FCC RF Test Report

APPLICANT	:	Zebra Technologies Corporation
EQUIPMENT	:	Touch computer
BRAND NAME	:	Zebra
MODEL NAME	:	TC75EK
FCC ID	:	UZ7TC75EK
STANDARD	:	FCC 47 CFR Part 2, 22(H), 24(E), 27(L)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Jul. 28, 2016 and testing was completed on Sep. 12, 2016. 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 / EIA-603-D-2010 and has been in compliance with the applicable technical standards.

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

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL INC.
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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG672834A	Rev. 01	Initial issue of report	Sep. 29, 2016
FG672834A	Rev. 02	Revising the specification of accessories.	Oct. 04, 2016
FG672834A	Rev. 03	Revising the Adapter information in specification of accessories.	Oct. 07, 2016

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
3.5	§24.232(d)	Peak-to-Average Ratio	< 13 dB	PASS	-
3.6	§2.1049 §22.917(b) §24.238(b) §27.53(g)	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Band Edge Measurement	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Emission	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability for Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§22.913(a)(2)	Effective Radiated Power	< 7 Watts	PASS	-
	§24.232(c)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power	< 1 Watts	PASS	-
4.5	§2.1053 §22.917(a) §24.238(a) §27.53(h)	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	Under limit 16.00 dB at 7638.000 MHz

1 General Description

1.1 Applicant

Zebra Technologies Corporation
1 Zebra Plaza Holtsville, NY 11742

1.2 Manufacturer

Wistron Corporation
21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih Dist, New Taipei City 221,Taiwan R.O.C.

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Touch computer
Brand Name	Zebra
Model Name	TC75EK
FCC ID	UZ7TC75EK
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	DV
SW Version	Android version 6.0.1
FW Version	91-10-01-MG-00
MFD	14JUL16
EUT Stage	Engineering sample

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Specification of Accessories				
AC Adapter	**Brand Name**	Zebra	**Part Number**	PWR-BUA5V16W0WW
Snap-On USB/Charge Cable	**Brand Name**	Symbol	**Part Number**	CBL-TC7X-USB1-01
Snap-On Charging Cable Cup	**Brand Name**	Symbol	**Part Number**	CHG-TC7X-CBL1-01
Battery	**Brand Name**	Zebra	**Part Number**	BT-000318-01
Earphone 1	**Brand Name**	Zebra	**Part Number**	HDST-35MM-PTVP-01
Earphone 2	**Brand Name**	Zebra	**Part Number**	HS2100-OTH
Earphone 3	**Brand Name**	Zebra	**Part Number**	HS3100-OTH
Snap-on 3.5MM Audio Nugget	**Brand Name**	Symbol	**Part Number**	ADP-TC7X-AUD35-01
3.5mm Jack 43"(1.1m) Standard Cable	**Brand Name**	Zebra	**Part Number**	CBL-HS2100-3MS1-01
Soft Holster	**Brand Name**	Zebra	**Part Number**	SG-TC7X-HLSTR1-01
Rigid Holster	**Brand Name**	Zebra	**Part Number**	SG-TC7X-RHLSTR1-01
Power Cord	**Brand Name**	LOROM	**Part Number**	50-16000-182R
Cable line	**Brand Name**	Zebra	**Part Number**	CBL-DC-383A1-01

1.4 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 ~ 1909.8MHz **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: 32.22 dBm 1900: 29.53 dBm **WCDMA:** Band V: 23.90 dBm Band II: 24.39 dBm Band IV: 23.92 dBm **CDMA2000:** BC0: 24.17 dBm BC1: 24.83 dBm
Antenna Type	IFA Antenna
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Downlink) HSUPA: QPSK (Uplink) CDMA2000 1xRTT: QPSK CDMA2000 1xEV-DO: QPSK/8PSK

1.5 Modification of EUT

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

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

FCC Rule	System	Type of Modulation	Maximum ERP/EIRP (W)	Frequency Tolerance (ppm)	Emission Designator
Part 22	GSM850 GPRS class 8	GMSK	0.7211	0.0048 ppm	245KGXW
Part 22	GSM850 EDGE class 8	8PSK	0.1574	0.0084 ppm	247KG7W
Part 22	WCDMA Band V RMC 12.2Kbps	QPSK	0.1099	0.0143 ppm	4M13F9W
Part 22	CDMA2000 BC0 1xRTT	QPSK	0.1167	0.0072 ppm	1M27F9W
Part 22	CDMA2000 BC0 1xEV-DO Rev. A	QPSK	0.1151	0.0096 ppm	1M27F9W
Part 24	GSM1900 GPRS class 8	GMSK	1.3804	0.0122 ppm	247KGXW
Part 24	GSM1900 EDGE class 8	8PSK	0.5047	0.0154 ppm	242KG7W
Part 24	WCDMA Band II RMC 12.2Kbps	QPSK	0.3155	0.0090 ppm	4M14F9W
Part 24	CDMA2000 BC1 1xRTT	QPSK	0.4217	0.0027 ppm	1M27F9W
Part 24	CDMA2000 BC1 1xEV-DO Rev. A	QPSK	0.3412	0.0144 ppm	1M27F9W
Part 27	WCDMA Band IV HSDPA	QPSK	0.3846	0.0196 ppm	4M14F9W

1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH03-HY

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH10-HY

1.8 Applicable Standards

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

- 47 CFR Part 2, 22(H), 24(E), 27(L)
- ANSI / TIA / EIA-603-D-2010
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02

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 v02r02 with maximum output power.

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

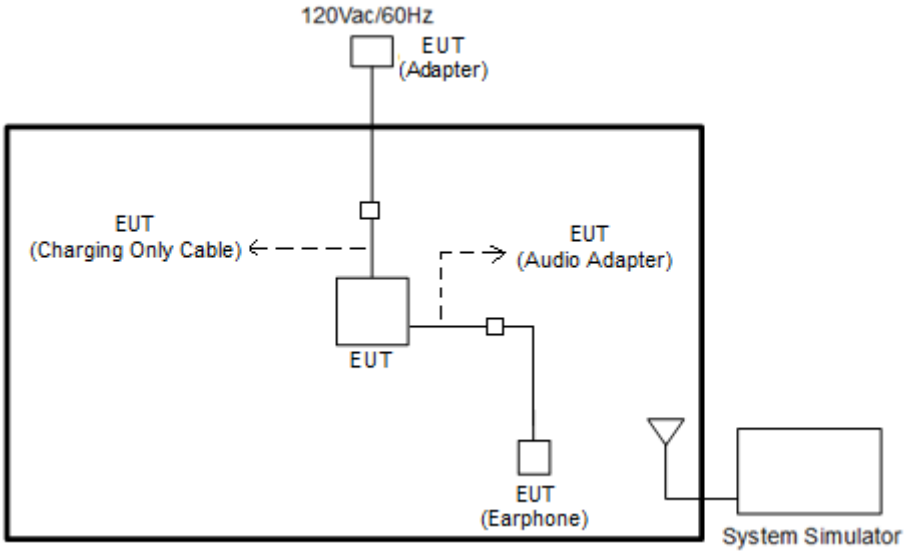
1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V and CDMA BC0.
2. 30 MHz to 18000 MHz for WCDMA Band IV.
3. 30 MHz to 19100 MHz for GSM1900 and WCDMA Band II and CDMA BC1.

All modes and data rates and positions were investigated.

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

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

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration

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

2.4 Measurement Results Explanation Example

For all conducted test items:

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

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

Offset = RF cable loss + attenuator factor.

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

Example :

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

= 4.2 + 10 = 14.2 (dB)

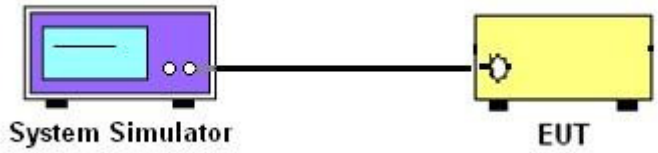
3 Conducted Test Result

3.1 Measuring Instruments

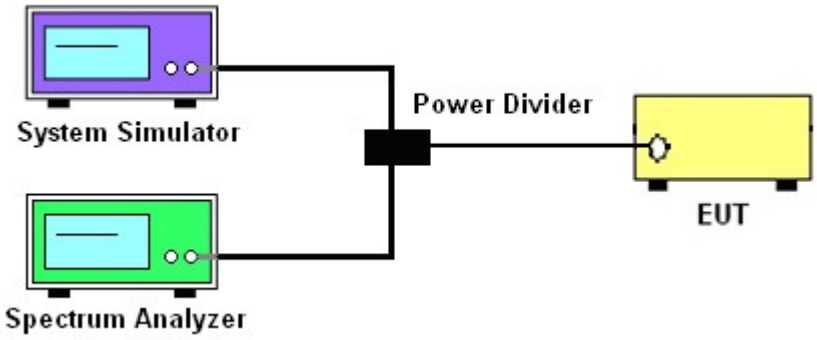
See list of measuring instruments of this test report.

3.2 Test Setup

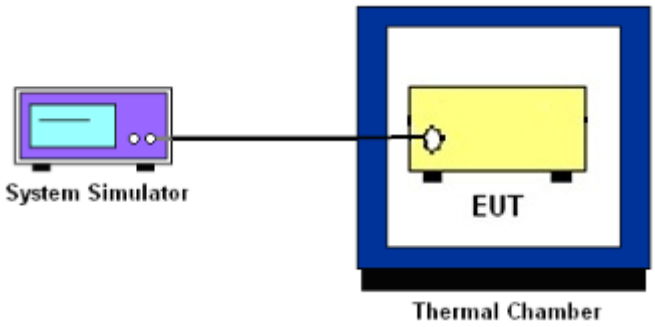
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power

3.4.1 Description of the Conducted Output Power

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.

3.4.2 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.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

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

3.5.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 5.7.1.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. Set EUT to transmit at maximum output power.
4. When the duty cycle is less than 98%, then signal gating will be implemented on the spectrum analyzer by triggering from the system simulator.
5. Set the CCDF (Complementary Cumulative Distribution Function) option of the spectrum analyzer.

Record the maximum PAPR level associated with a probability of 0.1%.

3.6 99% Occupied Bandwidth and 26dB Bandwidth Measurement

3.6.1 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.

3.6.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 4.2.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. 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.
5. Set the detection mode to peak, and the trace mode to max hold.
6. 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)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. 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.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 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.

3.7.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 6.0.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. 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.
4. The band edges of low and high channels for the highest RF powers were measured.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)
   =P(W) - [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

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

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

3.8.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 6.0.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. 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.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

= P(W) - [43 + 10log(P)] (dB)

= [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)

= -13dBm.

3.9 Frequency Stability

3.9.1 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 ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows FCC KDB 971168 D01 v02r02 Section 9.0.
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. 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.
4. 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.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows FCC KDB 971168 D01 v02r02 Section 9.0.
2. The EUT was placed in a temperature chamber at 20±5° C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

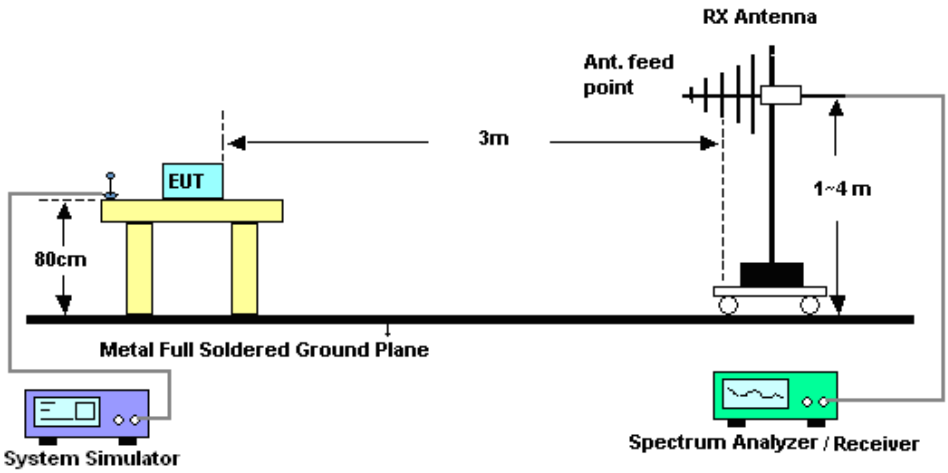
4 Radiated Test Items

4.1 Measuring Instruments

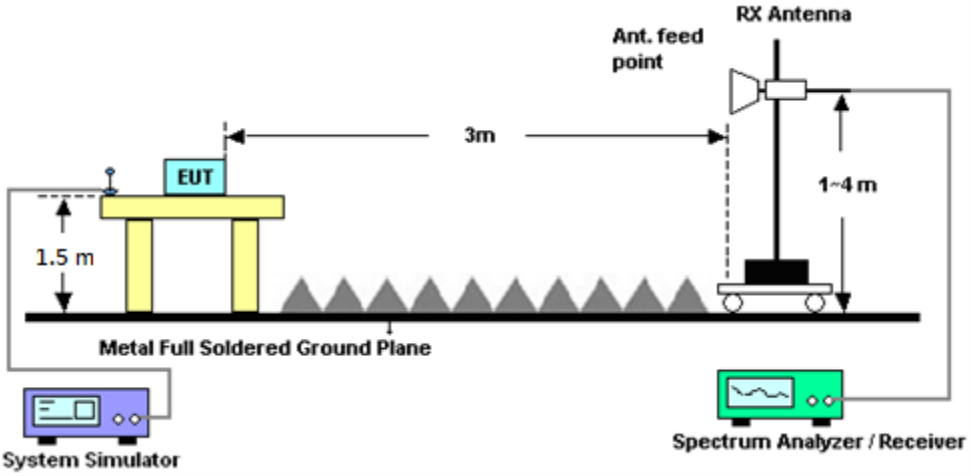
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Effective Radiated Power and Effective Isotropic Radiated Power Measurement

4.4.1 Description of the ERP/EIRP Measurement

The substitution method, in ANSI / TIA / EIA-603-D-2010, was used for ERP/EIRP measurement, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. The ERP of mobile transmitters must not exceed 7 Watts (Cellular Band) and the EIRP of mobile transmitters are limited to 2 Watts (PCS Band) and 1 Watts (AWS Band).

4.4.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 5.2.1. (for CDMA/WCDMA), Section 5.2.2.2 (for GSM/GPRS/EDGE) and ANSI / TIA-603-D-2010 Section 2.2.17.
2. The EUT was placed on a non-conductive rotating platform (0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz) in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01.
3. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
4. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-D. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, EIRP = LVL + Correction factor and ERP = EIRP - 2.15. Take the record of the output power at substitution antenna.

	GSM/GPRS/EDGE	WCDMA/HSPA
SPAN	500kHz	10MHz
RBW	10kHz	100kHz
VBW	30kHz	300kHz
Detector	RMS	RMS
Trace	Average	Average
Average Type	Power	Power
Sweep Count	100	100

4.5 Field Strength of Spurious Radiation Measurement

4.5.1 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.

4.5.2 Test Procedures

1. The testing follows FCC KDB 971168 D01 v02r02 Section 5.8 and ANSI / TIA-603-D-2010 Section 2.2.12.
2. 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.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. 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.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
12. ERP (dBm) = EIRP - 2.15
13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
14. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

    = P(W) - [43 + 10log(P)] (dB)

    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)

    = -13dBm.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Jun. 27, 2016	Aug. 29, 2016 ~ Sep. 12, 2016	Jun. 26, 2017	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-641	92013721	-30℃ ~70℃	Nov. 20, 2015	Aug. 29, 2016 ~ Sep. 12, 2016	Nov. 19, 2016	Conducted (TH03-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL883644	Voltage:0~20V;Current:0~5A	Nov. 26, 2015	Aug. 29, 2016 ~ Sep. 12, 2016	Nov. 25, 2016	Conducted (TH03-HY)
Base Station(Measu	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Aug. 03, 2017	Aug. 29, 2016 ~ Sep. 12, 2016	Aug,04, 2017	Conducted (TH03-HY)
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Nov. 16, 2015	Aug. 31, 2016 ~ Sep. 07, 2016	Nov. 15, 2016	Radiation (03CH10-HY)
Bilog Antenna	TESEQ	CBL 6111D	35413	30MHz~1GHz	Jan. 13, 2016	Aug. 31, 2016 ~ Sep. 07, 2016	Jan. 12, 2017	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1325	1GHz ~ 18GHz	Sep. 30, 2015	Aug. 31, 2016 ~ Sep. 07, 2016	Sep. 29, 2016	Radiation (03CH10-HY)
Preamplifier	Keysight	83017A	MY53270078	1GHz~26.5GHz	Nov. 13, 2015	Aug. 31, 2016 ~ Sep. 07, 2016	Nov. 12, 2016	Radiation (03CH10-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz ~ 44GHz	Oct. 15, 2015	Aug. 31, 2016 ~ Sep. 07, 2016	Oct. 14, 2016	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Aug. 31, 2016 ~ Sep. 07, 2016	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	Aug. 31, 2016 ~ Sep. 07, 2016	N/A	Radiation (03CH10-HY)
Bilog Antenna	TESEQ	CBL 6111D	35414	30MHz~1GHz	Nov. 17, 2015	Aug. 31, 2016 ~ Sep. 07, 2016	Nov. 16, 2016	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 08, 2015	Aug. 31, 2016 ~ Sep. 07, 2016	Oct. 07, 2016	Radiation (03CH10-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~ 40GHz	Apr. 15, 2016	Aug. 31, 2016 ~ Sep. 07, 2016	Apr. 14, 2017	Radiation (03CH10-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY55420170	N/A	Mar. 10, 2016	Aug. 31, 2016 ~ Sep. 07, 2016	Mar. 09, 2017	Radiation (03CH10-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz- 40GHz	Oct. 12, 2015	Aug. 31, 2016 ~ Sep. 07, 2016	Oct. 11, 2016	Radiation (03CH10-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	May 19, 2016	Aug. 31, 2016 ~ Sep. 07, 2016	May 18, 2017	Radiation (03CH10-HY)

6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.60**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.90**

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	1880.0	1909.8
GSM	32.03	32.22	32.12	29.45	29.52	29.36
GPRS class 8	32.20	32.21	32.10	29.39	29.53	29.37
GPRS class 10	31.84	32.07	32.00	29.42	29.50	29.29
GPRS class 11	31.67	31.85	31.80	29.34	29.41	29.30
GPRS class 12	31.79	31.65	31.67	27.60	27.58	27.18
EGPRS class 8	25.96	25.93	25.94	25.53	25.50	25.20
EGPRS class 10	25.96	25.97	25.78	25.47	25.41	25.21
EGPRS class 11	25.81	25.87	25.73	25.38	25.41	25.20
EGPRS class 12	25.72	25.73	25.65	25.44	25.39	25.19

