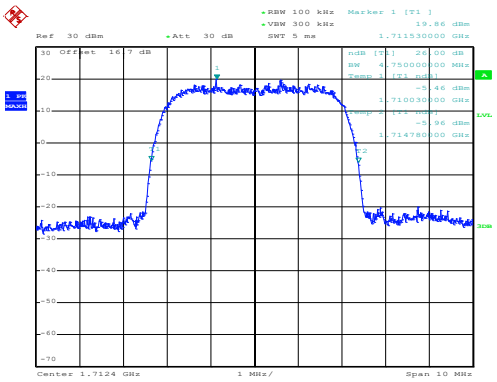
26dB Bandwidth

Mode	WCDMA Band V 26dB BW(MHz)	WCDMA Band II 26dB BW(MHz)	WCDMA Band IV 26dB BW(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.72	4.72	4.75
Middle CH	4.78	4.73	4.76
Highest CH	4.75	4.73	4.77

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
 Date: 13.SEP.2023 09:58:34	 Date: 12.SEP.2023 17:01:49
Middle Channel	**Middle Channel**
 Date: 13.SEP.2023 09:59:22	 Date: 12.SEP.2023 17:02:32
Highest Channel	**Highest Channel**
 Date: 13.SEP.2023 10:02:38	 Date: 12.SEP.2023 17:03:13

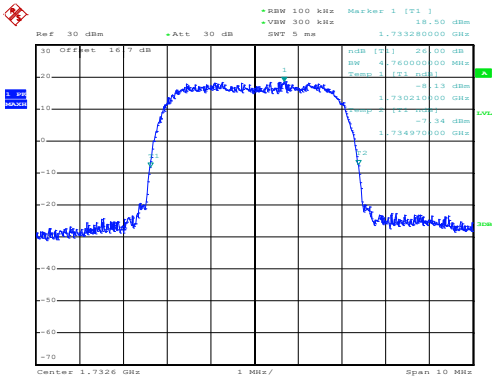
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



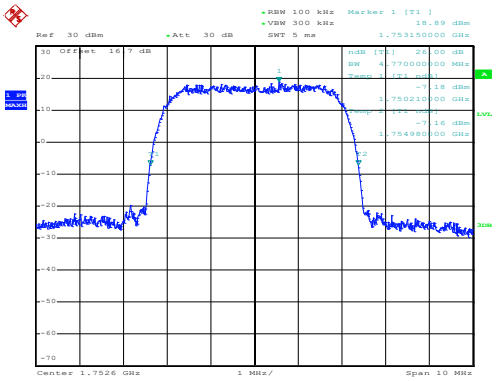
Date: 13.SEP.2023 09:33:02

Middle Channel



Date: 13.SEP.2023 09:33:48

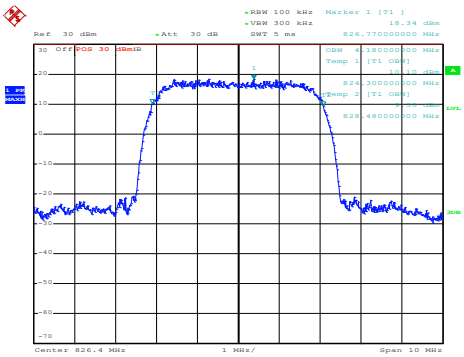
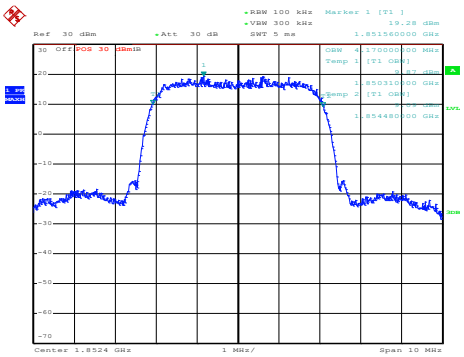
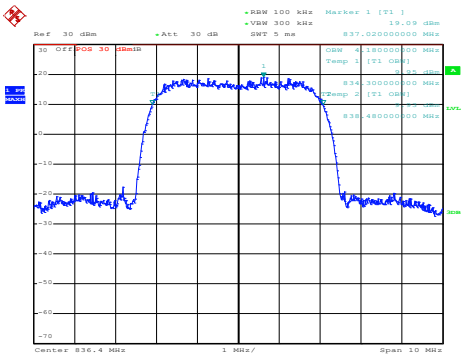
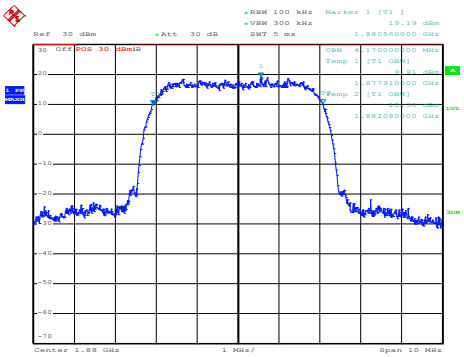
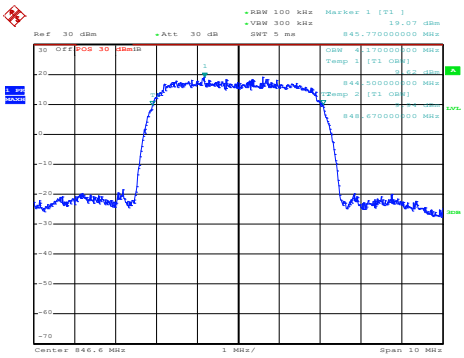
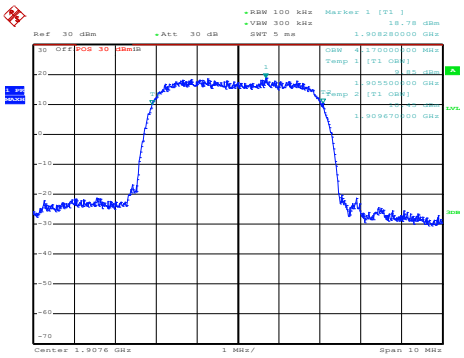
Highest Channel



Date: 13.SEP.2023 09:34:27

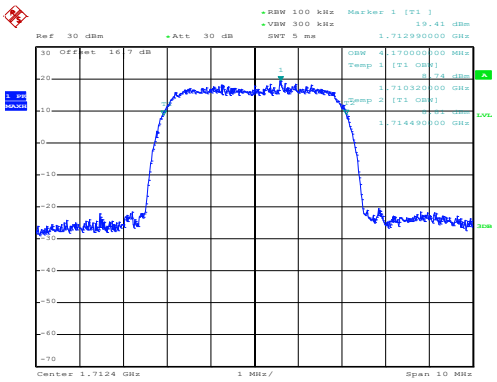
Occupied Bandwidth

Mode	WCDMA Band V 99%OBW(MHz)	WCDMA Band II 99%OBW(MHz)	WCDMA Band IV 99%OBW(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.18	4.17	4.17
Middle CH	4.18	4.17	4.17
Highest CH	4.17	4.17	4.18

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
 Date: 13.SEP.2023 10:07:13	 Date: 12.SEP.2023 17:04:24
Middle Channel	**Middle Channel**
 Date: 13.SEP.2023 10:08:02	 Date: 12.SEP.2023 17:05:03
Highest Channel	**Highest Channel**
 Date: 13.SEP.2023 10:08:43	 Date: 12.SEP.2023 17:05:45

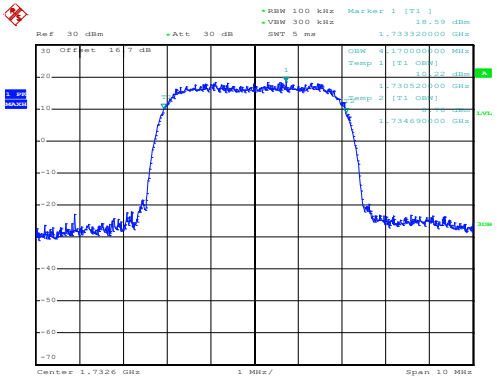
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



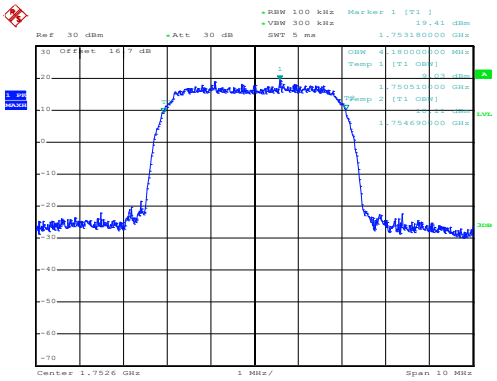
Date: 13.SEP.2023 09:35:38

Middle Channel



Date: 13.SEP.2023 09:36:28

Highest Channel

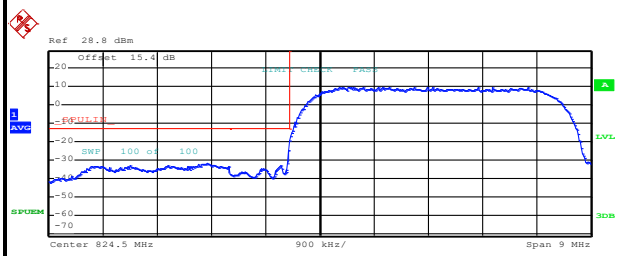


Date: 13.SEP.2023 09:37:09

Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

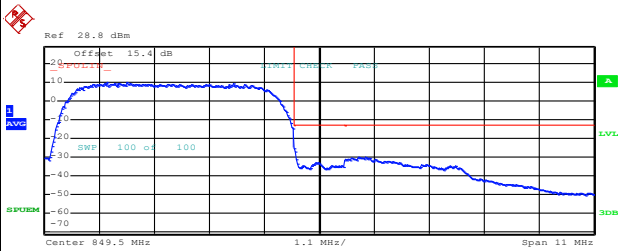
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.622000 M	-31.65	-18.65
823.000 M	824.000 M	50.00 k	823.996000 M	-24.63	-11.63
824.000 M	829.000 M	100.00 k	824.875000 M	9.33	-25.67

Date: 13.SEP.2023 10:12:00

Highest Band Edge

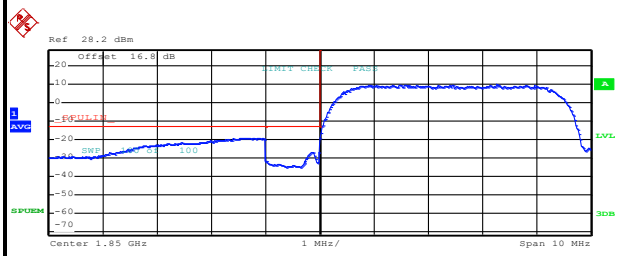


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
844.000 M	849.000 M	100.00 k	845.650000 M	9.92	-25.08
849.000 M	850.000 M	50.00 k	849.012000 M	-24.70	-11.70
850.000 M	855.000 M	100.00 k	850.285000 M	-30.12	-17.12

Date: 13.SEP.2023 10:15:02

WCDMA Band II (RMC 12.2Kbps)

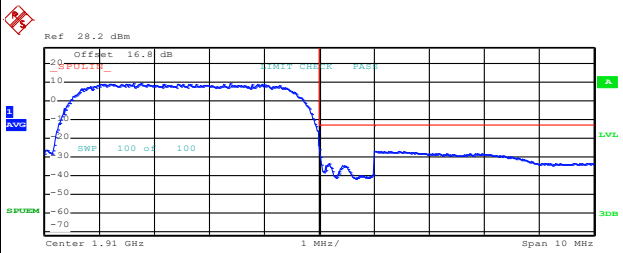
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848752 G	-19.26	-6.26
1.849 G	1.850 G	50.00 k	1.849840 G	-26.79	-13.79
1.850 G	1.855 G	100.00 k	1.853260 G	9.51	-25.49

Date: 12.SEP.2023 17:13:03

Highest Band Edge

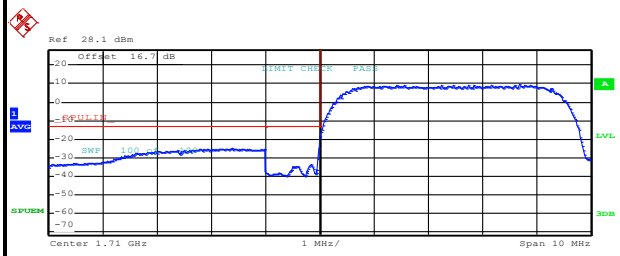


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.906625 G	9.40	-25.60
1.910 G	1.911 G	50.00 k	1.910004 G	-26.21	-13.21
1.911 G	1.915 G	1.00 M	1.911008 G	-26.82	-13.82

Date: 12.SEP.2023 17:17:13

WCDMA Band IV (RMC 12.2Kbps)

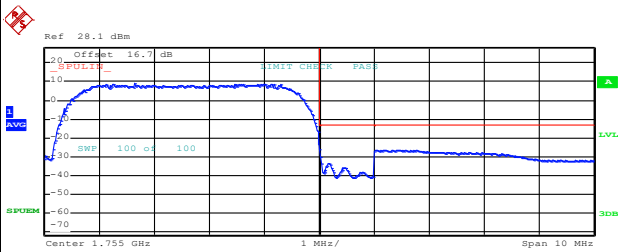
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.705 G	1.709 G	1.00 M	1.708376 G	-24.98	-11.98
1.709 G	1.710 G	50.00 k	1.709996 G	-26.01	-13.01
1.710 G	1.715 G	100.00 k	1.713680 G	9.50	-25.50

Date: 13.SEP.2023 09:41:05

Highest Band Edge



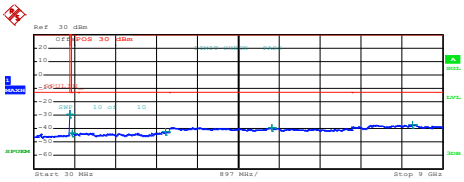
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.750 G	1.755 G	100.00 k	1.751630 G	9.16	-25.84
1.755 G	1.756 G	50.00 k	1.755004 G	-25.60	-12.60
1.756 G	1.760 G	1.00 M	1.756108 G	-26.30	-13.30

Date: 13.SEP.2023 09:44:00

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

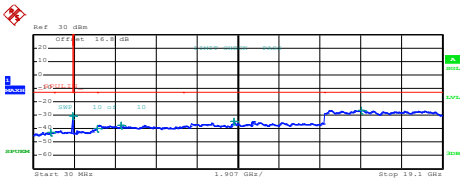
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.802500 M	-29.57	-16.57
855.000 M	1.000 G	1.00 M	881.643752 M	-43.59	-30.59
1.000 G	3.000 G	1.00 M	2.910500 G	-42.08	-29.08
3.000 G	7.000 G	1.00 M	5.255000 G	-39.06	-26.06
7.000 G	9.000 G	1.00 M	8.330500 G	-37.02	-24.02

Date: 13.SEP.2023 10:16:21

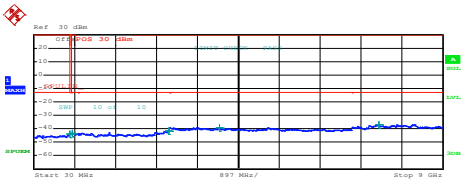
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	837.767500 M	-42.84	-29.84
1.000 G	1.845 G	1.00 M	1.844578 G	-30.37	-17.37
1.915 G	3.000 G	1.00 M	2.998372 G	-40.06	-27.06
3.000 G	7.000 G	1.00 M	4.104000 G	-37.35	-24.35
7.000 G	13.600 G	1.00 M	9.362800 G	-34.75	-21.75
13.600 G	19.100 G	1.00 M	15.328375 G	-26.27	-13.27

Date: 12.SEP.2023 17:19:30

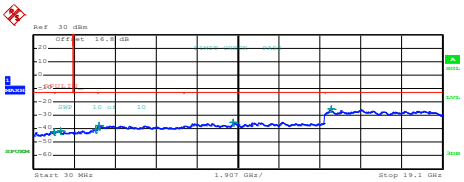
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	815.260000 M	-44.05	-31.05
855.000 M	1.000 G	1.00 M	866.418751 M	-43.37	-30.37
1.000 G	3.000 G	1.00 M	2.998000 G	-41.38	-28.38
3.000 G	7.000 G	1.00 M	4.101000 G	-39.32	-26.32
7.000 G	9.000 G	1.00 M	7.595500 G	-36.85	-23.85

Date: 13.SEP.2023 10:17:17

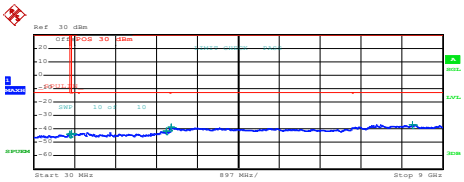
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	979.630000 M	-42.34	-29.34
1.000 G	1.845 G	1.00 M	1.303355 G	-41.85	-28.85
1.915 G	3.000 G	1.00 M	2.947106 G	-40.73	-27.73
3.000 G	7.000 G	1.00 M	3.079000 G	-37.80	-24.80
7.000 G	13.600 G	1.00 M	9.340525 G	-35.44	-22.44
13.600 G	19.100 G	1.00 M	13.903188 G	-25.07	-12.07

Date: 12.SEP.2023 17:21:36

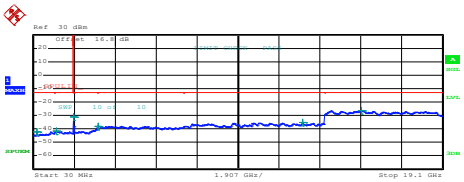
Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	815.062500 M	-44.19	-31.19
855.000 M	1.000 G	1.00 M	855.036250 M	-43.21	-30.21
1.000 G	3.000 G	1.00 M	2.936500 G	-41.91	-28.91
3.000 G	7.000 G	1.00 M	3.038000 G	-38.60	-25.60
7.000 G	9.000 G	1.00 M	8.342000 G	-36.87	-23.87

Date: 13.SEP.2023 10:18:12

Highest Channel

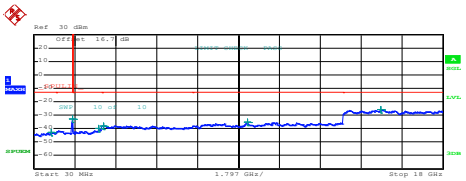


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	170.165000 M	-42.19	-29.19
1.000 G	1.845 G	1.00 M	1.094006 G	-41.84	-28.84
1.915 G	3.000 G	1.00 M	1.916356 G	-30.92	-17.92
3.000 G	7.000 G	1.00 M	3.054000 G	-37.91	-24.91
7.000 G	13.600 G	1.00 M	12.593500 G	-35.47	-22.47
13.600 G	19.100 G	1.00 M	15.320813 G	-26.23	-13.23

Date: 12.SEP.2023 17:22:40

WCDMA Band IV (RMC 12.2Kbps)

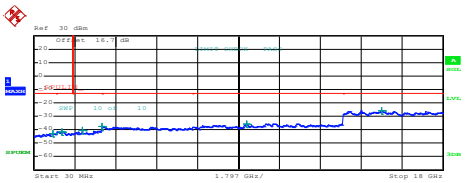
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	797.997500 M	-42.75	-29.75
1.000 G	1.705 G	1.00 M	1.704824 G	-32.74	-19.74
1.760 G	3.000 G	1.00 M	2.867320 G	-40.12	-27.12
3.000 G	7.000 G	1.00 M	3.102000 G	-37.89	-24.89
7.000 G	13.600 G	1.00 M	9.397450 G	-34.94	-21.94
13.600 G	18.000 G	1.00 M	15.264300 G	-25.82	-12.82

Date: 13.SEP.2023 09:45:20

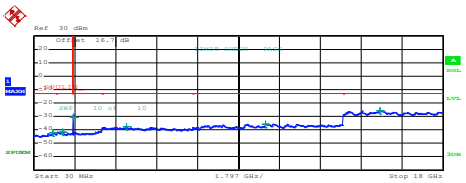
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	853.772500 M	-42.66	-29.66
1.000 G	1.705 G	1.00 M	1.256796 G	-41.71	-28.71
1.760 G	3.000 G	1.00 M	2.147500 G	-40.50	-27.50
3.000 G	7.000 G	1.00 M	3.002000 G	-37.69	-24.69
7.000 G	13.600 G	1.00 M	9.381775 G	-35.54	-22.54
13.600 G	18.000 G	1.00 M	15.319850 G	-25.58	-12.58

Date: 13.SEP.2023 09:46:17

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	849.892500 M	-42.13	-29.13
1.000 G	1.705 G	1.00 M	1.288169 G	-41.36	-28.36
1.760 G	3.000 G	1.00 M	1.760310 G	-30.51	-17.51
3.000 G	7.000 G	1.00 M	4.100000 G	-37.80	-24.80
7.000 G	13.600 G	1.00 M	10.215025 G	-35.59	-22.59
13.600 G	18.000 G	1.00 M	15.225250 G	-26.02	-13.02

Date: 13.SEP.2023 09:47:13

Frequency Stability

Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0048	PASS
40	Normal Voltage	0.0096	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0084	
0	Normal Voltage	0.0060	
-10	Normal Voltage	0.0167	
-20	Normal Voltage	0.0072	
-30	Normal Voltage	0.0143	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0048	
20	Battery End Point	0.0024	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0090	PASS
40	Normal Voltage	0.0069	
30	Normal Voltage	0.0064	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0053	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0048	
20	Normal Voltage	0.0080	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage = 3.87V. ；Battery End Point (BEP) = 3.6 V.；Maximum Voltage =4.48 V
2. The frequency fundamental emissions stay within the authorized frequency block.

