FCC RADIO TEST REPORT

FCC ID	:	**A4RG020I**
Equipment	:	**Phone**
Model Name	:	**G020I**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**47 CFR Part 2, 22(H), 24(E), 27(L)**

The product was received on Nov. 06, 2018 and testing was started from Apr. 13, 2019 and completed on Jun. 25, 2019. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FG8N0616-05A	01	Initial issue of report	Jun. 28, 2019
FG8N0616-05A	02	Revised power and E.R.P/ E.I.R.P of WCDMA Band IV and WCDMA Band V.	Jul. 04, 2019

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)(2)	Effective Radiated Power		
	§24.232 (c)	Equivalent Isotropic Radiated Power		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power		
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	Pass	-
3.5	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Band Edge Measurement	Pass	-
3.6	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Conducted Emission	Pass	-
3.7	§2.1055 §22.355	Frequency Stability Temperature & Voltage	Pass	-
	§2.1055 §24.235 §27.54			-
4.4	§2.1053 §22.917 (a) §24.238 (a) §27.53 (h)	Field Strength of Spurious Radiation	Pass	Under limit 16.95 dB at 2472.000 MHz

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Aileen Huang

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Phone
Model Name	G020I
FCC ID	A4RG020I
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC/GNSS/WPC WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE 60 GHz Low Power Transmitter
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

EUT Information List	
No.	S/N
#1	934AZ06943
#2	94DAZ009N4

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	**GSM/GPRS/EDGE:** 850: 824.2 MHz ~ 848.8 MHz 1900: 1850.2 MHz ~ 1909.8 MHz **CDMA/EV-DO** BC0 824.70 MHz ~ 848.31 MHz BC1: 1851.25 MHz ~ 1908.75 MHz **WCDMA:** Band V: 826.4 MHz ~ 846.6 MHz Band II: 1852.4 MHz ~ 1907.6 MHz Band IV: 1712.4 MHz ~ 1752.6 MHz
Rx Frequency	**GSM/GPRS/EDGE:** 850: 869.2 MHz ~ 893.8 MHz 1900: 1930.2 MHz ~ 1989.8 MHz **CDMA/EV-DO** BC0 869.70 MHz ~ 893.31 MHz BC1: 1931.25 MHz ~ 1988.75 MHz **WCDMA:** Band V: 871.4 MHz ~ 891.6 MHz Band II: 1932.4 MHz ~ 1987.6 MHz Band IV: 2112.4 MHz ~ 2152.6 MHz

Standards-related Product Specification	
Maximum Output Power to Antenna	**GSM/GPRS/EDGE:** 850: 32.80 dBm 1900: 28.84 dBm **CDMA/EV-DO** BC0 24.99 dBm BC1: 24.75 dBm **WCDMA:** Band V: 24.99 dBm Band II: 24.75 dBm Band IV: 24.73 dBm
Antenna Type / Gain	**<Ant. 0_A>** Cellular Band : ILA Antenna type with gain -3.5 dBi **<Ant. 0_B>** PCS Band : ILA Antenna type with gain -0.5 dBi AWS Band : ILA Antenna type with gain -1.5 dBi **<Ant. 0_C>** PCS Band : ILA Antenna type with gain -1.5 dBi AWS Band : ILA Antenna type with gain -3.5 dBi **<Ant. 1>** Cellular Band : ILA Antenna type with gain -4.6 dBi PCS Band : ILA Antenna type with gain -2.2 dBi AWS Band : ILA Antenna type with gain -4.7 dBi
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: BPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink) CDMA2000 1xRTT: QPSK CDMA2000 1xEV-DO: QPSK/8PSK

1.3 Modification of EUT

No modifications are made to the EUT during all test items.

1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	TH03-HY	03CH07-HY
Test Engineer	George Chen and Benjamin Lin	Jesse Wang, Stan Hsieh, Troye Hsieh and Ken Wu
Temperature	21~24℃	24~26℃
Relative Humidity	51~55%	52~55%

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

FCC Designation No.: TW1190

1.5 Applicable Standards

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

- ANSI C63.26-2015
- ANSI / TIA-603-E
- 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

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

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, pre-scanned in three orthogonal panels, X, Y, Z with Accessory (Earphone or Adapter). The worst cases of panels were recorded in this report:

<Adapter Mode>

Cellular Band	PCS Band	AWS Band
Z plane for Ant. 0_A	Y plane for Ant. 0_B	X plane for Ant. 0_B
-	X plane for Ant. 0_C	Z plane for Ant. 0_C
Y plane for Ant. 1	Y plane for Ant. 1	Z plane for Ant. 1
Z plane with WPC Charging Mode for Ant. 0_A		

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V and CDMA BC0.
2. 30 MHz to 18000 MHz for WCDMA Band IV.
3. 30 MHz to 19100 MHz for GSM1900 and WCDMA Band II and CDMA BC1.

All modes and data rates and positions were investigated.

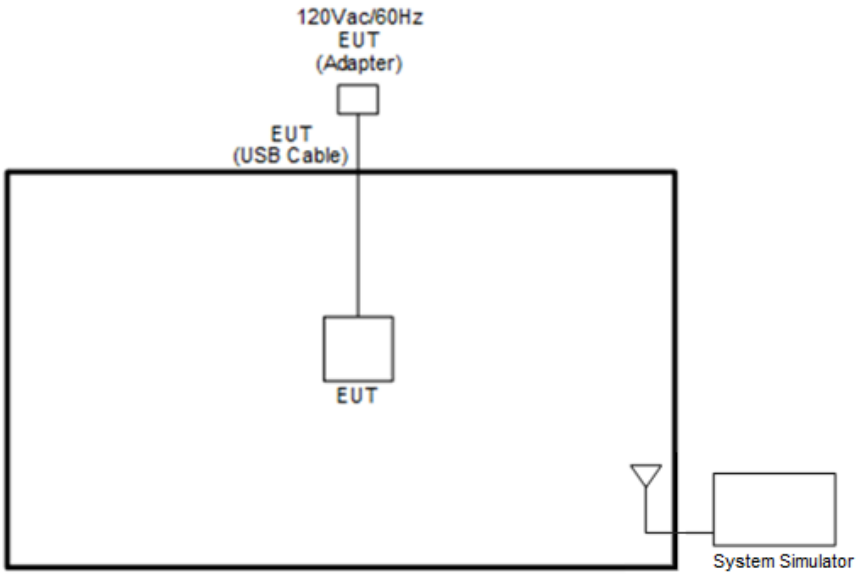
Test modes are chosen to be reported as the worst case configuration below:

Test Modes		
Band	**Radiated TCs**	**Conducted TCs**
GSM 850	■ GPRS Class 8 Link ■ EDGE Class 8 Link	■ GPRS Class 8 Link ■ EDGE Class 8 Link
GSM 1900	■ 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
CDMA BC0	■ 1xRTT Link ■ 1xEV-DO Rev. A Link	■ 1xRTT Link ■ 1xEV-DO Rev. A Link
CDMA BC1	■ 1xRTT Link ■ 1xEV-DO Rev. A Link	■ 1xRTT Link ■ 1xEV-DO Rev. A Link

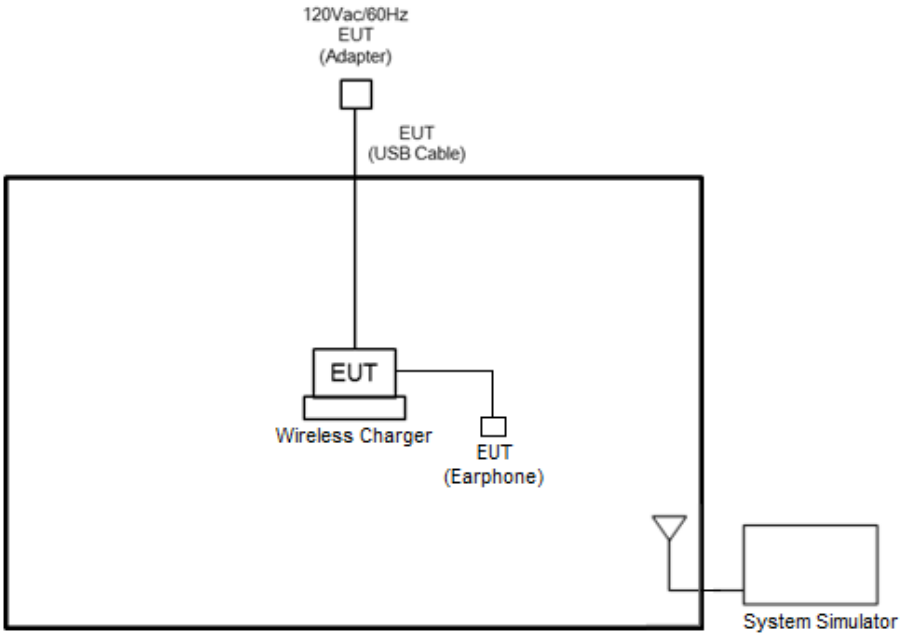
Remark: All the radiated test cases were performed with Adapter 1.

2.2 Connection Diagram of Test System

<For Adapter Mode>



<For WPC Charging Mode>



2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	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 10dB 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
CDMA2000 BC0	Channel	1013	384	777
	Frequency	824.7	836.52	848.31
CDMA2000 BC1	Channel	25	600	1175
	Frequency	1851.25	1880.0	1908.75

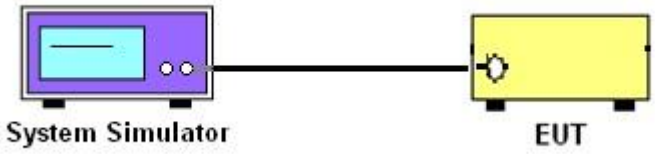
3 Conducted Test Result

3.1 Measuring Instruments

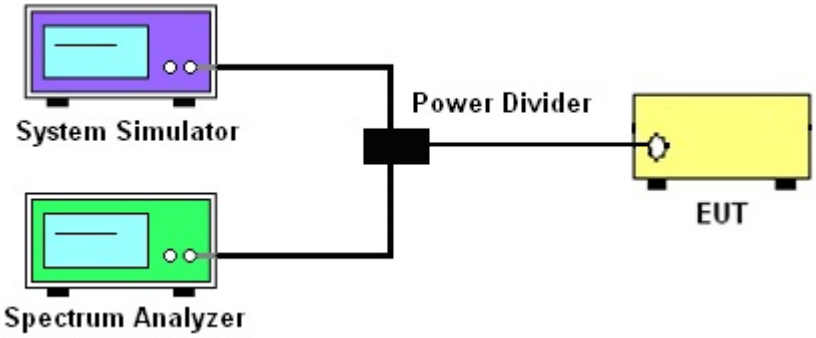
See list of measuring instruments of this test report.

3.1.1 Test Setup

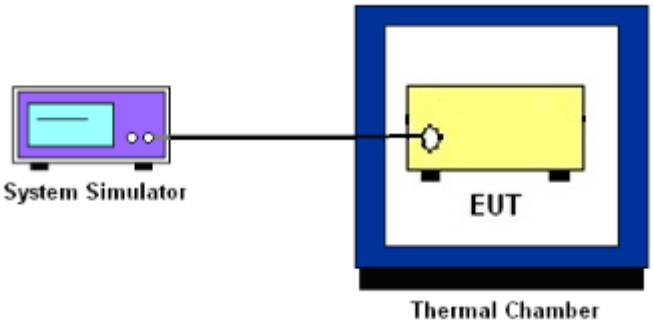
3.1.2 Conducted Output Power



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 was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and 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 was 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 was 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 was connected to the spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The band edges of low and high channels for the highest RF powers were measured.
4. The RF fundamental frequency should 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 was connected to the spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. The RF fundamental frequency should 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 was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was 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 was placed in a temperature chamber at 20±5° C and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

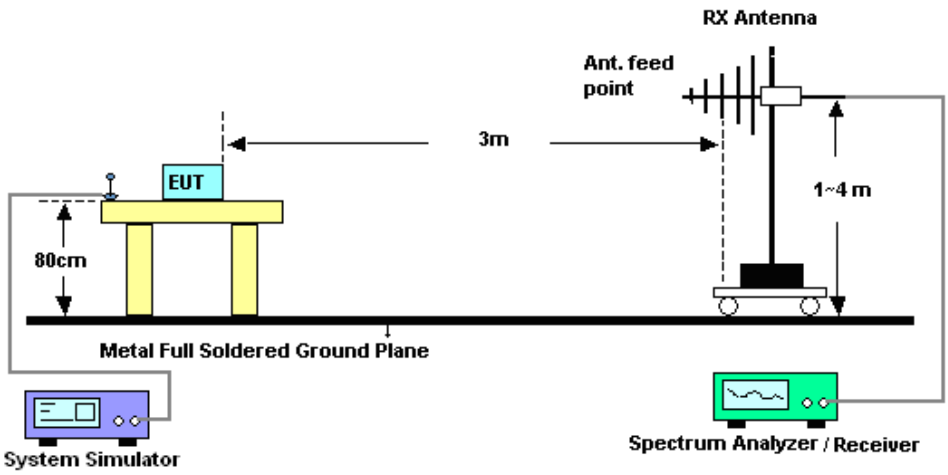
4 Radiated Test Items

4.1 Measuring Instruments

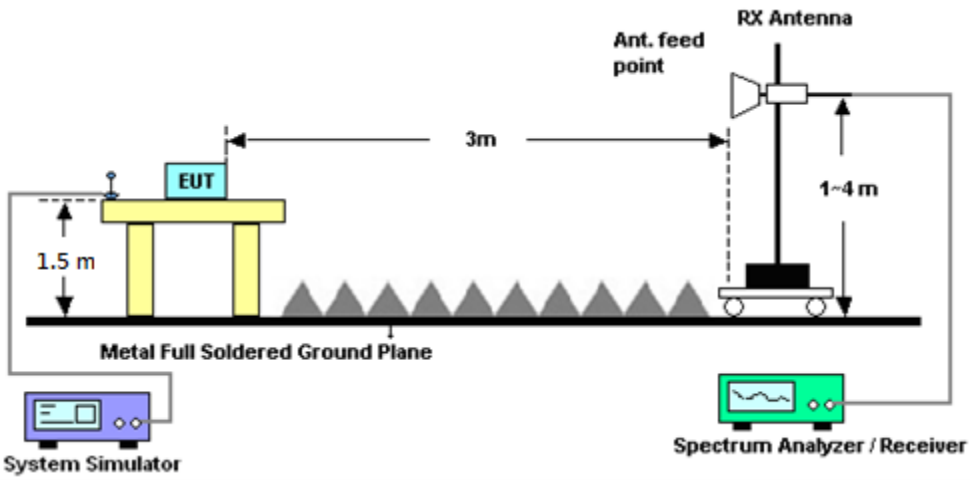
See list of measuring instruments of this test report.

4.2 Test Setup

For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

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 / TIA-603-E Section 2.2.12.

1. The EUT was placed on a rotatable wooden table 0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz above the ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was 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 = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Jun. 29, 2018	Apr. 13, 2019~ May 23, 2019	Jun. 28, 2019	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-641	92013721	-30℃ ~70℃	Dec. 06, 2017	Apr. 13, 2019~ May 23, 2019	Dec. 05, 2019	Conducted (TH03-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL883644	Voltage:0~20V; Current:0~5A	Dec. 06, 2017	Apr. 13, 2019~ May 23, 2019	Dec. 05, 2019	Conducted (TH03-HY)
Base Station (Measure)	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Aug. 10, 2018	Apr. 13, 2019~ May 23, 2019	Aug. 09, 2019	Conducted (TH03-HY)
Bilog Antenna	Schaffner	CBL 6111C & N-6-06	2725 & AT-N0601	30MHz~1GHz	Jan. 10, 2019	Apr. 14, 2019 ~ Jun. 25, 2019	Jan. 09, 2020	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 02, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Dec. 03, 2019	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz~26.5GHz	Jan. 23, 2019	Apr. 14, 2019 ~ Jun. 25, 2019	Jan. 22, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 25, 2018	Apr. 14, 2019 ~ Apr. 23, 2019	Apr. 24, 2019	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 24, 2019	Apr. 24, 2019 ~ Jun. 25, 2019	Apr. 23, 2020	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 21, 2018	Apr. 14, 2019 ~ May 19, 2019	May 20, 2019	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 20, 2019	May 20, 2019~ Jun. 25, 2019	May 19, 2020	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Nov. 02, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Nov. 01, 2019	Radiation (03CH07-HY)
Filter	Microwave	H1G013G1	SN477215	1GHz High Pass Filter	Nov. 02, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Nov. 01, 2019	Radiation (03CH07-HY)
Filter	Microwave	H3G018G1	SN477220	3GHz High Pass Filter	Nov. 02, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Nov. 01, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 26, 2019	Apr. 14, 2019 ~ Jun. 25, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 26, 2019	Apr. 14, 2019 ~ Jun. 25, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 26, 2019	Apr. 14, 2019 ~ Jun. 25, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Apr. 14, 2019 ~ Jun. 25, 2019	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 14, 2019 ~ Jun. 25, 2019	N/A	Radiation (03CH07-HY)
Filter	Wainwright	WHKX8-5272. 5-6750-18000-40ST	SN3	6.75GHz High Pass Filter	Aug. 23, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Aug. 22, 2019	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz~40GHz	Dec. 05, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Dec. 04, 2019	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 06, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Dec. 05, 2019	Radiation (03CH07-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101408	10Hz~40GHz	Jul. 30, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Jul. 29, 2019	Radiation (03CH07-HY)
Signal Generator	Anritsu	MG3694C	163401	0.1Hz~40GHz	Jan. 21, 2019	Apr. 14, 2019 ~ Jun. 25, 2019	Jan. 20, 2020	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	80504004656 H	N/A	N/A	Apr. 14, 2019 ~ Jun. 25, 2019	N/A	Radiation (03CH07-HY)
Horn Antenna	ESCO	3117	00066584	1GHz~18GHz	Sep. 17, 2018	Apr. 14, 2019 ~ Jun. 25, 2019	Sep. 16, 2019	Radiation (03CH07-HY)

6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.05

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.44

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.95

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GSM	32.78	32.69	32.73	28.75	28.77	28.83
GPRS class 8	32.80	32.73	32.75	28.76	28.78	28.84
GPRS class 10	31.28	31.11	31.19	28.21	28.19	28.32
GPRS class 11	30.09	29.90	30.17	27.58	27.54	27.69
GPRS class 12	28.95	28.92	29.00	26.45	26.38	26.46
EGPRS class 8	26.00	26.00	26.08	24.58	24.58	24.62
EGPRS class 10	25.83	25.89	26.00	23.48	23.46	23.49
EGPRS class 11	25.70	25.72	25.76	23.32	23.25	23.23
EGPRS class 12	23.70	23.59	23.59	22.01	22.05	22.01

Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6
RMC 12.2K	24.94	24.99	24.53	24.71	24.75	24.74
HSDPA Subtest-1	23.90	23.99	23.51	23.67	23.74	23.74
HSDPA Subtest-2	23.93	23.96	23.48	23.64	23.70	23.75
HSDPA Subtest-3	23.35	23.45	23.13	23.13	23.24	23.25
HSDPA Subtest-4	23.45	23.46	23.21	23.13	23.23	23.24
HSUPA Subtest-1	23.75	23.84	23.47	23.64	23.72	23.75
HSUPA Subtest-2	21.76	21.93	21.52	21.69	21.71	21.74
HSUPA Subtest-3	22.85	22.97	22.57	22.62	22.74	22.72
HSUPA Subtest-4	21.76	21.95	21.49	21.64	21.68	21.73
HSUPA Subtest-5	23.82	23.89	23.45	23.70	23.75	23.70

Conducted Power (*Unit: dBm)			
Band	WCDMA Band IV		
Channel	1312	1413	1513
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	24.73	24.71	24.70
HSDPA Subtest-1	23.72	23.70	23.72
HSDPA Subtest-2	23.71	23.69	23.70
HSDPA Subtest-3	23.18	23.18	23.22
HSDPA Subtest-4	23.19	23.18	23.18
HSUPA Subtest-1	23.66	23.65	23.69
HSUPA Subtest-2	21.67	21.70	21.72
HSUPA Subtest-3	22.68	22.73	22.68
HSUPA Subtest-4	21.66	21.62	21.61
HSUPA Subtest-5	23.60	23.70	23.70

Conducted Power (*Unit: dBm)						
Band	CDMA 2000 BC0			CDMA 2000 BC1		
Channel	1013	384	777	25	600	1175
Frequency	824.7	836.52	848.31	1851.25	1880	1908.75
1xRTT RC1 SO55	24.93	24.89	24.90	24.67	24.70	24.70
1xRTT RC3 SO55	24.95	24.92	24.93	24.70	24.70	24.74
1xRTT RC3 SO32 (+ F-SCH)	24.93	24.94	24.94	24.68	24.71	24.72
1xRTT RC3 SO32 (+SCH)	24.92	24.91	24.89	24.65	24.71	24.70
1xEVDO RTAP 153.6Kbps	24.96	24.99	24.97	24.71	24.73	24.75
1xEVDO RETAP 4096Bits	24.95	24.96	24.91	24.68	24.72	24.72

A2. GSM

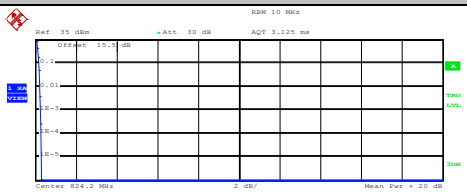
Peak-to-Average Ratio

Mode	GSM850		Limit: 13dB
Mod.	GPRS class 8	EDGE class 8	Result
Lowest CH	0.28	3.4	PASS
Middle CH	0.28	3.24	
Highest CH	0.28	3.24	

Mode	GSM1900		Limit: 13dB
Mod.	GPRS class 8	EDGE class 8	Result
Lowest CH	0.24	3.12	PASS
Middle CH	0.4	3.12	
Highest CH	0.28	3.04	

GSM850 (GPRS class 8)

Lowest Channel



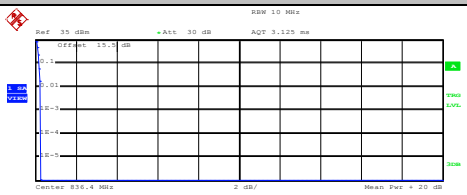
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	31.86 dBm
Peak	32.14 dBm
Crest	0.28 dB
10 %	0.20 dB
1 %	0.24 dB
.1 %	0.28 dB
.01 %	0.32 dB

