FCC RADIO TEST REPORT

FCC ID	**:**	**A4RG025J**
Equipment	**:**	**Phone**
Model Name	**:**	**G025J, G025N, G025M**
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 Jan. 16, 2020 and testing was started from Jan. 21, 2020 and completed on Mar. 19, 2020. 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.

Louis Wu

Approved by: Louis Wu

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

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FG9D0616-05A	01	Initial issue of report	Mar. 24, 2020

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 (GSM850) (WCDMA Band V) (CDMA BC0)		
	§24.232 (c)	Equivalent Isotropic Radiated Power (GSM1900) (WCDMA Band II) (CDMA BC1)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (WCDMA Band IV)		
3.3	§24.232 (d)	Peak-to-Average Ratio	Pass	
3.4	§2.1049 §22.917 (b) §24.238 (b) §27.53 (g)	Occupied Bandwidth (GSM850) (WCDMA Band V) (CDMA BC0) (GSM1900) (WCDMA Band II) (CDMA BC1) (WCDMA Band IV)	Pass	-
3.5	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Band Edge Measurement (GSM850) (WCDMA Band V) (CDMA BC0) (GSM1900) (WCDMA Band II) (CDMA BC1) (WCDMA Band IV)	Pass	-
3.6	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Conducted Emission (GSM850) (WCDMA Band V) (CDMA BC0) (GSM1900) (WCDMA Band II) (CDMA BC1) (WCDMA Band IV)	Pass	-
3.7	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	Pass	-
4.4	§2.1053 §22.917 (a) §24.238 (a) §27.53 (h)	Field Strength of Spurious Radiation (GSM850) (WCDMA Band V) (CDMA BC0) (GSM1900) (WCDMA Band II) (CDMA BC1) (WCDMA Band IV)	Pass	Under limit 25.08 dB at 3763.000 MHz for Primary Antenna Under limit 17.91 dB at 5730.000 MHz for ASDIV Antenna

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: Lucy Wu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Phone
Model Name	G025J, G025N, G025M
FCC ID	A4RG025J
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC/GNSS WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
EUT Stage	Identical Prototype

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

EUT Information List	
S/N	Performed Test Item
01021FQC200422	Conducted Measurement ERP/EIRP
01021FQC200313	Radiated Spurious Emission

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
Maximum Output Power to Antenna	**<Primary Antenna>** **GSM/GPRS/EDGE:** 850: 32.98 dBm 1900: 29.84 dBm **CDMA/EV-DO** BC0 24.92 dBm BC1: 24.93 dBm **WCDMA:** Band V: 25.25 dBm Band II: 25.05 dBm Band IV: 24.87 dBm **<ASDIV Antenna>** **GSM/GPRS/EDGE:** 850: 32.37 dBm 1900: 30.31 dBm **CDMA/EV-DO** BC0 24.52 dBm BC1: 25.41 dBm **WCDMA:** Band V: 24.86 dBm Band II: 25.19 dBm Band IV: 25.17 dBm

Standards-related Product Specification	
Antenna Type	**<Primary Antenna>:** PIFA Antenna type **<ASDIV Antenna>:** PIFA Antenna type
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

<Primary Antenna>

Radio Tech	Band Number	Antenna name	Gain
CDMA	BC0	ANT0	-2.2
CDMA	BC1	ANT2	1.9
WCDMA	B2	ANT2	1.9
WCDMA	B4	ANT2	1.1
WCDMA	B5	ANT0	-2.2
GSM1Tx	850	ANT0	-2.2
GSM1Tx	1900	ANT2	1.9

<ASDIV Antenna>

Radio Tech	Band Number	Antenna name	Gain
CDMA	BC0	ANT1	-3.5
CDMA	BC1	ANT0	1.7
WCDMA	B2	ANT0	1.7
WCDMA	B4	ANT0	-0.4
WCDMA	B5	ANT1	-3.5
GSM1Tx	850	ANT1	-3.5
GSM1Tx	1900	ANT0	1.7

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
Test Engineer	Louis Chung
Temperature	23.2~24.6℃
Relative Humidity	52.6~58.2%

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

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH13-HY
Test Engineer	Jimmy Chung , Karl Hou and Wilson Wu
Temperature	21.5~23.5℃
Relative Humidity	49.5~55.5%

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

FCC Designation No.: TW1190 and TW0007

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
- FCC KDB 414788 D01 Radiated Test Site 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. The worst cases (Primary Antenna : Y Plane with Accessory for Ant. 0 and Ant. 2, Z Plane with Accessory for Ant. 2; ASDIV Antenna: Y Plane with Accessory for Ant. 0, Z Plane with Accessory for Ant. 0 and Ant. 1) were recorded in this report.

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

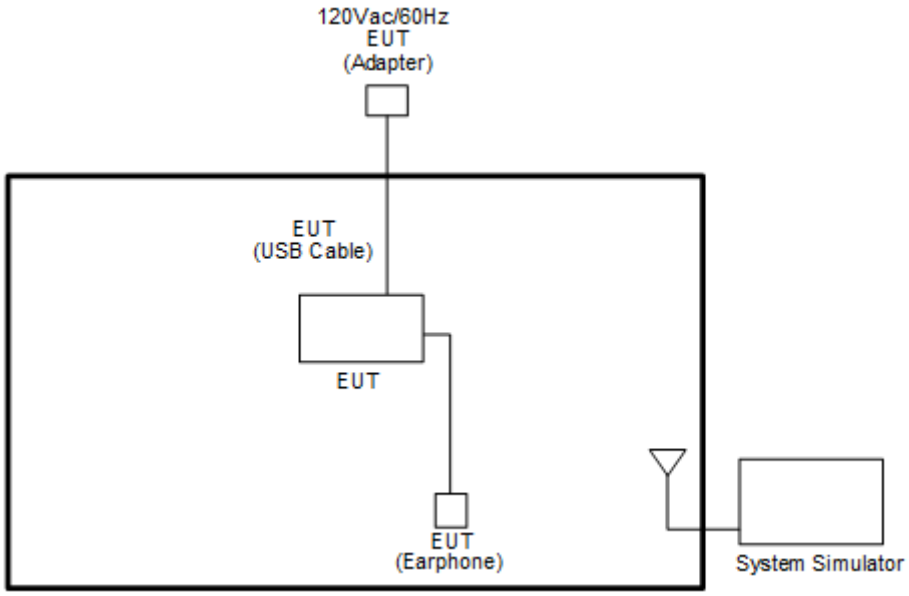
All modes and data rates and positions were investigated.

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

Test Modes		
Band	**Radiated TCs**	**Conducted TCs**
GSM850	■ GPRS Class 8 Link ■ EDGE Class 8 Link	■ GPRS Class 8 Link ■ EDGE Class 8 Link
GSM1900	■ GPRS Class 8 Link ■ EDGE Class 8 Link	■ GPRS Class 8 Link ■ EDGE Class 8 Link
WCDMA Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band IV	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
CDMA BC0	■ 1xRTT Link	■ 1xRTT Link ■ 1xEV-DO Link
CDMA BC1	■ 1xRTT Link	■ 1xRTT Link ■ 1xEV-DO Link

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

2.2 Connection Diagram of Test System



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

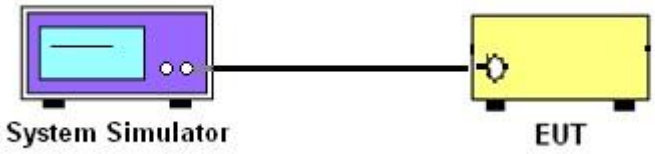
3 Conducted Test Result

3.1 Measuring Instruments

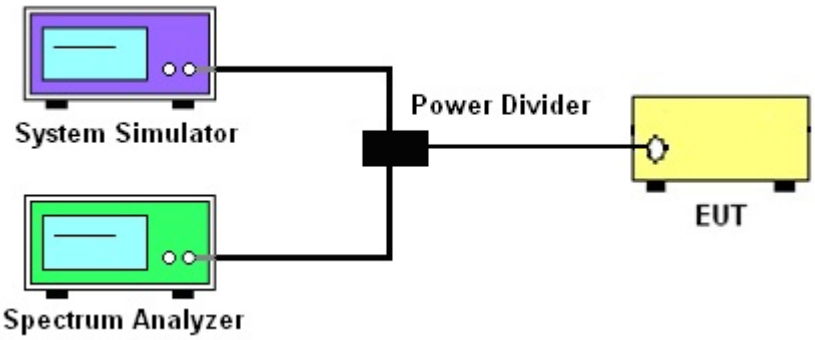
See list of measuring instruments of this test report.

3.1.1 Test Setup

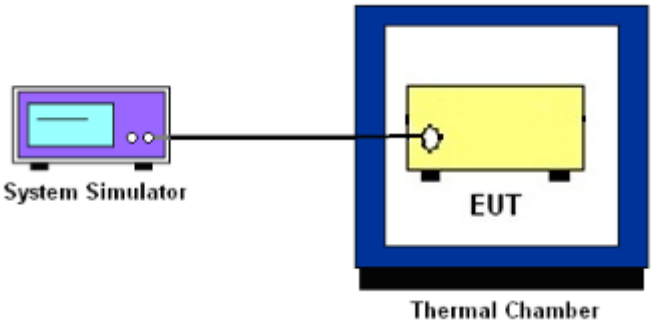
3.1.2 Conducted Output Power



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 and CDMA BC0

The EIRP of mobile transmitters must not exceed 2 Watts for GSM1900 and WCDMA Band II and CDMA BC1

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 10^{th} 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.

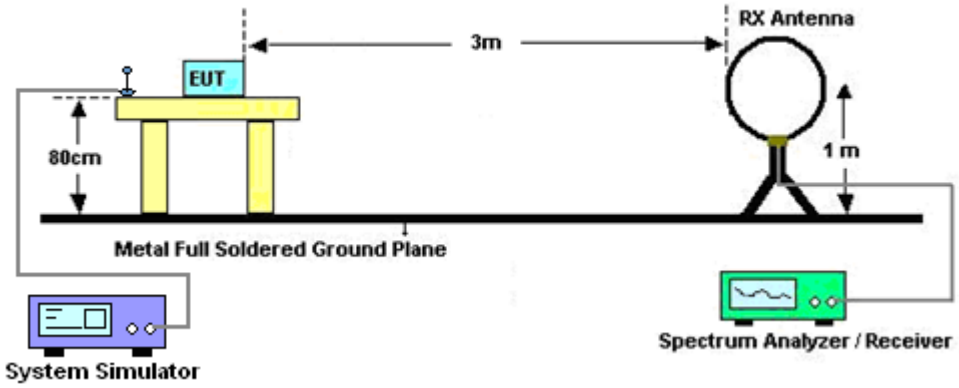
4 Radiated Test Items

4.1 Measuring Instruments

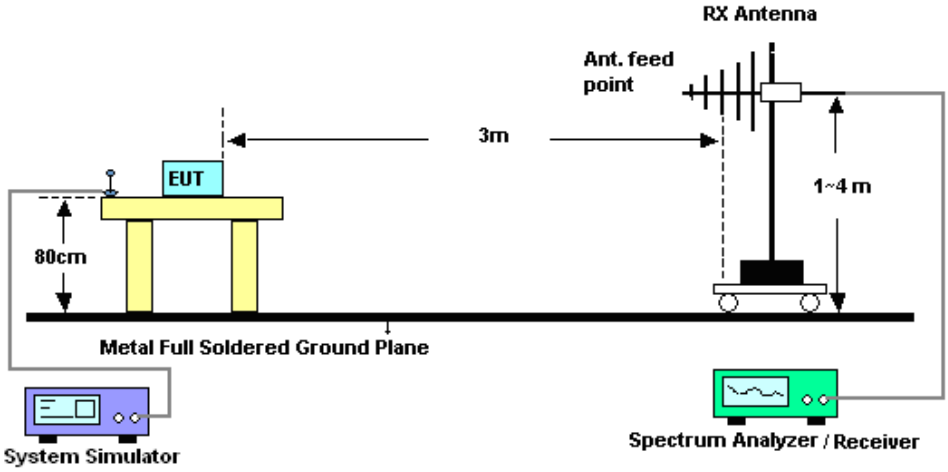
See list of measuring instruments of this test report.

4.2 Test Setup

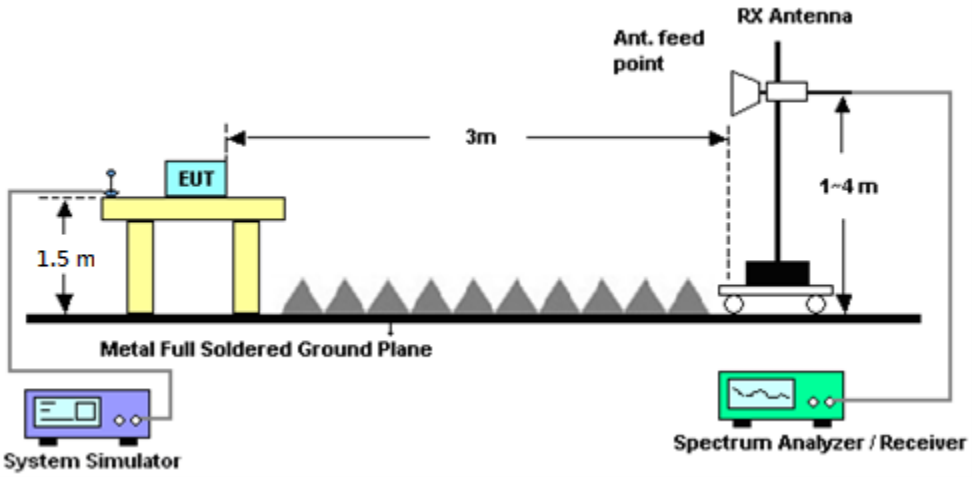
For radiated emissions below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

Note:

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

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

4.4 Field Strength of Spurious Radiation Measurement

4.4.1 Description of Field Strength of Spurious Radiated Measurement

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

4.4.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / 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
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 06, 2019	Feb. 04, 2020~ Feb. 05, 2020	Mar. 05, 2020	Conducted (TH03-HY)
Hygrometer	Testo	HTC-2	1	N/A	Jun. 17, 2019	Mar. 19, 2020	Jun. 16, 2020	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Sep. 04, 2019	Feb. 04, 2020~ Mar. 19, 2020	Sep. 03, 2020	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-641	92013721	-30℃ ~70℃	Nov. 26, 2019	Feb. 04, 2020~ Feb. 05, 2020	Nov. 25, 2020	Conducted (TH03-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	1V~20V 0.5A~4A	Oct. 09, 2019	Feb. 04, 2020~ Feb. 05, 2020	Oct. 08, 2020	Conducted (TH03-HY)
Base Station(Measure)	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Aug. 23, 2019	Feb. 04, 2020~ Feb. 05, 2020	Aug. 22, 2020	Conducted (TH03-HY)
Power Divider	Warison	WCOU-0.4-26 .5S-20	#A	N/A	Nov. 06, 2019	Feb. 04, 2020~ Feb. 05, 2020	Nov. 05, 2020	Conducted (TH03-HY)
Amplifier	Sonoma-Instru ment	310 N	187282	9KHz~1GHz	Dec. 17, 2019	Jan. 21, 2020~ Mar. 19, 2020	Dec. 16, 2020	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103&07	30MHz to 1GHz	Apr. 30, 2019	Jan. 21, 2020~ Mar. 19, 2020	Apr. 29, 2020	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	41912 & 07	30MHz to 1GHz	Apr. 30, 2019	Jan. 21, 2020~ Mar. 19, 2020	Apr. 29, 2020	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-124 1	1GHz ~ 18GHz	Jul. 02, 2019	Jan. 21, 2020~ Mar. 19, 2020	Jul. 01, 2020	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-121 2	1GHz ~ 18GHz	May 14, 2019	Jan. 21, 2020~ Mar. 19, 2020	May 13, 2020	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 20, 2019	Jan. 21, 2020~ Mar. 19, 2020	May 19, 2020	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY532701 47	1GHz~26.5GHz	Oct. 28, 2019	Jan. 21, 2020~ Mar. 19, 2020	Oct. 27, 2020	Radiation (03CH13-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	Aug. 27, 2019	Jan. 21, 2020~ Mar. 19, 2020	Aug. 26, 2020	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY553705 26	10Hz~44GHz	Mar. 19, 2019	Jan. 21, 2020~ Mar. 17, 2020	Mar. 18, 2020	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY542004 85	10Hz~44GHz	Feb. 10, 2020	Mar. 18, 2020~ Mar. 19, 2020	Feb. 09, 2021	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jan. 21, 2020~ Mar. 19, 2020	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jan. 21, 2020~ Mar. 19, 2020	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jan. 21, 2020~ Mar. 19, 2020	N/A	Radiation (03CH13-HY)
Software	Audix	E3 6.2009-8-24	RK-00099 2	N/A	N/A	Jan. 21, 2020~ Mar. 19, 2020	N/A	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 13, 2019	Jan. 21, 2020~ Mar. 19, 2020	Dec. 12, 2020	Radiation (03CH13-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
RF Cable	HUBER + SUHNER	SF102/2*11SK252	MY4278/2	9kHz~40GHz	May 16, 2019	Jan. 21, 2020~ Mar. 19, 2020	May 15, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY36980/4	30M-18G	Apr. 15, 2019	Jan. 21, 2020~ Mar. 19, 2020	Apr. 14, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30M~40GHz	Mar. 13, 2019	Jan. 21, 2020~ Mar. 11, 2020	Mar. 12, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30M~40GHz	Mar. 12, 2020	Mar. 13, 2020~ Mar. 19, 2020	Mar. 11, 2021	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 10, 2019	Jan. 21, 2020~ Mar. 19, 2020	Dec. 09, 2020	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz~40GHz	May 14, 2019	Jan. 21, 2020~ Mar. 19, 2020	May 13, 2020	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60SS	SN2	3GHz High Pass Filter	Jul. 14, 2019	Jan. 21, 2020~ Mar. 19, 2020	Jul. 13, 2020	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-1080-1200-15000-60SS	SN3	1.2GHz High Pass Filter	Jul. 03, 2019	Jan. 21, 2020~ Mar. 19, 2020	Jul. 02, 2020	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303B	TP157151	N/A	Jun. 17, 2019	Jan. 21, 2020~ Mar. 19, 2020	Jun. 16, 2020	Radiation (03CH13-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))	**3.21**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.24**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.99**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

<Primary Antenna>

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	32.96	32.70	32.48	29.61	29.72	29.83
GPRS class 8	32.98	32.70	32.50	29.63	29.72	29.84
GPRS class 10	31.37	31.13	30.94	28.28	28.27	28.19
GPRS class 11	30.20	29.96	29.90	27.58	27.54	27.46
GPRS class 12	29.05	28.83	28.78	26.57	26.58	26.73
EGPRS class 8	27.15	27.11	26.84	25.84	25.67	25.66
EGPRS class 10	26.32	26.03	25.87	24.21	24.71	24.64
EGPRS class 11	26.19	25.81	25.70	23.05	23.50	23.37
EGPRS class 12	24.25	24.06	23.78	22.10	22.70	22.70

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	25.21	25.09	25.25	24.78	24.85	25.05
HSDPA Subtest-1	24.22	24.08	24.24	23.66	23.84	23.99
HSDPA Subtest-2	24.25	24.12	24.26	23.69	23.84	23.99
HSDPA Subtest-3	23.69	23.60	23.82	23.26	23.37	23.54
HSDPA Subtest-4	23.71	23.61	23.85	23.26	23.32	23.53
HSUPA Subtest-1	24.18	24.01	24.24	23.71	23.82	23.99
HSUPA Subtest-2	22.17	22.02	22.26	21.73	21.80	21.97
HSUPA Subtest-3	23.23	23.08	23.23	22.74	22.81	23.01
HSUPA Subtest-4	22.23	22.06	22.21	21.66	21.80	22.01
HSUPA Subtest-5	24.10	24.10	24.30	23.70	23.80	24.00

Conducted Power (*Unit: dBm)			
Band	WCDMA Band IV		
Channel	1312	1413	1513
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	24.85	24.83	**24.87**
HSDPA Subtest-1	23.76	23.70	23.78
HSDPA Subtest-2	23.76	23.77	23.79
HSDPA Subtest-3	23.24	23.25	23.31
HSDPA Subtest-4	23.22	23.26	23.25
HSUPA Subtest-1	23.72	23.75	23.71
HSUPA Subtest-2	21.64	21.70	21.72
HSUPA Subtest-3	22.72	22.74	22.74
HSUPA Subtest-4	21.71	21.73	21.78
HSUPA Subtest-5	23.70	23.70	23.80