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0150	PASS
40	Normal Voltage	0.0115	
30	Normal Voltage	0.0040	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0040	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0046	
20	Maximum Voltage	0.0110	
20	Normal Voltage	0.0098	
20	Battery End Point	0.0127	

Note:

1. Normal Voltage = 3.87V. ；Battery End Point (BEP) = 3.6 V.；Maximum Voltage =4.48 V
2. The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

B1. Summary of each worse mode

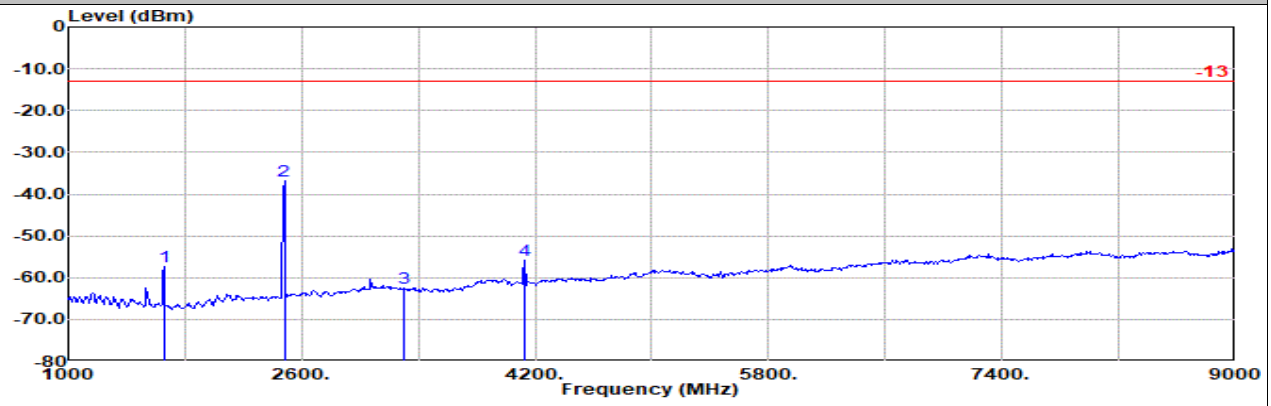
Part	Mode	Ch	Freq (MHz)	Level (dBm)	Detector	Ant Factor (dB/m)	Amp\Cbl (dB)	Filter (dB)	EIRP CF (dB)	Reading (dBuV)	Limit (dBm)	Margin (dB)	Pol	Ant
22	1	L	2480.000	-34.63	RMS	27.72	-27.30	0.34	-95.23	59.84	-13.00	-21.63	V	Tx0Rx0
22	2	H	2552.000	-40.05	RMS	27.90	-27.15	0.36	-95.23	54.07	-13.00	-27.05	H	Tx1Rx1
22	3	H	2544.000	-45.07	RMS	27.89	-27.17	0.36	-95.23	49.08	-13.00	-32.07	H	Tx0Rx0
22	4	L	3304.000	-62.85	RMS	29.60	-26.03	0.23	-95.23	28.58	-13.00	-49.85	H	Tx1Rx1
24	1	L	7400.000	-54.93	RMS	36.50	-22.77	0.53	-95.23	26.04	-13.00	-41.93	H	Tx0Rx0
24	2	H	7639.200	-55.05	RMS	36.48	-22.79	0.55	-95.23	25.94	-13.00	-42.05	H	Tx1Rx1
24	3	L	5565.000	-54.01	RMS	33.03	-24.38	0.46	-95.23	32.11	-13.00	-41.01	V	Tx0Rx0
24	4	L	7410.000	-54.76	RMS	36.48	-22.77	0.53	-95.23	26.23	-13.00	-41.76	H	Tx1Rx1
27	1	M	5205.000	-54.10	RMS	32.99	-24.65	0.52	-95.23	32.27	-13.00	-41.10	H	Tx0Rx0
27	2	H	7010.400	-55.39	RMS	35.94	-22.98	0.57	-95.23	26.31	-13.00	-42.39	V	Tx1Rx1

Tx0Rx0

Part 22 Mode 1

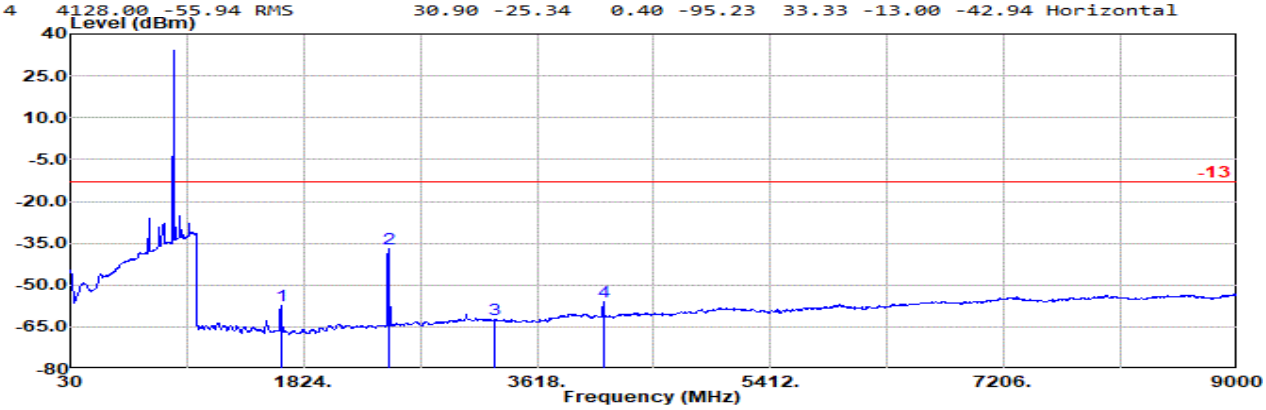
GSM 850 10M Ch128

L



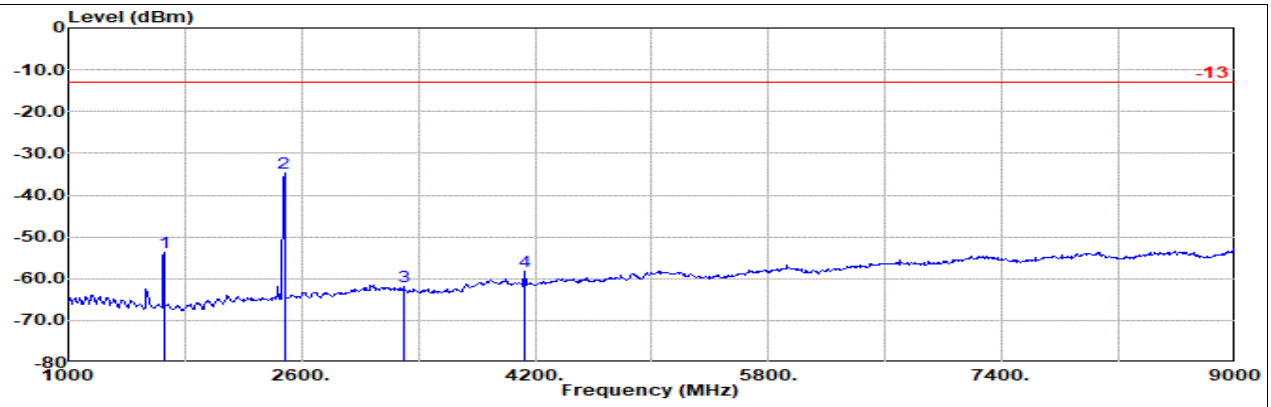
Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project : 380306
: GSM850 Ch128

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-57.36	RMS	25.18	-28.63	0.46	-95.23	40.86	-13.00	-44.36	Horizontal
2	2480.00	-36.89	RMS	27.72	-27.30	0.34	-95.23	57.58	-13.00	-23.89	Horizontal
3	3296.00	-62.53	RMS	29.61	-26.04	0.23	-95.23	28.90	-13.00	-49.53	Horizontal
4	4128.00	-55.94	RMS	30.90	-25.34	0.40	-95.23	33.33	-13.00	-42.94	Horizontal



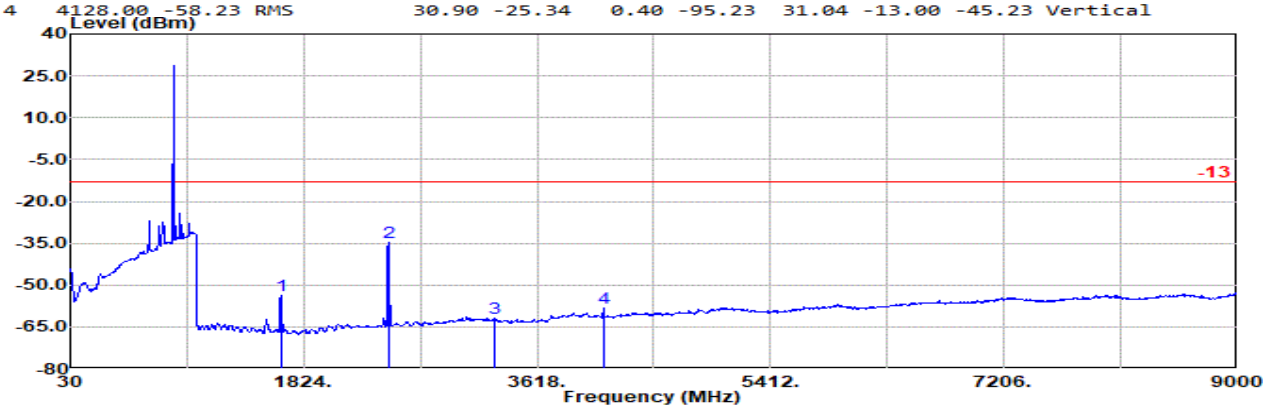
Site : 03CH20-HY
Condition: -13 3m LF_55606&08_221022 Horizontal
Project : 380306
: GSM850 Ch128

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-57.36	RMS	25.18	-28.63	0.46	-95.23	40.86	-13.00	-44.36	Horizontal
2	2480.00	-36.89	RMS	27.72	-27.30	0.34	-95.23	57.58	-13.00	-23.89	Horizontal
3	3296.00	-62.53	RMS	29.61	-26.04	0.23	-95.23	28.90	-13.00	-49.53	Horizontal
4	4128.00	-55.94	RMS	30.90	-25.34	0.40	-95.23	33.33	-13.00	-42.94	Horizontal



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project : 380306
: GSM850 Ch128

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-53.69	RMS	25.18	-28.63	0.46	-95.23	44.53	-13.00	-40.69	Vertical
2	2480.00	-34.63	RMS	27.72	-27.30	0.34	-95.23	59.84	-13.00	-21.63	Vertical
3	3296.00	-61.91	RMS	29.61	-26.04	0.23	-95.23	29.52	-13.00	-48.91	Vertical
4	4128.00	-58.23	RMS	30.90	-25.34	0.40	-95.23	31.04	-13.00	-45.23	Vertical



Site : 03CH20-HY
Condition: -13 3m LF_55606&08_221022 Vertical
Project : 380306
: GSM850 Ch128

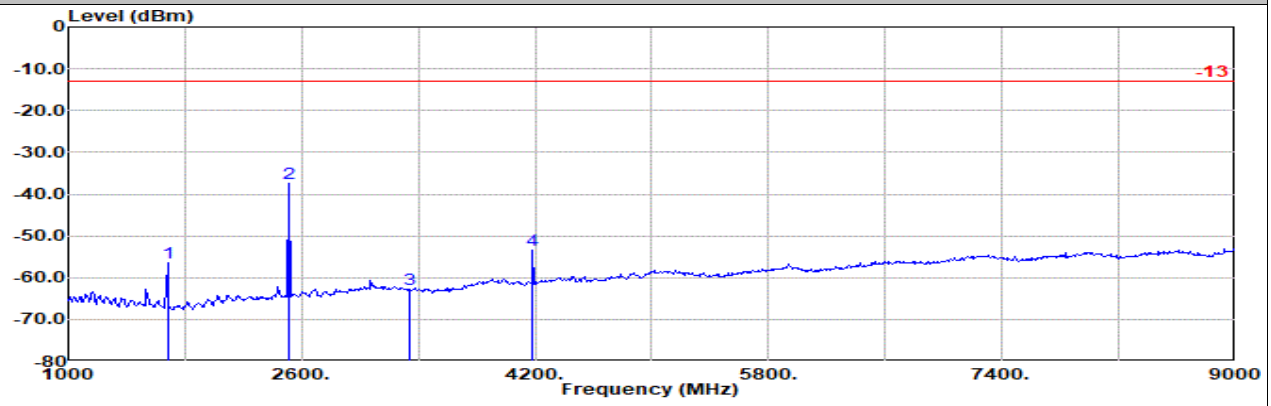
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-53.69	RMS	25.18	-28.63	0.46	-95.23	44.53	-13.00	-40.69	Vertical
2	2480.00	-34.63	RMS	27.72	-27.30	0.34	-95.23	59.84	-13.00	-21.63	Vertical
3	3296.00	-61.91	RMS	29.61	-26.04	0.23	-95.23	29.52	-13.00	-48.91	Vertical
4	4128.00	-58.23	RMS	30.90	-25.34	0.40	-95.23	31.04	-13.00	-45.23	Vertical

Tx0Rx0

Part 22 Mode 1

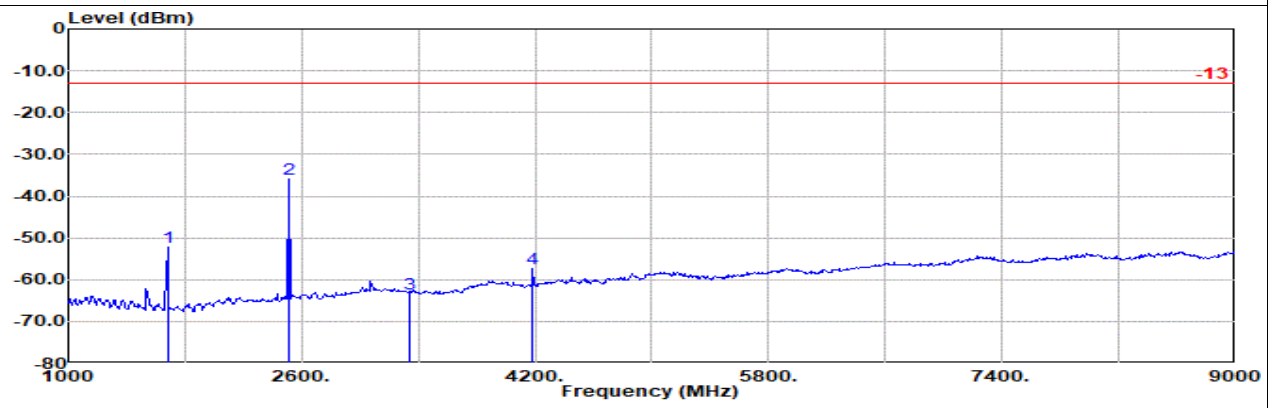
GSM 850 10M Ch189

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM850 Ch189
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1680.00	-56.30	RMS	25.08	-28.59	0.45	-95.23	41.99	-13.00	-43.30	Horizontal
2	2512.00	-37.29	RMS	27.82	-27.24	0.35	-95.23	57.01	-13.00	-24.29	Horizontal
3	3345.00	-62.76	RMS	29.60	-26.01	0.23	-95.23	28.65	-13.00	-49.76	Horizontal
4	4184.00	-53.43	RMS	30.97	-25.32	0.38	-95.23	35.77	-13.00	-40.43	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM850 Ch189
```

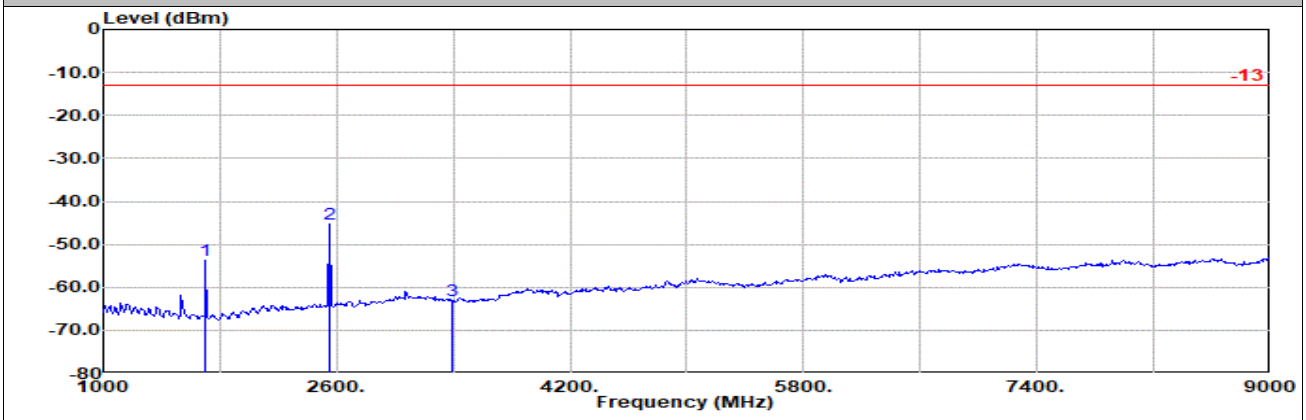
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1680.00	-52.34	RMS	25.08	-28.59	0.45	-95.23	45.95	-13.00	-39.34	Vertical
2	2512.00	-35.90	RMS	27.82	-27.24	0.35	-95.23	58.40	-13.00	-22.90	Vertical
3	3345.00	-63.37	RMS	29.60	-26.01	0.23	-95.23	28.04	-13.00	-50.37	Vertical
4	4184.00	-57.29	RMS	30.97	-25.32	0.38	-95.23	31.91	-13.00	-44.29	Vertical

Tx0Rx0

Part 22 Mode 1

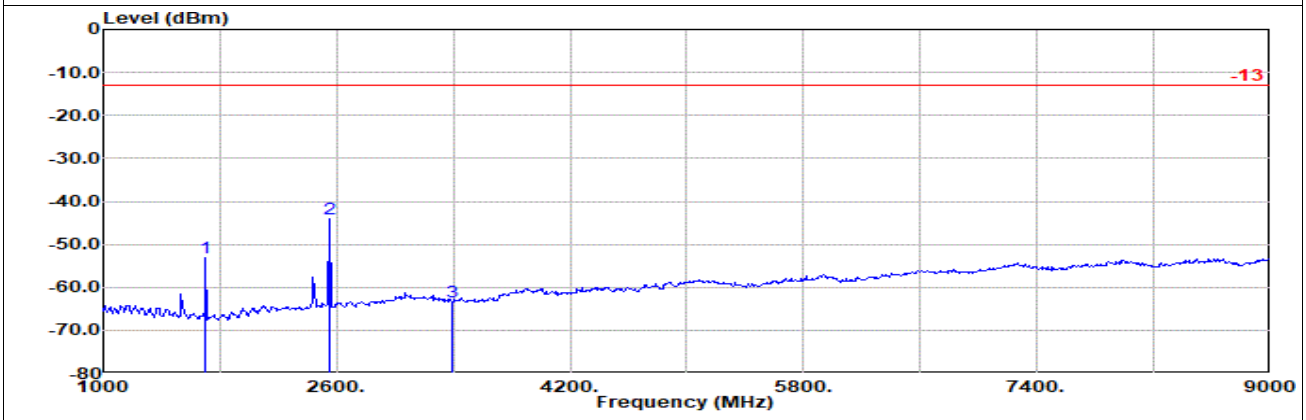
GSM 850 10M Ch251

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM850 Ch251
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1704.00	-53.60	RMS	25.00	-28.55	0.44	-95.23	44.74	-13.00	-40.60	Horizontal
2	2552.00	-45.41	RMS	27.90	-27.15	0.36	-95.23	48.71	-13.00	-32.41	Horizontal
3	3395.00	-63.06	RMS	29.60	-25.98	0.22	-95.23	28.33	-13.00	-50.06	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM850 Ch251
```

