



FCC RADIO TEST REPORT

FCC ID : A4RG013C
Equipment : Smartphone
Model Name : G013C
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 completed on Jul. 18, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issued Date
FG820502-02A	01	Initial issue of report	Jun. 27, 2018
FG820502-02A	02	Revising test data in appendix a, b, and section 1.4.	Jul. 18, 2018

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
	§22.913 (a)(2)	Effective Radiated Power		
	§24.232 (c)	Equivalent Isotropic Radiated Power		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power		
3.3	§24.232 (d)	Peak-to-Average Ratio	Pass	-
3.4	§2.1049 §22.917 (b) §24.238 (b) §27.53 (g)	Occupied Bandwidth	Pass	-
3.5	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Band Edge Measurement	Pass	-
3.6	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Conducted Emission	Pass	-
3.7	§2.1055 §22.355	Frequency Stability Temperature & Voltage	Pass	-
	§2.1055 §24.235 §27.54			-
4.4	§2.1053 §22.917 (a) §24.238 (a) §27.53 (h)	Field Strength of Spurious Radiation	Pass	Under limit 6.54 dB at 2544.000 MHz

Reviewed by: Joseph Lin

Report Producer: Yuping Lin



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smartphone
Model Name	G013C
FCC ID	A4RG013C
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC/ GNSS/WPC WLAN 11b/g/n HT20/VHT20 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. Please refer to the specifications or user's manual for more detailed description.

EUT Information List	
No.	S/N
#1	85LY009BE
#2	85KY0092X

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 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 CDMA2000: BC0: 824.70 MHz ~ 848.31 MHz BC1: 1851.25 MHz ~ 1908.75 MHz
Rx Frequency	GSM/GPRS/EDGE: 850: 869.2 MHz ~ 893.8 MHz 1900: 1930.2 MHz ~ 1989.8 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 CDMA2000: BC0: 869.70 MHz ~ 893.31 MHz BC1: 1931.25 MHz ~ 1988.75 MHz
Maximum Output Power to Antenna	GSM/GPRS/EDGE: 850: 32.26 dBm 1900: 29.28 dBm WCDMA: Band V: 23.89 dBm Band II: 23.20 dBm Band IV: 23.33 dBm CDMA2000: BC0: 24.45 dBm BC1: 24.88 dBm

Standards-related Product Specification	
Antenna Type / Gain	<For Main Antenna> Cellular Band: integrated loop Antenna type with gain -1.60 dBi PCS Band: integrated loop Antenna type with gain 3.70 dBi AWS Band: integrated loop Antenna type with gain 3.70 dBi <For Aux. Antenna> Cellular Band: integrated monopole Antenna type with gain -3.00 dBi PCS Band: integrated monopole Antenna type with gain -0.50 dBi AWS Band: integrated monopole Antenna type with gain -0.50 dBi
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: BPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink) CDMA2000 1xRTT: QPSK CDMA2000 1xEV-DO: QPSK/8PSK

1.3 Modification of EUT

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

1.4 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

<For Main Antenna>

FCC Rule	Frequency Range (MHz)	System	Type of Modulation	Maximum ERP/EIRP (W)	Frequency Tolerance (ppm)	Emission Designator
Part 22	824.2 ~848.8	GSM850 GPRS class 8	GMSK	0.7096	0.0215 ppm	245KGXW
Part 22	824.2 ~848.8	GSM850 EDGE class 8	8PSK	0.2323	0.0048 ppm	251KG7W
Part 22	826.4 ~846.6	WCDMA Band V RMC 12.2Kbps	BPSK	0.1033	0.0179 ppm	4M13F9W
Part 22	824.70 ~ 848.31	CDMA2000 BC0 1xRTT	QPSK	0.1140	0.0131 ppm	1M28F9W
Part 22	824.70 ~ 848.31	CDMA2000 BC0 1xEV-DO	QPSK	0.1175	0.0131 ppm	1M28F9W
Part 24	1850.2 ~1909.8	GSM1900 GPRS class 8	GMSK	1.9861	0.0117 ppm	241KGXW
Part 24	1850.2 ~1909.8	GSM1900 EDGE class 8	8PSK	0.9863	0.0027 ppm	255KG7W
Part 24	1852.4 ~ 1907.6	WCDMA Band II RMC 12.2Kbps	BPSK	0.4898	0.0053 ppm	4M14F9W
Part 24	1851.25 ~ 1908.75	CDMA2000 BC1 1xRTT	QPSK	0.7211	0.0149 ppm	1M28F9W
Part 24	1851.25 ~ 1908.75	CDMA2000 BC1 1xEV-DO	QPSK	0.6839	0.0149 ppm	1M28F9W
Part 27	1712.4 ~ 1752.6	WCDMA Band IV RMC 12.2Kbps	BPSK	0.5047	0.0058 ppm	4M14F9W

<For Aux. Antenna>

FCC Rule	Frequency Range (MHz)	System	Type of Modulation	Maximum ERP/EIRP (W)	Frequency Tolerance (ppm)	Emission Designator
Part 22	824.2 ~848.8	GSM850 GPRS class 8	GMSK	0.5140	-	-
Part 22	824.2 ~848.8	GSM850 EDGE class 8	8PSK	0.1683	-	-
Part 22	826.4 ~846.6	WCDMA Band V RMC 12.2Kbps	BPSK	0.0748	-	-
Part 22	824.70 ~ 848.31	CDMA2000 BC0 1xRTT	QPSK	0.0826	-	-
Part 22	824.70 ~ 848.31	CDMA2000 BC0 1xEV-DO	QPSK	0.0851	-	-
Part 24	1850.2 ~1909.8	GSM1900 GPRS class 8	GMSK	0.7551	-	-
Part 24	1850.2 ~1909.8	GSM1900 EDGE class 8	8PSK	0.3750	-	-
Part 24	1852.4 ~ 1907.6	WCDMA Band II RMC 12.2Kbps	BPSK	0.1862	-	-
Part 24	1851.25 ~ 1908.75	CDMA2000 BC1 1xRTT	QPSK	0.2742	-	-
Part 24	1851.25 ~ 1908.75	CDMA2000 BC1 1xEV-DO	QPSK	0.2600	-	-
Part 27	1712.4 ~ 1752.6	WCDMA Band IV RMC 12.2Kbps	BPSK	0.1919	-	-

1.5 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sporton Site No.	
	TH03-HY	03CH07-HY

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

1.6 Applicable Standards

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

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

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Z plane for Cellular Band and PCS Band, Y plane for AWS Band and Z plane for wpc charging mode) 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.

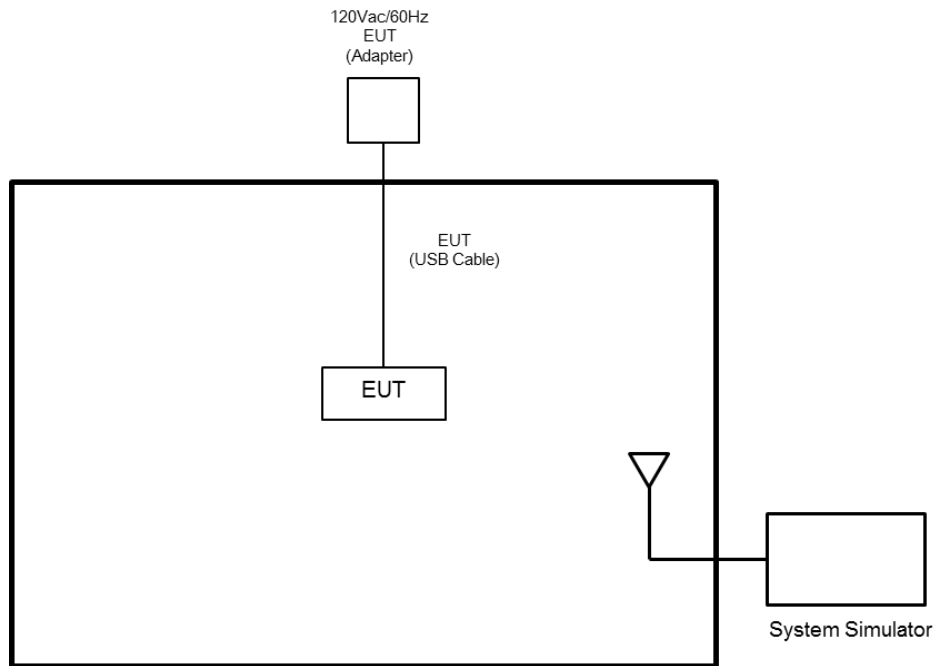
Test modes are chosen to be reported as the worst case configuration below:

Test Modes		
Band	Radiated TCs	Conducted TCs
GSM 850	■ GSM Link ■ EDGE Class 8 Link	■ GSM Link ■ EDGE Class 8 Link
GSM 1900	■ GSM Link ■ EDGE Class 8 Link	■ GSM Link ■ EDGE Class 8 Link
WCDMA Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band II	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
WCDMA Band IV	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link
CDMA BC0	■ 1xRTT Link ■ 1xEV-DO Rev. 0 Link	■ 1xRTT Link ■ 1xEV-DO Rev. 0 Link
CDMA BC1	■ 1xRTT Link ■ 1xEV-DO Rev. 0 Link	■ 1xRTT Link ■ 1xEV-DO Rev. 0 Link

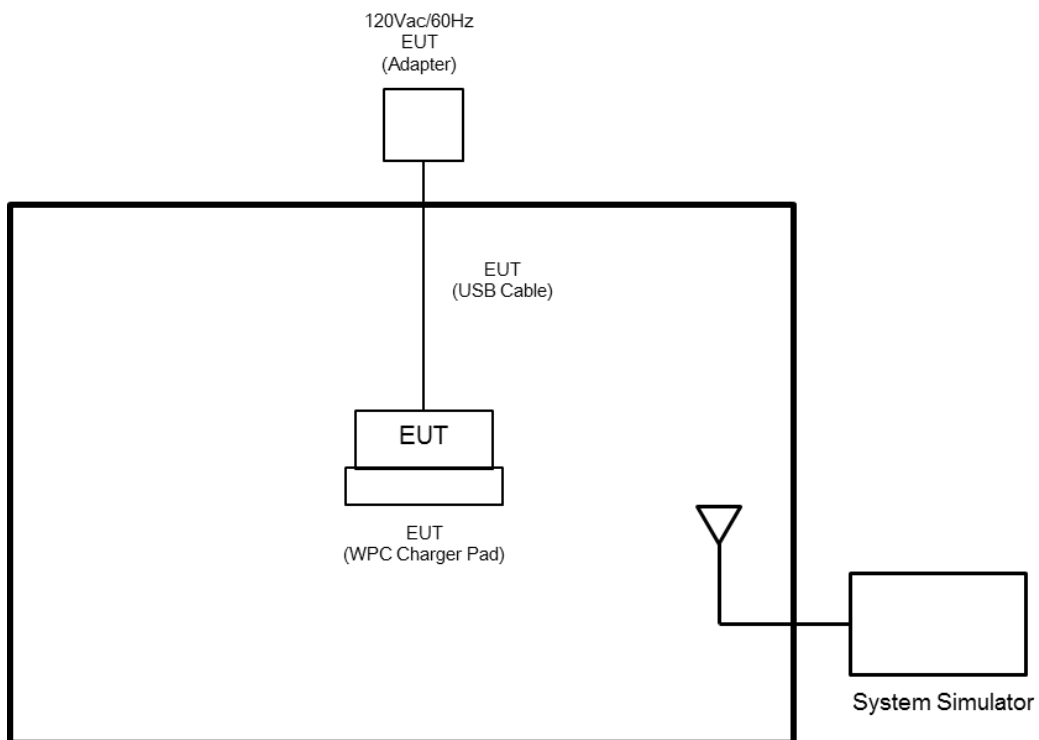
Remark: All the radiated test cases were performed with Adapter 1.

2.2 Connection Diagram of Test System

<Radiated Test Mode>



<For WPC Charging Mode>





2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

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

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

Offset = RF cable loss + attenuator factor.

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

Example:

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 4.2 + 10 = 14.2 \text{ (dB)}\end{aligned}$$

2.5 Frequency List of Low/Middle/High Channels

Frequency List				
Band	Channel/Frequency(MHz)	Lowest	Middle	Highest
GSM850	Channel	128	189	251
	Frequency	824.2	836.4	848.8
WCDMA Band V	Channel	4132	4182	4233
	Frequency	826.4	836.4	846.6
GSM1900	Channel	512	661	810
	Frequency	1850.2	1880.0	1909.8
WCDMA Band II	Channel	9262	9400	9538
	Frequency	1852.4	1880.0	1907.6
WCDMA Band IV	Channel	1312	1413	1513
	Frequency	1712.4	1732.6	1752.6
CDMA2000 BC0	Channel	1013	384	777
	Frequency	824.7	836.52	848.31
CDMA2000 BC1	Channel	25	600	1175
	Frequency	1851.25	1880.0	1908.75

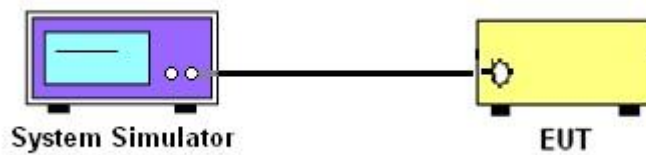
3 Conducted Test Result

3.1 Measuring Instruments

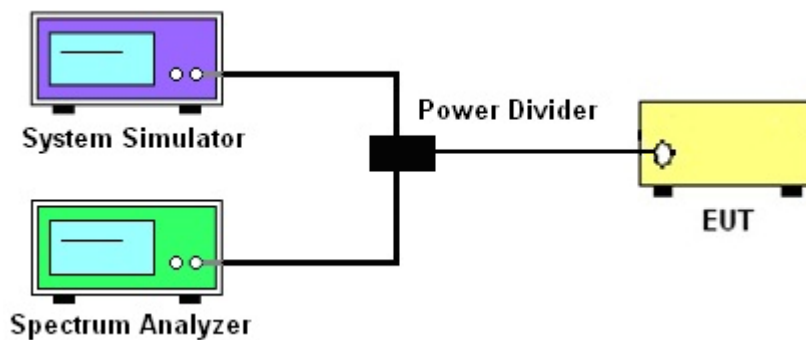
See list of measuring instruments of this test report.

3.1.1 Test Setup

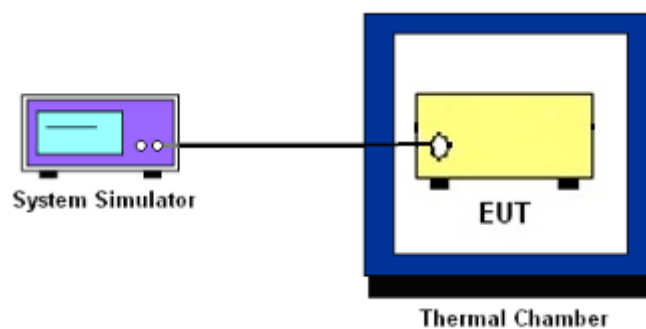
3.1.2 Conducted Output Power



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



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power and ERP/EIRP

3.2.1 Description of the Conducted Output Power and ERP/EIRP

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

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

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

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

According to KDB 412172 D01 Power Approach,

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

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.2.2 Test Procedures

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



3.3 Peak-to-Average Ratio

3.3.1 Description of the PAR Measurement

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

3.3.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 5.7.1

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 FCC KDB 971168 D01 v03r01 Section 4.2

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 6.0.

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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)



3.6 Conducted Spurious Emission

3.6.1 Description of Conducted Spurious Emission Measurement

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

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

3.6.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.0.

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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)

3.7 Frequency Stability

3.7.1 Description of Frequency Stability Measurement

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 $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

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 $20 \pm 5^{\circ}\text{C}$ and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

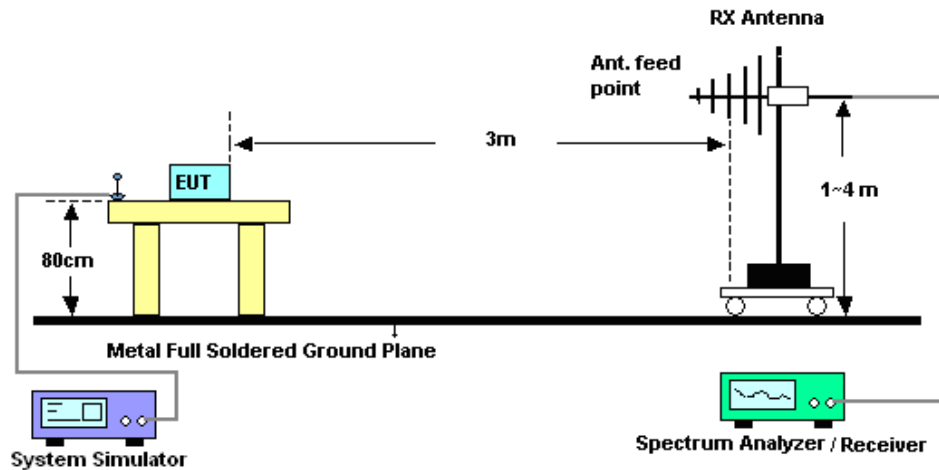
4 Radiated Test Items

4.1 Measuring Instruments

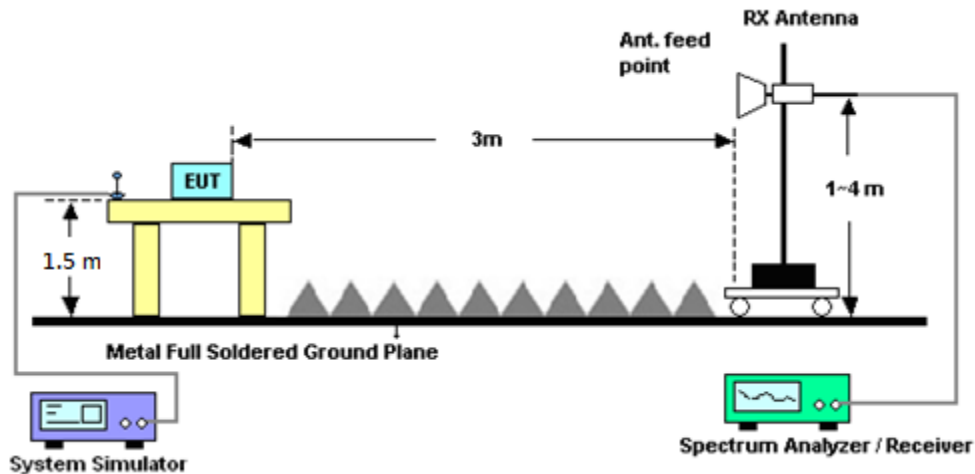
See list of measuring instruments of this test report.

4.2 Test Setup

For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Field Strength of Spurious Radiation Measurement

4.4.1 Description of Field Strength of Spurious Radiated Measurement

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

4.4.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 5.8 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. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 07, 2017	Jun. 14, 2018~ Jul. 18, 2018	Nov. 06, 2018	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-641	92013721	-30℃ ~70℃	Dec. 06, 2017	Jun. 14, 2018~ Jul. 18, 2018	Dec. 05, 2019	Conducted (TH03-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL883644	Voltage:0~20V; Current:0~5A	Dec. 06, 2017	Jun. 14, 2018~ Jul. 18, 2018	Dec. 05, 2019	Conducted (TH03-HY)
Base Station (Measure)	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Aug. 09, 2017	Jun. 14, 2018~ Jul. 18, 2018	Aug. 08, 2018	Conducted (TH03-HY)
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 06, 2018	Jun. 14, 2018~ Jul. 18, 2018	Mar. 05, 2019	Conducted (TH03-HY)
Bilog Antenna	TESEQ	CBL 6111D&0080 0N1D01N-06	35419&03	30MHz to 1GHz	Dec. 18, 2017	Jun. 07, 2018~ Jun. 11, 2018	Dec. 17, 2018	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 23, 2017	Jun. 07, 2018~ Jun. 11, 2018	Aug. 22, 2018	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz-1GHz	May 21, 2018	Jun. 07, 2018~ Jun. 11, 2018	May 20, 2019	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~ 26.5GHz	Oct. 30, 2017	Jun. 07, 2018~ Jun. 11, 2018	Oct. 29, 2018	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 05, 2017	Jun. 07, 2018~ Jun. 11, 2018	Dec. 04, 2018	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Apr. 17, 2018	Jun. 07, 2018~ Jun. 11, 2018	Apr. 16, 2019	Radiation (03CH07-HY)
Controller	ChainTek	Chaintek 3000	N/A	Control Turn table	N/A	Jun. 07, 2018~ Jun. 11, 2018	N/A	Radiation (03CH07-HY)
Controller	Max-Full	MF7802	MF78020836 8	Control Ant Mast	N/A	Jun. 07, 2018~ Jun. 11, 2018	N/A	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Jun. 07, 2018~ Jun. 11, 2018	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Jun. 07, 2018~ Jun. 11, 2018	N/A	Radiation (03CH07-HY)
Signal Generator	Anritsu	MG3694C	163401	0.1Hz~40GHz	Jan. 15, 2018	Jun. 07, 2018~ Jun. 11, 2018	Jan. 14, 2019	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA917058 4	18GHz- 40GHz	Nov. 27, 2017	Jun. 07, 2018~ Jun. 11, 2018	Nov. 26, 2018	Radiation (03CH07-HY)
Horn Antenna	ESCO	3117	00066584	1GHz~18GHz	Sep. 06, 2017	Jun. 07, 2018~ Jun. 11, 2018	Sep. 05, 2018	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8 -24	8050400465 6H	N/A	N/A	Jun. 07, 2018~ Jun. 11, 2018	N/A	Radiation (03CH07-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Filter	Wainwright	WLKS1200-8SS	SN3	1.2G Low Pass	Nov. 21, 2017	Jun. 07, 2018~ Jun. 11, 2018	Nov. 20, 2018	Radiation (03CH07-HY)
Filter	Microwave	H3G018G1	SN477220	3.0G High Pass	Nov. 21, 2017	Jun. 07, 2018~ Jun. 11, 2018	Nov. 20, 2018	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4, MY28655/4	9KHz~30MHz	Jan. 02, 2018	Jun. 07, 2018~ Jun. 11, 2018	Jan. 01, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 27, 2018	Jun. 07, 2018~ Jun. 11, 2018	Feb. 26, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 27, 2018	Jun. 07, 2018~ Jun. 11, 2018	Feb. 26, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	1G~40GHz	Jan. 02, 2018	Jun. 07, 2018~ Jun. 11, 2018	Jan. 01, 2019	Radiation (03CH07-HY)