Date: 12.APR.2019 19:19:24

Middle Channel



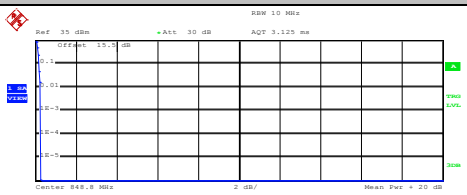
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	31.75 dBm
Peak	32.00 dBm
Crest	0.26 dB
10 %	0.20 dB
1 %	0.24 dB
.1 %	0.28 dB
.01 %	0.28 dB

Date: 12.APR.2019 19:19:46

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

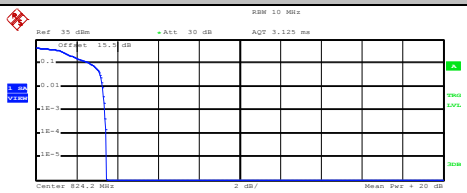
Trace 1

Mean	31.81 dBm
Peak	32.07 dBm
Crest	0.26 dB
10 %	0.20 dB
1 %	0.24 dB
.1 %	0.28 dB
.01 %	0.28 dB

Date: 12.APR.2019 19:20:02

GSM850 (EDGE class 8)

Lowest Channel



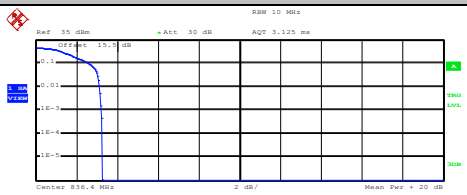
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	24.67 dBm
Peak	28.12 dBm
Crest	3.46 dB
10 %	2.68 dB
1 %	3.28 dB
.1 %	3.40 dB
.01 %	3.44 dB

Date: 13.APR.2019 11:37:42

Middle Channel



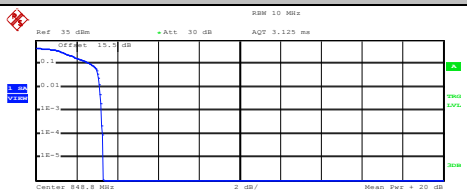
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	24.78 dBm
Peak	28.05 dBm
Crest	3.27 dB
10 %	2.64 dB
1 %	3.12 dB
.1 %	3.24 dB
.01 %	3.28 dB

Date: 13.APR.2019 11:37:58

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

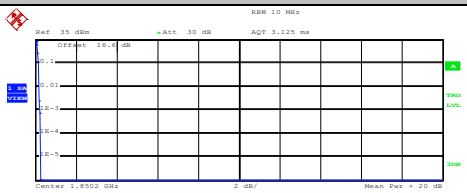
Trace 1

Mean	24.82 dBm
Peak	28.12 dBm
Crest	3.30 dB
10 %	2.68 dB
1 %	3.12 dB
.1 %	3.24 dB
.01 %	3.28 dB

Date: 13.APR.2019 11:38:20

GSM1900 (GPRS class 8)

Lowest Channel



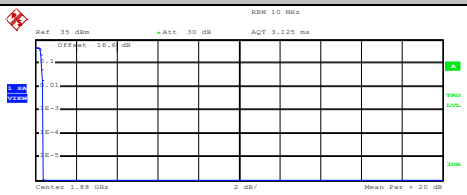
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	27.30 dBm
Peak	27.56 dBm
Crest	0.26 dB
10 %	0.16 dB
1 %	0.20 dB
.1 %	0.24 dB
.01 %	0.28 dB

Date: 13.APR.2019 11:58:21

Middle Channel



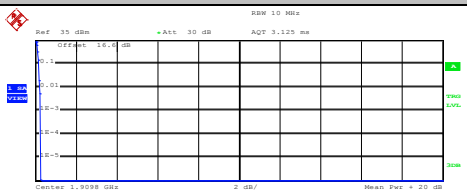
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	27.16 dBm
Peak	27.56 dBm
Crest	0.39 dB
10 %	0.32 dB
1 %	0.36 dB
.1 %	0.40 dB
.01 %	0.40 dB

Date: 13.APR.2019 11:58:40

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

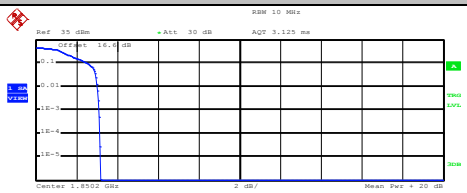
Trace 1

Mean	27.09 dBm
Peak	27.35 dBm
Crest	0.25 dB
10 %	0.16 dB
1 %	0.24 dB
.1 %	0.28 dB
.01 %	0.28 dB

Date: 13.APR.2019 11:59:00

GSM1900 (EDGE class 8)

Lowest Channel



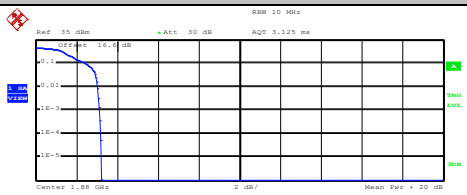
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	24.01 dBm
Peak	27.21 dBm
Crest	3.19 dB
10 %	2.56 dB
1 %	3.04 dB
.1 %	3.12 dB
.01 %	3.16 dB

Date: 13.APR.2019 14:34:30

Middle Channel



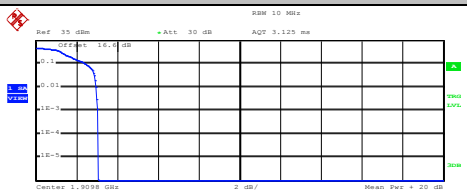
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	24.00 dBm
Peak	27.21 dBm
Crest	3.20 dB
10 %	2.48 dB
1 %	3.04 dB
.1 %	3.12 dB
.01 %	3.20 dB

Date: 13.APR.2019 14:34:53

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

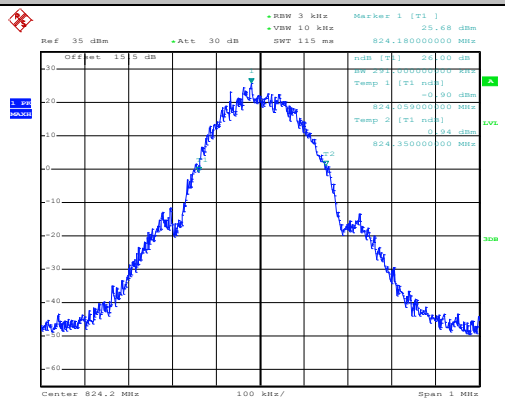
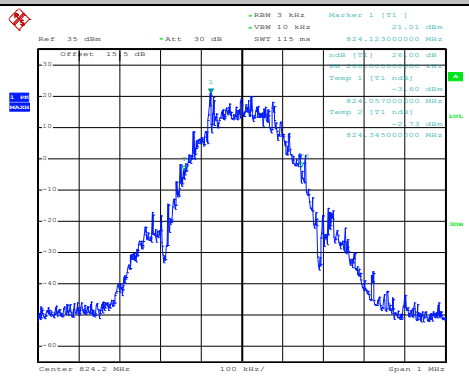
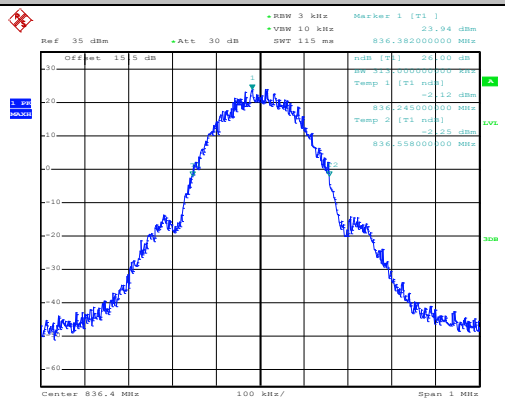
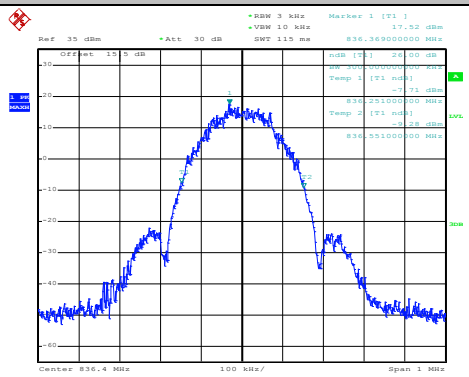
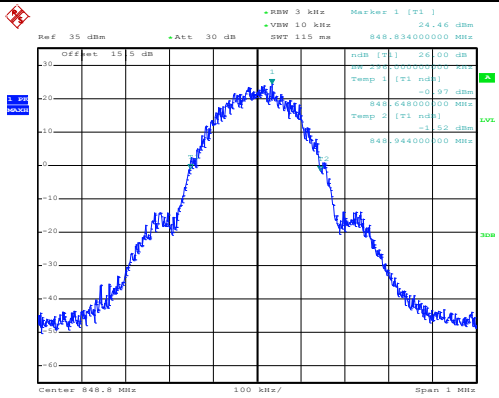
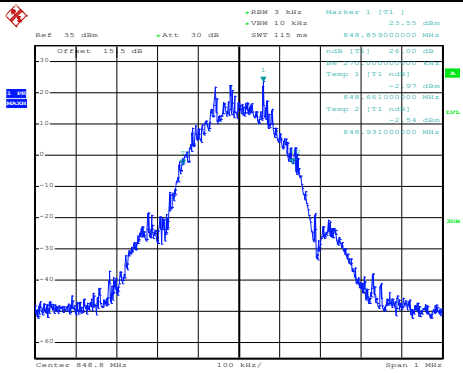
Mean	24.07 dBm
Peak	27.13 dBm
Crest	3.07 dB
10 %	2.44 dB
1 %	2.96 dB
.1 %	3.04 dB
.01 %	3.08 dB

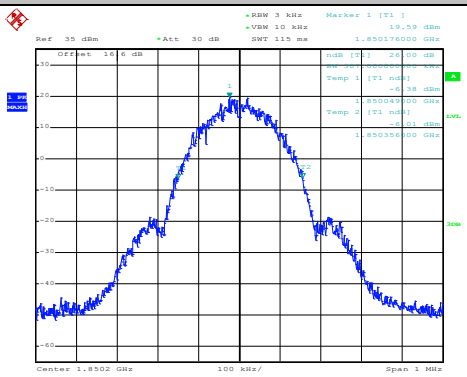
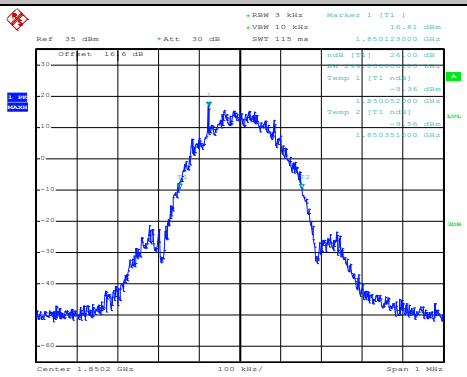
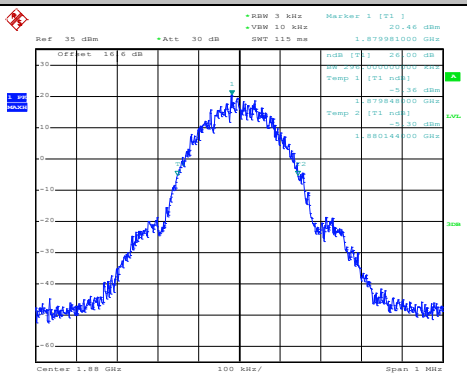
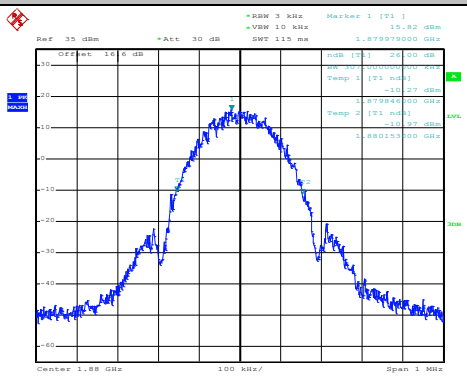
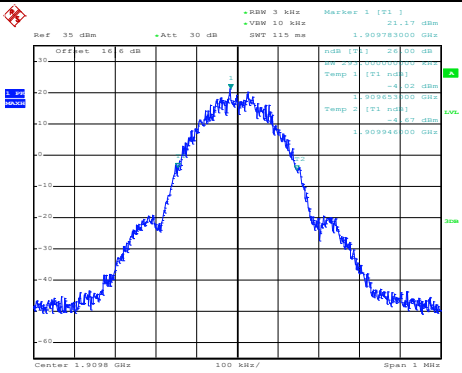
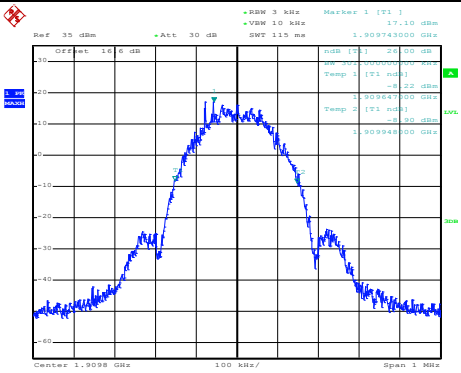
Date: 13.APR.2019 14:35:21

26dB Bandwidth

Mode	GSM850 : 26dB BW(kHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	291	288
Middle CH	313	300
Highest CH	296	270

Mode	GSM1900 : 26dB BW(kHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	307	299
Middle CH	296	307
Highest CH	293	301

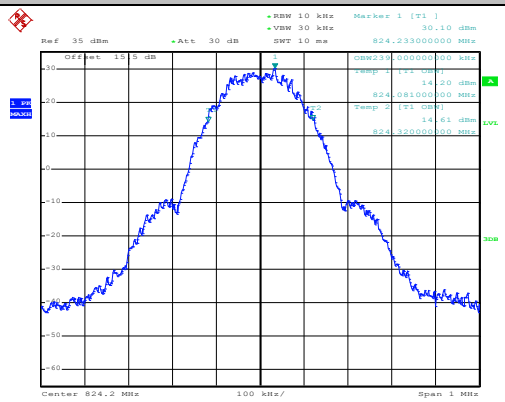
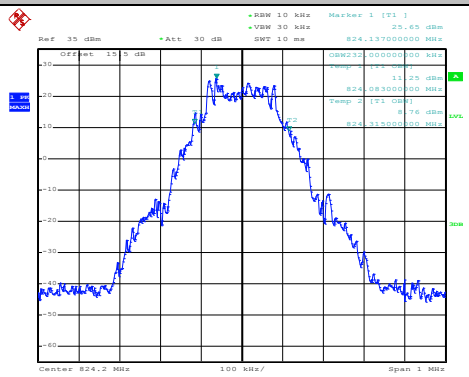
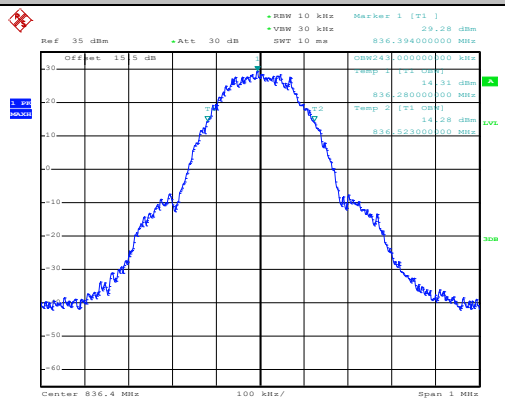
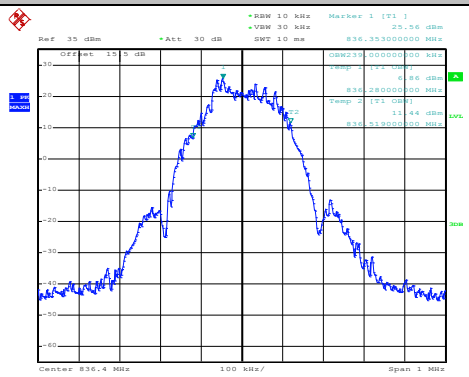
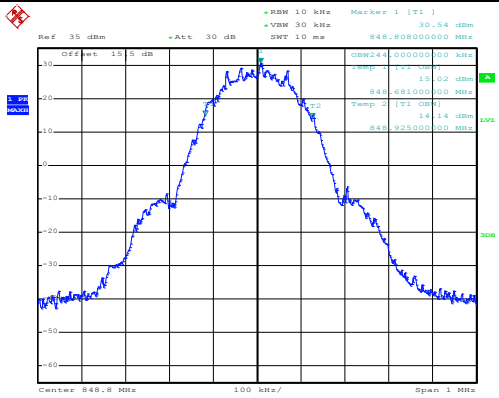
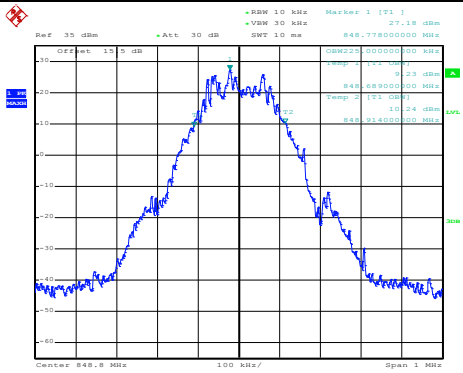
GSM850 (GPRS class 8)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
 Date: 12.APR.2019 19:09:24	 Date: 13.APR.2019 11:26:46
Middle Channel	**Middle Channel**
 Date: 12.APR.2019 19:10:02	 Date: 13.APR.2019 11:27:19
Highest Channel	**Highest Channel**
 Date: 12.APR.2019 19:10:40	 Date: 13.APR.2019 11:28:11

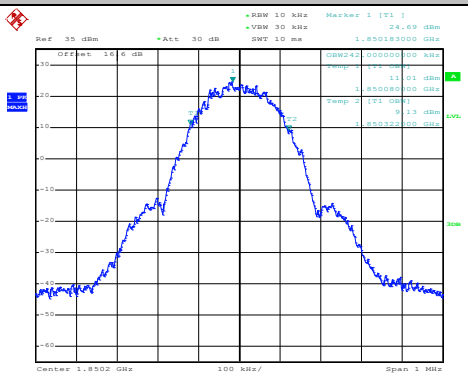
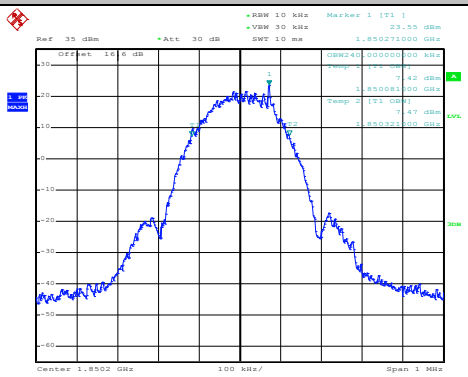
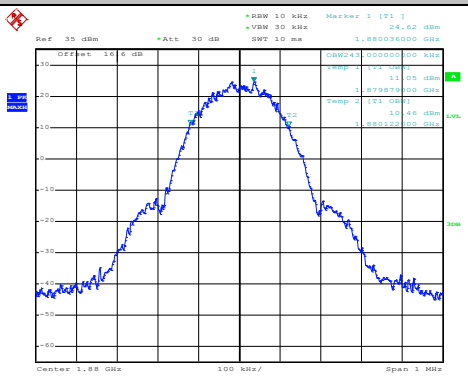
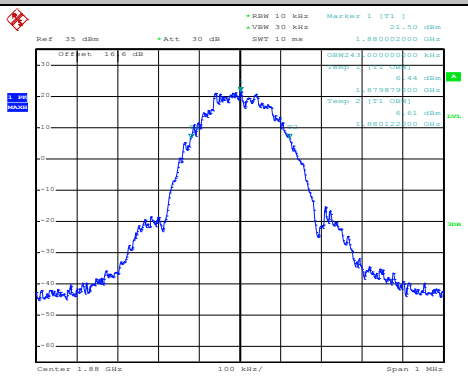
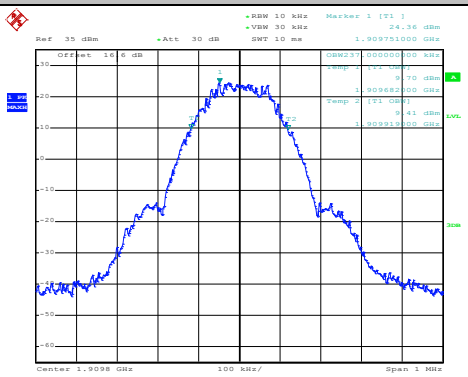
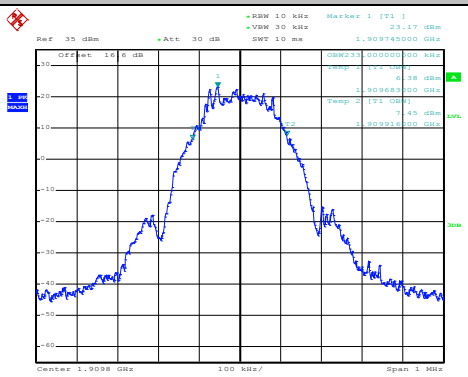
GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 13.APR.2019 11:47:10	Date: 13.APR.2019 13:51:35
Middle Channel	**Middle Channel**
	
Date: 13.APR.2019 11:47:45	Date: 13.APR.2019 13:52:25
Highest Channel	**Highest Channel**
	
Date: 13.APR.2019 11:48:20	Date: 13.APR.2019 13:53:00

Occupied Bandwidth

Mode	GSM850 : 99% OBW(kHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	239	232
Middle CH	243	239
Highest CH	244	225

Mode	GSM1900 : 99% OBW(kHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	242	240
Middle CH	243	243
Highest CH	237	233

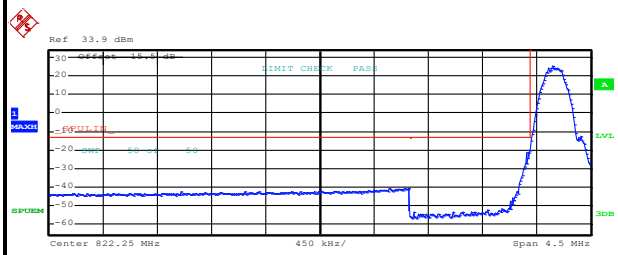
GSM850 (GPRS class 8)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
 Date: 12.APR.2019 19:11:19	 Date: 13.APR.2019 11:28:56
Middle Channel	**Middle Channel**
 Date: 12.APR.2019 19:11:53	 Date: 13.APR.2019 11:29:29
Highest Channel	**Highest Channel**
 Date: 12.APR.2019 19:12:27	 Date: 13.APR.2019 11:30:03

