FCC RADIO TEST REPORT

FCC ID	:	**A4RG025E**
Equipment	:	**Phone**
Model Name	:	**G025E**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC 47 CFR Part 2, 22(H), 24(E), 27(L)**

The product was received on Apr. 30, 2020 and testing was started from May 09, 2020 and completed on Jun. 17, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

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History of this test report

Report No.	Version	Description	Issued Date
FG022521-02A	01	Initial issue of report	Jun. 26, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
	§22.913 (a)(2)	Effective Radiated Power (GSM850) (WCDMA Band V) (CDMA BC0)		
	§24.232 (c)	Equivalent Isotropic Radiated Power (GSM1900) (WCDMA Band II) (CDMA BC1)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (WCDMA Band IV)		
3.3	§24.232 (d)	Peak-to-Average Ratio	Pass	
3.4	§2.1049 §22.917 (b) §24.238 (b) §27.53 (g)	Occupied Bandwidth (GSM850) (WCDMA Band V) (CDMA BC0) (GSM1900) (WCDMA Band II) (CDMA BC1) (WCDMA Band IV)	Pass	-
3.5	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Band Edge Measurement (GSM850) (WCDMA Band V) (CDMA BC0) (GSM1900) (WCDMA Band II) (CDMA BC1) (WCDMA Band IV)	Pass	-
3.6	§2.1051 §22.917 (a) §24.238 (a) §27.53 (g)	Conducted Emission (GSM850) (WCDMA Band V) (CDMA BC0) (GSM1900) (WCDMA Band II) (CDMA BC1) (WCDMA Band IV)	Pass	-
3.7	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	Pass	-
4.4	§2.1053 §22.917 (a) §24.238 (a) §27.53 (h)	Field Strength of Spurious Radiation (GSM850) (WCDMA Band V) (CDMA BC0) (GSM1900) (WCDMA Band II) (CDMA BC1) (WCDMA Band IV)	Pass	Under limit 25.65 dB at 3760.000 MHz for Primary Antenna Under limit 25.98 dB at 2509.000 MHz for ASDIV Antenna

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

Reviewed by: Wii Chang

Report Producer: Vivian Hsu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Phone
Model Name	G025E
FCC ID	A4RG025E
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/ NFC/GNSS WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

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

EUT Information List	
S/N	Performed Test Item
04211FQCB00048	Conducted Measurement
04241FQCB00299	Radiated Spurious Emission

1.2 Product Specification of Equipment Under Test

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

Standards-related Product Specification	
Maximum Output Power to Antenna	**<Primary Antenna>** **GSM/GPRS/EDGE:** 850: 32.15 dBm 1900: 28.99 dBm **CDMA/EV-DO** BC0 24.40 dBm BC1: 24.70 dBm **WCDMA:** Band V: 24.07 dBm Band II: 24.58 dBm Band IV: 24.74 dBm **<ASDIV Antenna>** **GSM/GPRS/EDGE:** 850: 32.04 dBm 1900: 29.00 dBm **CDMA/EV-DO** BC0 24.45 dBm BC1: 24.60 dBm **WCDMA:** Band V: 24.14 dBm Band II: 24.46 dBm Band IV: 24.65 dBm
Antenna Type	**<Primary Antenna>:** **<Ant. 0>:** PIFA Antenna type **<Ant. 2>:** Monopole Antenna type **<ASDIV Antenna>:** **<Ant. 0>:** PIFA Antenna type **<Ant. 1>:** PIFA Antenna type
Type of Modulation	GSM / GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink) CDMA2000: QPSK CDMA2000 1xEV-DO: QPSK/8PSK

<Primary Antenna>

Radio Tech	Band Number	Antenna name	Gain
GSM	850	Ant 0	-2.8
GSM	1900	Ant 2	2.2
CDMA	BC0	Ant 0	-2.8
CDMA	BC1	Ant 2	2.2
WCDMA	B2	Ant 2	2.2
WCDMA	B4	Ant 2	1.2
WCDMA	B5	Ant 0	-2.8

<ASDIV Antenna>

Radio Tech	Band Number	Antenna name	Gain
GSM	850	Ant 1	-3.5
GSM	1900	Ant 0	0.4
CDMA	BC0	Ant 1	-3.5
CDMA	BC1	Ant 0	0.4
WCDMA	B2	Ant 0	0.4
WCDMA	B4	Ant 0	0.8
WCDMA	B5	Ant 1	-3.5