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	24.84	24.86	24.89	24.91	24.81	24.73
1xRTT RC3 SO55	24.86	24.85	**24.92**	**24.93**	24.85	24.74
1xRTT RC3 SO32 (+ F-SCH)	24.88	24.82	24.88	24.92	24.82	24.71
1xRTT RC3 SO32 (+SCH)	24.90	24.84	**24.92**	24.90	24.82	24.71
1xEVDO RTAP 153.6Kbps	24.65	24.68	**24.73**	**24.88**	24.80	24.70
1xEVDO RETAP 4096Bits	24.64	24.67	24.72	24.87	24.78	24.65

<ASDIV Antenna>

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	32.28	32.35	32.19	30.09	30.07	30.30
GPRS class 8	32.29	32.37	32.19	30.09	30.08	30.31
GPRS class 10	31.12	30.62	30.55	28.60	28.74	28.72
GPRS class 11	30.10	29.63	29.43	28.09	27.84	27.88
GPRS class 12	28.89	28.40	28.15	27.24	27.12	27.09
EGPRS class 8	26.82	26.76	26.56	26.04	26.10	26.23
EGPRS class 10	25.95	25.77	25.52	25.24	25.19	25.18
EGPRS class 11	25.79	25.54	25.20	24.07	23.96	23.84
EGPRS class 12	23.93	23.67	23.40	23.06	23.11	23.23

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	24.85	24.74	24.86	25.15	25.04	25.19
HSDPA Subtest-1	23.90	23.74	23.85	24.13	24.06	24.23
HSDPA Subtest-2	23.88	23.72	23.84	24.18	24.05	24.27
HSDPA Subtest-3	23.40	23.23	23.43	23.68	23.60	23.75
HSDPA Subtest-4	23.42	23.27	23.42	23.67	23.61	23.82
HSUPA Subtest-1	23.91	23.73	23.86	24.17	24.08	24.25
HSUPA Subtest-2	21.89	21.76	21.90	22.20	22.08	22.17
HSUPA Subtest-3	22.85	22.71	22.87	23.12	23.08	23.24
HSUPA Subtest-4	21.88	21.76	21.84	22.15	22.07	22.21
HSUPA Subtest-5	23.90	23.70	23.80	24.20	24.10	24.30

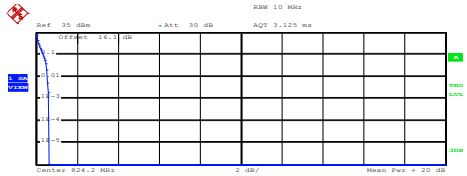
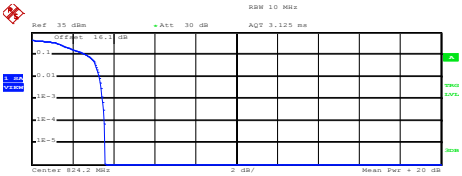
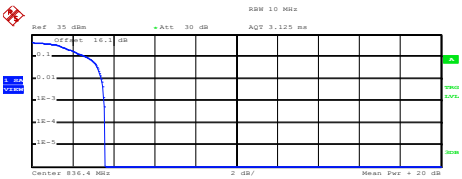
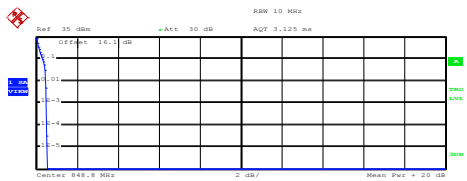
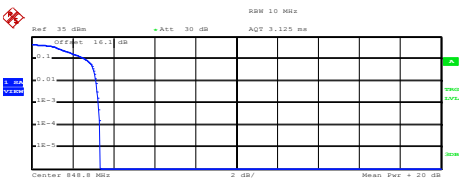
Conducted Power (*Unit: dBm)			
Band	WCDMA Band IV		
Channel	1312	1413	1513
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	**25.17**	25.16	25.14
HSDPA Subtest-1	24.20	24.16	24.14
HSDPA Subtest-2	24.19	24.18	24.16
HSDPA Subtest-3	23.71	23.67	23.66
HSDPA Subtest-4	23.34	23.63	23.68
HSUPA Subtest-1	24.17	24.14	24.16
HSUPA Subtest-2	22.12	22.16	22.16
HSUPA Subtest-3	23.15	23.13	23.15
HSUPA Subtest-4	22.13	22.16	22.14
HSUPA Subtest-5	24.20	24.20	24.20

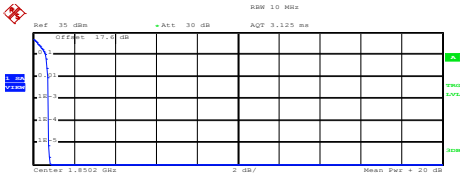
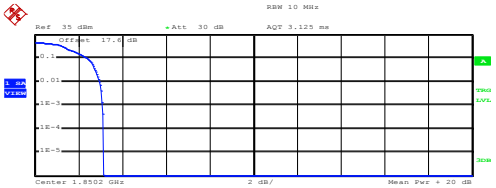
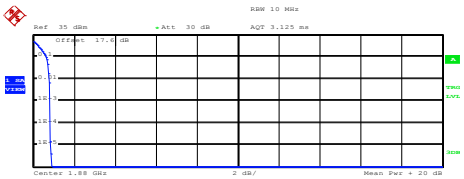
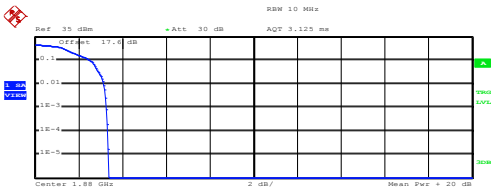
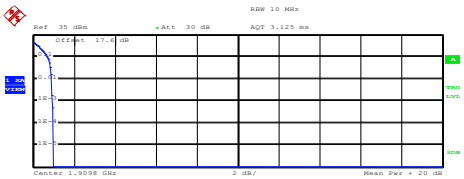
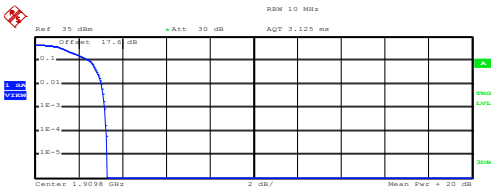
Conducted Power (*Unit: dBm)						
Band	CDMA 2000 BC0			CDMA 2000 BC1		
Channel	1013	384	777	25	600	1175
Frequency	824.7	836.52	848.31	1851.25	1880	1908.75
1xRTT RC1 SO55	24.44	24.46	24.49	**25.41**	25.34	25.22
1xRTT RC3 SO55	24.46	24.45	**24.52**	25.40	25.32	25.20
1xRTT RC3 SO32 (+ F-SCH)	24.48	24.42	24.48	25.38	25.30	25.22
1xRTT RC3 SO32 (+SCH)	24.50	24.44	**24.52**	25.38	25.31	25.21
1xEVDO RTAP 153.6Kbps	24.25	24.28	**24.33**	**25.22**	25.14	25.11
1xEVDO RETAP 4096Bits	24.24	24.27	24.32	25.20	25.13	25.06

A2. GSM

Peak-to-Average Ratio

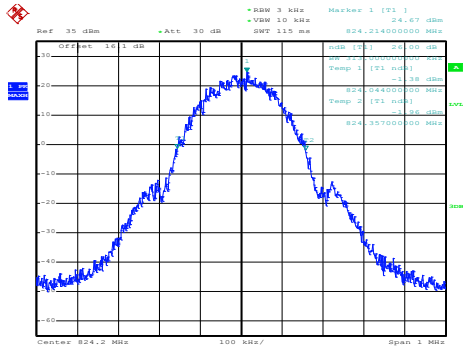
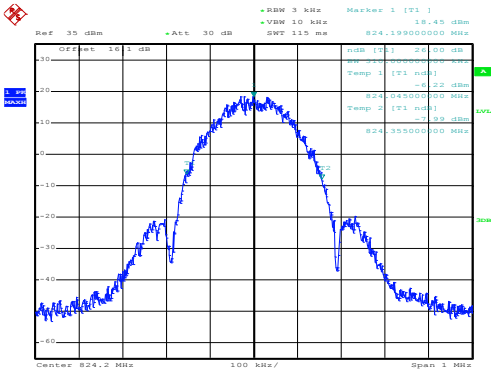
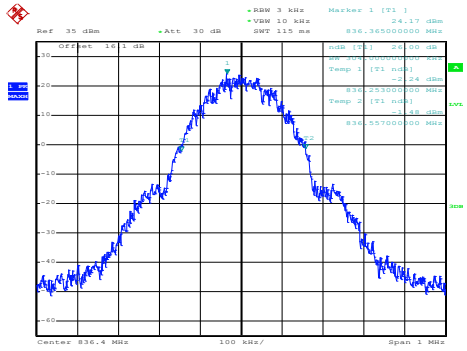
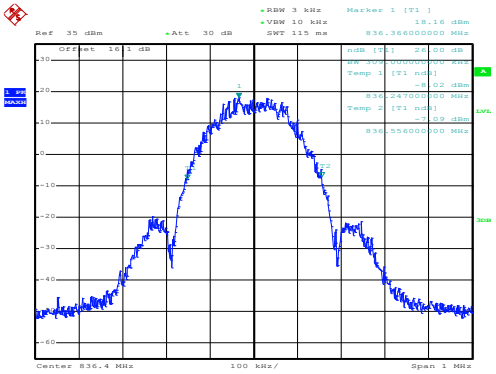
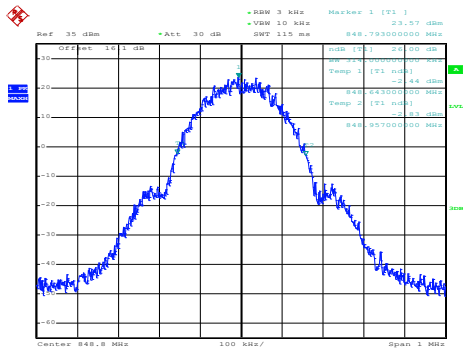
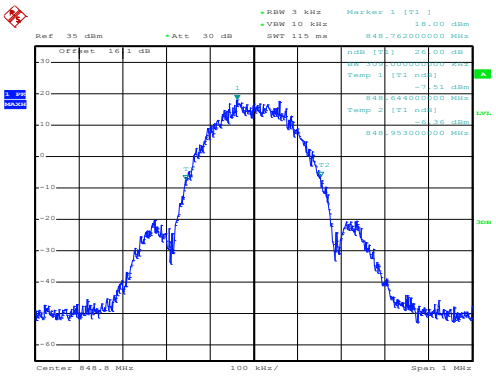
Mode	GSM850		Limit: 13dB
Mod.	GPRS class 8	EDGE class 8	Result
Lowest CH	0.60	3.44	PASS
Middle CH	0.56	3.56	
Highest CH	0.52	3.28	
Mode	GSM1900		Limit: 13dB
Mod.	GPRS class 8	EDGE class 8	Result
Lowest CH	0.76	3.08	PASS
Middle CH	0.84	3.28	
Highest CH	0.96	3.20	

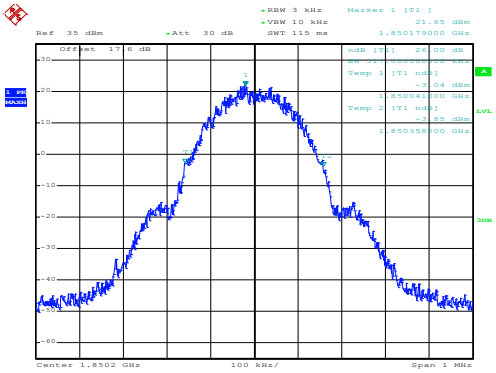
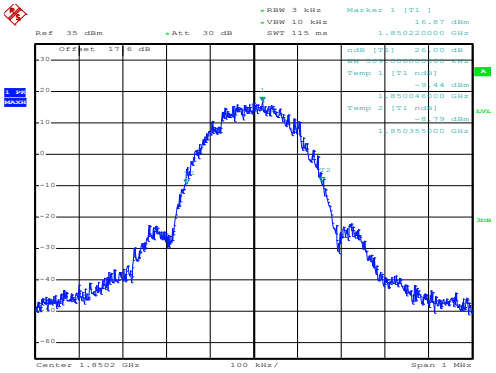
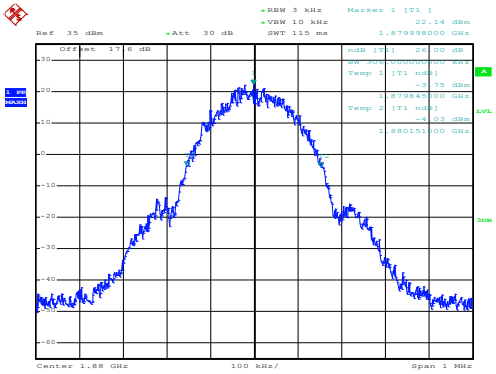
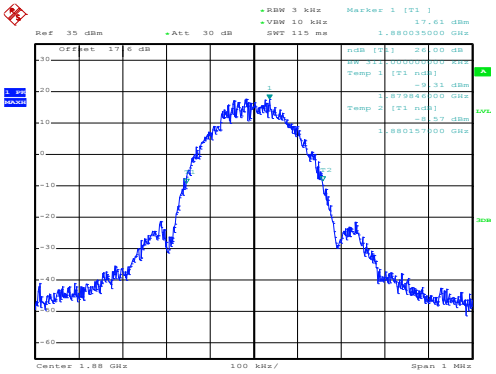
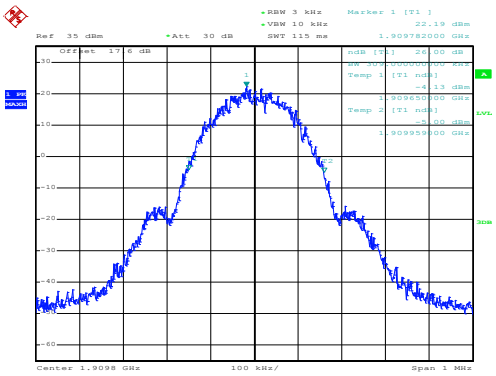
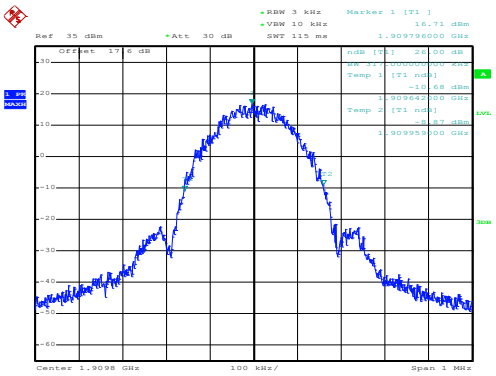
GSM850 (GPRS class 8)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 31.80 dBm Peak 32.43 dBm Crest 0.62 dB 10 % 0.36 dB 1 % 0.56 dB .1 % 0.60 dB .01 % 0.64 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 26.18 dBm Peak 29.75 dBm Crest 3.57 dB 10 % 2.68 dB 1 % 3.32 dB .1 % 3.44 dB .01 % 3.56 dB
Date: 4.FEB.2020 11:57:50	Date: 4.FEB.2020 13:51:31
Middle Channel	**Middle Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 31.52 dBm Peak 32.07 dBm Crest 0.56 dB 10 % 0.32 dB 1 % 0.52 dB .1 % 0.56 dB .01 % 0.56 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 25.67 dBm Peak 29.25 dBm Crest 3.59 dB 10 % 2.68 dB 1 % 3.40 dB .1 % 3.56 dB .01 % 3.60 dB
Date: 4.FEB.2020 11:58:03	Date: 4.FEB.2020 13:51:46
Highest Channel	**Highest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 31.45 dBm Peak 32.00 dBm Crest 0.56 dB 10 % 0.32 dB 1 % 0.48 dB .1 % 0.52 dB .01 % 0.52 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 25.71 dBm Peak 29.04 dBm Crest 3.33 dB 10 % 2.64 dB 1 % 3.16 dB .1 % 3.28 dB .01 % 3.32 dB
Date: 4.FEB.2020 11:58:14	Date: 4.FEB.2020 13:52:01

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 29.21 dBm Peak 30.03 dBm Crest 0.82 dB 10 % 0.60 dB 1 % 0.72 dB .1 % 0.76 dB .01 % 0.76 dB Date: 4.FEB.2020 10:32:20	 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 25.48 dBm Peak 28.62 dBm Crest 3.13 dB 10 % 2.40 dB 1 % 2.96 dB .1 % 3.08 dB .01 % 3.16 dB Date: 4.FEB.2020 10:55:20
Middle Channel	**Middle Channel**
 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 29.21 dBm Peak 30.10 dBm Crest 0.89 dB 10 % 0.64 dB 1 % 0.80 dB .1 % 0.84 dB .01 % 0.84 dB Date: 4.FEB.2020 10:32:37	 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 25.36 dBm Peak 28.76 dBm Crest 3.39 dB 10 % 2.56 dB 1 % 3.16 dB .1 % 3.28 dB .01 % 3.36 dB Date: 4.FEB.2020 10:55:40
Highest Channel	**Highest Channel**
 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 29.11 dBm Peak 30.10 dBm Crest 0.99 dB 10 % 0.68 dB 1 % 0.88 dB .1 % 0.96 dB .01 % 1.00 dB Date: 4.FEB.2020 10:32:48	 Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 25.18 dBm Peak 28.48 dBm Crest 3.29 dB 10 % 2.48 dB 1 % 3.04 dB .1 % 3.20 dB .01 % 3.28 dB Date: 4.FEB.2020 10:56:01

26dB Bandwidth

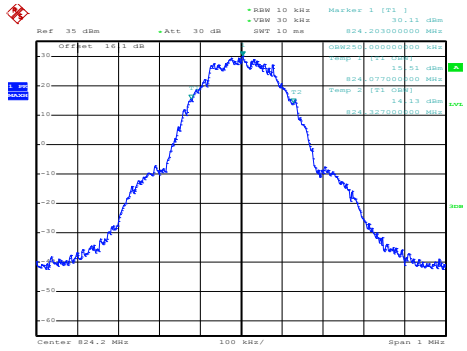
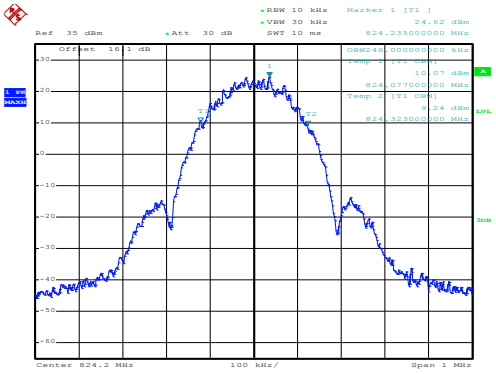
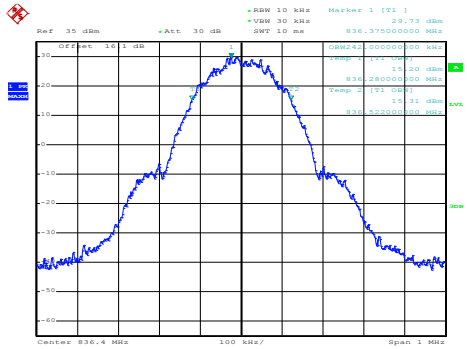
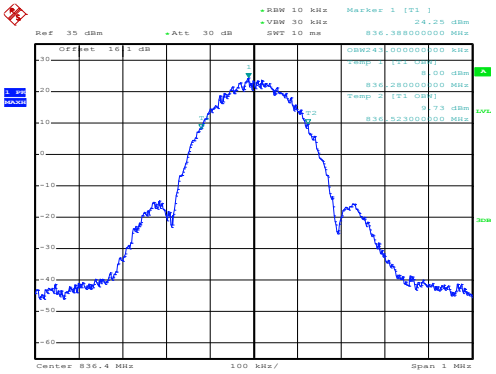
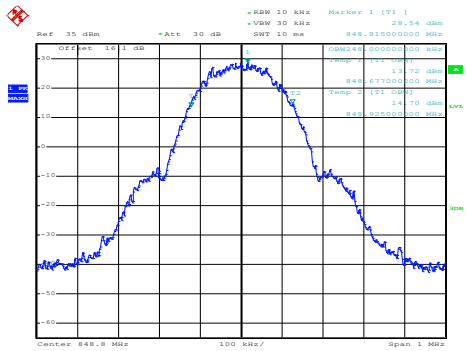
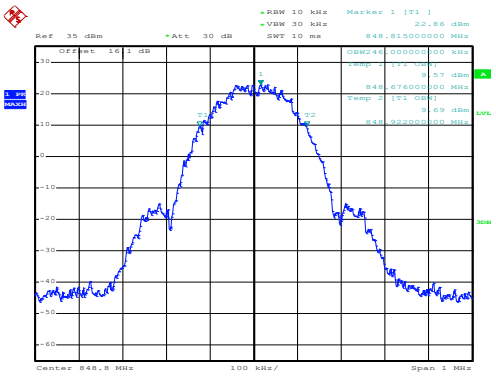
Mode	GSM850 : 26dB BW (MHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.313	0.310
Middle CH	0.304	0.309
Highest CH	0.314	0.309
Mode	GSM1900 : 26dB BW (MHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.317	0.309
Middle CH	0.306	0.311
Highest CH	0.309	0.317