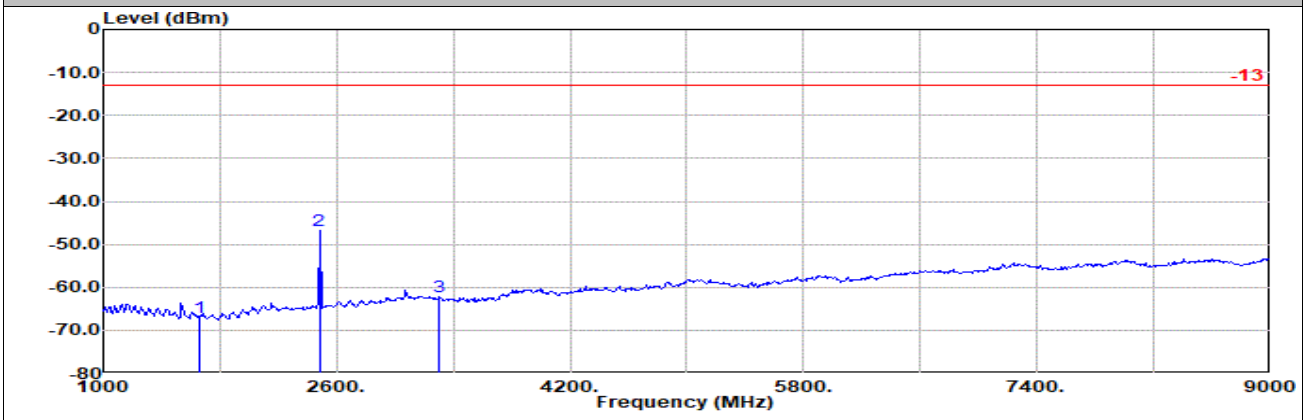
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1704.00	-53.07	RMS	25.00	-28.55	0.44	-95.23	45.27	-13.00	-40.07	Vertical
2	2552.00	-44.06	RMS	27.90	-27.15	0.36	-95.23	50.06	-13.00	-31.06	Vertical
3	3395.00	-63.40	RMS	29.60	-25.98	0.22	-95.23	27.99	-13.00	-50.40	Vertical

Tx0Rx0

Part 22 Mode 3

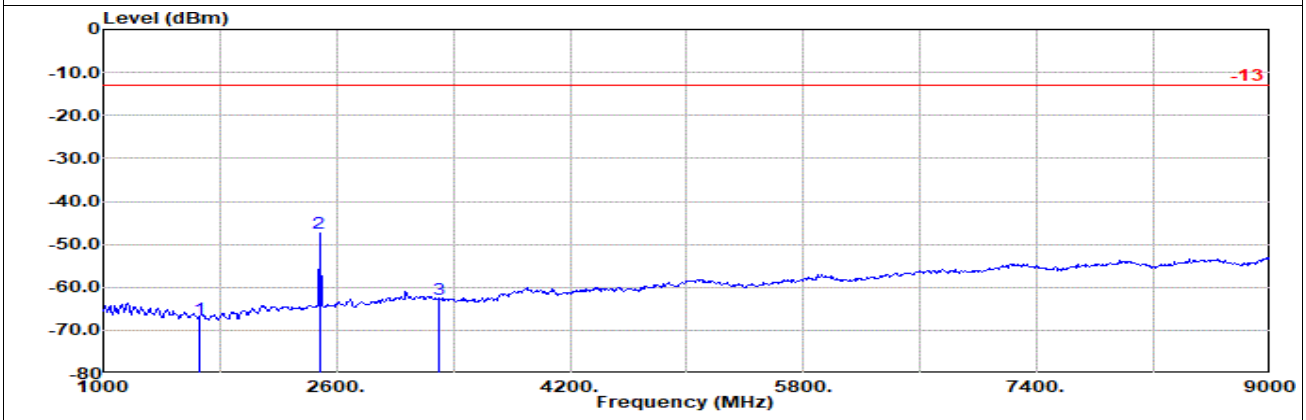
WCDMA B5 10M Ch4132

L



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project : 380306
: WCDMA B5 Ch4132

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-67.14	RMS	25.18	-28.63	0.46	-95.23	31.08	-13.00	-54.14	Horizontal
2	2480.00	-46.90	RMS	27.72	-27.30	0.34	-95.23	47.57	-13.00	-33.90	Horizontal
3	3304.00	-62.24	RMS	29.60	-26.03	0.23	-95.23	29.19	-13.00	-49.24	Horizontal



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project : 380306
: WCDMA B5 Ch4132

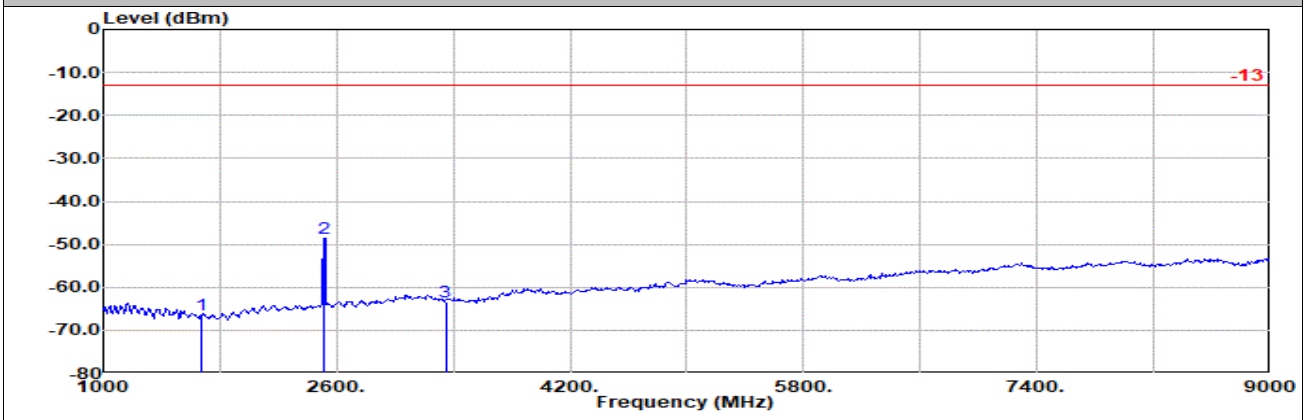
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-67.17	RMS	25.18	-28.63	0.46	-95.23	31.05	-13.00	-54.17	Vertical
2	2480.00	-47.53	RMS	27.72	-27.30	0.34	-95.23	46.94	-13.00	-34.53	Vertical
3	3304.00	-62.88	RMS	29.60	-26.03	0.23	-95.23	28.55	-13.00	-49.88	Vertical

Tx0Rx0

Part 22 Mode 3

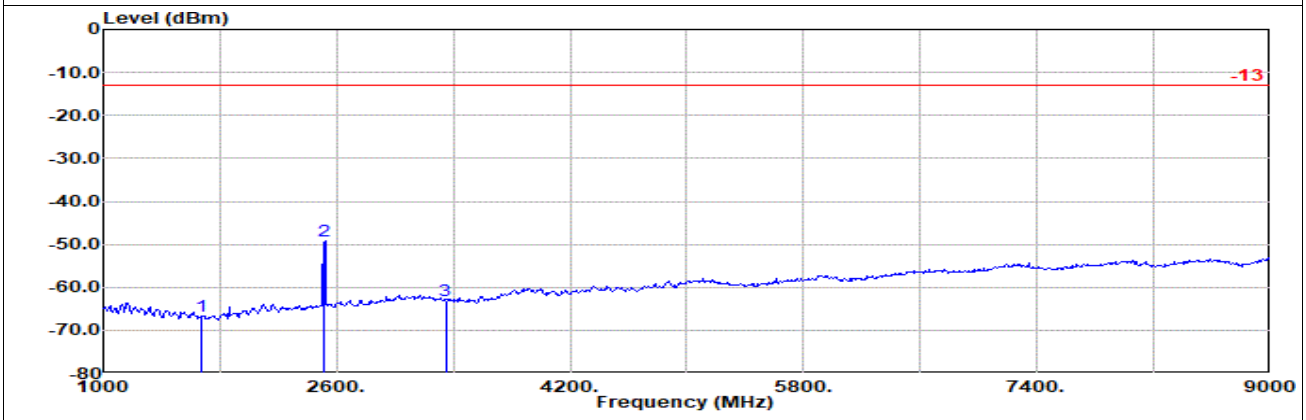
WCDMA B5 10M Ch4182

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B5 Ch4182
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1672.00	-66.51	RMS	25.11	-28.60	0.45	-95.23	31.76	-13.00	-53.51	Horizontal
2	2512.00	-48.46	RMS	27.82	-27.24	0.35	-95.23	45.84	-13.00	-35.46	Horizontal
3	3345.80	-63.26	RMS	29.60	-26.01	0.23	-95.23	28.15	-13.00	-50.26	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B5 Ch4182
```

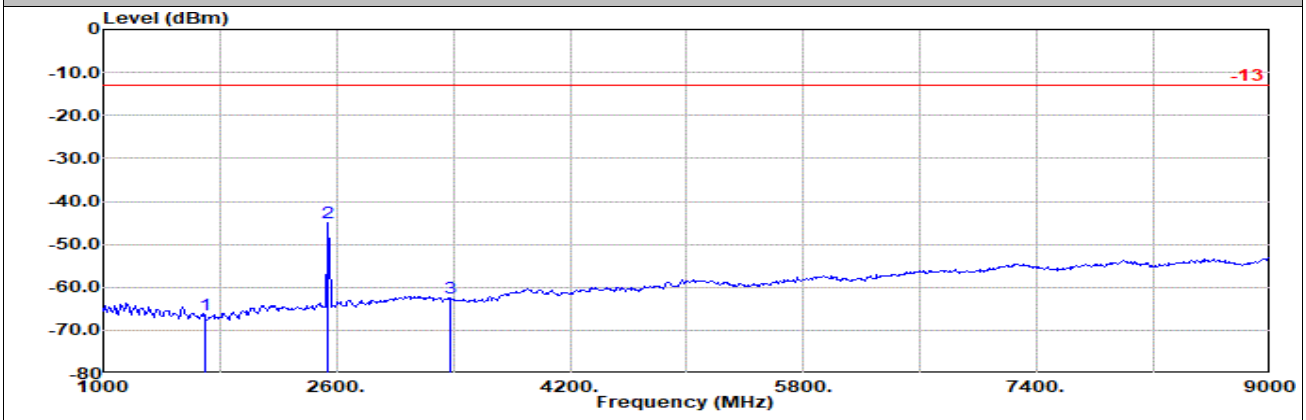
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1672.00	-66.85	RMS	25.11	-28.60	0.45	-95.23	31.42	-13.00	-53.85	Vertical
2	2512.00	-49.26	RMS	27.82	-27.24	0.35	-95.23	45.04	-13.00	-36.26	Vertical
3	3345.80	-63.07	RMS	29.60	-26.01	0.23	-95.23	28.34	-13.00	-50.07	Vertical

Tx0Rx0

Part 22 Mode 3

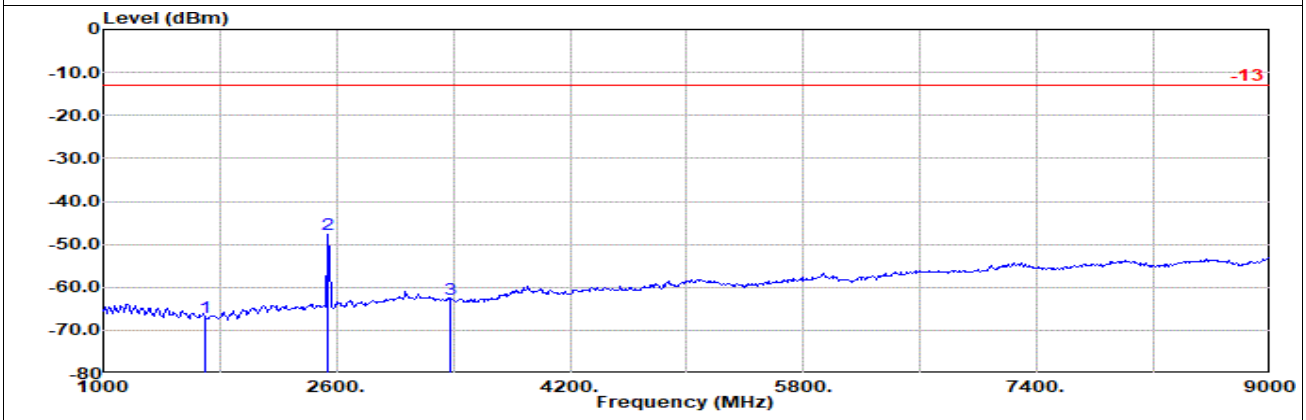
WCDMA B5 10M Ch4233

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B5 Ch4233
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1696.00	-66.42	RMS	25.02	-28.56	0.44	-95.23	31.91	-13.00	-53.42	Horizontal
2	2544.00	-45.07	RMS	27.89	-27.17	0.36	-95.23	49.08	-13.00	-32.07	Horizontal
3	3384.00	-62.57	RMS	29.60	-25.98	0.22	-95.23	28.82	-13.00	-49.57	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B5 Ch4233
```

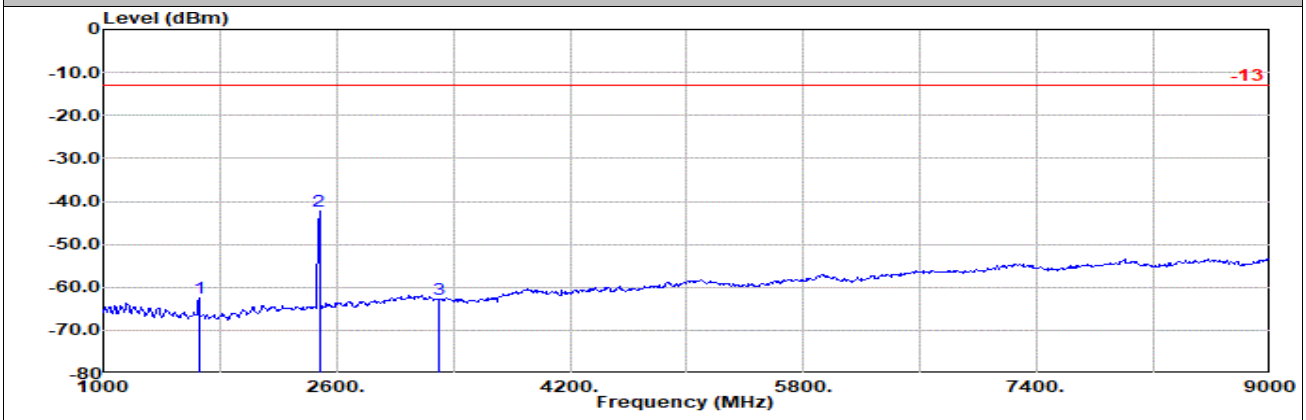
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1696.00	-66.93	RMS	25.02	-28.56	0.44	-95.23	31.40	-13.00	-53.93	Vertical
2	2544.00	-47.66	RMS	27.89	-27.17	0.36	-95.23	46.49	-13.00	-34.66	Vertical
3	3384.00	-62.82	RMS	29.60	-25.98	0.22	-95.23	28.57	-13.00	-49.82	Vertical

Tx1Rx1

Part 22 Mode 2

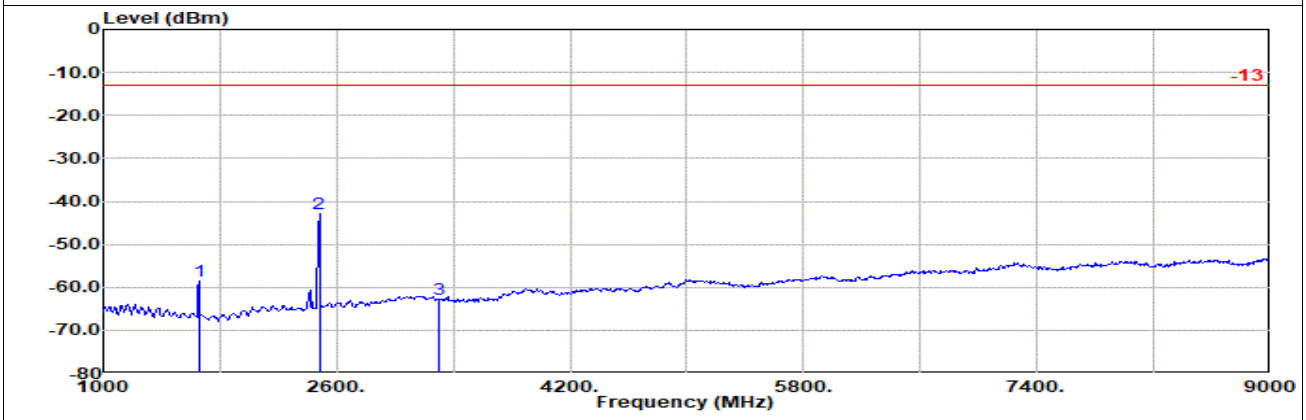
GSM 850 10M Ch128

L




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM850 Ch128
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-62.60	RMS	25.18	-28.63	0.46	-95.23	35.62	-13.00	-49.60	Horizontal
2	2480.00	-42.18	RMS	27.72	-27.30	0.34	-95.23	52.29	-13.00	-29.18	Horizontal
3	3296.80	-62.86	RMS	29.61	-26.04	0.23	-95.23	28.57	-13.00	-49.86	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM850 Ch128
```

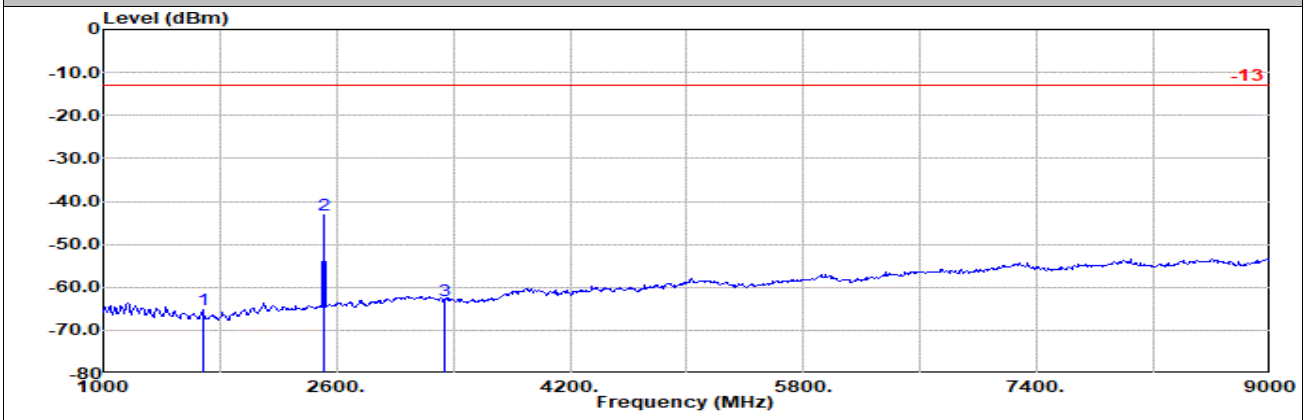
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-58.71	RMS	25.18	-28.63	0.46	-95.23	39.51	-13.00	-45.71	Vertical
2	2480.00	-42.92	RMS	27.72	-27.30	0.34	-95.23	51.55	-13.00	-29.92	Vertical
3	3296.80	-62.89	RMS	29.61	-26.04	0.23	-95.23	28.54	-13.00	-49.89	Vertical

Tx1Rx1

Part 22 Mode 2

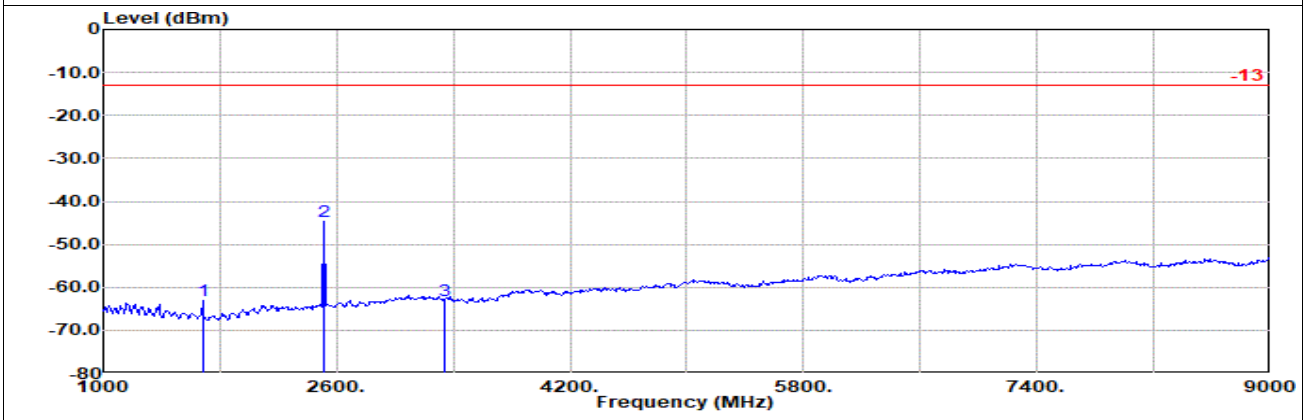
GSM 850 10M Ch189

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM850 Ch189
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1680.00	-65.26	RMS	25.08	-28.59	0.45	-95.23	33.03	-13.00	-52.26	Horizontal
2	2512.00	-43.14	RMS	27.82	-27.24	0.35	-95.23	51.16	-13.00	-30.14	Horizontal
3	3345.60	-63.21	RMS	29.60	-26.01	0.23	-95.23	28.20	-13.00	-50.21	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM850 Ch189
```