1.3 Modification of EUT

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

1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH03-HY
Test Engineer	Louis Chung
Temperature	21~24℃
Relative Humidity	51~55%

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

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH12-HY
Test Engineer	Jack Cheng, Lance Chiang, and Chuan Chu
Temperature	20~26℃
Relative Humidity	52~66%

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

FCC Designation No.: TW1190 and TW0007

1.5 Applicable Standards

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

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

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z, and Accessory. The worst cases (Primary Antenna: Y Plane for AWS Band, Z Plane for Cellular Band and PCS Band; ASDIV Antenna: Y Plane for Cellular Band, PCS Band, and AWS Band) were recorded in this report.

Radiated emissions were investigated as following frequency range:

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

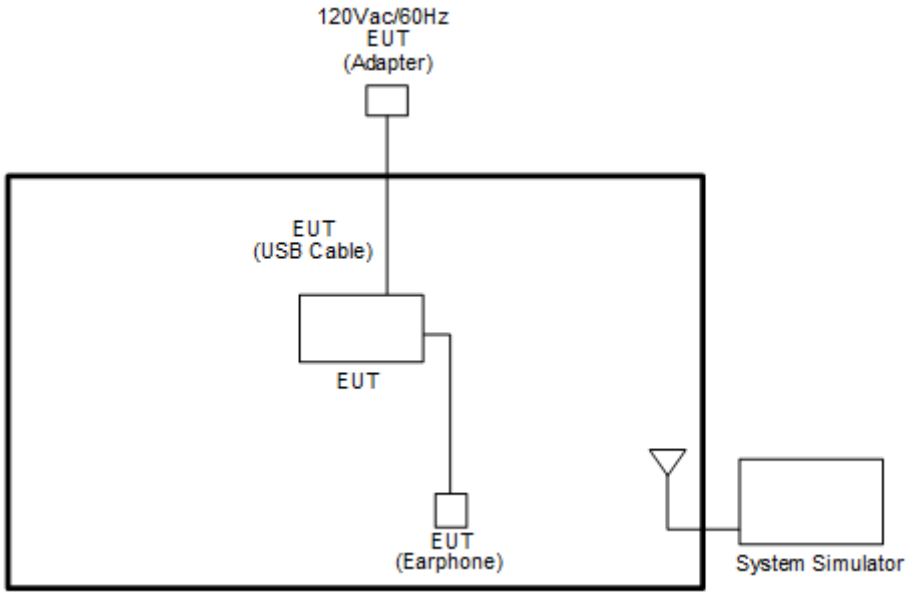
All modes and data rates and positions were investigated.

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

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

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

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration

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

2.4 Measurement Results Explanation Example

For all conducted test items:

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

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

Offset = RF cable loss + attenuator factor.

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

Example:

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

= 4.2 + 10 = 14.2 (dB)

2.5 Frequency List of Low/Middle/High Channels

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

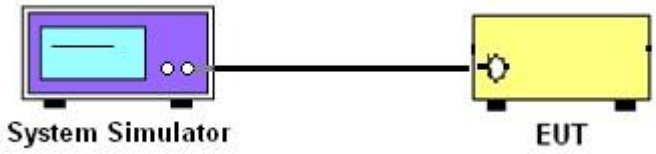
3 Conducted Test Result

3.1 Measuring Instruments

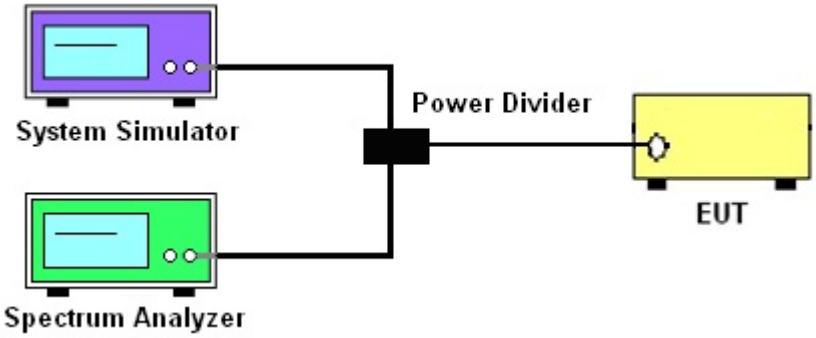
See list of measuring instruments of this test report.