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
 Date: 13.APR.2019 11:49:00	 Date: 13.APR.2019 13:53:43
Middle Channel	**Middle Channel**
 Date: 13.APR.2019 11:49:33	 Date: 13.APR.2019 13:54:23
Highest Channel	**Highest Channel**
 Date: 13.APR.2019 11:50:10	 Date: 13.APR.2019 13:54:58

Conducted Band Edge

GSM850 (GPRS class 8)

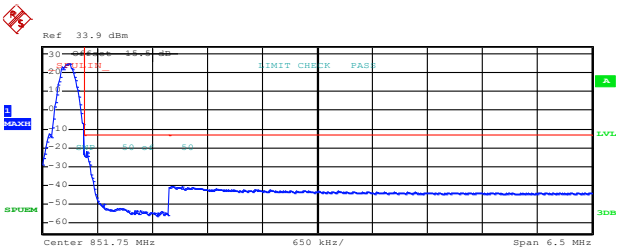
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.826000 M	-40.84	-27.84
823.000 M	824.000 M	3.00 k	823.988000 M	-21.15	-8.15
824.000 M	824.500 M	10.00 k	824.183500 M	25.52	-9.48

Date: 12.APR.2019 19:14:05

Highest Band Edge

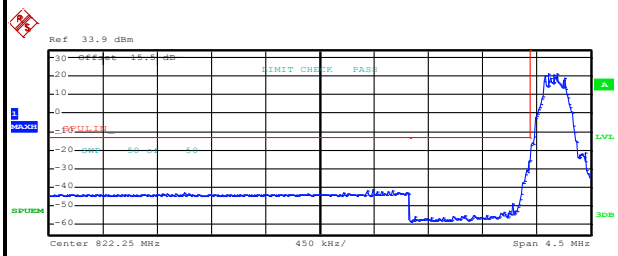


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.819000 M	24.83	-10.17
849.000 M	850.000 M	3.00 k	849.020000 M	-21.74	-8.74
850.000 M	855.000 M	100.00 k	850.045000 M	-40.39	-27.39

Date: 12.APR.2019 19:15:38

GSM850 (EDGE class 8)

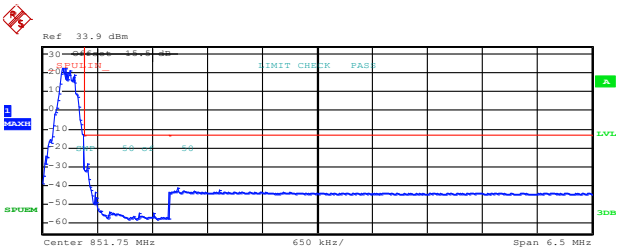
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.685000 M	-41.02	-28.02
823.000 M	824.000 M	3.00 k	823.992000 M	-26.12	-13.12
824.000 M	824.500 M	10.00 k	824.149500 M	21.60	-13.40

Date: 13.APR.2019 11:32:13

Highest Band Edge

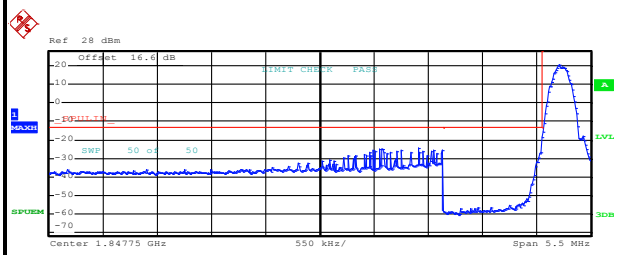


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.776500 M	22.54	-12.46
849.000 M	850.000 M	3.00 k	849.028000 M	-28.32	-15.32
850.000 M	855.000 M	100.00 k	850.100000 M	-40.96	-27.96

Date: 13.APR.2019 11:33:46

GSM1900 (GPRS class 8)

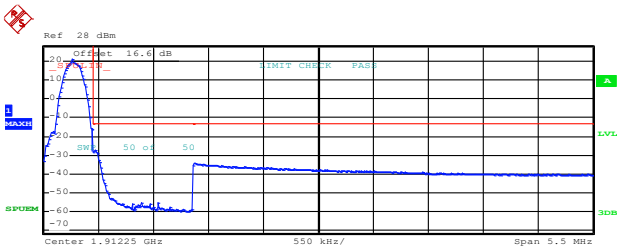
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848744 G	-24.15	-11.15
1.849 G	1.850 G	3.00 k	1.849980 G	-27.13	-14.13
1.850 G	1.851 G	10.00 k	1.850180 G	20.51	-14.49

Date: 13.APR.2019 11:51:49

Highest Band Edge

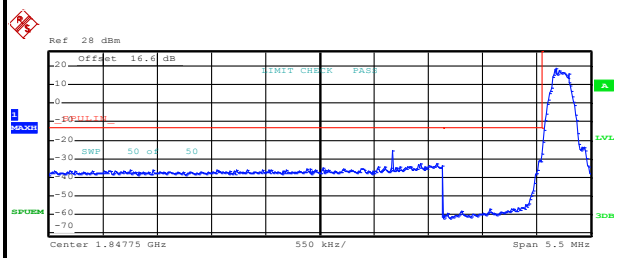


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909781 G	21.01	-13.99
1.910 G	1.911 G	3.00 k	1.910024 G	-26.00	-13.00
1.911 G	1.915 G	1.00 M	1.911008 G	-34.33	-21.33

Date: 13.APR.2019 11:53:23

GSM1900 (EDGE class 8)

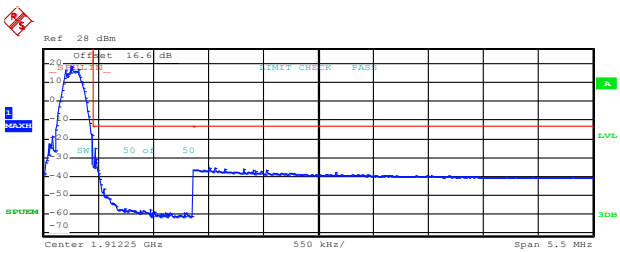
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848488 G	-25.55	-12.55
1.849 G	1.850 G	3.00 k	1.849984 G	-30.50	-17.50
1.850 G	1.851 G	10.00 k	1.850143 G	19.09	-15.91

Date: 13.APR.2019 13:56:36

Highest Band Edge



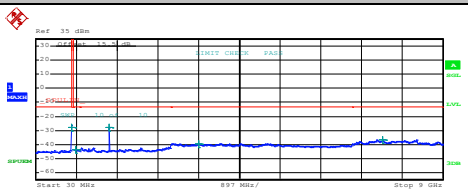
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909779 G	19.09	-15.91
1.910 G	1.911 G	3.00 k	1.910012 G	-25.13	-12.13
1.911 G	1.915 G	1.00 M	1.911160 G	-35.47	-22.47

Date: 13.APR.2019 13:58:14

Conducted Spurious Emission

GSM850 (GPRS class 8)

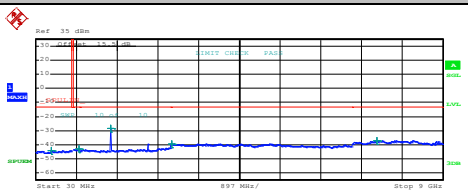
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.822500 M	-28.15	-15.15
855.000 M	1.000 G	1.00 M	903.973753 M	-43.47	-30.47
1.000 G	3.000 G	1.00 M	1.648500 G	-27.61	-14.61
3.000 G	7.000 G	1.00 M	3.623000 G	-39.46	-26.46
7.000 G	9.000 G	1.00 M	7.675500 G	-36.77	-23.77

Date: 12.APR.2019 19:16:37

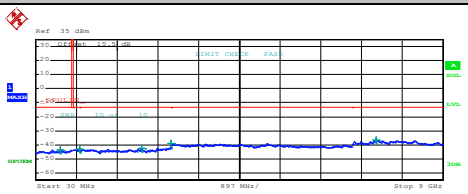
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	378.390000 M	-44.22	-31.22
855.000 M	1.000 G	1.00 M	975.930008 M	-43.31	-30.31
1.000 G	3.000 G	1.00 M	1.673000 G	-28.53	-15.53
3.000 G	7.000 G	1.00 M	3.024000 G	-39.43	-26.43
7.000 G	9.000 G	1.00 M	7.547000 G	-36.94	-23.94

Date: 12.APR.2019 19:17:26

Highest Channel

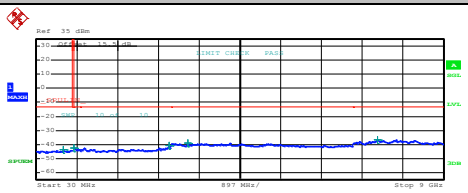


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	568.780000 M	-43.51	-30.51
855.000 M	1.000 G	1.00 M	996.230010 M	-43.28	-30.28
1.000 G	3.000 G	1.00 M	2.369000 G	-42.38	-29.38
3.000 G	7.000 G	1.00 M	3.014000 G	-38.91	-25.91
7.000 G	9.000 G	1.00 M	7.526000 G	-36.65	-23.65

Date: 12.APR.2019 19:18:29

GSM850 (EDGE class 8)

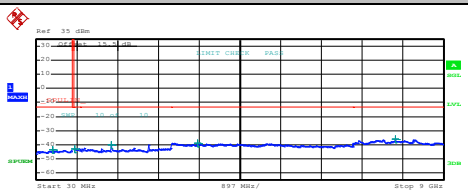
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	617.957500 M	-43.77	-30.77
855.000 M	1.000 G	1.00 M	861.706250 M	-42.71	-29.71
1.000 G	3.000 G	1.00 M	2.946000 G	-40.84	-27.84
3.000 G	7.000 G	1.00 M	3.365000 G	-39.15	-26.15
7.000 G	9.000 G	1.00 M	7.539500 G	-36.83	-23.83

Date: 13.APR.2019 11:35:14

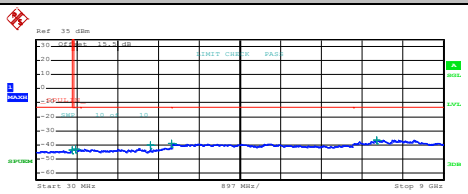
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	380.365000 M	-45.84	-32.84
855.000 M	1.000 G	1.00 M	877.801252 M	-43.17	-30.17
1.000 G	3.000 G	1.00 M	1.673000 G	-39.97	-26.97
3.000 G	7.000 G	1.00 M	3.588000 G	-39.03	-26.03
7.000 G	9.000 G	1.00 M	7.941500 G	-36.15	-23.15

Date: 13.APR.2019 11:36:07

Highest Channel

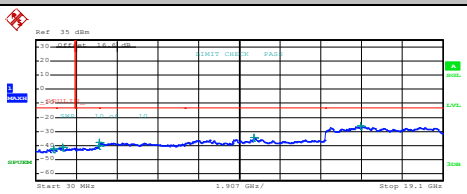


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	811.112500 M	-43.89	-30.89
855.000 M	1.000 G	1.00 M	895.890003 M	-43.32	-30.32
1.000 G	3.000 G	1.00 M	2.547000 G	-40.24	-27.24
3.000 G	7.000 G	1.00 M	3.010000 G	-39.22	-26.22
7.000 G	9.000 G	1.00 M	7.536000 G	-36.48	-23.48

Date: 13.APR.2019 11:37:00

GSM1900 (GPRS class 8)

Lowest Channel

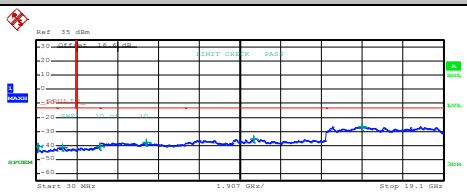


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	874.142500 M	-42.61	-29.61
1.000 G	1.845 G	1.00 M	1.287723 G	-41.38	-28.38
1.915 G	3.000 G	1.00 M	2.997288 G	-40.41	-27.41
3.000 G	7.000 G	1.00 M	3.009000 G	-37.78	-24.78
7.000 G	13.600 G	1.00 M	10.235650 G	-34.46	-21.46
13.600 G	19.100 G	1.00 M	15.239000 G	-26.33	-13.33

Date: 13.APR.2019 11:54:25

GSM1900 (EDGE class 8)

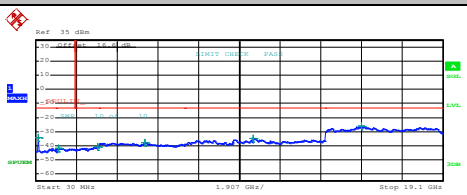
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	112.207500 M	-40.92	-27.92
1.000 G	1.845 G	1.00 M	1.232798 G	-41.61	-28.61
1.915 G	3.000 G	1.00 M	2.990235 G	-40.56	-27.56
3.000 G	7.000 G	1.00 M	5.176000 G	-37.52	-24.52
7.000 G	13.600 G	1.00 M	10.210075 G	-35.23	-22.23
13.600 G	19.100 G	1.00 M	15.297437 G	-26.52	-13.52

Date: 13.APR.2019 13:59:13

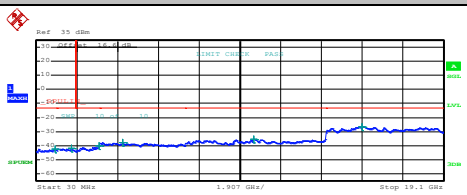
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	141.792500 M	-34.15	-21.15
1.000 G	1.845 G	1.00 M	1.089781 G	-41.96	-28.96
1.915 G	3.000 G	1.00 M	2.941139 G	-40.81	-27.81
3.000 G	7.000 G	1.00 M	5.140000 G	-37.67	-24.67
7.000 G	13.600 G	1.00 M	10.222450 G	-35.04	-22.04
13.600 G	19.100 G	1.00 M	15.278188 G	-26.27	-13.27

Date: 13.APR.2019 11:55:39

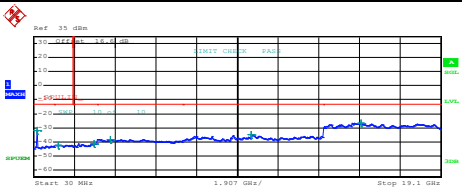
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	893.300000 M	-42.52	-29.52
1.000 G	1.845 G	1.00 M	1.663959 G	-42.03	-29.03
1.915 G	3.000 G	1.00 M	2.983182 G	-40.18	-27.18
3.000 G	7.000 G	1.00 M	4.086000 G	-37.82	-24.82
7.000 G	13.600 G	1.00 M	10.216675 G	-35.45	-22.45
13.600 G	19.100 G	1.00 M	15.274750 G	-26.52	-13.52

Date: 13.APR.2019 14:00:07

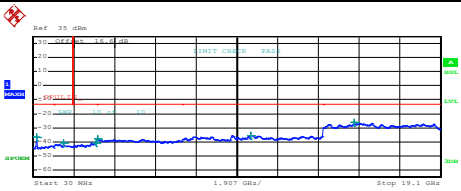
Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	171.620000 M	-31.87	-18.87
1.000 G	1.845 G	1.00 M	1.186745 G	-42.28	-29.28
1.915 G	3.000 G	1.00 M	2.837521 G	-41.14	-28.14
3.000 G	7.000 G	1.00 M	3.601000 G	-38.14	-25.14
7.000 G	13.600 G	1.00 M	10.215025 G	-35.13	-22.13
13.600 G	19.100 G	1.00 M	15.366875 G	-26.71	-13.71

Date: 13.APR.2019 11:56:31

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	-36.72	-23.72
1.000 G	1.845 G	1.00 M	1.432640 G	-40.99	-27.99
1.915 G	3.000 G	1.00 M	2.971519 G	-40.86	-27.86
3.000 G	7.000 G	1.00 M	3.050000 G	-37.56	-24.56
7.000 G	13.600 G	1.00 M	10.210075 G	-35.32	-22.32
13.600 G	19.100 G	1.00 M	15.057500 G	-26.26	-13.26

Date: 13.APR.2019 14:01:00

Frequency Stability

Test Conditions	Middle Channel	GSM850 (GPRS class 8)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0143	0.0036	PASS
40	Normal Voltage	0.0096	0.0012	
30	Normal Voltage	0.0024	0.0084	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0084	0.0108	
0	Normal Voltage	0.0048	0.0179	
-10	Normal Voltage	0.0096	0.0239	
-20	Normal Voltage	0.0143	0.0359	
-30	Normal Voltage	0.0120	0.0263	
20	Maximum Voltage	0.0048	0.0012	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0036	0.0024	

Test Conditions	Middle Channel	GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0032	0.0005	PASS
40	Normal Voltage	0.0059	0.0011	
30	Normal Voltage	0.0037	0.0032	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0053	0.0043	
0	Normal Voltage	0.0085	0.0069	
-10	Normal Voltage	0.0122	0.0101	
-20	Normal Voltage	0.0106	0.0122	
-30	Normal Voltage	0.0133	0.0176	
20	Maximum Voltage	0.0016	0.0005	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0005	0.0005	

Note:

1. Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4V

2. The frequency fundamental emissions stay within the authorized frequency block.

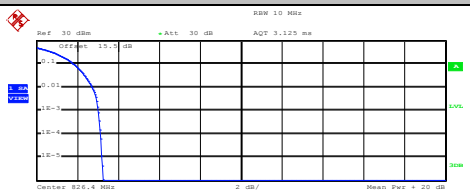
A3. WCDMA

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	3.04	2.84	3.12	PASS
Middle CH	3.16	3.04	3.16	
Highest CH	3.00	3.04	3.20	

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel



Complementary Cumulative Distribution Function (100000 samples)

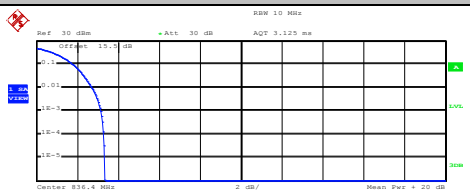
Trace 1

Mean 23.17 dBm
Peak 26.44 dBm
Crest 3.27 dB

10 % 1.84 dB
1 % 2.72 dB
.1 % 3.04 dB
.01 % 3.16 dB

Date: 13.APR.2019 13:46:00

Middle Channel



Complementary Cumulative Distribution Function (100000 samples)

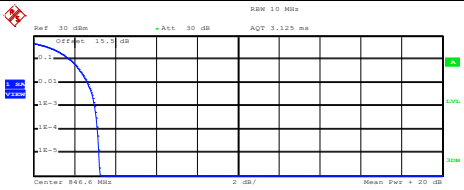
Trace 1

Mean 23.32 dBm
Peak 26.65 dBm
Crest 3.33 dB

10 % 1.80 dB
1 % 2.72 dB
.1 % 3.16 dB
.01 % 3.28 dB

Date: 13.APR.2019 13:46:20

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

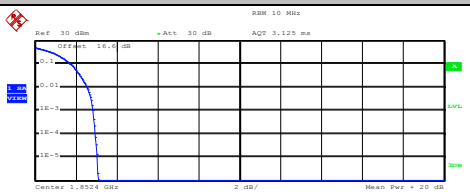
Mean 23.06 dBm
Peak 26.30 dBm
Crest 3.24 dB

10 % 1.80 dB
1 % 2.64 dB
.1 % 3.00 dB
.01 % 3.12 dB

Date: 13.APR.2019 13:46:38

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



Complementary Cumulative Distribution Function (100000 samples)

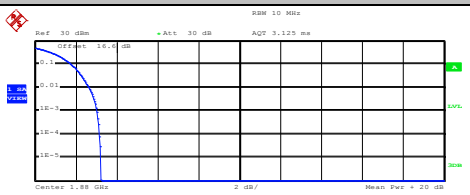
Trace 1

Mean 22.93 dBm
Peak 26.02 dBm
Crest 3.08 dB

10 % 1.76 dB
1 % 2.56 dB
.1 % 2.84 dB
.01 % 2.96 dB

Date: 13.APR.2019 12:48:23

Middle Channel



Complementary Cumulative Distribution Function (100000 samples)

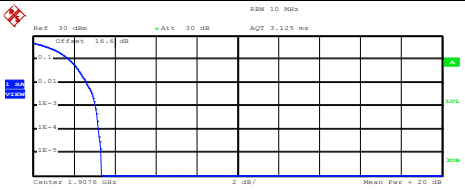
Trace 1

Mean 23.01 dBm
Peak 26.23 dBm
Crest 3.22 dB

10 % 1.76 dB
1 % 2.64 dB
.1 % 3.04 dB
.01 % 3.16 dB

Date: 13.APR.2019 12:48:44

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

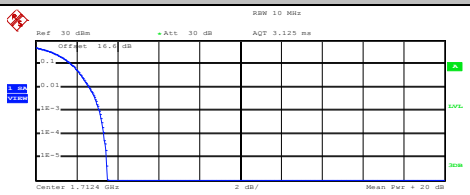
Mean 23.02 dBm
Peak 26.37 dBm
Crest 3.35 dB

10 % 1.76 dB
1 % 2.60 dB
.1 % 3.04 dB
.01 % 3.20 dB

Date: 13.APR.2019 12:48:58

WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



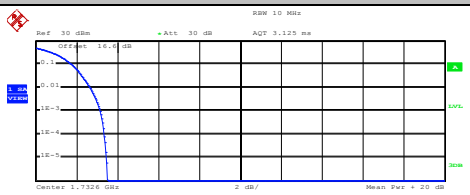
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	23.03 dBm
Peak	26.51 dBm
Crest	3.48 dB
10 %	1.72 dB
1 %	2.64 dB
.1 %	3.12 dB
.01 %	3.32 dB

Date: 13.APR.2019 12:53:30

Middle Channel



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	23.01 dBm
Peak	26.51 dBm
Crest	3.49 dB
10 %	1.76 dB
1 %	2.68 dB
.1 %	3.16 dB
.01 %	3.36 dB

Date: 13.APR.2019 12:53:46

Highest Channel

Complementary Cumulative Distribution Function (100000 samples)