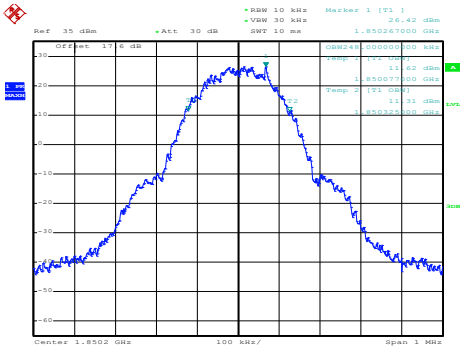
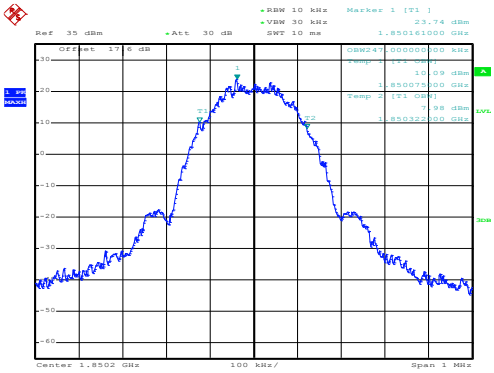
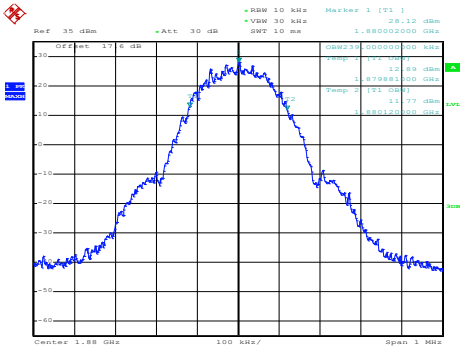
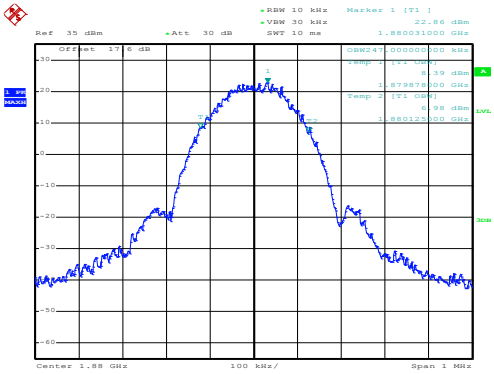
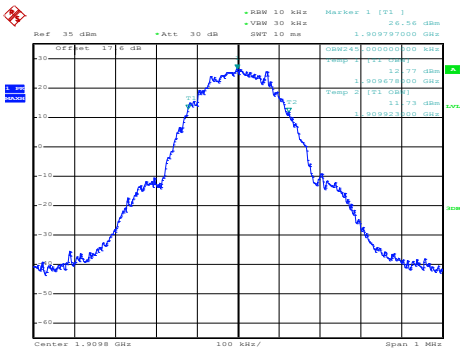
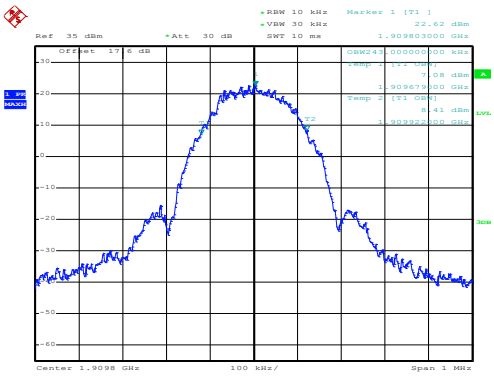
GSM850 (GPRS class 8)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 4.FEB.2020 11:56:15	Date: 4.FEB.2020 13:41:37
Middle Channel	**Middle Channel**
	
Date: 4.FEB.2020 11:56:54	Date: 4.FEB.2020 13:42:16
Highest Channel	**Highest Channel**
	
Date: 4.FEB.2020 11:57:27	Date: 4.FEB.2020 13:42:49

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 4.FEB.2020 10:27:34	Date: 4.FEB.2020 10:49:48
Middle Channel	**Middle Channel**
	
Date: 4.FEB.2020 10:28:13	Date: 4.FEB.2020 10:51:45
Highest Channel	**Highest Channel**
	
Date: 4.FEB.2020 10:28:46	Date: 4.FEB.2020 10:52:23

Occupied Bandwidth

Mode	GSM850): 99% OBW (MHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.250	0.246
Middle CH	0.242	0.243
Highest CH	0.248	0.246
Mode	GSM1900: 99% OBW (MHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.248	0.247
Middle CH	0.239	0.247
Highest CH	0.245	0.243

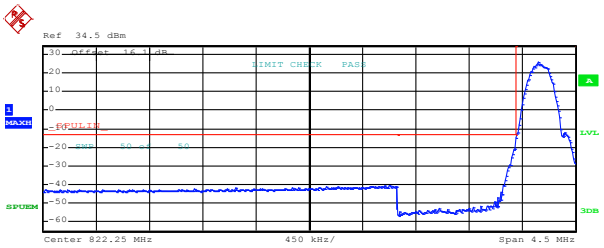
GSM850 (GPRS class 8)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 4.FEB.2020 13:34:06	Date: 4.FEB.2020 13:43:32
Middle Channel	**Middle Channel**
	
Date: 4.FEB.2020 13:34:39	Date: 4.FEB.2020 13:44:16
Highest Channel	**Highest Channel**
	
Date: 4.FEB.2020 13:35:16	Date: 4.FEB.2020 13:45:00

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 4.FEB.2020 10:33:26	Date: 4.FEB.2020 10:53:42
Middle Channel	**Middle Channel**
	
Date: 4.FEB.2020 10:33:59	Date: 4.FEB.2020 10:54:17
Highest Channel	**Highest Channel**
	
Date: 4.FEB.2020 10:34:34	Date: 4.FEB.2020 10:54:58

Conducted Band Edge

GSM850 (GPRS class 8)

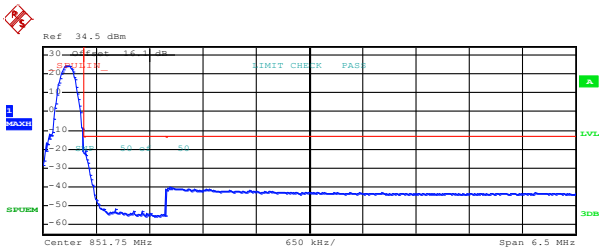
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.919000 M	-40.51	-27.51
823.000 M	824.000 M	3.00 k	823.996000 M	-20.57	-7.57
824.000 M	824.500 M	10.00 k	824.182500 M	26.00	-9.00

Date: 4.FEB.2020 13:36:55

Highest Band Edge

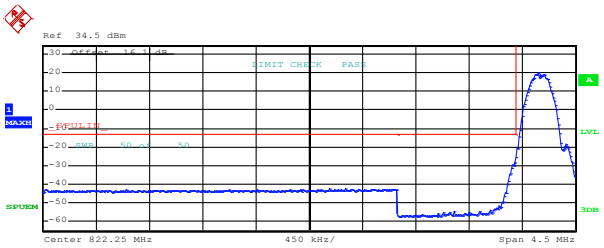


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.820000 M	24.53	-10.47
849.000 M	850.000 M	3.00 k	849.012000 M	-20.57	-7.57
850.000 M	855.000 M	100.00 k	850.045000 M	-40.29	-27.29

Date: 4.FEB.2020 13:38:29

GSM850 (EDGE class 8)

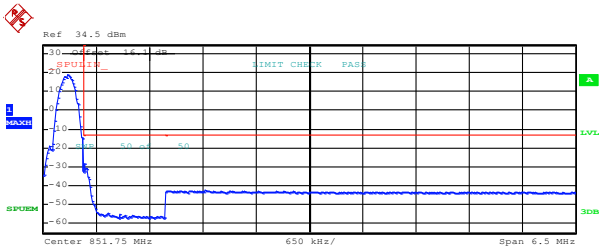
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.550000 M	-42.37	-29.37
823.000 M	824.000 M	3.00 k	823.992000 M	-28.59	-15.59
824.000 M	824.500 M	10.00 k	824.186000 M	20.02	-14.98

Date: 4.FEB.2020 13:46:35

Highest Band Edge

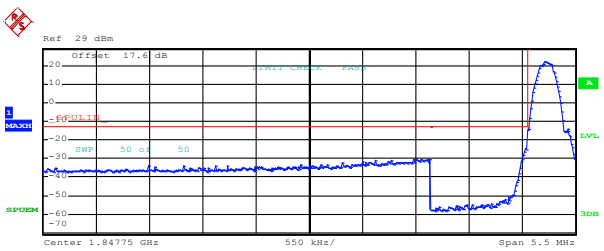


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.797000 M	19.27	-15.73
849.000 M	850.000 M	3.00 k	849.004000 M	-28.50	-15.50
850.000 M	855.000 M	100.00 k	850.475000 M	-42.36	-29.36

Date: 4.FEB.2020 13:48:09

GSM1900 (GPRS class 8)

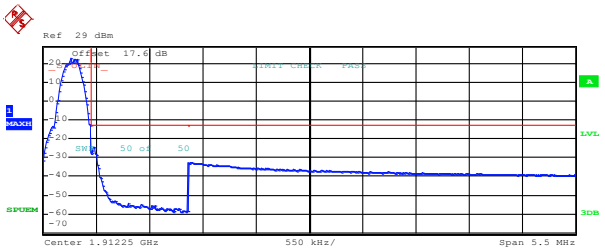
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848996 G	-30.14	-17.14
1.849 G	1.850 G	3.00 k	1.849980 G	-24.79	-11.79
1.850 G	1.851 G	10.00 k	1.850185 G	22.36	-12.64

Date: 4.FEB.2020 10:36:11

Highest Band Edge

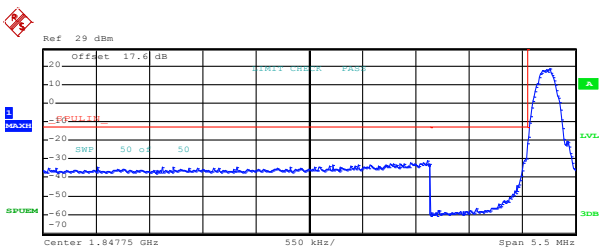


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909781 G	22.67	-12.33
1.910 G	1.911 G	3.00 k	1.910020 G	-24.45	-11.45
1.911 G	1.915 G	1.00 M	1.911000 G	-32.67	-19.67

Date: 4.FEB.2020 10:37:44

GSM1900 (EDGE class 8)

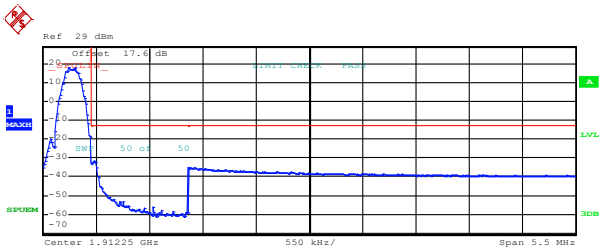
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848968 G	-31.02	-18.02
1.849 G	1.850 G	3.00 k	1.849988 G	-29.63	-16.63
1.850 G	1.851 G	10.00 k	1.850234 G	18.51	-16.49

Date: 4.FEB.2020 11:00:21

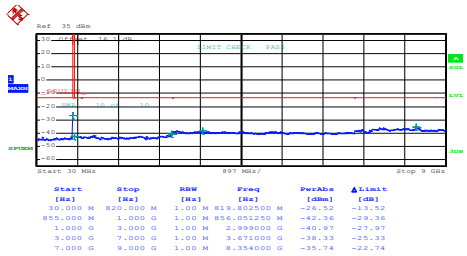
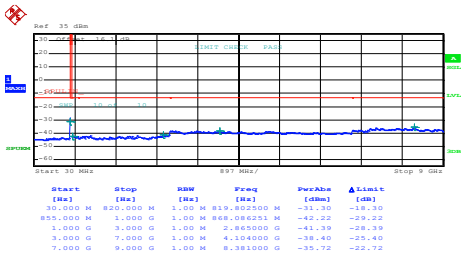
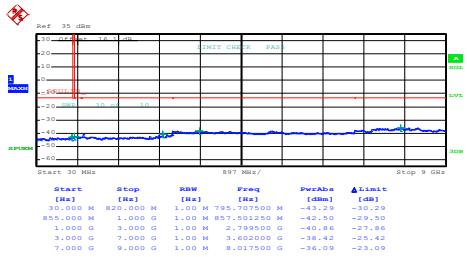
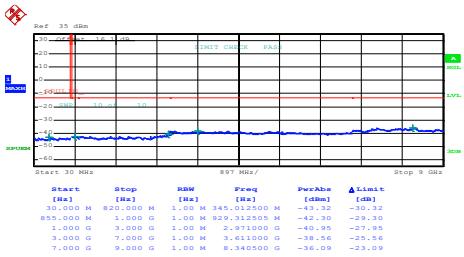
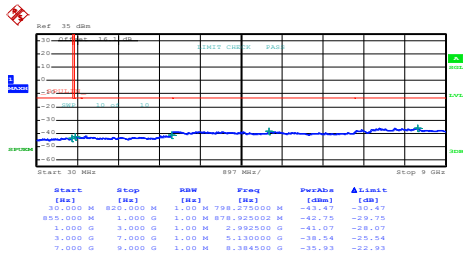
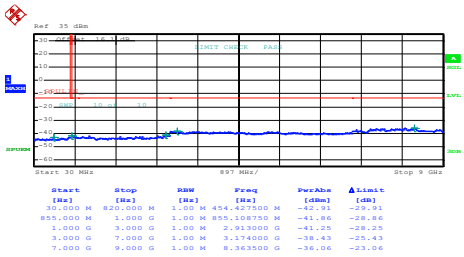
Highest Band Edge

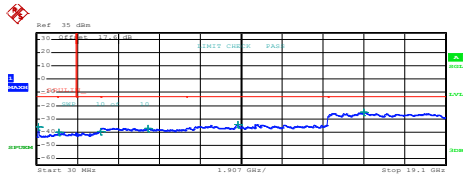
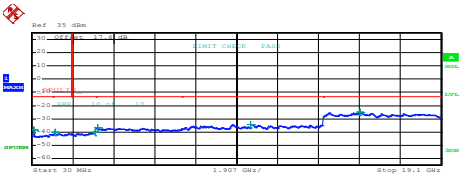
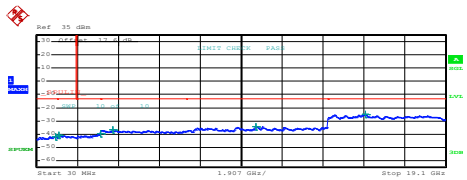
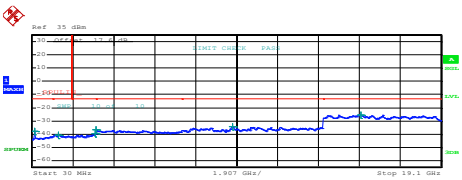
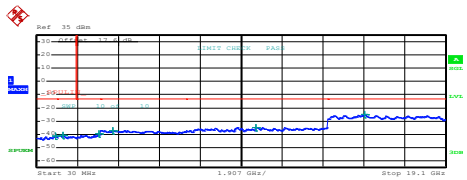
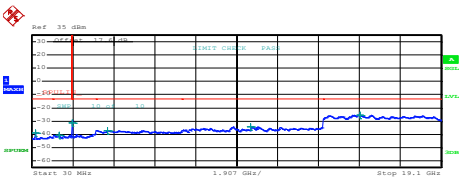


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909769 G	18.34	-16.66
1.910 G	1.911 G	3.00 k	1.910028 G	-30.84	-17.84
1.911 G	1.915 G	1.00 M	1.911060 G	-35.25	-22.25

Date: 4.FEB.2020 11:02:41

Conducted Spurious Emission

GSM850 (GPRS class 8)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 4.FEB.2020 13:31:31	Date: 4.FEB.2020 13:49:02
Middle Channel	**Middle Channel**
	
Date: 4.FEB.2020 13:32:22	Date: 4.FEB.2020 13:50:01
Highest Channel	**Highest Channel**
	
Date: 4.FEB.2020 13:33:13	Date: 4.FEB.2020 13:51:09

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 111.965000 M / -35.87 / -22.87 1.000 G / 1.845 G / 1.00 M / 1.065065 G / -40.19 / -27.19 1.915 G / 3.000 G / 1.00 M / 2.993490 G / -39.57 / -26.57 3.000 G / 7.000 G / 1.00 M / 5.209000 G / -37.01 / -24.01 7.000 G / 13.600 G / 1.00 M / 9.397450 G / -34.46 / -21.46 13.600 G / 19.100 G / 1.00 M / 15.303625 G / -24.96 / -11.96	Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 111.965000 M / -38.45 / -25.45 1.000 G / 1.845 G / 1.00 M / 1.090415 G / -40.01 / -27.01 1.915 G / 3.000 G / 1.00 M / 2.949819 G / -40.08 / -27.08 3.000 G / 7.000 G / 1.00 M / 3.073000 G / -36.71 / -23.71 7.000 G / 13.600 G / 1.00 M / 10.212550 G / -34.39 / -21.39 13.600 G / 19.100 G / 1.00 M / 15.321500 G / -25.03 / -12.03
Date: 4.FEB.2020 10:29:49	Date: 4.FEB.2020 10:57:02
Middle Channel	**Middle Channel**
	
Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 891.117500 M / -41.78 / -28.78 1.000 G / 1.845 G / 1.00 M / 1.073304 G / -40.88 / -27.88 1.915 G / 3.000 G / 1.00 M / 3.000000 G / -39.68 / -26.68 3.000 G / 7.000 G / 1.00 M / 3.566000 G / -36.84 / -23.84 7.000 G / 13.600 G / 1.00 M / 10.237300 G / -34.29 / -21.29 13.600 G / 19.100 G / 1.00 M / 15.345563 G / -25.00 / -12.00	Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 141.792500 M / -38.00 / -25.00 1.000 G / 1.845 G / 1.00 M / 1.238501 G / -40.59 / -27.59 1.915 G / 3.000 G / 1.00 M / 2.965822 G / -39.55 / -26.55 3.000 G / 7.000 G / 1.00 M / 3.000000 G / -36.65 / -23.65 7.000 G / 13.600 G / 1.00 M / 9.387550 G / -34.44 / -21.44 13.600 G / 19.100 G / 1.00 M / 15.344875 G / -25.36 / -12.36
Date: 4.FEB.2020 10:30:42	Date: 4.FEB.2020 10:57:53
Highest Channel	**Highest Channel**
	
Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 926.280500 M / -41.31 / -28.31 1.000 G / 1.845 G / 1.00 M / 1.268921 G / -40.80 / -27.80 1.915 G / 3.000 G / 1.00 M / 2.941410 G / -39.77 / -26.77 3.000 G / 7.000 G / 1.00 M / 3.563000 G / -37.09 / -24.09 7.000 G / 13.600 G / 1.00 M / 10.248850 G / -34.74 / -21.74 13.600 G / 19.100 G / 1.00 M / 15.323563 G / -25.07 / -12.07	Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 171.862500 M / -38.97 / -25.97 1.000 G / 1.845 G / 1.00 M / 1.279695 G / -40.47 / -27.47 1.915 G / 3.000 G / 1.00 M / 1.915271 G / -31.21 / -18.21 3.000 G / 7.000 G / 1.00 M / 3.554000 G / -36.99 / -23.99 7.000 G / 13.600 G / 1.00 M / 10.229050 G / -34.16 / -21.16 13.600 G / 19.100 G / 1.00 M / 15.314625 G / -25.27 / -12.27
Date: 4.FEB.2020 10:31:35	Date: 4.FEB.2020 10:58:45

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	0.0108	0.0012	PASS
40	Normal Voltage	0.0060	0.0012	
30	Normal Voltage	0.0036	0.0000	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0060	0.0036	
0	Normal Voltage	0.0036	0.0000	
-10	Normal Voltage	0.0000	0.0012	
-20	Normal Voltage	0.0012	0.0024	
-30	Normal Voltage	0.0012	0.0024	
20	Maximum Voltage	0.0000	0.0000	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0000	0.0012	