6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.05
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.44
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.95
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GSM	32.26	32.18	32.20	29.28	29.16	29.26
GPRS class 8	32.25	32.16	32.19	29.26	29.17	29.27
GPRS class 10	28.70	28.45	28.40	26.48	26.41	26.33
GPRS class 11	27.49	26.99	26.75	26.27	26.21	26.12
GPRS class 12	27.75	27.74	27.80	24.32	24.22	24.18
EGPRS class 8	27.41	27.36	27.34	26.24	26.15	26.05
EGPRS class 10	24.27	24.31	24.34	24.29	24.26	24.13
EGPRS class 11	23.52	23.52	23.43	22.49	22.46	22.31
EGPRS class 12	23.50	23.37	23.29	21.39	21.36	21.24

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	23.89	23.75	23.83	23.20	23.06	23.05
HSDPA Subtest-1	22.92	22.77	22.71	22.16	22.07	22.07
HSDPA Subtest-2	22.91	22.80	22.77	22.21	22.14	22.06
HSDPA Subtest-3	22.45	22.31	22.27	21.75	21.60	21.57
HSDPA Subtest-4	22.45	22.27	22.26	21.67	21.63	21.59
HSUPA Subtest-1	22.81	22.72	22.69	22.15	22.05	22.02
HSUPA Subtest-2	20.87	20.67	20.71	20.09	20.10	20.03
HSUPA Subtest-3	21.91	21.77	21.69	21.15	21.04	21.02
HSUPA Subtest-4	20.94	20.59	20.71	20.15	20.07	20.05
HSUPA Subtest-5	22.90	22.80	22.60	22.20	22.10	22.05



Conducted Power (*Unit: dBm)			
Band	WCDMA Band IV		
Channel	1312	1413	1513
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	23.33	23.23	23.25
HSDPA Subtest-1	22.31	22.22	22.15
HSDPA Subtest-2	22.30	22.27	22.10
HSDPA Subtest-3	21.82	21.71	21.61
HSDPA Subtest-4	21.80	21.68	21.56
HSUPA Subtest-1	22.25	22.22	22.19
HSUPA Subtest-2	20.30	20.20	20.18
HSUPA Subtest-3	21.28	21.20	21.20
HSUPA Subtest-4	20.25	20.22	20.22
HSUPA Subtest-5	22.30	22.20	22.11

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	24.31	24.32	24.26	24.76	24.56	24.57
1xRTT RC3 SO55	24.30	24.26	24.26	24.68	24.47	24.40
1xRTT RC3 SO32 (+ F-SCH)	24.31	24.26	24.26	24.88	24.66	24.64
1xRTT RC3 SO32 (+SCH)	24.29	24.23	24.25	24.70	24.45	24.38
1xEVDO RTAP 153.6Kbps	24.45	24.36	24.36	24.62	24.65	24.52
1xEVDO RETAP 4096Bits	24.44	24.35	24.35	24.49	24.20	24.16

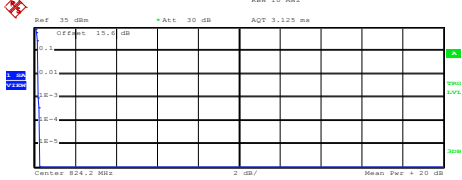
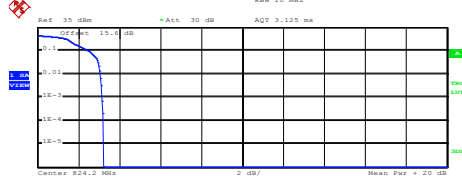
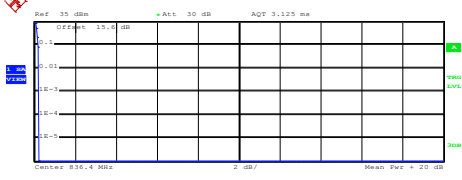
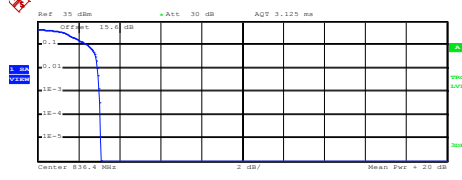
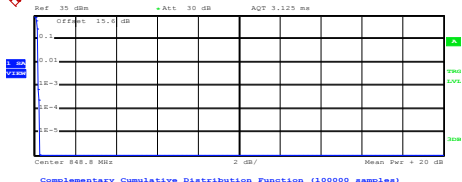
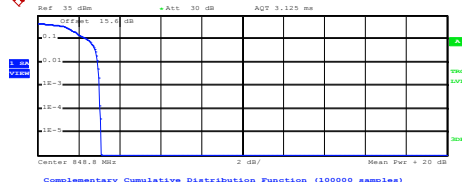


A2. GSM

Peak-to-Average Ratio

Mode	GSM850		Limit: 13dB
Mod.	GSM	EDGE class 8	Result
Lowest CH	0.20	3.16	PASS
Middle CH	0.24	3.00	
Highest CH	0.20	3.04	
Mode	GSM1900		Limit: 13dB
Mod.	GSM	EDGE class 8	Result
Lowest CH	0.32	2.80	PASS
Middle CH	0.32	2.76	
Highest CH	0.24	2.80	



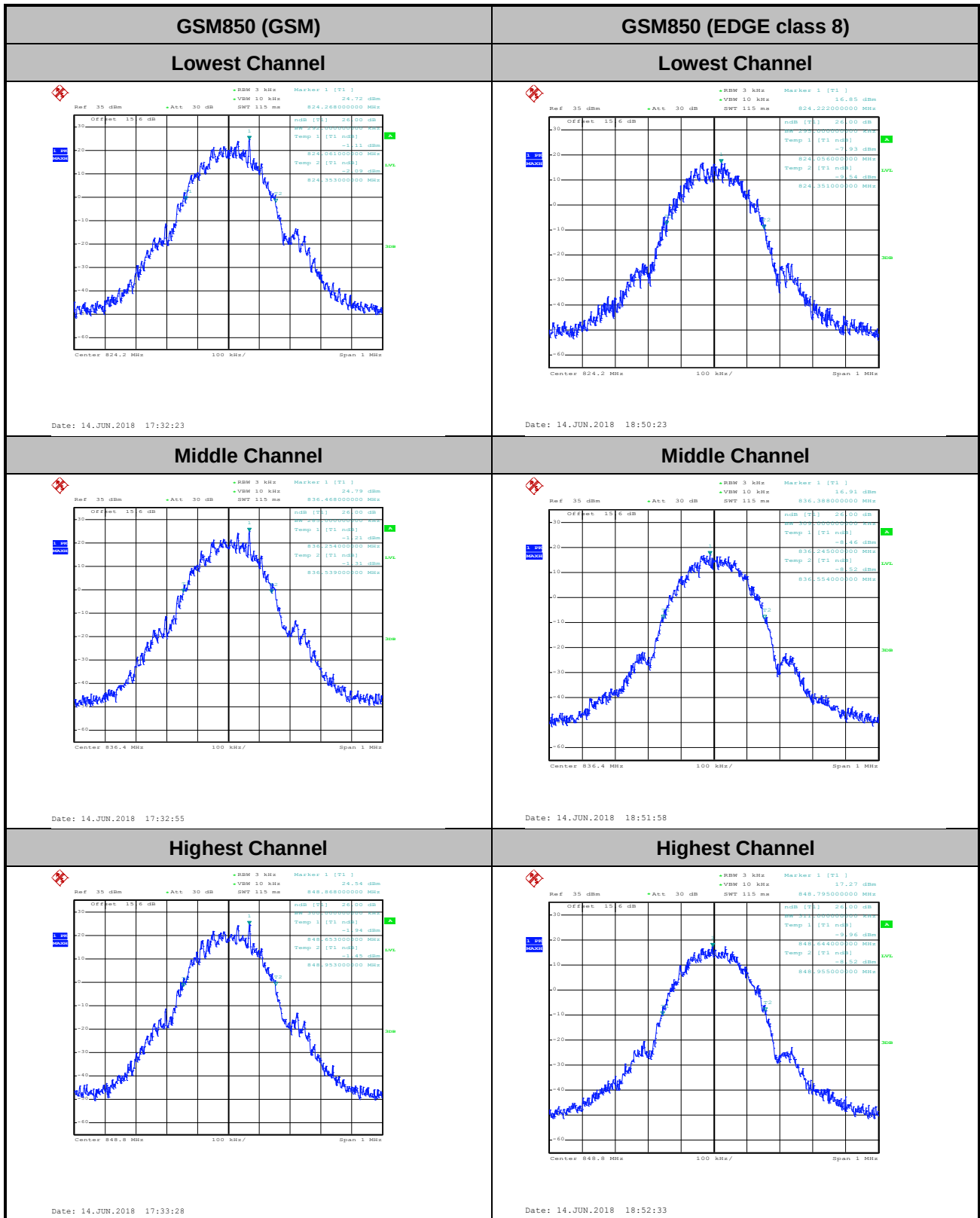
GSM850 (GSM)		GSM850 (EDGE class 8)	
Lowest Channel		Lowest Channel	
 Ref: 35 dBm Att: 30 dB AGT: 3.125 ms Center: 824.2 MHz 2 dB/ Mean: Per: +20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 30.90 dBm Peak: 31.16 dBm Crest: 0.26 dB 10 %: 0.20 dB 1 %: 0.20 dB .1 %: 0.20 dB .01 %: 0.28 dB Date: 14.JUN.2018 17:35:37		 Ref: 35 dBm Att: 30 dB AGT: 3.125 ms Center: 824.2 MHz 2 dB/ Mean: Per: +20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 25.13 dBm Peak: 28.34 dBm Crest: 3.21 dB 10 %: 2.52 dB 1 %: 3.08 dB .1 %: 3.16 dB .01 %: 3.24 dB Date: 14.JUN.2018 18:59:48	
Middle Channel		Middle Channel	
 Ref: 35 dBm Att: 30 dB AGT: 3.125 ms Center: 836.4 MHz 2 dB/ Mean: Per: +20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 30.94 dBm Peak: 31.16 dBm Crest: 0.22 dB 10 %: 0.20 dB 1 %: 0.24 dB .1 %: 0.24 dB .01 %: 0.24 dB Date: 14.JUN.2018 17:35:52		 Ref: 35 dBm Att: 30 dB AGT: 3.125 ms Center: 836.4 MHz 2 dB/ Mean: Per: +20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 25.22 dBm Peak: 28.34 dBm Crest: 3.12 dB 10 %: 2.44 dB 1 %: 2.92 dB .1 %: 3.00 dB .01 %: 3.08 dB Date: 14.JUN.2018 19:00:29	
Highest Channel		Highest Channel	
 Ref: 35 dBm Att: 30 dB AGT: 3.125 ms Center: 848.8 MHz 2 dB/ Mean: Per: +20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 30.97 dBm Peak: 31.23 dBm Crest: 0.26 dB 10 %: 0.20 dB 1 %: 0.20 dB .1 %: 0.20 dB .01 %: 0.28 dB Date: 14.JUN.2018 17:36:08		 Ref: 35 dBm Att: 30 dB AGT: 3.125 ms Center: 848.8 MHz 2 dB/ Mean: Per: +20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 25.25 dBm Peak: 28.34 dBm Crest: 3.09 dB 10 %: 2.44 dB 1 %: 2.92 dB .1 %: 3.04 dB .01 %: 3.04 dB Date: 14.JUN.2018 19:00:53	



GSM1900 (GSM)		GSM1900 (EDGE class 8)	
Lowest Channel		Lowest Channel	
Ref: 35 dBm Att: 30 dB RSW: 10 MHz AQT: 3.125 ms Center: 1.8502 GHz 2 dB/ Mean: Per + 20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 27.77 dBm Peak: 28.06 dBm Crest: 0.29 dB 10 %: 0.20 dB 1 %: 0.24 dB .1 %: 0.32 dB .01 %: 0.32 dB Date: 14.JUN.2018 17:15:31		Ref: 35 dBm Att: 30 dB RSW: 10 MHz AQT: 3.125 ms Center: 1.8502 GHz 2 dB/ Mean: Per + 20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 23.36 dBm Peak: 26.22 dBm Crest: 2.86 dB 10 %: 2.24 dB 1 %: 2.68 dB .1 %: 2.80 dB .01 %: 2.84 dB Date: 14.JUN.2018 18:00:36	
Middle Channel		Middle Channel	
Ref: 35 dBm Att: 30 dB RSW: 10 MHz AQT: 3.125 ms Center: 1.85 GHz 2 dB/ Mean: Per + 20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 27.62 dBm Peak: 27.92 dBm Crest: 0.30 dB 10 %: 0.20 dB 1 %: 0.24 dB .1 %: 0.32 dB .01 %: 0.32 dB Date: 14.JUN.2018 17:15:48		Ref: 35 dBm Att: 30 dB RSW: 10 MHz AQT: 3.125 ms Center: 1.85 GHz 2 dB/ Mean: Per + 20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 23.24 dBm Peak: 26.08 dBm Crest: 2.84 dB 10 %: 2.20 dB 1 %: 2.68 dB .1 %: 2.76 dB .01 %: 2.80 dB Date: 14.JUN.2018 18:00:52	
Highest Channel		Highest Channel	
Ref: 35 dBm Att: 30 dB RSW: 10 MHz AQT: 3.125 ms Center: 1.9098 GHz 2 dB/ Mean: Per + 20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 27.47 dBm Peak: 27.77 dBm Crest: 0.30 dB 10 %: 0.20 dB 1 %: 0.24 dB .1 %: 0.24 dB .01 %: 0.28 dB Date: 14.JUN.2018 17:16:04		Ref: 35 dBm Att: 30 dB RSW: 10 MHz AQT: 3.125 ms Center: 1.9098 GHz 2 dB/ Mean: Per + 20 dB Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 23.00 dBm Peak: 25.87 dBm Crest: 2.87 dB 10 %: 2.28 dB 1 %: 2.72 dB .1 %: 2.80 dB .01 %: 2.88 dB Date: 14.JUN.2018 18:01:08	

**26dB Bandwidth**

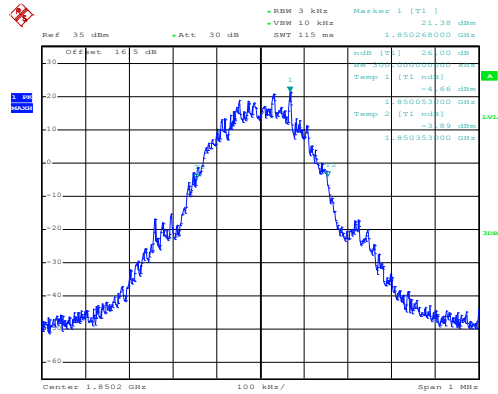
Mode	GSM850 : 26dB BW(MHz)	
Mod.	GSM	EDGE class 8
Lowest CH	0.292	0.295
Middle CH	0.285	0.309
Highest CH	0.300	0.311
Mode	GSM1900 : 26dB BW(MHz)	
Mod.	GSM	EDGE class 8
Lowest CH	0.300	0.318
Middle CH	0.279	0.307
Highest CH	0.306	0.316





GSM1900 (GSM)

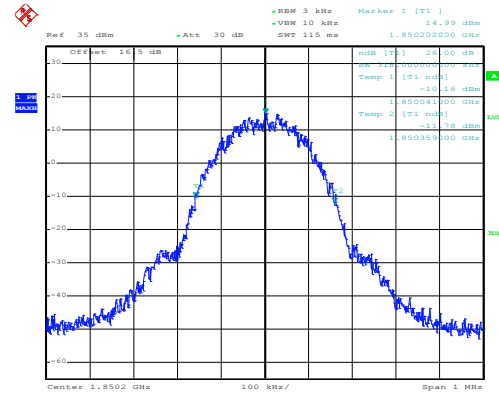
Lowest Channel



Date: 14.JUN.2018 17:09:05

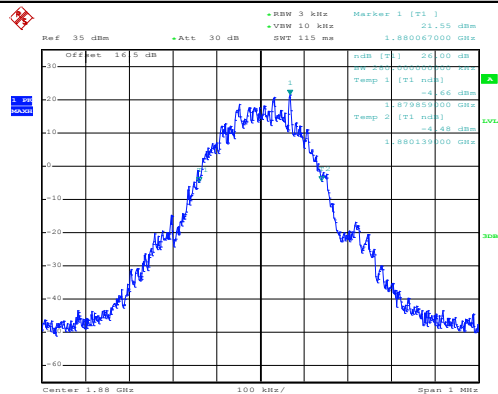
GSM1900 (EDGE class 8)

Lowest Channel



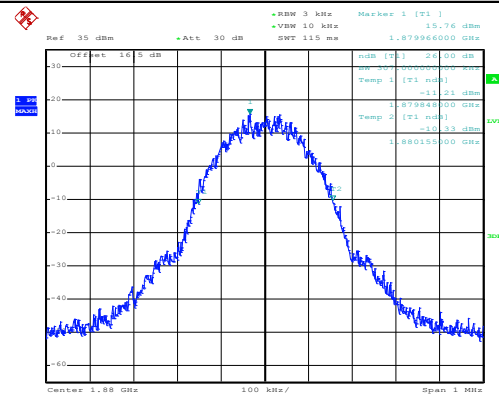
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Middle Channel



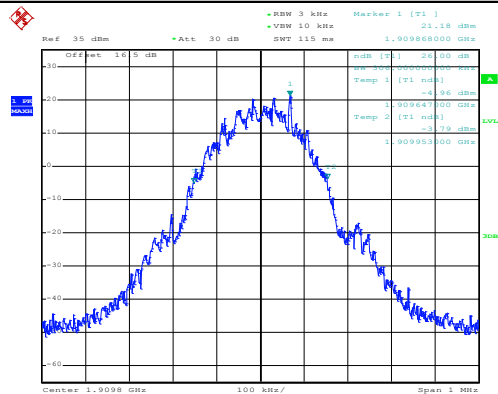
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Middle Channel



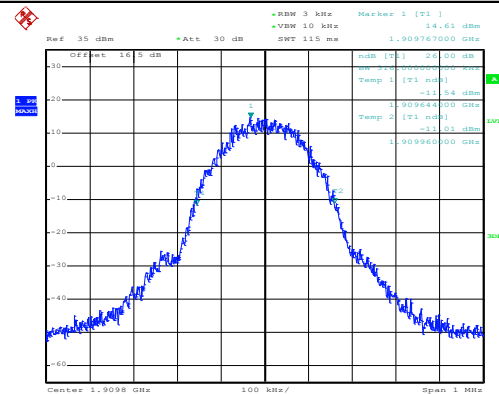
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Highest Channel



Date: 14.JUN.2018 17:10:10

Highest Channel

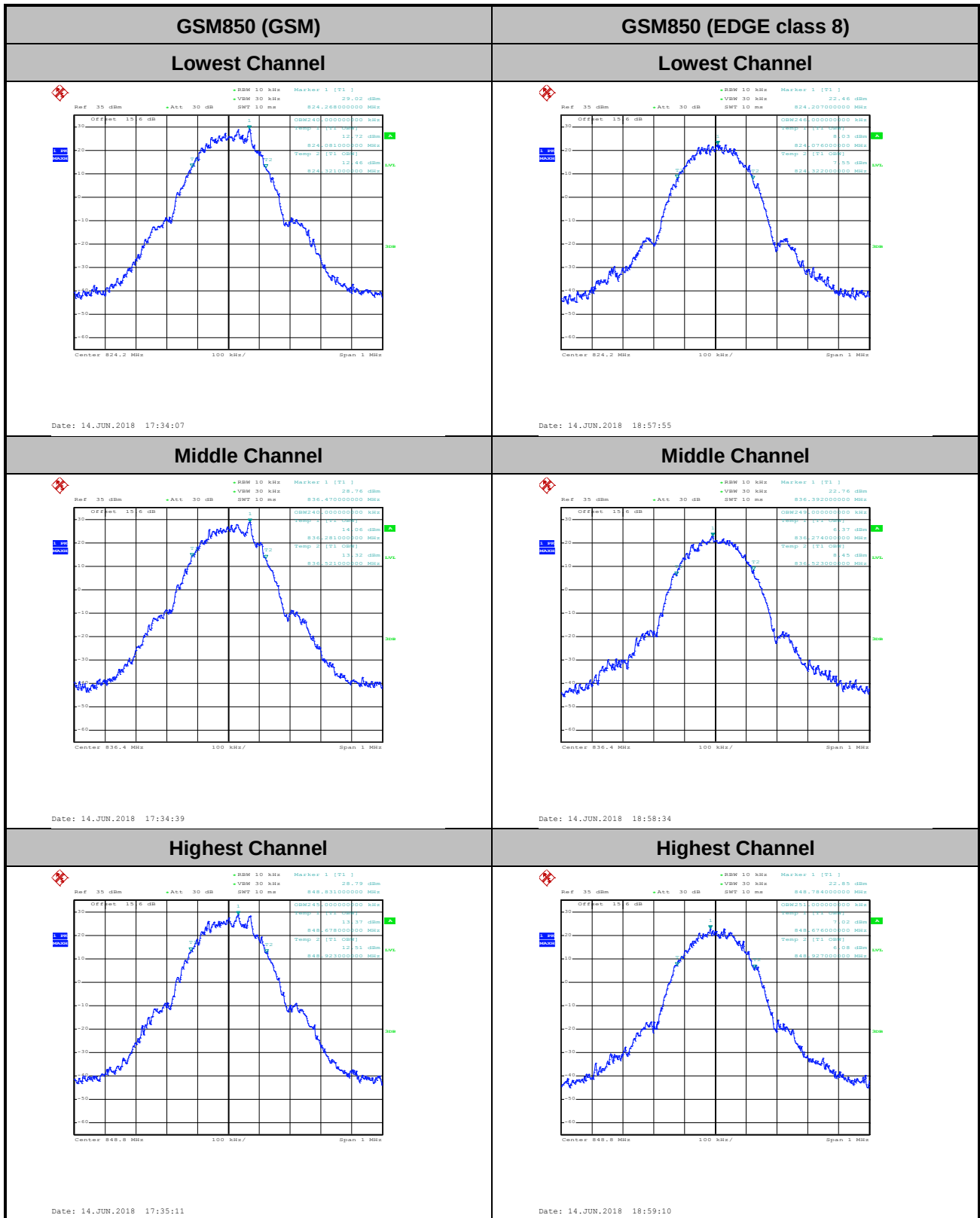


Date: 14.JUN.2018 17:54:02

**Occupied Bandwidth**

Mode	GSM850 : 99% OBW(MHz)	
Mod.	GSM	EDGE class 8
Lowest CH	0.240	0.245
Middle CH	0.240	0.249
Highest CH	0.245	0.251