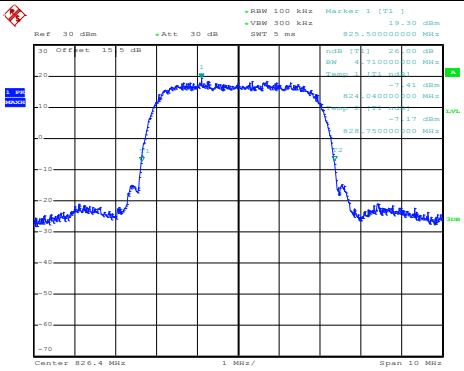
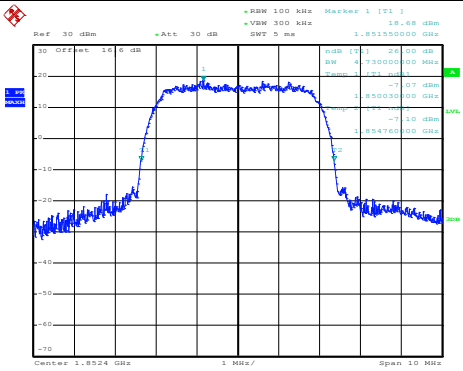
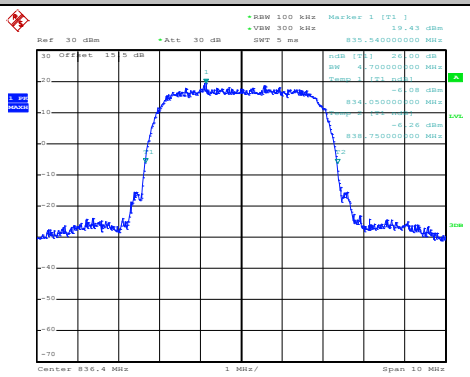
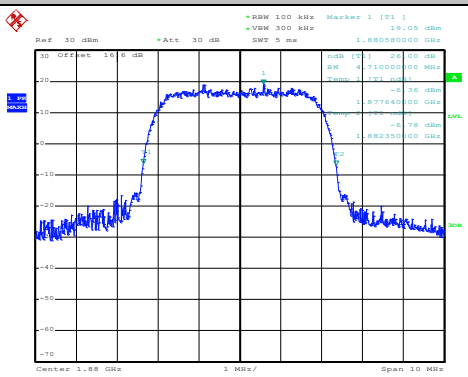
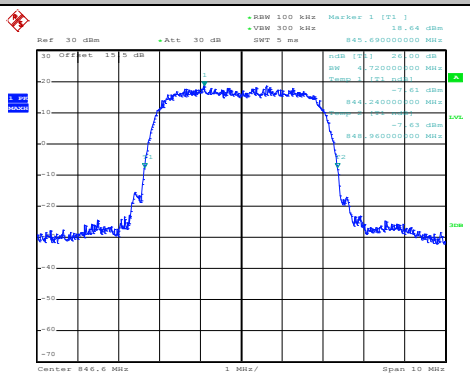
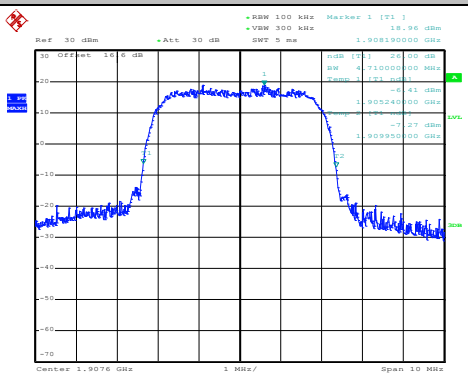
Trace 1

Mean	23.03 dBm
Peak	26.58 dBm
Crest	3.55 dB
10 %	1.76 dB
1 %	2.68 dB
.1 %	3.20 dB
.01 %	3.40 dB

Date: 13.APR.2019 12:54:01

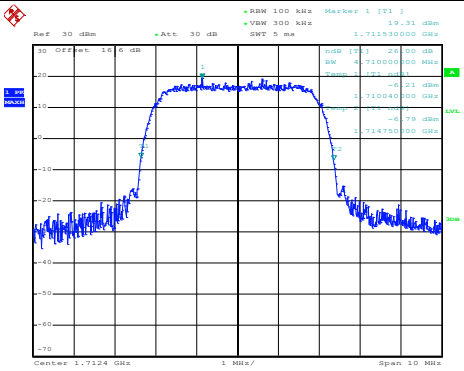
26dB Bandwidth

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	4.71	4.73	4.71
Middle CH	4.70	4.71	4.71
Highest CH	4.72	4.71	4.72

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
 Date: 13.APR.2019 13:33:14	 Date: 13.APR.2019 12:28:24
Middle Channel	**Middle Channel**
 Date: 13.APR.2019 13:33:52	 Date: 13.APR.2019 12:29:04
Highest Channel	**Highest Channel**
 Date: 13.APR.2019 13:34:30	 Date: 13.APR.2019 12:29:41

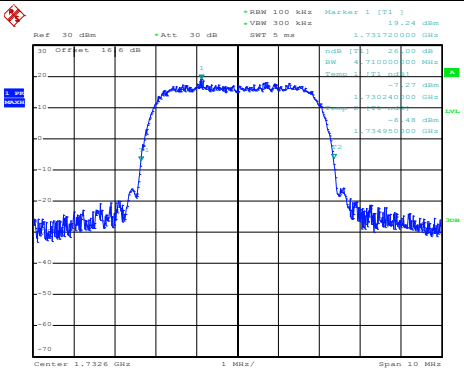
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



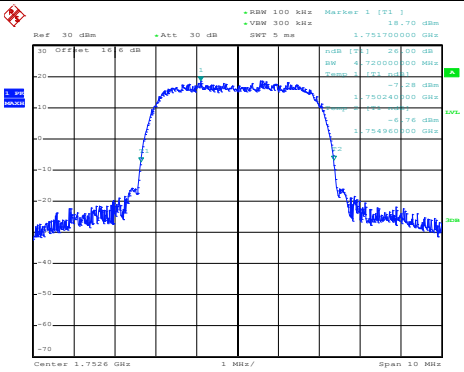
Date: 13.APR.2019 12:50:04

Middle Channel



Date: 13.APR.2019 12:50:41

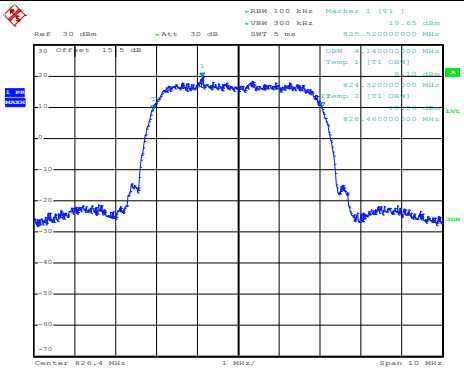
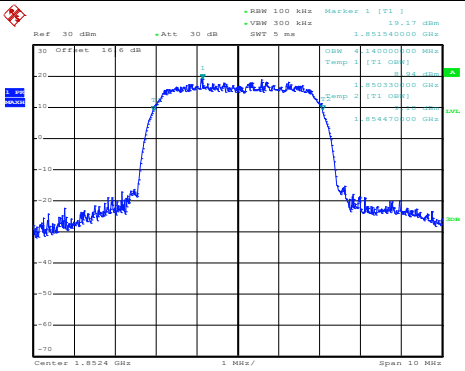
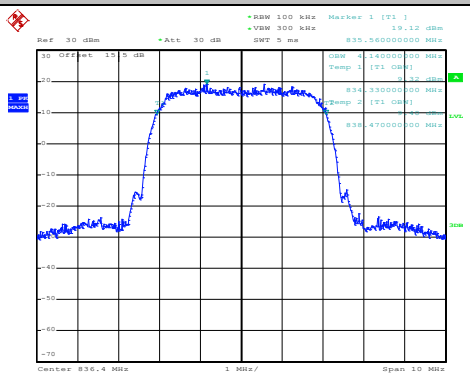
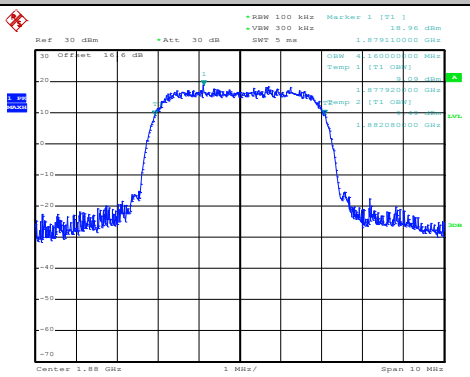
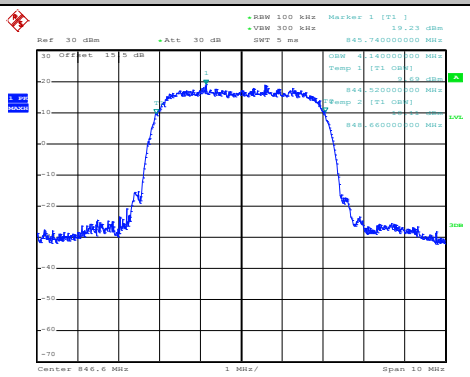
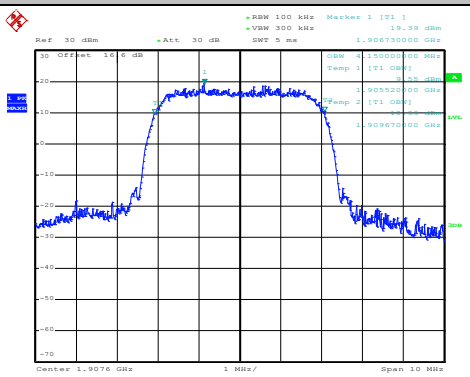
Highest Channel



Date: 13.APR.2019 12:51:19

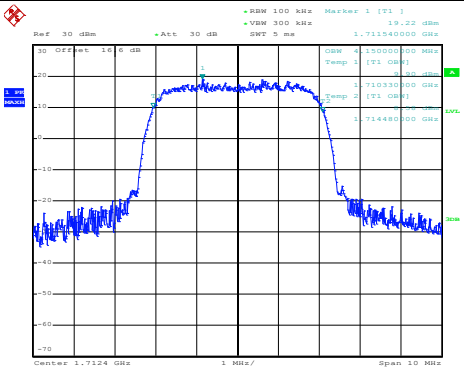
Occupied Bandwidth

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	4.14	4.14	4.15
Middle CH	4.14	4.16	4.15
Highest CH	4.14	4.15	4.14

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
 Date: 13.APR.2019 13:35:27	 Date: 13.APR.2019 12:33:07
Middle Channel	**Middle Channel**
 Date: 13.APR.2019 13:36:08	 Date: 13.APR.2019 12:33:46
Highest Channel	**Highest Channel**
 Date: 13.APR.2019 13:36:44	 Date: 13.APR.2019 12:34:25

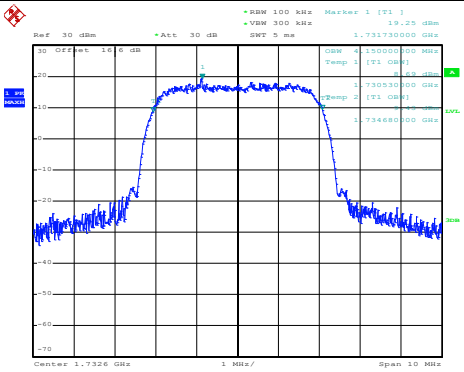
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



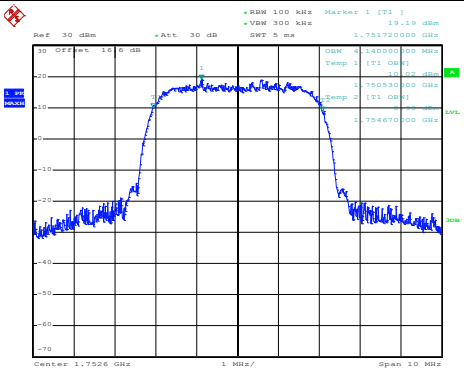
Date: 13.APR.2019 12:51:58

Middle Channel



Date: 13.APR.2019 12:52:31

Highest Channel

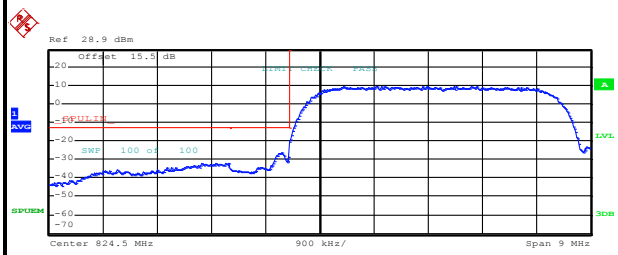


Date: 13.APR.2019 12:53:05

Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

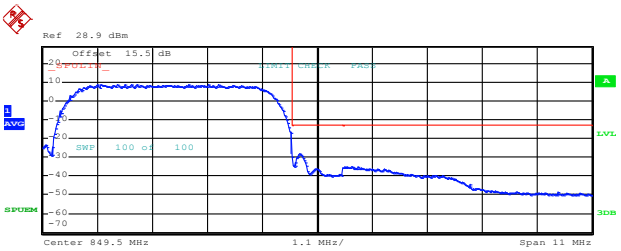
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.994000 M	-32.28	-19.28
823.000 M	824.000 M	50.00 k	823.868000 M	-26.19	-13.19
824.000 M	829.000 M	100.00 k	826.280000 M	9.53	-25.47

Date: 13.APR.2019 13:39:40

Highest Band Edge

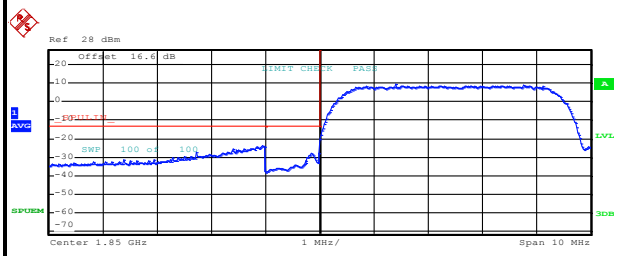


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
844.000 M	849.000 M	100.00 k	845.655000 M	8.90	-26.10
849.000 M	850.000 M	50.00 k	849.152000 M	-28.21	-15.21
850.000 M	855.000 M	100.00 k	850.310000 M	-35.12	-22.12

Date: 13.APR.2019 13:42:50

WCDMA Band II (RMC 12.2Kbps)

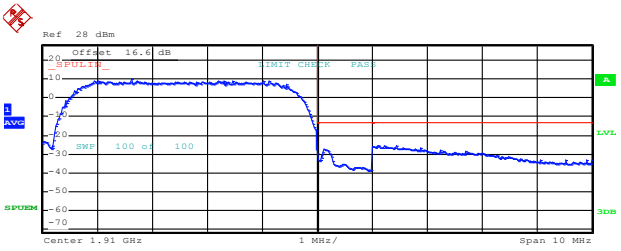
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848940 G	-23.93	-10.93
1.849 G	1.850 G	50.00 k	1.849828 G	-27.95	-14.95
1.850 G	1.855 G	100.00 k	1.851405 G	9.41	-25.59

Date: 13.APR.2019 12:37:36

Highest Band Edge

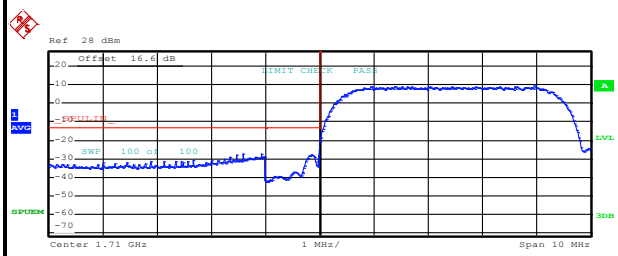


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.906620 G	9.98	-25.02
1.910 G	1.911 G	50.00 k	1.910124 G	-27.55	-14.55
1.911 G	1.915 G	1.00 M	1.911444 G	-25.25	-12.25

Date: 13.APR.2019 12:40:31

WCDMA Band IV (RMC 12.2Kbps)

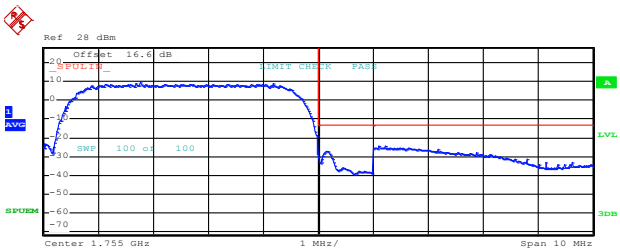
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.705 G	1.709 G	1.00 M	1.708916 G	-27.10	-14.10
1.709 G	1.710 G	50.00 k	1.709836 G	-27.70	-14.70
1.710 G	1.715 G	100.00 k	1.713950 G	9.90	-25.10

Date: 13.APR.2019 12:56:59

Highest Band Edge



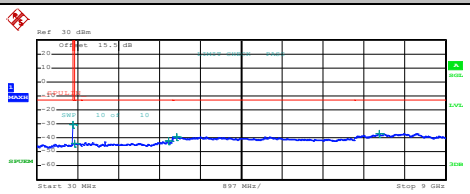
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.750 G	1.755 G	100.00 k	1.751755 G	9.29	-25.71
1.755 G	1.756 G	50.00 k	1.755152 G	-27.16	-14.16
1.756 G	1.760 G	1.00 M	1.756212 G	-24.19	-11.19

Date: 13.APR.2019 13:09:39

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

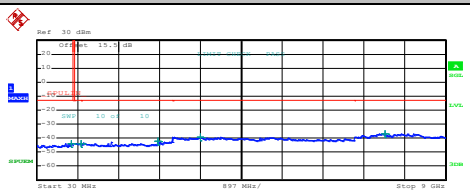
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.822500 M	-30.40	-17.40
855.000 M	1.000 G	1.00 M	863.192501 M	-43.84	-30.84
1.000 G	3.000 G	1.00 M	2.910000 G	-42.20	-29.20
3.000 G	7.000 G	1.00 M	3.099000 G	-39.07	-26.07
7.000 G	9.000 G	1.00 M	7.555000 G	-36.82	-23.82

Date: 13.APR.2019 13:43:48

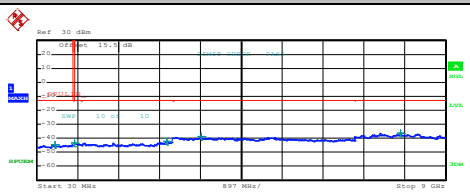
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	783.462500 M	-44.02	-31.02
855.000 M	1.000 G	1.00 M	994.236260 M	-43.80	-30.80
1.000 G	3.000 G	1.00 M	2.693500 G	-42.33	-29.33
3.000 G	7.000 G	1.00 M	3.611000 G	-39.08	-26.08
7.000 G	9.000 G	1.00 M	7.679000 G	-36.71	-23.71

Date: 13.APR.2019 13:44:39

Highest Channel

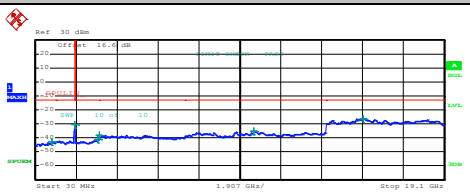


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	418.482500 M	-44.53	-31.53
855.000 M	1.000 G	1.00 M	860.582500 M	-43.63	-30.63
1.000 G	3.000 G	1.00 M	2.874000 G	-42.45	-29.45
3.000 G	7.000 G	1.00 M	3.627000 G	-38.97	-25.97
7.000 G	9.000 G	1.00 M	8.015000 G	-36.20	-23.20

Date: 13.APR.2019 13:45:34

WCDMA Band II (RMC 12.2Kbps)

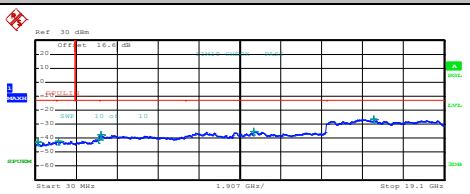
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	805.272500 M	-42.59	-29.59
1.000 G	1.845 G	1.00 M	1.842888 G	-30.29	-17.29
1.915 G	3.000 G	1.00 M	2.922965 G	-40.88	-27.88
3.000 G	7.000 G	1.00 M	3.008000 G	-38.00	-25.00
7.000 G	13.600 G	1.00 M	10.224925 G	-35.46	-22.46
13.600 G	19.100 G	1.00 M	15.328375 G	-26.37	-13.37

Date: 13.APR.2019 12:44:09

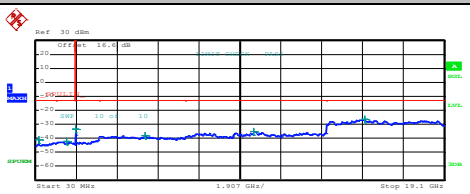
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	140.822500 M	-42.60	-29.60
1.000 G	1.845 G	1.00 M	1.115342 G	-42.30	-29.30
1.915 G	3.000 G	1.00 M	2.951989 G	-41.18	-28.18
3.000 G	7.000 G	1.00 M	3.067000 G	-37.47	-24.47
7.000 G	13.600 G	1.00 M	10.226575 G	-35.07	-22.07
13.600 G	19.100 G	1.00 M	15.813750 G	-26.48	-13.48

Date: 13.APR.2019 12:45:03

Highest Channel

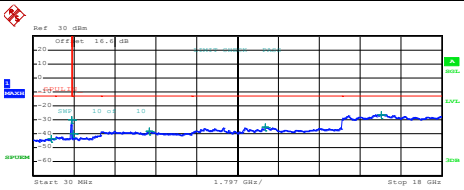


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	168.225000 M	-40.96	-27.96
1.000 G	1.845 G	1.00 M	1.492212 G	-42.36	-29.36
1.915 G	3.000 G	1.00 M	1.915271 G	-33.55	-20.55
3.000 G	7.000 G	1.00 M	5.146000 G	-38.35	-25.35
7.000 G	13.600 G	1.00 M	10.232350 G	-35.40	-22.40
13.600 G	19.100 G	1.00 M	15.394375 G	-26.53	-13.53

Date: 13.APR.2019 12:46:11

WCDMA Band IV (RMC 12.2Kbps)