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	0.0021	0.0027	PASS
40	Normal Voltage	0.0005	0.0037	
30	Normal Voltage	0.0011	0.0016	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0011	0.0016	
0	Normal Voltage	0.0011	0.0011	
-10	Normal Voltage	0.0021	0.0245	
-20	Normal Voltage	0.0016	0.0282	
-30	Normal Voltage	0.0069	0.0378	
20	Maximum Voltage	0.0005	0.0011	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0016	0.0005	

Note:

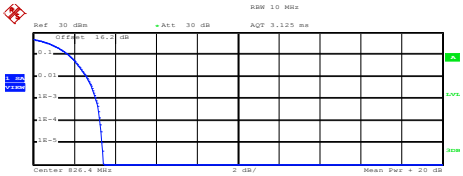
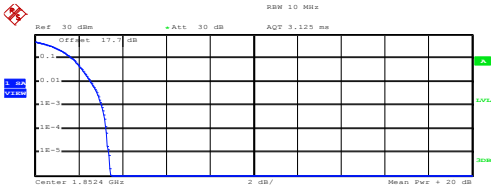
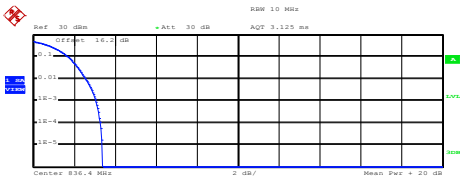
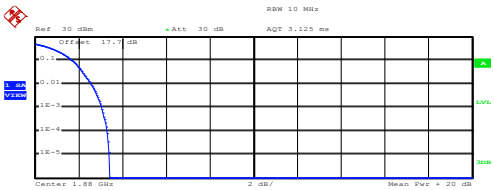
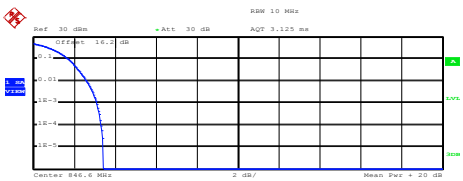
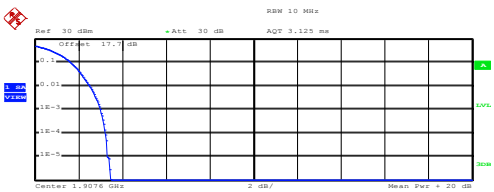
1. Normal Voltage = 3.87V. ；Battery End Point (BEP) = 3.6 V.；Maximum Voltage =4.45 V

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

A3. WCDMA

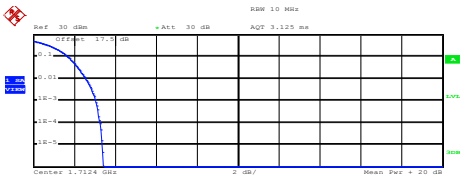
Peak-to-Average Ratio

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	3.08	3.04	3.08	PASS
Middle CH	3.08	3.08	3.08	
Highest CH	3.12	3.00	3.04	

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.30 dBm Peak 26.72 dBm Crest 3.42 dB 10 % 1.72 dB 1 % 2.60 dB .1 % 3.08 dB .01 % 3.28 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.35 dBm Peak 25.80 dBm Crest 3.45 dB 10 % 1.72 dB 1 % 2.56 dB .1 % 3.04 dB .01 % 3.28 dB
Date: 4.FEB.2020 14:06:45	Date: 4.FEB.2020 11:07:17
Middle Channel	**Middle Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.14 dBm Peak 26.51 dBm Crest 3.37 dB 10 % 1.72 dB 1 % 2.56 dB .1 % 3.08 dB .01 % 3.28 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.14 dBm Peak 26.58 dBm Crest 3.44 dB 10 % 1.72 dB 1 % 2.56 dB .1 % 3.08 dB .01 % 3.32 dB
Date: 4.FEB.2020 14:07:03	Date: 4.FEB.2020 11:07:27
Highest Channel	**Highest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.30 dBm Peak 26.72 dBm Crest 3.42 dB 10 % 1.72 dB 1 % 2.60 dB .1 % 3.12 dB .01 % 3.32 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.21 dBm Peak 25.66 dBm Crest 3.45 dB 10 % 1.64 dB 1 % 2.52 dB .1 % 3.00 dB .01 % 3.24 dB
Date: 4.FEB.2020 14:07:12	Date: 4.FEB.2020 11:07:37

WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



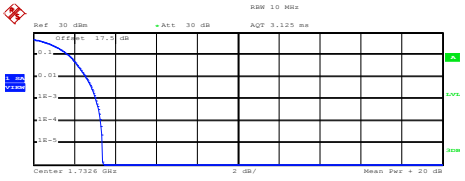
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	23.31 dBm
Peak	26.72 dBm
Crest	3.41 dB
10 %	1.72 dB
1 %	2.56 dB
.1 %	3.08 dB
.01 %	3.28 dB

Date: 4.FEB.2020 11:34:37

Middle Channel



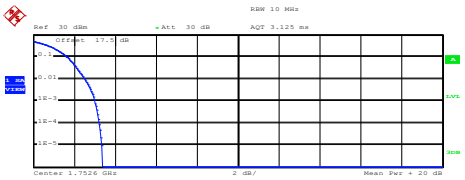
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	22.27 dBm
Peak	25.66 dBm
Crest	3.40 dB
10 %	1.72 dB
1 %	2.56 dB
.1 %	3.08 dB
.01 %	3.28 dB

Date: 4.FEB.2020 11:34:52

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

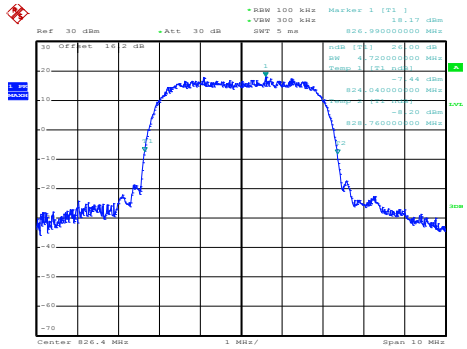
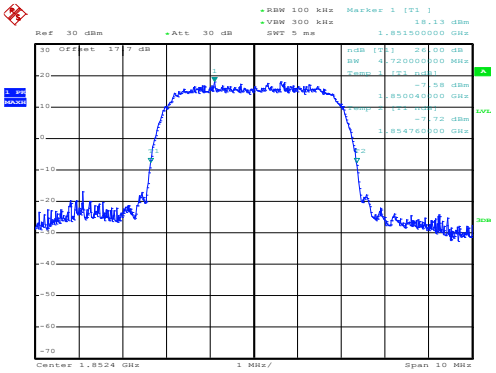
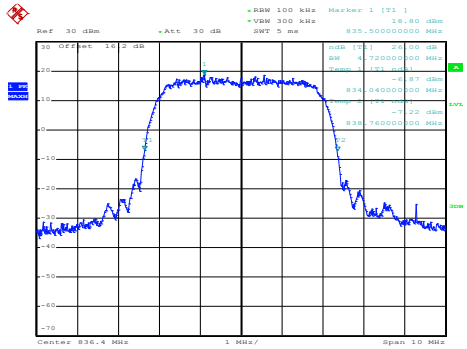
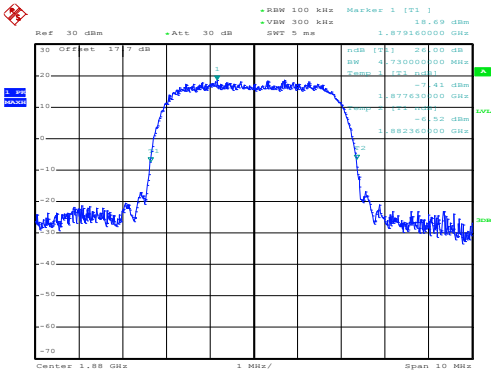
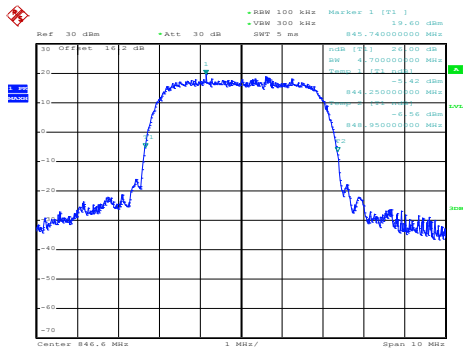
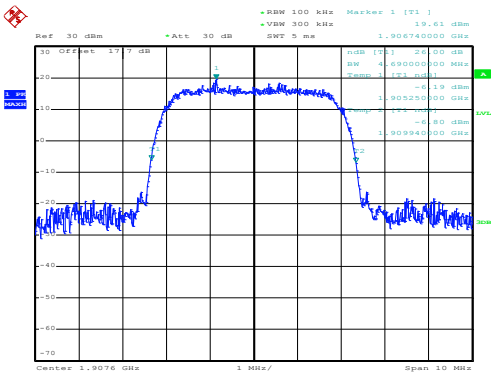
Trace 1

Mean	23.19 dBm
Peak	26.58 dBm
Crest	3.39 dB
10 %	1.68 dB
1 %	2.52 dB
.1 %	3.04 dB
.01 %	3.24 dB

Date: 4.FEB.2020 11:35:07

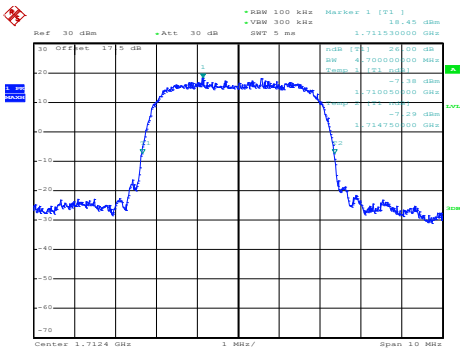
26dB Bandwidth

Mode	WCDMA Band V 26dB BW(MHz)	WCDMA Band II 26dB BW(MHz)	WCDMA Band IV 26dB BW(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.72	4.72	4.70
Middle CH	4.72	4.73	4.70
Highest CH	4.70	4.69	4.72

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
 Date: 4.FEB.2020 13:54:33	 Date: 4.FEB.2020 11:05:41
Middle Channel	**Middle Channel**
 Date: 4.FEB.2020 13:55:10	 Date: 4.FEB.2020 11:06:20
Highest Channel	**Highest Channel**
 Date: 4.FEB.2020 13:55:47	 Date: 4.FEB.2020 11:06:53

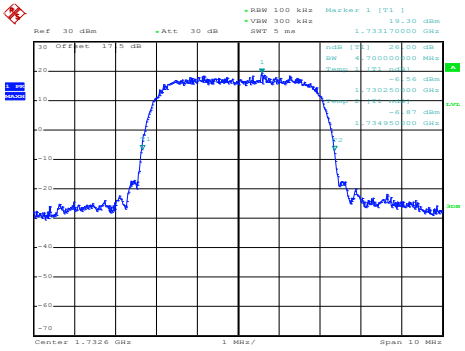
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



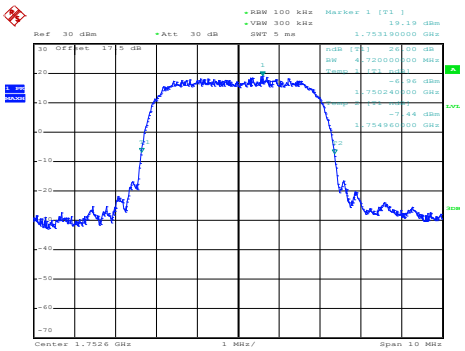
Date: 4.FEB.2020 11:19:49

Middle Channel



Date: 4.FEB.2020 11:21:00

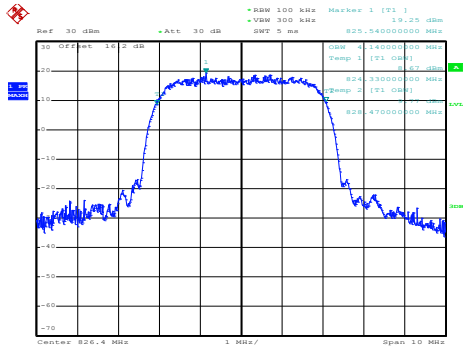
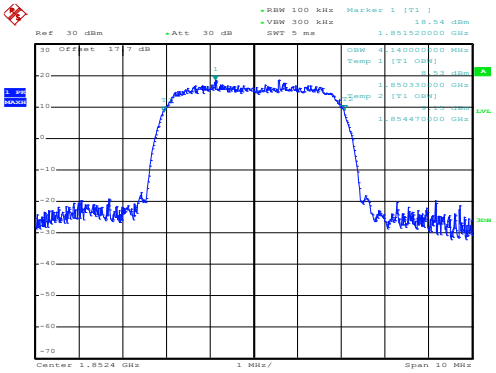
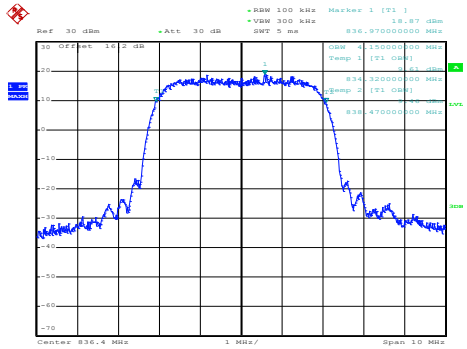
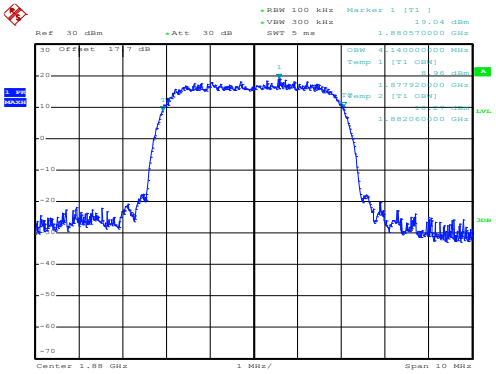
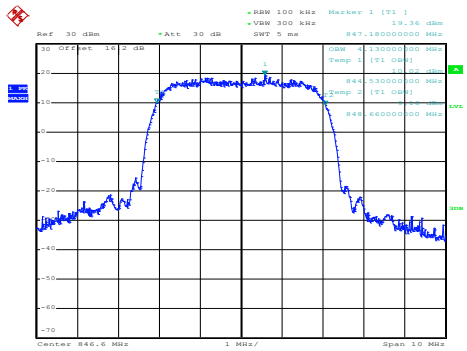
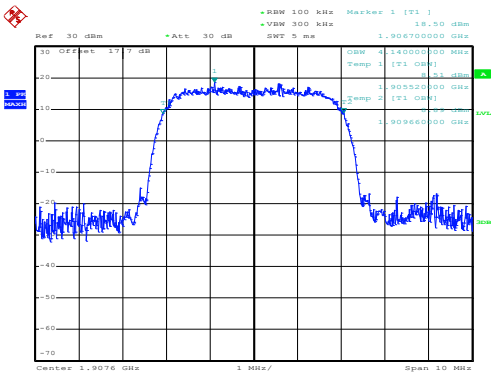
Highest Channel



Date: 4.FEB.2020 11:21:39

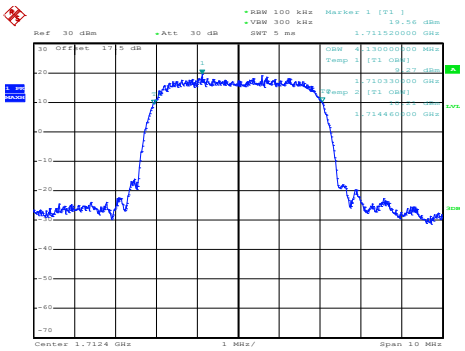
Occupied Bandwidth

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	4.13
Middle CH	4.15	4.14	4.15
Highest CH	4.13	4.14	4.14

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Date: 4.FEB.2020 13:56:29	Date: 4.FEB.2020 11:08:29
Middle Channel	**Middle Channel**
	
Date: 4.FEB.2020 13:57:06	Date: 4.FEB.2020 11:09:02
Highest Channel	**Highest Channel**
	
Date: 4.FEB.2020 13:57:39	Date: 4.FEB.2020 11:09:36

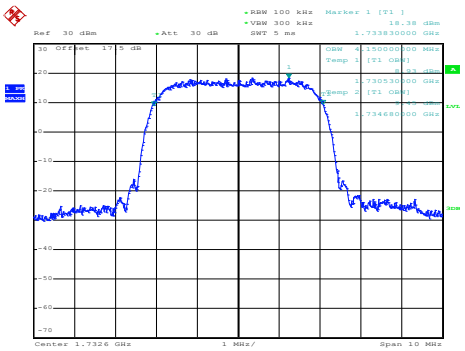
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



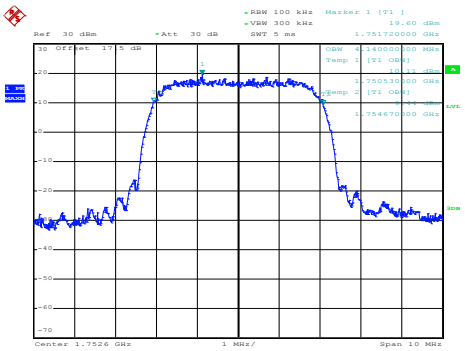
Date: 4.FEB.2020 11:22:30

Middle Channel



Date: 4.FEB.2020 11:23:03

Highest Channel

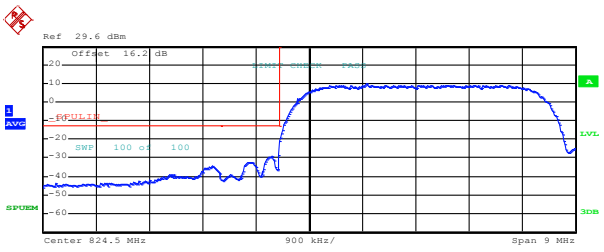


Date: 4.FEB.2020 11:23:36

Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

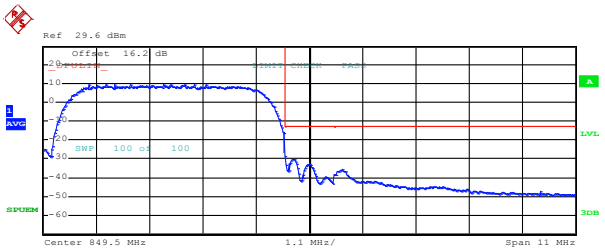
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.862000 M	-34.26	-21.26
823.000 M	824.000 M	50.00 k	823.872000 M	-29.46	-16.46
824.000 M	829.000 M	100.00 k	825.465000 M	9.74	-25.26

Date: 4.FEB.2020 14:00:48

Highest Band Edge

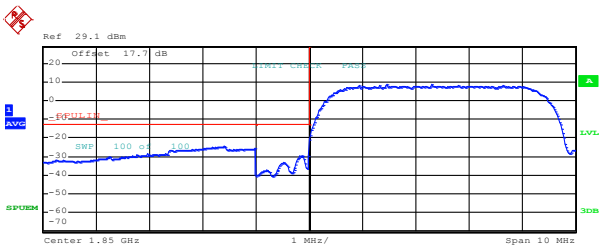


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
844.000 M	849.000 M	100.00 k	846.475000 M	9.66	-25.34
849.000 M	850.000 M	50.00 k	849.008000 M	-29.01	-16.01
850.000 M	855.000 M	100.00 k	850.175000 M	-35.48	-22.48

Date: 4.FEB.2020 14:03:41

WCDMA Band II (RMC 12.2Kbps)

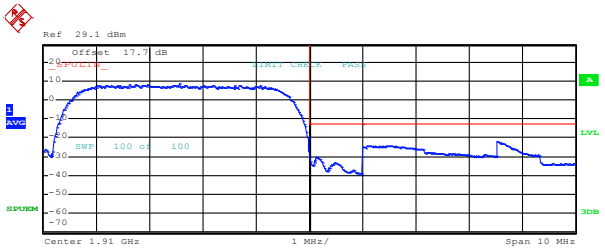
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848392 G	-24.60	-11.60
1.849 G	1.850 G	50.00 k	1.849868 G	-29.70	-16.70
1.850 G	1.855 G	100.00 k	1.852300 G	8.96	-26.04

Date: 4.FEB.2020 11:12:28

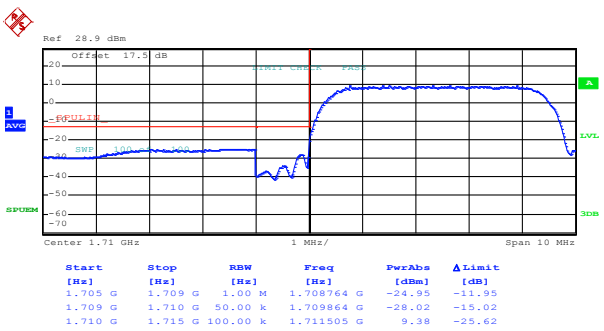
Highest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.907555 G	8.74	-26.26
1.910 G	1.911 G	50.00 k	1.910004 G	-29.79	-16.79
1.911 G	1.915 G	1.00 M	1.913516 G	-21.99	-8.99