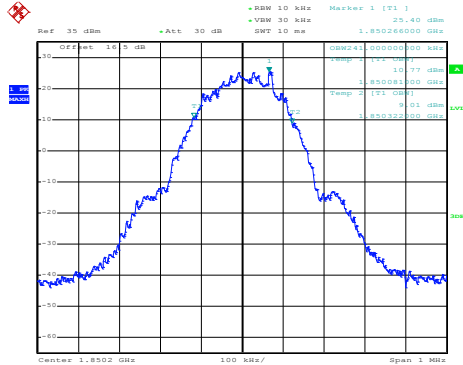
Mode	GSM1900 : 99% OBW(MHz)	
Mod.	GSM	EDGE class 8
Lowest CH	0.241	0.252
Middle CH	0.241	0.250
Highest CH	0.239	0.255





GSM1900 (GSM)

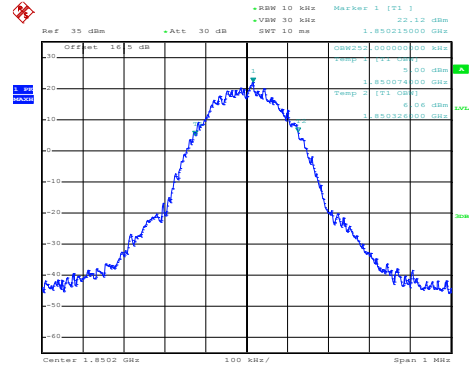
Lowest Channel



Date: 14.JUN.2018 17:14:08

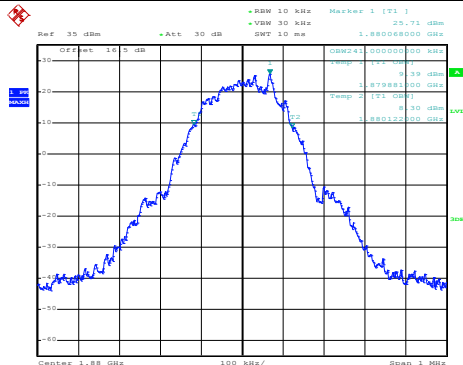
GSM1900 (EDGE class 8)

Lowest Channel



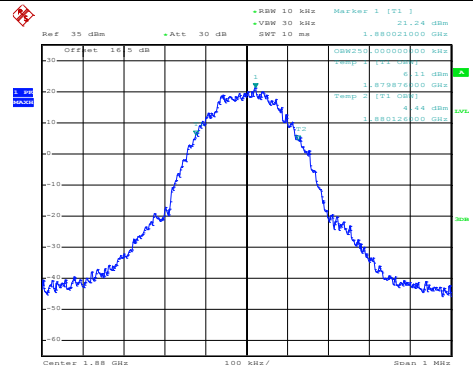
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Middle Channel



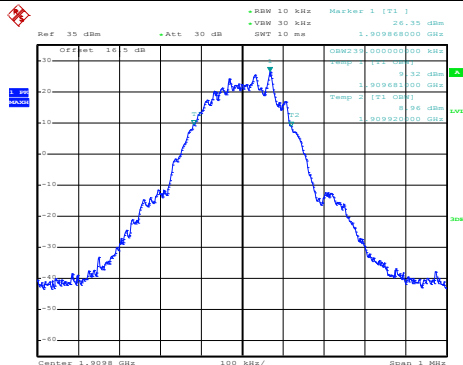
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Middle Channel



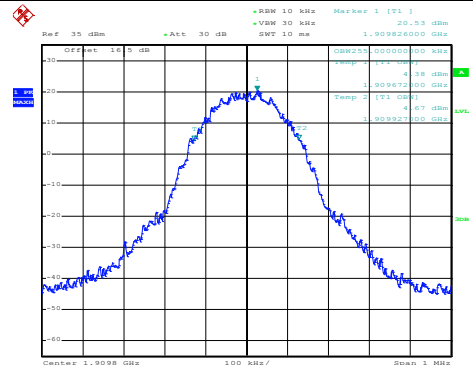
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Highest Channel

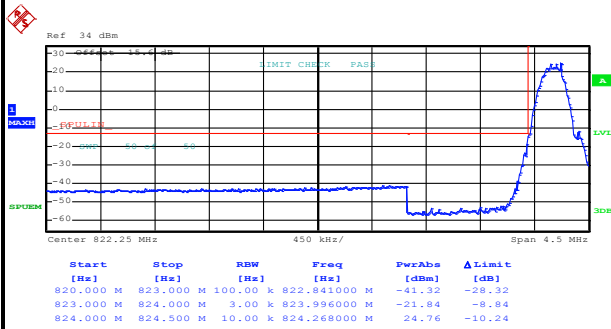


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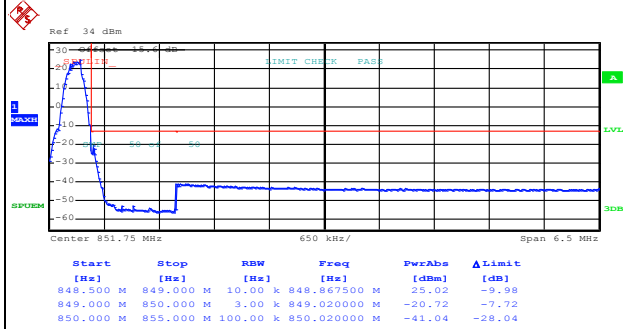
Highest Channel



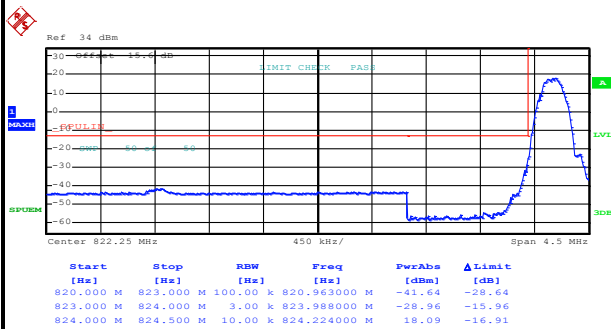
Date: 14.JUN.2018 18:00:00

**Conducted Band Edge****GSM850 (GSM)****Lowest Band Edge**

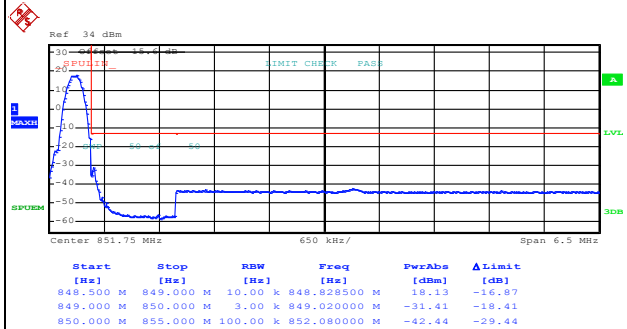
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Highest Band Edge

Date: 14.JUN.2018 17:39:18

GSM850 (EDGE class 8)**Lowest Band Edge**

Date: 14.JUN.2018 19:02:38

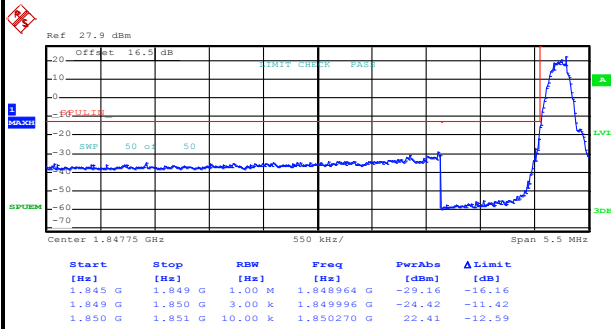
Highest Band Edge

Date: 14.JUN.2018 19:04:10



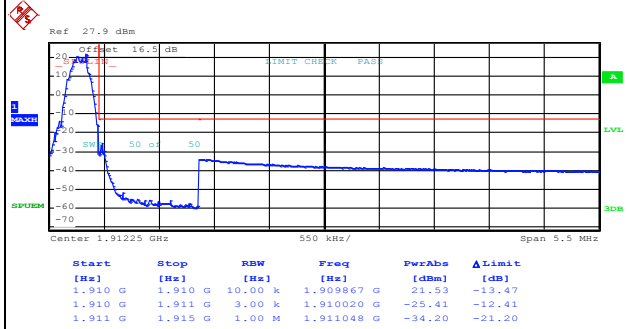
GSM1900 (GSM)

Lowest Band Edge



Date: 14.JUN.2018 17:17:37

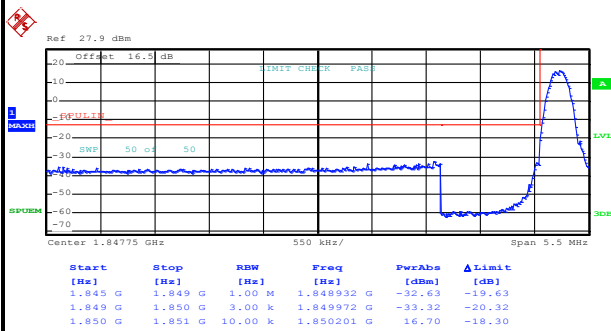
Highest Band Edge



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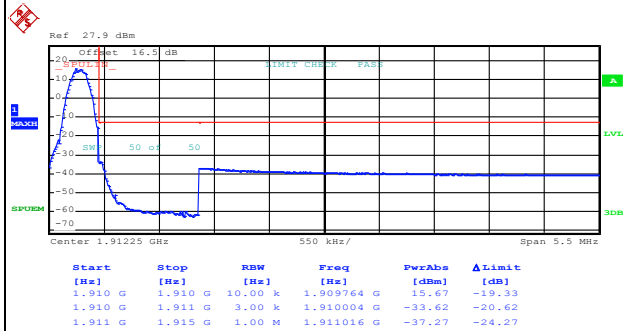
GSM1900 (EDGE class 8)

Lowest Band Edge



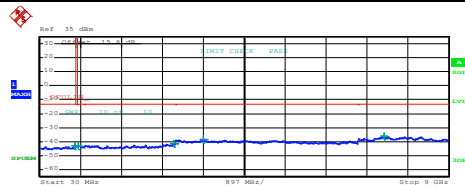
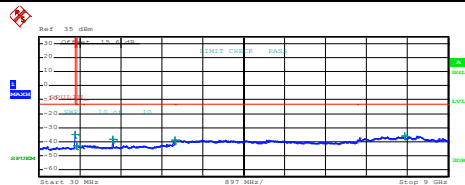
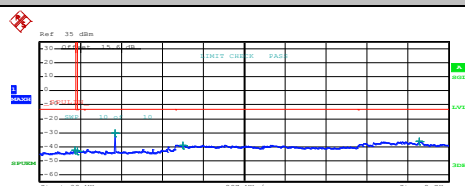
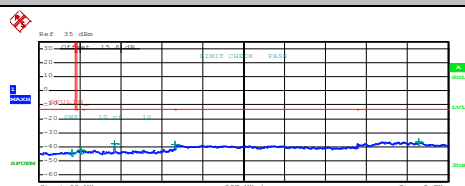
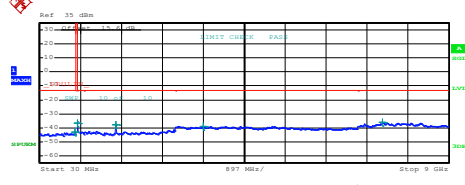
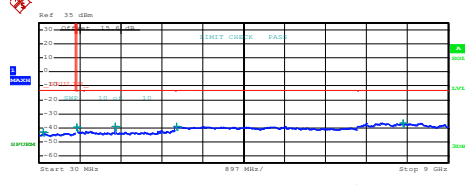
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Highest Band Edge



Date: 14.JUN.2018 18:08:28

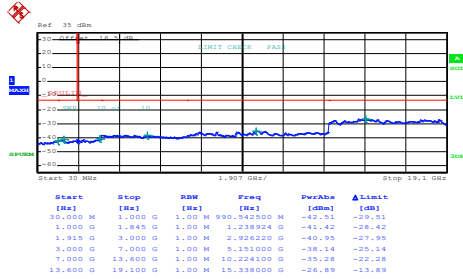
**Conducted Spurious Emission**

GSM850 (GSM)		GSM850 (EDGE class 8)																																																																																					
Lowest Channel		Lowest Channel																																																																																					
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Start	Stop	RBW	Freq	PerAbn	ΔLimit																																																																																		
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Start	Stop	RBW	Freq	PerAbn	ΔLimit																																																																																		
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7,000 G	9,000 G	1,00 M	8,016500 G	-36.53	-23.53																																																																																		



GSM1900 (GSM)

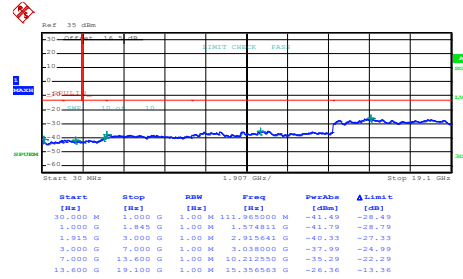
Lowest Channel



Date: 14.JUN.2018 17:11:12

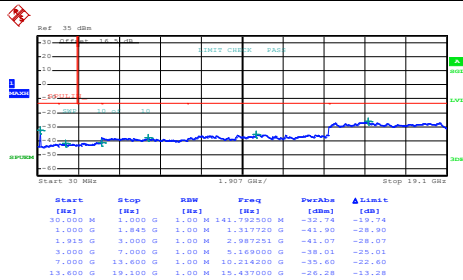
GSM1900 (EDGE class 8)

Lowest Channel



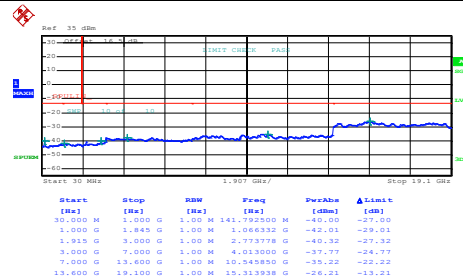
Date: 14.JUN.2018 17:55:06

Middle Channel



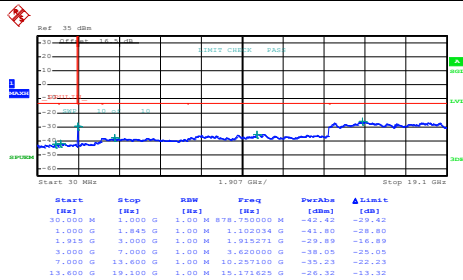
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Middle Channel



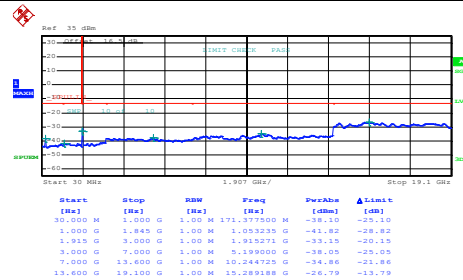
Date: 14.JUN.2018 17:55:58

Highest Channel



Date: 14.JUN.2018 17:13:17

Highest Channel



Date: 14.JUN.2018 17:57:38

Frequency Stability

Test Conditions	Middle Channel	GSM850 (GSM)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0084	0.0048	PASS
40	Normal Voltage	0.0048	0.0012	
30	Normal Voltage	0.0000	0.0000	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0000	0.0012	
0	Normal Voltage	0.0024	0.0024	
-10	Normal Voltage	0.0072	0.0024	
-20	Normal Voltage	0.0060	0.0036	
-30	Normal Voltage	0.0060	0.0012	
20	Maximum Voltage	0.0179	0.0012	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0215	0.0024	

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0037	0.0005	PASS
40	Normal Voltage	0.0021	0.0000	
30	Normal Voltage	0.0021	0.0000	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0011	0.0011	
0	Normal Voltage	0.0021	0.0016	
-10	Normal Voltage	0.0027	0.0005	
-20	Normal Voltage	0.0032	0.0011	
-30	Normal Voltage	0.0032	0.0021	
20	Maximum Voltage	0.0117	0.0027	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0101	0.0011	

Note:

1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block.

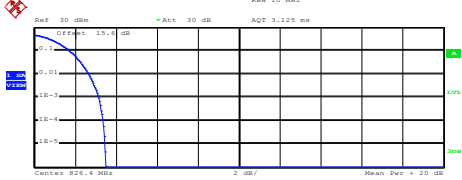
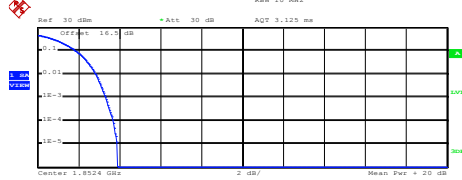
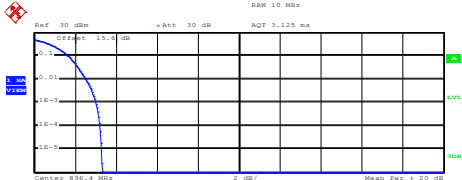
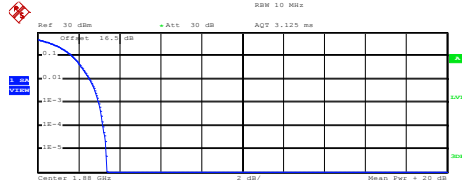
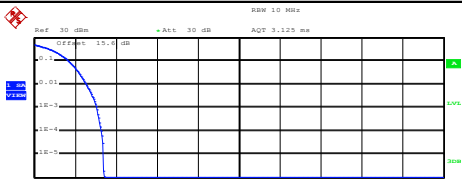
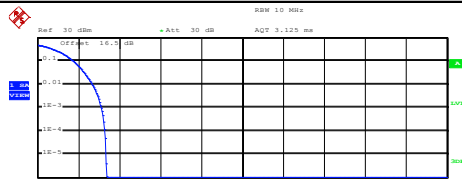


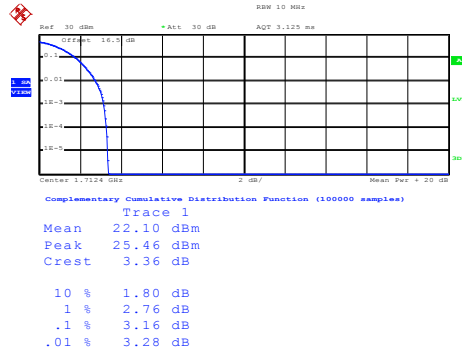
A3. WCDMA

Peak-to-Average Ratio

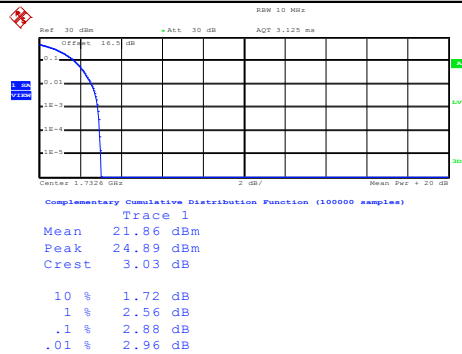
Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	3.16	3.32	3.16	PASS
Middle CH	3.00	3.00	2.88	
Highest CH	3.08	3.12	3.16	