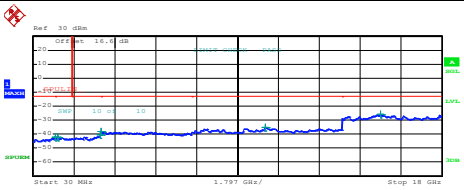
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	835.100000 M	-43.54	-30.54
1.000 G	1.705 G	1.00 M	1.704295 G	-30.01	-17.01
1.760 G	3.000 G	1.00 M	1.787280 G	-39.68	-26.68
3.000 G	7.000 G	1.00 M	5.144000 G	-38.02	-25.02
7.000 G	13.600 G	1.00 M	10.219150 G	-35.33	-22.33
13.600 G	18.000 G	1.00 M	15.358350 G	-26.24	-13.24

Date: 13.APR.2019 13:18:45

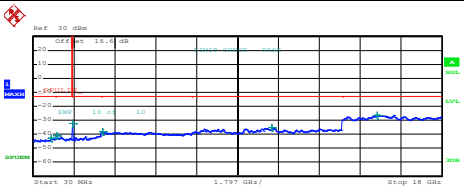
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	991.755000 M	-42.47	-29.47
1.000 G	1.705 G	1.00 M	1.093941 G	-41.97	-28.97
1.760 G	3.000 G	1.00 M	2.989770 G	-40.58	-27.58
3.000 G	7.000 G	1.00 M	3.017000 G	-38.33	-25.33
7.000 G	13.600 G	1.00 M	10.222450 G	-35.40	-22.40
13.600 G	18.000 G	1.00 M	15.308850 G	-26.11	-13.11

Date: 13.APR.2019 13:19:53

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	827.097500 M	-42.72	-29.72
1.000 G	1.705 G	1.00 M	1.077198 G	-41.33	-28.33
1.760 G	3.000 G	1.00 M	1.760310 G	-32.13	-19.13
3.000 G	7.000 G	1.00 M	3.091000 G	-38.26	-25.26
7.000 G	13.600 G	1.00 M	10.541725 G	-35.27	-22.27
13.600 G	18.000 G	1.00 M	15.169150 G	-26.43	-13.43

Date: 13.APR.2019 13:20:47

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	0.0024	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0096	
0	Normal Voltage	0.0036	
-10	Normal Voltage	0.0084	
-20	Normal Voltage	0.0132	
-30	Normal Voltage	0.0215	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0032	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0027	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0058	
-30	Normal Voltage	0.0046	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4 V

2. The frequency fundamental emissions stay within the authorized frequency block.

A4. CDMA

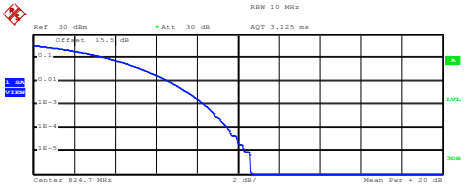
Peak-to-Average Ratio

Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xRTT	1xRTT	Result
Lowest CH	8.36	8.40	PASS
Middle CH	8.44	7.72	
Highest CH	8.44	12.28	

Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xEV-DO Rev. A	1xEV-DO Rev. A	Result
Lowest CH	10.92	8.44	PASS
Middle CH	8.44	12.56	
Highest CH	8.40	8.56	

CDMA BC0 (1xRTT)

Lowest Channel



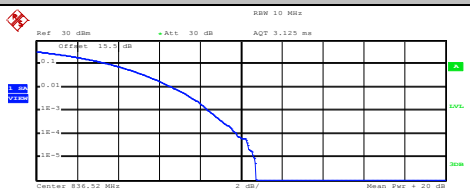
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean -29.69 dBm
Peak -19.06 dBm
Crest 10.63 dB

10 % 3.68 dB
1 % 6.64 dB
.1 % 8.36 dB
.01 % 9.48 dB

Date: 25.APR.2019 10:48:23

Middle Channel



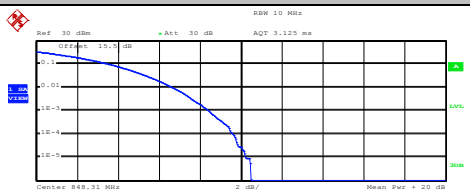
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean -29.66 dBm
Peak -18.92 dBm
Crest 10.74 dB

10 % 3.68 dB
1 % 6.68 dB
.1 % 8.44 dB
.01 % 9.80 dB

Date: 25.APR.2019 10:49:04

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

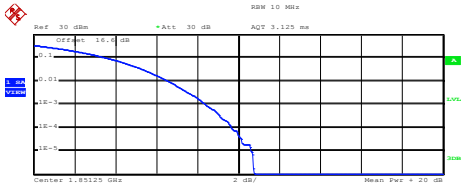
Trace 1
Mean -29.70 dBm
Peak -19.20 dBm
Crest 10.50 dB

10 % 3.68 dB
1 % 6.72 dB
.1 % 8.44 dB
.01 % 9.64 dB

Date: 25.APR.2019 10:49:37

CDMA BC1 (1xRTT)

Lowest Channel



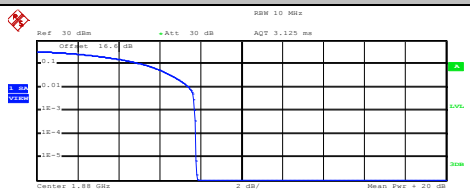
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean -29.53 dBm
Peak -18.78 dBm
Crest 10.75 dB

10 % 3.68 dB
1 % 6.64 dB
.1 % 8.40 dB
.01 % 9.68 dB

Date: 7.MAY.2019 14:20:33

Middle Channel



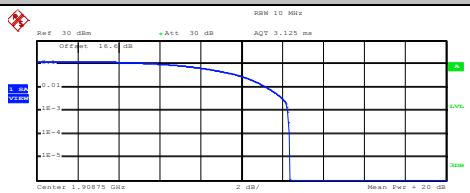
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 17.54 dBm
Peak 25.38 dBm
Crest 7.84 dB

10 % 5.24 dB
1 % 7.44 dB
.1 % 7.72 dB
.01 % 7.80 dB

Date: 7.MAY.2019 14:20:55

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

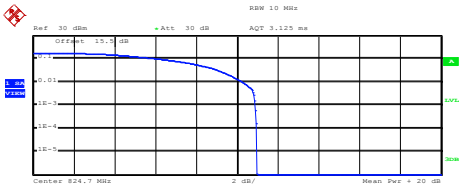
Trace 1
Mean 13.43 dBm
Peak 25.81 dBm
Crest 12.37 dB

10 % 6.64 dB
1 % 11.28 dB
.1 % 12.28 dB
.01 % 12.36 dB

Date: 7.MAY.2019 14:21:18

CDMA BC0 (1xEV-DO Rev. A)

Lowest Channel



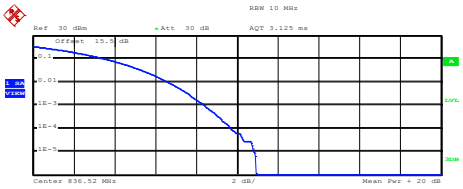
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 13.30 dBm
Peak 24.25 dBm
Crest 10.95 dB

10 % 6.44 dB
1 % 10.28 dB
.1 % 10.92 dB
.01 % 10.96 dB

Date: 8.MAY.2019 16:30:16

Middle Channel



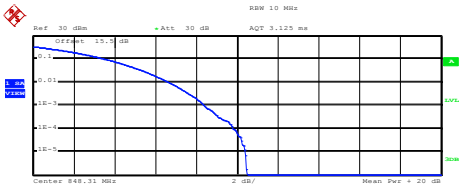
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean -29.66 dBm
Peak -18.71 dBm
Crest 10.95 dB

10 % 3.68 dB
1 % 6.64 dB
.1 % 8.44 dB
.01 % 9.72 dB

Date: 8.MAY.2019 16:30:33

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

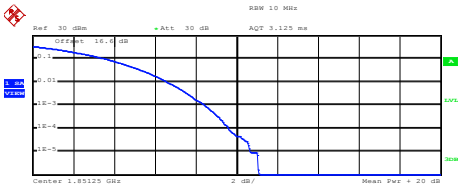
Trace 1
Mean -29.68 dBm
Peak -19.21 dBm
Crest 10.47 dB

10 % 3.64 dB
1 % 6.68 dB
.1 % 8.40 dB
.01 % 9.84 dB

Date: 8.MAY.2019 16:31:06

CDMA BC1 (1xEV-DO Rev. A)

Lowest Channel



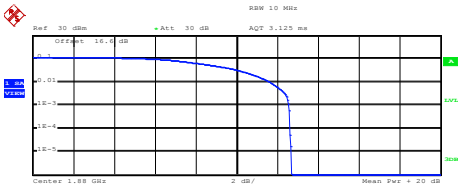
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean -29.57 dBm
Peak -18.50 dBm
Crest 11.07 dB

10 % 3.68 dB
1 % 6.64 dB
.1 % 8.44 dB
.01 % 9.60 dB

Date: 9.MAY.2019 10:00:47

Middle Channel



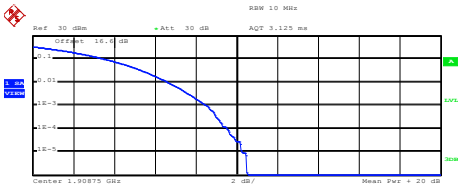
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 12.84 dBm
Peak 25.52 dBm
Crest 12.69 dB

10 % 6.52 dB
1 % 11.68 dB
.1 % 12.56 dB
.01 % 12.64 dB

Date: 9.MAY.2019 10:01:03

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean -29.50 dBm
Peak -19.00 dBm
Crest 10.51 dB

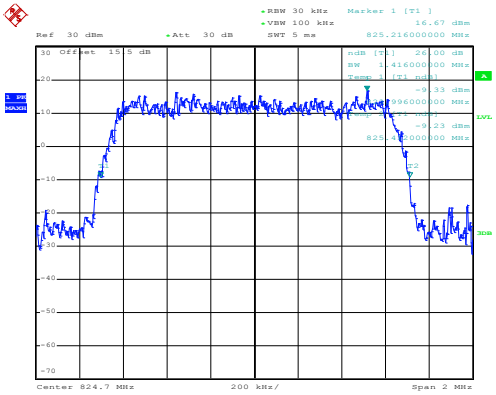
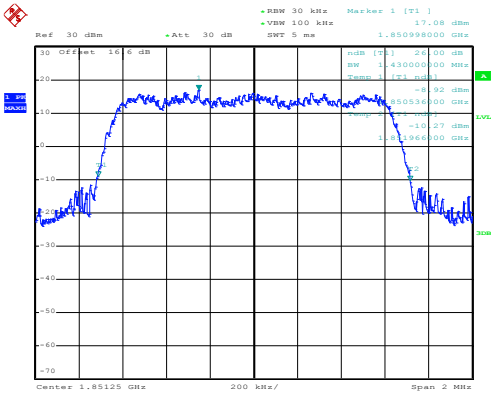
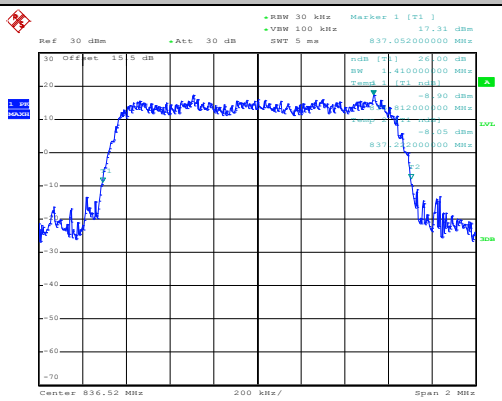
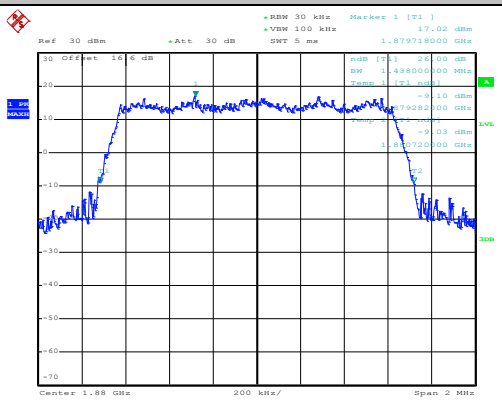
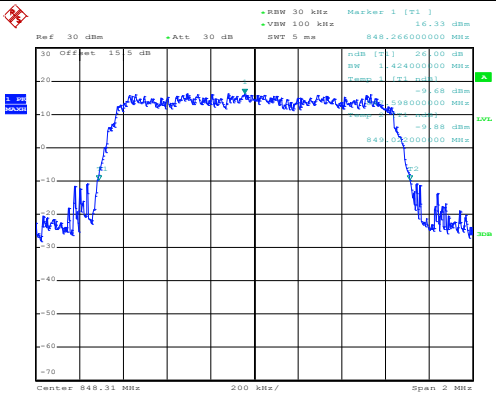
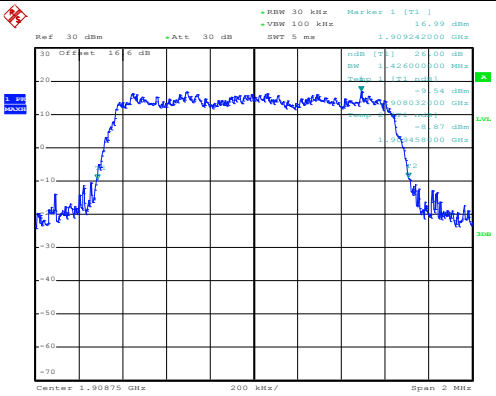
10 % 3.68 dB
1 % 6.68 dB
.1 % 8.56 dB
.01 % 9.56 dB

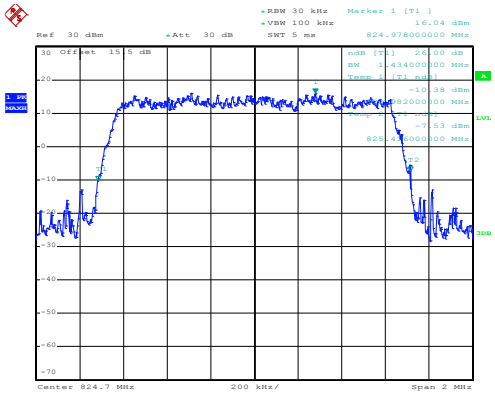
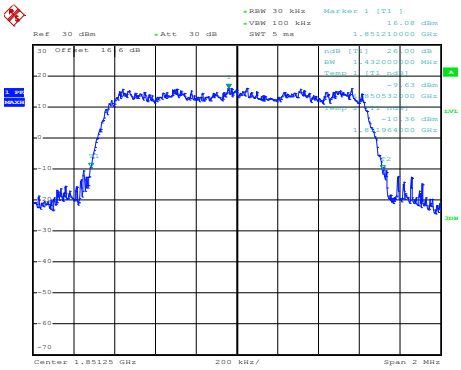
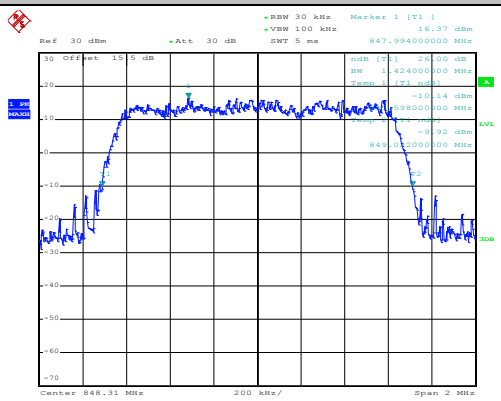
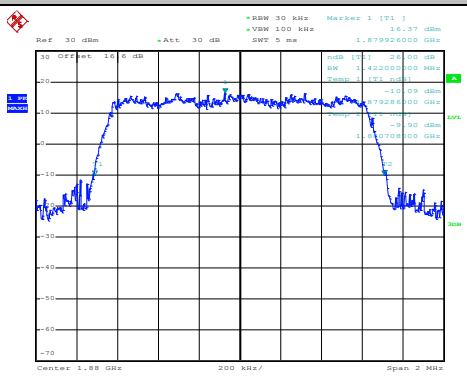
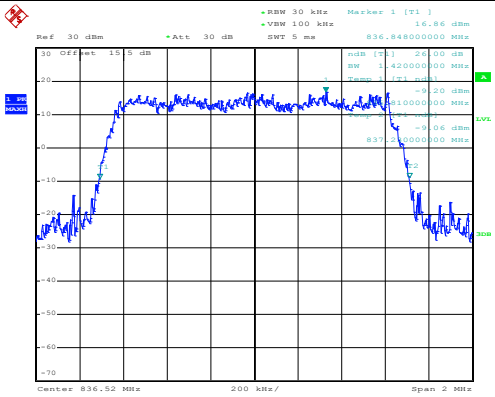
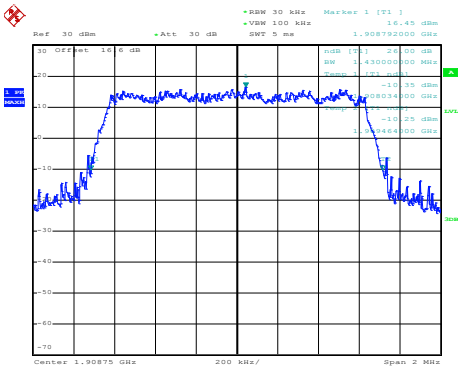
Date: 9.MAY.2019 10:01:25

26dB Bandwidth

Mode	CDMA BC0 26dB BW(MHz)	CDMA BC1 26dB BW(MHz)
Mod.	1xRTT	1xRTT
Lowest CH	1.416	1.430
Middle CH	1.41	1.438
Highest CH	1.424	1.426

Mode	CDMA BC0 26dB BW(MHz)	CDMA BC1 26dB BW(MHz)
Mod.	1xEV-DO Rev. A	1xEV-DO Rev. A
Lowest CH	1.434	1.432
Middle CH	1.424	1.422
Highest CH	1.42	1.430

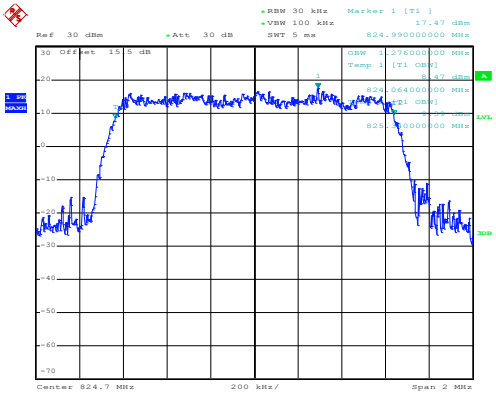
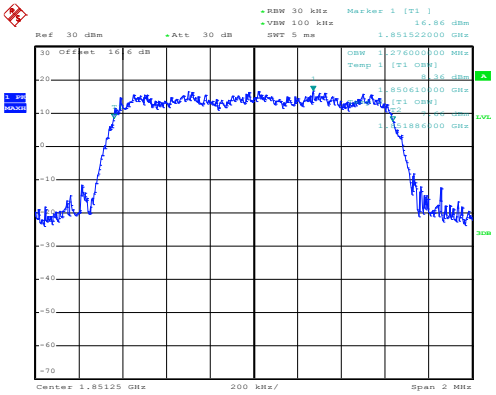
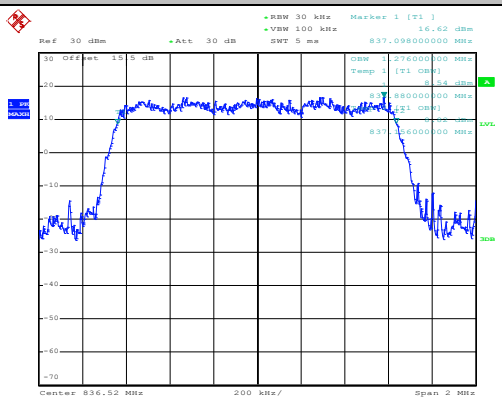
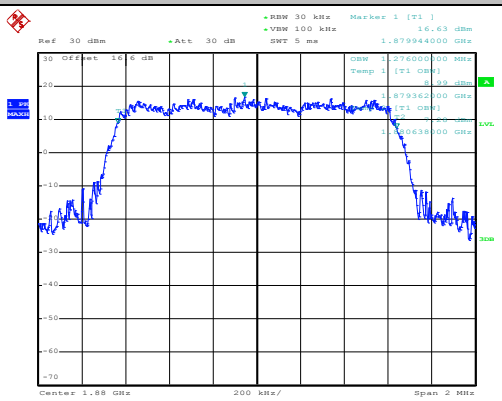
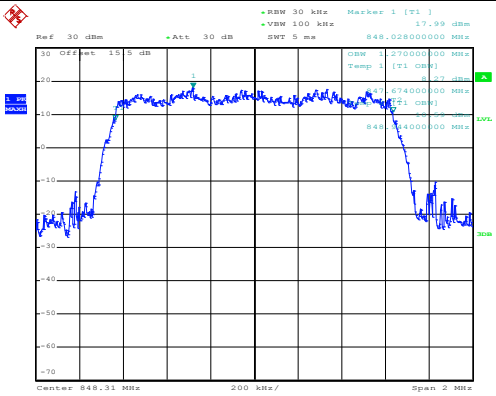
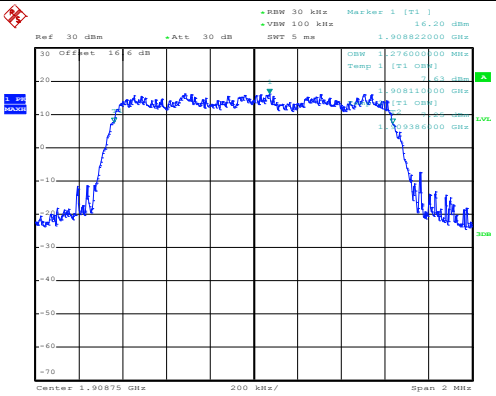
CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
	
Date: 25.APR.2019 10:24:24	Date: 7.MAY.2019 14:12:24
Middle Channel	**Middle Channel**
	
Date: 25.APR.2019 10:22:14	Date: 7.MAY.2019 14:13:02
Highest Channel	**Highest Channel**
	