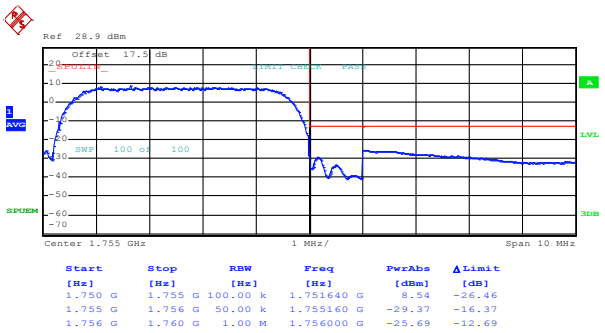
Date: 4.FEB.2020 11:15:21

WCDMA Band IV (RMC 12.2Kbps)	
Lowest Band Edge	**Highest Band Edge**



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.705 G	1.709 G	1.00 M	1.708764 G	-24.95	-11.95
1.709 G	1.710 G	50.00 k	1.709864 G	-28.02	-15.02
1.710 G	1.715 G	100.00 k	1.711505 G	9.38	-25.62

Date: 4.FEB.2020 11:27:45



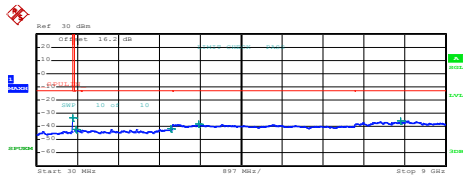
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.750 G	1.755 G	100.00 k	1.751640 G	8.54	-26.46
1.755 G	1.756 G	50.00 k	1.755160 G	-29.37	-16.37
1.756 G	1.760 G	1.00 M	1.756000 G	-25.69	-12.69

Date: 4.FEB.2020 11:30:34

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

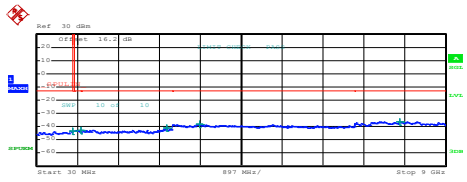
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.012500 M	-33.72	-20.72
855.000 M	1.000 G	1.00 M	898.790003 M	-42.35	-29.35
1.000 G	3.000 G	1.00 M	2.971000 G	-41.39	-28.39
3.000 G	7.000 G	1.00 M	3.591000 G	-38.33	-25.33
7.000 G	9.000 G	1.00 M	8.005000 G	-35.85	-22.85

Date: 4.FEB.2020 14:04:37

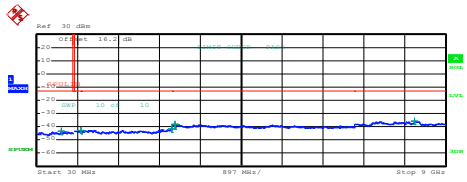
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	812.495000 M	-43.20	-30.20
855.000 M	1.000 G	1.00 M	992.568759 M	-42.72	-29.72
1.000 G	3.000 G	1.00 M	2.877000 G	-40.85	-27.85
3.000 G	7.000 G	1.00 M	3.602000 G	-38.16	-25.16
7.000 G	9.000 G	1.00 M	7.991000 G	-36.28	-23.28

Date: 4.FEB.2020 14:05:28

Highest Channel

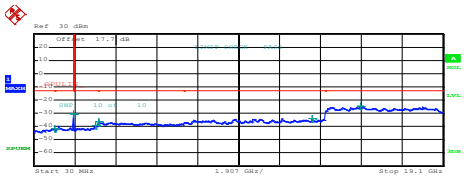


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	559.300000 M	-43.64	-30.64
855.000 M	1.000 G	1.00 M	998.151260 M	-43.10	-30.10
1.000 G	3.000 G	1.00 M	2.993000 G	-41.86	-28.86
3.000 G	7.000 G	1.00 M	3.056000 G	-38.25	-25.25
7.000 G	9.000 G	1.00 M	8.326500 G	-36.02	-23.02

Date: 4.FEB.2020 14:06:19

WCDMA Band II (RMC 12.2Kbps)

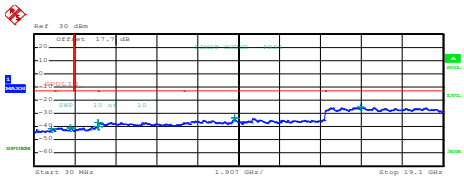
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	993.695000 M	-41.58	-28.58
1.000 G	1.845 G	1.00 M	1.844789 G	-30.78	-17.78
1.915 G	3.000 G	1.00 M	2.881735 G	-39.35	-26.35
3.000 G	7.000 G	1.00 M	3.035000 G	-36.35	-23.35
7.000 G	13.600 G	1.00 M	12.988675 G	-34.18	-21.18
13.600 G	19.100 G	1.00 M	15.231438 G	-24.91	-11.91

Date: 4.FEB.2020 11:16:17

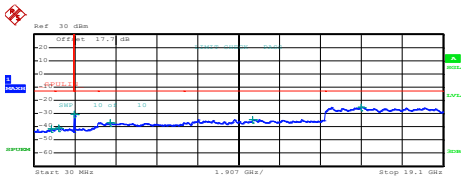
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	846.255000 M	-41.61	-28.61
1.000 G	1.845 G	1.00 M	1.707265 G	-41.11	-28.11
1.915 G	3.000 G	1.00 M	2.986980 G	-39.67	-26.67
3.000 G	7.000 G	1.00 M	3.000000 G	-36.74	-23.74
7.000 G	13.600 G	1.00 M	9.376825 G	-33.60	-20.60
13.600 G	19.100 G	1.00 M	15.241750 G	-25.08	-12.08

Date: 4.FEB.2020 11:17:14

Highest Channel

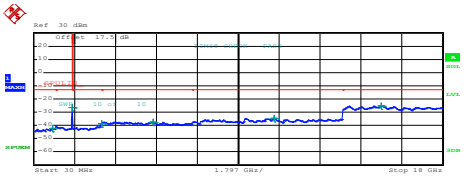


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	831.220000 M	-41.82	-28.82
1.000 G	1.845 G	1.00 M	1.158438 G	-40.83	-27.83
1.915 G	3.000 G	1.00 M	1.916899 G	-30.75	-17.75
3.000 G	7.000 G	1.00 M	3.596000 G	-36.86	-23.86
7.000 G	13.600 G	1.00 M	10.215025 G	-34.57	-21.57
13.600 G	19.100 G	1.00 M	15.301562 G	-25.11	-12.11

Date: 4.FEB.2020 11:18:10

WCDMA Band IV (RMC 12.2Kbps)

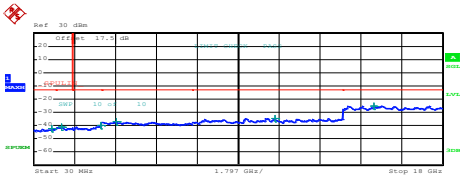
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	842.617500 M	-42.26	-29.26
1.000 G	1.705 G	1.00 M	1.704471 G	-26.42	-13.42
1.760 G	3.000 G	1.00 M	2.995970 G	-38.75	-25.75
3.000 G	7.000 G	1.00 M	5.276000 G	-37.36	-24.36
7.000 G	13.600 G	1.00 M	10.582150 G	-34.81	-21.81
13.600 G	18.000 G	1.00 M	15.292350 G	-25.09	-12.09

Date: 4.FEB.2020 11:31:27

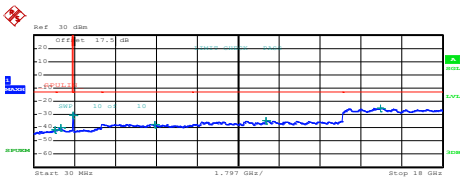
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	804.060000 M	-42.11	-29.11
1.000 G	1.705 G	1.00 M	1.256268 G	-41.32	-28.32
1.760 G	3.000 G	1.00 M	2.990700 G	-39.92	-26.92
3.000 G	7.000 G	1.00 M	3.642000 G	-37.13	-24.13
7.000 G	13.600 G	1.00 M	10.626700 G	-34.61	-21.61
13.600 G	18.000 G	1.00 M	14.979400 G	-25.18	-12.18

Date: 4.FEB.2020 11:33:16

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	978.417500 M	-41.88	-28.88
1.000 G	1.705 G	1.00 M	1.230711 G	-39.65	-26.65
1.760 G	3.000 G	1.00 M	1.760620 G	-30.34	-17.34
3.000 G	7.000 G	1.00 M	5.363000 G	-37.40	-24.40
7.000 G	13.600 G	1.00 M	10.254625 G	-34.81	-21.81
13.600 G	18.000 G	1.00 M	15.282450 G	-25.13	-12.13

Date: 4.FEB.2020 11:34:07

Frequency Stability

Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0048	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0132	
-30	Normal Voltage	0.0143	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0000	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0027	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0027	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0005	
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	0.0069	PASS
40	Normal Voltage	0.0058	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0023	

Note:

1. Normal Voltage =3.87V. ；Battery End Point (BEP) = 3.6 V.；Maximum Voltage =4.45 V

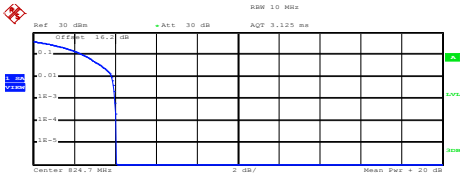
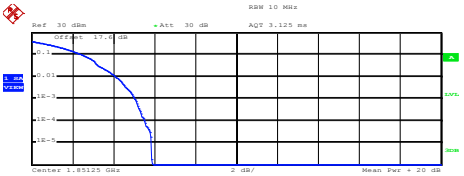
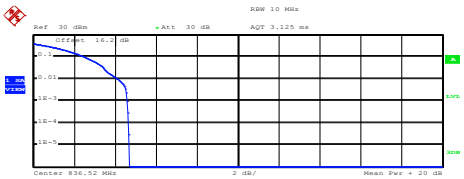
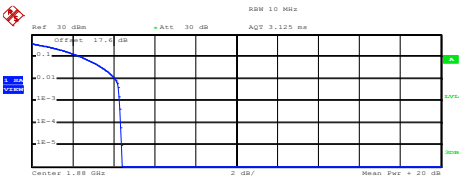
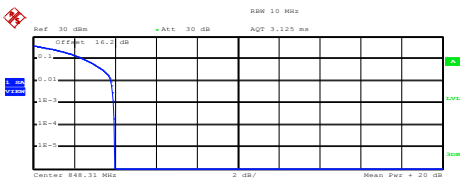
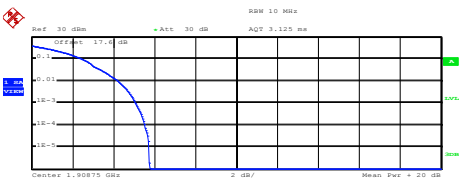
2. The frequency fundamental emissions stay within the authorized frequency block.

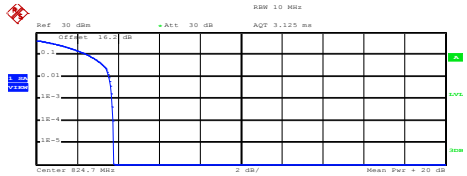
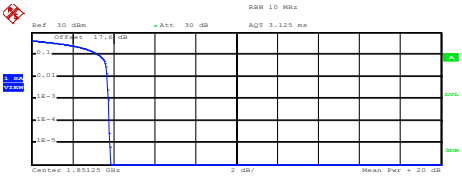
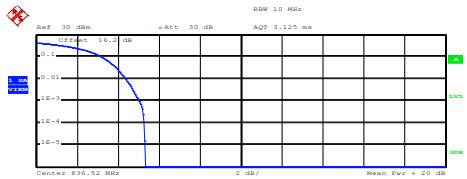
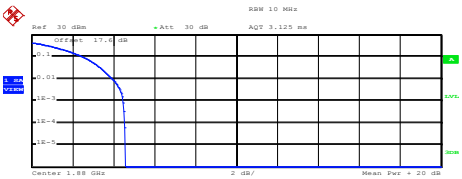
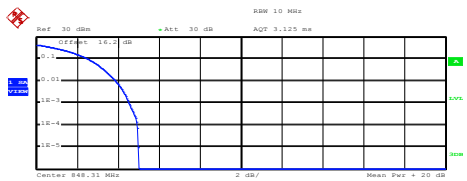
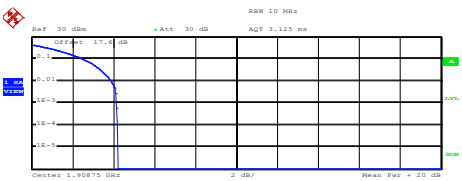
A4. CDMA

Peak-to-Average Ratio

Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xRTT	1xRTT	Result
Lowest CH	4.00	5.04	PASS
Middle CH	4.60	4.32	
Highest CH	3.92	5.08	

Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0	Result
Lowest CH	3.72	3.76	PASS
Middle CH	5.04	4.48	
Highest CH	4.56	4.16	

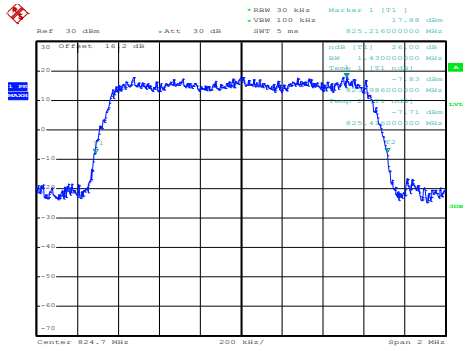
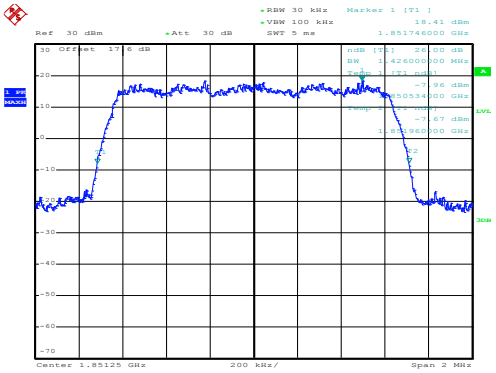
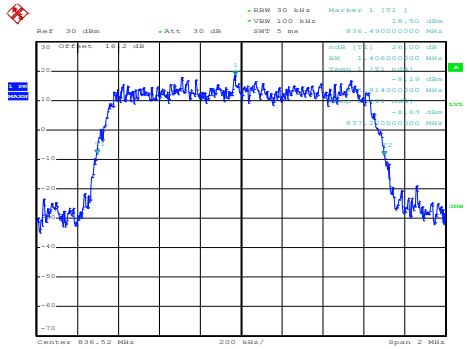
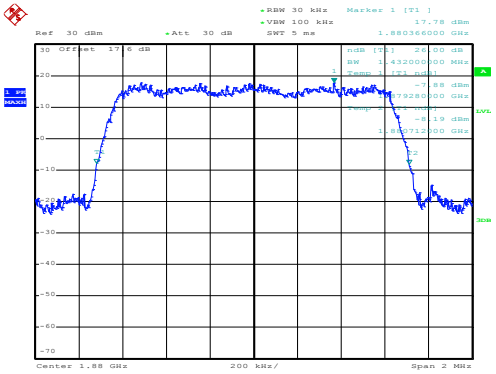
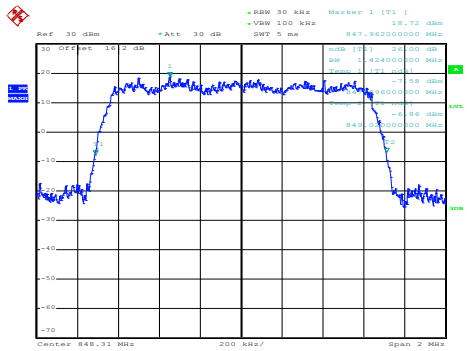
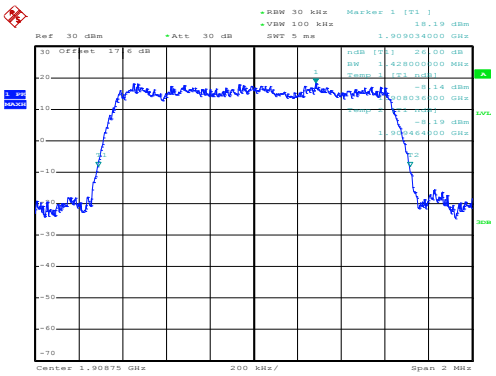
CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.66 dBm Peak 27.71 dBm Crest 4.05 dB 10 % 2.48 dB 1 % 3.84 dB .1 % 4.00 dB .01 % 4.08 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 21.91 dBm Peak 27.78 dBm Crest 5.87 dB 10 % 2.48 dB 1 % 4.12 dB .1 % 5.04 dB .01 % 5.52 dB
Date: 4.FEB.2020 14:31:48	Date: 4.FEB.2020 15:58:42
Middle Channel	**Middle Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.61 dBm Peak 27.28 dBm Crest 4.68 dB 10 % 2.56 dB 1 % 4.12 dB .1 % 4.60 dB .01 % 4.68 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 21.59 dBm Peak 26.02 dBm Crest 4.43 dB 10 % 2.48 dB 1 % 4.08 dB .1 % 4.32 dB .01 % 4.36 dB
Date: 4.FEB.2020 14:32:55	Date: 4.FEB.2020 15:59:06
Highest Channel	**Highest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.20 dBm Peak 26.16 dBm Crest 3.96 dB 10 % 2.52 dB 1 % 3.80 dB .1 % 3.92 dB .01 % 3.96 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.38 dBm Peak 28.13 dBm Crest 5.75 dB 10 % 2.48 dB 1 % 4.24 dB .1 % 5.08 dB .01 % 5.52 dB
Date: 4.FEB.2020 14:33:31	Date: 4.FEB.2020 15:59:27

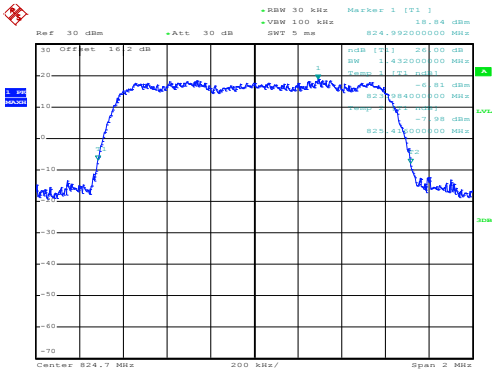
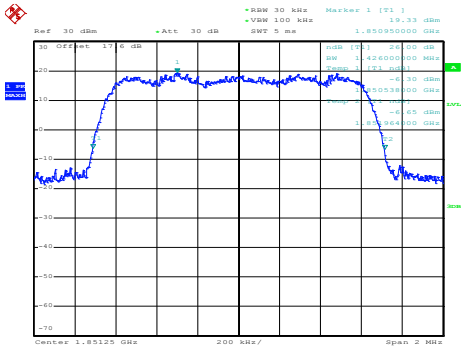
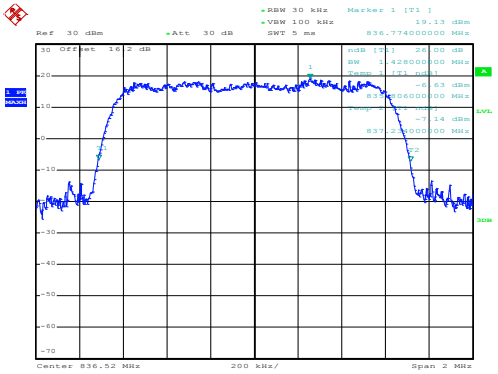
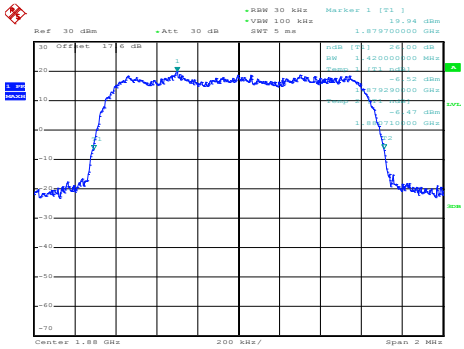
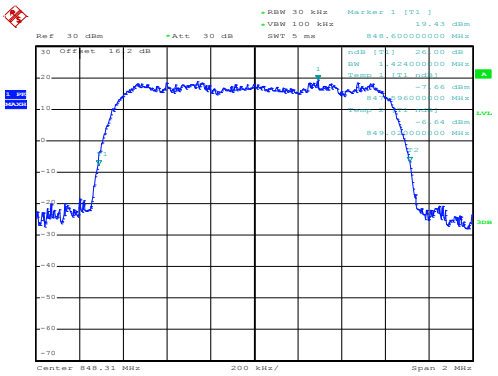
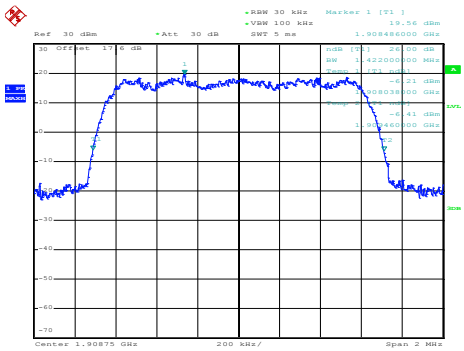
CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.06 dBm Peak 27.83 dBm Crest 3.76 dB 10 % 2.52 dB 1 % 3.56 dB .1 % 3.72 dB .01 % 3.76 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.13 dBm Peak 27.97 dBm Crest 3.84 dB 10 % 3.28 dB 1 % 3.68 dB .1 % 3.76 dB .01 % 3.80 dB
Date: 18.MAR.2020 19:21:21	Date: 19.MAR.2020 10:19:20
Middle Channel	**Middle Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.99 dBm Peak 29.31 dBm Crest 5.32 dB 10 % 3.24 dB 1 % 4.36 dB .1 % 5.04 dB .01 % 5.28 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.04 dBm Peak 28.60 dBm Crest 4.56 dB 10 % 2.56 dB 1 % 3.92 dB .1 % 4.48 dB .01 % 4.56 dB
Date: 18.MAR.2020 19:21:35	Date: 19.MAR.2020 10:19:35
Highest Channel	**Highest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.96 dBm Peak 28.96 dBm Crest 5.00 dB 10 % 2.56 dB 1 % 3.88 dB .1 % 4.56 dB .01 % 4.96 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.88 dBm Peak 28.11 dBm Crest 4.23 dB 10 % 2.56 dB 1 % 3.88 dB .1 % 4.16 dB .01 % 4.20 dB
Date: 18.MAR.2020 19:21:43	Date: 19.MAR.2020 10:19:51