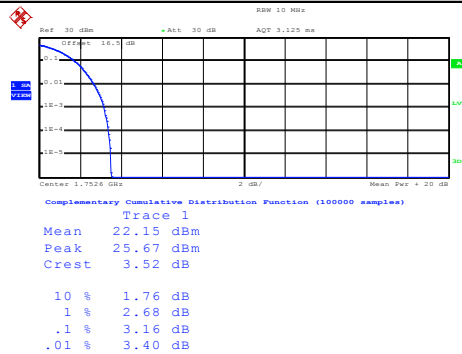
WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)																
Lowest Channel	Lowest Channel																
 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 826.4 MHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 23.24 dBm Peak: 26.73 dBm Crest: 3.48 dB <table><tr><td>10 %</td><td>1.72 dB</td></tr><tr><td>1 %</td><td>2.68 dB</td></tr><tr><td>.1 %</td><td>3.16 dB</td></tr><tr><td>.01 %</td><td>3.36 dB</td></tr></table> Date: 14.JUN.2018 19:46:30	10 %	1.72 dB	1 %	2.68 dB	.1 %	3.16 dB	.01 %	3.36 dB	 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 1.8524 GHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: -3.51 dBm Peak: 0.41 dBm Crest: 3.92 dB <table><tr><td>10 %</td><td>1.88 dB</td></tr><tr><td>1 %</td><td>2.84 dB</td></tr><tr><td>.1 %</td><td>3.32 dB</td></tr><tr><td>.01 %</td><td>3.72 dB</td></tr></table> Date: 14.JUN.2018 19:13:26	10 %	1.88 dB	1 %	2.84 dB	.1 %	3.32 dB	.01 %	3.72 dB
10 %	1.72 dB																
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.01 %	3.72 dB																
Middle Channel	Middle Channel																
 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 836.4 MHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 23.12 dBm Peak: 26.44 dBm Crest: 3.32 dB <table><tr><td>10 %</td><td>1.68 dB</td></tr><tr><td>1 %</td><td>2.52 dB</td></tr><tr><td>.1 %</td><td>3.00 dB</td></tr><tr><td>.01 %</td><td>3.20 dB</td></tr></table> Date: 14.JUN.2018 19:46:44	10 %	1.68 dB	1 %	2.52 dB	.1 %	3.00 dB	.01 %	3.20 dB	 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 1.85 GHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 21.81 dBm Peak: 25.17 dBm Crest: 3.37 dB <table><tr><td>10 %</td><td>1.68 dB</td></tr><tr><td>1 %</td><td>2.56 dB</td></tr><tr><td>.1 %</td><td>3.00 dB</td></tr><tr><td>.01 %</td><td>3.20 dB</td></tr></table> Date: 14.JUN.2018 19:13:40	10 %	1.68 dB	1 %	2.56 dB	.1 %	3.00 dB	.01 %	3.20 dB
10 %	1.68 dB																
1 %	2.52 dB																
.1 %	3.00 dB																
.01 %	3.20 dB																
10 %	1.68 dB																
1 %	2.56 dB																
.1 %	3.00 dB																
.01 %	3.20 dB																
Highest Channel	Highest Channel																
 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 846.6 MHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 23.05 dBm Peak: 26.44 dBm Crest: 3.40 dB <table><tr><td>10 %</td><td>1.68 dB</td></tr><tr><td>1 %</td><td>2.56 dB</td></tr><tr><td>.1 %</td><td>3.08 dB</td></tr><tr><td>.01 %</td><td>3.28 dB</td></tr></table> Date: 14.JUN.2018 19:46:59	10 %	1.68 dB	1 %	2.56 dB	.1 %	3.08 dB	.01 %	3.28 dB	 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 1.9076 GHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 21.53 dBm Peak: 24.89 dBm Crest: 3.36 dB <table><tr><td>10 %</td><td>1.76 dB</td></tr><tr><td>1 %</td><td>2.68 dB</td></tr><tr><td>.1 %</td><td>3.12 dB</td></tr><tr><td>.01 %</td><td>3.28 dB</td></tr></table> Date: 14.JUN.2018 19:13:59	10 %	1.76 dB	1 %	2.68 dB	.1 %	3.12 dB	.01 %	3.28 dB
10 %	1.68 dB																
1 %	2.56 dB																
.1 %	3.08 dB																
.01 %	3.28 dB																
10 %	1.76 dB																
1 %	2.68 dB																
.1 %	3.12 dB																
.01 %	3.28 dB																

WCDMA Band IV (RMC 12.2Kbps)
Lowest Channel


Date: 14.JUN.2018 19:30:55

Middle Channel


Date: 14.JUN.2018 19:31:43

Highest Channel


Date: 14.JUN.2018 19:32:03

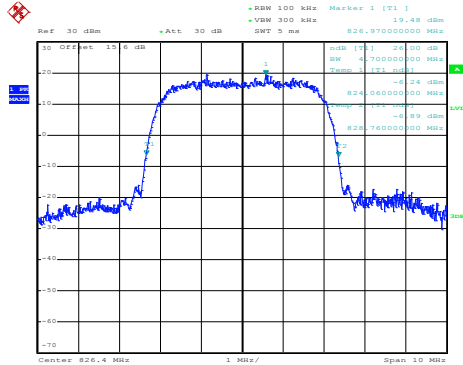
**26dB Bandwidth**

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



WCDMA Band V (RMC 12.2Kbps)

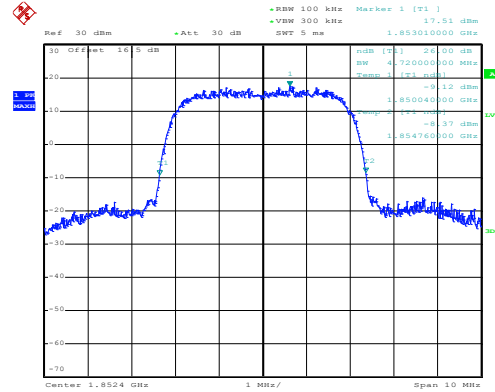
Lowest Channel



Date: 14.JUN.2018 19:43:22

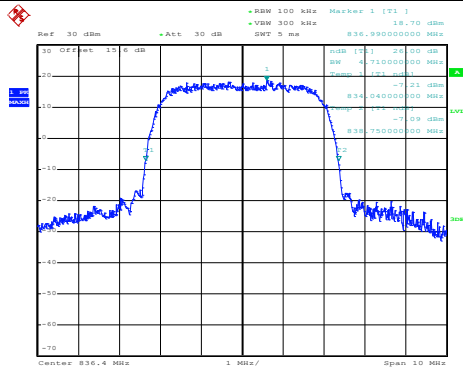
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



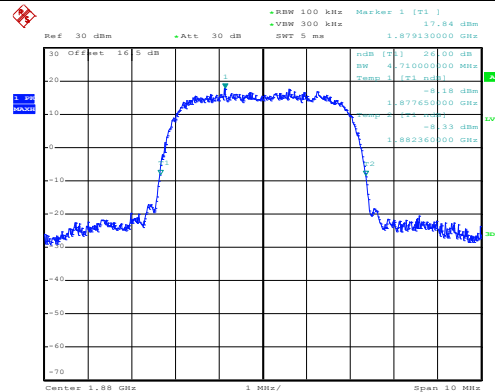
Date: 14.JUN.2018 19:07:24

Middle Channel



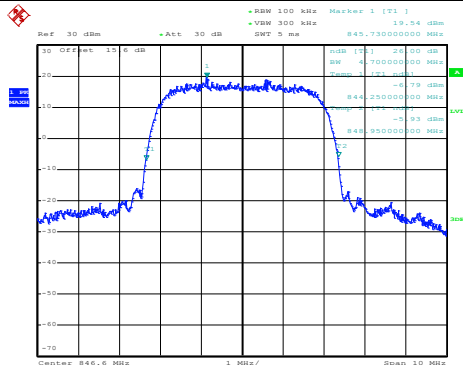
Date: 14.JUN.2018 19:43:54

Middle Channel



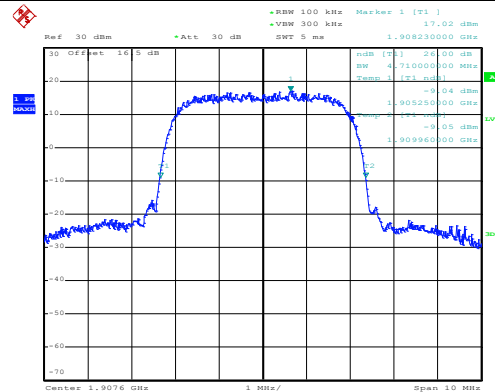
Date: 14.JUN.2018 19:07:58

Highest Channel



Date: 14.JUN.2018 19:44:29

Highest Channel

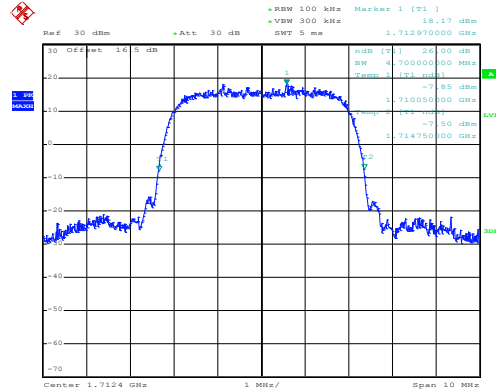


Date: 14.JUN.2018 19:08:31



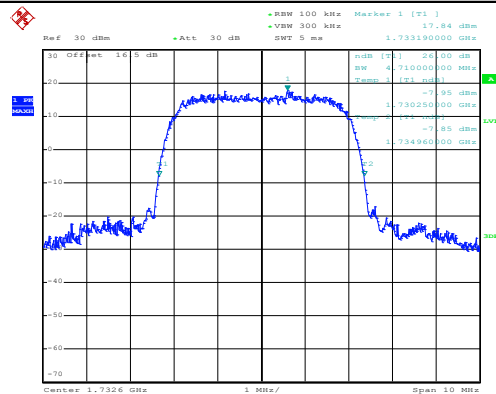
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



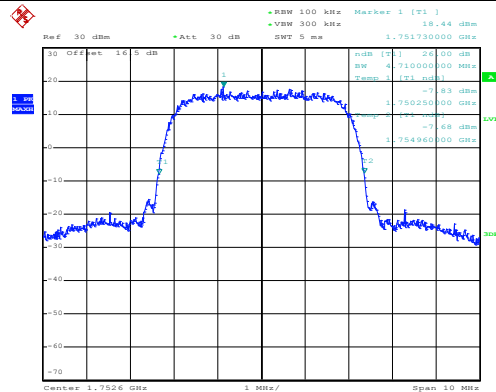
Date: 14.JUN.2018 19:24:40

Middle Channel



Date: 14.JUN.2018 19:25:15

Highest Channel



Date: 14.JUN.2018 19:25:48

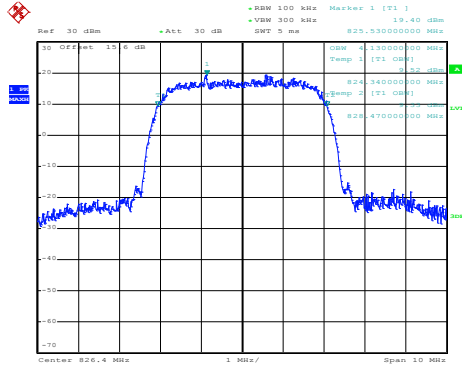
**Occupied Bandwidth**

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	4.13	4.14	4.12
Middle CH	4.13	4.14	4.13
Highest CH	4.12	4.14	4.14



WCDMA Band V (RMC 12.2Kbps)

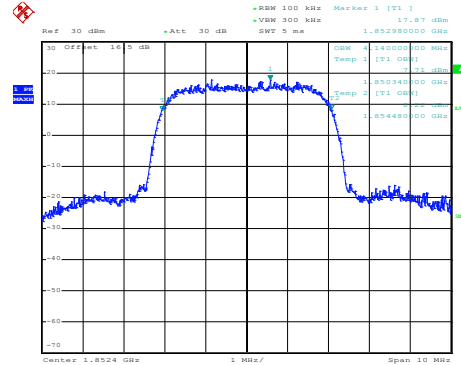
Lowest Channel



Date: 14.JUN.2018 19:45:09

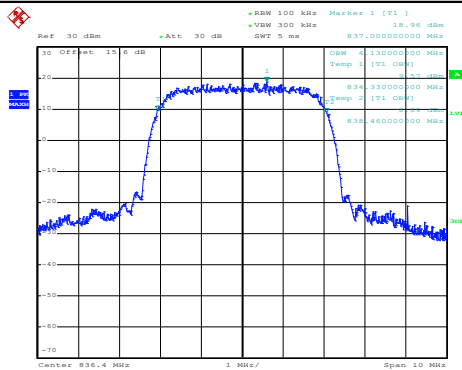
WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



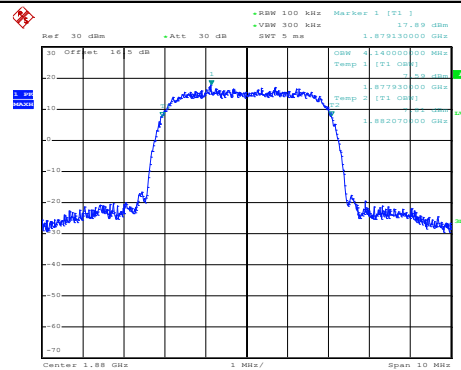
Date: 14.JUN.2018 19:12:03

Middle Channel



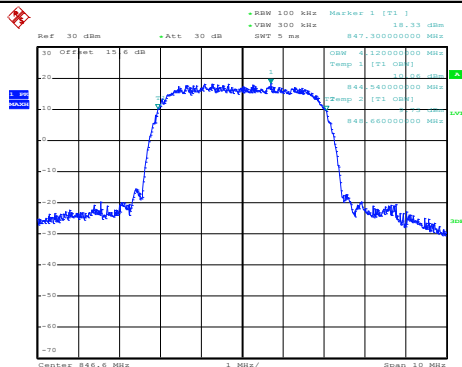
Date: 14.JUN.2018 19:45:43

Middle Channel



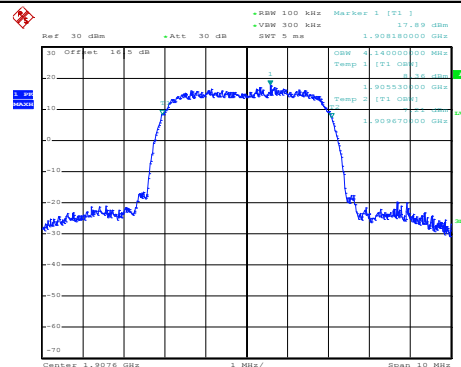
Date: 14.JUN.2018 19:12:36

Highest Channel



Date: 14.JUN.2018 19:46:15

Highest Channel

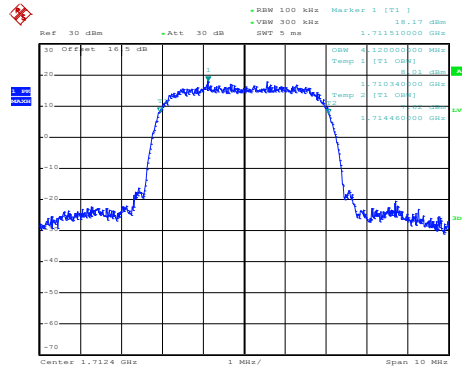


Date: 14.JUN.2018 19:13:11



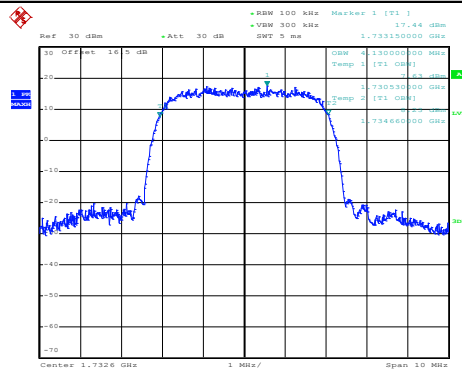
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



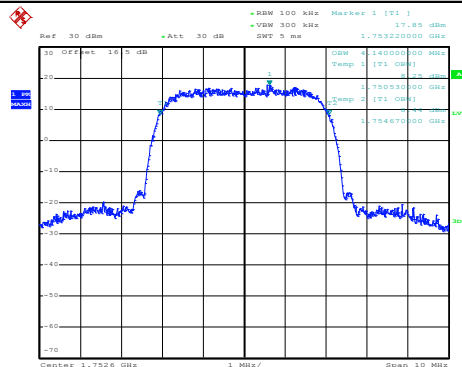
Date: 14.JUN.2018 19:29:07

Middle Channel

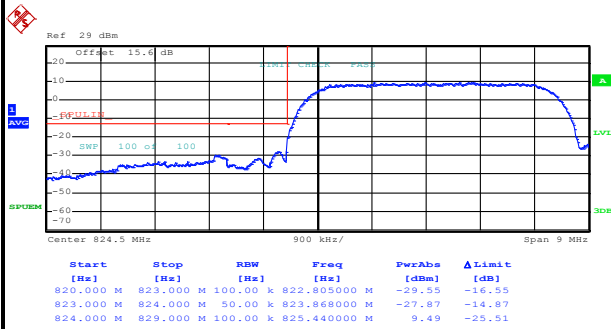


Date: 14.JUN.2018 19:29:46

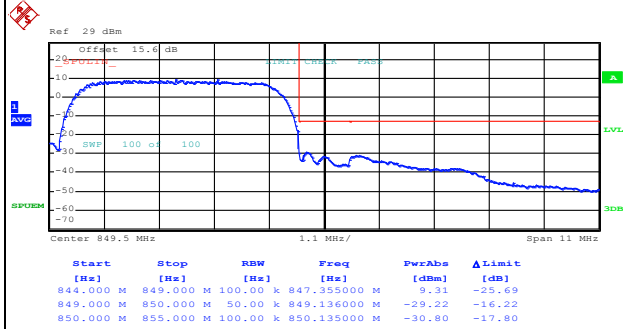
Highest Channel



Date: 14.JUN.2018 19:30:18

**Conducted Band Edge****WCDMA Band V (RMC 12.2Kbps)****Lowest Band Edge**

Date: 14.JUN.2018 19:49:49

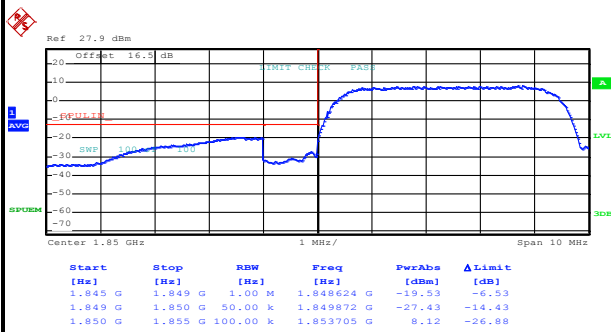
Highest Band Edge

Date: 14.JUN.2018 19:52:36



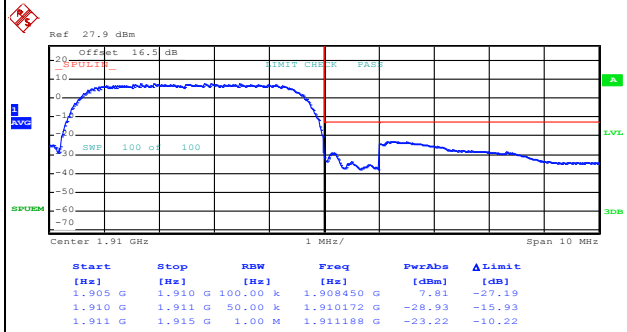
WCDMA Band II (RMC 12.2Kbps)

Lowest Band Edge



Date: 14.JUN.2018 19:16:50

Highest Band Edge

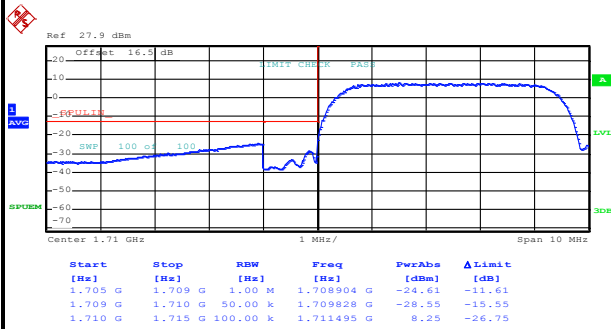


Date: 14.JUN.2018 19:22:32



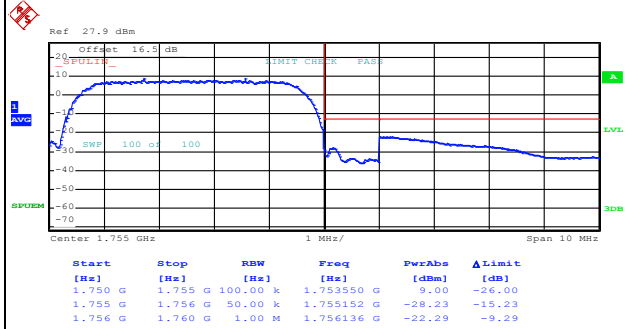
WCDMA Band IV (RMC 12.2Kbps)

Lowest Band Edge

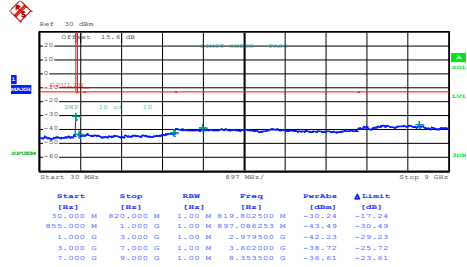


Date: 14.JUN.2018 19:34:55

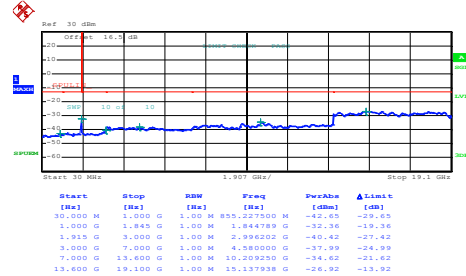
Highest Band Edge



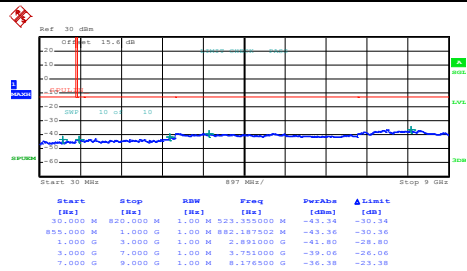
Date: 14.JUN.2018 19:37:42

**Conducted Spurious Emission****WCDMA Band V (RMC 12.2Kbps)****Lowest Channel**

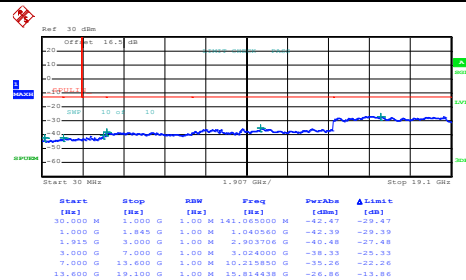
Date: 14.JUN.2018 19:41:02

WCDMA Band II (RMC 12.2Kbps)**Lowest Channel**

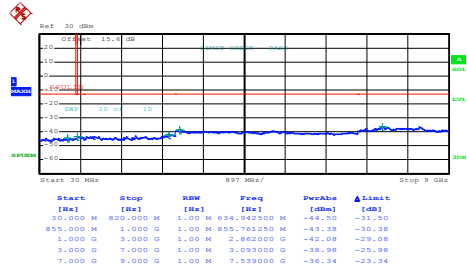
Date: 14.JUN.2018 19:09:35

Middle Channel

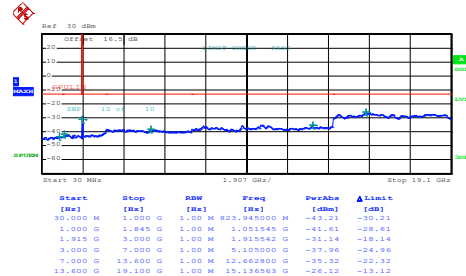
Date: 14.JUN.2018 19:41:52

Middle Channel

Date: 14.JUN.2018 19:10:26

Highest Channel

Date: 14.JUN.2018 19:42:43

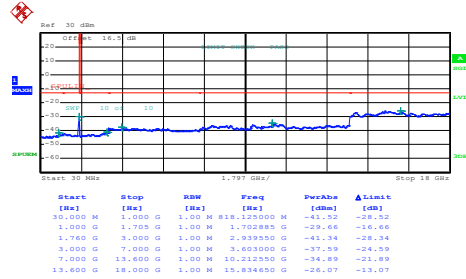
Highest Channel

Date: 14.JUN.2018 19:11:18



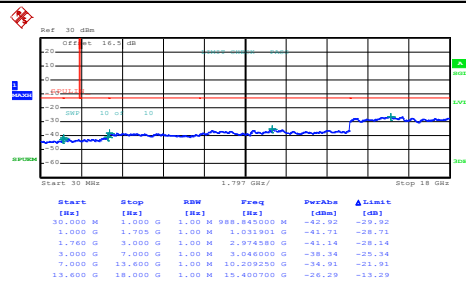
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