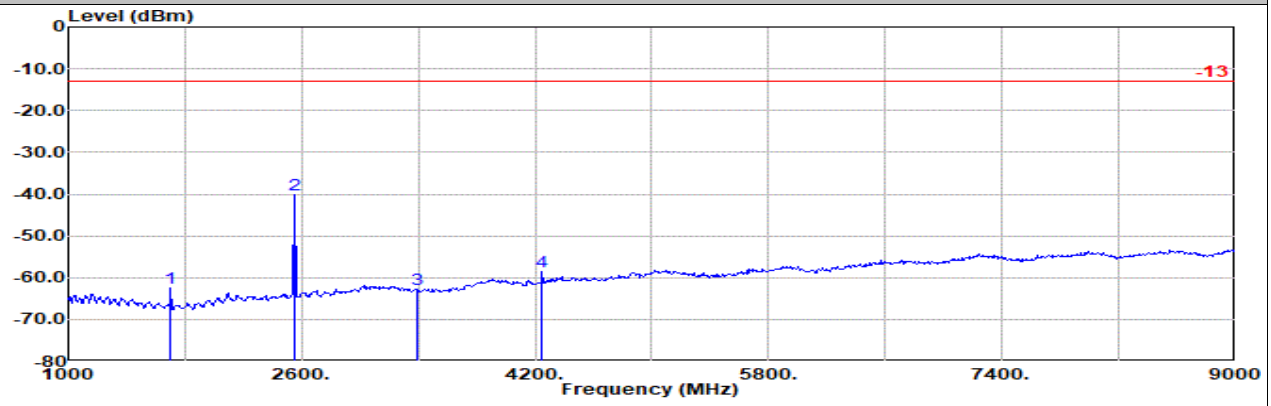
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1680.00	-63.03	RMS	25.08	-28.59	0.45	-95.23	35.26	-13.00	-50.03	Vertical
2	2512.00	-44.67	RMS	27.82	-27.24	0.35	-95.23	49.63	-13.00	-31.67	Vertical
3	3345.60	-63.16	RMS	29.60	-26.01	0.23	-95.23	28.25	-13.00	-50.16	Vertical

Tx1Rx1

Part 22 Mode 2

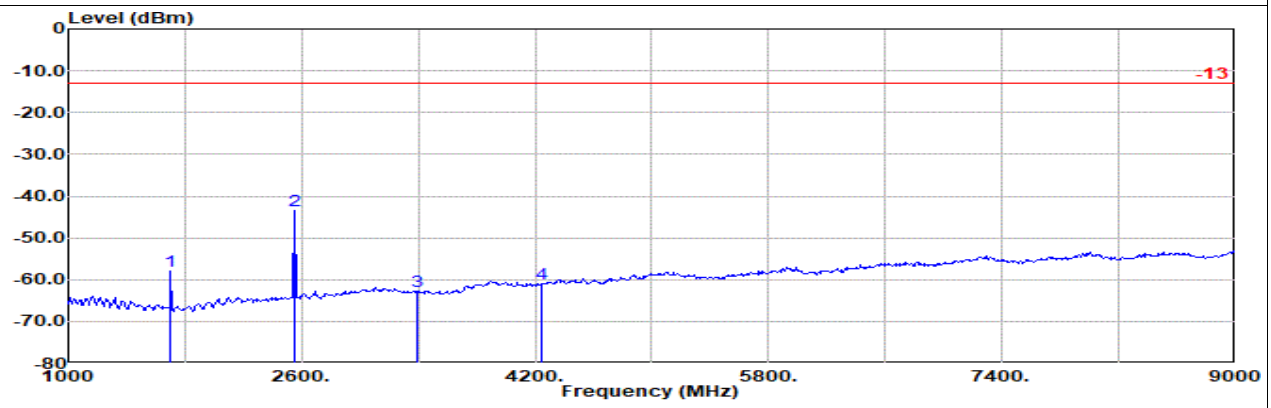
GSM 850 10M Ch251

H



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project : 380306
: GSM850 Ch251

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1704.00	-62.49	RMS	25.00	-28.55	0.44	-95.23	35.85	-13.00	-49.49	Horizontal
2	2552.00	-40.05	RMS	27.90	-27.15	0.36	-95.23	54.07	-13.00	-27.05	Horizontal
3	3395.20	-62.81	RMS	29.60	-25.97	0.22	-95.23	28.57	-13.00	-49.81	Horizontal
4	4248.00	-58.67	RMS	31.19	-25.25	0.38	-95.23	30.24	-13.00	-45.67	Horizontal



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project : 380306
: GSM850 Ch251

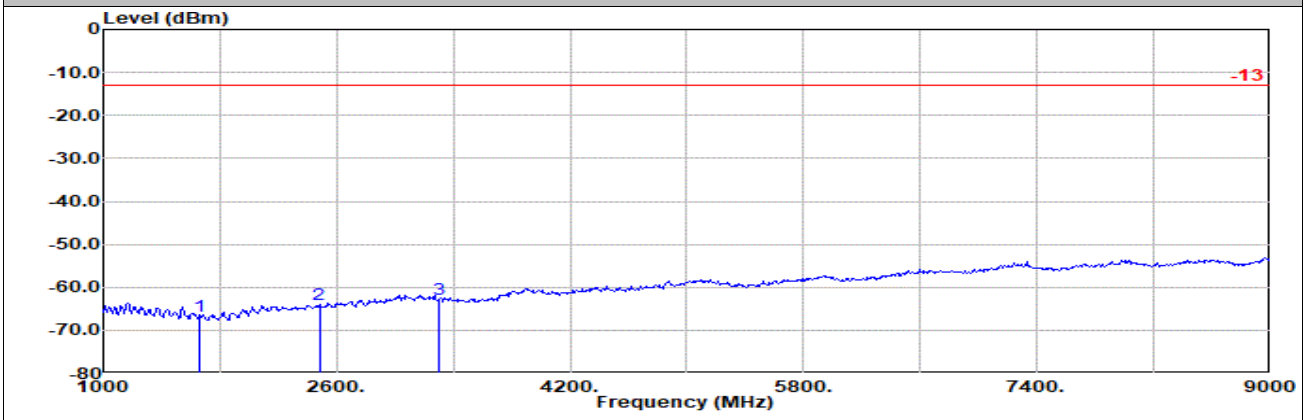
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1704.00	-58.05	RMS	25.00	-28.55	0.44	-95.23	40.29	-13.00	-45.05	Vertical
2	2552.00	-43.46	RMS	27.90	-27.15	0.36	-95.23	50.66	-13.00	-30.46	Vertical
3	3395.20	-62.92	RMS	29.60	-25.97	0.22	-95.23	28.46	-13.00	-49.92	Vertical
4	4248.00	-60.99	RMS	31.19	-25.25	0.38	-95.23	27.92	-13.00	-47.99	Vertical

Tx1Rx1

Part 22 Mode 4

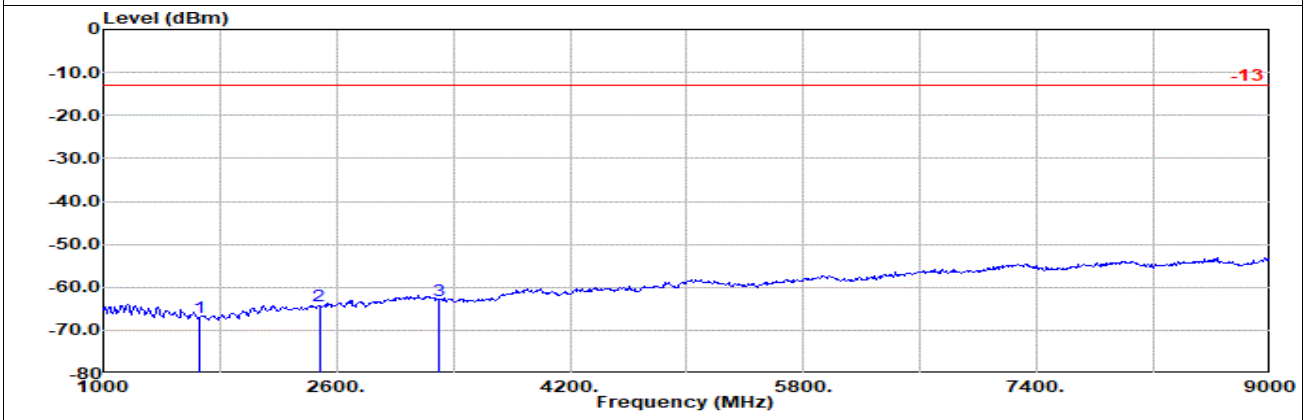
WCDMA B5 10M Ch4132

L




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B5 Ch4132
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-66.86	RMS	25.18	-28.63	0.46	-95.23	31.36	-13.00	-53.86	Horizontal
2	2480.00	-64.07	RMS	27.72	-27.30	0.34	-95.23	30.40	-13.00	-51.07	Horizontal
3	3304.00	-62.85	RMS	29.60	-26.03	0.23	-95.23	28.58	-13.00	-49.85	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B5 Ch4132
```

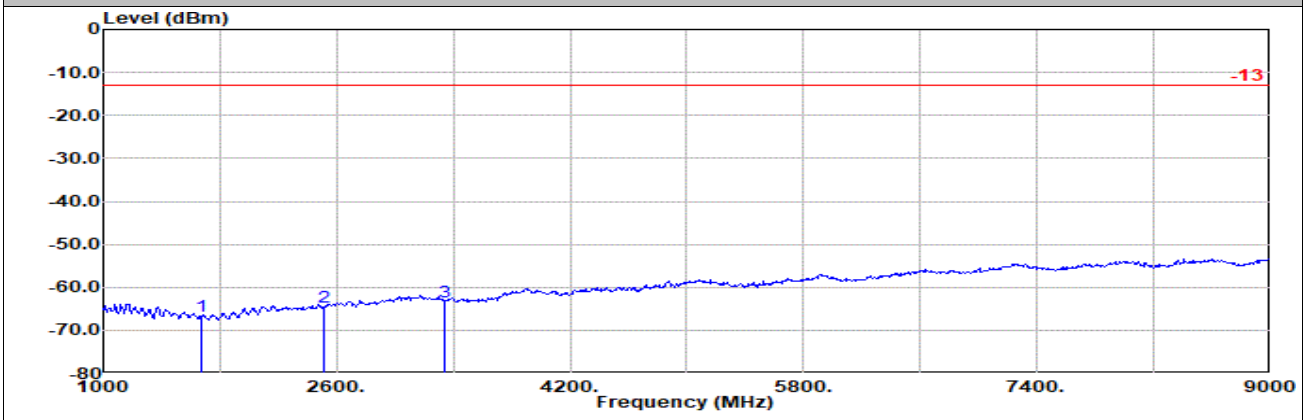
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-67.05	RMS	25.18	-28.63	0.46	-95.23	31.17	-13.00	-54.05	Vertical
2	2480.00	-64.29	RMS	27.72	-27.30	0.34	-95.23	30.18	-13.00	-51.29	Vertical
3	3304.00	-63.00	RMS	29.60	-26.03	0.23	-95.23	28.43	-13.00	-50.00	Vertical

Tx1Rx1

Part 22 Mode 4

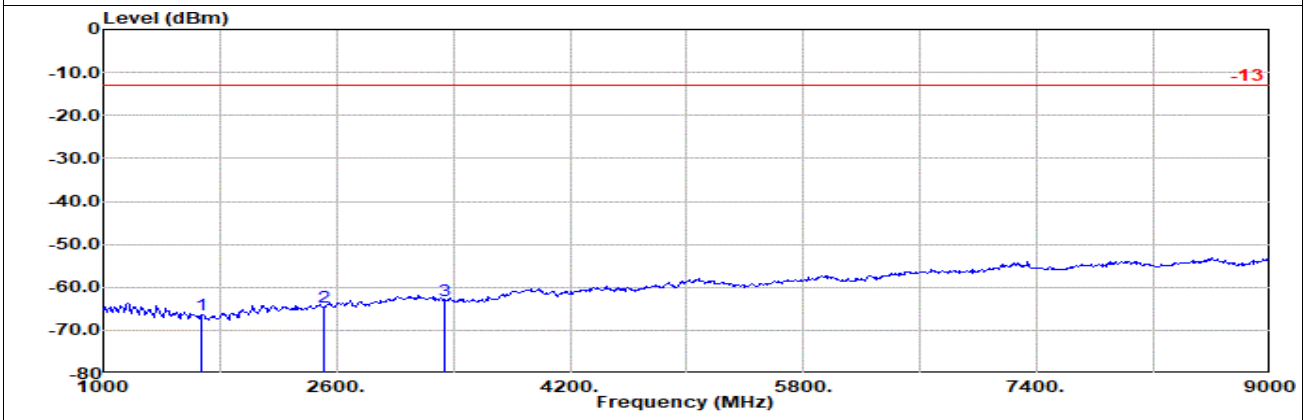
WCDMA B5 10M Ch4182

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B5 Ch4182
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1672.00	-66.73	RMS	25.11	-28.60	0.45	-95.23	31.54	-13.00	-53.73	Horizontal
2	2512.00	-64.63	RMS	27.82	-27.24	0.35	-95.23	29.67	-13.00	-51.63	Horizontal
3	3344.00	-63.31	RMS	29.60	-26.01	0.23	-95.23	28.10	-13.00	-50.31	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B5 Ch4182
```

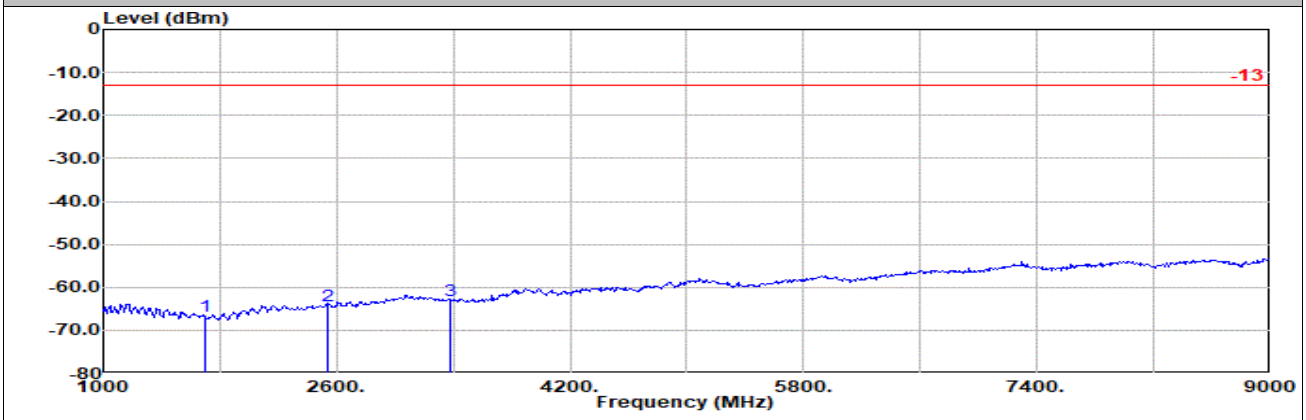
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1672.00	-66.55	RMS	25.11	-28.60	0.45	-95.23	31.72	-13.00	-53.55	Vertical
2	2512.00	-64.50	RMS	27.82	-27.24	0.35	-95.23	29.80	-13.00	-51.50	Vertical
3	3344.00	-63.00	RMS	29.60	-26.01	0.23	-95.23	28.41	-13.00	-50.00	Vertical

Tx1Rx1

Part 22 Mode 4

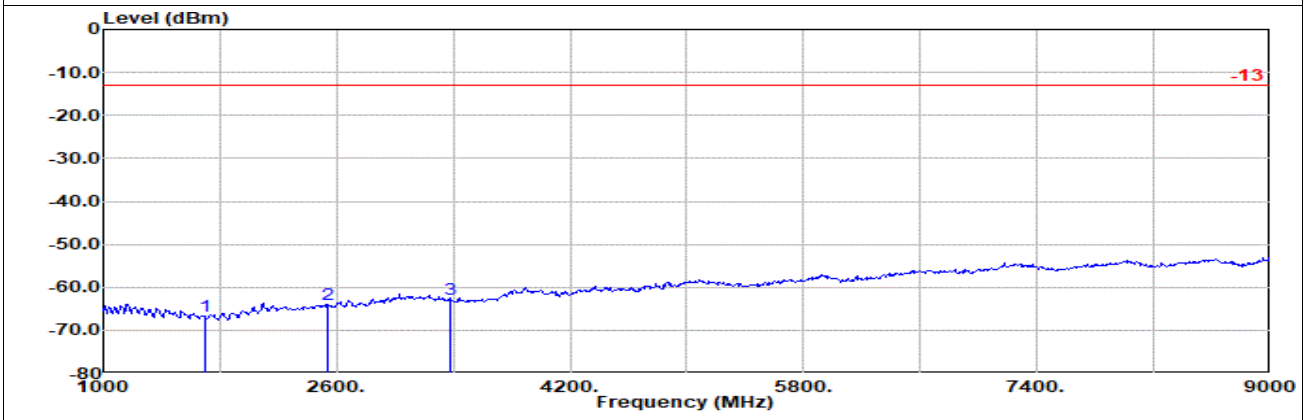
WCDMA B5 10M Ch4233

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B5 Ch4233
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1696.00	-66.84	RMS	25.02	-28.56	0.44	-95.23	31.49	-13.00	-53.84	Horizontal
2	2536.00	-64.30	RMS	27.87	-27.19	0.35	-95.23	29.90	-13.00	-51.30	Horizontal
3	3384.00	-63.13	RMS	29.60	-25.98	0.22	-95.23	28.26	-13.00	-50.13	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B5 Ch4233
```

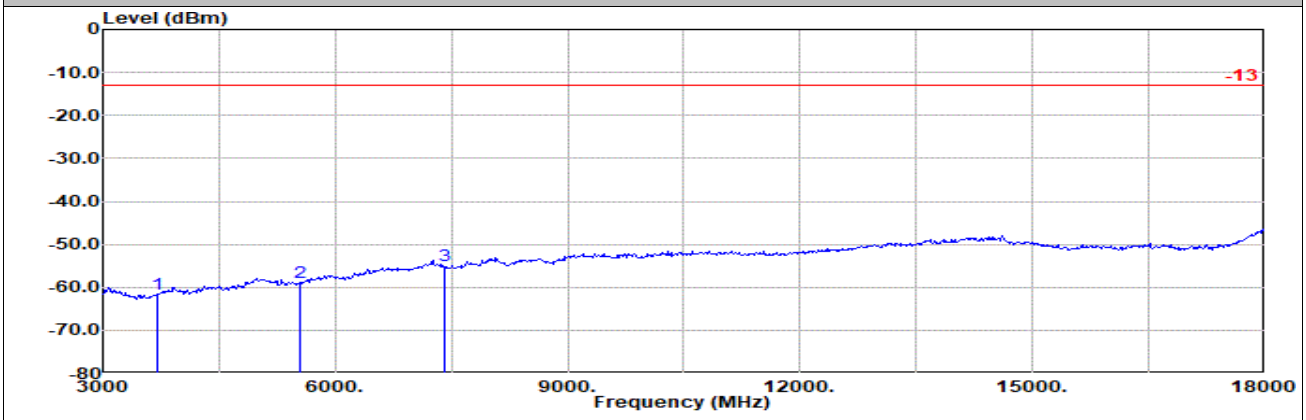
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1696.00	-66.69	RMS	25.02	-28.56	0.44	-95.23	31.64	-13.00	-53.69	Vertical
2	2536.00	-64.07	RMS	27.87	-27.19	0.35	-95.23	30.13	-13.00	-51.07	Vertical
3	3384.00	-62.94	RMS	29.60	-25.98	0.22	-95.23	28.45	-13.00	-49.94	Vertical

Tx0Rx0

Part 24 Mode 1

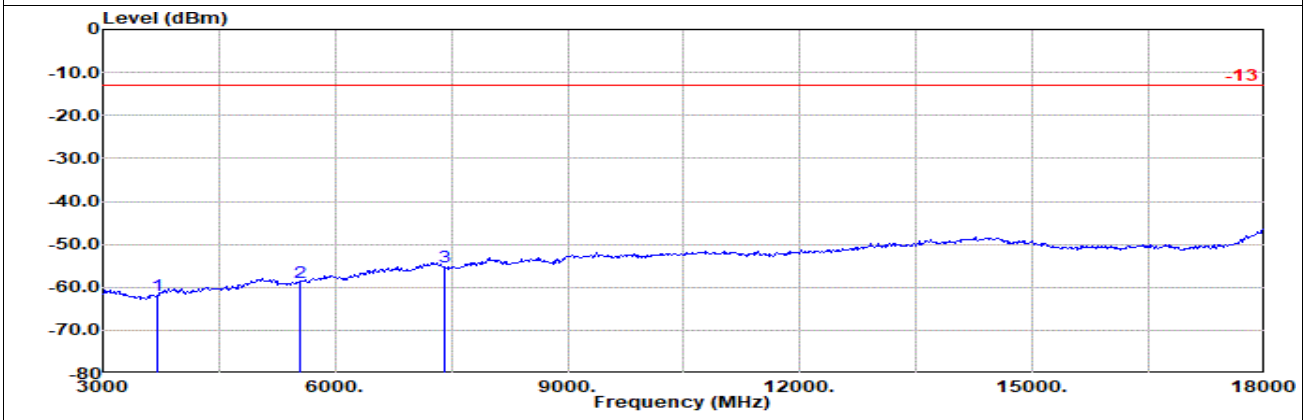
GSM 1900 10M Ch512

L




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM1900 Ch512
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-61.44	RMS	29.84	-25.57	0.85	-95.23	28.67	-13.00	-48.44	Horizontal
2	5550.00	-58.81	RMS	33.00	-24.39	0.47	-95.23	27.34	-13.00	-45.81	Horizontal
3	7400.00	-54.93	RMS	36.50	-22.77	0.53	-95.23	26.04	-13.00	-41.93	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM1900 Ch512
```