Conducted Power (*Unit: dBm)									
Band	WCDMA Band V			WCDMA Band II			WCDMA Band IV		
Channel	4132	4182	4233	9262	9400	9538	1312	1413	1513
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6	1712.4	1732.6	1752.6
RMC 12.2K	23.73	23.85	23.90	24.39	24.17	24.39	23.58	23.72	23.92
HSDPA Subtest-1	22.61	22.66	22.85	23.40	23.25	23.46	22.52	22.69	22.96
HSDPA Subtest-2	22.65	22.69	22.80	23.42	23.23	23.46	22.50	22.71	23.00
HSDPA Subtest-3	22.12	22.24	22.30	22.71	22.60	22.82	22.00	22.23	22.46
HSDPA Subtest-4	22.16	22.25	22.38	22.73	22.65	22.88	22.01	22.21	22.44
HSUPA Subtest-1	22.50	22.62	22.80	23.36	23.29	23.42	22.53	22.56	22.59
HSUPA Subtest-2	20.73	20.76	20.92	21.21	21.22	21.45	20.51	20.68	20.93
HSUPA Subtest-3	21.79	21.75	21.88	22.20	22.16	22.37	21.50	21.78	21.94
HSUPA Subtest-4	20.79	20.83	20.97	21.22	21.20	21.27	20.50	20.77	20.97
HSUPA Subtest-5	22.68	22.70	22.82	23.40	23.27	23.47	22.55	22.76	22.94

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	24.06	23.86	24.12	24.51	24.50	24.77
1xRTT RC3 SO55	24.12	23.88	24.15	24.57	24.58	**24.83**
1xRTT RC3 SO32 (+ F-SCH)	24.05	23.89	24.16	24.51	24.51	24.81
1xRTT RC3 SO32 (+SCH)	24.02	23.91	24.15	24.52	24.52	24.80
1xEVDO RTAP 153.6Kbps	23.96	23.78	**24.17**	24.50	24.52	24.71
1xEVDO RETAP 4096Bits	23.97	23.75	24.08	24.46	24.46	24.67

A1. GSM

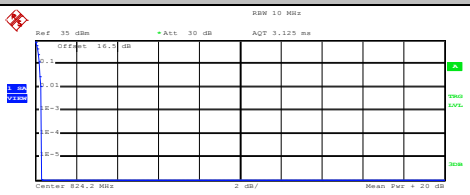
Peak-to-Average Ratio

Mode	GSM850		Limit: 13dB
Mod.	GSM	EDGE class 8	Result
Lowest CH	0.32	3.08	PASS
Middle CH	0.28	3.24	
Highest CH	0.28	3.36	

Mode	GSM1900		Limit: 13dB
Mod.	GPRS class 8	EDGE class 8	Result
Lowest CH	0.20	3.16	PASS
Middle CH	0.16	3.12	
Highest CH	0.16	3.08	

GSM850 (GSM)

Lowest Channel



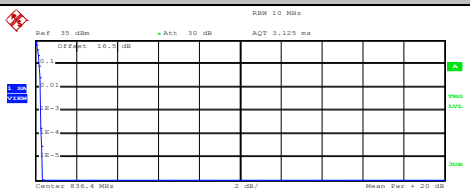
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	31.78 dBm
Peak	32.08 dBm
Crest	0.30 dB
10 %	0.20 dB
1 %	0.28 dB
.1 %	0.32 dB
.01 %	0.32 dB

Date: 29.AUG.2016 12:54:05

Middle Channel



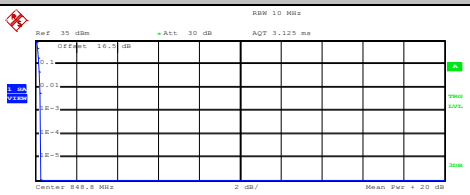
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	32.17 dBm
Peak	32.50 dBm
Crest	0.33 dB
10 %	0.20 dB
1 %	0.28 dB
.1 %	0.28 dB
.01 %	0.32 dB

Date: 29.AUG.2016 12:59:55

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

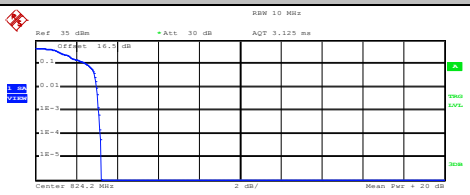
Trace 1

Mean	32.33 dBm
Peak	32.57 dBm
Crest	0.24 dB
10 %	0.20 dB
1 %	0.24 dB
.1 %	0.28 dB
.01 %	0.28 dB

Date: 29.AUG.2016 13:00:57

GSM850 (EDGE class 8)

Lowest Channel



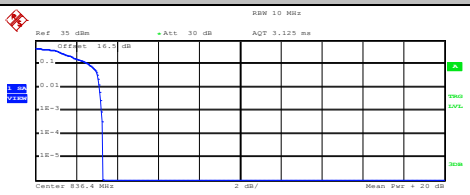
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	25.55 dBm
Peak	28.76 dBm
Crest	3.22 dB
10 %	2.52 dB
1 %	3.00 dB
.1 %	3.08 dB
.01 %	3.20 dB

Date: 29.AUG.2016 13:13:49

Middle Channel



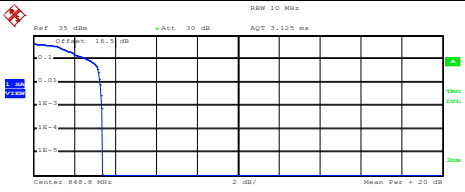
Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	25.60 dBm
Peak	28.90 dBm
Crest	3.31 dB
10 %	2.60 dB
1 %	3.16 dB
.1 %	3.24 dB
.01 %	3.32 dB

Date: 29.AUG.2016 13:15:12

Highest Channel

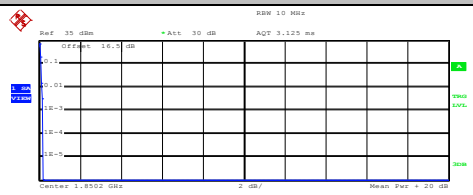
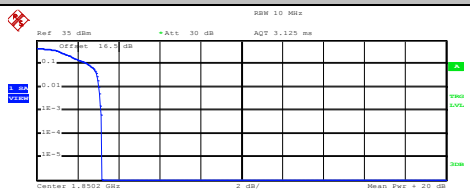
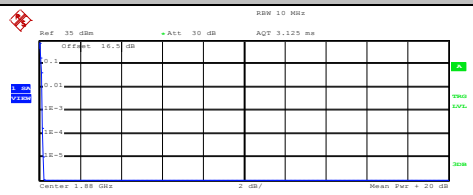
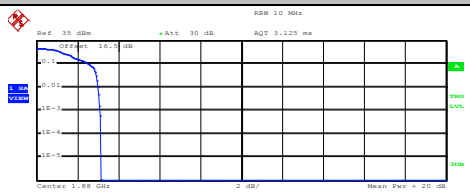
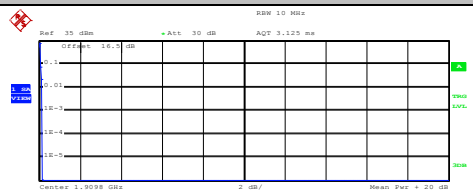
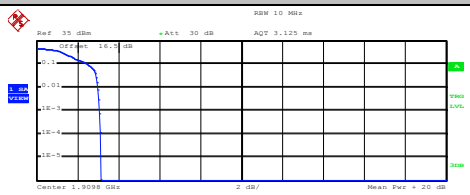


Complementary Cumulative Distribution Function (100000 samples)

Trace 1

Mean	26.10 dBm
Peak	29.47 dBm
Crest	3.37 dB
10 %	2.68 dB
1 %	3.28 dB
.1 %	3.36 dB
.01 %	3.40 dB

Date: 29.AUG.2016 13:16:48

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 28.03 dBm Peak 28.20 dBm Crest 0.17 dB 10 % 0.12 dB 1 % 0.12 dB .1 % 0.20 dB .01 % 0.20 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.89 dBm Peak 27.07 dBm Crest 3.18 dB 10 % 2.52 dB 1 % 3.04 dB .1 % 3.16 dB .01 % 3.20 dB
Date: 29.AUG.2016 13:33:16	Date: 29.AUG.2016 13:48:41
Middle Channel	**Middle Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 28.42 dBm Peak 28.62 dBm Crest 0.20 dB 10 % 0.12 dB 1 % 0.16 dB .1 % 0.16 dB .01 % 0.16 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.27 dBm Peak 27.42 dBm Crest 3.15 dB 10 % 2.56 dB 1 % 3.00 dB .1 % 3.12 dB .01 % 3.16 dB
Date: 29.AUG.2016 13:34:27	Date: 29.AUG.2016 13:49:48
Highest Channel	**Highest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 27.69 dBm Peak 27.85 dBm Crest 0.15 dB 10 % 0.08 dB 1 % 0.16 dB .1 % 0.16 dB .01 % 0.16 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.92 dBm Peak 27.07 dBm Crest 3.15 dB 10 % 2.48 dB 1 % 3.00 dB .1 % 3.08 dB .01 % 3.12 dB
Date: 29.AUG.2016 13:36:57	Date: 29.AUG.2016 13:51:16

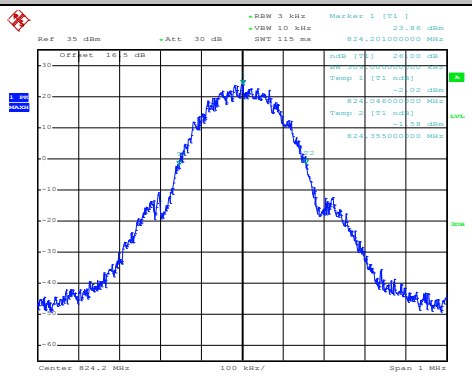
26dB Bandwidth

Mode	GSM850	
Mod.	GSM	EDGE class 8
Lowest CH	0.309	0.283
Middle CH	0.306	0.292
Highest CH	0.310	0.285

Mode	GSM1900	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.315	0.299
Middle CH	0.319	0.292
Highest CH	0.307	0.298

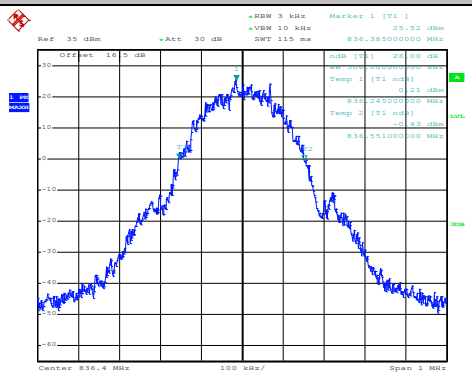
GSM850 (GSM)

Lowest Channel



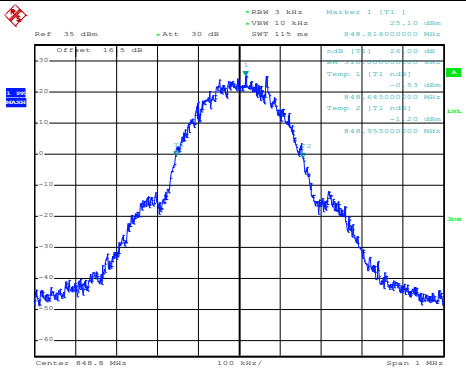
Date: 29.AUG.2016 12:42:59

Middle Channel



Date: 29.AUG.2016 12:43:28

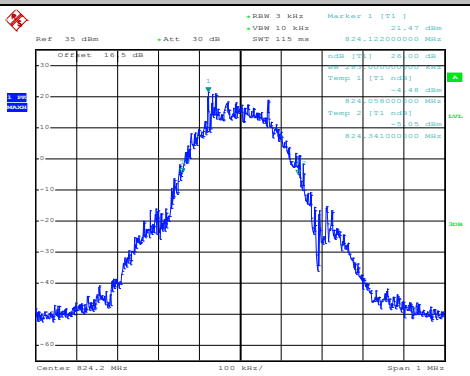
Highest Channel



Date: 29.AUG.2016 12:44:02

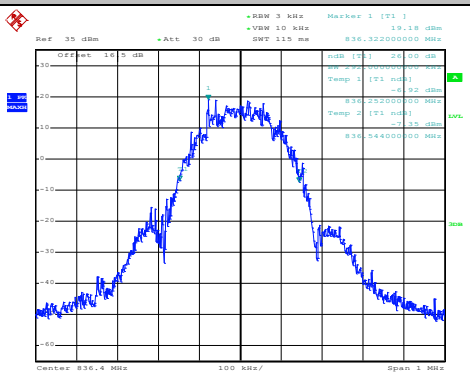
GSM850 (EDGE class 8)

Lowest Channel



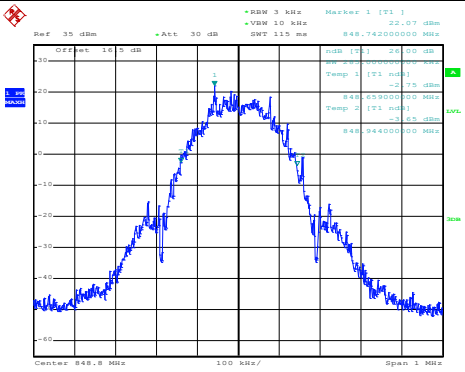
Date: 29.AUG.2016 13:03:13

Middle Channel

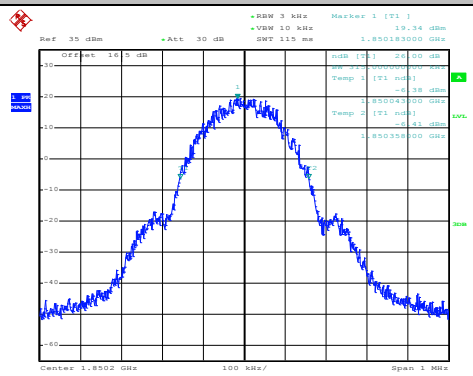
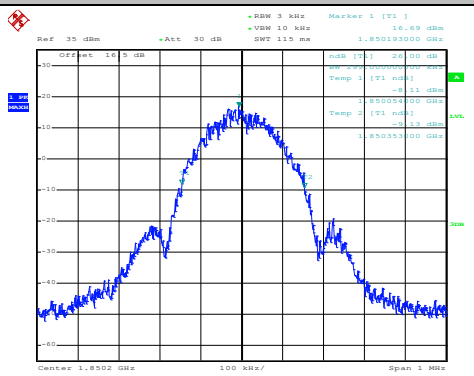
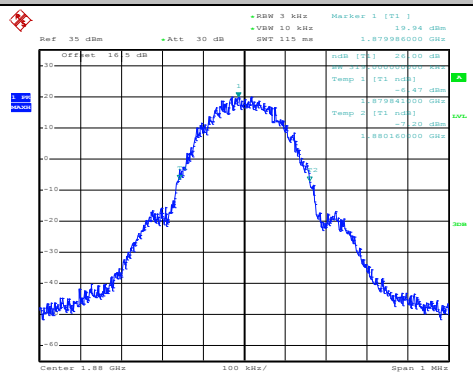
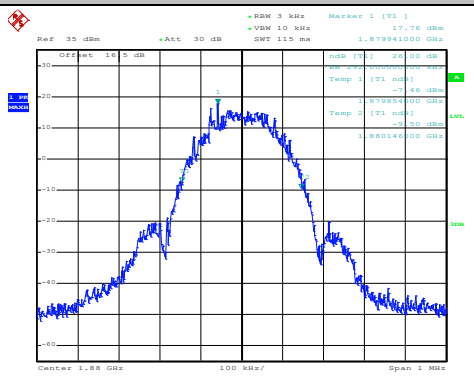
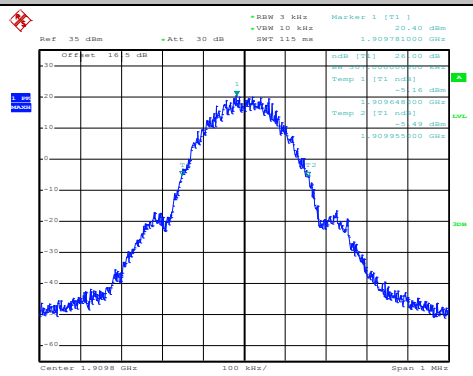
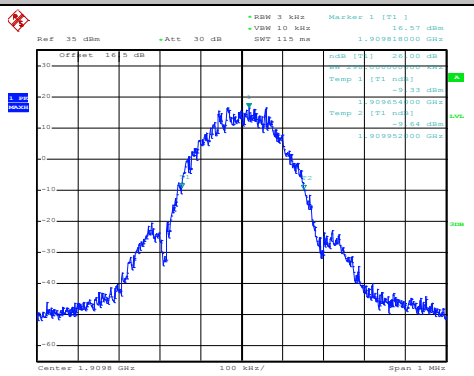


Date: 29.AUG.2016 13:03:43

Highest Channel



Date: 29.AUG.2016 13:04:17

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 29.AUG.2016 13:22:38	Date: 29.AUG.2016 13:38:48
Middle Channel	**Middle Channel**
	
Date: 29.AUG.2016 13:23:07	Date: 29.AUG.2016 13:39:16
Highest Channel	**Highest Channel**
	
Date: 29.AUG.2016 13:23:40	Date: 29.AUG.2016 13:39:44

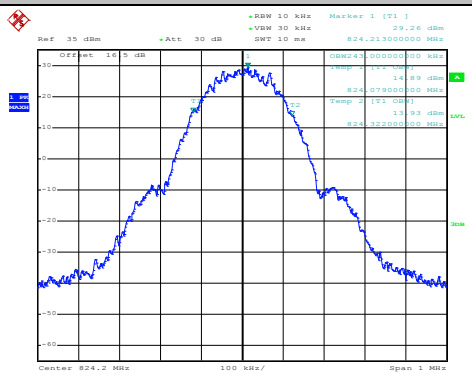
Occupied Bandwidth

Mode	GSM850	
Mod.	GSM	EDGE class 8
Lowest CH	0.243	0.237
Middle CH	0.242	0.247
Highest CH	0.245	0.240

Mode	GSM1900	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.245	0.242
Middle CH	0.245	0.240
Highest CH	0.247	0.242

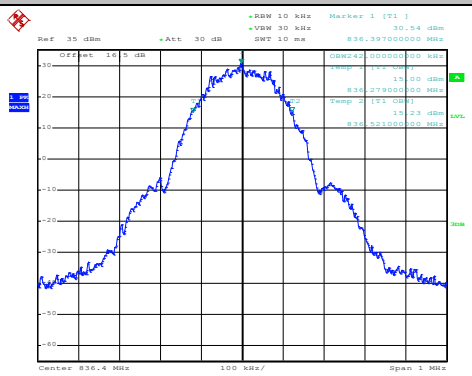
GSM850 (GSM)