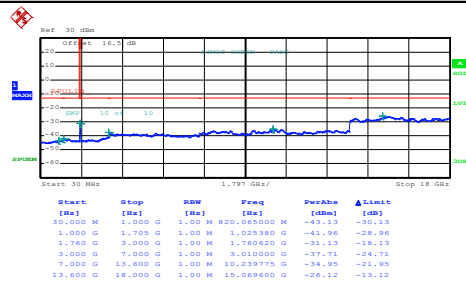
Date: 14.JUN.2018 19:26:47

Middle Channel



Date: 14.JUN.2018 19:27:36

Highest Channel



Date: 14.JUN.2018 19:28:26

**Frequency Stability**

Test Conditions	Middle Channel	WCDMA Band V (RMC 12.2Kbps)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0036	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0179	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0179	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0053	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0043	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0023	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0052	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0058	

Note:

1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block



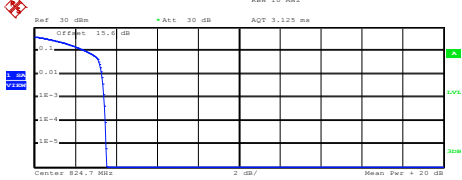
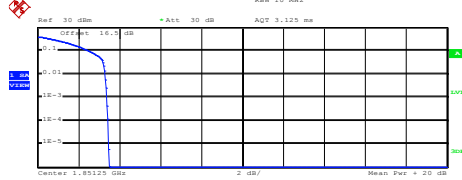
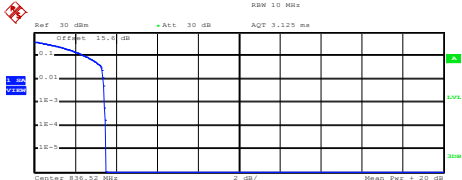
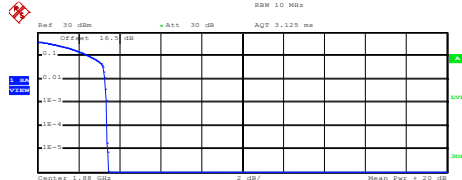
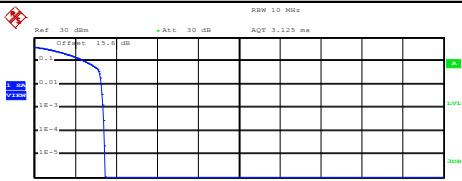
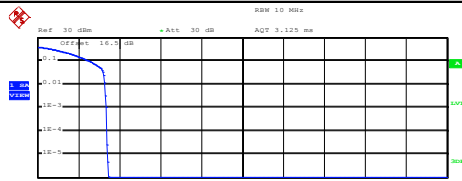
A4. CDMA

Peak-to-Average Ratio

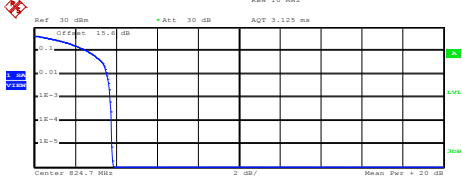
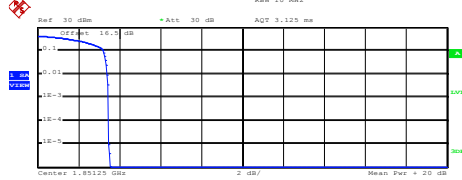
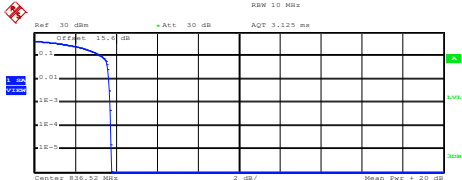
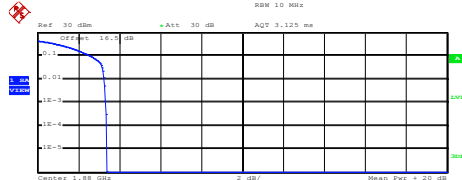
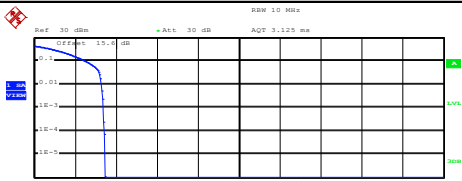
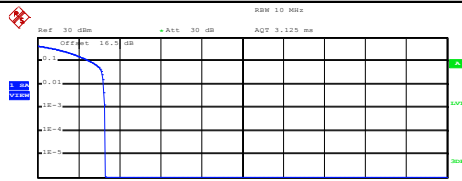
Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xRTT	1xRTT	Result
Lowest CH	3.40	3.40	PASS
Middle CH	3.44	3.36	
Highest CH	3.36	3.36	

Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0	Result
Lowest CH	3.72	3.48	PASS
Middle CH	3.72	3.32	
Highest CH	3.40	3.28	



CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	Lowest Channel
 Center 824.7 MHz Ref 30 dBm Att 30 dB AQT 3.125 ms Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.06 dBm Peak 27.57 dBm Crest 3.52 dB 10 % 2.56 dB 1 % 3.32 dB .1 % 3.40 dB .01 % 3.48 dB Date: 15.JUN.2018 12:42:32	 Center 1.85125 GHz Ref 30 dBm Att 30 dB AQT 3.125 ms Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.78 dBm Peak 26.30 dBm Crest 3.52 dB 10 % 2.56 dB 1 % 3.32 dB .1 % 3.40 dB .01 % 3.44 dB Date: 15.JUN.2018 12:29:29
Middle Channel	Middle Channel
 Center 836.52 MHz Ref 30 dBm Att 30 dB AQT 3.125 ms Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.92 dBm Peak 27.43 dBm Crest 3.51 dB 10 % 2.52 dB 1 % 3.36 dB .1 % 3.44 dB .01 % 3.48 dB Date: 15.JUN.2018 12:42:53	 Center 1.85 GHz Ref 30 dBm Att 30 dB AQT 3.125 ms Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 21.92 dBm Peak 25.38 dBm Crest 3.46 dB 10 % 2.56 dB 1 % 3.28 dB .1 % 3.36 dB .01 % 3.40 dB Date: 15.JUN.2018 12:29:42
Highest Channel	Highest Channel
 Center 848.31 MHz Ref 30 dBm Att 30 dB AQT 3.125 ms Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.64 dBm Peak 27.08 dBm Crest 3.44 dB 10 % 2.52 dB 1 % 3.28 dB .1 % 3.36 dB .01 % 3.44 dB Date: 15.JUN.2018 12:43:07	 Center 1.90875 GHz Ref 30 dBm Att 30 dB AQT 3.125 ms Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.00 dBm Peak 26.44 dBm Crest 3.44 dB 10 % 2.56 dB 1 % 3.28 dB .1 % 3.36 dB .01 % 3.40 dB Date: 15.JUN.2018 12:29:55



CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)																
Lowest Channel	Lowest Channel																
 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 824.7 MHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 24.12 dBm Peak: 27.96 dBm Crest: 3.85 dB <table><tr><td>10 %</td><td>2.60 dB</td></tr><tr><td>1 %</td><td>3.56 dB</td></tr><tr><td>.1 %</td><td>3.72 dB</td></tr><tr><td>.01 %</td><td>3.80 dB</td></tr></table> Date: 26.JUN.2018 22:06:42	10 %	2.60 dB	1 %	3.56 dB	.1 %	3.72 dB	.01 %	3.80 dB	 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 1.85125 GHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 24.14 dBm Peak: 27.68 dBm Crest: 3.54 dB <table><tr><td>10 %</td><td>3.20 dB</td></tr><tr><td>1 %</td><td>3.40 dB</td></tr><tr><td>.1 %</td><td>3.48 dB</td></tr><tr><td>.01 %</td><td>3.48 dB</td></tr></table> Date: 26.JUN.2018 22:20:21	10 %	3.20 dB	1 %	3.40 dB	.1 %	3.48 dB	.01 %	3.48 dB
10 %	2.60 dB																
1 %	3.56 dB																
.1 %	3.72 dB																
.01 %	3.80 dB																
10 %	3.20 dB																
1 %	3.40 dB																
.1 %	3.48 dB																
.01 %	3.48 dB																
Middle Channel	Middle Channel																
 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 836.52 MHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 24.03 dBm Peak: 27.82 dBm Crest: 3.79 dB <table><tr><td>10 %</td><td>3.28 dB</td></tr><tr><td>1 %</td><td>3.64 dB</td></tr><tr><td>.1 %</td><td>3.72 dB</td></tr><tr><td>.01 %</td><td>3.76 dB</td></tr></table> Date: 26.JUN.2018 22:06:54	10 %	3.28 dB	1 %	3.64 dB	.1 %	3.72 dB	.01 %	3.76 dB	 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 1.85 GHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 24.59 dBm Peak: 27.96 dBm Crest: 3.37 dB <table><tr><td>10 %</td><td>2.60 dB</td></tr><tr><td>1 %</td><td>3.24 dB</td></tr><tr><td>.1 %</td><td>3.32 dB</td></tr><tr><td>.01 %</td><td>3.40 dB</td></tr></table> Date: 26.JUN.2018 22:20:34	10 %	2.60 dB	1 %	3.24 dB	.1 %	3.32 dB	.01 %	3.40 dB
10 %	3.28 dB																
1 %	3.64 dB																
.1 %	3.72 dB																
.01 %	3.76 dB																
10 %	2.60 dB																
1 %	3.24 dB																
.1 %	3.32 dB																
.01 %	3.40 dB																
Highest Channel	Highest Channel																
 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 848.31 MHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 23.93 dBm Peak: 27.40 dBm Crest: 3.47 dB <table><tr><td>10 %</td><td>2.52 dB</td></tr><tr><td>1 %</td><td>3.28 dB</td></tr><tr><td>.1 %</td><td>3.40 dB</td></tr><tr><td>.01 %</td><td>3.44 dB</td></tr></table> Date: 26.JUN.2018 22:07:06	10 %	2.52 dB	1 %	3.28 dB	.1 %	3.40 dB	.01 %	3.44 dB	 Ref: 30 dBm, Att: 30 dB, AQT: 3.125 ms, RSW: 10 MHz Center: 1.90875 GHz, 2 dB/ Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean: 24.23 dBm Peak: 27.54 dBm Crest: 3.31 dB <table><tr><td>10 %</td><td>2.60 dB</td></tr><tr><td>1 %</td><td>3.24 dB</td></tr><tr><td>.1 %</td><td>3.28 dB</td></tr><tr><td>.01 %</td><td>3.32 dB</td></tr></table> Date: 26.JUN.2018 22:20:48	10 %	2.60 dB	1 %	3.24 dB	.1 %	3.28 dB	.01 %	3.32 dB
10 %	2.52 dB																
1 %	3.28 dB																
.1 %	3.40 dB																
.01 %	3.44 dB																
10 %	2.60 dB																
1 %	3.24 dB																
.1 %	3.28 dB																
.01 %	3.32 dB																

**26dB Bandwidth**

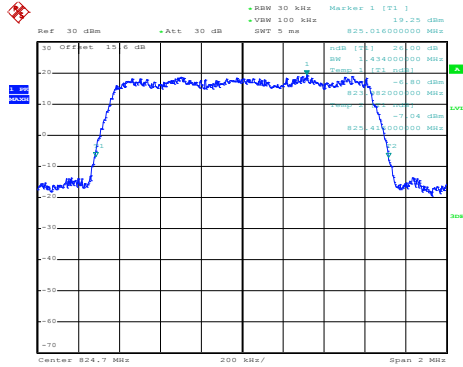
Mode	CDMA BC0 26dB BW(MHz)	CDMA BC1 26dB BW(MHz)
Mod.	1xRTT	1xRTT
Lowest CH	1.43	1.43
Middle CH	1.43	1.43
Highest CH	1.44	1.44

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	1.43
Highest CH	1.44	1.43



CDMA BC0 (1xRTT)

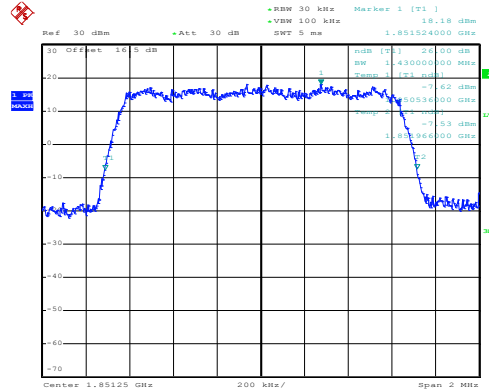
Lowest Channel



Date: 15.JUN.2018 12:41:04

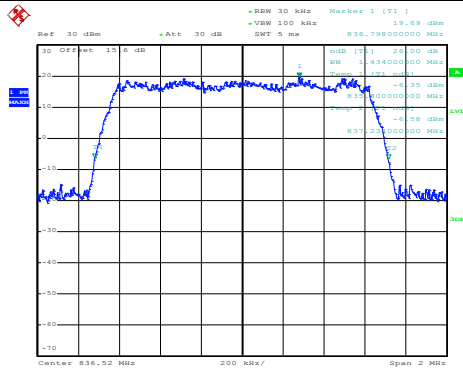
CDMA BC1 (1xRTT)

Lowest Channel



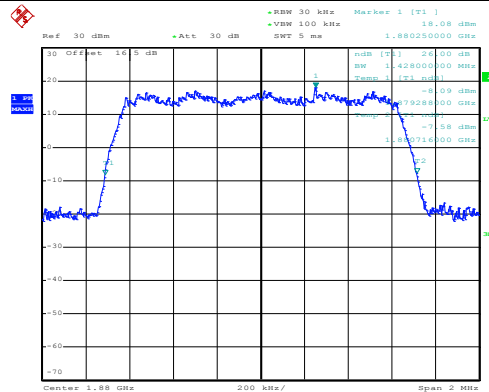
Date: 15.JUN.2018 12:04:50

Middle Channel



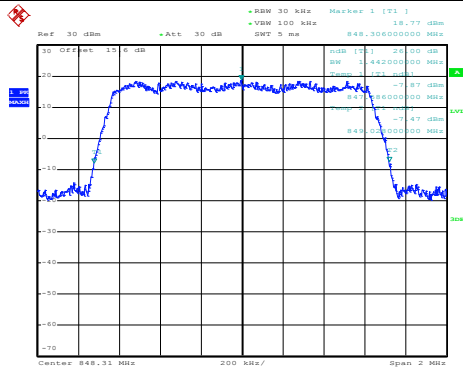
Date: 15.JUN.2018 12:41:39

Middle Channel



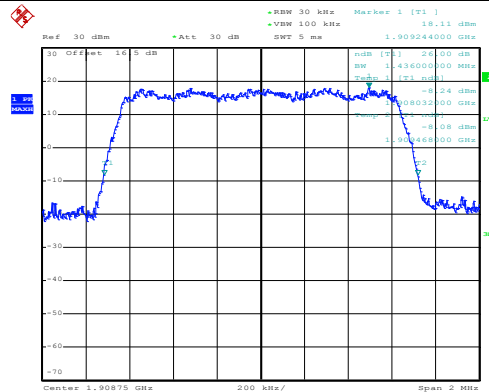
Date: 15.JUN.2018 12:05:26

Highest Channel



Date: 15.JUN.2018 12:42:11

Highest Channel

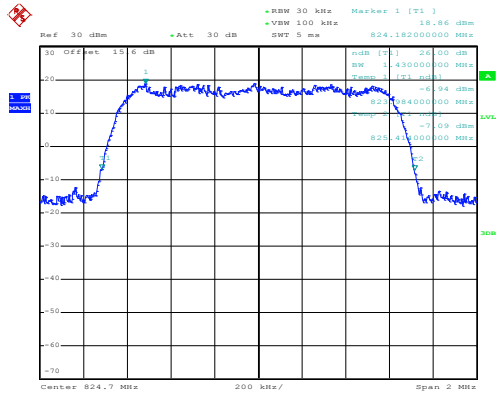


Date: 15.JUN.2018 12:05:59



CDMA BC0 (1xEV-DO Rev. 0)

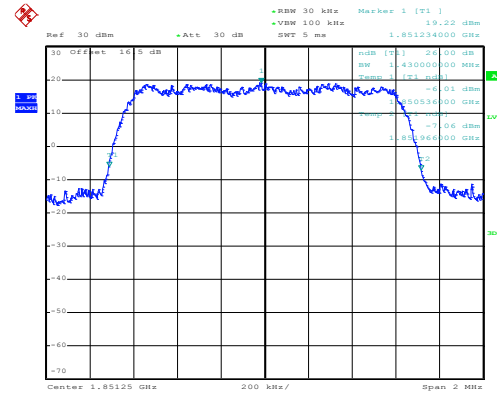
Lowest Channel



Date: 26.JUN.2018 22:00:50

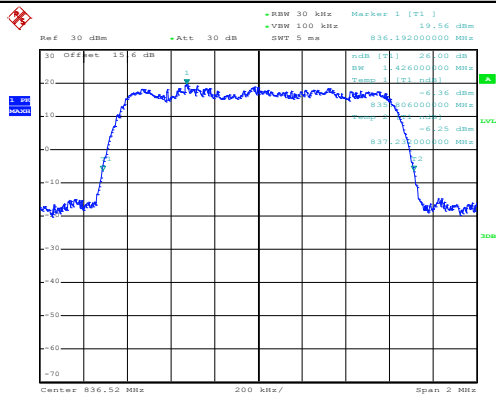
CDMA BC1 (1xEV-DO Rev. 0)

Lowest Channel



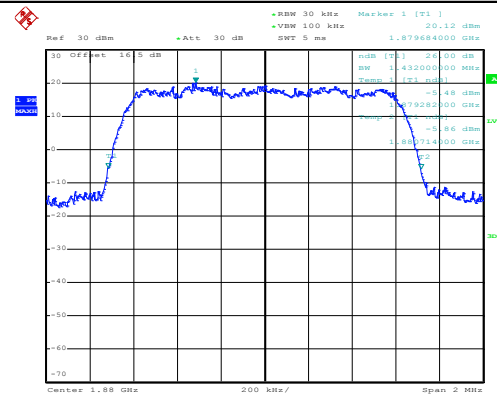
Date: 26.JUN.2018 22:14:36

Middle Channel



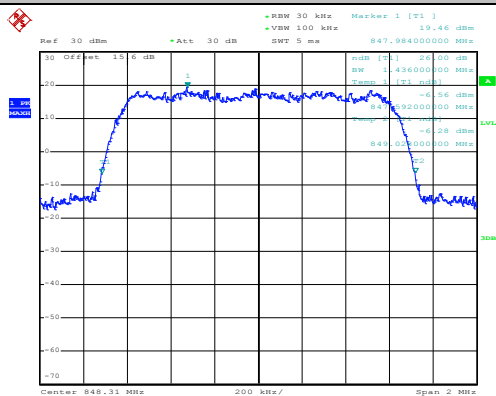
Date: 26.JUN.2018 22:01:24

Middle Channel



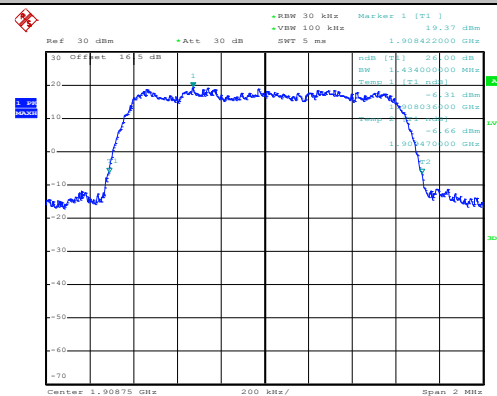
Date: 26.JUN.2018 22:15:08

Highest Channel



Date: 26.JUN.2018 22:01:56

Highest Channel



Date: 26.JUN.2018 22:15:43

**Occupied Bandwidth**

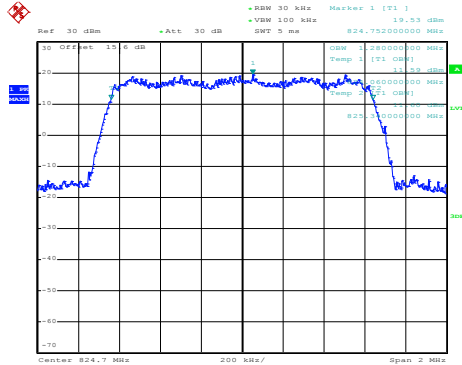
Mode	CDMA BC0 99% OBW(MHz)	CDMA BC1 99% OBW(MHz)
Mod.	1xRTT	1xRTT
Lowest CH	1.28	1.28
Middle CH	1.28	1.28
Highest CH	1.28	1.28

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	1.28	1.28
Highest CH	1.28	1.28



CDMA BC0 (1xRTT)