3.1.1 Test Setup

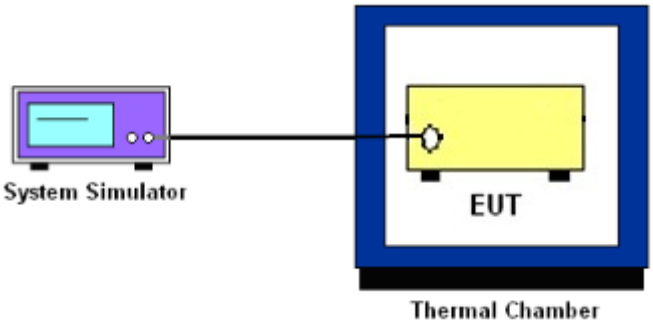
3.1.2 Conducted Output Power



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



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power and ERP/EIRP

3.2.1 Description of the Conducted Output Power and ERP/EIRP

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

The ERP of mobile transmitters must not exceed 7 Watts for GSM850 and WCDMA Band V and CDMA BC0

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

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

According to KDB 412172 D01 Power Approach,

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

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.2.2 Test Procedures

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

3.3 Peak-to-Average Ratio

3.3.1 Description of the PAR Measurement

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

3.3.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

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

3.4 99% Occupied Bandwidth and 26dB Bandwidth Measurement

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

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

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

3.4.2 Test Procedures

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

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

3.5 Conducted Band Edge

3.5.1 Description of Conducted Band Edge Measurement

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

3.5.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

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

3.6 Conducted Spurious Emission

3.6.1 Description of Conducted Spurious Emission Measurement

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

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

3.6.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

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

3.7 Frequency Stability

3.7.1 Description of Frequency Stability Measurement

22.355

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

24.235 & 27.54

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

3.7.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

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

3.7.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

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

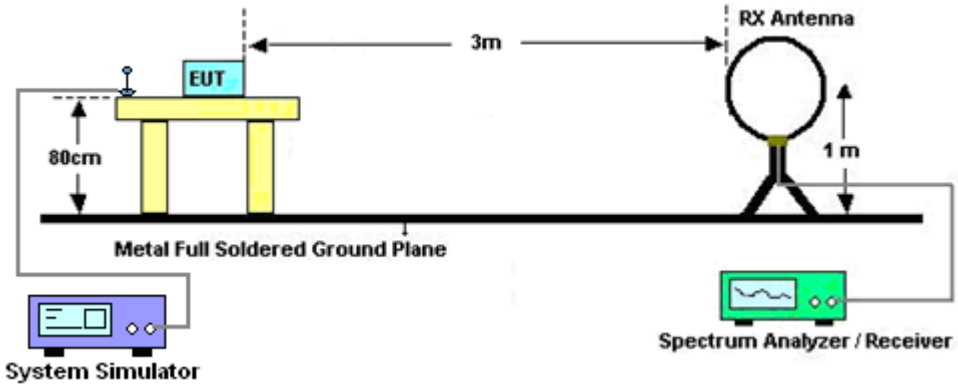
4 Radiated Test Items

4.1 Measuring Instruments

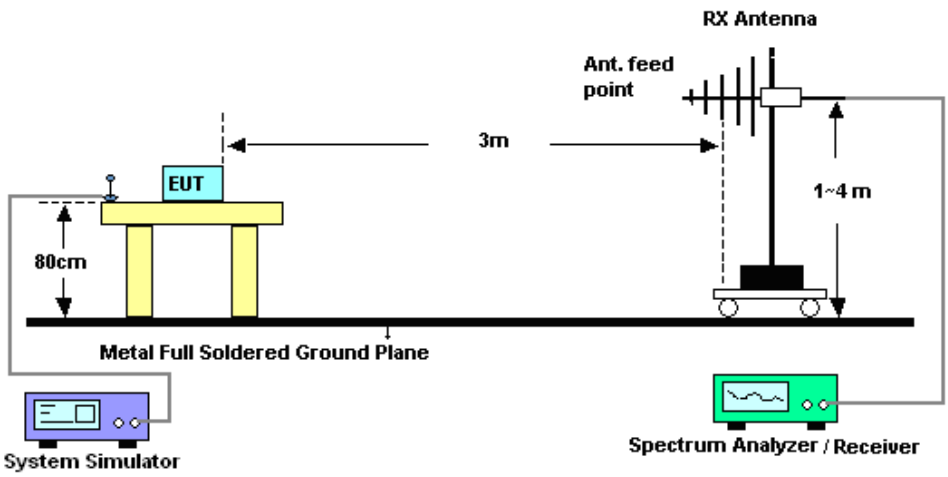
See list of measuring instruments of this test report.