Lowest Channel



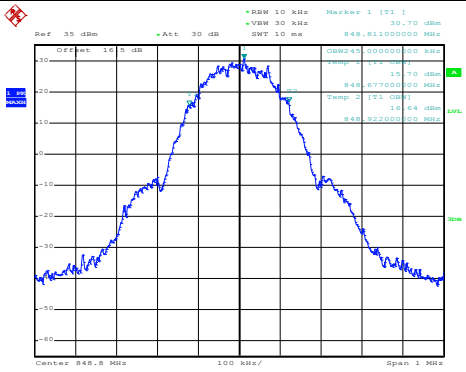
Date: 29.AUG.2016 12:44:40

Middle Channel



Date: 29.AUG.2016 12:45:08

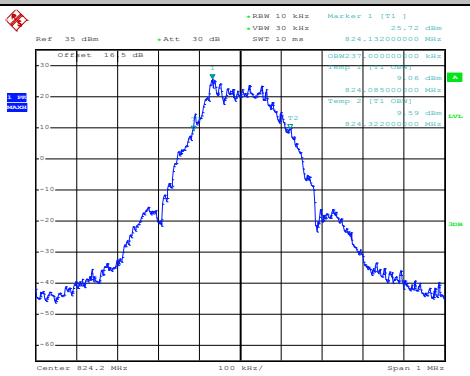
Highest Channel



Date: 29.AUG.2016 12:45:38

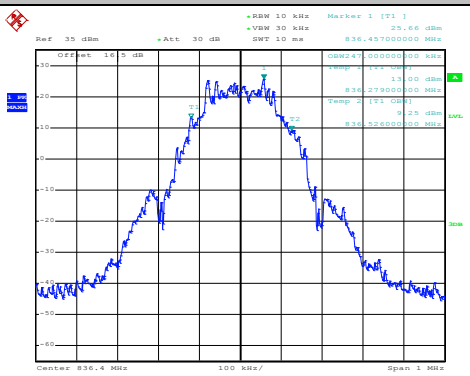
GSM850 (EDGE class 8)

Lowest Channel



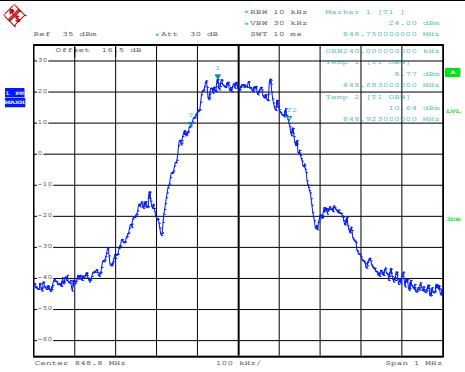
Date: 29.AUG.2016 13:05:19

Middle Channel

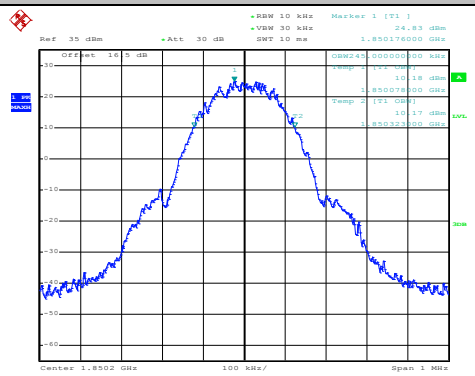
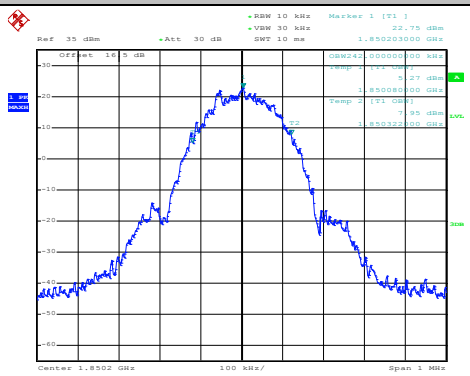
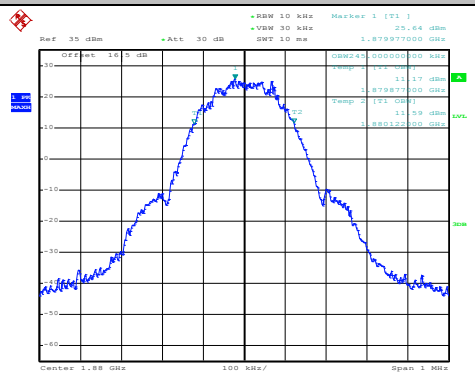
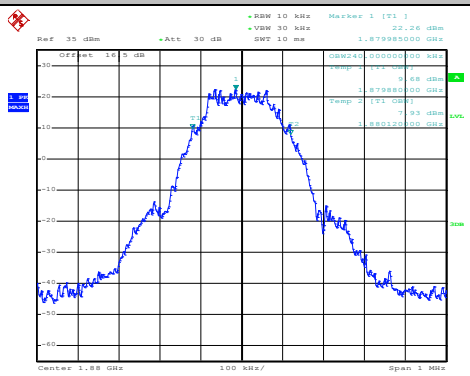
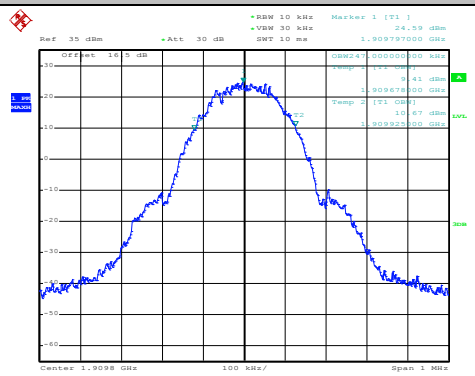
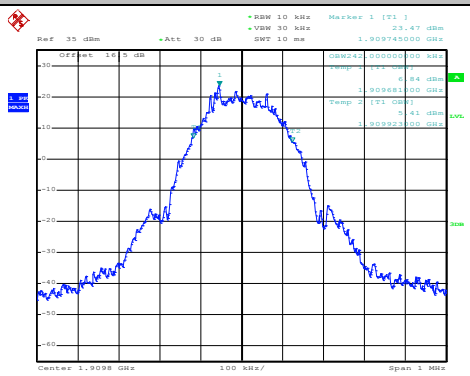


Date: 29.AUG.2016 13:05:48

Highest Channel



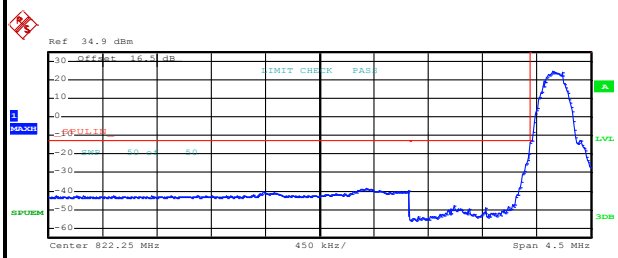
Date: 29.AUG.2016 13:06:19

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 29.AUG.2016 13:24:27	Date: 29.AUG.2016 13:40:29
Middle Channel	**Middle Channel**
	
Date: 29.AUG.2016 13:24:55	Date: 29.AUG.2016 13:40:57
Highest Channel	**Highest Channel**
	
Date: 29.AUG.2016 13:25:24	Date: 29.AUG.2016 13:41:25

Conducted Band Edge

GSM850 (GSM)

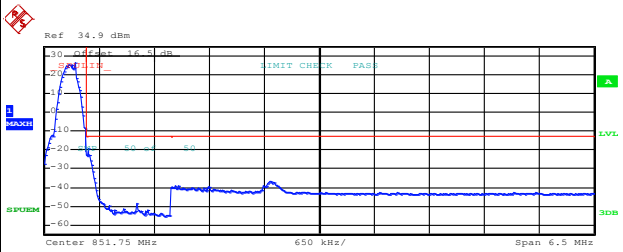
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.634000 M	-38.41	-25.41
823.000 M	824.000 M	3.00 k	823.980000 M	-19.65	-6.65
824.000 M	824.500 M	10.00 k	824.184500 M	24.90	-10.10

Date: 29.AUG.2016 12:47:18

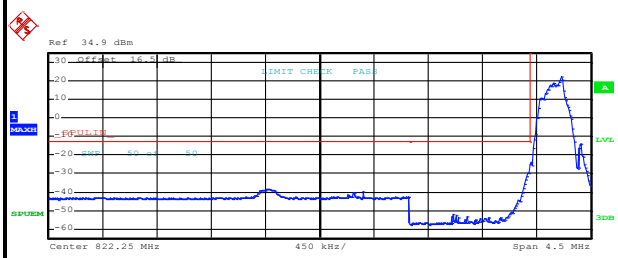
Highest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.866500 M	26.49	-8.51
849.000 M	850.000 M	3.00 k	849.020000 M	-19.19	-6.19
850.000 M	855.000 M	100.00 k	851.165000 M	-36.84	-23.84

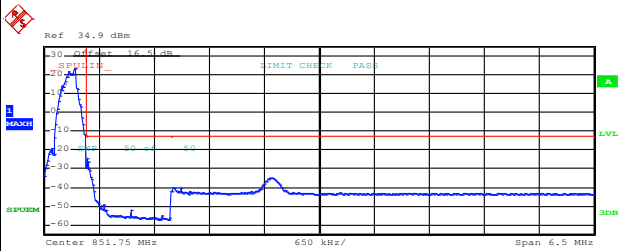
Date: 29.AUG.2016 12:48:49

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



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	821.821000 M	-38.25	-25.25
823.000 M	824.000 M	3.00 k	823.976000 M	-29.82	-16.82
824.000 M	824.500 M	10.00 k	824.256500 M	22.15	-12.85

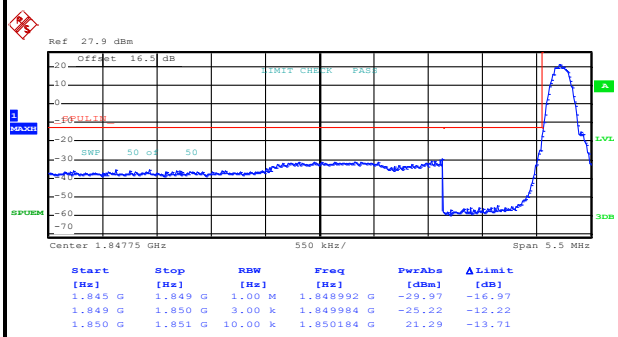
Date: 29.AUG.2016 13:08:24



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.862500 M	23.49	-11.51
849.000 M	850.000 M	3.00 k	849.008000 M	-24.68	-11.68
850.000 M	855.000 M	100.00 k	851.200000 M	-35.03	-22.03

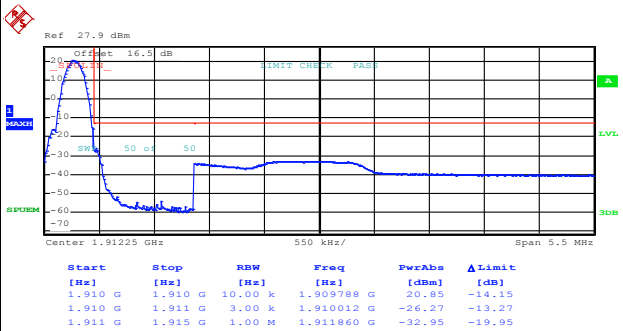
Date: 29.AUG.2016 13:09:53

GSM1900 (GPRS class 8)	
Lowest Band Edge	**Highest Band Edge**



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848992 G	-29.97	-16.97
1.849 G	1.850 G	3.00 k	1.849984 G	-25.22	-12.22
1.850 G	1.851 G	10.00 k	1.850184 G	21.29	-13.71

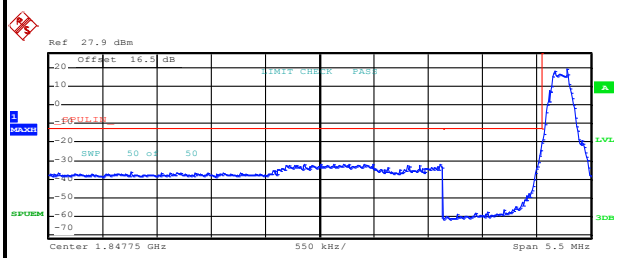
Date: 29.AUG.2016 13:27:04



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909788 G	20.85	-14.15
1.910 G	1.911 G	3.00 k	1.910012 G	-26.27	-13.27
1.911 G	1.915 G	1.00 M	1.911860 G	-32.95	-19.95

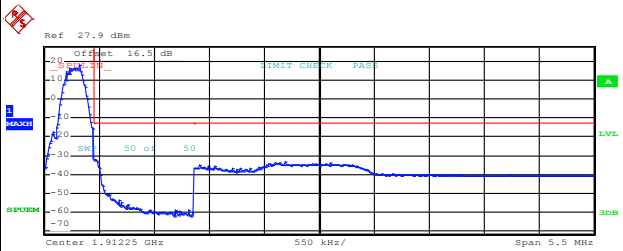
Date: 29.AUG.2016 13:28:32

GSM1900 (EDGE class 8)	
Lowest Band Edge	**Highest Band Edge**



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848040 G	-31.95	-19.95
1.849 G	1.850 G	3.00 k	1.849988 G	-24.69	-11.69
1.850 G	1.851 G	10.00 k	1.850261 G	19.30	-15.70

Date: 29.AUG.2016 13:42:54



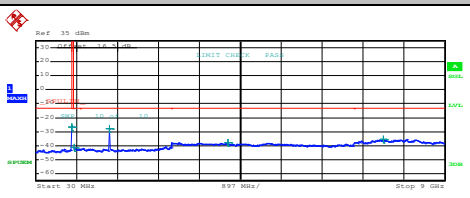
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909857 G	18.01	-16.99
1.910 G	1.911 G	3.00 k	1.910008 G	-30.61	-17.61
1.911 G	1.915 G	1.00 M	1.911904 G	-33.34	-20.34

Date: 29.AUG.2016 13:44:22

Conducted Spurious Emission

GSM850 (GSM)

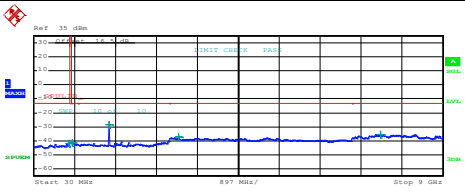
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.802500 M	-26.61	-13.61
855.000 M	1.000 G	1.00 M	869.318751 M	-41.29	-28.29
1.000 G	3.000 G	1.00 M	1.648500 G	-28.10	-15.10
3.000 G	7.000 G	1.00 M	4.246000 G	-38.01	-25.01
7.000 G	9.000 G	1.00 M	7.659500 G	-35.64	-22.64

Date: 29.AUG.2016 12:50:08

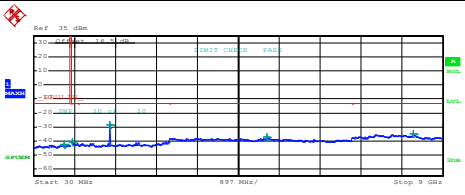
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	795.905000 M	-42.05	-29.05
855.000 M	1.000 G	1.00 M	864.606251 M	-41.04	-28.04
1.000 G	3.000 G	1.00 M	1.673000 G	-28.34	-15.34
3.000 G	7.000 G	1.00 M	3.199000 G	-37.41	-24.41
7.000 G	9.000 G	1.00 M	7.639000 G	-35.23	-22.23

Date: 29.AUG.2016 12:50:53

Highest Channel

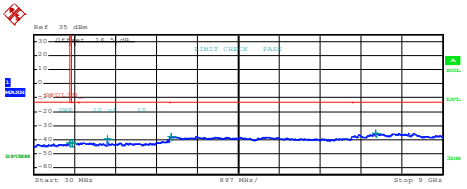


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	688.662500 M	-42.45	-29.45
855.000 M	1.000 G	1.00 M	870.515001 M	-40.52	-27.52
1.000 G	3.000 G	1.00 M	1.697500 G	-28.55	-15.55
3.000 G	7.000 G	1.00 M	5.137000 G	-37.46	-24.46
7.000 G	9.000 G	1.00 M	8.360000 G	-34.68	-21.68

Date: 29.AUG.2016 12:51:39

GSM850 (EDGE class 8)

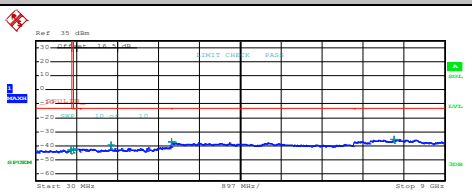
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	813.285000 M	-42.24	-29.24
855.000 M	1.000 G	1.00 M	875.336251 M	-42.22	-29.22
1.000 G	3.000 G	1.00 M	1.649000 G	-39.53	-26.53
3.000 G	7.000 G	1.00 M	3.041000 G	-37.95	-24.95
7.000 G	9.000 G	1.00 M	7.534000 G	-35.48	-22.48

Date: 29.AUG.2016 13:10:47

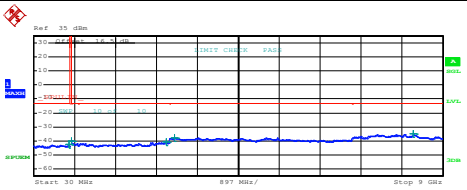
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	801.040000 M	-43.04	-30.04
855.000 M	1.000 G	1.00 M	855.580000 M	-42.32	-29.32
1.000 G	3.000 G	1.00 M	1.673000 G	-39.84	-26.84
3.000 G	7.000 G	1.00 M	3.003000 G	-37.51	-24.51
7.000 G	9.000 G	1.00 M	7.882500 G	-35.46	-22.46

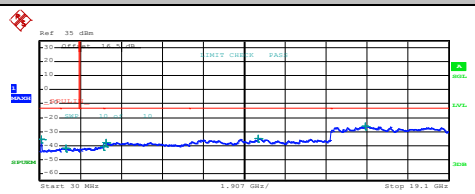
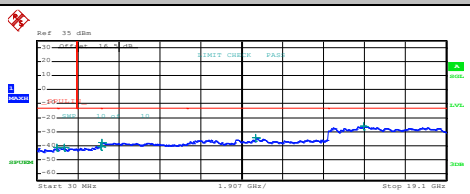
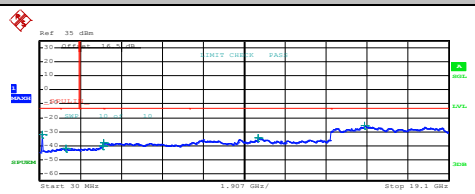
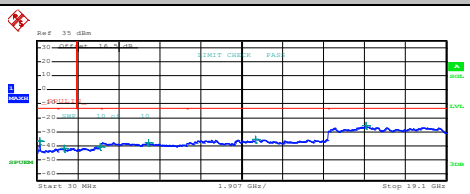
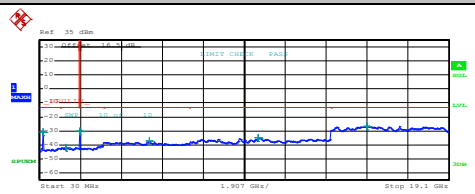
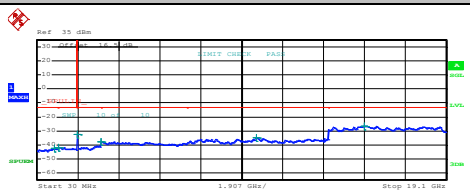
Date: 29.AUG.2016 13:11:33