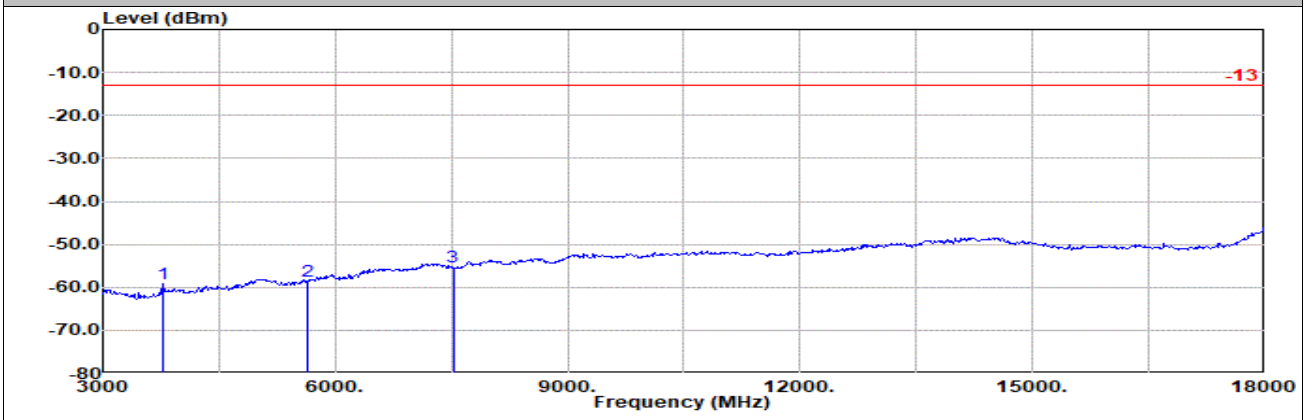
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-61.98	RMS	29.84	-25.57	0.85	-95.23	28.13	-13.00	-48.98	Vertical
2	5550.00	-58.97	RMS	33.00	-24.39	0.47	-95.23	27.18	-13.00	-45.97	Vertical
3	7400.00	-55.22	RMS	36.50	-22.77	0.53	-95.23	25.75	-13.00	-42.22	Vertical

Tx0Rx0

Part 24 Mode 1

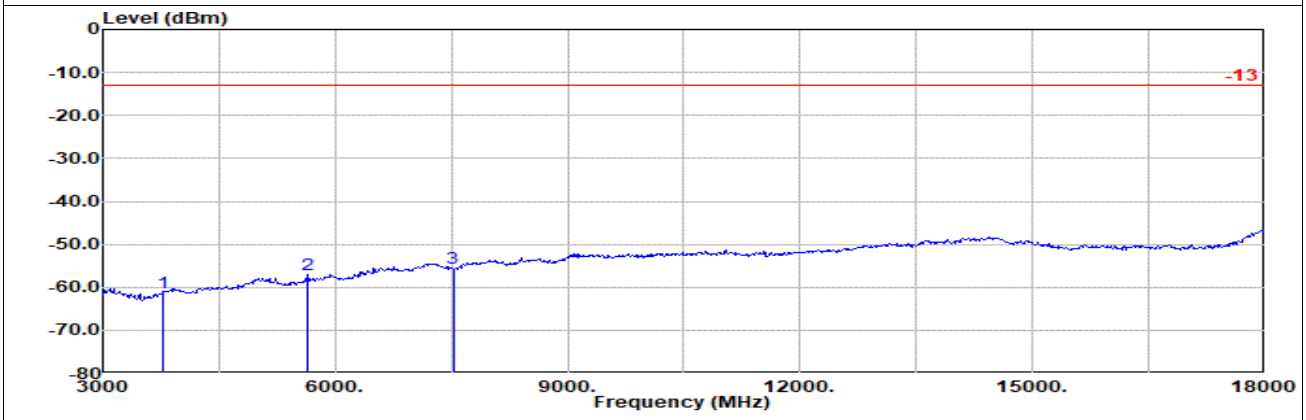
GSM 1900 10M Ch661

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM1900 Ch661
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3765.00	-59.13	RMS	30.29	-25.53	0.83	-95.23	30.51	-13.00	-46.13	Horizontal
2	5640.00	-58.69	RMS	33.18	-24.32	0.45	-95.23	27.23	-13.00	-45.69	Horizontal
3	7520.00	-55.13	RMS	36.30	-22.78	0.54	-95.23	26.04	-13.00	-42.13	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM1900 Ch661
```

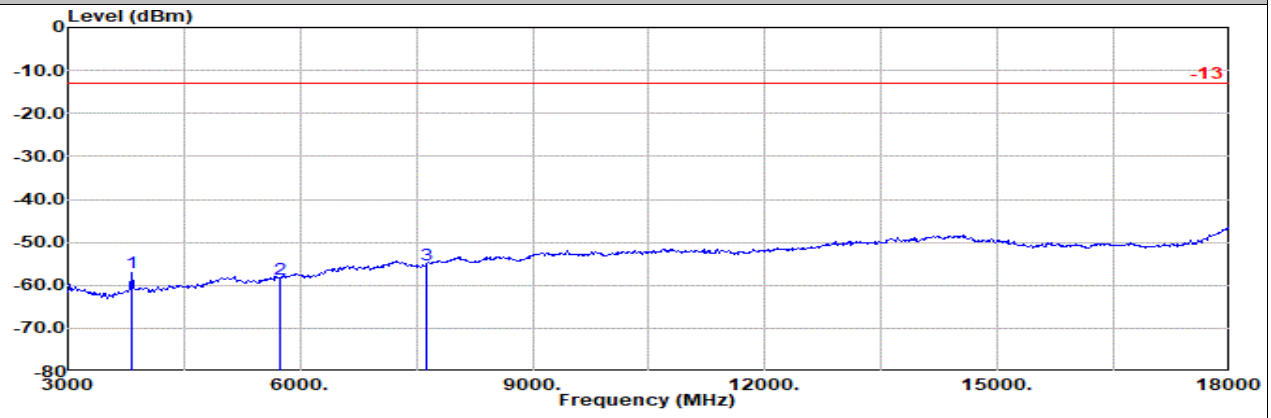
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3765.00	-61.24	RMS	30.29	-25.53	0.83	-95.23	28.40	-13.00	-48.24	Vertical
2	5640.00	-56.99	RMS	33.18	-24.32	0.45	-95.23	28.93	-13.00	-43.99	Vertical
3	7520.00	-55.60	RMS	36.30	-22.78	0.54	-95.23	25.57	-13.00	-42.60	Vertical

Tx0Rx0

Part 24 Mode 1

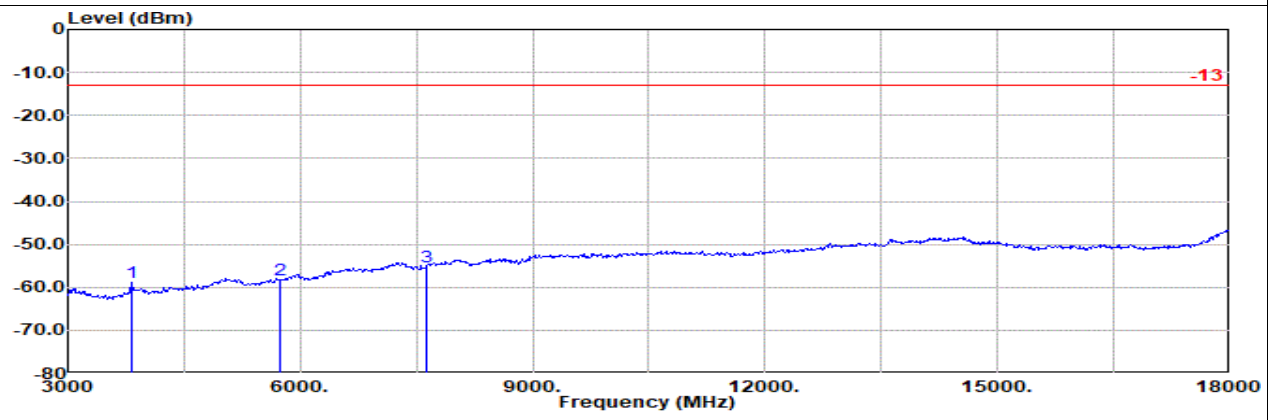
GSM 1900 10M Ch810

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM1900 Ch810
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3825.00	-57.07	RMS	30.60	-25.50	0.81	-95.23	32.25	-13.00	-44.07	Horizontal
2	5730.00	-58.45	RMS	33.72	-24.22	0.44	-95.23	26.84	-13.00	-45.45	Horizontal
3	7639.00	-55.18	RMS	36.48	-22.79	0.55	-95.23	25.81	-13.00	-42.18	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM1900 Ch810
```

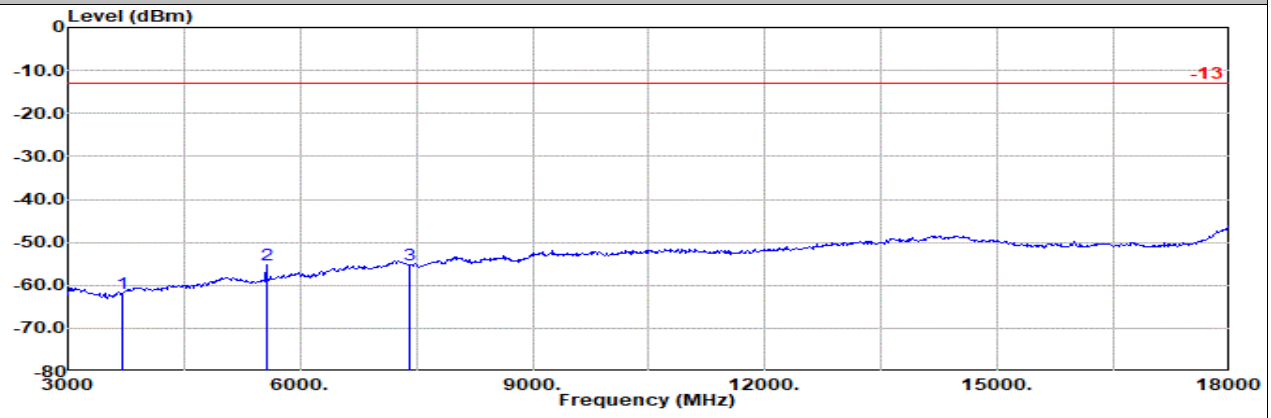
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3825.00	-58.90	RMS	30.60	-25.50	0.81	-95.23	30.42	-13.00	-45.90	Vertical
2	5730.00	-58.34	RMS	33.72	-24.22	0.44	-95.23	26.95	-13.00	-45.34	Vertical
3	7639.00	-55.24	RMS	36.48	-22.79	0.55	-95.23	25.75	-13.00	-42.24	Vertical

Tx0Rx0

Part 24 Mode 3

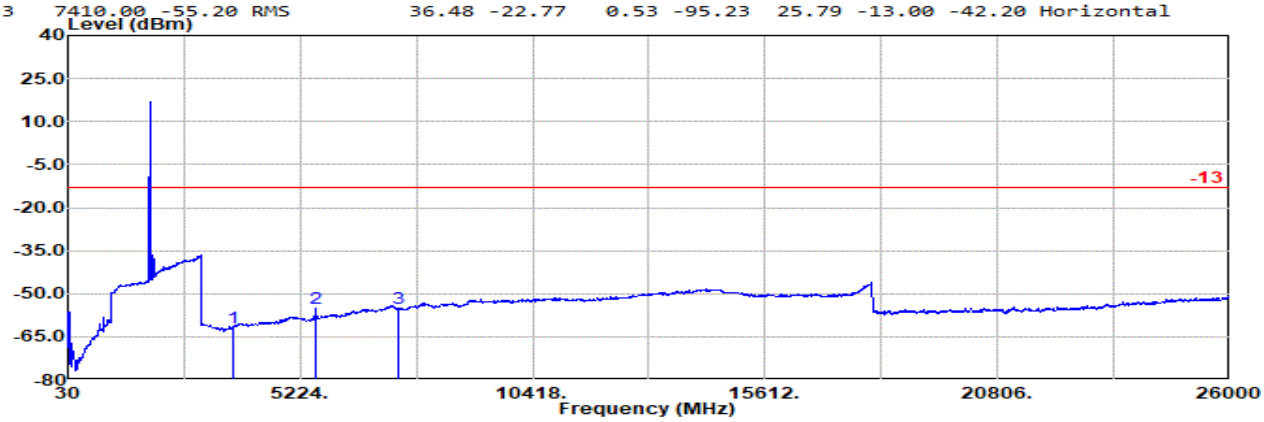
WCDMA B2 10M Ch9262

L



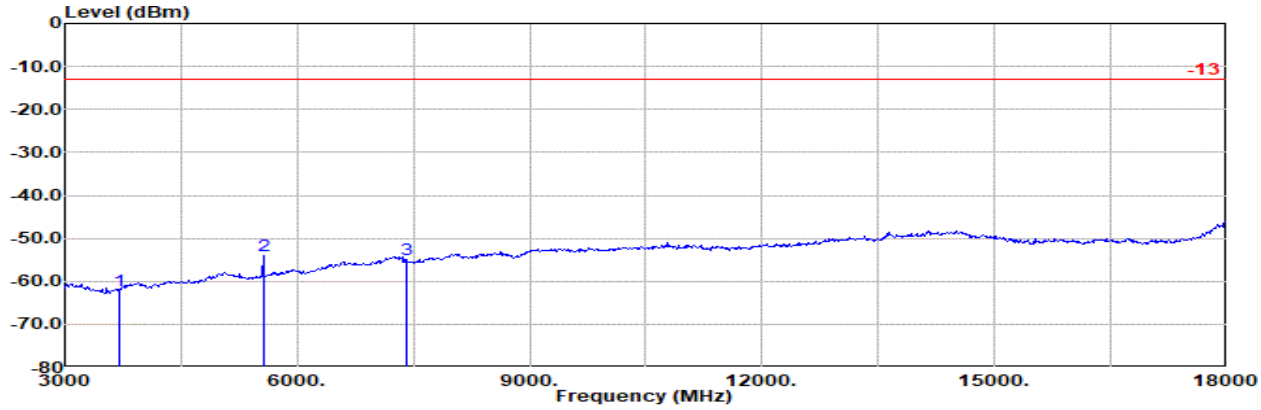

```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B2 Ch9262
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-61.94	RMS	29.84	-25.57	0.85	-95.23	28.17	-13.00	-48.94	Horizontal
2	5565.00	-55.18	RMS	33.03	-24.38	0.46	-95.23	30.94	-13.00	-42.18	Horizontal
3	7410.00	-55.20	RMS	36.48	-22.77	0.53	-95.23	25.79	-13.00	-42.20	Horizontal



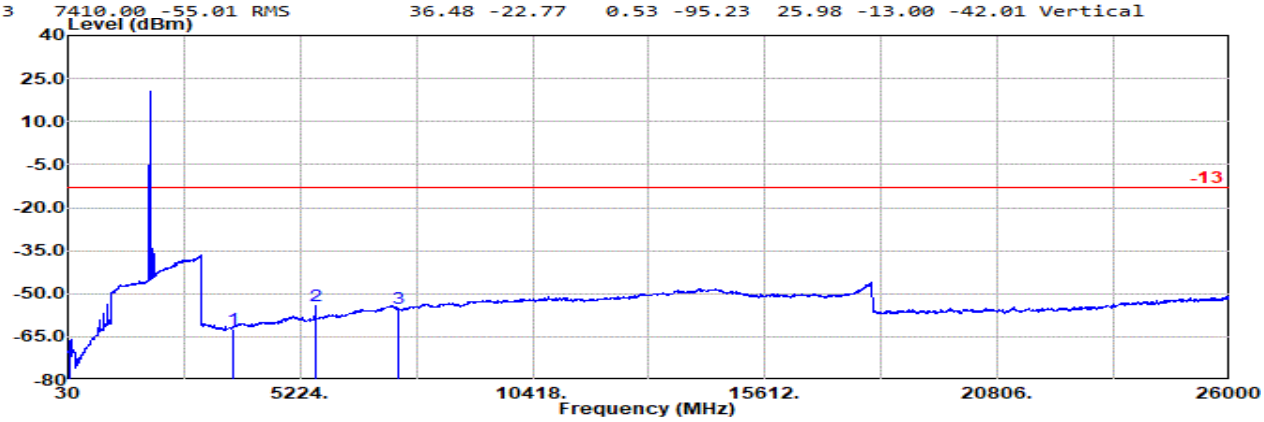

```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B2 Ch9262
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-61.94	RMS	29.84	-25.57	0.85	-95.23	28.17	-13.00	-48.94	Horizontal
2	5565.00	-55.18	RMS	33.03	-24.38	0.46	-95.23	30.94	-13.00	-42.18	Horizontal
3	7410.00	-55.20	RMS	36.48	-22.77	0.53	-95.23	25.79	-13.00	-42.20	Horizontal



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project : 380306
: WCDMA B2 Ch9262

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-62.24	RMS	29.84	-25.57	0.85	-95.23	27.87	-13.00	-49.24	Vertical
2	5565.00	-54.01	RMS	33.03	-24.38	0.46	-95.23	32.11	-13.00	-41.01	Vertical
3	7410.00	-55.01	RMS	36.48	-22.77	0.53	-95.23	25.98	-13.00	-42.01	Vertical



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project : 380306
: WCDMA B2 Ch9262

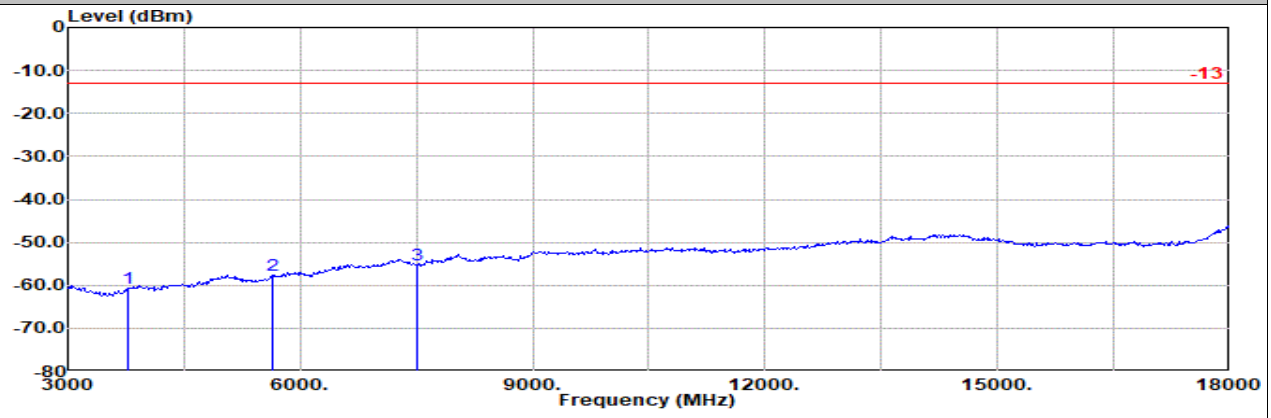
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-62.24	RMS	29.84	-25.57	0.85	-95.23	27.87	-13.00	-49.24	Vertical
2	5565.00	-54.01	RMS	33.03	-24.38	0.46	-95.23	32.11	-13.00	-41.01	Vertical
3	7410.00	-55.01	RMS	36.48	-22.77	0.53	-95.23	25.98	-13.00	-42.01	Vertical