4.2 Test Setup

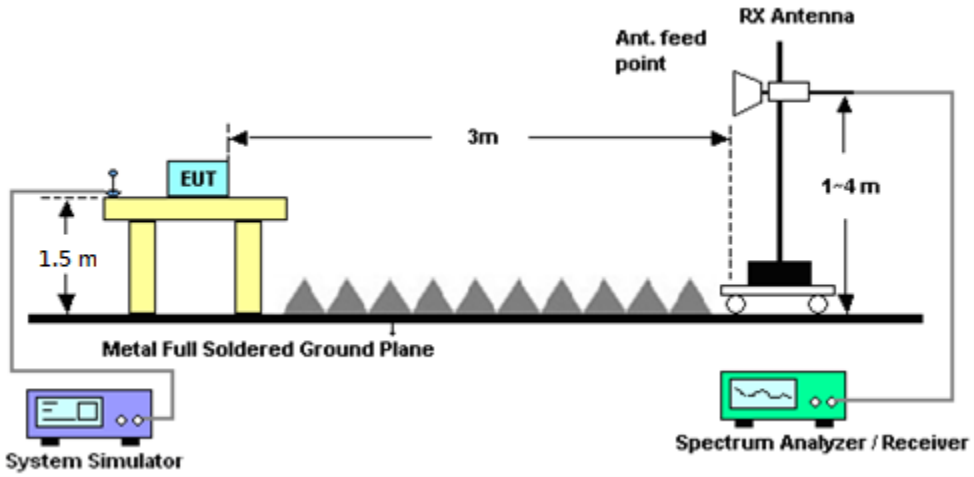
For radiated emissions below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

Note:

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

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

4.4 Field Strength of Spurious Radiation Measurement

4.4.1 Description of Field Strength of Spurious Radiated Measurement

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

4.4.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

1. The EUT was placed on a rotatable wooden table 0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz above the ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 26, 2020	May 15,2020~ May 18, 2020	Mar. 25, 2021	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Sep. 04, 2019	May 15,2020~ May 18, 2020	Sep. 03, 2020	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-641	92013721	-30℃ ~70℃	Nov. 26, 2019	May 15,2020~ May 18, 2020	Nov. 25, 2020	Conducted (TH03-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	1V~20V 0.5A~4A	Oct. 09, 2019	May 15,2020~ May 18, 2020	Oct. 08, 2020	Conducted (TH03-HY)
Base Station (Measure)	Rohde & Schwarz	CMU200	117995	GSM / GPRS / WCDMA / CDMA	Aug. 23, 2019	May 15, 2020~ May 18,2020	Aug. 22, 2020	Conducted (TH03-HY)
Power Divider	Warison	WCOU-0.4-26.5S-20	#A	N/A	Nov. 06, 2019	May 15,2020~ May 18, 2020	Nov. 05, 2020	Conducted (TH03-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Dec. 26, 2019	May 09, 2020~ Jun. 17, 2020	Dec. 25, 2020	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	37059 & 01	30MHz~1GHz	Oct. 12, 2019	May 09, 2020~ Jun. 17, 2020	Oct. 11, 2020	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Nov. 14, 2019	May 09, 2020~ Jun. 17, 2020	Nov. 13, 2020	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1522	1GHz ~ 18GHz	Sep. 19, 2019	May 09, 2020~ Jun. 17, 2020	Sep. 18, 2020	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz ~ 40GHz	Dec. 10, 2019	May 09, 2020~ Jun. 17, 2020	Dec. 09, 2020	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170980	18GHz ~ 40GHz	Jan. 10, 2019	May 09, 2020~ Jun. 17, 2020	Jan. 09, 2021	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 25, 2020	May 09, 2020~ Jun. 17, 2020	Mar. 24, 2021	Radiation (03CH12-HY)
Preamplifier	Jet-Power	JPA00101800-30-10P	1601180002	1GHz~18GHz	Feb. 07, 2020	May 09, 2020~ Jun. 17, 2020	Feb. 06, 2021	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 13, 2019	May 09, 2020~ Jun. 17, 2020	Dec. 12, 2020	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY53270148	1GHz~26.5GHz	Dec. 20, 2019	May 09, 2020~ Jun. 17, 2020	Dec. 19, 2020	Radiation (03CH12-HY)
Signal Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Mar. 12, 2020	May 09, 2020~ Jun. 17, 2020	Mar. 11, 2021	Radiation (03CH12-HY)
Signal Generator	Rohde & Schwarz	SMB100A	101107	100kHz~40GHz	Aug. 27, 2019	May 09, 2020~ Jun. 17, 2020	Aug. 26, 2020	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTN-303B	TP140325	N/A	Nov. 07, 2019	May 09, 2020~ Jun. 17, 2020	Nov. 06, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30M-18G	Dec. 12, 2019	May 09, 2020~ Jun. 17, 2020	Dec. 11, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Feb. 25, 2020	May 09, 2020~ Jun. 17, 2020	Feb. 24, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30M~40GHz	Feb. 25, 2020	May 09, 2020~ Jun. 17, 2020	Feb. 24, 2021	Radiation (03CH12-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	May 09, 2020~ Jun. 17, 2020	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	May 09, 2020~ Jun. 17, 2020	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	May 09, 2020~ Jun. 17, 2020	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	May 09, 2020~ Jun. 17, 2020	N/A	Radiation (03CH12-HY)