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	806.175000 M	-42.42	-29.42
855.000 M	1.000 G	1.00 M	855.072500 M	-40.11	-27.11
1.000 G	3.000 G	1.00 M	2.942000 G	-40.79	-27.79
3.000 G	7.000 G	1.00 M	3.117000 G	-37.78	-24.78
7.000 G	9.000 G	1.00 M	8.360500 G	-35.15	-22.15

Date: 29.AUG.2016 13:12:18

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Start 30 MHz / 1.907 GHz / Stop 19.1 GHz Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 111.965000 M / -35.64 / -22.64 1.000 G / 1.845 G / 1.00 M / 1.234910 G / -41.76 / -28.76 1.915 G / 3.000 G / 1.00 M / 3.000000 G / -40.76 / -27.76 3.000 G / 7.000 G / 1.00 M / 3.110000 G / -37.88 / -24.88 7.000 G / 13.600 G / 1.00 M / 10.216675 G / -34.87 / -21.87 13.600 G / 19.100 G / 1.00 M / 15.200500 G / -25.90 / -12.90	Start 30 MHz / 1.907 GHz / Stop 19.1 GHz Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 956.350000 M / -41.45 / -28.45 1.000 G / 1.845 G / 1.00 M / 1.275893 G / -41.46 / -28.46 1.915 G / 3.000 G / 1.00 M / 2.996745 G / -40.51 / -27.51 3.000 G / 7.000 G / 1.00 M / 3.035000 G / -37.64 / -24.64 7.000 G / 13.600 G / 1.00 M / 10.224925 G / -34.40 / -21.40 13.600 G / 19.100 G / 1.00 M / 15.249313 G / -26.13 / -13.13
Date: 29.AUG.2016 13:29:39	Date: 29.AUG.2016 13:45:12
Middle Channel	**Middle Channel**
	
Start 30 MHz / 1.907 GHz / Stop 19.1 GHz Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 141.792500 M / -32.07 / -19.07 1.000 G / 1.845 G / 1.00 M / 1.248430 G / -41.75 / -28.75 1.915 G / 3.000 G / 1.00 M / 2.970705 G / -39.87 / -26.87 3.000 G / 7.000 G / 1.00 M / 3.003000 G / -37.63 / -24.63 7.000 G / 13.600 G / 1.00 M / 10.227400 G / -34.57 / -21.57 13.600 G / 19.100 G / 1.00 M / 15.171625 G / -25.81 / -12.81	Start 30 MHz / 1.907 GHz / Stop 19.1 GHz Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 141.792500 M / -36.63 / -23.63 1.000 G / 1.845 G / 1.00 M / 1.290891 G / -41.83 / -28.83 1.915 G / 3.000 G / 1.00 M / 2.951989 G / -40.76 / -27.76 3.000 G / 7.000 G / 1.00 M / 5.214000 G / -37.76 / -24.76 7.000 G / 13.600 G / 1.00 M / 10.211725 G / -35.18 / -22.18 13.600 G / 19.100 G / 1.00 M / 15.351750 G / -25.58 / -12.58
Date: 29.AUG.2016 13:30:25	Date: 29.AUG.2016 13:45:58
Highest Channel	**Highest Channel**
	
Start 30 MHz / 1.907 GHz / Stop 19.1 GHz Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 171.620000 M / -30.77 / -17.77 1.000 G / 1.845 G / 1.00 M / 1.268921 G / -42.08 / -29.08 1.915 G / 3.000 G / 1.00 M / 1.915271 G / -30.41 / -17.41 3.000 G / 7.000 G / 1.00 M / 5.135000 G / -37.50 / -24.50 7.000 G / 13.600 G / 1.00 M / 10.222450 G / -35.04 / -22.04 13.600 G / 19.100 G / 1.00 M / 15.283000 G / -26.58 / -13.58	Start 30 MHz / 1.907 GHz / Stop 19.1 GHz Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 30.000 M / 1.000 G / 1.00 M / 839.707500 M / -42.46 / -29.46 1.000 G / 1.845 G / 1.00 M / 1.039081 G / -41.99 / -28.99 1.915 G / 3.000 G / 1.00 M / 1.915271 G / -32.49 / -19.49 3.000 G / 7.000 G / 1.00 M / 3.002000 G / -37.89 / -24.89 7.000 G / 13.600 G / 1.00 M / 10.243900 G / -34.71 / -21.71 13.600 G / 19.100 G / 1.00 M / 15.269250 G / -26.64 / -13.64
Date: 29.AUG.2016 13:31:12	Date: 29.AUG.2016 13:46:44

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	0.0012	0.0024	PASS
40	Normal Voltage	0.0012	0.0000	
30	Normal Voltage	0.0012	0.0036	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0024	0.0024	
0	Normal Voltage	0.0048	0.0012	
-10	Normal Voltage	0.0000	0.0036	
-20	Normal Voltage	0.0000	0.0024	
-30	Normal Voltage	0.0000	0.0084	
20	Maximum Voltage	0.0048	0.0024	
20	Normal Voltage	0.0024	0.0024	
20	Battery End Point	0.0024	0.0024	

Test Conditions	Middle Channel	GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0027	0.0027	PASS
40	Normal Voltage	0.0027	0.0027	
30	Normal Voltage	0.0021	0.0027	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0090	0.0005	
0	Normal Voltage	0.0096	0.0106	
-10	Normal Voltage	0.0117	0.0133	
-20	Normal Voltage	0.0122	0.0133	
-30	Normal Voltage	0.0122	0.0154	
20	Maximum Voltage	0.0032	0.0021	
20	Normal Voltage	0.0032	0.0027	
20	Battery End Point	0.0032	0.0027	

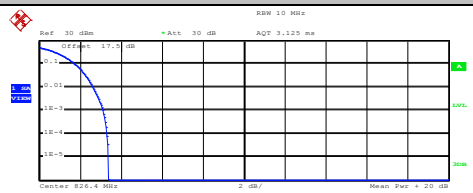
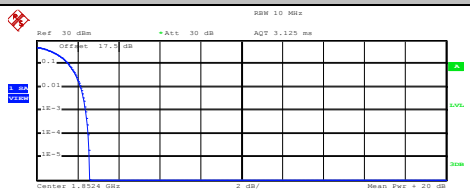
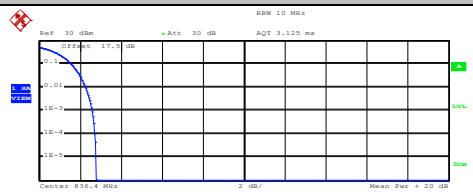
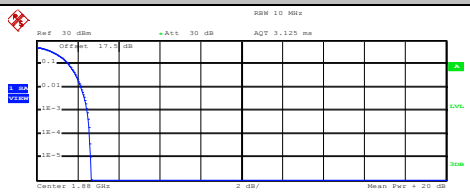
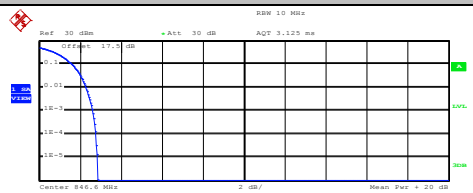
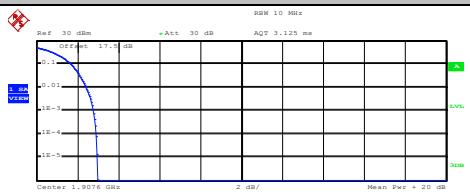
Note:

1. Normal Voltage = 3.9V. ；Battery End Point (BEP) = 3.7 V.；Maximum Voltage =4.2 V
2. The frequency fundamental emissions stay within the authorized frequency block.

A2. WCDMA

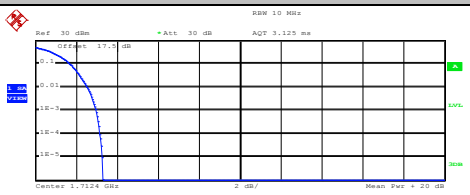
Peak-to-Average Ratio

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	3.12	2.40	3.00	PASS
Middle CH	2.60	2.48	3.08	
Highest CH	2.60	2.76	2.56	

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.82 dBm Peak 28.21 dBm Crest 3.39 dB 10 % 1.72 dB 1 % 2.64 dB .1 % 3.12 dB .01 % 3.32 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.30 dBm Peak 26.87 dBm Crest 2.57 dB 10 % 1.56 dB 1 % 2.16 dB .1 % 2.40 dB .01 % 2.52 dB
Date: 29.AUG.2016 12:37:15	Date: 26.AUG.2016 11:27:32
Middle Channel	**Middle Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.79 dBm Peak 27.57 dBm Crest 2.79 dB 10 % 1.56 dB 1 % 2.28 dB .1 % 2.60 dB .01 % 2.72 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.29 dBm Peak 26.94 dBm Crest 2.65 dB 10 % 1.56 dB 1 % 2.16 dB .1 % 2.48 dB .01 % 2.60 dB
Date: 29.AUG.2016 12:37:43	Date: 26.AUG.2016 11:27:54
Highest Channel	**Highest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 25.06 dBm Peak 27.93 dBm Crest 2.87 dB 10 % 1.60 dB 1 % 2.28 dB .1 % 2.60 dB .01 % 2.76 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.40 dBm Peak 27.36 dBm Crest 2.96 dB 10 % 1.68 dB 1 % 2.44 dB .1 % 2.76 dB .01 % 2.92 dB
Date: 29.AUG.2016 12:38:18	Date: 26.AUG.2016 11:28:34

WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel

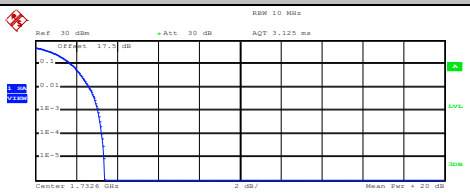


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	23.79 dBm
Peak	27.08 dBm
Crest	3.29 dB
10 %	1.72 dB
1 %	2.56 dB
.1 %	3.00 dB
.01 %	3.16 dB

Date: 26.AUG.2016 11:41:25

Middle Channel

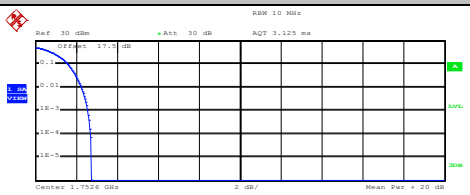


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	23.71 dBm
Peak	27.08 dBm
Crest	3.37 dB
10 %	1.76 dB
1 %	2.64 dB
.1 %	3.08 dB
.01 %	3.24 dB

Date: 26.AUG.2016 11:43:02

Highest Channel



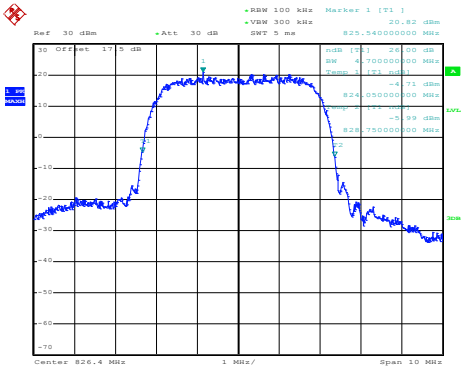
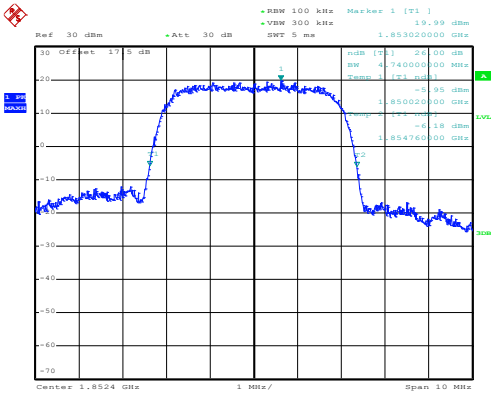
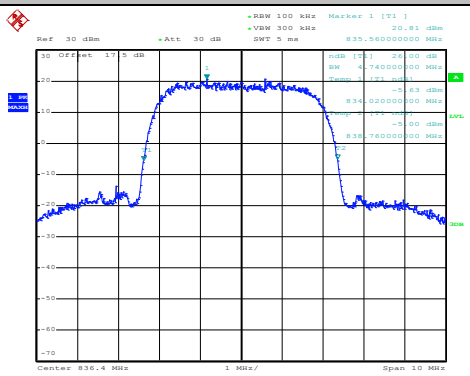
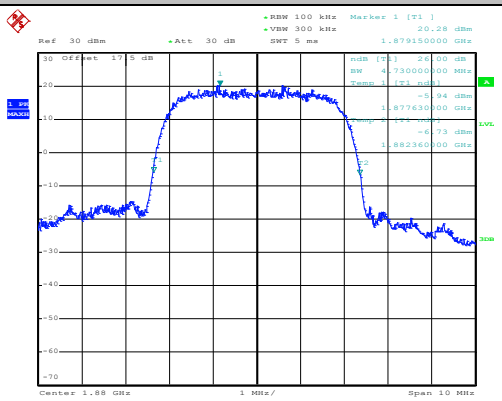
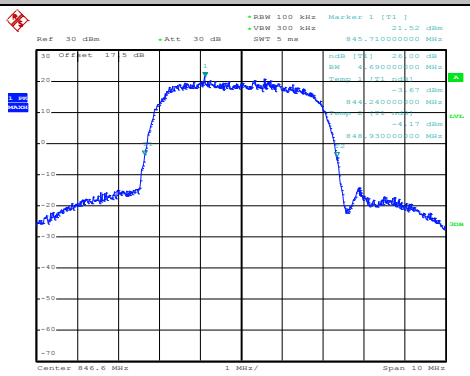
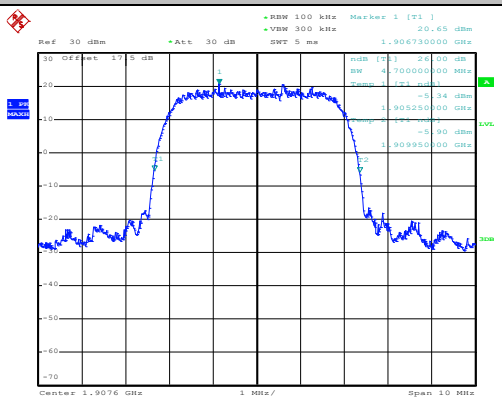
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	23.77 dBm
Peak	26.51 dBm
Crest	2.75 dB
10 %	1.60 dB
1 %	2.28 dB
.1 %	2.56 dB
.01 %	2.72 dB

Date: 26.AUG.2016 11:43:14

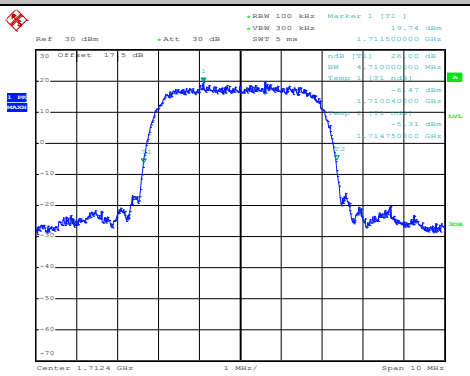
26dB Bandwidth

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.70	4.74	4.71
Middle CH	4.74	4.73	4.70
Highest CH	4.69	4.70	4.73

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Date: 29.AUG.2016 12:28:58	Date: 26.AUG.2016 11:16:35
Middle Channel	**Middle Channel**
	
Date: 29.AUG.2016 12:29:28	Date: 26.AUG.2016 11:17:03
Highest Channel	**Highest Channel**
	
Date: 29.AUG.2016 12:29:56	Date: 26.AUG.2016 11:17:31

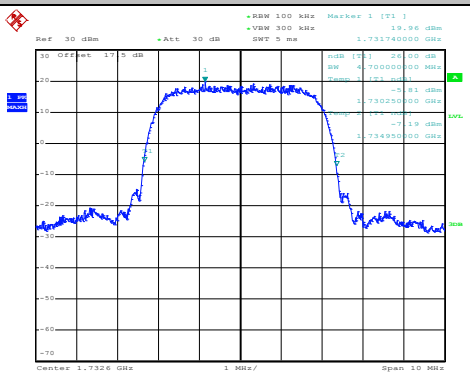
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