Tx0Rx0

Part 24 Mode 3

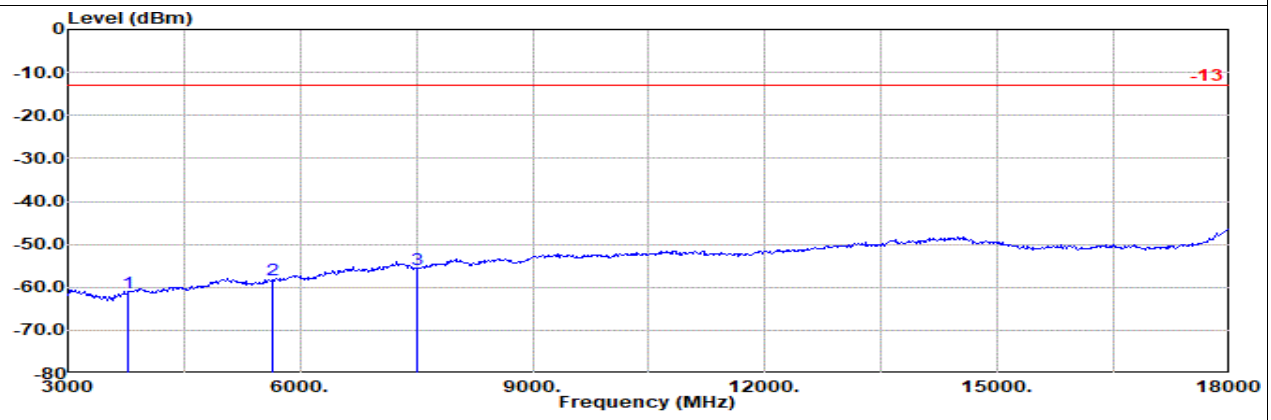
WCDMA B2 10M Ch9400

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B2 Ch9400
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3765.00	-60.80	RMS	30.29	-25.53	0.83	-95.23	28.84	-13.00	-47.80	Horizontal
2	5640.00	-57.65	RMS	33.18	-24.32	0.45	-95.23	28.27	-13.00	-44.65	Horizontal
3	7515.00	-55.24	RMS	36.30	-22.78	0.54	-95.23	25.93	-13.00	-42.24	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B2 Ch9400
```

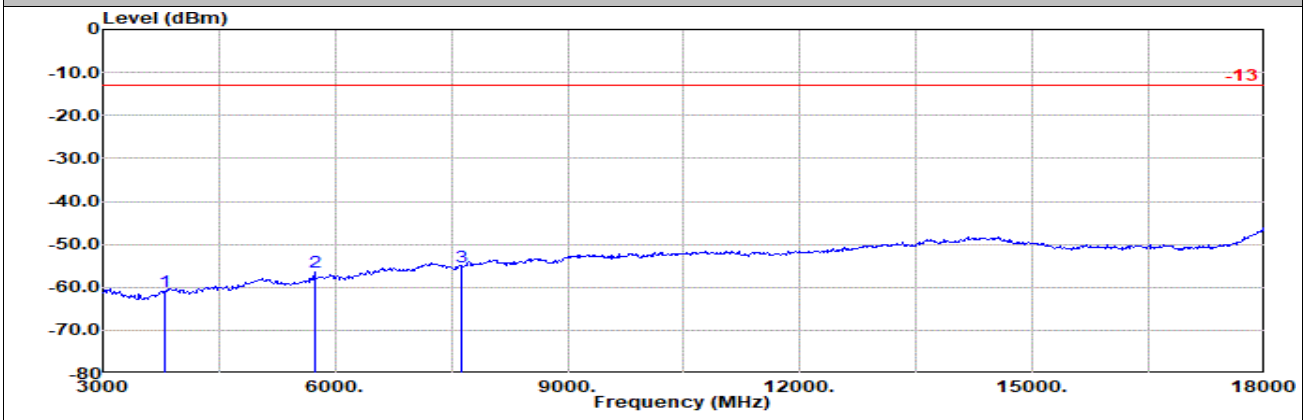
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3765.00	-61.36	RMS	30.29	-25.53	0.83	-95.23	28.28	-13.00	-48.36	Vertical
2	5640.00	-58.12	RMS	33.18	-24.32	0.45	-95.23	27.80	-13.00	-45.12	Vertical
3	7515.00	-55.77	RMS	36.30	-22.78	0.54	-95.23	25.40	-13.00	-42.77	Vertical

Tx0Rx0

Part 24 Mode 3

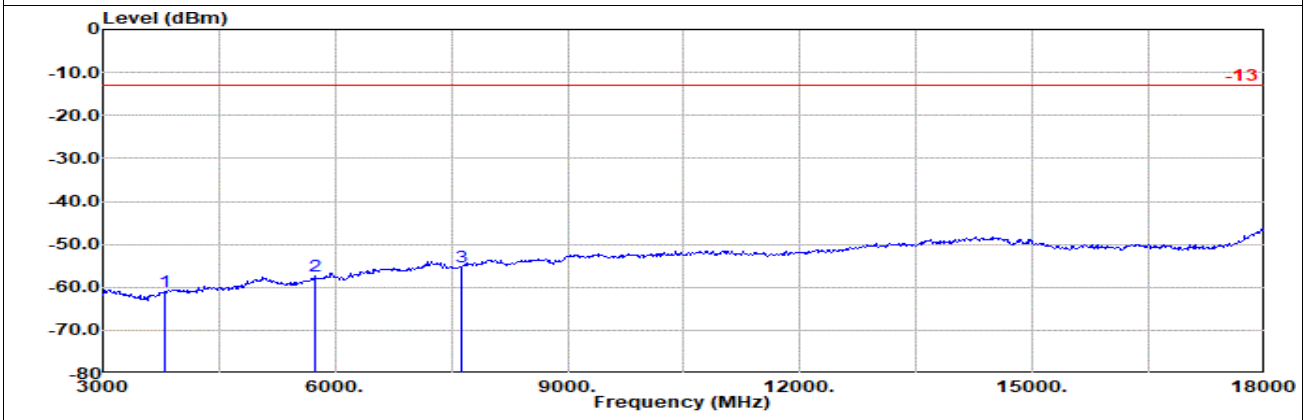
WCDMA B2 10M Ch9538

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B2 Ch9538
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3810.00	-61.05	RMS	30.54	-25.51	0.82	-95.23	28.33	-13.00	-48.05	Horizontal
2	5730.00	-56.57	RMS	33.72	-24.22	0.44	-95.23	28.72	-13.00	-43.57	Horizontal
3	7635.00	-55.12	RMS	36.47	-22.80	0.55	-95.23	25.89	-13.00	-42.12	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B2 Ch9538
```

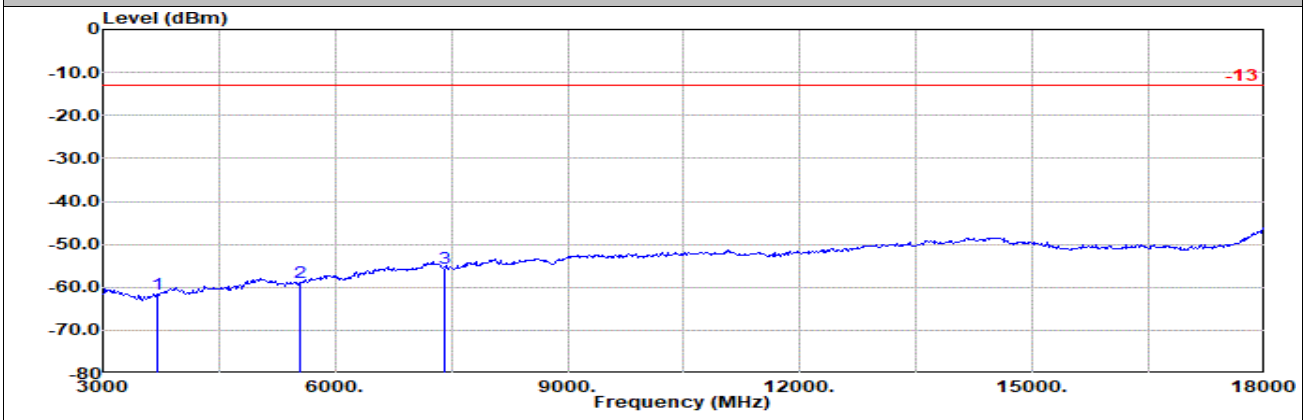
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3810.00	-61.00	RMS	30.54	-25.51	0.82	-95.23	28.38	-13.00	-48.00	Vertical
2	5730.00	-57.30	RMS	33.72	-24.22	0.44	-95.23	27.99	-13.00	-44.30	Vertical
3	7635.00	-55.32	RMS	36.47	-22.80	0.55	-95.23	25.69	-13.00	-42.32	Vertical

Tx1Rx1

Part 24 Mode 2

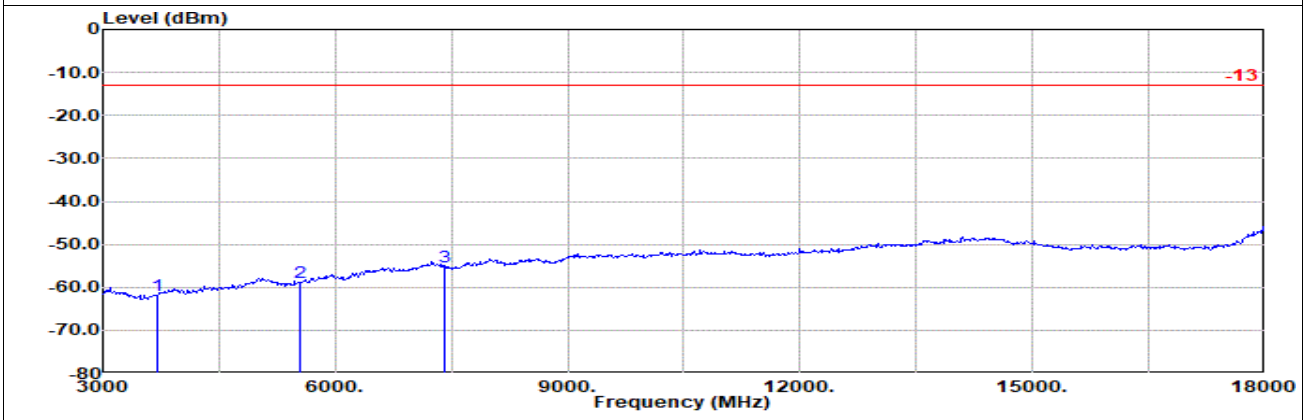
GSM 1900 10M Ch512

L




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM1900 Ch512
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3700.40	-61.47	RMS	29.80	-25.57	0.85	-95.23	28.68	-13.00	-48.47	Horizontal
2	5550.60	-58.95	RMS	33.00	-24.39	0.47	-95.23	27.20	-13.00	-45.95	Horizontal
3	7400.80	-55.51	RMS	36.50	-22.77	0.53	-95.23	25.46	-13.00	-42.51	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM1900 Ch512
```

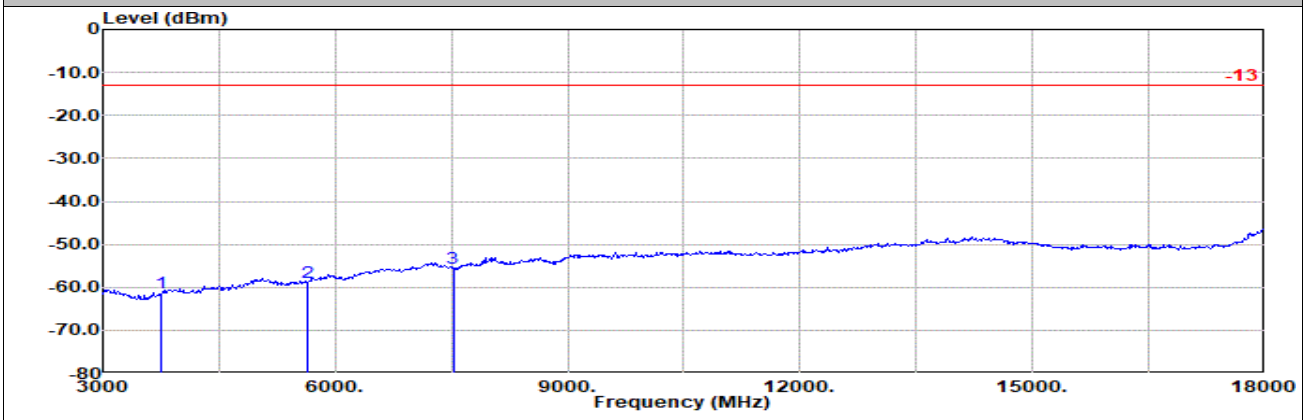
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3700.40	-61.92	RMS	29.80	-25.57	0.85	-95.23	28.23	-13.00	-48.92	Vertical
2	5550.60	-58.95	RMS	33.00	-24.39	0.47	-95.23	27.20	-13.00	-45.95	Vertical
3	7400.80	-55.14	RMS	36.50	-22.77	0.53	-95.23	25.83	-13.00	-42.14	Vertical

Tx1Rx1

Part 24 Mode 2

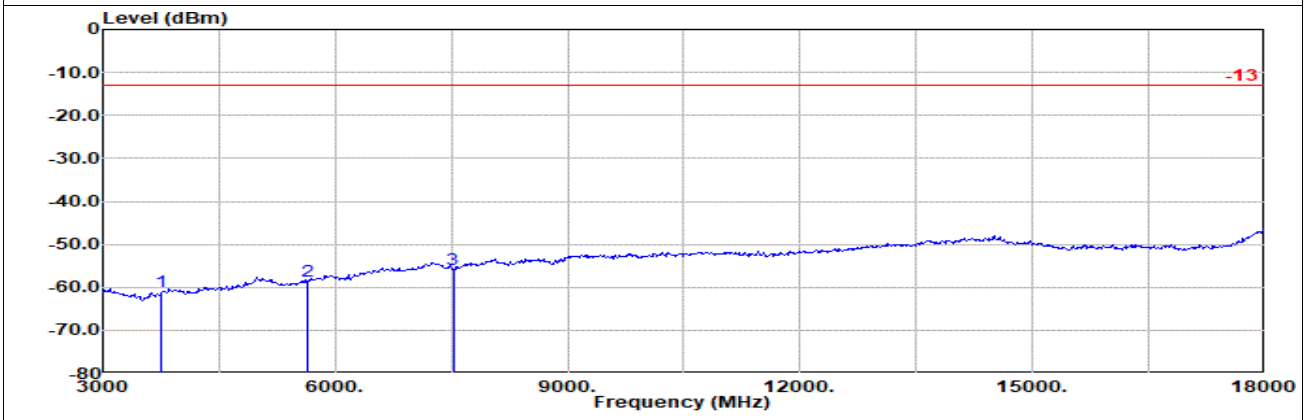
GSM 1900 10M Ch661

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM1900 Ch661
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3760.00	-61.29	RMS	30.26	-25.53	0.83	-95.23	28.38	-13.00	-48.29	Horizontal
2	5640.00	-58.74	RMS	33.18	-24.32	0.45	-95.23	27.18	-13.00	-45.74	Horizontal
3	7520.00	-55.41	RMS	36.30	-22.78	0.54	-95.23	25.76	-13.00	-42.41	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM1900 Ch661
```

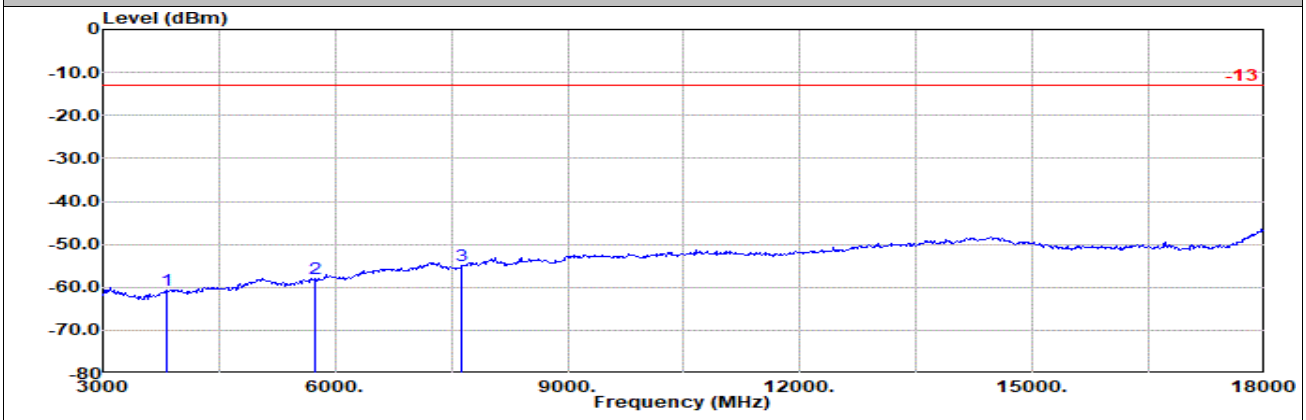
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3760.00	-60.93	RMS	30.26	-25.53	0.83	-95.23	28.74	-13.00	-47.93	Vertical
2	5640.00	-58.65	RMS	33.18	-24.32	0.45	-95.23	27.27	-13.00	-45.65	Vertical
3	7520.00	-55.72	RMS	36.30	-22.78	0.54	-95.23	25.45	-13.00	-42.72	Vertical

Tx1Rx1

Part 24 Mode 2

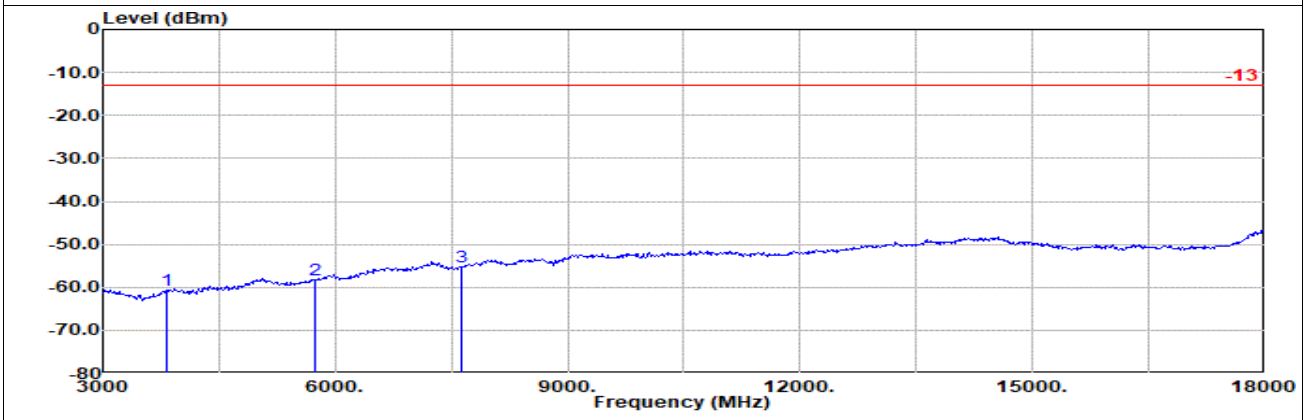
GSM 1900 10M Ch810

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : GSM1900 Ch810
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3819.60	-60.58	RMS	30.58	-25.50	0.81	-95.23	28.76	-13.00	-47.58	Horizontal
2	5729.40	-58.10	RMS	33.72	-24.22	0.44	-95.23	27.19	-13.00	-45.10	Horizontal
3	7639.20	-55.05	RMS	36.48	-22.79	0.55	-95.23	25.94	-13.00	-42.05	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : GSM1900 Ch810
```

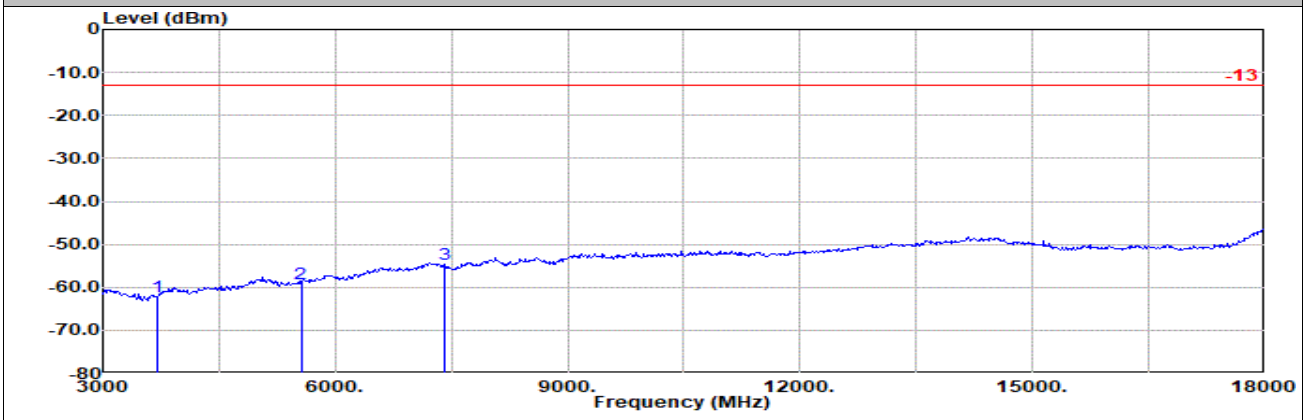
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3819.60	-60.72	RMS	30.58	-25.50	0.81	-95.23	28.62	-13.00	-47.72	Vertical
2	5729.40	-58.30	RMS	33.72	-24.22	0.44	-95.23	26.99	-13.00	-45.30	Vertical
3	7639.20	-55.33	RMS	36.48	-22.79	0.55	-95.23	25.66	-13.00	-42.33	Vertical

Tx1Rx1

Part 24 Mode 4

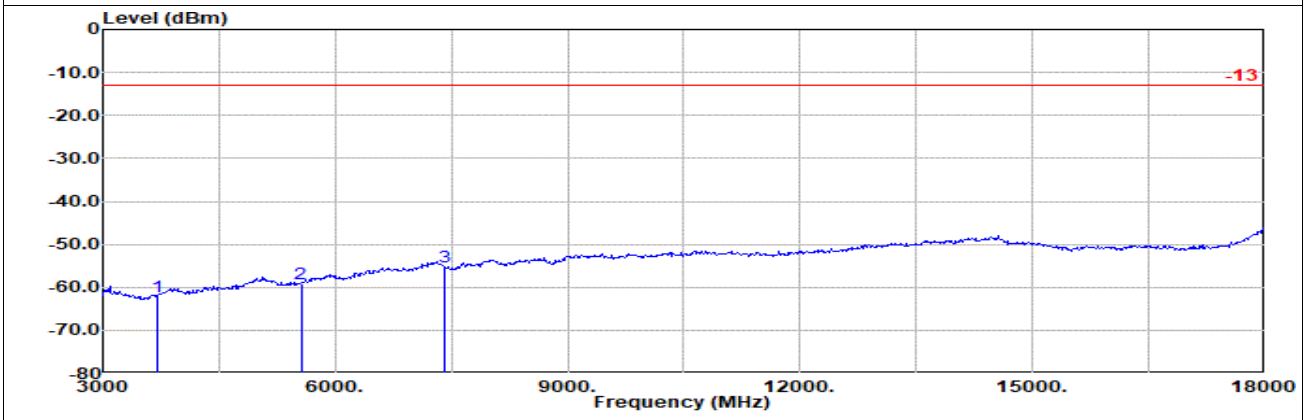
WCDMA B2 10M Ch9262

L




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B2 Ch9262
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-62.19	RMS	29.84	-25.57	0.85	-95.23	27.92	-13.00	-49.19	Horizontal
2	5557.20	-59.06	RMS	33.01	-24.39	0.46	-95.23	27.09	-13.00	-46.06	Horizontal
3	7410.00	-54.76	RMS	36.48	-22.77	0.53	-95.23	26.23	-13.00	-41.76	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B2 Ch9262
```