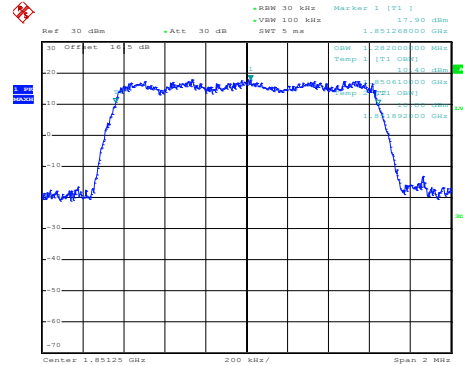
Lowest Channel



Date: 15.JUN.2018 12:43:44

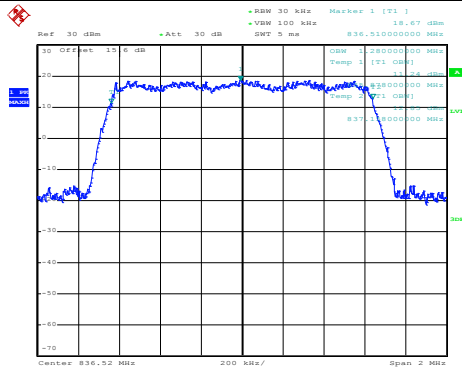
CDMA BC1 (1xRTT)

Lowest Channel



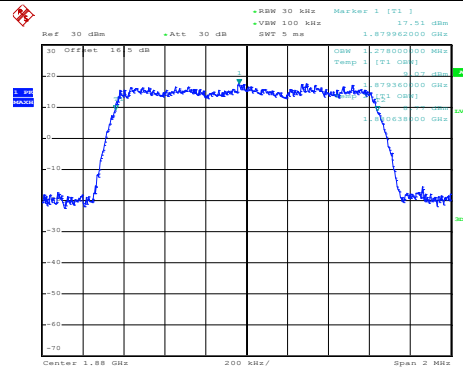
Date: 15.JUN.2018 12:21:01

Middle Channel



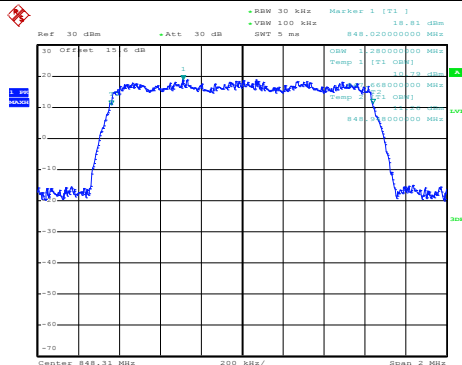
Date: 15.JUN.2018 12:44:23

Middle Channel



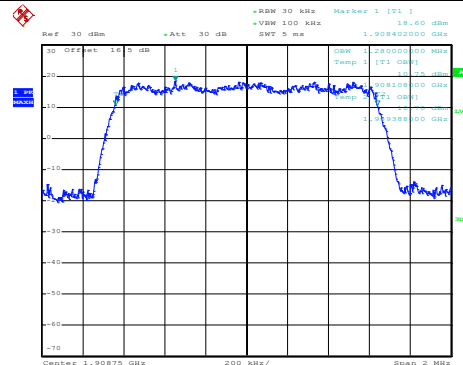
Date: 15.JUN.2018 12:22:22

Highest Channel



Date: 15.JUN.2018 12:44:55

Highest Channel

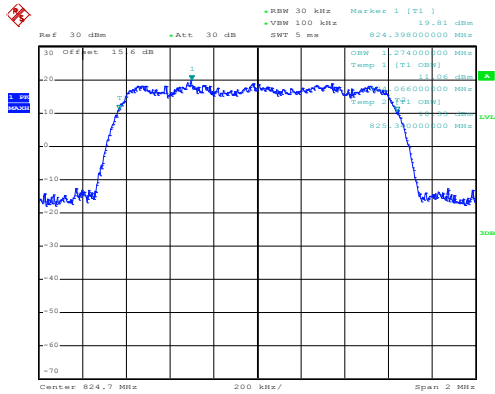


Date: 15.JUN.2018 12:29:16



CDMA BC0 (1xEV-DO Rev. 0)

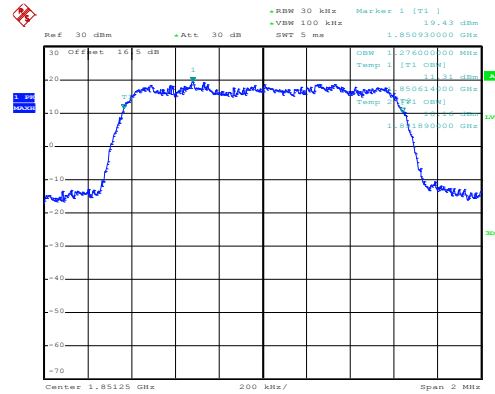
Lowest Channel



Date: 26 JUN 2018 22:02:40

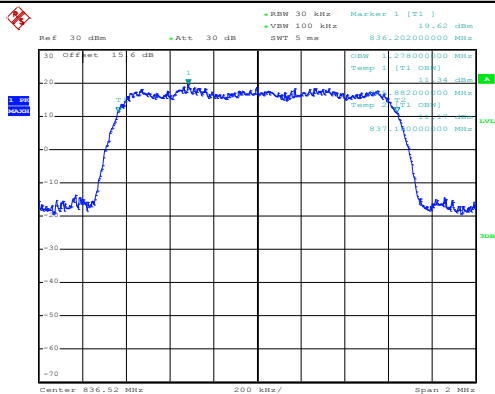
CDMA BC1 (1xEV-DO Rev. 0)

Lowest Channel



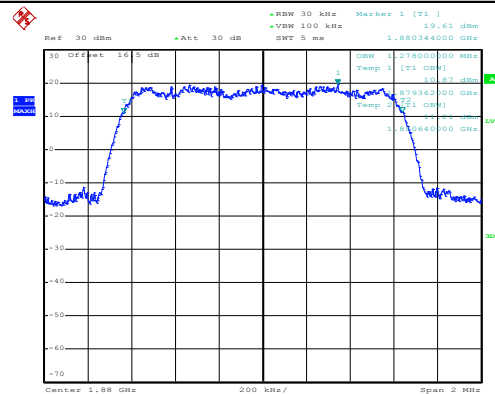
Date: 26 JUN 2018 22:16:32

Middle Channel



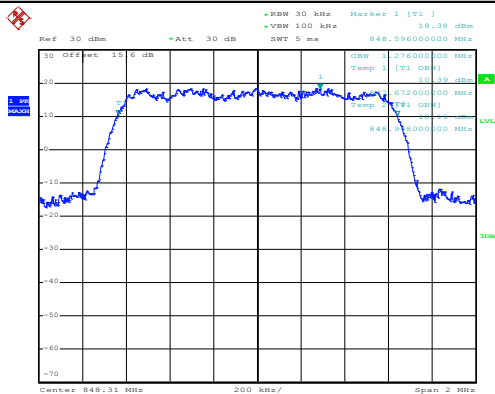
Date: 26 JUN 2018 22:03:14

Middle Channel



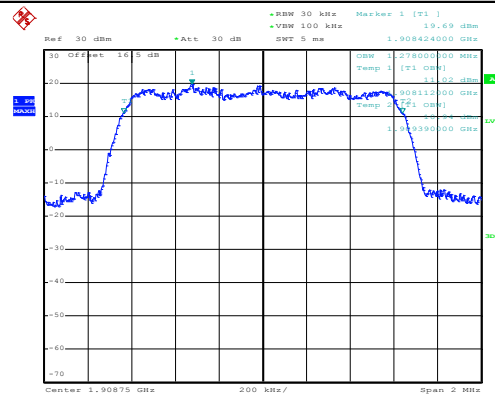
Date: 26 JUN 2018 22:17:03

Highest Channel

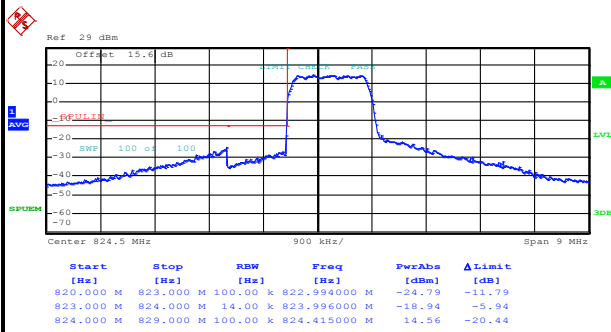


Date: 26 JUN 2018 22:03:46

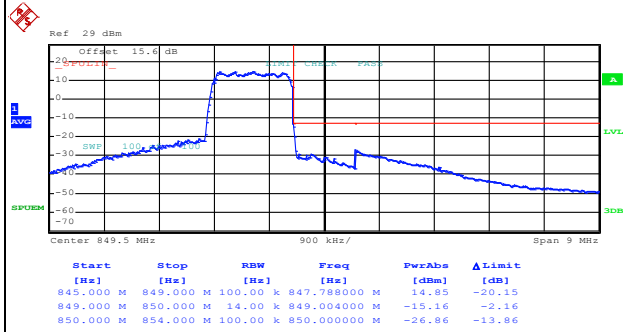
Highest Channel



Date: 26 JUN 2018 22:17:35

**Conducted Band Edge****CDMA BC0 (1xRTT)****Lowest Band Edge**

Date: 15.JUN.2018 12:48:00

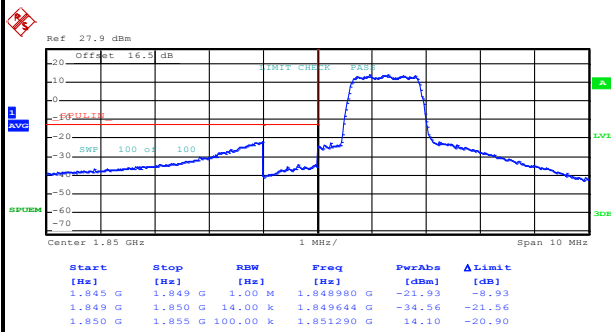
Highest Band Edge

Date: 15.JUN.2018 12:50:47



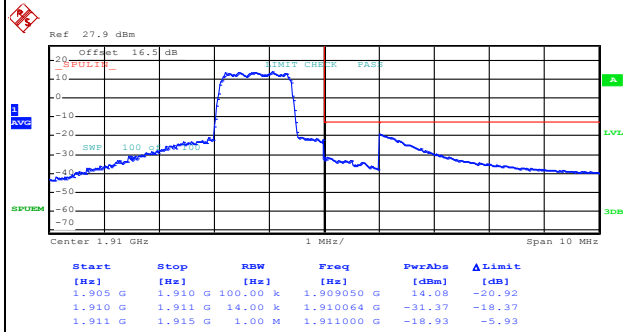
CDMA BC1 (1xRTT)

Lowest Band Edge



Date: 15.JUN.2018 12:32:43

Highest Band Edge

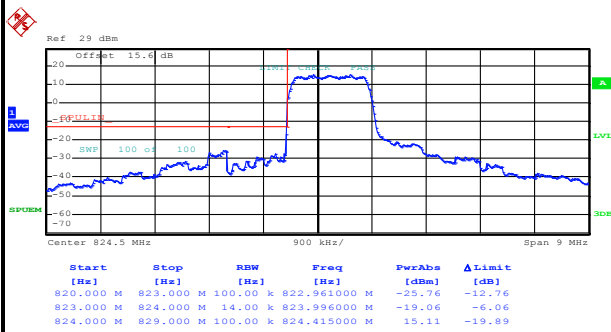


Date: 15.JUN.2018 12:35:54



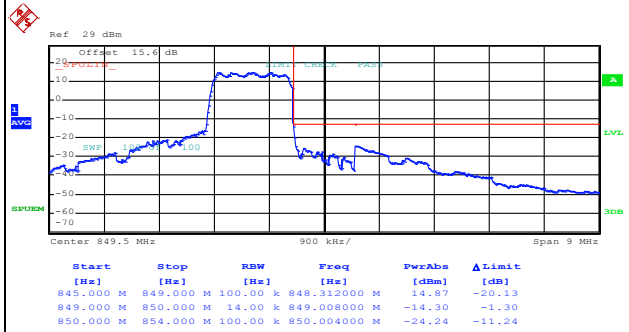
CDMA BC0 (1xEV-DO Rev. 0)

Lowest Band Edge



Date: 26.JUN.2018 22:10:01

Highest Band Edge

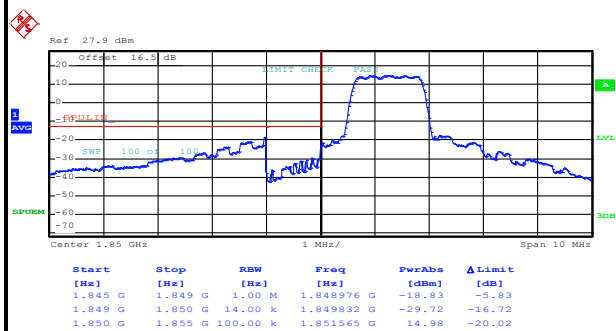


Date: 26.JUN.2018 22:12:48



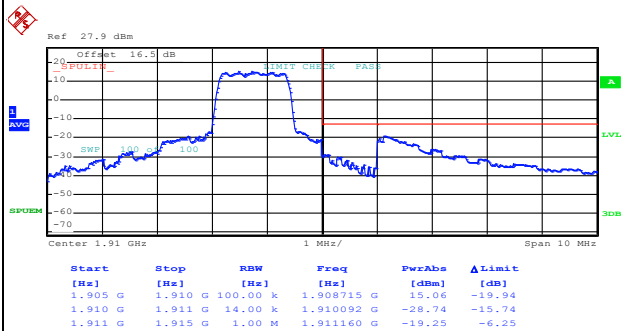
CDMA BC1 (1xEV-DO Rev. 0)

Lowest Band Edge

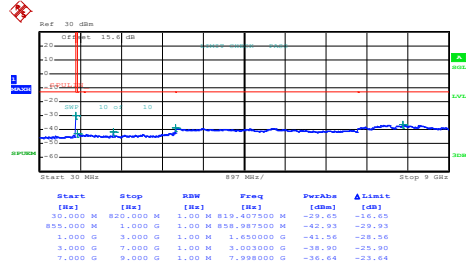


Date: 26.JUN.2018 22:23:36

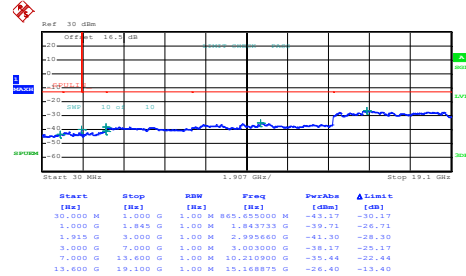
Highest Band Edge



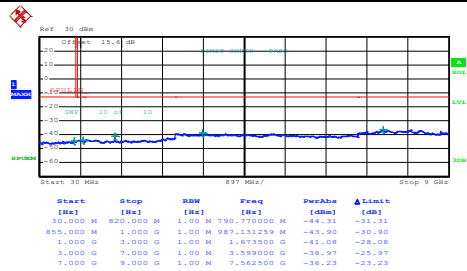
Date: 26.JUN.2018 22:26:24

**Conducted Spurious Emission****CDMA BC0 (1xRTT)****Lowest Channel**

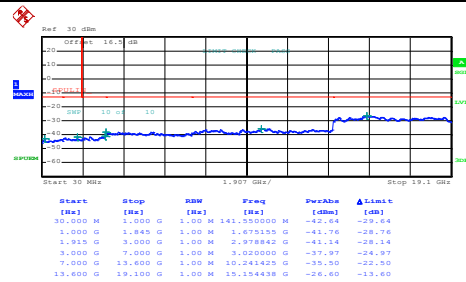
Date: 15.JUN.2018 12:38:34

CDMA BC1 (1xRTT)**Lowest Channel**

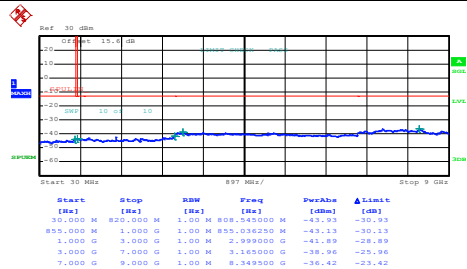
Date: 15.JUN.2018 12:06:54

Middle Channel

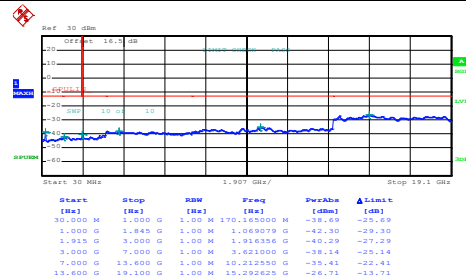
Date: 15.JUN.2018 12:39:24

Middle Channel

Date: 15.JUN.2018 12:07:47

Highest Channel

Date: 15.JUN.2018 12:40:16

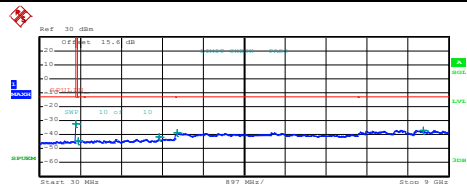
Highest Channel

Date: 15.JUN.2018 12:08:42



CDMA BC0 (1xEV-DO Rev. 0)

Lowest Channel

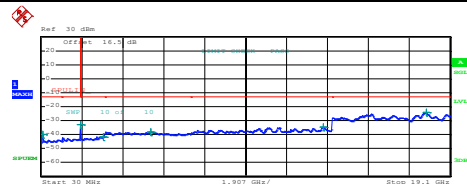


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAve [dBm]	Δ Limit [dB]
30,000 M	820,000 M	1,000 M	819,012500 M	-32.43	-31.43
855,000 M	1,000 G	1,000 M	876,713751 M	-44.31	-31.31
1,000 G	3,000 G	1,000 M	2,0300000 G	-42.50	-28.50
3,000 G	7,000 G	1,000 M	5,0360000 G	-38.58	-25.58
7,000 G	9,000 G	1,000 M	8,4445000 G	-36.87	-23.87

Date: 26.JUN.2018 22:04:42

CDMA BC1 (1xEV-DO Rev. 0)

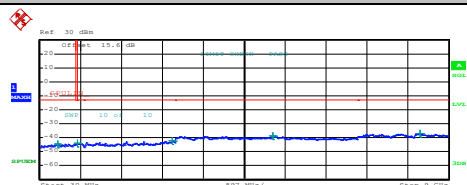
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAve [dBm]	Δ Limit [dB]
30,000 M	1,000 G	1,000 M	112,652500 M	-39.60	-26.60
1,000 G	3,000 G	1,000 M	1,8447889 G	-33.06	-20.06
3,000 G	7,000 G	1,000 M	5,1220000 G	-37.85	-24.85
7,000 G	13,600 G	1,000 M	13,1710000 G	-34.71	-21.71
13,600 G	19,100 G	1,000 M	18,001375 G	-24.58	-11.58

Date: 26.JUN.2018 22:18:25

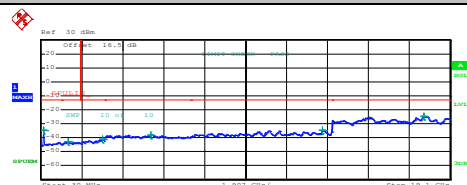
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAve [dBm]	Δ Limit [dB]
30,000 M	820,000 M	1,000 M	426,975000 M	-44.55	-31.55
855,000 M	1,000 G	1,000 M	861,432500 M	-43.75	-30.75
1,000 G	3,000 G	1,000 M	2,9390000 G	-42.09	-29.09
3,000 G	7,000 G	1,000 M	5,1510000 G	-38.78	-25.78
7,000 G	9,000 G	1,000 M	8,3740000 G	-37.03	-24.03

Date: 26.JUN.2018 22:05:34

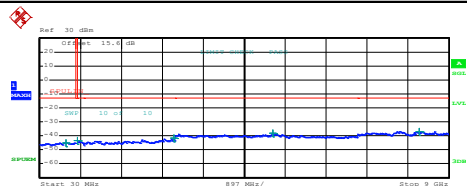
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAve [dBm]	Δ Limit [dB]
30,000 M	1,000 G	1,000 M	142,035000 M	-34.40	-21.40
1,000 G	3,000 G	1,000 M	1,845 G	-42.57	-29.57
3,000 G	7,000 G	1,000 M	5,1550000 G	-37.91	-24.91
7,000 G	13,600 G	1,000 M	13,158625 G	-34.57	-21.57
13,600 G	19,100 G	1,000 M	17,894125 G	-24.77	-11.77

Date: 26.JUN.2018 22:19:15

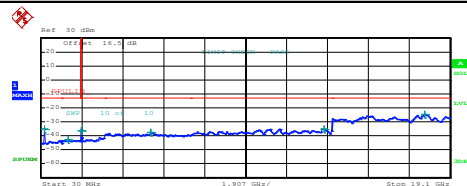
Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAve [dBm]	Δ Limit [dB]
30,000 M	820,000 M	1,000 M	597,4117500 M	-44.96	-31.96
855,000 M	1,000 G	1,000 M	855,290000 M	-43.37	-30.37
1,000 G	3,000 G	1,000 M	2,9605000 G	-42.65	-28.65
3,000 G	7,000 G	1,000 M	5,1490000 G	-38.26	-25.26
7,000 G	9,000 G	1,000 M	8,3520000 G	-36.86	-23.86

Date: 26.JUN.2018 22:06:28

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAve [dBm]	Δ Limit [dB]
30,000 M	1,000 G	1,000 M	170,882500 M	-35.29	-22.29
1,000 G	3,000 G	1,000 M	1,276104 G	-42.63	-29.63
3,000 G	7,000 G	1,000 M	1,955271 G	-36.61	-23.61
7,000 G	13,600 G	1,000 M	5,1260000 G	-37.81	-24.81
13,600 G	19,100 G	1,000 M	13,222975 G	-34.99	-21.99
19,100 G	19,100 G	1,000 M	17,956125 G	-24.84	-11.84

Date: 26.JUN.2018 22:20:05

**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	0.0000	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0084	
0	Normal Voltage	0.0084	
-10	Normal Voltage	0.0108	
-20	Normal Voltage	0.0131	
-30	Normal Voltage	0.0084	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0084	

Test Conditions	Middle Channel	CDMA BC1 (1xRTT)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0037	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0101	
-30	Normal Voltage	0.0106	
20	Maximum Voltage	0.0144	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0149	

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	0.0084	
0	Normal Voltage	0.0084	
-10	Normal Voltage	0.0108	
-20	Normal Voltage	0.0131	
-30	Normal Voltage	0.0084	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0084	

Test Conditions	Middle Channel	CDMA BC1 (1xEV-DO Rev. 0)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0037	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0101	
-30	Normal Voltage	0.0106	
20	Maximum Voltage	0.0144	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0149	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage =4.4 V
2. The frequency fundamental emissions stay within the authorized frequency block.