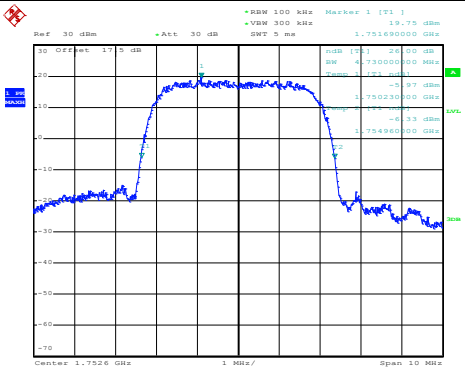
Date: 26.AUG.2016 11:29:25

Middle Channel



Date: 26.AUG.2016 11:29:53

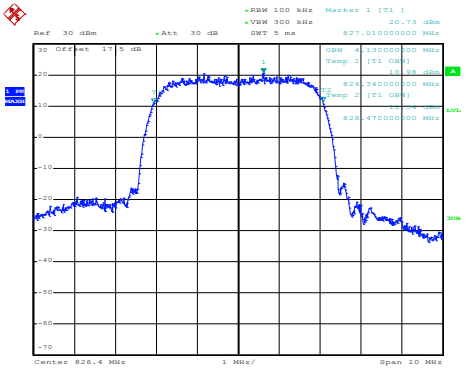
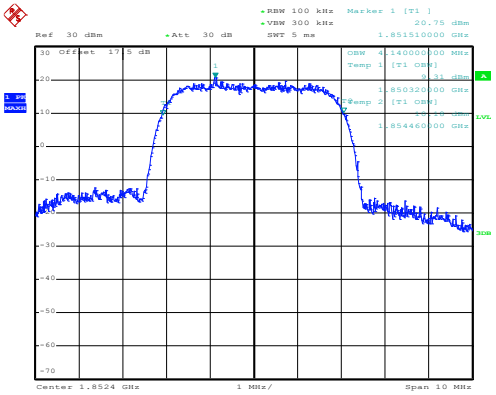
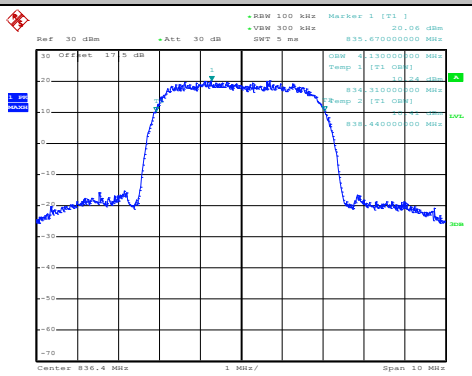
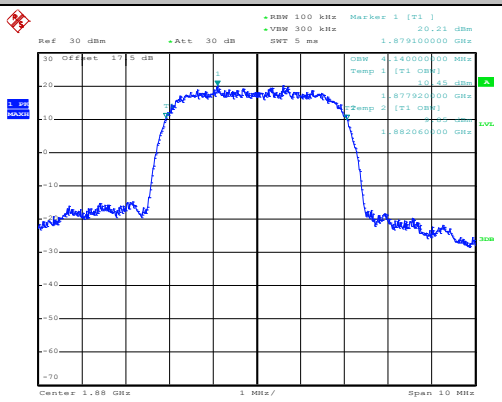
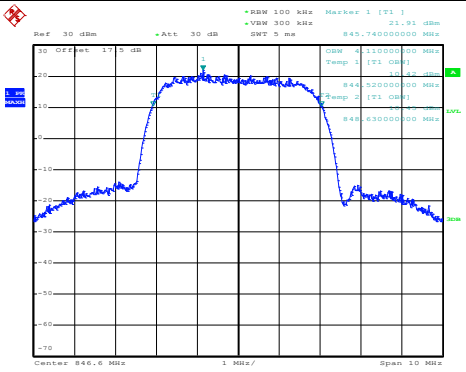
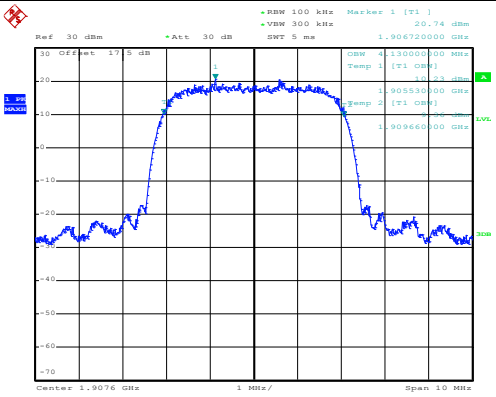
Highest Channel



Date: 26.AUG.2016 11:30:21

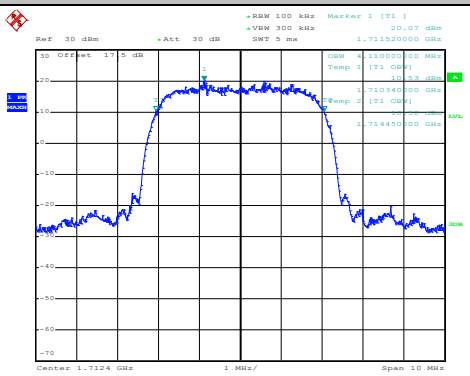
Occupied Bandwidth

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.13	4.14	4.11
Middle CH	4.13	4.14	4.12
Highest CH	4.11	4.13	4.14

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
	
Date: 29.AUG.2016 12:30:57	Date: 26.AUG.2016 11:18:03
Middle Channel	**Middle Channel**
	
Date: 29.AUG.2016 12:31:26	Date: 26.AUG.2016 11:18:31
Highest Channel	**Highest Channel**
	
Date: 29.AUG.2016 12:32:03	Date: 26.AUG.2016 11:18:59

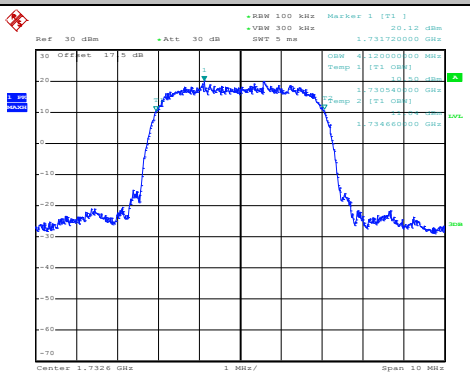
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



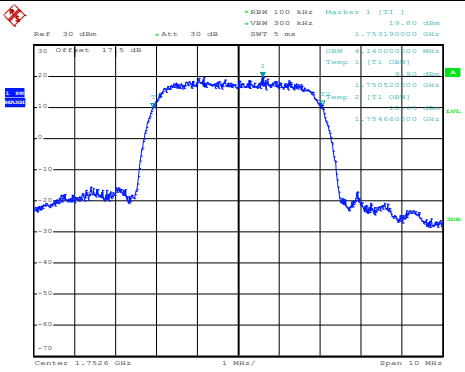
Date: 26.AUG.2016 11:30:53

Middle Channel



Date: 26.AUG.2016 11:31:21

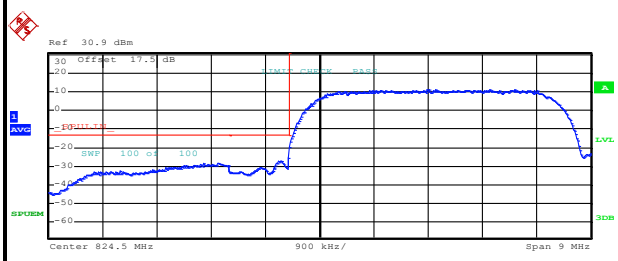
Highest Channel



Date: 26.AUG.2016 11:31:49

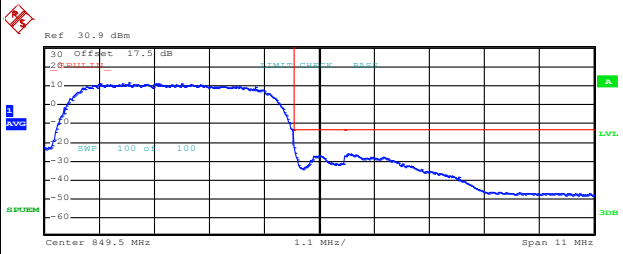
Conducted Band Edge

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



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.580000 M	-28.21	-15.21
823.000 M	824.000 M	50.00 k	823.996000 M	-26.33	-13.33
824.000 M	829.000 M	100.00 k	826.420000 M	11.54	-23.46

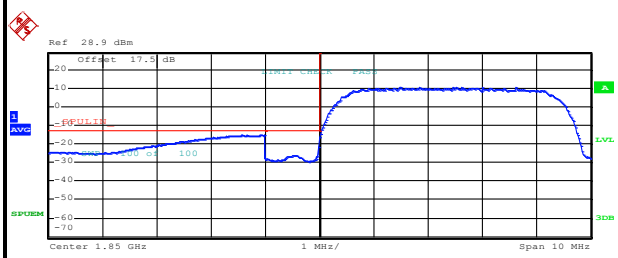
Date: 26.AUG.2016 11:49:08



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
844.000 M	849.000 M	100.00 k	845.690000 M	11.71	-23.29
849.000 M	850.000 M	50.00 k	849.008000 M	-23.34	-10.34
850.000 M	855.000 M	100.00 k	850.065000 M	-25.93	-12.93

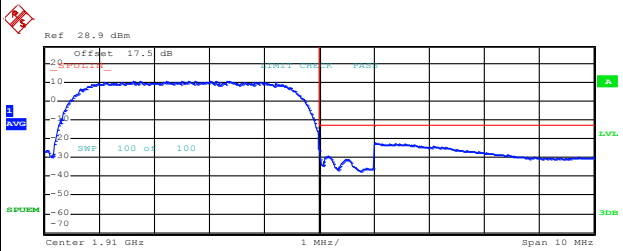
Date: 26.AUG.2016 11:51:50

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



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848916 G	-15.26	-2.26
1.849 G	1.850 G	50.00 k	1.849996 G	-22.29	-9.29
1.850 G	1.855 G	100.00 k	1.851505 G	10.50	-24.50

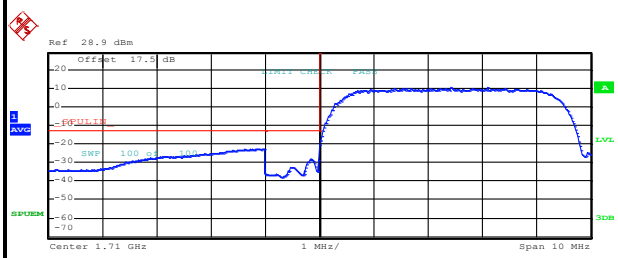
Date: 26.AUG.2016 11:21:46



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.907505 G	10.74	-24.26
1.910 G	1.911 G	50.00 k	1.910008 G	-26.96	-13.96
1.911 G	1.915 G	1.00 M	1.911016 G	-22.28	-9.28

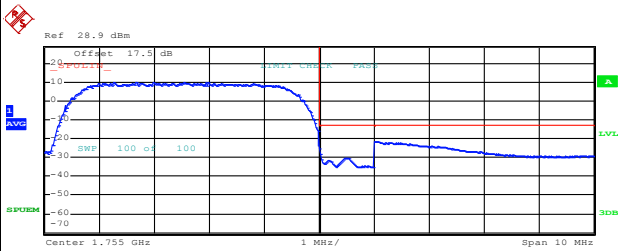
Date: 26.AUG.2016 11:24:28

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



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.705 G	1.709 G	1.00 M	1.708960 G	-22.58	-9.58
1.709 G	1.710 G	50.00 k	1.709840 G	-28.10	-15.10
1.710 G	1.715 G	100.00 k	1.713105 G	10.32	-24.68

Date: 26.AUG.2016 11:34:35



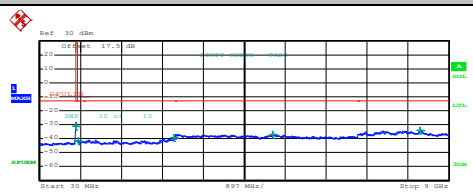
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.750 G	1.755 G	100.00 k	1.751675 G	10.09	-24.91
1.755 G	1.756 G	50.00 k	1.755004 G	-25.39	-12.39
1.756 G	1.760 G	1.00 M	1.756044 G	-21.75	-8.75

Date: 26.AUG.2016 11:37:17

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

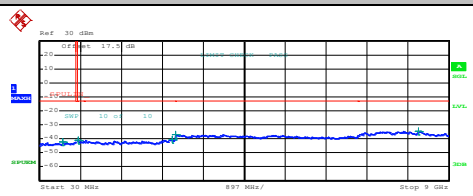
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.802500 M	-30.88	-17.88
855.000 M	1.000 G	1.00 M	871.566251 M	-41.58	-28.58
1.000 G	3.000 G	1.00 M	2.975000 G	-39.31	-26.31
3.000 G	7.000 G	1.00 M	5.138000 G	-36.90	-23.90
7.000 G	9.000 G	1.00 M	8.369000 G	-33.95	-20.95

Date: 29.AUG.2016 12:34:25

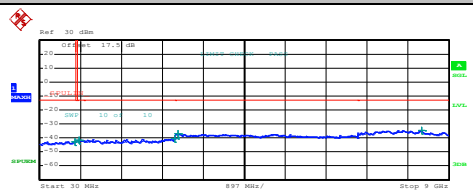
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	532.835000 M	-42.15	-29.15
855.000 M	1.000 G	1.00 M	880.121252 M	-41.21	-28.21
1.000 G	3.000 G	1.00 M	2.938000 G	-40.19	-27.19
3.000 G	7.000 G	1.00 M	3.000000 G	-37.00	-24.00
7.000 G	9.000 G	1.00 M	8.343500 G	-34.62	-21.62

Date: 29.AUG.2016 12:35:12

Highest Channel

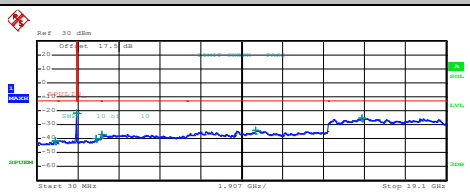


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	805.780000 M	-42.55	-29.55
855.000 M	1.000 G	1.00 M	890.815002 M	-41.36	-28.36
1.000 G	3.000 G	1.00 M	2.983000 G	-40.19	-27.19
3.000 G	7.000 G	1.00 M	3.060000 G	-37.18	-24.18
7.000 G	9.000 G	1.00 M	8.403000 G	-34.62	-21.62

Date: 29.AUG.2016 12:36:18

WCDMA Band II (RMC 12.2Kbps)

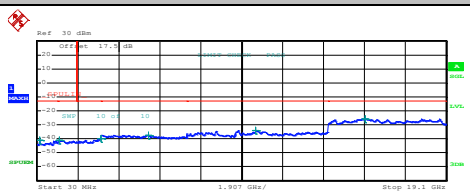
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	865.412500 M	-41.70	-28.70
1.000 G	1.845 G	1.00 M	1.844789 G	-21.74	-8.74
1.915 G	3.000 G	1.00 M	2.768081 G	-39.75	-26.75
3.000 G	7.000 G	1.00 M	3.027000 G	-37.08	-24.08
7.000 G	13.600 G	1.00 M	10.213375 G	-33.87	-20.87
13.600 G	19.100 G	1.00 M	15.184688 G	-25.39	-12.39

Date: 26.AUG.2016 11:25:18

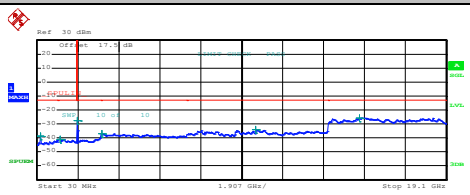
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	141.065000 M	-41.20	-28.20
1.000 G	1.845 G	1.00 M	1.057462 G	-41.17	-28.17
1.915 G	3.000 G	1.00 M	2.994304 G	-39.90	-26.90
3.000 G	7.000 G	1.00 M	5.232000 G	-37.33	-24.33
7.000 G	13.600 G	1.00 M	10.227400 G	-34.27	-21.27
13.600 G	19.100 G	1.00 M	15.316000 G	-25.65	-12.65

Date: 26.AUG.2016 11:26:04

Highest Channel

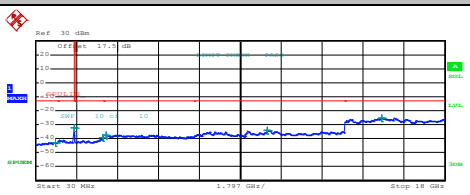


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	170.165000 M	-38.99	-25.99
1.000 G	1.845 G	1.00 M	1.082388 G	-41.05	-28.05
1.915 G	3.000 G	1.00 M	1.915542 G	-27.40	-14.40
3.000 G	7.000 G	1.00 M	3.039000 G	-37.13	-24.13
7.000 G	13.600 G	1.00 M	10.224100 G	-34.02	-21.02
13.600 G	19.100 G	1.00 M	15.072625 G	-25.70	-12.70

Date: 26.AUG.2016 11:26:50

WCDMA Band IV (RMC 12.2Kbps)

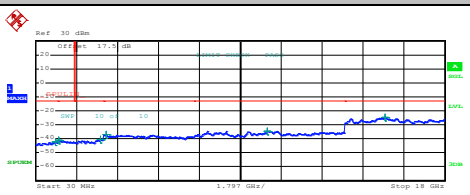
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	900.332500 M	-42.69	-29.69
1.000 G	1.705 G	1.00 M	1.704648 G	-32.39	-19.39
1.760 G	3.000 G	1.00 M	2.980160 G	-39.34	-26.34
3.000 G	7.000 G	1.00 M	3.113000 G	-37.26	-24.26
7.000 G	13.600 G	1.00 M	10.210900 G	-34.29	-21.29
13.600 G	18.000 G	1.00 M	15.243950 G	-25.42	-12.42

Date: 26.AUG.2016 11:38:25

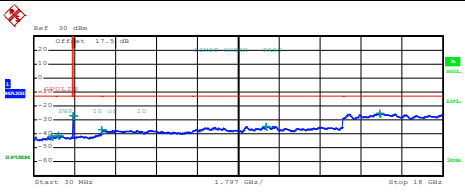
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	904.455000 M	-41.94	-28.94
1.000 G	1.705 G	1.00 M	1.028553 G	-40.88	-27.88
1.760 G	3.000 G	1.00 M	2.869800 G	-40.29	-27.29
3.000 G	7.000 G	1.00 M	3.106000 G	-37.21	-24.21
7.000 G	13.600 G	1.00 M	10.216675 G	-34.46	-21.46
13.600 G	18.000 G	1.00 M	15.362200 G	-24.78	-11.78

Date: 26.AUG.2016 11:39:11

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	832.432500 M	-41.60	-28.60
1.000 G	1.705 G	1.00 M	1.103282 G	-41.29	-28.29
1.760 G	3.000 G	1.00 M	1.760930 G	-27.09	-14.09
3.000 G	7.000 G	1.00 M	3.005000 G	-36.85	-23.85
7.000 G	13.600 G	1.00 M	10.224925 G	-34.47	-21.47
13.600 G	18.000 G	1.00 M	15.245600 G	-25.07	-12.07

Date: 26.AUG.2016 11:39:56

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	0.0012	PASS
40	Normal Voltage	0.0143	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0084	
-10	Normal Voltage	0.0024	
-20	Normal Voltage	0.0120	
-30	Normal Voltage	0.0143	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0000	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0000	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0090	
-10	Normal Voltage	0.0090	
-20	Normal Voltage	0.0085	
-30	Normal Voltage	0.0090	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0011	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage = 3.9V. ；Battery End Point (BEP) = 3.7 V.；Maximum Voltage =4.2 V
2. The frequency fundamental emissions stay within the authorized frequency block.