Date: 25.APR.2019 10:23:13	Date: 7.MAY.2019 14:13:38

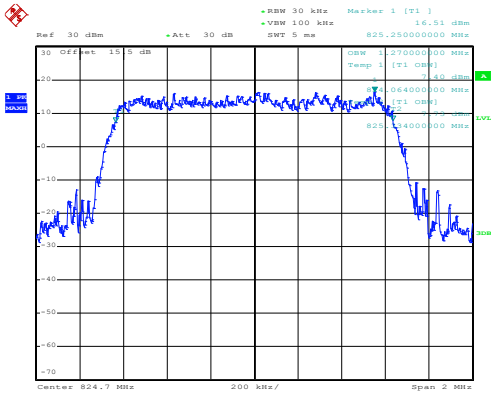
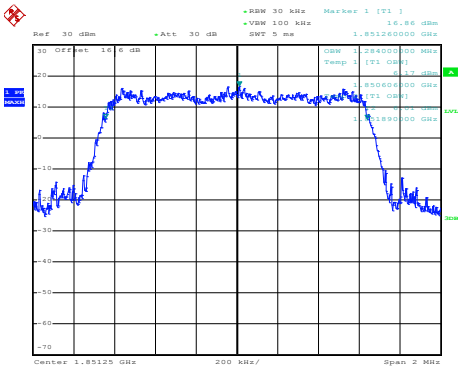
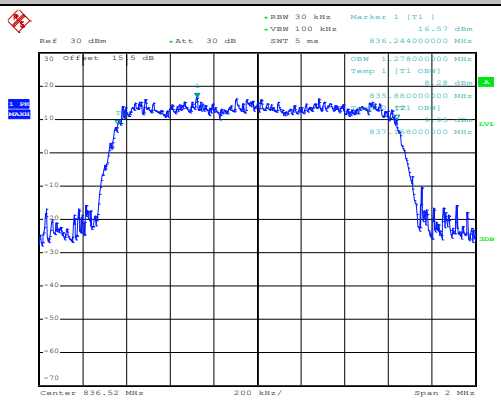
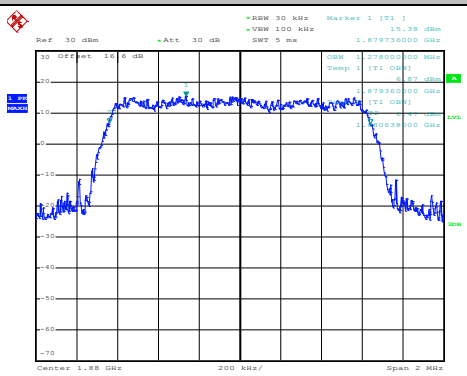
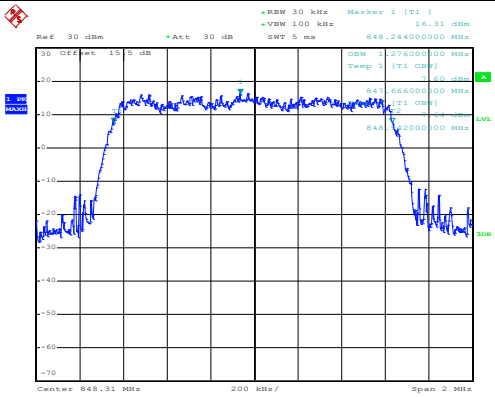
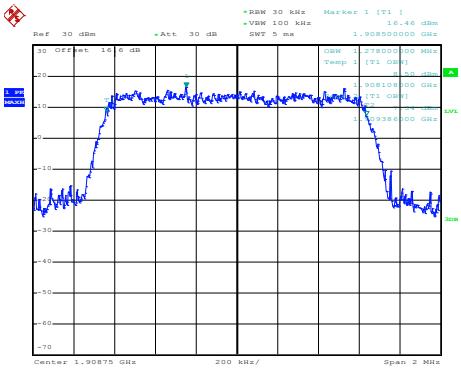
CDMA BC0 (1xEV-DO Rev. A)	CDMA BC1 (1xEV-DO Rev. A)
Lowest Channel	**Lowest Channel**
 Date: 8.MAY.2019 16:18:50	 Date: 9.MAY.2019 09:54:18
Middle Channel	**Middle Channel**
 Date: 8.MAY.2019 16:23:18	 Date: 9.MAY.2019 09:54:53
Highest Channel	**Highest Channel**
 Date: 8.MAY.2019 16:21:40	 Date: 9.MAY.2019 09:55:27

Occupied Bandwidth

Mode	CDMA BC0 99% OBW(MHz)	CDMA BC1 99% OBW(MHz)
Mod.	1xRTT	1xRTT
Lowest CH	1.276	1.276
Middle CH	1.276	1.276
Highest CH	1.270	1.276

Mode	CDMA BC0 99% OBW(MHz)	CDMA BC1 99% OBW(MHz)
Mod.	1xEV-DO Rev. A	1xEV-DO Rev. A
Lowest CH	1.270	1.284
Middle CH	1.278	1.278
Highest CH	1.276	1.278

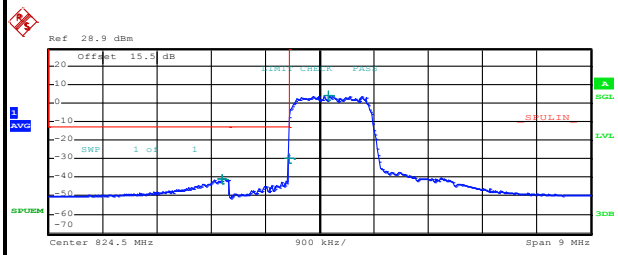
CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
 Date: 25.APR.2019 10:27:02	 Date: 7.MAY.2019 14:15:48
Middle Channel	**Middle Channel**
 Date: 25.APR.2019 10:28:23	 Date: 7.MAY.2019 14:16:28
Highest Channel	**Highest Channel**
 Date: 25.APR.2019 10:29:16	 Date: 7.MAY.2019 14:17:05

CDMA BC0 (1xEV-DO Rev. A)	CDMA BC1 (1xEV-DO Rev. A)
Lowest Channel	**Lowest Channel**
 Date: 8.MAY.2019 16:25:18	 Date: 9.MAY.2019 09:56:06
Middle Channel	**Middle Channel**
 Date: 8.MAY.2019 16:25:52	 Date: 9.MAY.2019 09:56:41
Highest Channel	**Highest Channel**
 Date: 8.MAY.2019 16:26:28	 Date: 9.MAY.2019 09:57:15

Conducted Band Edge

CDMA BC0 (1xRTT)

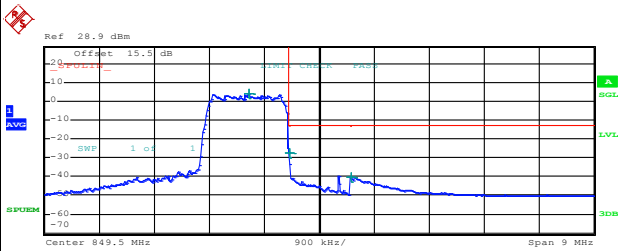
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.880000 M	-40.79	-27.79
823.000 M	824.000 M	14.00 k	823.995000 M	-29.64	-16.64
824.000 M	829.000 M	100.00 k	824.650000 M	4.09	-30.91

Date: 25.APR.2019 16:46:12

Highest Band Edge

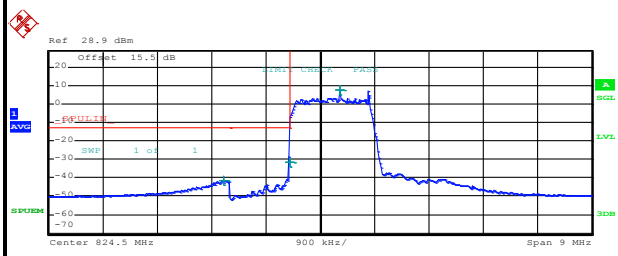


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
845.000 M	849.000 M	100.00 k	848.340000 M	4.09	-30.91
849.000 M	850.000 M	14.00 k	849.005000 M	-27.67	-14.67
850.000 M	854.000 M	100.00 k	850.020000 M	-40.40	-27.40

Date: 25.APR.2019 16:42:37

CDMA BC0 (1xEV-DO Rev. A)

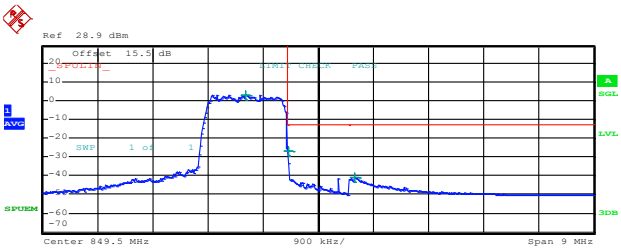
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.895000 M	-41.56	-28.56
823.000 M	824.000 M	14.00 k	823.995000 M	-31.82	-18.82
824.000 M	829.000 M	100.00 k	824.825000 M	7.63	-27.37

Date: 8.MAY.2019 16:41:06

Highest Band Edge

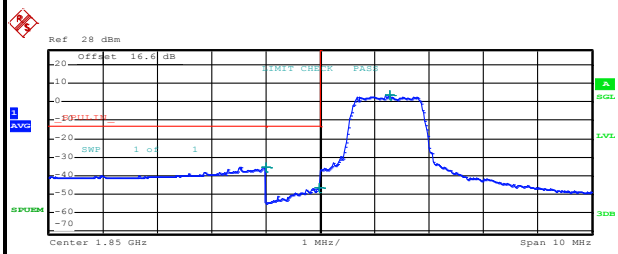


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
845.000 M	849.000 M	100.00 k	848.320000 M	2.95	-32.05
849.000 M	850.000 M	14.00 k	849.005000 M	-26.71	-13.71
850.000 M	854.000 M	100.00 k	850.100000 M	-41.03	-28.03

Date: 8.MAY.2019 16:52:15

CDMA BC1 (1xRTT)

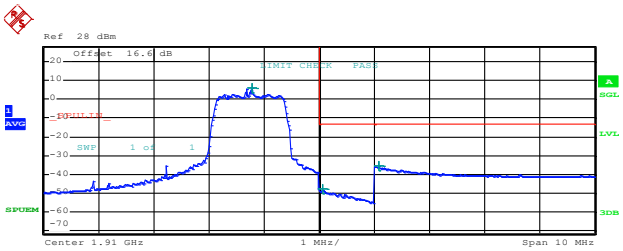
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.849000 G	-35.40	-22.40
1.849 G	1.850 G	14.00 k	1.849980 G	-46.73	-33.73
1.850 G	1.855 G	100.00 k	1.851275 G	3.49	-31.51

Date: 7.MAY.2019 14:29:44

Highest Band Edge

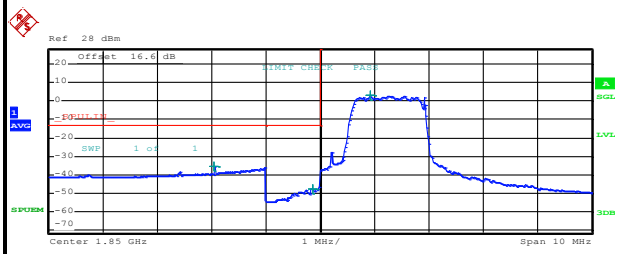


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.908775 G	6.09	-28.91
1.910 G	1.911 G	14.00 k	1.910050 G	-47.69	-34.69
1.911 G	1.915 G	1.00 M	1.911080 G	-35.68	-22.68

Date: 7.MAY.2019 14:37:53

CDMA BC1 (1xEV-DO Rev. A)

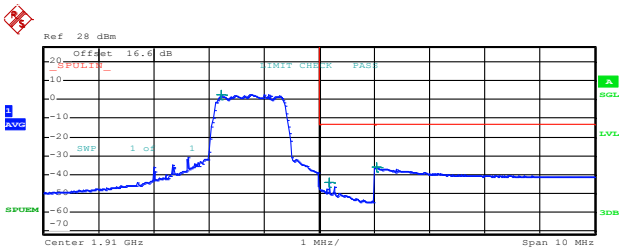
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848040 G	-35.43	-22.43
1.849 G	1.850 G	14.00 k	1.849855 G	-47.53	-34.53
1.850 G	1.855 G	100.00 k	1.850925 G	2.85	-32.15

Date: 9.MAY.2019 10:09:34

Highest Band Edge



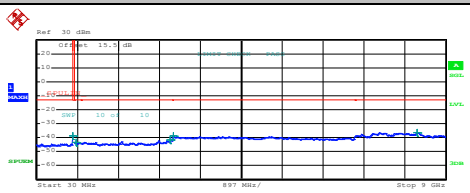
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.908225 G	2.78	-32.22
1.910 G	1.911 G	14.00 k	1.910175 G	-44.26	-31.26
1.911 G	1.915 G	1.00 M	1.911040 G	-36.17	-23.17

Date: 9.MAY.2019 10:19:08

Conducted Spurious Emission

CDMA BC0 (1xRTT)

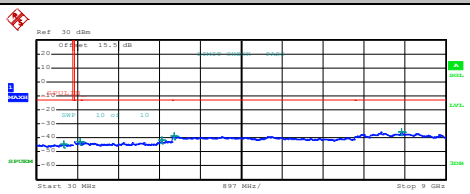
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.822500 M	-38.58	-25.58
855.000 M	1.000 G	1.00 M	883.673752 M	-43.26	-30.26
1.000 G	3.000 G	1.00 M	2.963000 G	-41.54	-28.54
3.000 G	7.000 G	1.00 M	3.031000 G	-38.91	-25.91
7.000 G	9.000 G	1.00 M	8.369000 G	-36.40	-23.40

Date: 25.APR.2019 10:38:35

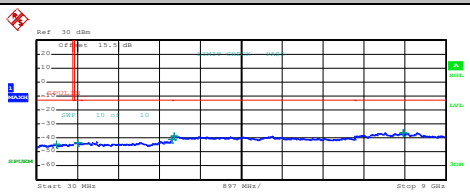
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	618.550000 M	-44.57	-31.57
855.000 M	1.000 G	1.00 M	987.131259 M	-42.77	-29.77
1.000 G	3.000 G	1.00 M	2.776500 G	-41.74	-28.74
3.000 G	7.000 G	1.00 M	3.041000 G	-38.99	-25.99
7.000 G	9.000 G	1.00 M	8.031500 G	-35.68	-22.68

Date: 25.APR.2019 10:40:25

Highest Channel

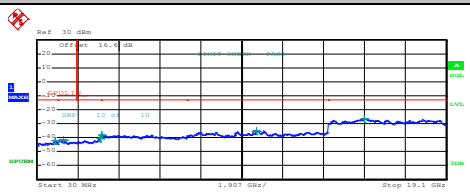


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	464.500000 M	-44.55	-31.55
855.000 M	1.000 G	1.00 M	922.388755 M	-43.21	-30.21
1.000 G	3.000 G	1.00 M	2.994500 G	-40.95	-27.95
3.000 G	7.000 G	1.00 M	3.051000 G	-38.89	-25.89
7.000 G	9.000 G	1.00 M	8.061500 G	-36.16	-23.16

Date: 25.APR.2019 10:41:59

CDMA BC1 (1xRTT)

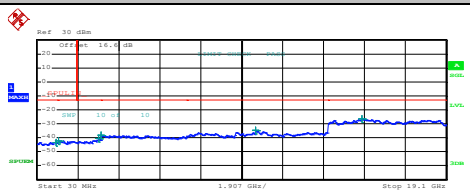
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	864.442500 M	-42.47	-29.47
1.000 G	1.845 G	1.00 M	1.236600 G	-41.53	-28.53
1.915 G	3.000 G	1.00 M	2.980199 G	-40.69	-27.69
3.000 G	7.000 G	1.00 M	3.037000 G	-38.24	-25.24
7.000 G	13.600 G	1.00 M	10.238125 G	-35.11	-22.11
13.600 G	19.100 G	1.00 M	15.300875 G	-26.57	-13.57

Date: 7.MAY.2019 14:18:19

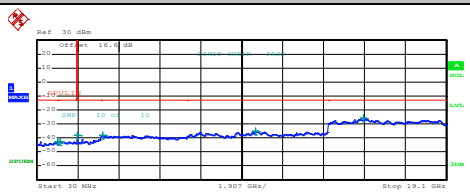
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	906.637500 M	-43.51	-30.51
1.000 G	1.845 G	1.00 M	1.031476 G	-42.12	-29.12
1.915 G	3.000 G	1.00 M	2.872241 G	-40.55	-27.55
3.000 G	7.000 G	1.00 M	3.008000 G	-38.20	-25.20
7.000 G	13.600 G	1.00 M	10.223275 G	-34.88	-21.88
13.600 G	19.100 G	1.00 M	15.176438 G	-26.69	-13.69

Date: 7.MAY.2019 14:19:13

Highest Channel

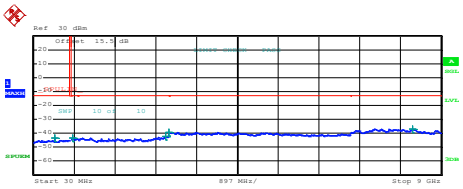


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	988.360000 M	-42.53	-29.53
1.000 G	1.845 G	1.00 M	1.082388 G	-42.54	-29.54
1.915 G	3.000 G	1.00 M	1.915271 G	-38.15	-25.15
3.000 G	7.000 G	1.00 M	3.096000 G	-38.31	-25.31
7.000 G	13.600 G	1.00 M	10.219975 G	-35.42	-22.42
13.600 G	19.100 G	1.00 M	15.244500 G	-25.77	-12.77

Date: 7.MAY.2019 14:20:08

CDMA BC0 (1xEV-DO Rev. A)

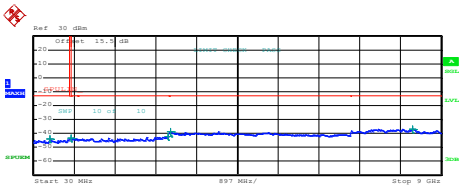
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	494.125000 M	-43.54	-30.54
855.000 M	1.000 G	1.00 M	884.108752 M	-43.35	-30.35
1.000 G	3.000 G	1.00 M	2.938000 G	-42.47	-29.47
3.000 G	7.000 G	1.00 M	3.000000 G	-39.18	-26.18
7.000 G	9.000 G	1.00 M	8.374000 G	-36.86	-23.86

Date: 8.MAY.2019 16:27:28

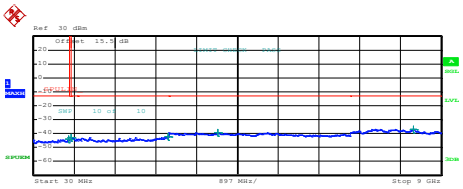
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	394.585000 M	-43.75	-30.75
855.000 M	1.000 G	1.00 M	862.395001 M	-43.40	-30.40
1.000 G	3.000 G	1.00 M	2.984500 G	-42.01	-29.01
3.000 G	7.000 G	1.00 M	3.051000 G	-38.85	-25.85
7.000 G	9.000 G	1.00 M	8.364500 G	-36.90	-23.90

Date: 8.MAY.2019 16:28:21

Highest Channel

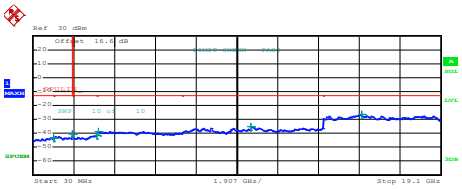


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	795.510000 M	-44.15	-31.15
855.000 M	1.000 G	1.00 M	855.036250 M	-42.91	-29.91
1.000 G	3.000 G	1.00 M	2.996500 G	-42.13	-29.13
3.000 G	7.000 G	1.00 M	4.086000 G	-39.29	-26.29
7.000 G	9.000 G	1.00 M	8.382000 G	-36.77	-23.77

Date: 8.MAY.2019 16:29:38

CDMA BC1 (1xEV-DO Rev. A)

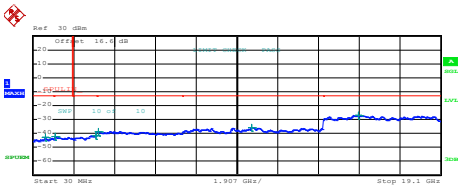
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	968.232500 M	-43.55	-30.55
1.000 G	1.845 G	1.00 M	1.842676 G	-40.73	-27.73
1.915 G	3.000 G	1.00 M	2.997288 G	-41.43	-28.43
3.000 G	7.000 G	1.00 M	3.092000 G	-38.50	-25.50
7.000 G	13.600 G	1.00 M	10.215025 G	-35.03	-22.03
13.600 G	19.100 G	1.00 M	15.417750 G	-26.64	-13.64

Date: 9.MAY.2019 09:58:12

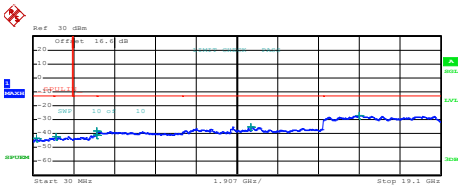
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	613.940000 M	-43.09	-30.09
1.000 G	1.845 G	1.00 M	1.062108 G	-42.26	-29.26
1.915 G	3.000 G	1.00 M	2.962296 G	-41.57	-28.57
3.000 G	7.000 G	1.00 M	3.087000 G	-38.57	-25.57
7.000 G	13.600 G	1.00 M	10.234825 G	-35.83	-22.83
13.600 G	19.100 G	1.00 M	15.239000 G	-26.91	-13.91

Date: 9.MAY.2019 09:59:09

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	170.650000 M	-43.12	-30.12
1.000 G	1.845 G	1.00 M	1.111329 G	-42.14	-29.14
1.915 G	3.000 G	1.00 M	2.989964 G	-41.32	-28.32
3.000 G	7.000 G	1.00 M	3.017000 G	-38.22	-25.22
7.000 G	13.600 G	1.00 M	10.212550 G	-34.94	-21.94
13.600 G	19.100 G	1.00 M	15.293313 G	-26.88	-13.88

Date: 9.MAY.2019 10:00:01

Frequency Stability

Test Conditions	Middle Channel	CDMA BC0 (1xRTT)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0048	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0036	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0084	
20	Maximum Voltage	0.0048	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0048	

Note:

1. Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block

Test Conditions	Middle Channel	CDMA BC1 (1xRTT)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0133	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0059	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage = 3.85V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block