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

ERP/EIRP

<For Main Antenna>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850 GSM (GT - LC = -1.6 dB)	32.26	1.6827	28.51	0.7096
Middle		32.18	1.6520	28.43	0.6966
Highest		32.20	1.6596	28.45	0.6998
Lowest	GSM850 EDGE class 8 (GT - LC = -1.6 dB)	27.41	0.5508	23.66	0.2323
Middle		27.36	0.5445	23.61	0.2296
Highest		27.34	0.5420	23.59	0.2286
Lowest	WCDMA Band V RMC 12.2Kbps (GT - LC = -1.6 dB)	23.89	0.2449	20.14	0.1033
Middle		23.75	0.2371	20.00	0.1000
Highest		23.83	0.2415	20.08	0.1019
Lowest	CDMA BC0 1xRTT (GT - LC = -1.6 dB)	24.31	0.2698	20.56	0.1138
Middle		24.32	0.2704	20.57	0.1140
Highest		24.26	0.2667	20.51	0.1125
Lowest	CDMA BC0 1xEV-DO (GT - LC = -1.6 dB)	24.45	0.2786	20.70	0.1175
Middle		24.36	0.2729	20.61	0.1151
Highest		24.36	0.2729	20.61	0.1151
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900 GSM (GT - LC = 3.7 dB)	29.28	0.8472	32.98	1.9861
Middle		29.16	0.8241	32.86	1.9320
Highest		29.26	0.8433	32.96	1.9770
Lowest	GSM1900 EDGE class 8 (GT - LC = 3.7 dB)	26.24	0.4207	29.94	0.9863
Middle		26.15	0.4121	29.85	0.9661
Highest		26.05	0.4027	29.75	0.9441
Lowest	WCDMA Band II RMC 12.2Kbps (GT - LC = 3.7 dB)	23.20	0.2089	26.90	0.4898
Middle		23.06	0.2023	26.76	0.4742
Highest		23.05	0.2018	26.75	0.4732
Lowest	CDMA BC1 1xRTT (GT - LC = 3.7 dB)	24.88	0.3076	28.58	0.7211
Middle		24.66	0.2924	28.36	0.6855
Highest		24.64	0.2911	28.34	0.6823
Lowest	CDMA BC1 1xEV-DO (GT - LC = 3.7 dB)	24.62	0.2897	28.32	0.6792
Middle		24.65	0.2917	28.35	0.6839
Highest		24.52	0.2831	28.22	0.6637
Limit	EIRP < 2W	Result		PASS	

**FCC RADIO TEST REPORT**

Report No. : FG820502-02A

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV RMC 12.2Kbps (GT - LC = 3.7 dB)	23.33	0.2153	27.03	0.5047
Middle		23.23	0.2104	26.93	0.4932
Highest		23.25	0.2113	26.95	0.4955
Limit	EIRP < 1W	Result		PASS	


<For Aux. Antenna>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	32.26	1.6827	27.11	0.5140
Middle	GSM	32.18	1.6520	27.03	0.5047
Highest	(GT - LC = -3 dB)	32.20	1.6596	27.05	0.5070
Lowest	GSM850	27.41	0.5508	22.26	0.1683
Middle	EDGE class 8	27.36	0.5445	22.21	0.1663
Highest	(GT - LC = -3 dB)	27.34	0.5420	22.19	0.1656
Lowest	WCDMA Band V	23.89	0.2449	18.74	0.0748
Middle	RMC 12.2Kbps	23.75	0.2371	18.60	0.0724
Highest	(GT - LC = -3 dB)	23.83	0.2415	18.68	0.0738
Lowest	CDMA BC0	24.31	0.2698	19.16	0.0824
Middle	1xRTT	24.32	0.2704	19.17	0.0826
Highest	(GT - LC = -3 dB)	24.26	0.2667	19.11	0.0815
Lowest	CDMA BC0	24.45	0.2786	19.30	0.0851
Middle	1xEV-DO	24.36	0.2729	19.21	0.0834
Highest	(GT - LC = -3 dB)	24.36	0.2729	19.21	0.0834
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	29.28	0.8472	28.78	0.7551
Middle	GSM	29.16	0.8241	28.66	0.7345
Highest	(GT - LC = -0.5 dB)	29.26	0.8433	28.76	0.7516
Lowest	GSM1900	26.24	0.4207	25.74	0.3750
Middle	EDGE class 8	26.15	0.4121	25.65	0.3673
Highest	(GT - LC = -0.5 dB)	26.05	0.4027	25.55	0.3589
Lowest	WCDMA Band II	23.20	0.2089	22.70	0.1862
Middle	RMC 12.2Kbps	23.06	0.2023	22.56	0.1803
Highest	(GT - LC = -0.5 dB)	23.05	0.2018	22.55	0.1799
Lowest	CDMA BC1	24.88	0.3076	24.38	0.2742
Middle	1xRTT	24.66	0.2924	24.16	0.2606
Highest	(GT - LC = -0.5 dB)	24.64	0.2911	24.14	0.2594
Lowest	CDMA BC1	24.62	0.2897	24.12	0.2582
Middle	1xEV-DO	24.65	0.2917	24.15	0.2600
Highest	(GT - LC = -0.5 dB)	24.52	0.2831	24.02	0.2523
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	23.33	0.2153	22.83	0.1919
Middle	RMC 12.2Kbps	23.23	0.2104	22.73	0.1875
Highest	(GT - LC = -0.5 dB)	23.25	0.2113	22.75	0.1884
Limit	EIRP < 1W	Result		PASS	

**Radiated Spurious Emission**

<Main Antenna>

<For Adapter Mode>

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	-54.11	-13	-41.11	-66.51	-55.87	0.98	4.89	H
	2472	-30.16	-13	-17.16	-47.66	-32.04	1.28	5.32	H
	3296	-55.56	-13	-42.56	-75.08	-58.97	1.54	7.10	H
	4120	-41.37	-13	-28.37	-62.3	-46.01	1.83	8.62	H
	5768	-49.28	-13	-36.28	-74.89	-54.16	2.78	9.81	H
	7416	-42.36	-13	-29.36	-69.77	-49.39	2.46	11.63	H
	1648	-57.89	-13	-44.89	-70.81	-59.65	0.98	4.89	V
	2472	-33.24	-13	-20.24	-51.2	-35.12	1.28	5.32	V
	3296	-53.55	-13	-40.55	-73.39	-56.96	1.54	7.10	V
	4120	-40.44	-13	-27.44	-61.63	-45.08	1.83	8.62	V
	5768	-49.64	-13	-36.64	-75.16	-54.52	2.78	9.81	V
	7416	-42.28	-13	-29.28	-69.9	-49.31	2.46	11.63	V
Middle	1672	-60.86	-13	-47.86	-73.42	-62.54	0.99	4.82	H
	2512	-29.61	-13	-16.61	-47.16	-31.58	1.29	5.41	H
	3344	-56.56	-13	-43.56	-76.43	-60.17	1.56	7.31	H
	4184	-35.73	-13	-22.73	-56.76	-40.35	1.87	8.64	H
	5856	-40.15	-13	-27.15	-66.02	-45.01	2.83	9.84	H
	7528	-45.86	-13	-32.86	-73.27	-53.11	2.42	11.82	H
	1672	-60.63	-13	-47.63	-73.63	-62.31	0.99	4.82	V
	2512	-30.15	-13	-17.15	-48.19	-32.12	1.29	5.41	V
	3344	-56.27	-13	-43.27	-76.34	-59.88	1.56	7.31	V
	4184	-35.92	-13	-22.92	-57.04	-40.54	1.87	8.64	V
	5856	-39.52	-13	-26.52	-65.34	-44.38	2.83	9.84	V
	7528	-42.97	-13	-29.97	-70.63	-50.22	2.42	11.82	V



Highest	1696	-56.47	-13	-43.47	-69.25	-58.07	1.00	4.75	H
	2544	-31.87	-13	-18.87	-49.5	-33.85	1.30	5.44	H
	3392	-53.21	-13	-40.21	-73.35	-57.01	1.57	7.52	H
	4248	-39.44	-13	-26.44	-60.72	-44.04	1.90	8.65	H
	5944	-42.27	-13	-29.27	-68.35	-47.12	2.88	9.88	H
	7640	-39.62	-13	-26.62	-67.19	-46.97	2.38	11.88	H
	1696	-55.29	-13	-42.29	-68.56	-56.89	1.00	4.75	V
	2544	-19.71	-13	-6.71	-37.81	-21.69	1.30	5.44	V
	3392	-55.55	-13	-42.55	-75.78	-59.35	1.57	7.52	V
	4248	-39.43	-13	-26.43	-60.73	-44.03	1.90	8.65	V
	5944	-43.62	-13	-30.62	-69.72	-48.47	2.88	9.88	V
	7640	-43.01	-13	-30.01	-70.96	-50.36	2.38	11.88	V

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

**EDGE 850**

EDGE 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-62.22	-13	-49.22	-74.57	-63.98	0.98	4.89	H
	2472	-48.79	-13	-35.79	-66.33	-50.67	1.28	5.32	H
	3296	-58.13	-13	-45.13	-77.6	-61.54	1.54	7.10	H
	4120	-34.37	-13	-21.37	-55.3	-39.01	1.83	8.62	H
	1648	-60.78	-13	-47.78	-73.58	-62.54	0.98	4.89	V
	2472	-46.67	-13	-33.67	-64.6	-48.55	1.28	5.32	V
	3296	-54.08	-13	-41.08	-74.08	-57.49	1.54	7.10	V
	4120	-41.52	-13	-28.52	-62.73	-46.16	1.83	8.62	V
Middle	1672	-62.94	-13	-49.94	-75.62	-64.62	0.99	4.82	H
	2512	-51.46	-13	-38.46	-69.04	-53.43	1.29	5.41	H
	3344	-56.53	-13	-43.53	-76.39	-60.14	1.56	7.31	H
	4184	-34.97	-13	-21.97	-56.01	-39.59	1.87	8.64	H
	1672	-61.09	-13	-48.09	-74.15	-62.77	0.99	4.82	V
	2512	-49.61	-13	-36.61	-67.64	-51.58	1.29	5.41	V
	3344	-57.21	-13	-44.21	-77.2	-60.82	1.56	7.31	V
	4184	-34.74	-13	-21.74	-55.93	-39.36	1.87	8.64	V
Highest	1696	-58.92	-13	-45.92	-71.7	-60.52	1.00	4.75	H
	2544	-54.86	-13	-41.86	-72.47	-56.84	1.30	5.44	H
	3392	-57.63	-13	-44.63	-77.78	-61.43	1.57	7.52	H
	4248	-46.16	-13	-33.16	-67.44	-50.76	1.90	8.65	H
	1696	-59.03	-13	-46.03	-72.25	-60.63	1.00	4.75	V
	2544	-53.54	-13	-40.54	-71.65	-55.52	1.30	5.44	V
	3392	-57.94	-13	-44.94	-78.13	-61.74	1.57	7.52	V
	4248	-41.65	-13	-28.65	-63.25	-46.25	1.90	8.65	V

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

**WCDMA 850**

WCDMA 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1656	-61.91	-13	-48.91	-74.36	-63.64	0.98	4.86	H
	2480	-55.98	-13	-42.98	-73.49	-57.89	1.28	5.34	H
	3312	-57.48	-13	-44.48	-77.14	-60.96	1.55	7.17	H
	1656	-60.24	-13	-47.24	-73.06	-61.97	0.98	4.86	V
	2480	-57.11	-13	-44.11	-75.02	-59.02	1.28	5.34	V
	3312	-57.04	-13	-44.04	-76.99	-60.52	1.55	7.17	V
Middle	1672	-62.51	-13	-49.51	-75.15	-64.19	0.99	4.82	H
	2512	-57.78	-13	-44.78	-75.38	-59.75	1.29	5.41	H
	3344	-57.74	-13	-44.74	-77.55	-61.35	1.56	7.31	H
	1672	-60.86	-13	-47.86	-73.94	-62.54	0.99	4.82	V
	2512	-57.69	-13	-44.69	-75.73	-59.66	1.29	5.41	V
	3344	-57.95	-13	-44.95	-77.95	-61.56	1.56	7.31	V
Highest	1688	-62.48	-13	-49.48	-75.11	-64.11	1.00	4.77	H
	2536	-57.08	-13	-44.08	-74.7	-59.06	1.30	5.43	H
	3376	-57.88	-13	-44.88	-77.87	-61.62	1.57	7.45	H
	1688	-59.74	-13	-46.74	-72.71	-61.37	1.00	4.77	V
	2536	-58.37	-13	-45.37	-76.46	-60.35	1.30	5.43	V
	3376	-57.98	-13	-44.98	-78.11	-61.72	1.57	7.45	V

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

**CDMABC0**

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	-61.52	-13	-48.52	-73.92	-63.28	0.98	4.89	H
	2472	-55.26	-13	-42.26	-72.8	-57.14	1.28	5.32	H
	3296	-57.65	-13	-44.65	-77.25	-61.06	1.54	7.10	H
	1648	-56.53	-13	-43.53	-69.37	-58.29	0.98	4.89	V
	2472	-55.45	-13	-42.45	-73.41	-57.33	1.28	5.32	V
	3296	-57.61	-13	-44.61	-77.48	-61.02	1.54	7.10	V
Middle	1672	-63.14	-13	-50.14	-75.75	-64.82	0.99	4.82	H
	2512	-54.37	-13	-41.37	-71.94	-56.34	1.29	5.41	H
	3344	-58.27	-13	-45.27	-78.09	-61.88	1.56	7.31	H
	1672	-59.44	-13	-46.44	-72.51	-61.12	0.99	4.82	V
	2512	-57.65	-13	-44.65	-75.74	-59.62	1.29	5.41	V
	3344	-58.05	-13	-45.05	-78.15	-61.66	1.56	7.31	V
Highest	1696	-62.84	-13	-49.84	-75.42	-64.44	1.00	4.75	H
	2544	-59.04	-13	-46.04	-76.63	-61.02	1.30	5.44	H
	3392	-57.49	-13	-44.49	-77.63	-61.29	1.57	7.52	H
	1696	-58.83	-13	-45.83	-72.05	-60.43	1.00	4.75	V
	2544	-58.84	-13	-45.84	-77.02	-60.82	1.30	5.44	V
	3392	-57.82	-13	-44.82	-78.04	-61.62	1.57	7.52	V

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

**WCDMA 1700**

WCDMA 1700									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3426	-55.86	-13	-42.86	-76.56	-61.95	1.58	7.67	H
	5142	-43.08	-13	-30.08	-67.47	-50.36	2.42	9.70	H
	6852	-51.37	-13	-38.37	-78.16	-59.35	2.64	10.62	H
	3426	-50.28	-13	-37.28	-71.05	-56.37	1.58	7.67	V
	5142	-45.69	-13	-32.69	-69.91	-52.97	2.42	9.70	V
	6852	-50.85	-13	-37.85	-77.54	-58.83	2.64	10.62	V
Middle	3462	-53.98	-13	-40.98	-74.86	-60.22	1.59	7.83	H
	5196	-41.74	-13	-28.74	-66.26	-48.99	2.45	9.70	H
	6930	-50.36	-13	-37.36	-77.18	-58.46	2.61	10.72	H
	3462	-49.69	-13	-36.69	-70.42	-55.93	1.59	7.83	V
	5196	-45.51	-13	-32.51	-69.94	-52.76	2.45	9.70	V
	6930	-49.01	-13	-36.01	-75.82	-57.11	2.61	10.72	V
Highest	3504	-53.61	-13	-40.61	-74.59	-60.01	1.61	8.00	H
	5262	-45.66	-13	-32.66	-70.38	-52.87	2.49	9.70	H
	7008	-49.25	-13	-36.25	-76.14	-57.48	2.59	10.82	H
	3504	-52.43	-13	-39.43	-73.11	-58.83	1.61	8.00	V
	5262	-48.26	-13	-35.26	-72.9	-55.47	2.49	9.70	V
	7008	-49.69	-13	-36.69	-76.57	-57.92	2.59	10.82	V

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

**GSM 1900**

GSM 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-43.02	-13	-30.02	-64	-49.59	1.67	8.24	H
	5550	-29.19	-13	-16.19	-54.74	-36.26	2.65	9.72	H
	7404	-33.31	-13	-20.31	-60.33	-42.46	2.46	11.61	H
	9252	-38.71	-13	-25.71	-69.06	-48.77	2.54	12.60	H
	3702	-39.58	-13	-26.58	-60.5	-46.15	1.67	8.24	V
	5550	-31.49	-13	-18.49	-57.11	-38.56	2.65	9.72	V
	7404	-36.63	-13	-23.63	-63.9	-45.78	2.46	11.61	V
	9252	-40.61	-13	-27.61	-71.38	-50.67	2.54	12.60	V
Middle	3762	-41.58	-13	-28.58	-62.5	-48.21	1.69	8.31	H
	5640	-25.73	-13	-12.73	-51.46	-32.78	2.71	9.76	H
	7518	-33.43	-13	-20.43	-60.57	-42.82	2.42	11.81	H
	9399	-38.91	-13	-25.91	-69.68	-48.88	2.57	12.54	H
	3762	-40.19	-13	-27.19	-61.48	-46.82	1.69	8.31	V
	5640	-31.64	-13	-18.64	-57.39	-38.69	2.71	9.76	V
	7518	-34.02	-13	-21.02	-61.48	-43.41	2.42	11.81	V
	9399	-39.22	-13	-26.22	-70.39	-49.19	2.57	12.54	V
Highest	3822	-36.59	-13	-23.59	-57.38	-43.27	1.71	8.39	H
	5730	-26.29	-13	-13.29	-52.2	-33.32	2.76	9.79	H
	7638	-35.71	-13	-22.71	-63.18	-45.21	2.38	11.88	H
	9546	-44.26	-13	-31.26	-75.35	-54.13	2.60	12.47	H
	3822	-34.16	-13	-21.16	-55.07	-40.84	1.71	8.39	V
	5730	-31.68	-13	-18.68	-57.62	-38.71	2.76	9.79	V
	7638	-35.03	-13	-22.03	-62.76	-44.53	2.38	11.88	V
	9546	-41.56	-13	-28.56	-73.01	-51.43	2.60	12.47	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	3702	-49.46	-13	-36.46	-70.42	-56.03	1.67	8.24	H
	5550	-33.74	-13	-20.74	-59.39	-40.81	2.65	9.72	H
	7404	-38.27	-13	-25.27	-65.34	-47.42	2.46	11.61	H
	9252	-40.19	-13	-27.19	-70.54	-50.25	2.54	12.60	H
	3702	-47.12	-13	-34.12	-68.02	-53.69	1.67	8.24	V
	5550	-37.96	-13	-24.96	-63.51	-45.03	2.65	9.72	V
	7404	-36.12	-13	-23.12	-63.45	-45.27	2.46	11.61	V
	9252	-43.95	-13	-30.95	-74.63	-54.01	2.54	12.60	V
Middle	3762	-41.69	-13	-28.69	-62.52	-48.32	1.69	8.31	H
	5640	-31.63	-13	-18.63	-57.4	-38.68	2.71	9.76	H
	7518	-36.92	-13	-23.92	-64.1	-46.31	2.42	11.81	H
	9399	-38.92	-13	-25.92	-69.71	-48.89	2.57	12.54	H
	3762	-47.91	-13	-34.91	-68.86	-54.54	1.69	8.31	V
	5640	-34.01	-13	-21.01	-59.83	-41.06	2.71	9.76	V
	7518	-43.08	-13	-30.08	-70.42	-52.47	2.42	11.81	V
	9399	-43.05	-13	-30.05	-74.25	-53.02	2.57	12.54	V
Highest	3822	-40.38	-13	-27.38	-61.32	-47.06	1.71	8.39	H
	5730	-35.34	-13	-22.34	-61.24	-42.37	2.76	9.79	H
	7638	-35.73	-13	-22.73	-63.18	-45.23	2.38	11.88	H
	9546	-47.67	-13	-34.67	-78.77	-57.54	2.60	12.47	H
	3822	-38.35	-13	-25.35	-59.3	-45.03	1.71	8.39	V
	5730	-37.64	-13	-24.64	-63.51	-44.67	2.76	9.79	V
	7638	-38.83	-13	-25.83	-66.56	-48.33	2.38	11.88	V
	9546	-46.51	-13	-33.51	-78.02	-56.38	2.60	12.47	V

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

**WCDMA 1900**

WCDMA 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3708	-45.58	-13	-32.58	-66.53	-52.16	1.67	8.25	H
	5562	-49.32	-13	-36.32	-74.9	-56.38	2.66	9.72	H
	7410	-49.51	-13	-36.51	-76.67	-58.67	2.46	11.62	H
	3708	-43.03	-13	-30.03	-63.94	-49.61	1.67	8.25	V
	5562	-51.18	-13	-38.18	-76.69	-58.24	2.66	9.72	V
	7410	-50.16	-13	-37.16	-77.43	-59.32	2.46	11.62	V
Middle	3762	-54.89	-13	-41.89	-75.83	-61.52	1.69	8.31	H
	5640	-43.32	-13	-30.32	-69.13	-50.37	2.71	9.76	H
	7518	-48.72	-13	-35.72	-75.88	-58.11	2.42	11.81	H
	3762	-53.72	-13	-40.72	-74.63	-60.35	1.69	8.31	V
	5640	-47.74	-13	-34.74	-73.53	-54.79	2.71	9.76	V
	7518	-49.63	-13	-36.63	-77.04	-59.02	2.42	11.81	V
Highest	3816	-46.35	-13	-33.35	-67.15	-53.03	1.70	8.38	H
	5724	-44.92	-13	-31.92	-70.76	-51.96	2.75	9.79	H
	7632	-47.65	-13	-34.65	-75.1	-57.14	2.39	11.88	H
	3816	-45.21	-13	-32.21	-66.14	-51.89	1.70	8.38	V
	5724	-48.98	-13	-35.98	-74.89	-56.02	2.75	9.79	V
	7632	-48.18	-13	-35.18	-75.91	-57.67	2.39	11.88	V