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0000	PASS
40	Normal Voltage	0.0000	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0173	
-20	Normal Voltage	0.0190	
-30	Normal Voltage	0.0196	
20	Maximum Voltage	0.0087	
20	Normal Voltage	0.0087	
20	Battery End Point	0.0087	

Note:

1. Normal Voltage = 3.9V. ；Battery End Point (BEP) = 3.7 V.；Maximum Voltage =4.2 V

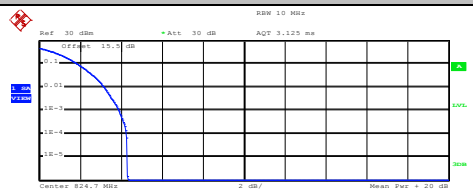
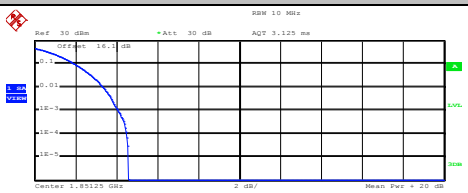
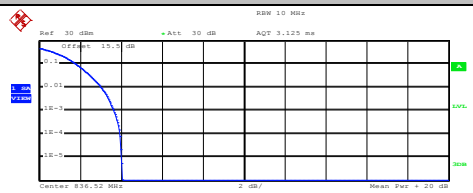
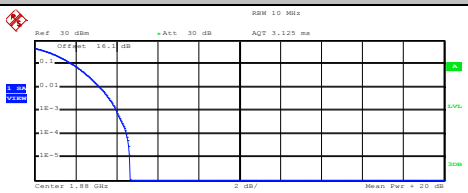
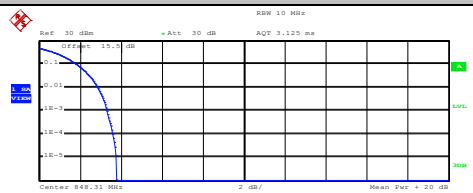
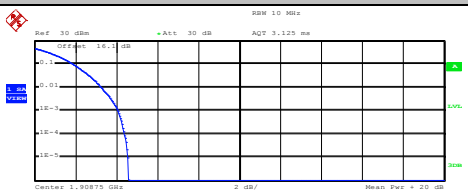
2. The frequency fundamental emissions stay within the authorized frequency block.

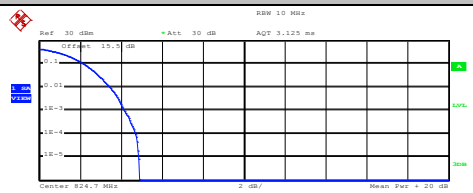
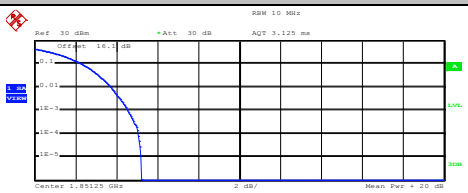
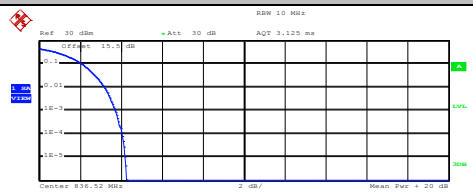
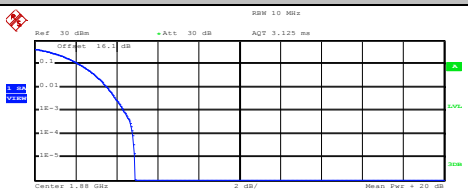
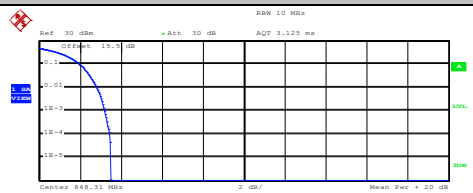
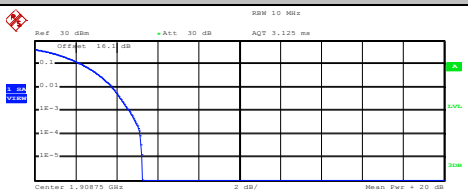
A3. CDMA

Peak-to-Average Ratio

Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xRTT	1xRTT	Result
Lowest CH	3.88	4.08	PASS
Middle CH	3.64	4.00	
Highest CH	3.32	4.08	

Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0	Result
Lowest CH	4.16	4.56	PASS
Middle CH	3.72	4.36	
Highest CH	3.20	4.64	

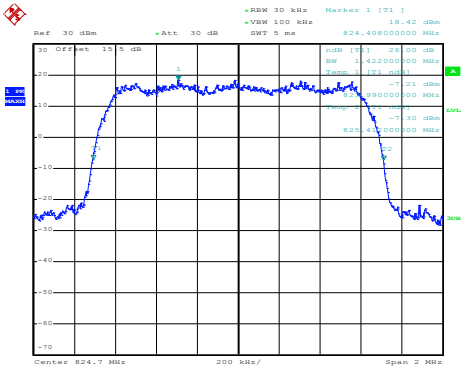
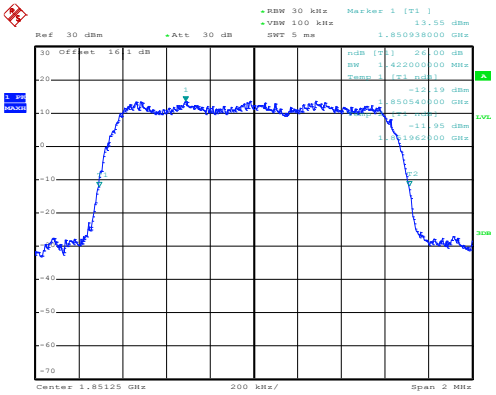
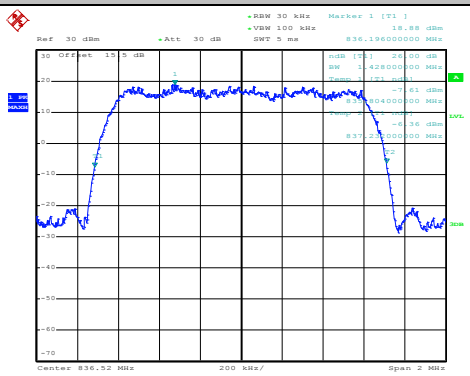
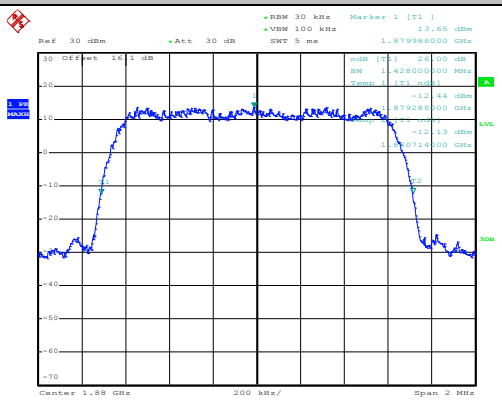
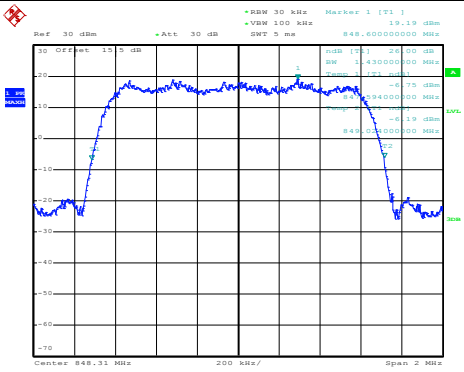
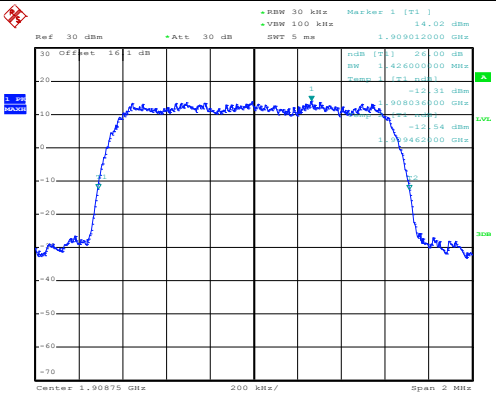
CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 22.55 dBm Peak 26.87 dBm Crest 4.31 dB 10 % 1.88 dB 1 % 3.16 dB .1 % 3.88 dB .01 % 4.28 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 18.47 dBm Peak 23.06 dBm Crest 4.59 dB 10 % 1.96 dB 1 % 3.36 dB .1 % 4.08 dB .01 % 4.48 dB
Date: 20.SEP.2016 17:49:46	Date: 12.SEP.2016 07:43:14
Middle Channel	**Middle Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.15 dBm Peak 27.22 dBm Crest 4.07 dB 10 % 1.80 dB 1 % 3.04 dB .1 % 3.64 dB .01 % 3.96 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 18.61 dBm Peak 23.27 dBm Crest 4.66 dB 10 % 1.84 dB 1 % 3.20 dB .1 % 4.00 dB .01 % 4.48 dB
Date: 20.SEP.2016 17:50:05	Date: 12.SEP.2016 07:43:47
Highest Channel	**Highest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.58 dBm Peak 27.36 dBm Crest 3.78 dB 10 % 1.84 dB 1 % 2.88 dB .1 % 3.32 dB .01 % 3.60 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 18.82 dBm Peak 23.41 dBm Crest 4.59 dB 10 % 1.92 dB 1 % 3.24 dB .1 % 4.08 dB .01 % 4.40 dB
Date: 20.SEP.2016 17:50:32	Date: 12.SEP.2016 07:44:13

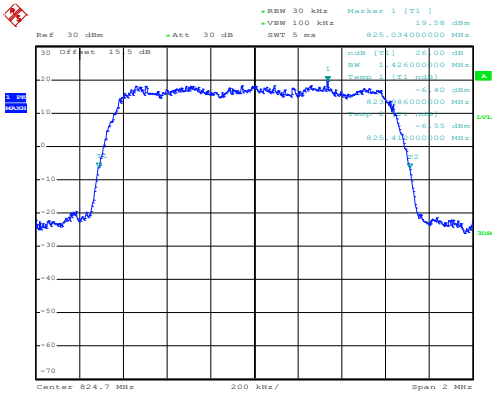
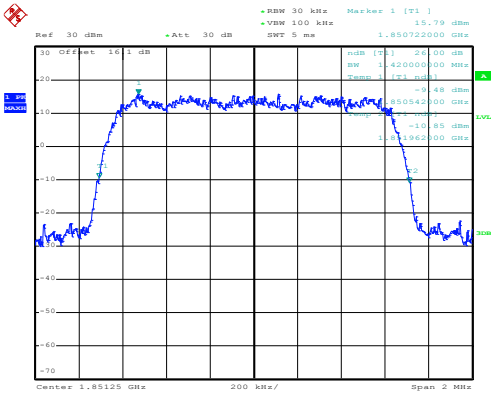
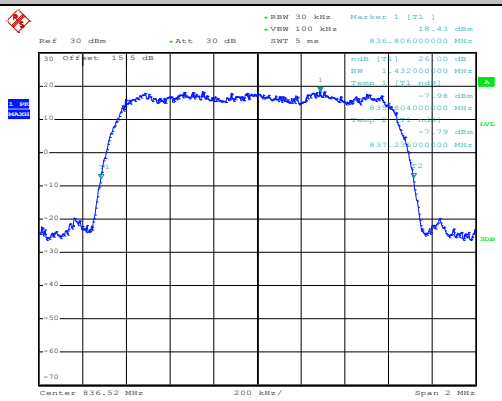
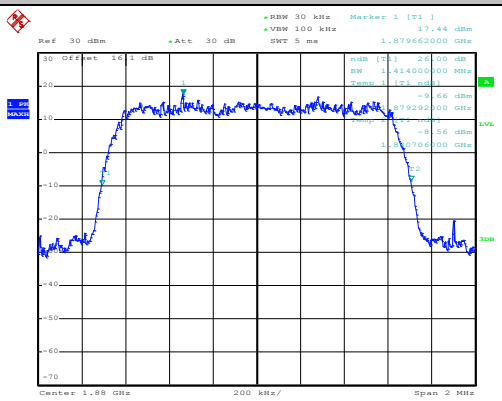
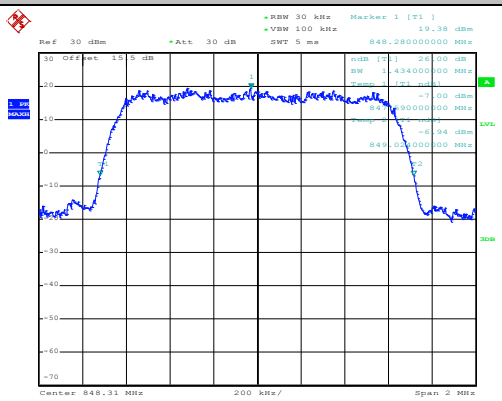
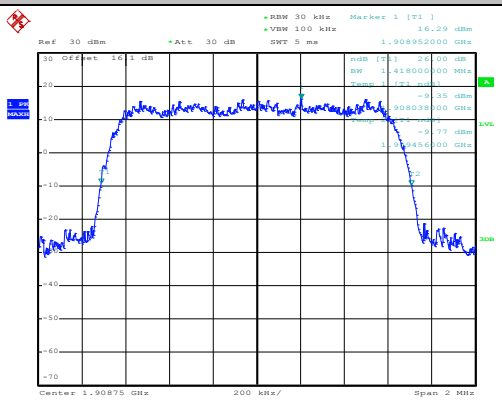
CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.87 dBm Peak 28.77 dBm Crest 4.90 dB 10 % 2.20 dB 1 % 3.44 dB .1 % 4.16 dB .01 % 4.72 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 19.46 dBm Peak 24.68 dBm Crest 5.22 dB 10 % 2.32 dB 1 % 3.72 dB .1 % 4.56 dB .01 % 5.08 dB
Date: 8.SEP.2016 00:11:59	Date: 21.SEP.2016 15:24:31
Middle Channel	**Middle Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 23.66 dBm Peak 27.92 dBm Crest 4.26 dB 10 % 2.12 dB 1 % 3.20 dB .1 % 3.72 dB .01 % 4.08 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 17.52 dBm Peak 22.42 dBm Crest 4.90 dB 10 % 2.20 dB 1 % 3.52 dB .1 % 4.36 dB .01 % 4.80 dB
Date: 8.SEP.2016 00:12:26	Date: 21.SEP.2016 15:24:56
Highest Channel	**Highest Channel**
	
Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 24.00 dBm Peak 27.50 dBm Crest 3.50 dB 10 % 1.96 dB 1 % 2.80 dB .1 % 3.20 dB .01 % 3.44 dB	Complementary Cumulative Distribution Function (100000 samples) Trace 1 Mean 18.37 dBm Peak 23.62 dBm Crest 5.25 dB 10 % 2.32 dB 1 % 3.80 dB .1 % 4.64 dB .01 % 5.16 dB
Date: 8.SEP.2016 00:21:31	Date: 21.SEP.2016 15:25:35

26dB Bandwidth

Mode	CDMA BC0	CDMA BC1
Mod.	1xRTT	1xRTT
Lowest CH	1.42	1.42
Middle CH	1.43	1.43
Highest CH	1.43	1.43

Mode	CDMA BC0	CDMA BC1
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0
Lowest CH	1.43	1.42
Middle CH	1.43	1.41
Highest CH	1.43	1.42

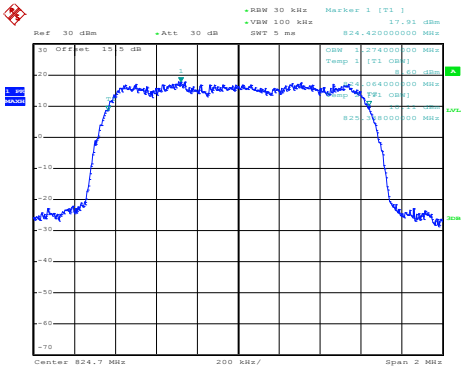
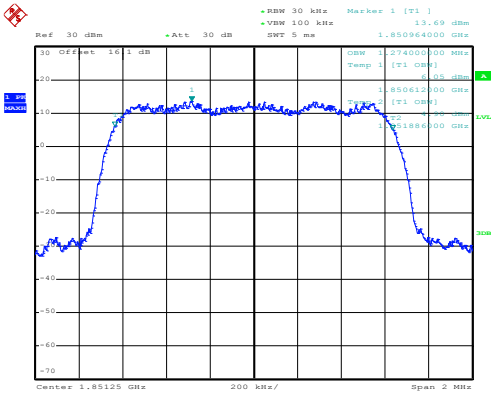
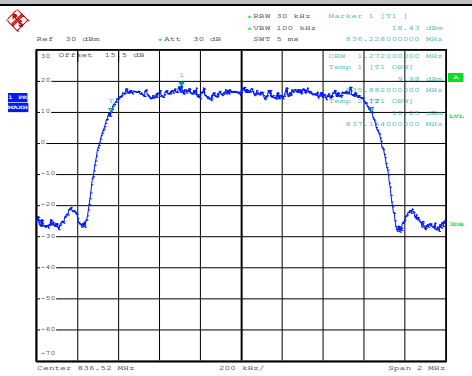
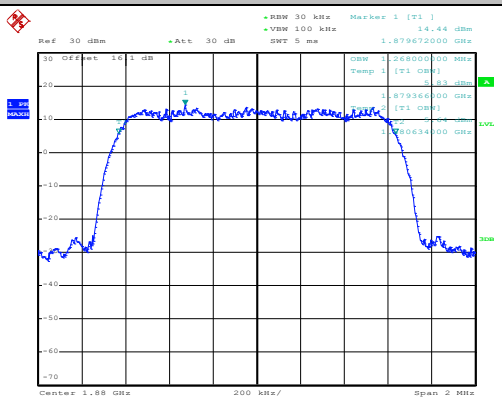
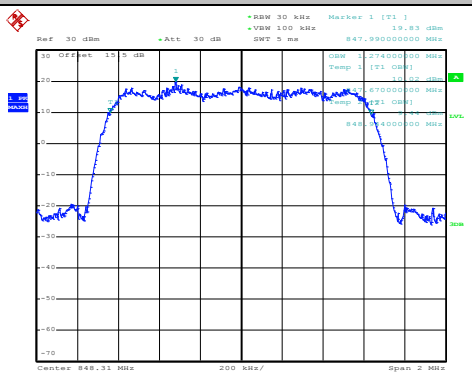
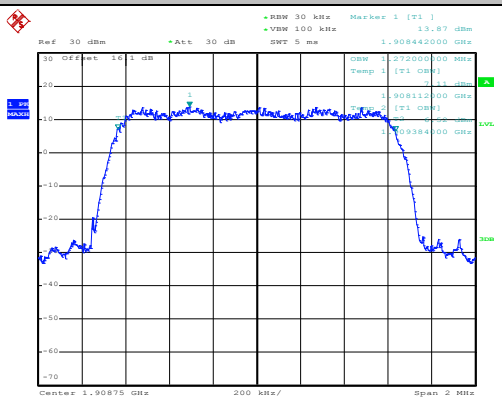
CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
	
Date: 20.SEP.2016 17:36:04	Date: 12.SEP.2016 07:31:04
Middle Channel	**Middle Channel**
	
Date: 20.SEP.2016 17:36:32	Date: 12.SEP.2016 07:31:32
Highest Channel	**Highest Channel**
	