Appendix B. Test Results of ERP/EIRP and Radiated Test

ERP/EIRP

<Ant. 0_A>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	32.80	1.9055	27.15	0.5188
Middle	GPRS class 8	32.73	1.8750	27.08	0.5105
Highest	(GT - LC = -3.5 dB)	32.75	1.8836	27.10	0.5129
Lowest	GSM850	26.00	0.3981	20.35	0.1084
Middle	EDGE class 8	26.00	0.3981	20.35	0.1084
Highest	(GT - LC = -3.5 dB)	26.08	0.4055	20.43	0.1104
Lowest	WCDMA Band V	24.94	0.3119	19.29	0.0849
Middle	RMC 12.2Kbps	24.99	0.3155	19.34	0.0859
Highest	(GT - LC = -3.5 dB)	24.53	0.2838	18.88	0.0773
Lowest	CDMA BC0	24.95	0.3126	19.30	0.0851
Middle	1xRTT	24.92	0.3105	19.27	0.0845
Highest	(GT - LC = -3.5 dB)	24.93	0.3112	19.28	0.0847
Lowest	CDMA BC0	24.96	0.3133	19.31	0.0853
Middle	1xEV-DO	24.99	0.3155	19.34	0.0859
Highest	(GT - LC = -3.5 dB)	24.97	0.3141	19.32	0.0855
Limit	ERP < 7W	Result		PASS	

<Ant. 0_B>

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	28.76	0.7516	28.26	0.6699
Middle	GPRS class 8	28.78	0.7551	28.28	0.6730
Highest	(GT - LC = -0.5 dB)	28.84	0.7656	28.34	0.6823
Lowest	GSM1900	24.58	0.2871	24.08	0.2559
Middle	EDGE class 8	24.58	0.2871	24.08	0.2559
Highest	(GT - LC = -0.5 dB)	24.62	0.2897	24.12	0.2582
Lowest	WCDMA Band II	24.71	0.2958	24.21	0.2636
Middle	RMC 12.2Kbps	24.75	0.2985	24.25	0.2661
Highest	(GT - LC = -0.5 dB)	24.74	0.2979	24.24	0.2655
Lowest	CDMA BC1	24.70	0.2951	24.20	0.2630
Middle	1xRTT	24.70	0.2951	24.20	0.2630
Highest	(GT - LC = -0.5 dB)	24.74	0.2979	24.24	0.2655
Lowest	CDMA BC1	24.71	0.2958	24.21	0.2636
Middle	1xEV-DO	24.73	0.2972	24.23	0.2649
Highest	(GT - LC = -0.5 dB)	24.75	0.2985	24.25	0.2661
Limit	EIRP < 2W	Result		PASS	

<Ant. 0_B>

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	24.73	0.2972	23.23	0.2104
Middle	RMC 12.2Kbps	24.71	0.2958	23.21	0.2094
Highest	(GT - LC = -1.5 dB)	24.70	0.2951	23.20	0.2089
Limit	EIRP < 1W	Result		PASS	

<Ant. 0_C>

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	28.76	0.7516	27.26	0.5321
Middle	GPRS class 8	28.78	0.7551	27.28	0.5346
Highest	(GT - LC = -1.5 dB)	28.84	0.7656	27.34	0.5420
Lowest	GSM1900	24.58	0.2871	23.08	0.2032
Middle	EDGE class 8	24.58	0.2871	23.08	0.2032
Highest	(GT - LC = -1.5 dB)	24.62	0.2897	23.12	0.2051
Lowest	WCDMA Band II	24.71	0.2958	23.21	0.2094
Middle	RMC 12.2Kbps	24.75	0.2985	23.25	0.2113
Highest	(GT - LC = -1.5 dB)	24.74	0.2979	23.24	0.2109
Limit	EIRP < 2W	Result		PASS	

<Ant. 0_C>

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	24.73	0.2972	21.23	0.1327
Middle	RMC 12.2Kbps	24.71	0.2958	21.21	0.1321
Highest	(GT - LC = -3.5 dB)	24.70	0.2951	21.20	0.1318
Limit	EIRP < 1W	Result		PASS	

<Ant. 1>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	32.80	1.9055	26.05	0.4027
Middle	GPRS class 8	32.73	1.8750	25.98	0.3963
Highest	(GT - LC = -4.6 dB)	32.75	1.8836	26.00	0.3981
Lowest	GSM850	26.00	0.3981	19.25	0.0841
Middle	EDGE class 8	26.00	0.3981	19.25	0.0841
Highest	(GT - LC = -4.6 dB)	26.08	0.4055	19.33	0.0857
Lowest	WCDMA Band V	24.94	0.3119	18.19	0.0659
Middle	RMC 12.2Kbps	24.99	0.3155	18.24	0.0667
Highest	(GT - LC = -4.6 dB)	24.53	0.2838	17.78	0.0600
Lowest	CDMA BC0	24.95	0.3126	18.20	0.0661
Middle	1xRTT	24.92	0.3105	18.17	0.0656
Highest	(GT - LC = -4.6 dB)	24.93	0.3112	18.18	0.0658
Lowest	CDMA BC0	24.96	0.3133	18.21	0.0662
Middle	1xEV-DO	24.99	0.3155	18.24	0.0667
Highest	(GT - LC = -4.6 dB)	24.97	0.3141	18.22	0.0664
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	28.76	0.7516	26.56	0.4529
Middle	GPRS class 8	28.78	0.7551	26.58	0.4550
Highest	(GT - LC = -2.2 dB)	28.84	0.7656	26.64	0.4613
Lowest	GSM1900	24.58	0.2871	22.38	0.1730
Middle	EDGE class 8	24.58	0.2871	22.38	0.1730
Highest	(GT - LC = -2.2 dB)	24.62	0.2897	22.42	0.1746
Lowest	WCDMA Band II	24.71	0.2958	22.51	0.1782
Middle	RMC 12.2Kbps	24.75	0.2985	22.55	0.1799
Highest	(GT - LC = -2.2 dB)	24.74	0.2979	22.54	0.1795
Lowest	CDMA BC1	24.70	0.2951	22.50	0.1778
Middle	1xRTT	24.70	0.2951	22.50	0.1778
Highest	(GT - LC = -2.2 dB)	24.74	0.2979	22.54	0.1795
Lowest	CDMA BC1	24.71	0.2958	22.51	0.1782
Middle	1xEV-DO	24.73	0.2972	22.53	0.1791
Highest	(GT - LC = -2.2 dB)	24.75	0.2985	22.55	0.1799
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	24.73	0.2972	20.03	0.1007
Middle	RMC 12.2Kbps	24.71	0.2958	20.01	0.1002
Highest	(GT - LC = -4.7 dB)	24.70	0.2951	20.00	0.1000
Limit	EIRP < 1W	Result		PASS	

Radiated Spurious Emission

<For Adapter Mode>

<Ant. 0_A>

GPRS850

GPRS 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-61.07	-13	-48.07	-73.56	-62.83	0.98	4.89	H
	2472	-33.37	-13	-20.37	-51.1	-35.25	1.28	5.32	H
	3296	-58.48	-13	-45.48	-78.1	-61.89	1.54	7.10	H
	1648	-58.59	-13	-45.59	-71.61	-60.35	0.98	4.89	V
	2472	-29.95	-13	-16.95	-48.03	-31.83	1.28	5.32	V
	3296	-57.73	-13	-44.73	-77.82	-61.14	1.54	7.10	V
Middle	1672	-62.18	-13	-49.18	-74.96	-63.86	0.99	4.82	H
	2512	-37.72	-13	-24.72	-55.41	-39.69	1.29	5.41	H
	3344	-58.71	-13	-45.71	-78.7	-62.32	1.56	7.31	H
	1672	-62.43	-13	-49.43	-75.66	-64.11	0.99	4.82	V
	2512	-34.57	-13	-21.57	-52.72	-36.54	1.29	5.41	V
	3344	-58.26	-13	-45.26	-78.42	-61.87	1.56	7.31	V
Highest	1696	-61.51	-13	-48.51	-74.4	-63.11	1.00	4.75	H
	2544	-40.44	-13	-27.44	-58.16	-42.42	1.30	5.44	H
	3392	-58.28	-13	-45.28	-78.53	-62.08	1.57	7.52	H
	1696	-61.01	-13	-48.01	-74.35	-62.61	1.00	4.75	V
	2544	-37.87	-13	-24.87	-56.13	-39.85	1.30	5.44	V
	3392	-58.09	-13	-45.09	-78.42	-61.89	1.57	7.52	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EDGE 850

EDGE 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-63.36	-13	-50.36	-75.82	-65.12	0.98	4.89	H
	2472	-55.98	-13	-42.98	-73.54	-57.86	1.28	5.32	H
	3296	-58.42	-13	-45.42	-78.03	-61.83	1.54	7.10	H
	1648	-63.11	-13	-50.11	-76.04	-64.87	0.98	4.89	V
	2472	-52.24	-13	-39.24	-70.31	-54.12	1.28	5.32	V
	3296	-58.18	-13	-45.18	-78.08	-61.59	1.54	7.10	V
Middle	1672	-63.47	-13	-50.47	-76.31	-65.15	0.99	4.82	H
	2512	-56.97	-13	-43.97	-74.66	-58.94	1.29	5.41	H
	3344	-58.39	-13	-45.39	-78.36	-62	1.56	7.31	H
	1672	-62.99	-13	-49.99	-75.99	-64.67	0.99	4.82	V
	2512	-56.64	-13	-43.64	-74.79	-58.61	1.29	5.41	V
	3344	-58.41	-13	-45.41	-78.62	-62.02	1.56	7.31	V
Highest	1696	-63.46	-13	-50.46	-76.36	-65.06	1.00	4.75	H
	2544	-58.82	-13	-45.82	-76.54	-60.8	1.30	5.44	H
	3392	-58.16	-13	-45.16	-78.42	-61.96	1.57	7.52	H
	1696	-62.82	-13	-49.82	-76.16	-64.42	1.00	4.75	V
	2544	-56.95	-13	-43.95	-75.17	-58.93	1.30	5.44	V
	3392	-58.22	-13	-45.22	-78.49	-62.02	1.57	7.52	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA 850

WCDMA 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1656	-63.43	-13	-50.43	-76	-65.16	0.98	4.86	H
	2480	-60.22	-13	-47.22	-77.76	-62.13	1.28	5.34	H
	3304	-58.12	-13	-45.12	-77.94	-61.56	1.54	7.14	H
	1656	-62.79	-13	-49.79	-77.83	-64.52	0.98	4.86	V
	2480	-59.15	-13	-46.15	-77.23	-61.06	1.28	5.34	V
	3304	-58.14	-13	-45.14	-78.2	-61.58	1.54	7.14	V
Middle	1672	-63.44	-13	-50.44	-76.2	-65.12	0.99	4.82	H
	2515	-58.78	-13	-45.78	-76.47	-60.75	1.30	5.41	H
	3344	-58.44	-13	-45.44	-78.46	-62.05	1.56	7.31	H
	1672	-62.51	-13	-49.51	-75.72	-64.19	0.99	4.82	V
	2515	-58.99	-13	-45.99	-77.14	-60.96	1.30	5.41	V
	3344	-58.27	-13	-45.27	-78.55	-61.88	1.56	7.31	V
Highest	1696	-63.22	-13	-50.22	-76.1	-64.82	1.00	4.75	H
	2536	-59.47	-13	-46.47	-77.2	-61.45	1.30	5.43	H
	3384	-58.09	-13	-45.09	-78.22	-61.86	1.57	7.49	H
	1696	-62.29	-13	-49.29	-75.61	-63.89	1.00	4.75	V
	2536	-58.83	-13	-45.83	-77.02	-60.81	1.30	5.43	V
	3384	-57.89	-13	-44.89	-78.2	-61.66	1.57	7.49	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

CDMA2000 (BC0 1xRTT)

CDMA2000 BC0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-62.49	-13	-49.49	-75.05	-64.25	0.98	4.89	H
	2472	-58.74	-13	-45.74	-76.44	-60.62	1.28	5.32	H
	3296	-57.74	-13	-44.74	-77.56	-61.15	1.54	7.10	H
	1648	-61.91	-13	-48.91	-74.89	-63.67	0.98	4.89	V
	2472	-57.24	-13	-44.24	-75.32	-59.12	1.28	5.32	V
	3296	-57.59	-13	-44.59	-77.56	-61	1.54	7.10	V
Middle	1672	-62.84	-13	-49.84	-75.64	-64.52	0.99	4.82	H
	2512	-59.22	-13	-46.22	-76.91	-61.19	1.29	5.41	H
	3344	-57.95	-13	-44.95	-77.99	-61.56	1.56	7.31	H
	1672	-62.34	-13	-49.34	-75.57	-64.02	0.99	4.82	V
	2512	-57.63	-13	-44.63	-75.78	-59.6	1.29	5.41	V
	3344	-57.64	-13	-44.64	-77.82	-61.25	1.56	7.31	V
Highest	1696	-62.85	-13	-49.85	-75.89	-64.45	1.00	4.75	H
	2544	-59.06	-13	-46.06	-76.8	-61.04	1.30	5.44	H
	3392	-57.73	-13	-44.73	-78.01	-61.53	1.57	7.52	H
	1696	-62.06	-13	-49.06	-75.4	-63.66	1.00	4.75	V
	2544	-58.55	-13	-45.55	-76.77	-60.53	1.30	5.44	V
	3392	-57.48	-13	-44.48	-77.82	-61.28	1.57	7.52	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

<Ant. 0_B>

WCDMA 1700

WCDMA 1700									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3424	-57.75	-13	-44.75	-77.82	-63.84	1.58	7.67	H
	5136	-53.66	-13	-40.66	-78	-60.94	2.42	9.70	H
	6852	-50.79	-13	-37.79	-77.75	-58.77	2.64	10.62	H
	3424	-57.03	-13	-44.03	-77.83	-63.12	1.58	7.67	V
	5136	-53.58	-13	-40.58	-77.85	-60.86	2.42	9.70	V
	6852	-50.69	-13	-37.69	-77.56	-58.67	2.64	10.62	V
Middle	3465	-56.50	-13	-43.50	-77.63	-62.75	1.59	7.85	H
	5197	-52.70	-13	-39.70	-77.21	-59.95	2.45	9.70	H
	6930	-50.42	-13	-37.42	-77.59	-58.52	2.61	10.72	H
	3465	-57.04	-13	-44.04	-78.1	-63.29	1.59	7.85	V
	5197	-53.30	-13	-40.30	-77.67	-60.55	2.45	9.70	V
	6930	-50.86	-13	-37.86	-78.03	-58.96	2.61	10.72	V
Highest	3505	-56.02	-13	-43.02	-77.31	-62.42	1.61	8.01	H
	5257	-52.62	-13	-39.62	-77.26	-59.83	2.49	9.70	H
	7010	-49.90	-13	-36.90	-77.14	-58.13	2.59	10.82	H
	3505	-56.61	-13	-43.61	-77.75	-63.01	1.61	8.01	V
	5257	-52.37	-13	-39.37	-76.89	-59.58	2.49	9.70	V
	7010	-49.92	-13	-36.92	-77.22	-58.15	2.59	10.82	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GPRS 1900

GPRS 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-56.54	-13	-43.54	-77.64	-63.11	1.67	8.24	H
	5550	-52.56	-13	-39.56	-78	-59.63	2.65	9.72	H
	7398	-50.74	-13	-37.74	-78.11	-59.87	2.46	11.60	H
	3702	-55.87	-13	-42.87	-76.97	-62.44	1.67	8.24	V
	5550	-52.59	-13	-39.59	-78.04	-59.66	2.65	9.72	V
	7398	-50.42	-13	-37.42	-77.98	-59.55	2.46	11.60	V
Middle	3762	-57.19	-13	-44.19	-78.35	-63.82	1.69	8.31	H
	5640	-52.11	-13	-39.11	-77.7	-59.16	2.71	9.76	H
	7518	-50.58	-13	-37.58	-77.97	-59.97	2.42	11.81	H
	3762	-56.25	-13	-43.25	-77.4	-62.88	1.69	8.31	V
	5640	-51.98	-13	-38.98	-77.57	-59.03	2.71	9.76	V
	7518	-50.05	-13	-37.05	-77.74	-59.44	2.42	11.81	V
Highest	3822	-57.45	-13	-44.45	-78.48	-64.13	1.71	8.39	H
	5730	-51.69	-13	-38.69	-77.53	-58.72	2.76	9.79	H
	7638	-48.91	-13	-35.91	-76.67	-58.41	2.38	11.88	H
	3822	-57.32	-13	-44.32	-78.36	-64	1.71	8.39	V
	5730	-51.26	-13	-38.26	-77.09	-58.29	2.76	9.79	V
	7638	-48.39	-13	-35.39	-76.42	-57.89	2.38	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EDGE1900

EDGE 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-58.34	-13	-45.34	-79.45	-64.91	1.67	8.24	H
	5550	-52.86	-13	-39.86	-78.27	-59.93	2.65	9.72	H
	7400	-53.13	-13	-40.13	-80.51	-62.27	2.46	11.60	H
	3700	-58.20	-13	-45.20	-79.3	-64.77	1.67	8.24	V
	5550	-52.22	-13	-39.22	-77.6	-59.29	2.65	9.72	V
	7400	-52.48	-13	-39.48	-80.05	-61.62	2.46	11.60	V
Middle	3760	-58.81	-13	-45.81	-79.87	-65.44	1.69	8.31	H
	5640	-51.23	-13	-38.23	-76.84	-58.28	2.71	9.76	H
	7520	-52.05	-13	-39.05	-79.56	-61.44	2.42	11.81	H
	3760	-58.46	-13	-45.46	-79.54	-65.09	1.69	8.31	V
	5640	-51.42	-13	-38.42	-77.01	-58.47	2.71	9.76	V
	7520	-52.23	-13	-39.23	-79.99	-61.62	2.42	11.81	V
Highest	3819	-58.84	-13	-45.84	-79.83	-65.52	1.70	8.38	H
	5729	-52.12	-13	-39.12	-77.93	-59.15	2.76	9.79	H
	7639	-49.96	-13	-36.96	-77.77	-59.46	2.38	11.88	H
	3819	-58.97	-13	-45.97	-80.03	-65.65	1.70	8.38	V
	5729	-50.51	-13	-37.51	-76.31	-57.54	2.76	9.79	V
	7639	-50.06	-13	-37.06	-78.14	-59.56	2.38	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA 1900

WCDMA 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-56.67	-13	-43.67	-77.52	-63.24	1.67	8.24	H
	5557	-52.77	-13	-39.77	-77.92	-59.83	2.66	9.72	H
	7410	-51.23	-13	-38.23	-78.35	-60.39	2.46	11.62	H
	3702	-56.59	-13	-43.59	-77.42	-63.16	1.67	8.24	V
	5557	-52.72	-13	-39.72	-77.85	-59.78	2.66	9.72	V
	7410	-50.88	-13	-37.88	-78.2	-60.04	2.46	11.62	V
Middle	3762	-56.96	-13	-43.96	-77.77	-63.59	1.69	8.31	H
	5640	-52.57	-13	-39.57	-77.94	-59.62	2.71	9.76	H
	7520	-50.26	-13	-37.26	-77.47	-59.65	2.42	11.81	H
	3762	-57.24	-13	-44.24	-78.03	-63.87	1.69	8.31	V
	5640	-52.77	-13	-39.77	-78.07	-59.82	2.71	9.76	V
	7520	-49.56	-13	-36.56	-77.1	-58.95	2.42	11.81	V
Highest	3816	-57.66	-13	-44.66	-78.39	-64.34	1.70	8.38	H
	5724	-51.83	-13	-38.83	-77.45	-58.87	2.75	9.79	H
	7635	-49.04	-13	-36.04	-76.55	-58.54	2.39	11.88	H
	3816	-57.24	-13	-44.24	-78.06	-63.92	1.70	8.38	V
	5724	-51.88	-13	-38.88	-77.44	-58.92	2.75	9.79	V
	7635	-48.96	-13	-35.96	-76.75	-58.46	2.39	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

CDMA2000 (BC1 1xRTT)

CDMA2000 BC1									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-56.71	-13	-43.71	-77.55	-63.28	1.67	8.24	H
	5556	-52.94	-13	-39.94	-78.1	-60.01	2.66	9.72	H
	7405	-50.88	-13	-37.88	-77.97	-60.03	2.46	11.61	H
	3702	-56.67	-13	-43.67	-77.5	-63.24	1.67	8.24	V
	5556	-52.76	-13	-39.76	-77.88	-59.83	2.66	9.72	V
	7405	-50.83	-13	-37.83	-78.18	-59.98	2.46	11.61	V
Middle	3762	-57.34	-13	-44.34	-78.17	-63.97	1.69	8.31	H
	5640	-52.67	-13	-39.67	-78.01	-59.72	2.71	9.76	H
	7518	-50.33	-13	-37.33	-77.53	-59.72	2.42	11.81	H
	3762	-57.34	-13	-44.34	-78.18	-63.97	1.69	8.31	V
	5640	-52.44	-13	-39.44	-77.77	-59.49	2.71	9.76	V
	7518	-50.13	-13	-37.13	-77.6	-59.52	2.42	11.81	V
Highest	3816	-57.36	-13	-44.36	-78.13	-64.04	1.70	8.38	H
	5724	-51.87	-13	-38.87	-77.38	-58.91	2.75	9.79	H
	7632	-49.26	-13	-36.26	-76.71	-58.75	2.39	11.88	H
	3816	-57.54	-13	-44.54	-78.35	-64.22	1.70	8.38	V
	5724	-51.67	-13	-38.67	-77.17	-58.71	2.75	9.79	V
	7632	-48.86	-13	-35.86	-76.63	-58.35	2.39	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

<Ant. 0_C>

WCDMA 1700

WCDMA 1700									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3426	-51.12	-13	-38.12	-71.81	-57.21	1.58	7.67	H
	5136	-54.26	-13	-41.26	-78.33	-61.54	2.42	9.70	H
	6852	-51.37	-13	-38.37	-78.18	-59.35	2.64	10.62	H
	3426	-48.89	-13	-35.89	-69.61	-54.98	1.58	7.67	V
	5136	-54.28	-13	-41.28	-78.11	-61.56	2.42	9.70	V
	6852	-51.49	-13	-38.49	-78.25	-59.47	2.64	10.62	V
Middle	3468	-57.38	-13	-44.38	-78.26	-63.64	1.59	7.86	H
	5196	-53.44	-13	-40.44	-77.68	-60.69	2.45	9.70	H
	6930	-51.18	-13	-38.18	-78.04	-59.28	2.61	10.72	H
	3468	-57.39	-13	-44.39	-78.18	-63.65	1.59	7.86	V
	5196	-53.97	-13	-40.97	-78.07	-61.22	2.45	9.70	V
	6930	-51.16	-13	-38.16	-78.03	-59.26	2.61	10.72	V
Highest	3504	-57.18	-13	-44.18	-78.18	-63.58	1.61	8.00	H
	5256	-53.56	-13	-40.56	-77.92	-60.78	2.48	9.70	H
	7008	-50.14	-13	-37.14	-77.1	-58.37	2.59	10.82	H
	3504	-57.37	-13	-44.37	-78.25	-63.77	1.61	8.00	V
	5256	-53.56	-13	-40.56	-77.77	-60.78	2.48	9.70	V
	7008	-50.51	-13	-37.51	-77.54	-58.74	2.59	10.82	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GPRS 1900