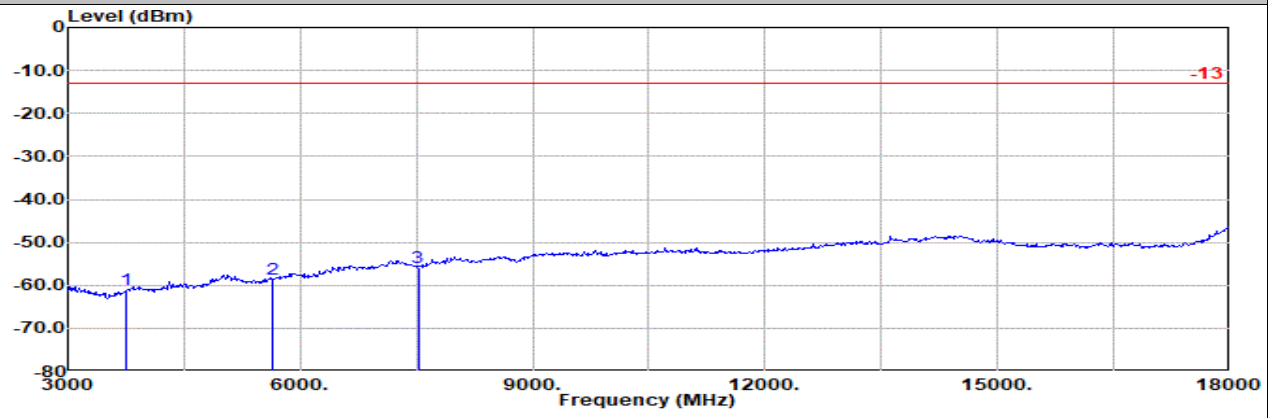
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-62.15	RMS	29.84	-25.57	0.85	-95.23	27.96	-13.00	-49.15	Vertical
2	5557.20	-59.23	RMS	33.01	-24.39	0.46	-95.23	26.92	-13.00	-46.23	Vertical
3	7410.00	-55.31	RMS	36.48	-22.77	0.53	-95.23	25.68	-13.00	-42.31	Vertical

Tx1Rx1

Part 24 Mode 4

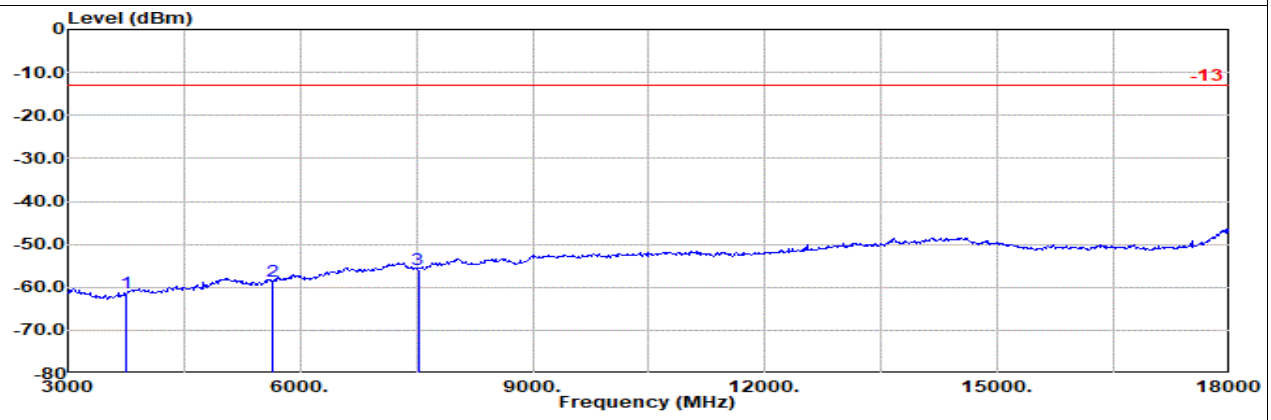
WCDMA B2 10M Ch9400

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B2 Ch9400
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3760.00	-60.84	RMS	30.26	-25.53	0.83	-95.23	28.83	-13.00	-47.84	Horizontal
2	5640.00	-58.49	RMS	33.18	-24.32	0.45	-95.23	27.43	-13.00	-45.49	Horizontal
3	7520.00	-55.75	RMS	36.30	-22.78	0.54	-95.23	25.42	-13.00	-42.75	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B2 Ch9400
```

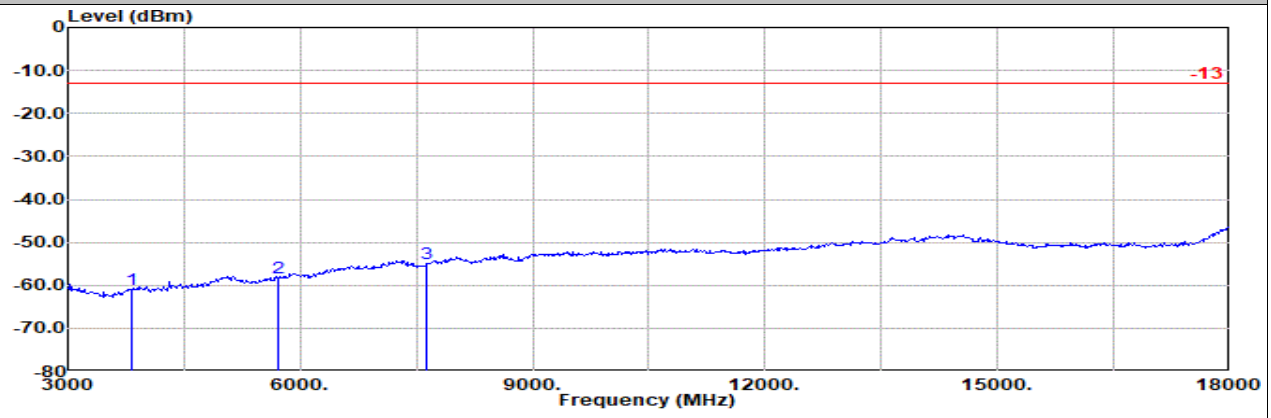
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3760.00	-61.17	RMS	30.26	-25.53	0.83	-95.23	28.50	-13.00	-48.17	Vertical
2	5640.00	-58.63	RMS	33.18	-24.32	0.45	-95.23	27.29	-13.00	-45.63	Vertical
3	7520.00	-55.85	RMS	36.30	-22.78	0.54	-95.23	25.32	-13.00	-42.85	Vertical

Tx1Rx1

Part 24 Mode 4

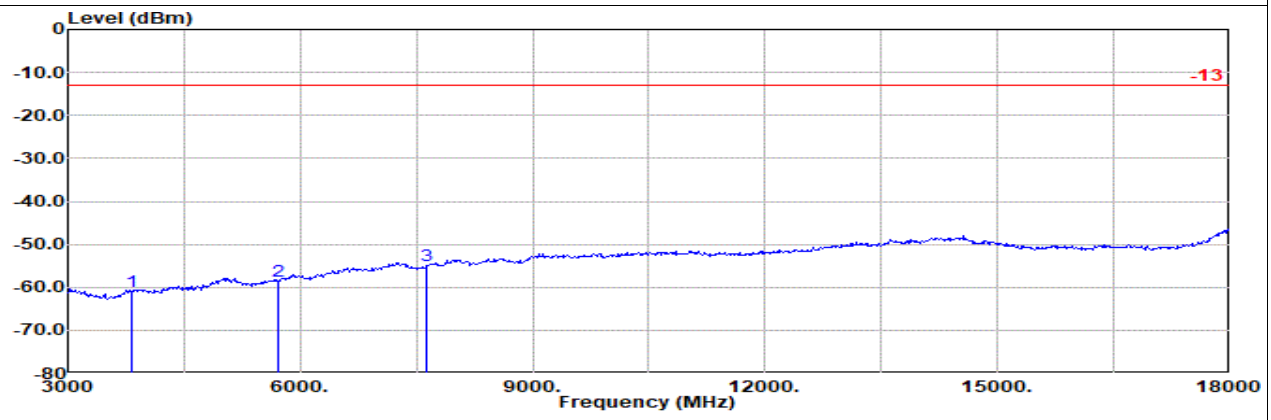
WCDMA B2 10M Ch9538

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B2 Ch9538
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3815.20	-61.07	RMS	30.56	-25.50	0.81	-95.23	28.29	-13.00	-48.07	Horizontal
2	5722.80	-58.18	RMS	33.69	-24.23	0.44	-95.23	27.15	-13.00	-45.18	Horizontal
3	7630.40	-55.06	RMS	36.46	-22.80	0.55	-95.23	25.96	-13.00	-42.06	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B2 Ch9538
```

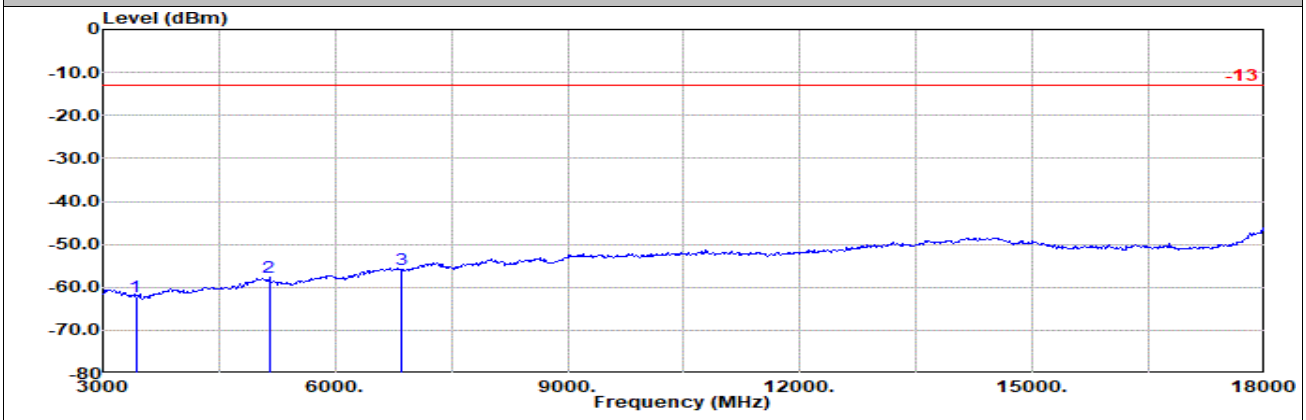
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3815.20	-60.90	RMS	30.56	-25.50	0.81	-95.23	28.46	-13.00	-47.90	Vertical
2	5722.80	-58.50	RMS	33.69	-24.23	0.44	-95.23	26.83	-13.00	-45.50	Vertical
3	7630.40	-54.90	RMS	36.46	-22.80	0.55	-95.23	26.12	-13.00	-41.90	Vertical

Tx0Rx0

Part 27 Mode 1

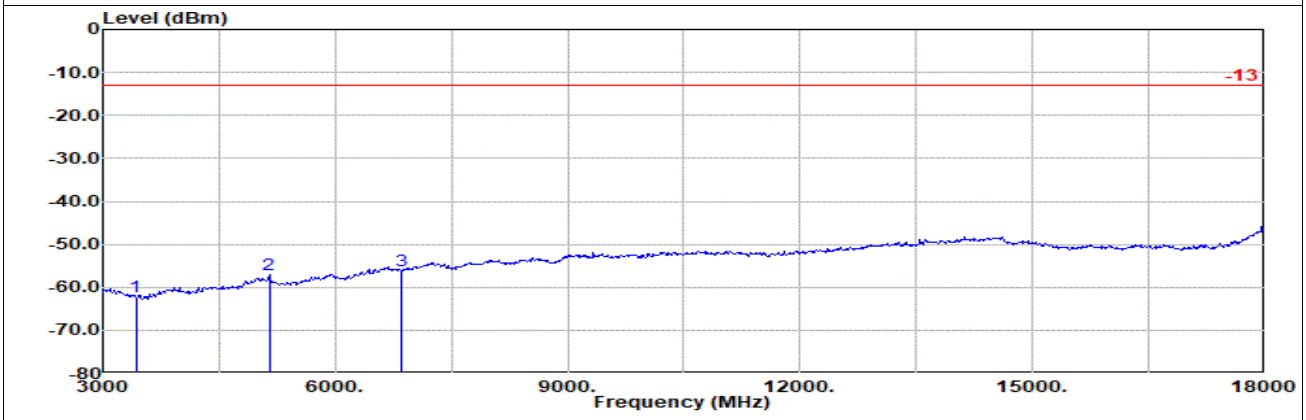
WCDMA B4 10M Ch1312

L




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B4 Ch1312
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3424.80	-62.31	RMS	29.60	-25.94	1.10	-95.23	0.00	-13.00	-49.31	Horizontal
2	5145.00	-57.53	RMS	33.01	-24.60	0.53	-95.23	28.76	-13.00	-44.53	Horizontal
3	6849.60	-55.99	RMS	35.80	-23.00	0.62	-95.23	25.82	-13.00	-42.99	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B4 Ch1312
```

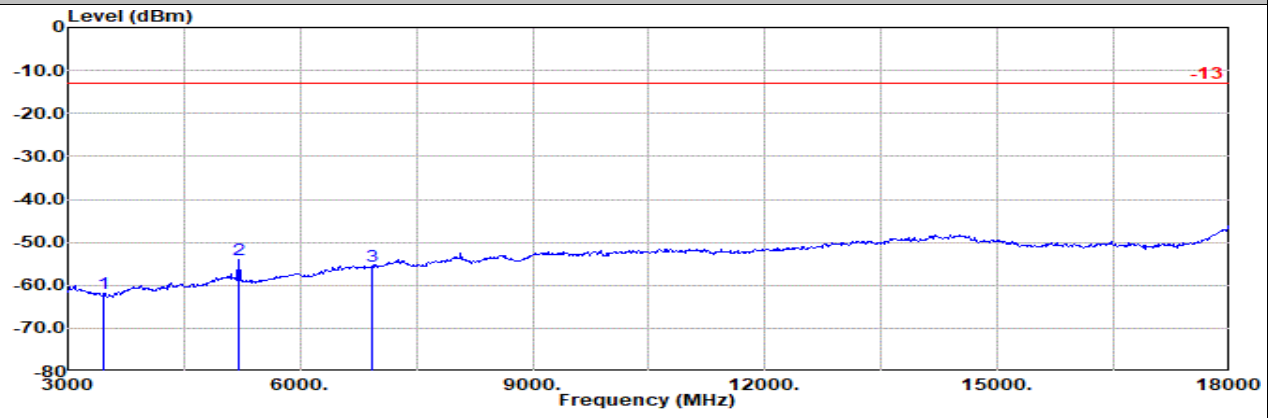
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3424.80	-62.26	RMS	29.60	-25.94	1.10	-95.23	28.21	-13.00	-49.26	Vertical
2	5145.00	-57.20	RMS	33.01	-24.60	0.53	-95.23	29.09	-13.00	-44.20	Vertical
3	6849.60	-56.04	RMS	35.80	-23.00	0.62	-95.23	25.77	-13.00	-43.04	Vertical

Tx0Rx0

Part 27 Mode 1

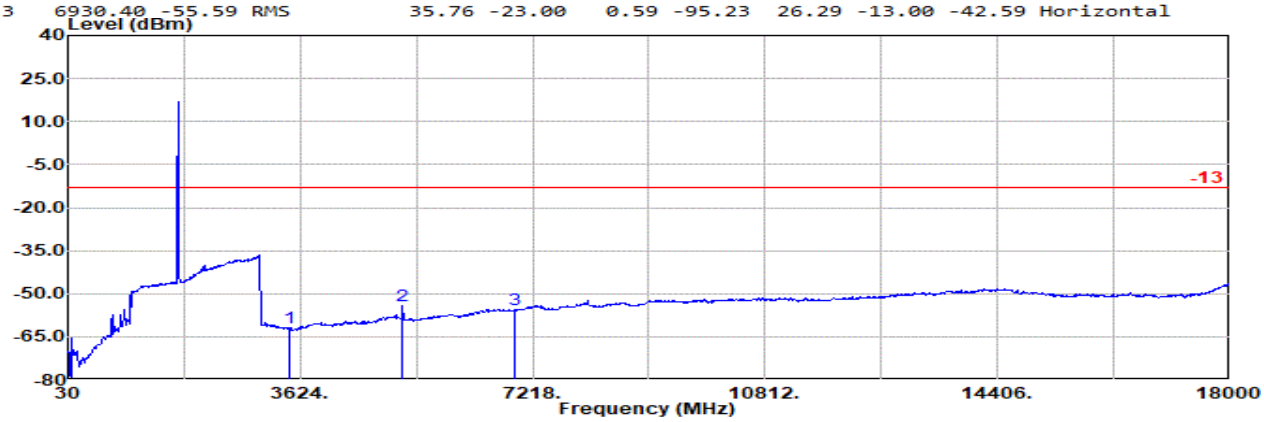
WCDMA B4 10M Ch1413

M



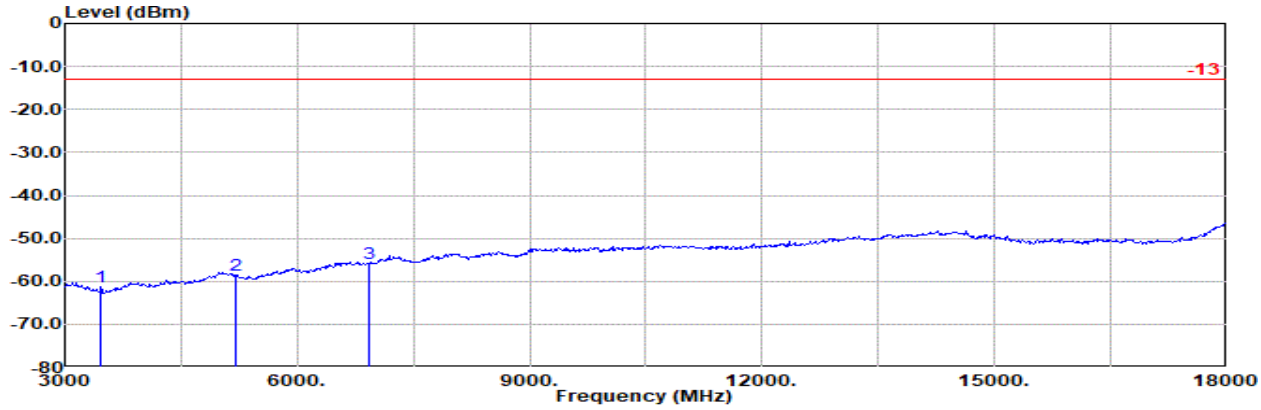