Date: 20.SEP.2016 17:37:00	Date: 12.SEP.2016 07:32:00

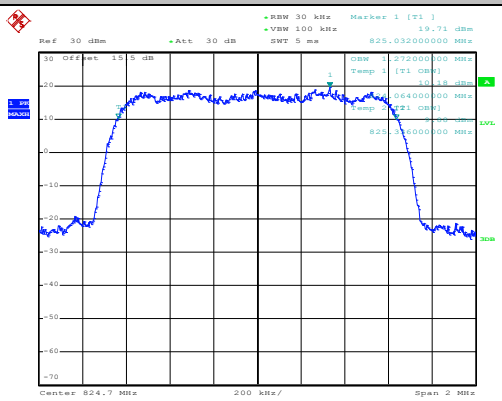
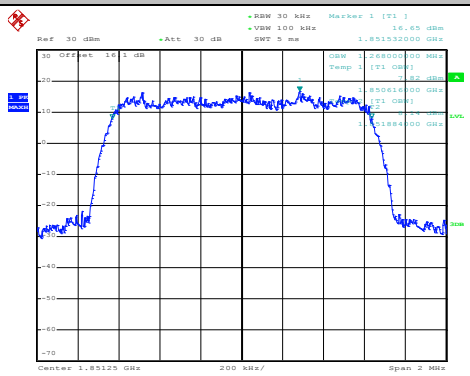
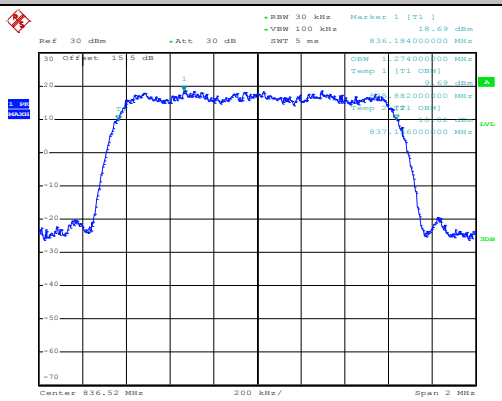
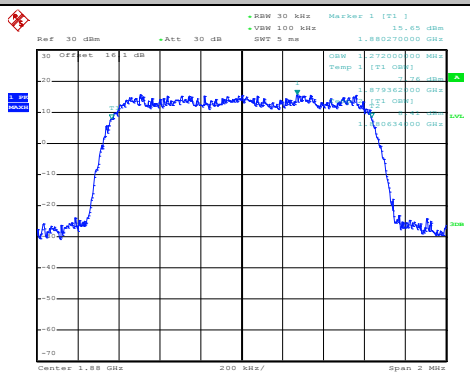
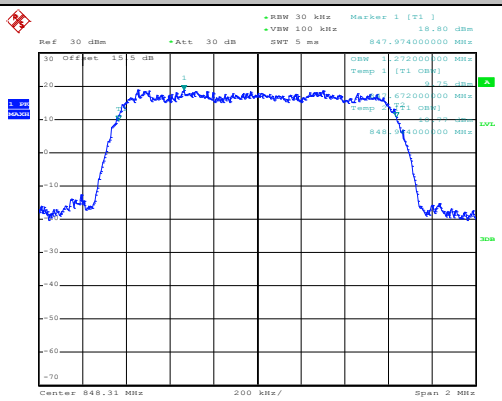
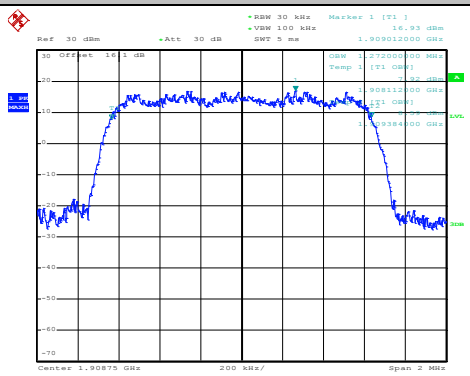
CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
	
Date: 7.SEP.2016 23:58:01	Date: 21.SEP.2016 15:12:02
Middle Channel	**Middle Channel**
	
Date: 7.SEP.2016 23:58:38	Date: 21.SEP.2016 15:12:58
Highest Channel	**Highest Channel**
	
Date: 7.SEP.2016 23:59:45	Date: 21.SEP.2016 15:13:40

Occupied Bandwidth

Mode	CDMA BC0	CDMA BC1
Mod.	1xRTT	1xRTT
Lowest CH	1.27	1.27
Middle CH	1.27	1.27
Highest CH	1.27	1.27

Mode	CDMA BC0	CDMA BC1
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0
Lowest CH	1.27	1.27
Middle CH	1.27	1.27
Highest CH	1.27	1.27

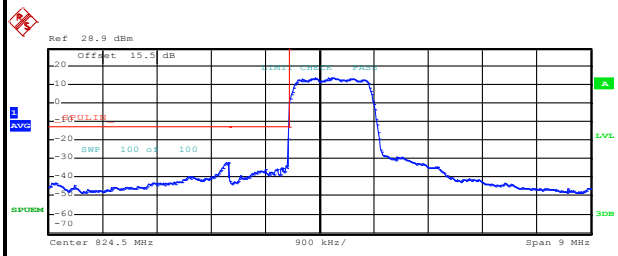
CDMA BC0 (1xRTT)	CDMA BC1 (1xRTT)
Lowest Channel	**Lowest Channel**
	
Date: 20.SEP.2016 17:37:32	Date: 12.SEP.2016 07:32:32
Middle Channel	**Middle Channel**
	
Date: 20.SEP.2016 17:38:00	Date: 12.SEP.2016 07:32:59
Highest Channel	**Highest Channel**
	
Date: 20.SEP.2016 17:38:28	Date: 12.SEP.2016 07:33:27

CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
	
Date: 8.SEP.2016 00:00:35	Date: 21.SEP.2016 15:02:16
Middle Channel	**Middle Channel**
	
Date: 8.SEP.2016 00:01:11	Date: 21.SEP.2016 15:02:52
Highest Channel	**Highest Channel**
	
Date: 8.SEP.2016 00:01:45	Date: 21.SEP.2016 15:03:27

Conducted Band Edge

CDMA BC0 (1xRTT)

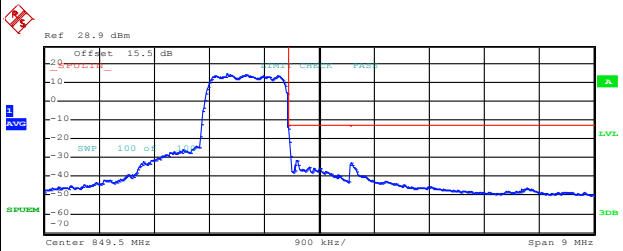
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.994000 M	-32.26	-19.26
823.000 M	824.000 M	14.00 k	823.996000 M	-21.85	-8.85
824.000 M	829.000 M	100.00 k	824.420000 M	13.60	-21.40

Date: 20.SEP.2016 17:41:15

Highest Band Edge

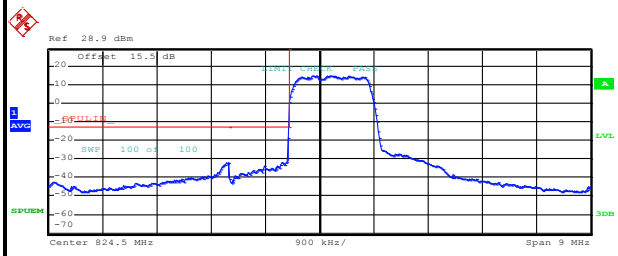


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
845.000 M	849.000 M	100.00 k	847.976000 M	14.30	-20.70
849.000 M	850.000 M	14.00 k	849.004000 M	-15.34	-2.34
850.000 M	854.000 M	100.00 k	850.016000 M	-32.81	-19.81

Date: 20.SEP.2016 17:43:57

CDMA BC0 (1xEV-DO Rev. 0)

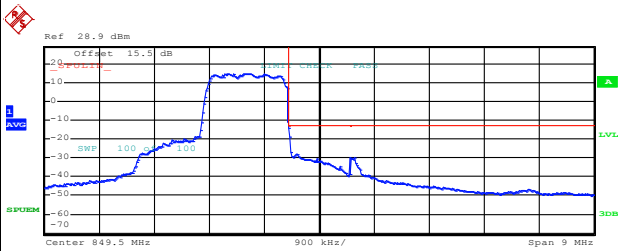
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.943000 M	-32.05	-19.05
823.000 M	824.000 M	14.00 k	823.996000 M	-21.06	-8.06
824.000 M	829.000 M	100.00 k	824.435000 M	14.84	-20.16

Date: 8.SEP.2016 00:04:39

Highest Band Edge

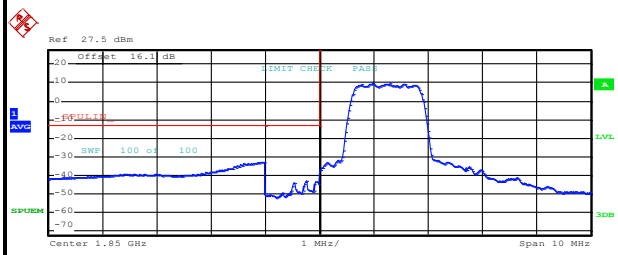


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
845.000 M	849.000 M	100.00 k	848.016000 M	14.71	-20.29
849.000 M	850.000 M	14.00 k	849.004000 M	-14.69	-1.69
850.000 M	854.000 M	100.00 k	850.004000 M	-30.00	-17.00

Date: 8.SEP.2016 00:07:27

CDMA BC1 (1xRTT)

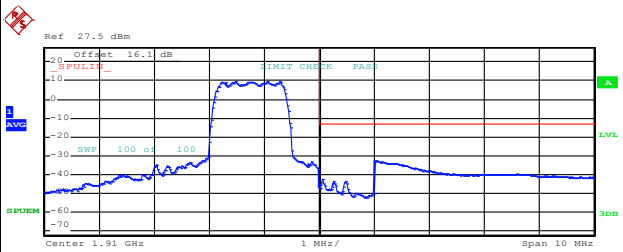
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848980 G	-32.89	-19.89
1.849 G	1.850 G	14.00 k	1.849752 G	-42.88	-29.88
1.850 G	1.855 G	100.00 k	1.850975 G	9.58	-25.42

Date: 12.SEP.2016 07:36:20

Highest Band Edge

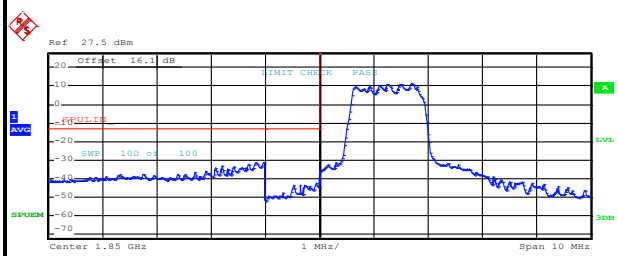


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.909065 G	9.60	-25.40
1.910 G	1.911 G	14.00 k	1.910048 G	-42.27	-29.27
1.911 G	1.915 G	1.00 M	1.911040 G	-32.72	-19.72

Date: 12.SEP.2016 07:39:02

CDMA BC1 (1xEV-DO Rev. 0)

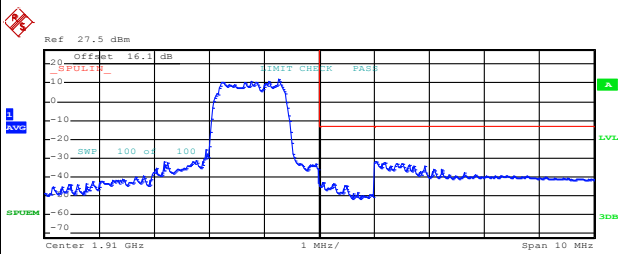
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848964 G	-31.18	-18.18
1.849 G	1.850 G	14.00 k	1.849944 G	-42.31	-29.31
1.850 G	1.855 G	100.00 k	1.851705 G	11.37	-23.63

Date: 21.SEP.2016 15:17:48

Highest Band Edge



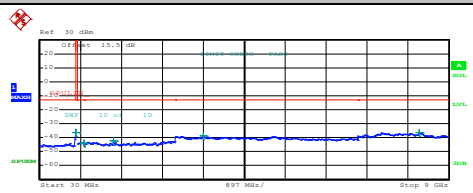
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.909265 G	12.15	-22.85
1.910 G	1.911 G	14.00 k	1.910080 G	-42.73	-29.73
1.911 G	1.915 G	1.00 M	1.911020 G	-31.91	-18.91

Date: 21.SEP.2016 15:21:02

Conducted Spurious Emission

CDMA BC0 (1xRTT)

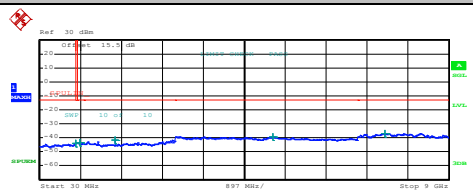
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.822500 M	-36.42	-23.42
855.000 M	1.000 G	1.00 M	994.200010 M	-43.84	-30.84
1.000 G	3.000 G	1.00 M	1.648500 G	-42.23	-29.23
3.000 G	7.000 G	1.00 M	3.611000 G	-38.95	-25.95
7.000 G	9.000 G	1.00 M	8.350500 G	-36.46	-23.46

Date: 20.SEP.2016 17:44:53

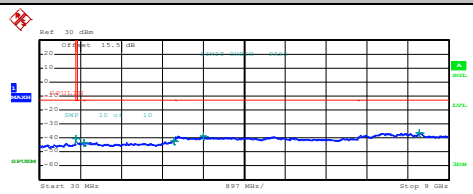
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	813.482500 M	-43.80	-30.80
855.000 M	1.000 G	1.00 M	904.517503 M	-43.31	-30.31
1.000 G	3.000 G	1.00 M	1.673500 G	-41.71	-28.71
3.000 G	7.000 G	1.00 M	5.149000 G	-39.28	-26.28
7.000 G	9.000 G	1.00 M	7.600500 G	-36.71	-23.71

Date: 20.SEP.2016 17:45:40

Highest Channel

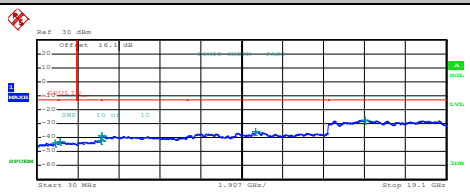


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	817.037500 M	-40.36	-27.36
855.000 M	1.000 G	1.00 M	998.296260 M	-43.33	-30.33
1.000 G	3.000 G	1.00 M	2.972000 G	-41.97	-28.97
3.000 G	7.000 G	1.00 M	3.611000 G	-38.73	-25.73
7.000 G	9.000 G	1.00 M	8.360500 G	-36.50	-23.50

Date: 20.SEP.2016 17:46:26

CDMA BC1 (1xRTT)

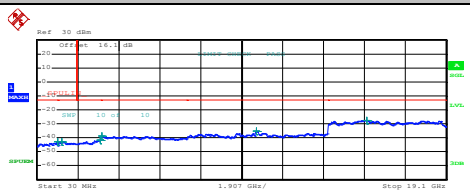
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	873.657500 M	-43.77	-30.77
1.000 G	1.845 G	1.00 M	1.096753 G	-42.83	-29.83
1.915 G	3.000 G	1.00 M	2.993490 G	-41.98	-28.98
3.000 G	7.000 G	1.00 M	3.027000 G	-38.88	-25.88
7.000 G	13.600 G	1.00 M	10.212550 G	-36.06	-23.06
13.600 G	19.100 G	1.00 M	15.308438 G	-27.41	-14.41

Date: 12.SEP.2016 07:39:56

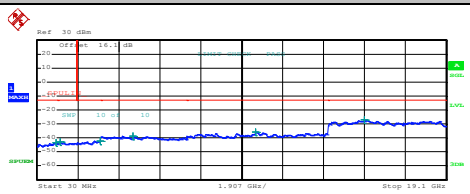
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	985.207500 M	-43.09	-30.09
1.000 G	1.845 G	1.00 M	1.191393 G	-42.54	-29.54
1.915 G	3.000 G	1.00 M	2.980199 G	-41.70	-28.70
3.000 G	7.000 G	1.00 M	3.040000 G	-38.85	-25.85
7.000 G	13.600 G	1.00 M	10.250500 G	-35.28	-22.28
13.600 G	19.100 G	1.00 M	15.397125 G	-27.58	-14.58

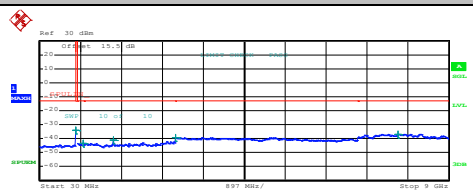
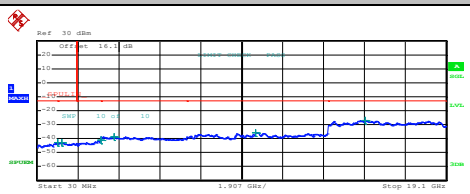
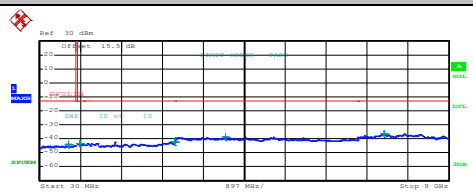
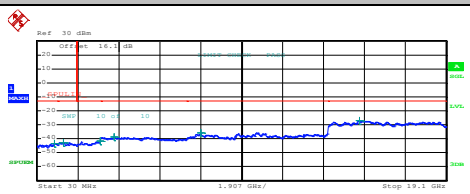
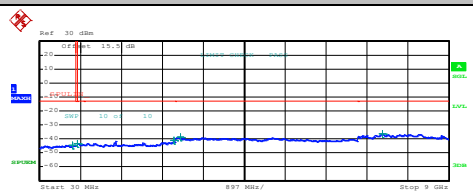
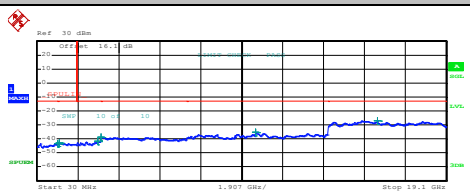
Date: 12.SEP.2016 07:40:41

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	899.847500 M	-43.19	-30.19
1.000 G	1.845 G	1.00 M	1.080275 G	-42.74	-29.74
1.915 G	3.000 G	1.00 M	2.977215 G	-41.98	-28.98
3.000 G	7.000 G	1.00 M	4.505000 G	-38.61	-25.61
7.000 G	13.600 G	1.00 M	10.210075 G	-35.94	-22.94
13.600 G	19.100 G	1.00 M	15.301562 G	-27.18	-14.18