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

**CDMABC1**

CDMA2000 BC1									
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	3702	-41.76	-13	-28.76	-62.4	-48.33	1.67	8.24	H
	5556	-34.28	-13	-21.28	-59.59	-41.35	2.66	9.72	H
	7404	-46.78	-13	-33.78	-73.6	-55.93	2.46	11.61	H
	9252	-42.32	-13	-29.32	-72.33	-52.38	2.54	12.60	H
	3702	-46.84	-13	-33.84	-67.5	-53.41	1.67	8.24	V
	5556	-33.96	-13	-20.96	-59.27	-41.03	2.66	9.72	V
	7404	-36.58	-13	-23.58	-63.64	-45.73	2.46	11.61	V
	9252	-45.62	-13	-32.62	-76.05	-55.68	2.54	12.60	V
Middle	3762	-47.24	-13	-34.24	-67.82	-53.87	1.69	8.31	H
	5640	-33.29	-13	-20.29	-58.77	-40.34	2.71	9.76	H
	7520	-46.08	-13	-33.08	-73.03	-55.47	2.42	11.81	H
	9400	-43.97	-13	-30.97	-74.52	-53.94	2.57	12.54	H
	3762	-47.06	-13	-34.06	-67.75	-53.69	1.69	8.31	V
	5640	-32.73	-13	-19.73	-58.18	-39.78	2.71	9.76	V
	7520	-39.33	-13	-26.33	-66.52	-48.72	2.42	11.81	V
	9400	-45.84	-13	-32.84	-76.76	-55.81	2.57	12.54	V
Highest	3816	-48.07	-13	-35.07	-68.69	-54.75	1.70	8.38	H
	5724	-36.98	-13	-23.98	-62.61	-44.02	2.75	9.79	H
	7638	-46.54	-13	-33.54	-73.76	-56.04	2.38	11.88	H
	3816	-48.68	-13	-35.68	-69.39	-55.36	1.70	8.38	V
	5724	-33.77	-13	-20.77	-59.39	-40.81	2.75	9.79	V
	7638	-42.12	-13	-29.12	-69.58	-51.62	2.38	11.88	V

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



<Aux Antenna>

<For Adapter Mode>

GPRS850

GPRS 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-61.72	-13	-48.72	-74.13	-63.48	0.98	4.89	H
	2472	-28.93	-13	-15.93	-46.47	-30.81	1.28	5.32	H
	3296	-56.41	-13	-43.41	-75.97	-59.82	1.54	7.10	H
	4120	-39.39	-13	-26.39	-60.37	-44.03	1.83	8.62	H
	5768	-48.58	-13	-35.58	-74.08	-53.46	2.78	9.81	H
	7416	-42.29	-13	-29.29	-69.66	-49.32	2.46	11.63	H
	1648	-58.88	-13	-45.88	-71.7	-60.64	0.98	4.89	V
	2472	-30.96	-13	-17.96	-48.76	-32.84	1.28	5.32	V
	3296	-53.81	-13	-40.81	-73.64	-57.22	1.54	7.10	V
	4120	-39.98	-13	-26.98	-61.04	-44.62	1.83	8.62	V
	5768	-49.17	-13	-36.17	-74.75	-54.05	2.78	9.81	V
	7416	-44.36	-13	-31.36	-72.01	-51.39	2.46	11.63	V
Middle	1672	-61.45	-13	-48.45	-74.11	-63.13	0.99	4.82	H
	2512	-30.18	-13	-17.18	-47.76	-32.15	1.29	5.41	H
	3344	-57.45	-13	-44.45	-77.33	-61.06	1.56	7.31	H
	4184	-35.95	-13	-22.95	-57.06	-40.57	1.87	8.64	H
	5856	-42.22	-13	-29.22	-68.04	-47.08	2.83	9.84	H
	7528	-48.51	-13	-35.51	-75.96	-55.76	2.42	11.82	H
	1672	-56.95	-13	-43.95	-69.98	-58.63	0.99	4.82	V
	2512	-29.59	-13	-16.59	-47.63	-31.56	1.29	5.41	V
	3344	-55.94	-13	-42.94	-76.01	-59.55	1.56	7.31	V
	4184	-37.07	-13	-24.07	-58.32	-41.69	1.87	8.64	V
	5856	-38.18	-13	-25.18	-64.02	-43.04	2.83	9.84	V
	7528	-44.75	-13	-31.75	-72.45	-52	2.42	11.82	V



Highest	1696	-60.86	-13	-47.86	-73.64	-62.46	1.00	4.75	H
	2544	-19.54	-13	-6.54	-37.15	-21.52	1.30	5.44	H
	3392	-56.01	-13	-43.01	-76.15	-59.81	1.57	7.52	H
	4248	-38.83	-13	-25.83	-60.11	-43.43	1.90	8.65	H
	5944	-48.14	-13	-35.14	-74.08	-52.99	2.88	9.88	H
	7640	-39.79	-13	-26.79	-67.47	-47.14	2.38	11.88	H
	1696	-56.44	-13	-43.44	-69.66	-58.04	1.00	4.75	V
	2544	-18.45	-13	-5.45	-36.53	-20.43	1.30	5.44	V
	3392	-55.37	-13	-42.37	-75.6	-59.17	1.57	7.52	V
	4248	-40.42	-13	-27.42	-61.74	-45.02	1.90	8.65	V
	5944	-48.68	-13	-35.68	-74.75	-53.53	2.88	9.88	V
	7640	-39.01	-13	-26.01	-66.95	-46.36	2.38	11.88	V

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

**EDGE 850**

EDGE 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-60.06	-13	-47.06	-72.39	-61.82	0.98	4.89	H
	2472	-49.18	-13	-36.18	-66.7	-51.06	1.28	5.32	H
	3296	-57.73	-13	-44.73	-77.45	-61.14	1.54	7.10	H
	4120	-53.52	-13	-40.52	-74.51	-58.16	1.83	8.62	H
	1648	-57.63	-13	-44.63	-70.44	-59.39	0.98	4.89	V
	2472	-50.16	-13	-37.16	-68.18	-52.04	1.28	5.32	V
	3296	-56.61	-13	-43.61	-76.43	-60.02	1.54	7.10	V
	4120	-55.47	-13	-42.47	-76.53	-60.11	1.83	8.62	V
Middle	1672	-58.86	-13	-45.86	-71.51	-60.54	0.99	4.82	H
	2512	-48.27	-13	-35.27	-65.85	-50.24	1.29	5.41	H
	3344	-53.44	-13	-40.44	-73.34	-57.05	1.56	7.31	H
	4184	-56.57	-13	-43.57	-77.69	-61.19	1.87	8.64	H
	1672	-62.11	-13	-49.11	-75.1	-63.79	0.99	4.82	V
	2512	-49.01	-13	-36.01	-67.07	-50.98	1.29	5.41	V
	3344	-56.91	-13	-43.91	-76.89	-60.52	1.56	7.31	V
	4184	-52.26	-13	-39.26	-73.45	-56.88	1.87	8.64	V
Highest	1696	-59.49	-13	-46.49	-72.27	-61.09	1.00	4.75	H
	2544	-50.28	-13	-37.28	-67.93	-52.26	1.30	5.44	H
	3392	-57.74	-13	-44.74	-77.89	-61.54	1.57	7.52	H
	4240	-56.03	-13	-43.03	-77.34	-60.63	1.90	8.65	H
	1696	-56.34	-13	-43.34	-69.53	-57.94	1.00	4.75	V
	2544	-50.33	-13	-37.33	-68.44	-52.31	1.30	5.44	V
	3392	-55.96	-13	-42.96	-76.17	-59.76	1.57	7.52	V
	4240	-56.36	-13	-43.36	-77.73	-60.96	1.90	8.65	V

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

**WCDMA 850**

WCDMA 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1656	-62.78	-13	-49.78	-75.04	-64.51	0.98	4.86	H
	2479	-55.38	-13	-42.38	-72.62	-57.28	1.28	5.34	H
	3305	-58.06	-13	-45.06	-77.5	-61.51	1.54	7.14	H
	4132	-53.92	-13	-40.92	-74.59	-58.56	1.84	8.63	H
	1656	-61.98	-13	-48.98	-74.7	-63.71	0.98	4.86	V
	2479	-54.76	-13	-41.76	-72.43	-56.66	1.28	5.34	V
	3305	-57.37	-13	-44.37	-77.06	-60.82	1.54	7.14	V
	4132	-53.38	-13	-40.38	-74.16	-58.02	1.84	8.63	V
Middle	1672	-62.94	-13	-49.94	-75.34	-64.62	0.99	4.82	H
	2504	-50.56	-13	-37.56	-67.83	-52.52	1.29	5.40	H
	3345	-58.24	-13	-45.24	-77.84	-61.85	1.56	7.32	H
	4176	-54.37	-13	-41.37	-75.21	-58.99	1.86	8.64	H
	1672	-62.48	-13	-49.48	-75.32	-64.16	0.99	4.82	V
	2504	-57.96	-13	-44.96	-75.71	-59.92	1.29	5.40	V
	3345	-58.13	-13	-45.13	-77.93	-61.74	1.56	7.32	V
	4176	-55.06	-13	-42.06	-76.04	-59.68	1.86	8.64	V
Highest	1696	-63.44	-13	-50.44	-75.94	-65.04	1.00	4.75	H
	2539	-58.43	-13	-45.43	-75.78	-60.41	1.30	5.43	H
	3386	-57.88	-13	-44.88	-77.66	-61.66	1.57	7.50	H
	1696	-61.43	-13	-48.43	-74.4	-63.03	1.00	4.75	V
	2539	-57.38	-13	-44.38	-75.27	-59.36	1.30	5.43	V
	3386	-57.66	-13	-44.66	-77.6	-61.44	1.57	7.50	V

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

**CDMABC0**

CDMA2000 BC0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-62.89	-13	-49.89	-75.31	-64.65	0.98	4.89	H
	2472	-56.79	-13	-43.79	-74.34	-58.67	1.28	5.32	H
	4120	-44.24	-13	-31.24	-65.24	-48.88	1.83	8.62	H
	1648	-62.26	-13	-49.26	-75.08	-64.02	0.98	4.89	V
	2472	-55.18	-13	-42.18	-73.14	-57.06	1.28	5.32	V
	4120	-46.61	-13	-33.61	-67.77	-51.25	1.83	8.62	V
Middle	1672	-63.34	-13	-50.34	-75.97	-65.02	0.99	4.82	H
	2512	-58.17	-13	-45.17	-75.75	-60.14	1.29	5.41	H
	4184	-48.97	-13	-35.97	-69.95	-53.59	1.87	8.64	H
	1672	-59.96	-13	-46.96	-73.07	-61.64	0.99	4.82	V
	2512	-56.47	-13	-43.47	-74.51	-58.44	1.29	5.41	V
	4184	-49.76	-13	-36.76	-70.96	-54.38	1.87	8.64	V
Highest	1696	-63.27	-13	-50.27	-76.04	-64.87	1.00	4.75	H
	2544	-58.07	-13	-45.07	-75.7	-60.05	1.30	5.44	H
	4240	-51.65	-13	-38.65	-72.93	-56.25	1.90	8.65	H
	1696	-62.88	-13	-49.88	-76.1	-64.48	1.00	4.75	V
	2544	-56.71	-13	-43.71	-74.82	-58.69	1.30	5.44	V
	4240	-52.41	-13	-39.41	-73.72	-57.01	1.90	8.65	V

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

**WCDMA 1700**

WCDMA 1700									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3426	-55.32	-13	-42.32	-76.07	-61.41	1.58	7.67	H
	5142	-42.46	-13	-29.46	-66.63	-49.74	2.42	9.70	H
	6852	-50.98	-13	-37.98	-77.72	-58.96	2.64	10.62	H
	3426	-50.37	-13	-37.37	-71.02	-56.46	1.58	7.67	V
	5142	-44.83	-13	-31.83	-69.16	-52.11	2.42	9.70	V
	6852	-50.83	-13	-37.83	-77.52	-58.81	2.64	10.62	V
Middle	3462	-54.52	-13	-41.52	-75.39	-60.76	1.59	7.83	H
	5196	-40.89	-13	-27.89	-65.49	-48.14	2.45	9.70	H
	6930	-50.68	-13	-37.68	-77.42	-58.78	2.61	10.72	H
	3462	-49.54	-13	-36.54	-70.3	-55.78	1.59	7.83	V
	5196	-44.91	-13	-31.91	-69.32	-52.16	2.45	9.70	V
	6930	-50.28	-13	-37.28	-77.1	-58.38	2.61	10.72	V
Highest	3504	-54.07	-13	-41.07	-75.1	-60.47	1.61	8.00	H
	5262	-44.42	-13	-31.42	-69.14	-51.63	2.49	9.70	H
	7008	-50.54	-13	-37.54	-77.28	-58.77	2.59	10.82	H
	3504	-51.74	-13	-38.74	-72.62	-58.14	1.61	8.00	V
	5262	-47.37	-13	-34.37	-72.03	-54.58	2.49	9.70	V
	7008	-49.73	-13	-36.73	-76.52	-57.96	2.59	10.82	V

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

**GSM 1900**

GSM 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-59.31	-13	-46.31	-60.04	-65.88	1.67	8.24	H
	5550	-20.64	-13	-7.64	-45.94	-27.71	2.65	9.72	H
	7404	-33.84	-13	-20.84	-60.65	-42.99	2.46	11.61	H
	9252	-30.78	-13	-17.78	-60.83	-40.84	2.54	12.60	H
	11100	-37.32	-13	-24.32	-71.77	-47.09	2.69	12.46	H
	3702	-38.18	-13	-25.18	-58.86	-44.75	1.67	8.24	V
	5550	-21.86	-13	-8.86	-47.12	-28.93	2.65	9.72	V
	7404	-26.34	-13	-13.34	-53.4	-35.49	2.46	11.61	V
	9252	-33.27	-13	-20.27	-63.67	-43.33	2.54	12.60	V
	11100	-41.88	-13	-28.88	-76.1	-51.65	2.69	12.46	V
Middle	3762	-38.26	-13	-25.26	-58.84	-44.89	1.69	8.31	H
	5640	-21.07	-13	-8.07	-46.6	-28.12	2.71	9.76	H
	7518	-34.96	-13	-21.96	-61.88	-44.35	2.42	11.81	H
	9400	-31.31	-13	-18.31	-61.84	-41.28	2.57	12.54	H
	11280	-40.96	-13	-27.96	-75.48	-50.66	2.68	12.39	H
	3762	-40.58	-13	-27.58	-61.26	-47.21	1.69	8.31	V
	5640	-20.14	-13	-7.14	-45.33	-27.19	2.71	9.76	V
	7518	-28.57	-13	-15.57	-55.73	-37.96	2.42	11.81	V
	9400	-35.94	-13	-22.94	-66.87	-45.91	2.57	12.54	V
	11280	-41.38	-13	-28.38	-75.8	-51.08	2.68	12.39	V



Highest	3822	-41.58	-13	-28.58	-62.2	-48.26	1.71	8.39	H
	5730	-21.26	-13	-8.26	-46.91	-28.29	2.76	9.79	H
	7638	-35.22	-13	-22.22	-62.42	-44.72	2.38	11.88	H
	9546	-37.04	-13	-24.04	-67.9	-46.91	2.60	12.47	H
	11457	-41.76	-13	-28.76	-76.49	-51.39	2.68	12.32	H
	3822	-41.47	-13	-28.47	-62.13	-48.15	1.71	8.39	V
	5730	-20.26	-13	-7.26	-45.84	-27.29	2.76	9.79	V
	7638	-30.18	-13	-17.18	-57.61	-39.68	2.38	11.88	V
	9546	-38.28	-13	-25.28	-69.45	-48.15	2.60	12.47	V
	11457	-44.78	-13	-31.78	-79.5	-54.41	2.68	12.32	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	3702	-45.96	-13	-32.96	-66.65	-52.53	1.67	8.24	H
	5550	-28.26	-13	-15.26	-53.61	-35.33	2.65	9.72	H
	7398	-38.18	-13	-25.18	-65.01	-47.31	2.46	11.60	H
	9252	-37.16	-13	-24.16	-67.18	-47.22	2.54	12.60	H
	11100	-43.21	-13	-30.21	-77.58	-52.98	2.69	12.46	H
	3702	-45.94	-13	-32.94	-64.17	-52.51	1.67	8.24	V
	5550	-28.26	-13	-15.26	-52.88	-35.33	2.65	9.72	V
	7398	-38.15	-13	-25.15	-55.45	-47.28	2.46	11.60	V
	9252	-37.13	-13	-24.13	-68.13	-47.19	2.54	12.60	V
	11100	-43.28	-13	-30.28	-77.35	-53.05	2.69	12.46	V
Middle	3762	-43.58	-13	-30.58	-64.22	-50.21	1.69	8.31	H
	5640	-27.22	-13	-14.22	-52.69	-34.27	2.71	9.76	H
	7518	-40.84	-13	-27.84	-67.77	-50.23	2.42	11.81	H
	9400	-36.64	-13	-23.64	-67.17	-46.61	2.57	12.54	H
	3762	-41.33	-13	-28.33	-62.01	-47.96	1.69	8.31	V
	5640	-25.24	-13	-12.24	-50.73	-32.29	2.71	9.76	V
	7518	-33.54	-13	-20.54	-60.7	-42.93	2.42	11.81	V
	9400	-38.56	-13	-25.56	-69.5	-48.53	2.57	12.54	V
Highest	3822	-42.28	-13	-29.28	-62.89	-48.96	1.71	8.39	H
	5730	-27.63	-13	-14.63	-53.32	-34.66	2.76	9.79	H
	7638	-42.68	-13	-29.68	-69.9	-52.18	2.38	11.88	H
	9546	-38.45	-13	-25.45	-69.24	-48.32	2.60	12.47	H
	3822	-39.56	-13	-26.56	-60.29	-46.24	1.71	8.39	V
	5730	-26.89	-13	-13.89	-52.56	-33.92	2.76	9.79	V
	7638	-33.82	-13	-20.82	-61.28	-43.32	2.38	11.88	V
	9546	-40.32	-13	-27.32	-71.49	-50.19	2.60	12.47	V

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

**WCDMA 1900**

WCDMA 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3708	-51.16	-13	-38.16	-71.83	-57.74	1.67	8.25	H
	5562	-39.18	-13	-26.18	-64.51	-46.24	2.66	9.72	H
	7410	-49.35	-13	-36.35	-76.18	-58.51	2.46	11.62	H
	3708	-49.28	-13	-36.28	-69.87	-55.86	1.67	8.25	V
	5562	-36.36	-13	-23.36	-61.66	-43.42	2.66	9.72	V
	7410	-43.98	-13	-30.98	-71.05	-53.14	2.46	11.62	V
Middle	3756	-49.32	-13	-36.32	-69.95	-55.94	1.68	8.31	H
	5640	-38.26	-13	-25.26	-63.68	-45.31	2.71	9.76	H
	7518	-49.77	-13	-36.77	-76.73	-59.16	2.42	11.81	H
	3756	-49.96	-13	-36.96	-70.63	-56.58	1.68	8.31	V
	5640	-37.04	-13	-24.04	-62.52	-44.09	2.71	9.76	V
	7518	-44.87	-13	-31.87	-72.02	-54.26	2.42	11.81	V
Highest	3816	-47.86	-13	-34.86	-68.58	-54.54	1.70	8.38	H
	5724	-37.53	-13	-24.53	-63.38	-44.57	2.75	9.79	H
	7632	-48.83	-13	-35.83	-76.28	-58.32	2.39	11.88	H
	3816	-47.19	-13	-34.19	-68.06	-53.87	1.70	8.38	V
	5724	-35.37	-13	-22.37	-61.32	-42.41	2.75	9.79	V
	7632	-45.02	-13	-32.02	-72.8	-54.51	2.39	11.88	V

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

**CDMABC1**

CDMA2000 BC1									
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	3702	-47.66	-13	-34.66	-68.34	-54.23	1.67	8.24	H
	5556	-35.41	-13	-22.41	-60.74	-42.48	2.66	9.72	H
	7404	-47.54	-13	-34.54	-74.33	-56.69	2.46	11.61	H
	9252	-43.78	-13	-30.78	-73.84	-53.84	2.54	12.60	H
	3702	-51.57	-13	-38.57	-72.27	-58.14	1.67	8.24	V
	5556	-32.26	-13	-19.26	-57.48	-39.33	2.66	9.72	V
	7404	-38.58	-13	-25.58	-65.62	-47.73	2.46	11.61	V
	9252	-44.86	-13	-31.86	-75.32	-54.92	2.54	12.60	V
Middle	3762	-47.43	-13	-34.43	-68.08	-54.06	1.69	8.31	H
	5640	-34.06	-13	-21.06	-59.58	-41.11	2.71	9.76	H
	7520	-39.94	-13	-26.94	-66.88	-49.33	2.42	11.81	H
	9400	-42.96	-13	-29.96	-73.48	-52.93	2.57	12.54	H
	3762	-46.79	-13	-33.79	-67.45	-53.42	1.69	8.31	V
	5640	-33.31	-13	-20.31	-58.76	-40.36	2.71	9.76	V
	7520	-38.22	-13	-25.22	-65.41	-47.61	2.42	11.81	V
	9400	-45.84	-13	-32.84	-76.76	-55.81	2.57	12.54	V
Highest	3816	-49.54	-13	-36.54	-70.13	-56.22	1.70	8.38	H
	5724	-34.27	-13	-21.27	-59.84	-41.31	2.75	9.79	H
	7632	-48.88	-13	-35.88	-76.12	-58.37	2.39	11.88	H
	3816	-49.26	-13	-36.26	-69.79	-55.94	1.70	8.38	V
	5724	-34.78	-13	-21.78	-60.41	-41.82	2.75	9.79	V
	7632	-44.47	-13	-31.47	-71.92	-53.96	2.39	11.88	V

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