GPRS 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-56.86	-13	-43.86	-77.97	-63.43	1.67	8.24	H
	5550	-53.06	-13	-40.06	-78.47	-60.13	2.65	9.72	H
	7400	-50.95	-13	-37.95	-78.33	-60.09	2.46	11.60	H
	3700	-56.94	-13	-43.94	-78.04	-63.51	1.67	8.24	V
	5550	-53.33	-13	-40.33	-78.71	-60.40	2.65	9.72	V
	7400	-50.83	-13	-37.83	-78.42	-59.97	2.46	11.60	V
Middle	3760	-57.71	-13	-44.71	-78.79	-64.34	1.69	8.31	H
	5640	-52.53	-13	-39.53	-78.14	-59.58	2.71	9.76	H
	7520	-50.84	-13	-37.84	-78.35	-60.23	2.42	11.81	H
	3760	-57.22	-13	-44.22	-78.31	-63.85	1.69	8.31	V
	5640	-53.14	-13	-40.14	-78.73	-60.19	2.71	9.76	V
	7520	-50.46	-13	-37.46	-78.16	-59.85	2.42	11.81	V
Highest	3817	-57.93	-13	-44.93	-78.93	-64.61	1.70	8.38	H
	5725	-51.65	-13	-38.65	-77.46	-58.69	2.75	9.79	H
	7632	-49.43	-13	-36.43	-77.19	-58.92	2.39	11.88	H
	3817	-57.91	-13	-44.91	-78.98	-64.59	1.70	8.38	V
	5725	-52.00	-13	-39.00	-77.8	-59.04	2.75	9.79	V
	7632	-49.31	-13	-36.31	-77.33	-58.80	2.39	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EDGE1900

EDGE 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-56.87	-13	-43.87	-77.98	-63.44	1.67	8.24	H
	5550	-53.20	-13	-40.20	-78.61	-60.27	2.65	9.72	H
	7400	-51.33	-13	-38.33	-78.71	-60.47	2.46	11.60	H
	3700	-56.93	-13	-43.93	-78.03	-63.50	1.67	8.24	V
	5550	-53.51	-13	-40.51	-78.89	-60.58	2.65	9.72	V
	7400	-51.10	-13	-38.10	-78.69	-60.24	2.46	11.60	V
Middle	3760	-57.49	-13	-44.49	-78.55	-64.12	1.69	8.31	H
	5640	-53.01	-13	-40.01	-78.62	-60.06	2.71	9.76	H
	7520	-50.54	-13	-37.54	-78.05	-59.93	2.42	11.81	H
	3760	-57.50	-13	-44.50	-78.58	-64.13	1.69	8.31	V
	5640	-52.83	-13	-39.83	-78.42	-59.88	2.71	9.76	V
	7520	-50.49	-13	-37.49	-78.25	-59.88	2.42	11.81	V
Highest	3815	-57.90	-13	-44.90	-78.9	-64.57	1.70	8.38	H
	5722	-52.16	-13	-39.16	-77.97	-59.20	2.75	9.79	H
	7630	-49.73	-13	-36.73	-77.49	-59.22	2.39	11.88	H
	3815	-57.89	-13	-44.89	-78.96	-64.56	1.70	8.38	V
	5722	-52.09	-13	-39.09	-77.89	-59.13	2.75	9.79	V
	7630	-49.35	-13	-36.35	-77.37	-58.84	2.39	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA 1900

WCDMA 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3704	-56.53	-13	-43.53	-77.64	-63.11	1.67	8.24	H
	5557	-52.96	-13	-39.96	-78.37	-60.02	2.66	9.72	H
	7409	-51.33	-13	-38.33	-78.71	-60.49	2.46	11.62	H
	3704	-57.16	-13	-44.16	-78.26	-63.74	1.67	8.24	V
	5557	-53.34	-13	-40.34	-78.72	-60.40	2.66	9.72	V
	7409	-51.00	-13	-38.00	-78.59	-60.16	2.46	11.62	V
Middle	3760	-57.55	-13	-44.55	-78.61	-64.18	1.69	8.31	H
	5640	-52.95	-13	-39.95	-78.56	-60.00	2.71	9.76	H
	7520	-50.87	-13	-37.87	-78.38	-60.26	2.42	11.81	H
	3760	-57.81	-13	-44.81	-78.89	-64.44	1.69	8.31	V
	5640	-52.99	-13	-39.99	-78.58	-60.04	2.71	9.76	V
	7520	-50.59	-13	-37.59	-78.35	-59.98	2.42	11.81	V
Highest	3815	-57.96	-13	-44.96	-78.96	-64.63	1.70	8.38	H
	5722	-52.30	-13	-39.30	-78.11	-59.34	2.75	9.79	H
	7630	-49.07	-13	-36.07	-76.83	-58.56	2.39	11.88	H
	3815	-57.91	-13	-44.91	-78.98	-64.58	1.70	8.38	V
	5722	-51.95	-13	-38.95	-77.75	-58.99	2.75	9.79	V
	7630	-49.02	-13	-36.02	-77.04	-58.51	2.39	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

<For Adapter Mode>

<Ant. 1>

GPRS850

GPRS 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-58.66	-13	-45.66	-71.1	-60.42	0.98	4.89	H
	2472	-51.48	-13	-38.48	-69.13	-53.36	1.28	5.32	H
	3296	-58.18	-13	-45.18	-77.84	-61.59	1.54	7.10	H
	1648	-59.81	-13	-46.81	-72.93	-61.57	0.98	4.89	V
	2472	-56.24	-13	-43.24	-74.3	-58.12	1.28	5.32	V
	3296	-57.62	-13	-44.62	-77.7	-61.03	1.54	7.10	V
Middle	1672	-57.53	-13	-44.53	-70.34	-59.21	0.99	4.82	H
	2512	-50.08	-13	-37.08	-67.8	-52.05	1.29	5.41	H
	3344	-57.93	-13	-44.93	-77.95	-61.54	1.56	7.31	H
	1672	-60.85	-13	-47.85	-74.13	-62.53	0.99	4.82	V
	2512	-55.94	-13	-42.94	-74.11	-57.91	1.29	5.41	V
	3344	-57.83	-13	-44.83	-78.06	-61.44	1.56	7.31	V
Highest	1696	-54.07	-13	-41.07	-66.97	-55.67	1.00	4.75	H
	2544	-50.56	-13	-37.56	-68.28	-52.54	1.30	5.44	H
	3392	-57.07	-13	-44.07	-77.32	-60.87	1.57	7.52	H
	1696	-56.61	-13	-43.61	-69.95	-58.21	1.00	4.75	V
	2544	-56.86	-13	-43.86	-75.18	-58.84	1.30	5.44	V
	3392	-57.68	-13	-44.68	-78.02	-61.48	1.57	7.52	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EDGE 850

EDGE 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-62.87	-13	-49.87	-75.34	-64.63	0.98	4.89	H
	2474	-57.51	-13	-44.51	-75.14	-59.4	1.28	5.32	H
	3296	-57.75	-13	-44.75	-77.48	-61.16	1.54	7.10	H
	1648	-62.17	-13	-49.17	-75.11	-63.93	0.98	4.89	V
	2474	-58.41	-13	-45.41	-76.48	-60.3	1.28	5.32	V
	3296	-57.43	-13	-44.43	-77.49	-60.84	1.54	7.10	V
Middle	1672	-62.85	-13	-49.85	-75.74	-64.53	0.99	4.82	H
	2512	-55.08	-13	-42.08	-72.8	-57.05	1.29	5.41	H
	3344	-57.64	-13	-44.64	-77.67	-61.25	1.56	7.31	H
	1672	-62.37	-13	-49.37	-75.61	-64.05	0.99	4.82	V
	2512	-56.68	-13	-43.68	-74.88	-58.65	1.29	5.41	V
	3344	-57.55	-13	-44.55	-77.73	-61.16	1.56	7.31	V
Highest	1697	-62.75	-13	-49.75	-75.65	-64.35	1.00	4.75	H
	2546	-59.10	-13	-46.10	-76.84	-61.08	1.31	5.44	H
	3395	-57.54	-13	-44.54	-77.79	-61.36	1.57	7.54	H
	1697	-62.38	-13	-49.38	-75.72	-63.98	1.00	4.75	V
	2546	-58.59	-13	-45.59	-76.83	-60.57	1.31	5.44	V
	3395	-57.53	-13	-44.53	-77.87	-61.35	1.57	7.54	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA 850

WCDMA 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1656	-63.36	-13	-50.36	-76.05	-65.09	0.98	4.86	H
	2480	-59.96	-13	-46.96	-77.5	-61.87	1.28	5.34	H
	3304	-58.24	-13	-45.24	-78.02	-61.68	1.54	7.14	H
	1656	-62.54	-13	-49.54	-75.62	-64.27	0.98	4.86	V
	2480	-58.91	-13	-45.91	-76.99	-60.82	1.28	5.34	V
	3304	-58.13	-13	-45.13	-78.15	-61.57	1.54	7.14	V
Middle	1672	-63.44	-13	-50.44	-76.22	-65.12	0.99	4.82	H
	2512	-59.76	-13	-46.76	-77.45	-61.73	1.29	5.41	H
	3344	-58.52	-13	-45.52	-78.46	-62.13	1.56	7.31	H
	1672	-62.78	-13	-49.78	-75.97	-64.46	0.99	4.82	V
	2512	-59.34	-13	-46.34	-77.49	-61.31	1.29	5.41	V
	3344	-58.11	-13	-45.11	-78.27	-61.72	1.56	7.31	V
Highest	1696	-63.01	-13	-50.01	-75.9	-64.61	1.00	4.75	H
	2536	-59.89	-13	-46.89	-77.59	-61.87	1.30	5.43	H
	3384	-58.11	-13	-45.11	-78.18	-61.88	1.57	7.49	H
	1696	-62.26	-13	-49.26	-75.6	-63.86	1.00	4.75	V
	2536	-58.81	-13	-45.81	-77	-60.79	1.30	5.43	V
	3384	-57.81	-13	-44.81	-78.27	-61.58	1.57	7.49	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

CDMA2000 (BC0 1xRTT)

CDMA2000 BC0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-63.13	-13	-50.13	-75.52	-64.89	0.98	4.89	H
	2472	-58.79	-13	-45.79	-76.46	-60.67	1.28	5.32	H
	3296	-57.61	-13	-44.61	-77.34	-61.02	1.54	7.10	H
	1648	-62.48	-13	-49.48	-75.38	-64.24	0.98	4.89	V
	2472	-58.55	-13	-45.55	-76.62	-60.43	1.28	5.32	V
	3296	-57.55	-13	-44.55	-77.55	-60.96	1.54	7.10	V
Middle	1672	-62.93	-13	-49.93	-75.71	-64.61	0.99	4.82	H
	2512	-57.88	-13	-44.88	-75.57	-59.85	1.29	5.41	H
	3344	-57.87	-13	-44.87	-77.9	-61.48	1.56	7.31	H
	1672	-62.32	-13	-49.32	-75.53	-64	0.99	4.82	V
	2512	-58.51	-13	-45.51	-76.68	-60.48	1.29	5.41	V
	3344	-57.71	-13	-44.71	-77.82	-61.32	1.56	7.31	V
Highest	1696	-62.89	-13	-49.89	-75.88	-64.49	1.00	4.75	H
	2544	-58.95	-13	-45.95	-76.67	-60.93	1.30	5.44	H
	3392	-57.62	-13	-44.62	-77.94	-61.42	1.57	7.52	H
	1696	-62.22	-13	-49.22	-75.53	-63.82	1.00	4.75	V
	2544	-57.58	-13	-44.58	-75.82	-59.56	1.30	5.44	V
	3392	-57.63	-13	-44.63	-77.94	-61.43	1.57	7.52	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA 1700

WCDMA 1700									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3426	-58.28	-13	-45.28	-78.97	-64.37	1.58	7.67	H
	5136	-53.56	-13	-40.56	-77.61	-60.84	2.42	9.70	H
	6852	-51.77	-13	-38.77	-78.58	-59.75	2.64	10.62	H
	3426	-57.97	-13	-44.97	-78.72	-64.06	1.58	7.67	V
	5136	-54.16	-13	-41.16	-78.07	-61.44	2.42	9.70	V
	6852	-51.49	-13	-38.49	-78.24	-59.47	2.64	10.62	V
Middle	3468	-58.31	-13	-45.31	-79.26	-64.57	1.59	7.86	H
	5196	-54.33	-13	-41.33	-78.6	-61.58	2.45	9.70	H
	6930	-51.49	-13	-38.49	-78.38	-59.59	2.61	10.72	H
	3468	-57.86	-13	-44.86	-78.66	-64.12	1.59	7.86	V
	5196	-53.72	-13	-40.72	-77.81	-60.97	2.45	9.70	V
	6930	-51.12	-13	-38.12	-78.02	-59.22	2.61	10.72	V
Highest	3504	-57.56	-13	-44.56	-78.57	-63.96	1.61	8.00	H
	5256	-53.47	-13	-40.47	-77.85	-60.69	2.48	9.70	H
	7008	-50.56	-13	-37.56	-77.49	-58.79	2.59	10.82	H
	3504	-57.59	-13	-44.59	-78.48	-63.99	1.61	8.00	V
	5256	-52.96	-13	-39.96	-77.2	-60.18	2.48	9.70	V
	7008	-50.68	-13	-37.68	-77.7	-58.91	2.59	10.82	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

GPRS 1900

GPRS 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-56.86	-13	-43.86	-77.95	-63.43	1.67	8.24	H
	5550	-51.95	-13	-38.95	-77.3	-59.02	2.65	9.72	H
	7398	-50.51	-13	-37.51	-77.95	-59.64	2.46	11.60	H
	3702	-56.54	-13	-43.54	-77.67	-63.11	1.67	8.24	V
	5550	-52.69	-13	-39.69	-78.14	-59.76	2.65	9.72	V
	7398	-50.24	-13	-37.24	-78.01	-59.37	2.46	11.60	V
Middle	3762	-57.18	-13	-44.18	-78.21	-63.81	1.69	8.31	H
	5640	-52.32	-13	-39.32	-77.96	-59.37	2.71	9.76	H
	7518	-50.63	-13	-37.63	-78.09	-60.02	2.42	11.81	H
	3762	-56.74	-13	-43.74	-77.84	-63.37	1.69	8.31	V
	5640	-52.19	-13	-39.19	-77.76	-59.24	2.71	9.76	V
	7518	-50.22	-13	-37.22	-77.95	-59.61	2.42	11.81	V
Highest	3822	-57.32	-13	-44.32	-78.28	-64	1.71	8.39	H
	5730	-51.83	-13	-38.83	-77.67	-58.86	2.76	9.79	H
	7638	-49.01	-13	-36.01	-76.77	-58.51	2.38	11.88	H
	3822	-57.43	-13	-44.43	-78.54	-64.11	1.71	8.39	V
	5730	-51.94	-13	-38.94	-77.62	-58.97	2.76	9.79	V
	7638	-48.81	-13	-35.81	-76.83	-58.31	2.38	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EDGE1900

EDGE 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-58.41	-13	-45.41	-79.52	-64.98	1.67	8.24	H
	5550	-53.19	-13	-40.19	-78.6	-60.26	2.65	9.72	H
	7400	-53.01	-13	-40.01	-80.39	-62.15	2.46	11.60	H
	3700	-58.47	-13	-45.47	-79.57	-65.04	1.67	8.24	V
	5550	-52.46	-13	-39.46	-77.84	-59.53	2.65	9.72	V
	7400	-52.67	-13	-39.67	-80.26	-61.81	2.46	11.60	V
Middle	3760	-58.38	-13	-45.38	-79.44	-65.01	1.69	8.31	H
	5640	-52.23	-13	-39.23	-77.84	-59.28	2.71	9.76	H
	7520	-52.34	-13	-39.34	-79.85	-61.73	2.42	11.81	H
	3760	-58.73	-13	-45.73	-79.81	-65.36	1.69	8.31	V
	5640	-50.74	-13	-37.74	-76.33	-57.79	2.71	9.76	V
	7520	-52.08	-13	-39.08	-79.84	-61.47	2.42	11.81	V
Highest	3819	-58.97	-13	-45.97	-79.96	-65.65	1.70	8.38	H
	5729	-52.24	-13	-39.24	-78.05	-59.27	2.76	9.79	H
	7639	-49.95	-13	-36.95	-77.76	-59.45	2.38	11.88	H
	3819	-58.58	-13	-45.58	-79.64	-65.26	1.70	8.38	V
	5729	-50.62	-13	-37.62	-76.42	-57.65	2.76	9.79	V
	7639	-49.74	-13	-36.74	-77.82	-59.24	2.38	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA 1900

WCDMA 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-56.88	-13	-43.88	-77.74	-63.45	1.67	8.24	H
	5557	-52.82	-13	-39.82	-77.97	-59.88	2.66	9.72	H
	7410	-51.03	-13	-38.03	-78.16	-60.19	2.46	11.62	H
	3702	-56.96	-13	-43.96	-77.79	-63.53	1.67	8.24	V
	5557	-52.51	-13	-39.51	-77.62	-59.57	2.66	9.72	V
	7410	-51.17	-13	-38.17	-78.5	-60.33	2.46	11.62	V
Middle	3762	-57.43	-13	-44.43	-78.23	-64.06	1.69	8.31	H
	5640	-52.51	-13	-39.51	-77.85	-59.56	2.71	9.76	H
	7520	-50.64	-13	-37.64	-77.86	-60.03	2.42	11.81	H
	3762	-57.51	-13	-44.51	-78.33	-64.14	1.69	8.31	V
	5640	-52.77	-13	-39.77	-78.12	-59.82	2.71	9.76	V
	7520	-50.32	-13	-37.32	-77.84	-59.71	2.42	11.81	V
Highest	3816	-57.75	-13	-44.75	-78.458	-64.43	1.70	8.38	H
	5724	-52.18	-13	-39.18	-77.72	-59.22	2.75	9.79	H
	7632	-49.27	-13	-36.27	-76.74	-58.76	2.39	11.88	H
	3816	-57.54	-13	-44.54	-78.34	-64.22	1.70	8.38	V
	5724	-52.04	-13	-39.04	-77.59	-59.08	2.75	9.79	V
	7632	-49.13	-13	-36.13	-76.88	-58.62	2.39	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

CDMA2000 (BC1 1xRTT)

CDMA2000 BC1									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-56.77	-13	-43.77	-77.59	-63.34	1.67	8.24	H
	5556	-49.26	-13	-36.26	-74.35	-56.33	2.66	9.72	H
	7405	-50.71	-13	-37.71	-77.76	-59.86	2.46	11.61	H
	3702	-56.88	-13	-43.88	-77.71	-63.45	1.67	8.24	V
	5556	-52.82	-13	-39.82	-77.94	-59.89	2.66	9.72	V
	7405	-50.56	-13	-37.56	-77.9	-59.71	2.46	11.61	V
Middle	3762	-56.93	-13	-43.93	-78	-63.56	1.69	8.31	H
	5640	-50.81	-13	-37.81	-76.47	-57.86	2.71	9.76	H
	7518	-50.22	-13	-37.22	-77.58	-59.61	2.42	11.81	H
	3762	-57.19	-13	-44.19	-78.18	-63.82	1.69	8.31	V
	5640	-49.89	-13	-36.89	-75.43	-56.94	2.71	9.76	V
	7518	-49.58	-13	-36.58	-77.27	-58.97	2.42	11.81	V
Highest	3816	-57.18	-13	-44.18	-78.14	-63.86	1.70	8.38	H
	5724	-51.31	-13	-38.31	-77.01	-58.35	2.75	9.79	H
	7632	-48.76	-13	-35.76	-76.64	-58.25	2.39	11.88	H
	3816	-57.21	-13	-44.21	-78.26	-63.89	1.70	8.38	V
	5724	-51.12	-13	-38.12	-76.94	-58.16	2.75	9.79	V
	7632	-48.51	-13	-35.51	-76.48	-58	2.39	11.88	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

<For WCP Charging Mode>

<Ant. 0_A>

GPRS850

GSM 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-62.27	-13	-49.27	-74.74	-64.03	0.98	4.89	H
	2472	-46.17	-13	-33.17	-63.72	-48.05	1.28	5.32	H
	3296	-57.71	-13	-44.71	-77.62	-61.12	1.54	7.10	H
	1648	-59.28	-13	-46.28	-72.22	-61.04	0.98	4.89	V
	2472	-41.47	-13	-28.47	-59.9	-43.35	1.28	5.32	V
	3296	-57.61	-13	-44.61	-77.68	-61.02	1.54	7.10	V
Middle	1672	-62.14	-13	-49.14	-74.81	-63.82	0.99	4.82	H
	2512	-37.03	-13	-24.03	-54.73	-39	1.29	5.41	H
	3344	-58.26	-13	-45.26	-78.33	-61.87	1.56	7.31	H
	1672	-60.88	-13	-47.88	-74.09	-62.56	0.99	4.82	V
	2512	-37.34	-13	-24.34	-55.49	-39.31	1.29	5.41	V
	3344	-57.88	-13	-44.88	-78.08	-61.49	1.56	7.31	V
Highest	1696	-60.47	-13	-47.47	-73.37	-62.07	1.00	4.75	H
	2544	-48.41	-13	-35.41	-66.13	-50.39	1.30	5.44	H
	3392	-57.44	-13	-44.44	-77.65	-61.24	1.57	7.52	H
	1696	-57.29	-13	-44.29	-70.7	-58.89	1.00	4.75	V
	2544	-40.48	-13	-27.48	-58.7	-42.46	1.30	5.44	V
	3392	-57.32	-13	-44.32	-77.64	-61.12	1.57	7.52	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

———THE END———