Date: 12.SEP.2016 07:41:27

CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
	
Date: 8.SEP.2016 00:08:31	Date: 21.SEP.2016 15:22:00
Middle Channel	**Middle Channel**
	
Date: 8.SEP.2016 00:09:24	Date: 21.SEP.2016 15:22:59
Highest Channel	**Highest Channel**
	
Date: 8.SEP.2016 00:10:15	Date: 21.SEP.2016 15:23:52

Frequency Stability

Test Conditions	Middle Channel	CDMA BC0 (1xRTT)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0036	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0072	
-20	Normal Voltage	0.0036	
-30	Normal Voltage	0.0036	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0012	

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	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0096	
-20	Normal Voltage	0.0096	
-30	Normal Voltage	0.0096	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0000	

Test Conditions	Middle Channel	CDMA BC1 (1xRTT)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0005	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0011	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0005	
20	Battery End Point	0.0011	

Test Conditions	Middle Channel	CDMA BC1 (1xEV-DO Rev. 0)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0000	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0117	
0	Normal Voltage	0.0144	
-10	Normal Voltage	0.0128	
-20	Normal Voltage	0.0133	
-30	Normal Voltage	0.0144	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0000	

Note:

1. Normal Voltage = 3.9V. ；Battery End Point (BEP) = 3.7 V.；Maximum Voltage =4.2 V
2. The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

ERP/EIRP

Channel	Mode	Horizontal		Vertical	
		ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	GSM850 GSM	20.43	0.1104	27.21	0.5260
Middle		21.19	0.1315	27.45	0.5559
Highest		22.97	0.1982	28.58	0.7211
Lowest	GSM850 EDGE class 10	14.76	0.0299	21.79	0.1510
Middle		14.92	0.0310	21.55	0.1429
Highest		15.80	0.0380	21.97	0.1574
Lowest	WCDMA Band V RMC 12.2Kbps	13.81	0.0240	20.41	0.1099
Middle		13.83	0.0242	20.09	0.1021
Highest		14.00	0.0251	19.75	0.0944
Lowest	CDMA BC0 1xRTT	13.88	0.0244	20.45	0.1109
Middle		13.90	0.0245	20.67	0.1167
Highest		13.48	0.0223	20.41	0.1099
Lowest	CDMA BC0 1xEV-DO	13.84	0.0242	20.58	0.1143
Middle		14.27	0.0267	20.61	0.1151
Highest		14.35	0.0272	19.89	0.0975
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900 GPRS class 8	31.09	1.2853	26.86	0.4853
Middle		31.40	1.3804	26.94	0.4943
Highest		30.84	1.2134	27.04	0.5058
Lowest	GSM1900 EDGE class 8	26.63	0.4603	22.99	0.1991
Middle		27.03	0.5047	23.01	0.2000
Highest		26.56	0.4529	23.04	0.2014
Lowest	WCDMA Band II RMC 12.2Kbps	24.58	0.2871	20.57	0.1140
Middle		24.99	0.3155	20.48	0.1117
Highest		24.64	0.2911	20.53	0.1130
Lowest	CDMA BC1 1xRTT	25.29	0.3381	21.12	0.1294
Middle		26.25	0.4217	21.40	0.1380
Highest		25.46	0.3516	21.48	0.1406
Lowest	CDMA BC1 1xEV-DO	25.22	0.3327	21.17	0.1309
Middle		25.33	0.3412	20.84	0.1213
Highest		24.89	0.3083	20.79	0.1199
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Horizontal		Vertical	
		EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV RMC 12.2Kbps	25.34	0.3420	20.81	0.1205
Middle		25.64	0.3664	21.07	0.1279
Highest		25.85	0.3846	21.22	0.1324
Limit	EIRP < 1W	Result		PASS	

Radiated Spurious Emission

GSM850 (GPRS class 8)									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-47.00	-13	-34.00	-56.72	-48.76	0.98	4.89	H
	2472	-54.17	-13	-41.17	-67.86	-56.05	1.28	5.32	H
	3296	-54.12	-13	-41.12	-70.1	-57.53	1.54	7.10	H
	1648	-48.57	-13	-35.57	-58.23	-50.33	0.98	4.89	V
	2472	-56.22	-13	-43.22	-69.95	-58.1	1.28	5.32	V
	3296	-53.94	-13	-40.94	-69.86	-57.35	1.54	7.10	V
Middle	1672	-47.09	-13	-34.09	-56.94	-48.77	0.99	4.82	H
	2512	-52.83	-13	-39.83	-66.67	-54.8	1.29	5.41	H
	3344	-53.84	-13	-40.84	-69.88	-57.45	1.56	7.31	H
	1672	-49.12	-13	-36.12	-58.91	-50.8	0.99	4.82	V
	2512	-53.20	-13	-40.20	-67.06	-55.17	1.29	5.41	V
	3344	-53.90	-13	-40.90	-69.95	-57.51	1.56	7.31	V
Highest	1696	-45.87	-13	-32.87	-55.81	-47.47	1.00	4.75	H
	2544	-54.29	-13	-41.29	-68.26	-56.27	1.30	5.44	H
	3392	-54.08	-13	-41.08	-70.18	-57.88	1.57	7.52	H
	1696	-46.84	-13	-33.84	-56.72	-48.44	1.00	4.75	V
	2544	-54.59	-13	-41.59	-68.55	-56.57	1.30	5.44	V
	3392	-54.68	-13	-41.68	-70.88	-58.48	1.57	7.52	V

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

GSM850 (EDGE class 8)									
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	-46.31	-13	-33.31	-56.03	-48.07	0.98	4.89	H
	2472	-55.24	-13	-42.24	-68.93	-57.12	1.28	5.32	H
	3296	-54.23	-13	-41.23	-70.21	-57.64	1.54	7.10	H
	1648	-49.96	-13	-36.96	-59.62	-51.72	0.98	4.89	V
	2472	-54.72	-13	-41.72	-68.45	-56.6	1.28	5.32	V
	3296	-53.72	-13	-40.72	-69.64	-57.13	1.54	7.10	V
Middle	1672	-45.88	-13	-32.88	-55.73	-47.56	0.99	4.82	H
	2512	-52.81	-13	-39.81	-66.65	-54.78	1.29	5.41	H
	3344	-54.11	-13	-41.11	-70.15	-57.72	1.56	7.31	H
	1672	-49.18	-13	-36.18	-58.97	-50.86	0.99	4.82	V
	2512	-52.29	-13	-39.29	-66.15	-54.26	1.29	5.41	V
	3344	-54.12	-13	-41.12	-70.17	-57.73	1.56	7.31	V
Highest	1696	-45.42	-13	-32.42	-55.36	-47.02	1.00	4.75	H
	2544	-54.11	-13	-41.11	-68.05	-56.09	1.30	5.44	H
	3392	-54.67	-13	-41.67	-70.77	-58.47	1.57	7.52	H
	1696	-49.52	-13	-36.52	-59.4	-51.12	1.00	4.75	V
	2544	-54.47	-13	-41.47	-68.43	-56.45	1.30	5.44	V
	3392	-53.98	-13	-40.98	-70.17	-57.78	1.57	7.52	V

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

GSM1900 (GPRS class 8)									
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	-40.52	-13	-27.52	-57.37	-47.09	1.67	8.24	H
	5550	-48.39	-13	-35.39	-71.03	-55.46	2.65	9.72	H
	7404	-40.71	-13	-27.71	-67.82	-49.86	2.46	11.61	H
	3702	-49.21	-13	-36.21	-66.22	-55.78	1.67	8.24	V
	5550	-50.37	-13	-37.37	-72.84	-57.44	2.65	9.72	V
	7404	-48.59	-13	-35.59	-75.75	-57.74	2.46	11.61	V
Middle	3760	-41.79	-13	-28.79	-58.8	-48.42	1.69	8.31	H
	5640	-47.98	-13	-34.98	-70.76	-55.03	2.71	9.76	H
	7520	-37.86	-13	-24.86	-65.17	-47.25	2.42	11.81	H
	3760	-48.77	-13	-35.77	-65.91	-55.4	1.69	8.31	V
	5640	-49.20	-13	-36.20	-71.82	-56.25	2.71	9.76	V
	7520	-45.26	-13	-32.26	-72.69	-54.65	2.42	11.81	V
Highest	4000	-43.96	-13	-30.96	-61.18	-50.8	1.76	8.60	H
	5726	-48.98	-13	-35.98	-71.9	-56.02	2.76	9.79	H
	7635	-36.23	-13	-23.23	-63.67	-45.73	2.39	11.88	H
	4000	-51.95	-13	-38.95	-69.26	-58.79	1.76	8.60	V
	5726	-51.81	-13	-38.81	-74.59	-58.85	2.76	9.79	V
	5555	-45.54	-13	-32.54	-73.06	-52.61	2.66	9.72	V

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

GSM1900 (EDGE class 8)									
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	-49.14	-13	-36.14	-65.99	-55.71	1.67	8.24	H
	5550	-53.38	-13	-40.38	-76.05	-60.45	2.65	9.72	H
	7404	-45.34	-13	-32.34	-72.45	-54.49	2.46	11.61	H
	3702	-55.88	-13	-42.88	-72.89	-62.45	1.67	8.24	V
	5550	-55.66	-13	-42.66	-78.13	-62.73	2.65	9.72	V
	7404	-50.85	-13	-37.85	-78.01	-60	2.46	11.61	V
Middle	3762	-53.57	-13	-40.57	-70.4	-60.2	1.69	8.31	H
	5640	-50.98	-13	-37.98	-73.76	-58.03	2.71	9.76	H
	7518	-45.52	-13	-32.52	-72.83	-54.91	2.42	11.81	H
	3762	-56.89	-13	-43.89	-74.03	-63.52	1.69	8.31	V
	5640	-54.48	-13	-41.48	-77.1	-61.53	2.71	9.76	V
	7518	-50.05	-13	-37.05	-77.48	-59.44	2.42	11.81	V
Highest	3822	-52.39	-13	-39.39	-69.61	-59.07	1.71	8.39	H
	5730	-53.56	-13	-40.56	-76.48	-60.59	2.76	9.79	H
	7638	-42.14	-13	-29.14	-69.58	-51.64	2.38	11.88	H
	3822	-56.47	-13	-43.47	-73.78	-63.15	1.71	8.39	V
	5730	-55.06	-13	-42.06	-77.84	-62.09	2.76	9.79	V
	7638	-48.27	-13	-35.27	-75.79	-57.77	2.38	11.88	V

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

WCDMA Band V (RMC 12.2Kbps)									
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	-57.59	-13	-44.59	-67.45	-59.32	0.98	4.86	H
	2480	-55.81	-13	-42.81	-69.41	-57.72	1.28	5.34	H
	3304	-54.40	-13	-41.40	-70.32	-57.84	1.54	7.14	H
	1656	-58.77	-13	-45.77	-68.53	-60.5	0.98	4.86	V
	2480	-55.40	-13	-42.40	-69.1	-57.31	1.28	5.34	V
	3304	-53.78	-13	-40.78	-69.74	-57.22	1.54	7.14	V
Middle	1672	-58.21	-13	-45.21	-68.07	-59.89	0.99	4.82	H
	2512	-55.47	-13	-42.47	-69.28	-57.44	1.29	5.41	H
	3344	-53.25	-13	-40.25	-69.31	-56.86	1.56	7.31	H
	1672	-58.61	-13	-45.61	-68.39	-60.29	0.99	4.82	V
	2512	-55.07	-13	-42.07	-68.93	-57.04	1.29	5.41	V
	3344	-54.59	-13	-41.59	-70.5	-58.2	1.56	7.31	V
Highest	1696	-58.59	-13	-45.59	-68.53	-60.19	1.00	4.75	H
	2536	-55.67	-13	-42.67	-69.53	-57.65	1.30	5.43	H
	3384	-54.67	-13	-41.67	-70.76	-58.44	1.57	7.49	H
	1696	-58.40	-13	-45.40	-68.23	-60	1.00	4.75	V
	2536	-55.67	-13	-42.67	-69.56	-57.65	1.30	5.43	V
	3384	-54.01	-13	-41.01	-70.21	-57.78	1.57	7.49	V

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

WCDMA Band II (RMC 12.2Kbps)									
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	-41.55	-13	-28.55	-58.4	-48.12	1.67	8.24	H
	5556	-51.33	-13	-38.33	-73.96	-58.4	2.66	9.72	H
	7410	-41.85	-13	-28.85	-68.96	-51.01	2.46	11.62	H
	3702	-49.48	-13	-36.48	-66.49	-56.05	1.67	8.24	V
	5556	-53.83	-13	-40.83	-76.29	-60.9	2.66	9.72	V
	7410	-49.14	-13	-36.14	-76.3	-58.3	2.46	11.62	V
Middle	3760	-42.56	-13	-29.56	-59.57	-49.19	1.69	8.31	H
	5640	-51.72	-13	-38.72	-74.5	-58.77	2.71	9.76	H
	7520	-39.48	-13	-26.48	-66.79	-48.87	2.42	11.81	H
	3760	-50.09	-13	-37.09	-67.23	-56.72	1.69	8.31	V
	5640	-53.88	-13	-40.88	-76.5	-60.93	2.71	9.76	V
	7520	-48.35	-13	-35.35	-75.78	-57.74	2.42	11.81	V
Highest	3816	-41.06	-13	-28.06	-58.27	-47.74	1.70	8.38	H
	5724	-49.90	-13	-36.90	-72.82	-56.94	2.75	9.79	H
	7632	-35.42	-13	-22.42	-62.86	-44.91	2.39	11.88	H
	3816	-47.53	-13	-34.53	-64.83	-54.21	1.70	8.38	V
	5724	-52.01	-13	-39.01	-74.79	-59.05	2.75	9.79	V
	7632	-44.88	-13	-31.88	-72.4	-54.37	2.39	11.88	V

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

WCDMA Band IV (HSDPA)									
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	-47.98	-13	-34.98	-64.06	-54.07	1.58	7.67	H
	5136	-56.28	-13	-43.28	-77.73	-63.56	2.42	9.70	H
	6852	-51.85	-13	-38.85	-77.56	-59.83	2.64	10.62	H
	3426	-53.25	-13	-40.25	-69.54	-59.34	1.58	7.67	V
	5136	-55.92	-13	-42.92	-77.49	-63.2	2.42	9.70	V
	6852	-52.19	-13	-39.19	-77.67	-60.17	2.64	10.62	V
Middle	3462	-46.17	-13	-33.17	-62.36	-52.41	1.59	7.83	H
	5196	-55.24	-13	-42.24	-76.89	-62.49	2.45	9.70	H
	6924	-51.96	-13	-38.96	-77.89	-60.05	2.62	10.71	H
	3462	-51.11	-13	-38.11	-67.5	-57.35	1.59	7.83	V
	5196	-55.08	-13	-42.08	-76.79	-62.33	2.45	9.70	V
	6924	-52.27	-13	-39.27	-77.94	-60.36	2.62	10.71	V
Highest	3510	-43.52	-13	-30.52	-59.81	-49.92	1.61	8.01	H
	5262	-41.27	-13	-28.27	-76.12	-48.48	2.49	9.70	H
	7008	-50.48	-13	-37.48	-76.68	-58.71	2.59	10.82	H
	3510	-49.15	-13	-36.15	-65.67	-55.55	1.61	8.01	V
	5262	-53.79	-13	-40.79	-75.65	-61	2.49	9.70	V
	7008	-51.71	-13	-38.71	-77.67	-59.94	2.59	10.82	V

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

CDMA BC0 (1xEV-DO Rev. A)									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-57.25	-13	-44.25	-66.94	-59.01	0.98	4.89	H
	2472	-55.21	-13	-42.21	-68.89	-57.09	1.28	5.32	H
	3296	-53.41	-13	-40.41	-69.3	-56.82	1.54	7.10	H
	1648	-56.74	-13	-43.74	-66.43	-58.5	0.98	4.89	V
	2472	-55.30	-13	-42.30	-69.15	-57.18	1.28	5.32	V
	3296	-54.70	-13	-41.70	-70.7	-58.11	1.54	7.10	V
Middle	1672	-58.34	-13	-45.34	-68.12	-60.02	0.99	4.82	H
	2512	-55.38	-13	-42.38	-69.22	-57.35	1.29	5.41	H
	3344	-54.93	-13	-41.93	-70.86	-58.54	1.56	7.31	H
	1672	-58.80	-13	-45.80	-68.58	-60.48	0.99	4.82	V
	2512	-54.39	-13	-41.39	-68.21	-56.36	1.29	5.41	V
	3344	-53.60	-13	-40.60	-69.83	-57.21	1.56	7.31	V
Highest	1696	-57.72	-13	-44.72	-67.67	-59.32	1.00	4.75	H
	2544	-54.93	-13	-41.93	-68.9	-56.91	1.30	5.44	H
	3392	-54.78	-13	-41.78	-70.81	-58.58	1.57	7.52	H
	1696	-58.67	-13	-45.67	-68.55	-60.27	1.00	4.75	V
	2544	-55.27	-13	-42.27	-69.18	-57.25	1.30	5.44	V
	3392	-54.70	-13	-41.70	-70.92	-58.5	1.57	7.52	V

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

CDMA BC1 (1xEV-DO Rev. A)									
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	-39.86	-13	-26.86	-56.78	-46.43	1.67	8.24	H
	5556	-48.61	-13	-35.61	-71.31	-55.68	2.66	9.72	H
	7404	-39.70	-13	-26.70	-66.89	-48.85	2.46	11.61	H
	3702	-50.45	-13	-37.45	-67.43	-57.02	1.67	8.24	V
	5556	-51.46	-13	-38.46	-73.99	-58.53	2.66	9.72	V
	7404	-47.14	-13	-34.14	-74.3	-56.29	2.46	11.61	V
Middle	3762	-39.37	-13	-26.37	-56.38	-46	1.69	8.31	H
	5640	-45.90	-13	-32.90	-68.62	-52.95	2.71	9.76	H
	7518	-34.65	-13	-21.65	-61.96	-44.04	2.42	11.81	H
	3762	-48.63	-13	-35.63	-65.83	-55.26	1.69	8.31	V
	5640	-49.62	-13	-36.62	-72.17	-56.67	2.71	9.76	V
	7518	-43.08	-13	-30.08	-70.62	-52.47	2.42	11.81	V
Highest	3816	-38.14	-13	-25.14	-55.26	-44.82	1.70	8.38	H
	5724	-44.40	-13	-31.40	-67.33	-51.44	2.75	9.79	H
	7638	-29.00	-13	-16.00	-56.46	-38.5	2.38	11.88	H
	3816	-46.53	-13	-33.53	-63.86	-53.21	1.70	8.38	V
	5724	-48.48	-13	-35.48	-71.3	-55.52	2.75	9.79	V
	7638	-40.53	-13	-27.53	-68.05	-50.03	2.38	11.88	V

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