26dB Bandwidth

Mode	CDMA BC0 26dB BW(MHz)	CDMA BC1 26dB BW(MHz)
Mod.	1xRTT	1xRTT
Lowest CH	1.43	1.43
Middle CH	1.41	1.43
Highest CH	1.42	1.43

Mode	CDMA BC0 26dB BW(MHz)	CDMA BC1 26dB BW(MHz)
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0
Lowest CH	1.43	1.43
Middle CH	1.43	1.42
Highest CH	1.42	1.42

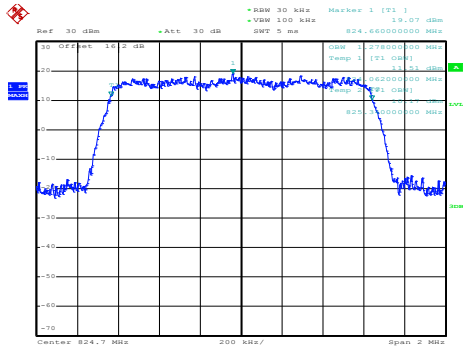
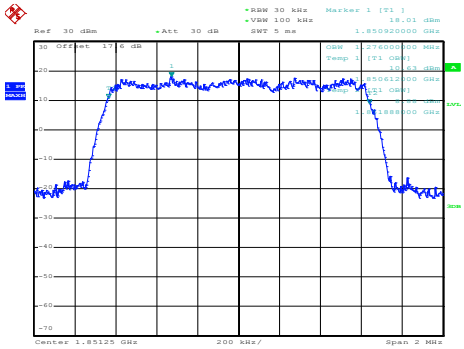
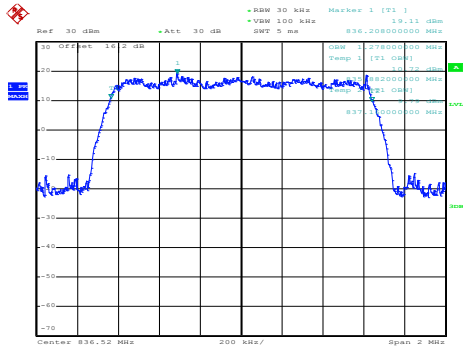
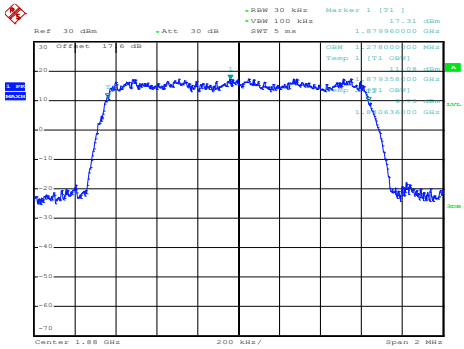
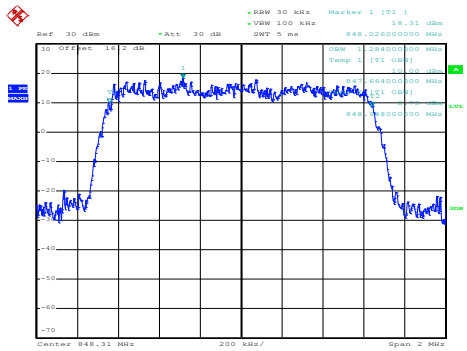
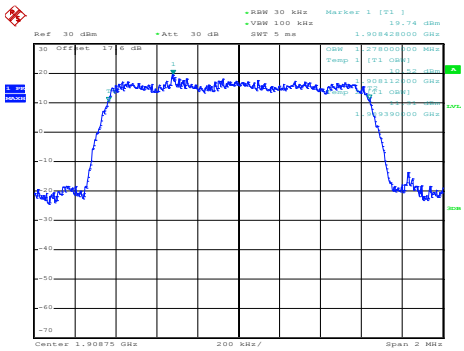
CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
	
Date: 4.FEB.2020 14:20:45	Date: 4.FEB.2020 15:33:22
Middle Channel	**Middle Channel**
	
Date: 4.FEB.2020 14:21:20	Date: 4.FEB.2020 15:34:06
Highest Channel	**Highest Channel**
	
Date: 4.FEB.2020 14:25:31	Date: 4.FEB.2020 15:34:54

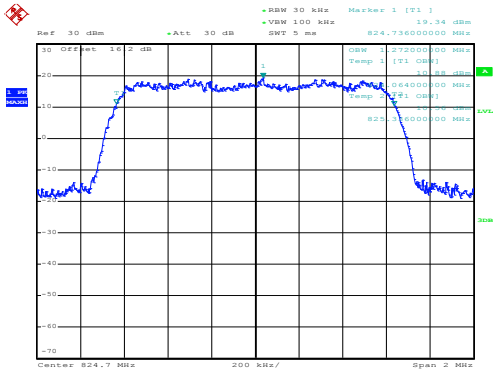
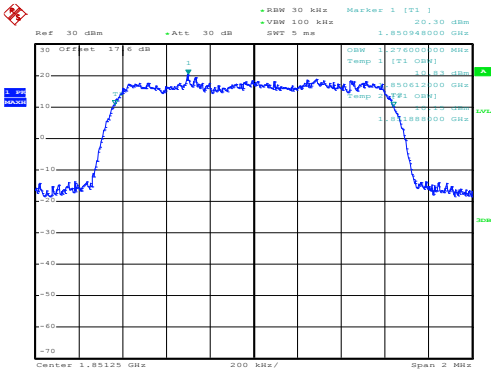
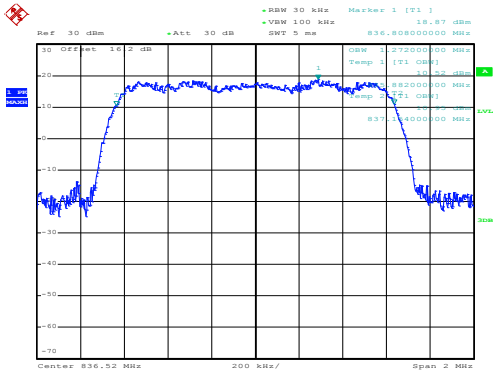
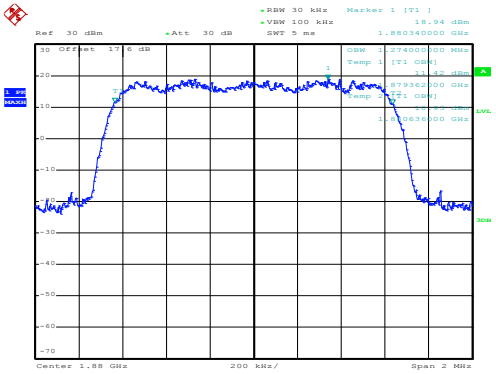
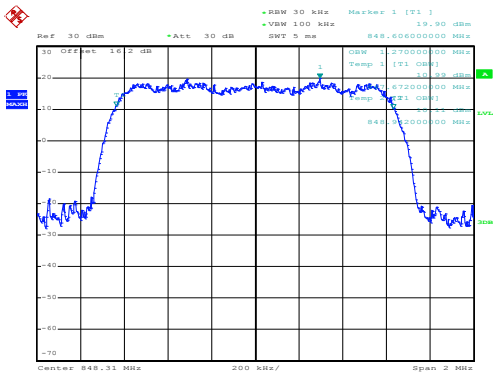
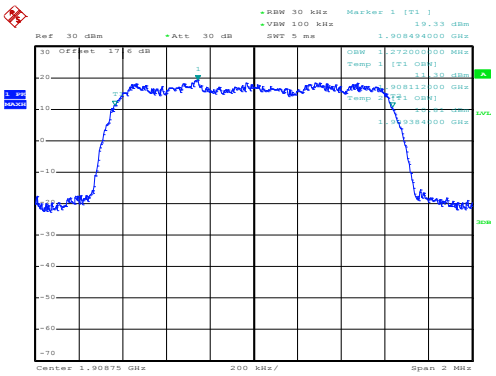
CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
	
Date: 18.MAR.2020 19:06:09	Date: 19.MAR.2020 10:17:31
Middle Channel	**Middle Channel**
	
Date: 18.MAR.2020 19:08:16	Date: 19.MAR.2020 10:18:06
Highest Channel	**Highest Channel**
	
Date: 18.MAR.2020 19:08:51	Date: 19.MAR.2020 10:18:39

Occupied Bandwidth

Mode	CDMA BC0 99% OBW(MHz)	CDMA BC1 99% OBW(MHz)
Mod.	1xRTT	1xRTT
Lowest CH	1.28	1.28
Middle CH	1.28	1.28
Highest CH	1.28	1.28

Mode	CDMA BC0 99% OBW(MHz)	CDMA BC1 99% OBW(MHz)
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0
Lowest CH	1.27	1.28
Middle CH	1.27	1.27
Highest CH	1.27	1.27

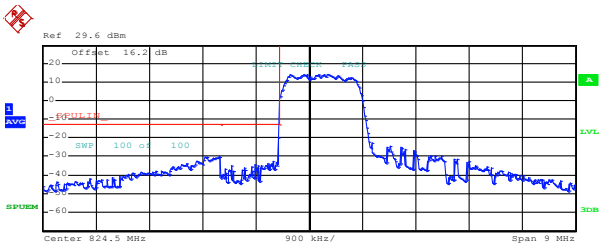
CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
	
Date: 4.FEB.2020 14:34:22	Date: 4.FEB.2020 15:40:49
Middle Channel	**Middle Channel**
	
Date: 4.FEB.2020 14:36:51	Date: 4.FEB.2020 15:43:26
Highest Channel	**Highest Channel**
	
Date: 4.FEB.2020 14:37:32	Date: 4.FEB.2020 15:44:08

CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
	
Date: 18.MAR.2020 19:10:24	Date: 19.MAR.2020 10:04:45
Middle Channel	**Middle Channel**
	
Date: 18.MAR.2020 19:10:56	Date: 19.MAR.2020 10:05:19
Highest Channel	**Highest Channel**
	
Date: 18.MAR.2020 19:11:28	Date: 19.MAR.2020 10:05:51

Conducted Band Edge

CDMA BC0 (1xRTT)

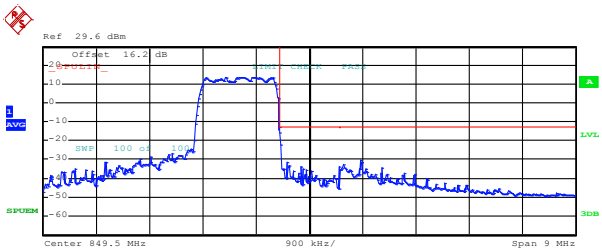
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.742000 M	-30.15	-17.15
823.000 M	824.000 M	14.00 k	823.996000 M	-21.62	-8.62
824.000 M	829.000 M	100.00 k	824.455000 M	14.29	-20.71

Date: 4.FEB.2020 14:40:53

Highest Band Edge

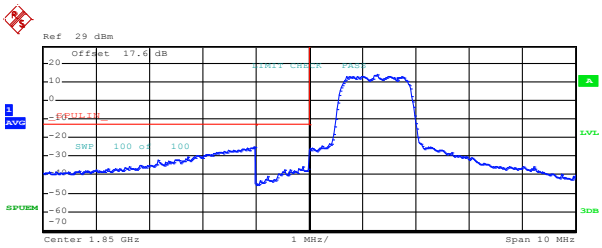


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
845.000 M	849.000 M	100.00 k	848.384000 M	13.78	-21.22
849.000 M	850.000 M	14.00 k	849.004000 M	-16.57	-3.57
850.000 M	854.000 M	100.00 k	850.368000 M	-30.52	-17.52

Date: 4.FEB.2020 14:45:03

CDMA BC1 (1xRTT)

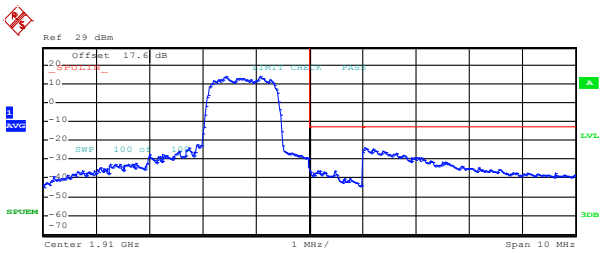
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848988 G	-24.95	-11.95
1.849 G	1.850 G	14.00 k	1.849884 G	-35.74	-22.74
1.850 G	1.855 G	100.00 k	1.851270 G	14.03	-20.97

Date: 4.FEB.2020 15:47:16

Highest Band Edge

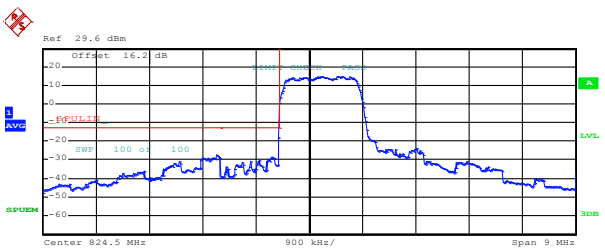


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.908435 G	14.30	-20.70
1.910 G	1.911 G	14.00 k	1.910468 G	-36.12	-23.12
1.911 G	1.915 G	1.00 M	1.911044 G	-23.87	-10.87

Date: 4.FEB.2020 15:54:11

CDMA BC0 (1xEV-DO Rev. 0)

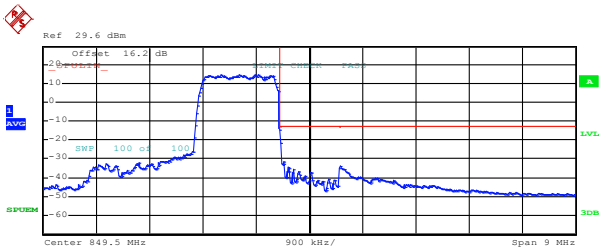
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.928000 M	-27.55	-14.55
823.000 M	824.000 M	14.00 k	823.996000 M	-19.99	-6.99
824.000 M	829.000 M	100.00 k	824.960000 M	14.90	-20.10

Date: 18.MAR.2020 19:14:36

Highest Band Edge

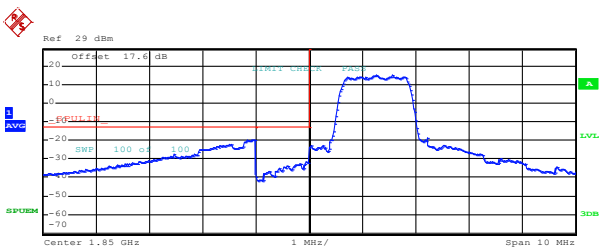


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
845.000 M	849.000 M	100.00 k	848.316000 M	14.97	-20.03
849.000 M	850.000 M	14.00 k	849.004000 M	-14.59	-1.59
850.000 M	854.000 M	100.00 k	850.020000 M	-33.61	-20.61

Date: 18.MAR.2020 19:17:25

CDMA BC1 (1xEV-DO Rev. 0)

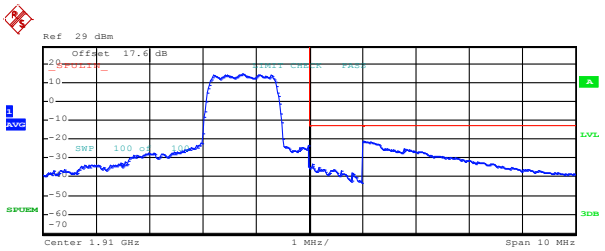
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848980 G	-19.61	-6.61
1.849 G	1.850 G	14.00 k	1.849940 G	-31.78	-18.78
1.850 G	1.855 G	100.00 k	1.851250 G	15.05	-19.95

Date: 19.MAR.2020 10:08:46

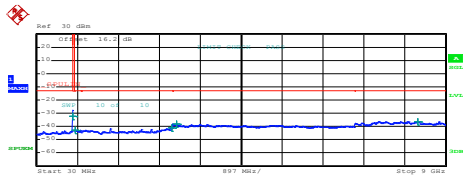
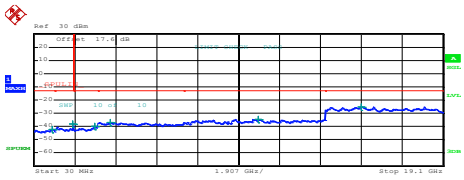
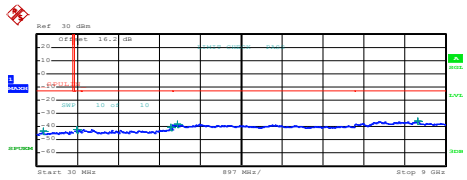
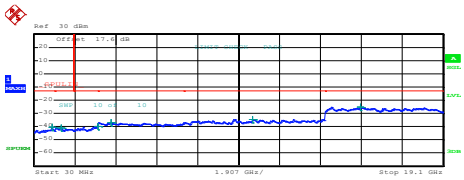
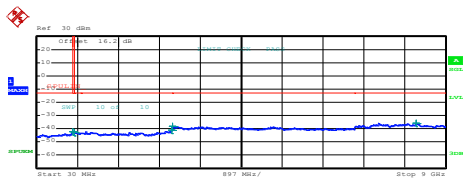
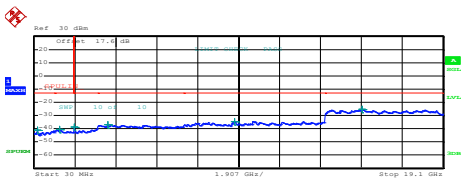
Highest Band Edge