```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B4 Ch1413
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3465.20	-62.01	RMS	29.57	-25.90	1.05	-95.23	28.50	-13.00	-49.01	Horizontal
2	5205.00	-54.10	RMS	32.99	-24.65	0.52	-95.23	32.27	-13.00	-41.10	Horizontal
3	6930.40	-55.59	RMS	35.76	-23.00	0.59	-95.23	26.29	-13.00	-42.59	Horizontal



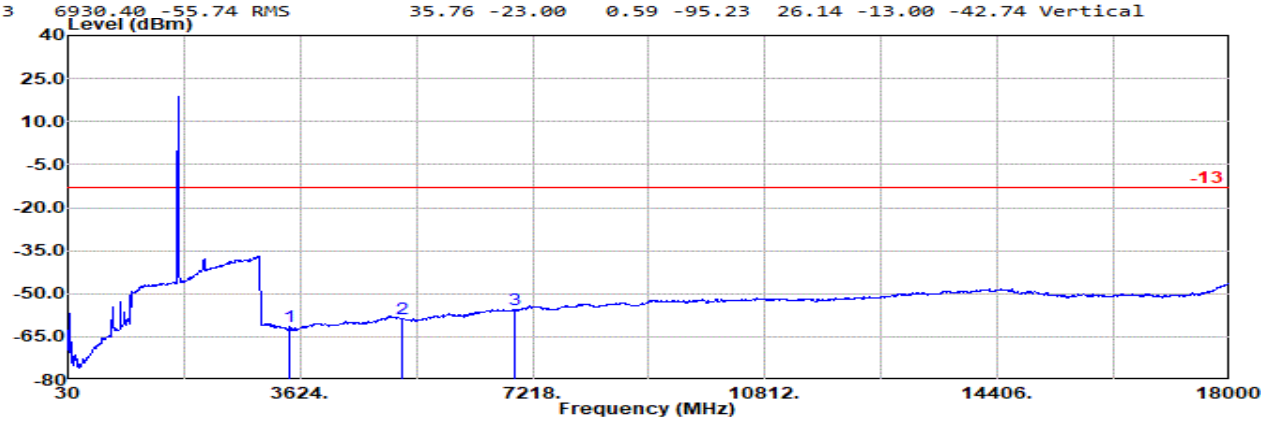

```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B4 Ch1413
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3465.20	-62.01	RMS	29.57	-25.90	1.05	-95.23	28.50	-13.00	-49.01	Horizontal
2	5205.00	-54.10	RMS	32.99	-24.65	0.52	-95.23	32.27	-13.00	-41.10	Horizontal
3	6930.40	-55.59	RMS	35.76	-23.00	0.59	-95.23	26.29	-13.00	-42.59	Horizontal



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project : 380306
: WCDMA B4 Ch1413

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3465.20	-61.39	RMS	29.57	-25.90	1.05	-95.23	29.12	-13.00	-48.39	Vertical
2	5205.00	-58.69	RMS	32.99	-24.65	0.52	-95.23	27.68	-13.00	-45.69	Vertical
3	6930.40	-55.74	RMS	35.76	-23.00	0.59	-95.23	26.14	-13.00	-42.74	Vertical



Site : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project : 380306
: WCDMA B4 Ch1413

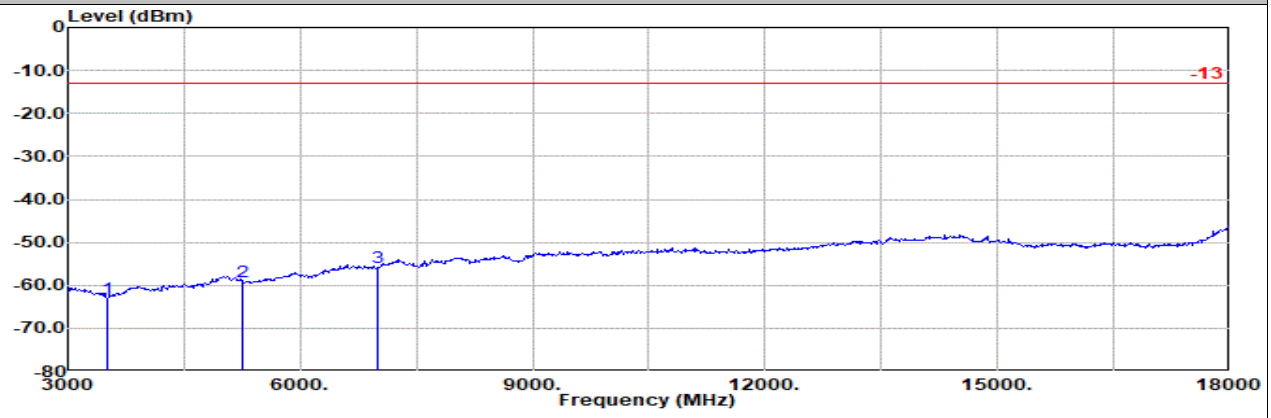
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3465.20	-61.39	RMS	29.57	-25.90	1.05	-95.23	29.12	-13.00	-48.39	Vertical
2	5205.00	-58.69	RMS	32.99	-24.65	0.52	-95.23	27.68	-13.00	-45.69	Vertical
3	6930.40	-55.74	RMS	35.76	-23.00	0.59	-95.23	26.14	-13.00	-42.74	Vertical

Tx0Rx0

Part 27 Mode 1

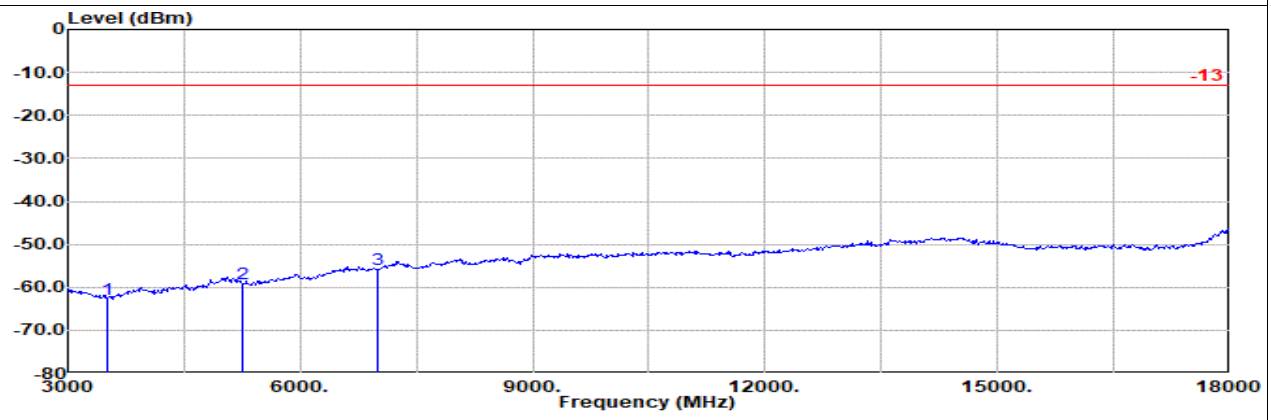
WCDMA B4 10M Ch1513

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B4 Ch1513
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3505.20	-63.04	RMS	29.50	-25.84	1.00	-95.23	27.53	-13.00	-50.04	Horizontal
2	5257.80	-59.05	RMS	32.90	-24.60	0.52	-95.23	27.36	-13.00	-46.05	Horizontal
3	7010.40	-55.73	RMS	35.94	-22.98	0.57	-95.23	25.97	-13.00	-42.73	Horizontal

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Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B4 Ch1513
```

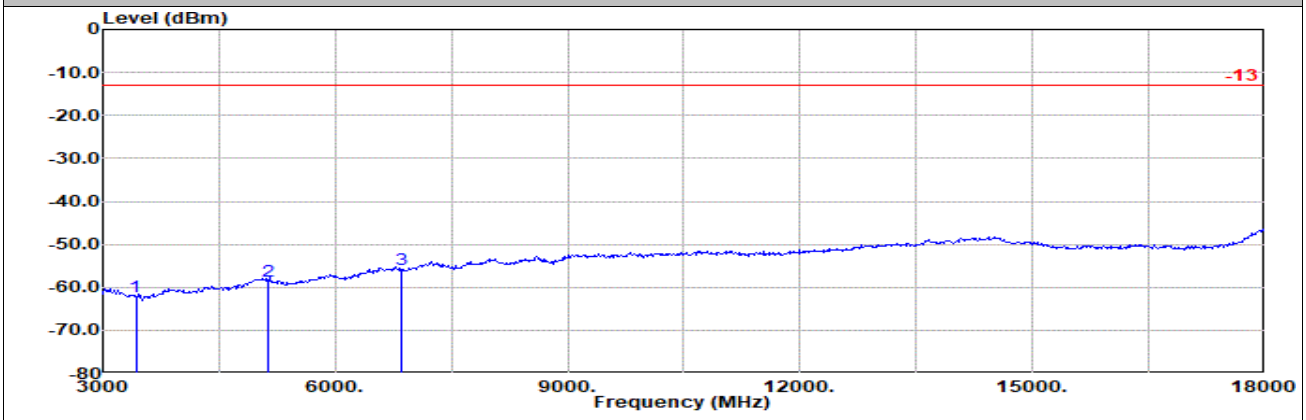
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3505.20	-62.86	RMS	29.50	-25.84	1.00	-95.23	27.71	-13.00	-49.86	Vertical
2	5257.80	-59.05	RMS	32.90	-24.60	0.52	-95.23	27.36	-13.00	-46.05	Vertical
3	7010.40	-55.71	RMS	35.94	-22.98	0.57	-95.23	25.99	-13.00	-42.71	Vertical

Tx1Rx1

Part 27 Mode 2

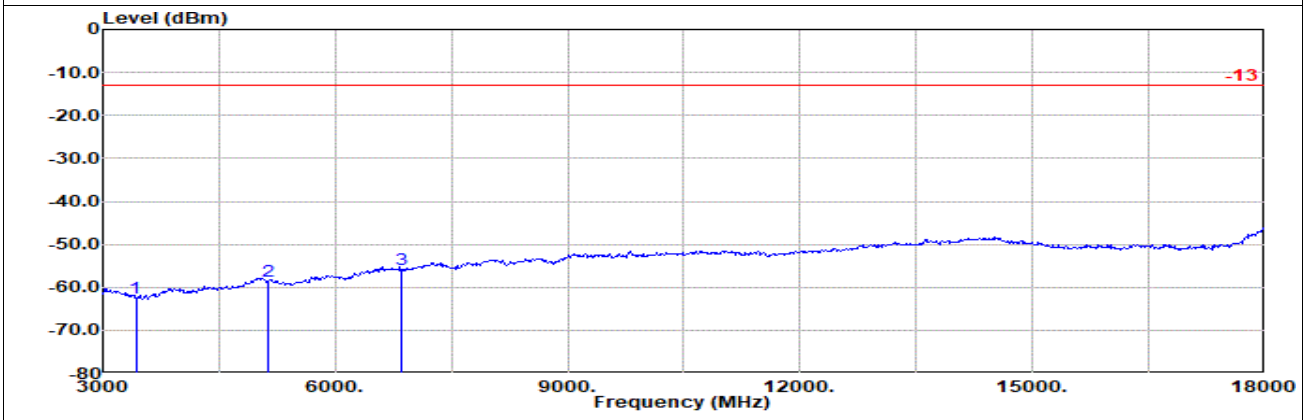
WCDMA B4 10M Ch1312

L




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B4 Ch1312
```

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3424.80	-62.32	RMS	29.60	-25.94	1.10	-95.23	28.15	-13.00	-49.32	Horizontal
2	5137.20	-58.51	RMS	33.03	-24.59	0.53	-95.23	27.75	-13.00	-45.51	Horizontal
3	6849.60	-55.90	RMS	35.80	-23.00	0.62	-95.23	25.91	-13.00	-42.90	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B4 Ch1312
```

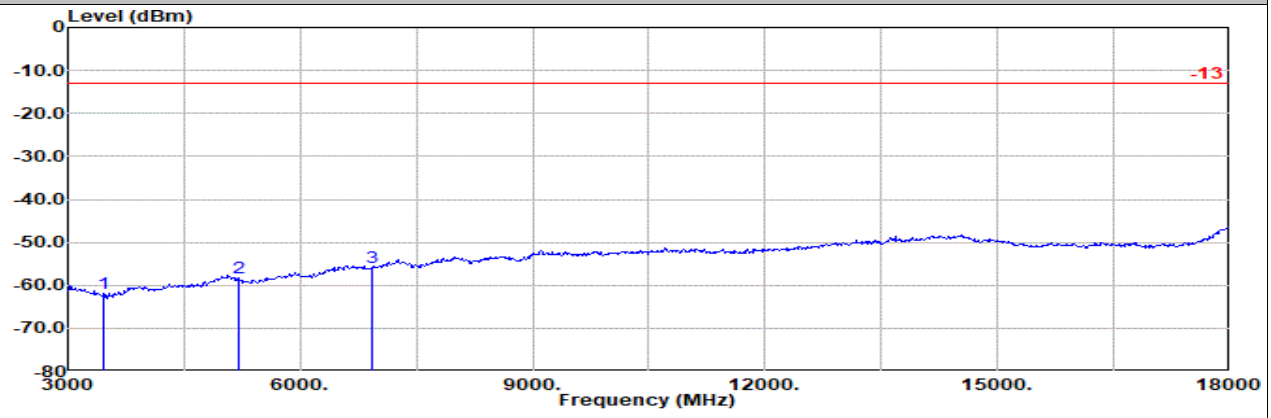
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3424.80	-62.49	RMS	29.60	-25.94	1.10	-95.23	27.98	-13.00	-49.49	Vertical
2	5137.20	-58.46	RMS	33.03	-24.59	0.53	-95.23	27.80	-13.00	-45.46	Vertical
3	6849.60	-55.78	RMS	35.80	-23.00	0.62	-95.23	26.03	-13.00	-42.78	Vertical

Tx1Rx1

Part 27 Mode 2

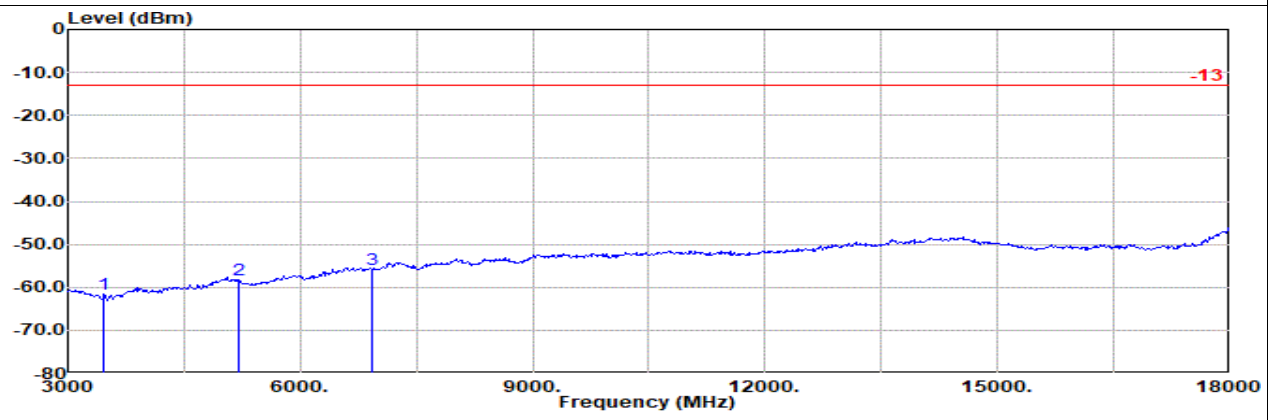
WCDMA B4 10M Ch1413

M




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B4 Ch1413
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3465.20	-61.88	RMS	29.57	-25.90	1.05	-95.23	28.63	-13.00	-48.88	Horizontal
2	5197.80	-58.23	RMS	33.00	-24.65	0.52	-95.23	28.13	-13.00	-45.23	Horizontal
3	6930.40	-55.94	RMS	35.76	-23.00	0.59	-95.23	25.94	-13.00	-42.94	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B4 Ch1413
```

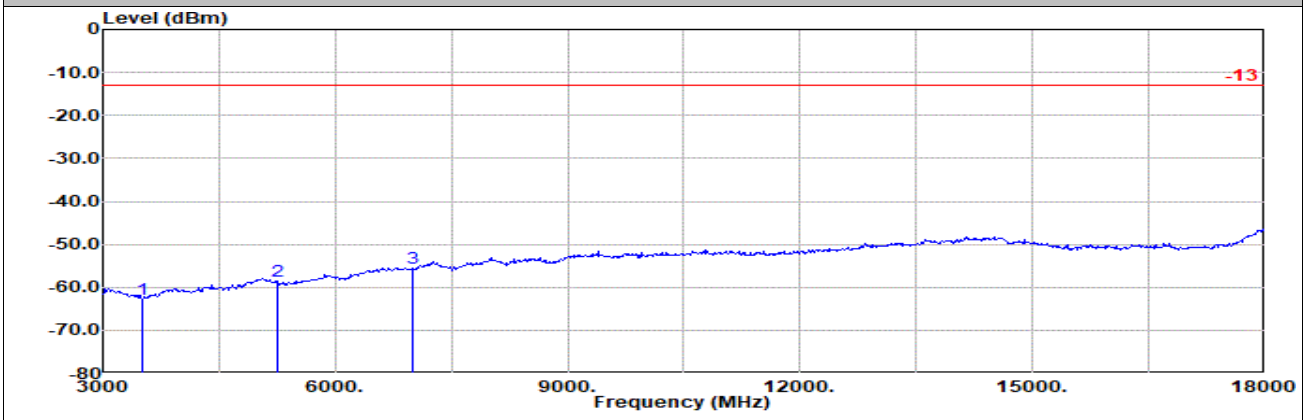
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3465.20	-61.69	RMS	29.57	-25.90	1.05	-95.23	28.82	-13.00	-48.69	Vertical
2	5197.80	-58.32	RMS	33.00	-24.65	0.52	-95.23	28.04	-13.00	-45.32	Vertical
3	6930.40	-55.72	RMS	35.76	-23.00	0.59	-95.23	26.16	-13.00	-42.72	Vertical

Tx1Rx1

Part 27 Mode 2

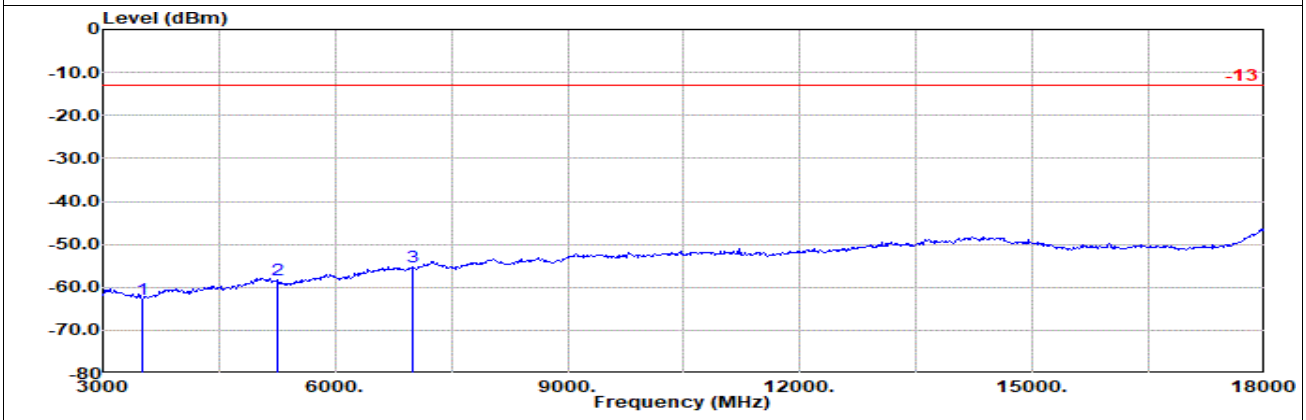
WCDMA B4 10M Ch1513

H




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Horizontal
Project   : 380306
          : WCDMA B4 Ch1513
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3505.20	-62.86	RMS	29.50	-25.84	1.00	-95.23	27.71	-13.00	-49.86	Horizontal
2	5257.80	-58.71	RMS	32.90	-24.60	0.52	-95.23	27.70	-13.00	-45.71	Horizontal
3	7010.40	-55.68	RMS	35.94	-22.98	0.57	-95.23	26.02	-13.00	-42.68	Horizontal




```
Site      : 03CH20-HY
Condition: -13 3m HF_9120D_02360_221104 Vertical
Project   : 380306
          : WCDMA B4 Ch1513
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3505.20	-62.84	RMS	29.50	-25.84	1.00	-95.23	27.73	-13.00	-49.84	Vertical
2	5257.80	-58.38	RMS	32.90	-24.60	0.52	-95.23	28.03	-13.00	-45.38	Vertical
3	7010.40	-55.39	RMS	35.94	-22.98	0.57	-95.23	26.31	-13.00	-42.39	Vertical

———THE END———