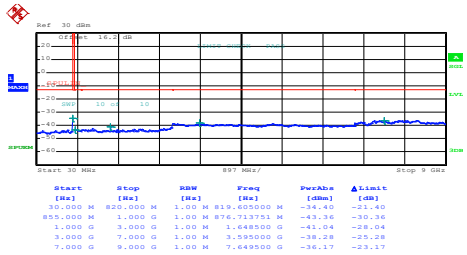
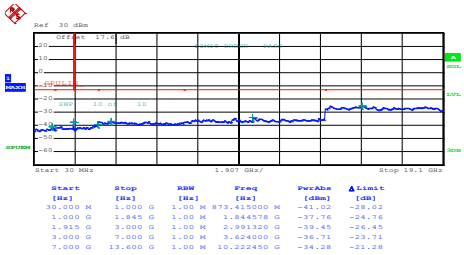
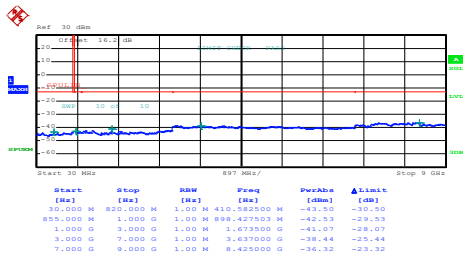
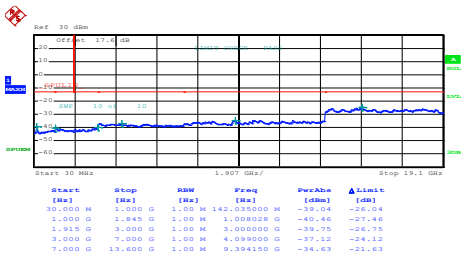
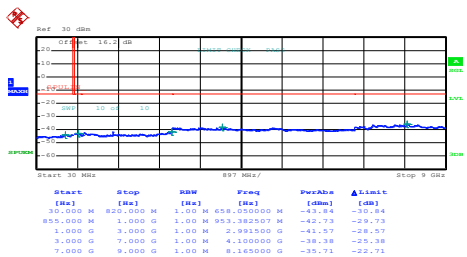
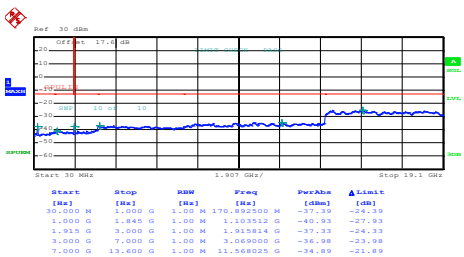


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.908750 G	14.58	-20.42
1.910 G	1.911 G	14.00 k	1.910060 G	-33.36	-20.36
1.911 G	1.915 G	1.00 M	1.911008 G	-21.21	-8.21

Date: 19.MAR.2020 10:14:20

Conducted Spurious Emission

CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
	
Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 820.000 M / 1.00 M / 819.802500 M / -32.05 / -19.05 855.000 M / 1.000 G / 1.00 M / 870.623751 M / -42.61 / -29.61 1.000 G / 3.000 G / 1.00 M / 2.988500 G / -40.98 / -27.98 3.000 G / 7.000 G / 1.00 M / 3.096000 G / -38.19 / -25.19 7.000 G / 9.000 G / 1.00 M / 8.386000 G / -36.21 / -23.21	Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 875.597500 M / -42.12 / -29.12 1.000 G / 1.845 G / 1.00 M / 1.835705 G / -37.93 / -24.93 1.915 G / 3.000 G / 1.00 M / 2.867630 G / -39.76 / -26.76 3.000 G / 7.000 G / 1.00 M / 3.583000 G / -36.81 / -23.81 7.000 G / 13.600 G / 1.00 M / 10.498000 G / -34.71 / -21.71 13.600 G / 19.100 G / 1.00 M / 15.295375 G / -25.25 / -12.25
Date: 4.FEB.2020 14:27:00	Date: 4.FEB.2020 15:56:13
Middle Channel	**Middle Channel**
	
Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 820.000 M / 1.00 M / 168.645000 M / -43.54 / -30.54 855.000 M / 1.000 G / 1.00 M / 907.852504 M / -42.27 / -29.27 1.000 G / 3.000 G / 1.00 M / 2.975000 G / -40.72 / -27.72 3.000 G / 7.000 G / 1.00 M / 3.113000 G / -38.13 / -25.13 7.000 G / 9.000 G / 1.00 M / 8.392500 G / -35.89 / -22.89	Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 850.862500 M / -40.72 / -27.72 1.000 G / 1.845 G / 1.00 M / 1.273780 G / -40.64 / -27.84 1.915 G / 3.000 G / 1.00 M / 2.988336 G / -39.99 / -26.99 3.000 G / 7.000 G / 1.00 M / 3.599000 G / -36.95 / -23.95 7.000 G / 13.600 G / 1.00 M / 10.218325 G / -34.55 / -21.55 13.600 G / 19.100 G / 1.00 M / 15.252750 G / -25.26 / -12.26
Date: 4.FEB.2020 14:28:12	Date: 4.FEB.2020 15:57:15
Highest Channel	**Highest Channel**
	
Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 820.000 M / 1.00 M / 816.050000 M / -42.30 / -29.30 855.000 M / 1.000 G / 1.00 M / 856.015000 M / -42.83 / -29.83 1.000 G / 3.000 G / 1.00 M / 2.982500 G / -41.29 / -28.29 3.000 G / 7.000 G / 1.00 M / 3.003000 G / -38.10 / -25.10 7.000 G / 9.000 G / 1.00 M / 8.348500 G / -35.96 / -22.96	Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 170.407500 M / -40.82 / -27.82 1.000 G / 1.845 G / 1.00 M / 1.215686 G / -40.25 / -27.25 1.915 G / 3.000 G / 1.00 M / 1.915271 G / -38.68 / -25.68 3.000 G / 7.000 G / 1.00 M / 3.474000 G / -37.04 / -24.04 7.000 G / 13.600 G / 1.00 M / 9.369400 G / -34.65 / -21.65 13.600 G / 19.100 G / 1.00 M / 15.327688 G / -25.06 / -12.06
Date: 4.FEB.2020 14:31:03	Date: 4.FEB.2020 15:58:06

CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
	
Date: 18.MAR.2020 19:18:33	Date: 19.MAR.2020 10:15:10
Middle Channel	**Middle Channel**
	
Date: 18.MAR.2020 19:19:24	Date: 19.MAR.2020 10:16:01
Highest Channel	**Highest Channel**
	
Date: 18.MAR.2020 19:20:10	Date: 19.MAR.2020 10:16:52

Frequency Stability

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

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

Test Conditions	Middle Channel	CDMA BC0 (1xEV-DO Rev. 0)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0000	PASS
40	Normal Voltage	0.0000	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0060	
-20	Normal Voltage	0.0060	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0048	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0000	

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

Note:

1. Normal Voltage = 3.87V. ；Battery End Point (BEP) =3.6 V.；Maximum Voltage =4.45 V

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

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

ERP/EIRP

<Primary Antenna>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	32.98	1.9861	28.63	0.7295
Middle	GPRS class 8	32.70	1.8621	28.35	0.6839
Highest	(GT - LC = -2.2 dB)	32.50	1.7783	28.15	0.6531
Lowest	GSM850	27.15	0.5188	22.80	0.1905
Middle	EDGE class 8	27.11	0.5140	22.76	0.1888
Highest	(GT - LC = -2.2 dB)	26.84	0.4831	22.49	0.1774
Lowest	WCDMA Band V	25.21	0.3319	20.86	0.1219
Middle	RMC 12.2Kbps	25.09	0.3228	20.74	0.1186
Highest	(GT - LC = -2.2 dB)	25.25	0.3350	20.90	0.1230
Lowest	CDMA BC0	24.86	0.3062	20.51	0.1125
Middle	1xRTT	24.85	0.3055	20.50	0.1122
Highest	(GT - LC = -2.2 dB)	24.92	0.3105	20.57	0.1140
Lowest	CDMA BC0	24.65	0.2917	20.30	0.1072
Middle	1xEV-DO	24.68	0.2938	20.33	0.1079
Highest	(GT - LC = -2.2 dB)	24.73	0.2972	20.38	0.1091
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	29.63	0.9183	31.53	1.4223
Middle	GPRS class 8	29.72	0.9376	31.62	1.4521
Highest	(GT - LC = 1.9 dB)	29.84	0.9638	31.74	1.4928
Lowest	GSM1900	25.84	0.3837	27.74	0.5943
Middle	EDGE class 8	25.67	0.3690	27.57	0.5715
Highest	(GT - LC = 1.9 dB)	25.66	0.3681	27.56	0.5702
Lowest	WCDMA Band II	24.78	0.3006	26.68	0.4656
Middle	RMC 12.2Kbps	24.85	0.3055	26.75	0.4732
Highest	(GT - LC = 1.9 dB)	25.05	0.3199	26.95	0.4955
Lowest	CDMA BC1	24.93	0.3112	26.83	0.4819
Middle	1xRTT	24.85	0.3055	26.75	0.4732
Highest	(GT - LC = 1.9 dB)	24.74	0.2979	26.64	0.4613
Lowest	CDMA BC1	24.88	0.3076	26.78	0.4764
Middle	1xEV-DO	24.80	0.3020	26.70	0.4677
Highest	(GT - LC = 1.9 dB)	24.70	0.2951	26.60	0.4571
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	24.85	0.3055	25.95	0.3936
Middle	RMC 12.2Kbps	24.83	0.3041	25.93	0.3917
Highest	(GT - LC = 1.1 dB)	24.87	0.3069	25.97	0.3954
Limit	EIRP < 1W	Result		PASS	

<ASDIV Antenna>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	32.29	1.6943	26.64	0.4613
Middle	GPRS class 8	32.37	1.7258	26.72	0.4699
Highest	(GT - LC = -3.5 dB)	32.19	1.6558	26.54	0.4508
Lowest	GSM850	26.82	0.4808	21.17	0.1309
Middle	EDGE class 8	26.76	0.4742	21.11	0.1291
Highest	(GT - LC = -3.5 dB)	26.56	0.4529	20.91	0.1233
Lowest	WCDMA Band V	24.85	0.3055	19.20	0.0832
Middle	RMC 12.2Kbps	24.74	0.2979	19.09	0.0811
Highest	(GT - LC = -3.5 dB)	24.86	0.3062	19.21	0.0834
Lowest	CDMA BC0	24.46	0.2793	18.81	0.0760
Middle	1xRTT	24.45	0.2786	18.80	0.0759
Highest	(GT - LC = -3.5 dB)	24.52	0.2831	18.87	0.0771
Lowest	CDMA BC0	24.25	0.2661	18.60	0.0724
Middle	1xEV-DO	24.28	0.2679	18.63	0.0729
Highest	(GT - LC = -3.5 dB)	24.33	0.2710	18.68	0.0738
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	30.09	1.0209	31.79	1.5101
Middle	GPRS class 8	30.08	1.0186	31.78	1.5066
Highest	(GT - LC = 1.7 dB)	30.31	1.0740	32.01	1.5885
Lowest	GSM1900	26.04	0.4018	27.74	0.5943
Middle	EDGE class 8	26.10	0.4074	27.80	0.6026
Highest	(GT - LC = 1.7 dB)	26.23	0.4198	27.93	0.6209
Lowest	WCDMA Band II	25.15	0.3273	26.85	0.4842
Middle	RMC 12.2Kbps	25.04	0.3192	26.74	0.4721
Highest	(GT - LC = 1.7 dB)	25.19	0.3304	26.89	0.4887
Lowest	CDMA BC1	25.41	0.3475	27.11	0.5140
Middle	1xRTT	25.34	0.3420	27.04	0.5058
Highest	(GT - LC = 1.7 dB)	25.22	0.3327	26.92	0.4920
Lowest	CDMA BC1	25.22	0.3327	26.92	0.4920
Middle	1xEV-DO	25.14	0.3266	26.84	0.4831
Highest	(GT - LC = 1.7 dB)	25.11	0.3243	26.81	0.4797
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	25.17	0.3289	24.77	0.2999
Middle	RMC 12.2Kbps	25.16	0.3281	24.76	0.2992
Highest	(GT - LC = -0.4 dB)	25.14	0.3266	24.74	0.2979
Limit	EIRP < 1W	Result		PASS	

Radiated Spurious Emission

<Primary Antenna>

<Ant. 0>

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	-41.19	-13	-28.19	-54.16	-46.58	1.23	8.76	H
	2472	-54.31	-13	-41.31	-71.14	-61.20	1.44	10.48	H
	3297	-57.45	-13	-44.45	-76.05	-65.39	1.70	11.79	H
	1648	-40.66	-13	-27.66	-53.51	-46.05	1.23	8.76	V
	2472	-51.10	-13	-38.10	-68.22	-57.99	1.44	10.48	V
	3297	-56.72	-13	-43.72	-75.71	-64.66	1.70	11.79	V
Middle	1672	-55.11	-13	-42.11	-68.13	-60.58	1.24	8.85	H
	2509	-58.58	-13	-45.58	-75.35	-65.50	1.44	10.51	H
	3346	-57.32	-13	-44.32	-75.61	-65.36	1.74	11.94	H
	1672	-62.00	-13	-49.00	-74.91	-67.47	1.24	8.85	V
	2512	-58.55	-13	-45.55	-75.51	-65.47	1.44	10.51	V
	3344	-56.88	-13	-43.88	-75.7	-64.92	1.74	11.93	V
Highest	1696	-39.45	-13	-26.45	-52.51	-45.00	1.24	8.94	H
	2544	-48.95	-13	-35.95	-65.78	-55.89	1.44	10.54	H
	4248	-53.60	-13	-40.60	-74.19	-61.50	2.05	12.10	H
	1696	-38.69	-13	-25.69	-51.66	-44.24	1.24	8.94	V
	2544	-47.40	-13	-34.40	-64.44	-54.34	1.44	10.54	V
	4248	-54.24	-13	-41.24	-75.53	-62.14	2.05	12.10	V

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

EDGE850

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	-47.04	-13	-34.04	-60.01	-52.43	1.23	8.76	H
	2473	-56.81	-13	-43.81	-73.64	-63.70	1.44	10.48	H
	3297	-56.99	-13	-43.99	-75.59	-64.93	1.70	11.79	H
	1648	-48.10	-13	-35.10	-60.95	-53.49	1.23	8.76	V
	2473	-56.72	-13	-43.72	-73.84	-63.61	1.44	10.48	V
	3297	-56.85	-13	-43.85	-75.84	-64.79	1.70	11.79	V
Middle	1672	-48.33	-13	-35.33	-61.35	-53.80	1.24	8.85	H
	2509	-56.57	-13	-43.57	-73.34	-63.49	1.44	10.51	H
	3346	-57.49	-13	-44.49	-75.78	-65.53	1.74	11.94	H
	1672	-48.37	-13	-35.37	-61.28	-53.84	1.24	8.85	V
	2509	-56.72	-13	-43.72	-73.68	-63.64	1.44	10.51	V
	3346	-56.94	-13	-43.94	-75.76	-64.98	1.74	11.94	V
Highest	1696	-50.42	-13	-37.42	-63.48	-55.97	1.24	8.94	H
	2544	-53.06	-13	-40.06	-69.89	-60.00	1.44	10.54	H
	3395	-57.81	-13	-44.81	-75.8	-65.96	1.78	12.09	H
	1696	-46.52	-13	-33.52	-59.49	-52.07	1.24	8.94	V
	2544	-56.14	-13	-43.14	-73.18	-63.08	1.44	10.54	V
	3395	-57.20	-13	-44.20	-75.86	-65.35	1.78	12.09	V

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

WCDMA V

WCDMA V									
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	-59.96	-13	-46.96	-72.93	-65.35	1.23	8.76	H
	2480	-58.79	-13	-45.79	-75.6	-65.69	1.44	10.48	H
	3306	-57.11	-13	-44.11	-75.64	-65.07	1.71	11.82	H
	1648	-59.33	-13	-46.33	-72.18	-64.72	1.23	8.76	V
	2480	-58.08	-13	-45.08	-75.15	-64.98	1.44	10.48	V
	3306	-56.63	-13	-43.63	-75.59	-64.59	1.71	11.82	V
Middle	1672	-59.27	-13	-46.27	-72.29	-64.74	1.24	8.85	H
	2509	-58.17	-13	-45.17	-74.94	-65.09	1.44	10.51	H
	3346	-57.15	-13	-44.15	-75.44	-65.19	1.74	11.94	H
	1672	-58.84	-13	-45.84	-71.75	-64.31	1.24	8.85	V
	2509	-58.42	-13	-45.42	-75.38	-65.34	1.44	10.51	V
	3346	-56.46	-13	-43.46	-75.28	-64.50	1.74	11.94	V
Highest	1696	-60.26	-13	-47.26	-73.32	-65.81	1.24	8.94	H
	2540	-58.46	-13	-45.46	-75.27	-65.40	1.44	10.53	H
	3386	-57.49	-13	-44.49	-75.53	-65.62	1.78	12.06	H
	1696	-59.08	-13	-46.08	-72.05	-64.63	1.24	8.94	V
	2540	-58.38	-13	-45.38	-75.41	-65.32	1.44	10.53	V
	3386	-56.92	-13	-43.92	-75.6	-65.05	1.78	12.06	V

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

CDMA2000 BC0

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	-60.48	-13	-47.48	-73.45	-65.87	1.23	8.76	H
	2474	-58.31	-13	-45.31	-75.14	-65.20	1.44	10.48	H
	3298	-57.19	-13	-44.19	-75.78	-65.13	1.70	11.79	H
	1648	-59.29	-13	-46.29	-72.14	-64.68	1.23	8.76	V
	2474	-57.71	-13	-44.71	-74.82	-64.60	1.44	10.48	V
	3298	-57.11	-13	-44.11	-76.1	-65.05	1.70	11.79	V
Middle	1672	-59.48	-13	-46.48	-72.5	-64.95	1.24	8.85	H
	2509	-58.60	-13	-45.60	-75.37	-65.52	1.44	10.51	H
	3346	-57.20	-13	-44.20	-75.49	-65.24	1.74	11.94	H
	1672	-57.97	-13	-44.97	-70.88	-63.44	1.24	8.85	V
	2509	-58.44	-13	-45.44	-75.4	-65.36	1.44	10.51	V
	3346	-57.18	-13	-44.18	-76.01	-65.22	1.74	11.94	V
Highest	1696	-60.74	-13	-47.74	-73.8	-66.29	1.24	8.94	H
	2544	-57.91	-13	-44.91	-74.74	-64.85	1.44	10.54	H
	3393	-57.78	-13	-44.78	-75.79	-65.93	1.78	12.08	H
	1696	-59.57	-13	-46.57	-72.54	-65.12	1.24	8.94	V
	2544	-58.75	-13	-45.75	-75.79	-65.69	1.44	10.54	V
	3393	-57.50	-13	-44.50	-76.17	-65.65	1.78	12.08	V

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

<Ant. 2>

GPRS1900

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	-41.04	-13	-28.04	-61.58	-51.35	1.97	12.28	H
	5548	-45.23	-13	-32.23	-68.81	-55.35	2.14	12.27	H
	7403	-47.39	-13	-34.39	-75.5	-55.39	2.17	10.17	H
	3700	-43.08	-13	-30.08	-64.14	-53.39	1.97	12.28	V
	5548	-41.80	-13	-28.80	-66	-51.92	2.14	12.27	V
	7403	-47.90	-13	-34.90	-75.97	-55.90	2.17	10.17	V
Middle	3763	-38.08	-13	-25.08	-58.77	-48.32	2.01	12.24	H
	5639	-40.58	-13	-27.58	-64.24	-50.85	2.12	12.39	H
	7522	-47.67	-13	-34.67	-75.45	-55.63	2.11	10.08	H
	3763	-39.55	-13	-26.55	-60.74	-49.79	2.01	12.24	V
	5639	-41.27	-13	-28.27	-65.55	-51.54	2.12	12.39	V
	7522	-46.58	-13	-33.58	-74.26	-54.54	2.11	10.08	V
Highest	3819	-41.79	-13	-28.79	-62.59	-51.96	2.04	12.21	H
	5730	-44.16	-13	-31.16	-68.25	-54.58	2.10	12.52	H
	7641	-47.52	-13	-34.52	-74.84	-55.91	2.11	10.51	H
	3819	-46.41	-13	-33.41	-67.68	-56.58	2.04	12.21	V
	5730	-45.12	-13	-32.12	-69.76	-55.54	2.10	12.52	V
	7641	-45.47	-13	-32.47	-72.84	-53.86	2.11	10.51	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	-45.53	-13	-32.53	-66.07	-55.84	1.97	12.28	H
	5548	-50.15	-13	-37.15	-73.73	-60.27	2.14	12.27	H
	7403	-47.81	-13	-34.81	-75.92	-55.81	2.17	10.17	H
	3700	-48.15	-13	-35.15	-69.21	-58.46	1.97	12.28	V
	5548	-46.84	-13	-33.84	-71.04	-56.96	2.14	12.27	V
	7403	-47.79	-13	-34.79	-75.86	-55.79	2.17	10.17	V
Middle	3763	-44.94	-13	-31.94	-65.63	-55.18	2.01	12.24	H
	5639	-50.20	-13	-37.20	-73.86	-60.47	2.12	12.39	H
	7522	-48.23	-13	-35.23	-76.01	-56.19	2.11	10.08	H
	3763	-45.99	-13	-32.99	-67.18	-56.23	2.01	12.24	V
	5639	-47.99	-13	-34.99	-72.27	-58.26	2.12	12.39	V
	7522	-47.94	-13	-34.94	-75.62	-55.90	2.11	10.08	V
Highest	3819	-48.72	-13	-35.72	-69.52	-58.89	2.04	12.21	H
	5730	-50.90	-13	-37.90	-74.99	-61.32	2.10	12.52	H
	7641	-48.12	-13	-35.12	-75.44	-56.51	2.11	10.51	H
	3819	-51.12	-13	-38.12	-72.39	-61.29	2.04	12.21	V
	5730	-49.53	-13	-36.53	-74.17	-59.95	2.10	12.52	V
	7641	-48.00	-13	-35.00	-75.37	-56.39	2.11	10.51	V

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

WCDMA II

WCDMA II									
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	-50.01	-13	-37.01	-70.55	-60.32	1.97	12.28	H
	5555	-51.88	-13	-38.88	-75.45	-62.01	2.14	12.28	H
	7410	-47.08	-13	-34.08	-75.16	-55.07	2.17	10.16	H
	3700	-52.49	-13	-39.49	-73.55	-62.80	1.97	12.28	V
	5555	-49.97	-13	-36.97	-74.16	-60.10	2.14	12.28	V
	7410	-47.35	-13	-34.35	-75.39	-55.34	2.17	10.16	V
Middle	3756	-47.04	-13	-34.04	-67.71	-57.28	2.00	12.25	H
	5646	-51.53	-13	-38.53	-75.21	-61.81	2.12	12.40	H
	7515	-47.68	-13	-34.68	-75.51	-55.62	2.11	10.05	H
	3756	-51.37	-13	-38.37	-72.54	-61.61	2.00	12.25	V
	5646	-49.38	-13	-36.38	-73.68	-59.66	2.12	12.40	V
	7515	-46.80	-13	-33.80	-74.51	-54.74	2.11	10.05	V
Highest	3819	-51.99	-13	-38.99	-72.79	-62.16	2.04	12.21	H
	5723	-52.30	-13	-39.30	-76.35	-62.71	2.10	12.51	H
	7634	-48.44	-13	-35.44	-75.75	-56.81	2.11	10.48	H
	3819	-52.89	-13	-39.89	-74.16	-63.06	2.04	12.21	V
	5723	-50.48	-13	-37.48	-75.09	-60.89	2.10	12.51	V
	7634	-46.60	-13	-33.60	-73.95	-54.97	2.11	10.48	V

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

CDMA2000 BC1

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	3700	-46.40	-13	-33.40	-66.94	-56.71	1.97	12.28	H
	5555	-50.27	-13	-37.27	-73.84	-60.40	2.14	12.28	H
	7405	-46.68	-13	-33.68	-74.78	-54.68	2.17	10.17	H
	3700	-49.96	-13	-36.96	-71.02	-60.27	1.97	12.28	V
	5555	-47.00	-13	-34.00	-71.19	-57.13	2.14	12.28	V
	7405	-46.54	-13	-33.54	-74.61	-54.54	2.17	10.17	V
Middle	3763	-56.89	-13	-43.89	-77.58	-67.13	2.01	12.24	H
	5640	-53.34	-13	-40.34	-77	-63.61	2.12	12.40	H
	7520	-48.53	-13	-35.53	-76.33	-56.49	2.11	10.07	H
	3763	-47.77	-13	-34.77	-68.96	-58.01	2.01	12.24	V
	5640	-47.86	-13	-34.86	-72.14	-58.13	2.12	12.40	V
	7520	-46.36	-13	-33.36	-74.04	-54.32	2.11	10.07	V
Highest	3819	-50.73	-13	-37.73	-71.53	-60.90	2.04	12.21	H
	5730	-50.07	-13	-37.07	-74.16	-60.49	2.10	12.52	H
	7635	-47.83	-13	-34.83	-75.14	-56.20	2.11	10.49	H
	3819	-52.38	-13	-39.38	-73.65	-62.55	2.04	12.21	V
	5730	-47.35	-13	-34.35	-71.96	-57.77	2.10	12.52	V
	7635	-45.71	-13	-32.71	-73.06	-54.08	2.11	10.49	V

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

WCDMA IV

WCDMA IV									
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	3427	-51.31	-13	-38.31	-70.41	-61.68	1.81	12.18	H
	5141	-52.60	-13	-39.60	-76.01	-62.43	2.30	12.13	H
	6854	-49.34	-13	-36.34	-75.56	-58.02	2.37	11.05	H
	3427	-50.73	-13	-37.73	-70.45	-61.10	1.81	12.18	V
	5141	-52.15	-13	-39.15	-76.13	-61.98	2.30	12.13	V
	6854	-49.16	-13	-36.16	-75.94	-57.84	2.37	11.05	V
Middle	3464	-51.15	-13	-38.15	-70.6	-61.60	1.84	12.29	H
	5198	-52.71	-13	-39.71	-76.17	-62.57	2.28	12.14	H
	6928	-49.27	-13	-36.27	-75.71	-57.85	2.40	10.97	H
	3464	-50.39	-13	-37.39	-70.37	-60.84	1.84	12.29	V
	5198	-52.76	-13	-39.76	-76.77	-62.62	2.28	12.14	V
	6928	-48.84	-13	-35.84	-75.9	-57.42	2.40	10.97	V
Highest	3504	-49.18	-13	-36.18	-68.98	-59.71	1.87	12.40	H
	5256	-51.88	-13	-38.88	-75.39	-61.78	2.26	12.15	H
	7008	-48.43	-13	-35.43	-75.15	-56.90	2.42	10.89	H
	3504	-48.87	-13	-35.87	-69.12	-59.40	1.87	12.40	V
	5256	-52.67	-13	-39.67	-76.71	-62.57	2.26	12.15	V
	7008	-48.12	-13	-35.12	-75.5	-56.59	2.42	10.89	V

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

<ASDIV Antenna>

<Ant. 0>

GPRS1900

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	-47.62	-13	-34.62	-68.16	-57.93	1.97	12.28	H
	5548	-36.15	-13	-23.15	-59.73	-46.27	2.14	12.27	H
	9251	-44.42	-13	-31.42	-75.96	-54.30	2.22	12.10	H
	3700	-47.54	-13	-34.54	-68.6	-57.85	1.97	12.28	V
	5548	-36.44	-13	-23.44	-60.64	-46.56	2.14	12.27	V
	9251	-43.18	-13	-30.18	-74.08	-53.06	2.22	12.10	V
Middle	3763	-53.85	-13	-40.85	-74.54	-64.09	2.01	12.24	H
	5639	-35.12	-13	-22.12	-58.78	-45.39	2.12	12.39	H
	9400	-43.55	-13	-30.55	-75.37	-53.31	2.16	11.92	H
	3763	-53.19	-13	-40.19	-74.38	-63.43	2.01	12.24	V
	5639	-38.97	-13	-25.97	-63.25	-49.24	2.12	12.39	V
	9400	-42.49	-13	-29.49	-73.24	-52.25	2.16	11.92	V
Highest	3819	-51.22	-13	-38.22	-72.2	-61.39	2.04	12.21	H
	5730	-30.91	-13	-17.91	-55	-41.33	2.10	12.52	H
	7641	-47.66	-13	-34.66	-74.98	-56.05	2.11	10.51	H
	9552	-43.41	-13	-30.41	-74.86	-53.12	2.09	11.80	H
	3819	-49.44	-13	-36.44	-70.71	-59.61	2.04	12.21	V
	5730	-40.09	-13	-27.09	-64.73	-50.51	2.10	12.52	V
	7641	-45.41	-13	-32.41	-72.78	-53.80	2.11	10.51	V
	9552	-43.35	-13	-30.35	-73.63	-53.06	2.09	11.80	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	-51.36	-13	-38.36	-71.9	-61.67	1.97	12.28	H
	5548	-42.46	-13	-29.46	-66.04	-52.58	2.14	12.27	H
	7400	-47.99	-13	-34.99	-76.1	-55.99	2.18	10.18	H
	3700	-50.83	-13	-37.83	-71.89	-61.14	1.97	12.28	V
	5548	-39.74	-13	-26.74	-63.94	-49.86	2.14	12.27	V
	7400	-47.54	-13	-34.54	-75.62	-55.54	2.18	10.18	V
Middle	3763	-55.09	-13	-42.09	-75.78	-65.33	2.01	12.24	H
	5639	-46.97	-13	-33.97	-70.63	-57.24	2.12	12.39	H
	7522	-47.55	-13	-34.55	-75.33	-55.51	2.11	10.08	H
	3763	-54.41	-13	-41.41	-75.59	-64.65	2.01	12.24	V
	5639	-49.19	-13	-36.19	-73.47	-59.46	2.12	12.39	V
	7522	-48.06	-13	-35.06	-75.75	-56.02	2.11	10.08	V
Highest	3819	-54.40	-13	-41.40	-75.2	-64.57	2.04	12.21	H
	5730	-49.59	-13	-36.59	-73.68	-60.01	2.10	12.52	H
	7641	-48.10	-13	-35.10	-75.42	-56.49	2.11	10.51	H
	3819	-54.62	-13	-41.62	-75.89	-64.79	2.04	12.21	V
	5730	-46.01	-13	-33.01	-70.65	-56.43	2.10	12.52	V
	7641	-47.07	-13	-34.07	-74.44	-55.46	2.11	10.51	V

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

WCDMA II

WCDMA II									
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	-54.69	-13	-41.69	-75.24	-65.00	1.97	12.28	H
	5557	-52.48	-13	-39.48	-76.05	-62.62	2.14	12.28	H
	7410	-47.59	-13	-34.59	-75.68	-55.58	2.17	10.16	H
	3700	-53.41	-13	-40.41	-74.49	-63.72	1.97	12.28	V
	5557	-51.89	-13	-38.89	-76.08	-62.03	2.14	12.28	V
	7410	-46.04	-13	-33.04	-74.08	-54.03	2.17	10.16	V
Middle	3756	-54.91	-13	-41.91	-75.6	-65.15	2.00	12.25	H
	5646	-51.52	-13	-38.52	-75.18	-61.80	2.12	12.40	H
	7520	-47.72	-13	-34.72	-75.52	-55.68	2.11	10.07	H
	3756	-53.14	-13	-40.14	-74.31	-63.38	2.00	12.25	V
	5646	-51.80	-13	-38.80	-76.09	-62.08	2.12	12.40	V
	7520	-47.39	-13	-34.39	-75.07	-55.35	2.11	10.07	V
Highest	3815	-53.90	-13	-40.90	-74.69	-64.08	2.03	12.21	H
	5723	-52.22	-13	-39.22	-76.27	-62.63	2.10	12.51	H
	7630	-47.89	-13	-34.89	-75.19	-56.24	2.11	10.47	H
	3815	-50.49	-13	-37.49	-71.76	-60.67	2.03	12.21	V
	5723	-51.67	-13	-38.67	-76.27	-62.08	2.10	12.51	V
	7630	-46.90	-13	-33.90	-74.24	-55.25	2.11	10.47	V

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

CDMA2000 BC1

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	3700	-54.68	-13	-41.68	-75.22	-64.99	1.97	12.28	H
	5553	-52.51	-13	-39.51	-76.08	-62.64	2.14	12.27	H
	7405	-47.74	-13	-34.74	-75.84	-55.74	2.17	10.17	H
	3700	-53.24	-13	-40.24	-74.3	-63.55	1.97	12.28	V
	5553	-51.71	-13	-38.71	-75.9	-61.84	2.14	12.27	V
	7405	-46.52	-13	-33.52	-74.59	-54.52	2.17	10.17	V
Middle	3763	-55.42	-13	-42.42	-76.11	-65.66	2.01	12.24	H
	5640	-52.82	-13	-39.82	-76.48	-63.09	2.12	12.40	H
	7520	-48.06	-13	-35.06	-75.86	-56.02	2.11	10.07	H
	3763	-52.89	-13	-39.89	-74.08	-63.13	2.01	12.24	V
	5640	-51.94	-13	-38.94	-76.22	-62.21	2.12	12.40	V
	7520	-47.49	-13	-34.49	-75.18	-55.45	2.11	10.07	V
Highest	3819	-53.86	-13	-40.86	-74.66	-64.03	2.04	12.21	H
	5726	-52.48	-13	-39.48	-76.55	-62.89	2.10	12.52	H
	7635	-47.65	-13	-34.65	-74.96	-56.02	2.11	10.49	H
	3819	-51.16	-13	-38.16	-72.43	-61.33	2.04	12.21	V
	5726	-51.48	-13	-38.48	-76.11	-61.89	2.10	12.52	V
	7635	-45.79	-13	-32.79	-73.14	-54.16	2.11	10.49	V

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

WCDMA IV

WCDMA IV									
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	3420	-54.14	-13	-41.14	-73.17	-64.50	1.80	12.16	H
	5128	-52.96	-13	-39.96	-76.36	-62.78	2.31	12.13	H
	6850	-48.37	-13	-35.37	-74.57	-57.05	2.37	11.05	H
	3420	-55.85	-13	-42.85	-45.51	-66.21	1.80	12.16	V
	5128	-52.12	-13	-39.12	-76.1	-61.94	2.31	12.13	V
	6850	-49.02	-13	-36.02	-75.78	-57.70	2.37	11.05	V
Middle	3464	-54.30	-13	-41.30	-73.75	-64.75	1.84	12.29	H
	5196	-53.15	-13	-40.15	-76.61	-63.01	2.28	12.14	H
	6928	-49.03	-13	-36.03	-75.47	-57.61	2.40	10.97	H
	3464	-55.79	-13	-42.79	-75.77	-66.24	1.84	12.29	V
	5196	-52.59	-13	-39.59	-76.6	-62.45	2.28	12.14	V
	6928	-48.74	-13	-35.74	-75.8	-57.32	2.40	10.97	V
Highest	3504	-52.84	-13	-39.84	-72.64	-63.37	1.87	12.40	H
	5254	-53.19	-13	-40.19	-76.69	-63.08	2.26	12.15	H
	7008	-48.50	-13	-35.50	-75.22	-56.97	2.42	10.89	H
	3504	-54.36	-13	-41.36	-74.61	-64.89	1.87	12.40	V
	5254	-51.87	-13	-38.87	-76.91	-61.76	2.26	12.15	V
	7008	-48.21	-13	-35.21	-75.59	-56.68	2.42	10.89	V

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

<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	-42.01	-13	-29.01	-54.98	-47.40	1.23	8.76	H
	2472	-43.36	-13	-30.36	-60.19	-50.25	1.44	10.48	H
	4120	-55.18	-13	-42.18	-75.56	-63.04	2.09	12.10	H
	1648	-39.22	-13	-26.22	-52.07	-44.61	1.23	8.76	V
	2472	-34.13	-13	-21.13	-51.25	-41.02	1.44	10.48	V
	4120	-53.52	-13	-40.52	-74.47	-61.38	2.09	12.10	V
Middle	1672	-42.59	-13	-29.59	-55.61	-48.06	1.24	8.85	H
	2512	-50.89	-13	-37.89	-67.66	-57.81	1.44	10.51	H
	4184	-54.17	-13	-41.17	-74.49	-62.05	2.07	12.10	H
	1672	-41.68	-13	-28.68	-54.59	-47.15	1.24	8.85	V
	2512	-41.05	-13	-28.05	-58.01	-47.97	1.44	10.51	V
	4184	-51.00	-13	-38.00	-71.98	-58.88	2.07	12.10	V
Highest	1696	-44.54	-13	-31.54	-57.6	-50.09	1.24	8.94	H
	2544	-47.89	-13	-34.89	-64.72	-54.83	1.44	10.54	H
	4248	-54.08	-13	-41.08	-74.67	-61.98	2.05	12.10	H
	1696	-42.65	-13	-29.65	-55.62	-48.20	1.24	8.94	V
	2544	-41.43	-13	-28.43	-58.47	-48.37	1.44	10.54	V
	4248	-50.57	-13	-37.57	-71.86	-58.47	2.05	12.10	V

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

EDGE850

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	-56.72	-13	-43.72	-69.69	-62.11	1.23	8.76	H
	2472	-46.59	-13	-33.59	-63.42	-53.48	1.44	10.48	H
	4120	-54.48	-13	-41.48	-74.78	-62.34	2.09	12.10	H
	1648	-54.02	-13	-41.02	-66.87	-59.41	1.23	8.76	V
	2472	-52.60	-13	-39.60	-69.72	-59.49	1.44	10.48	V
	4120	-54.99	-13	-41.99	-75.94	-62.85	2.09	12.10	V
Middle	1672	-50.66	-13	-37.66	-63.68	-56.13	1.24	8.85	H
	2512	-49.83	-13	-36.83	-66.6	-56.75	1.44	10.51	H
	3344	-57.29	-13	-44.29	-75.59	-65.33	1.74	11.93	H
	1672	-46.93	-13	-33.93	-59.84	-52.40	1.24	8.85	V
	2512	-52.99	-13	-39.99	-69.95	-59.91	1.44	10.51	V
	3344	-56.92	-13	-43.92	-75.75	-64.96	1.74	11.93	V
Highest	1696	-49.55	-13	-36.55	-62.61	-55.10	1.24	8.94	H
	2544	-50.47	-13	-37.47	-67.3	-57.41	1.44	10.54	H
	3395	-57.87	-13	-44.87	-75.86	-66.02	1.78	12.09	H
	1696	-46.11	-13	-33.11	-59.08	-51.66	1.24	8.94	V
	2544	-47.55	-13	-34.55	-64.59	-54.49	1.44	10.54	V
	3395	-57.41	-13	-44.41	-76.08	-65.56	1.78	12.09	V

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

WCDMA V

WCDMA V									
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	1652	-55.65	-13	-42.65	-68.64	-61.05	1.23	8.78	H
	2479	-58.33	-13	-45.33	-75.14	-65.23	1.44	10.48	H
	3305	-57.52	-13	-44.52	-76.06	-65.47	1.71	11.82	H
	1652	-57.49	-13	-44.49	-70.35	-62.89	1.23	1652	V
	2479	-56.06	-13	-43.06	-73.13	-62.96	1.44	2479	V
	3305	-57.35	-13	-44.35	-76.31	-65.30	1.71	3305	V
Middle	1672	-56.62	-13	-43.62	-69.64	-62.09	1.24	8.85	H
	2509	-58.09	-13	-45.09	-74.86	-65.01	1.44	10.51	H
	3346	-57.57	-13	-44.57	-75.87	-65.61	1.74	11.94	H
	1672	-55.91	-13	-42.91	-68.82	-61.38	1.24	8.85	V
	2509	-48.99	-13	-35.99	-65.94	-55.91	1.44	10.51	V
	3346	-56.94	-13	-43.94	-75.77	-64.98	1.74	11.94	V
Highest	1696	-57.37	-13	-44.37	-70.43	-62.92	1.24	8.94	H
	2544	-58.68	-13	-45.68	-75.51	-65.62	1.44	10.54	H
	3384	-58.08	-13	-45.08	-76.13	-66.21	1.77	12.05	H
	1696	-57.18	-13	-44.18	-70.15	-62.73	1.24	8.94	V
	2544	-56.66	-13	-43.66	-73.7	-63.60	1.44	10.54	V
	3384	-57.01	-13	-44.01	-75.69	-65.14	1.77	12.05	V

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

CDMA2000 BC0

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	-57.76	-13	-44.76	-70.73	-63.15	1.23	8.76	H
	2474	-57.97	-13	-44.97	-74.8	-64.86	1.44	10.48	H
	3298	-56.44	-13	-43.44	-75.03	-64.38	1.70	11.79	H
	1648	-53.96	-13	-40.96	-66.81	-59.35	1.23	8.76	V
	2474	-54.33	-13	-41.33	-71.45	-61.22	1.44	10.48	V
	3298	-57.32	-13	-44.32	-76.31	-65.26	1.70	11.79	V
Middle	1672	-51.17	-13	-38.17	-64.19	-56.64	1.24	8.85	H
	2509	-58.82	-13	-45.82	-75.59	-65.74	1.44	10.51	H
	3346	-57.79	-13	-44.79	-76.08	-65.83	1.74	11.94	H
	1672	-49.50	-13	-36.50	-62.41	-54.97	1.24	8.85	V
	2509	-57.85	-13	-44.85	-74.81	-64.77	1.44	10.51	V
	3346	-57.33	-13	-44.33	-76.16	-65.37	1.74	11.94	V
Highest	1696	-55.47	-13	-42.47	-68.53	-61.02	1.24	8.94	H
	2544	-57.95	-13	-44.95	-74.78	-64.89	1.44	10.54	H
	3393	-58.44	-13	-45.44	-76.45	-66.59	1.78	12.08	H
	1696	-54.74	-13	-41.74	-67.71	-60.29	1.24	8.94	V
	2544	-56.93	-13	-43.93	-73.97	-63.87	1.44	10.54	V
	3393	-57.42	-13	-44.42	-76.09	-65.57	1.78	12.08	V

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

———THE END———