6 Uncertainty of Evaluation

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.62

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.06

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

<Primary Antenna>

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GSM	31.85	32.14	31.81	28.70	28.96	28.93
GPRS class 8	31.88	32.15	31.83	28.73	28.99	28.94
GPRS class 10	30.91	31.05	31.02	27.81	28.00	27.75
GPRS class 11	28.83	28.86	28.93	26.92	26.61	26.64
GPRS class 12	27.72	27.75	27.66	25.93	25.91	25.19
EGPRS class 8	25.69	25.65	25.57	25.35	25.54	25.23
EGPRS class 10	25.52	25.52	25.50	24.77	25.14	24.88
EGPRS class 11	23.59	23.51	23.87	23.51	23.90	23.77
EGPRS class 12	21.79	21.73	22.18	22.35	22.89	22.76

Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6
RMC 12.2K	24.02	24.07	24.06	24.57	24.58	24.41
HSDPA Subtest-1	23.16	23.19	23.19	23.61	23.62	23.51
HSDPA Subtest-2	23.17	23.21	23.12	23.66	23.66	23.51
HSDPA Subtest-3	22.68	22.69	22.67	23.15	23.15	23.00
HSDPA Subtest-4	22.59	22.73	22.69	23.15	23.09	23.01
HSUPA Subtest-1	23.12	23.15	23.10	23.22	23.58	23.50
HSUPA Subtest-2	21.14	21.18	21.12	21.20	21.23	21.16
HSUPA Subtest-3	22.15	22.16	22.18	22.22	22.25	22.11
HSUPA Subtest-4	21.16	21.16	21.16	21.21	21.27	21.19
HSUPA Subtest-5	23.10	23.20	23.20	23.20	23.30	23.20

Conducted Power (*Unit: dBm)			
Band	WCDMA Band IV		
Channel	1312	1413	1513
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	24.70	**24.74**	24.67
HSDPA Subtest-1	23.78	23.85	23.77
HSDPA Subtest-2	23.79	23.86	23.75
HSDPA Subtest-3	23.31	23.38	23.28
HSDPA Subtest-4	23.25	23.34	23.25
HSUPA Subtest-1	23.75	23.82	23.73
HSUPA Subtest-2	21.46	21.50	21.49
HSUPA Subtest-3	22.44	22.51	22.47
HSUPA Subtest-4	21.44	21.57	21.51
HSUPA Subtest-5	23.50	23.50	23.50

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	24.20	24.27	23.79	24.58	24.63	24.57
1xRTT RC3 SO55	24.22	24.30	23.80	24.62	24.67	24.59
1xRTT RC3 SO32 (+ F-SCH)	24.25	**24.31**	23.83	24.67	**24.68**	24.58
1xRTT RC3 SO32 (+SCH)	24.21	24.28	23.81	24.66	24.61	24.54
1xEVDO RTAP 153.6Kbps	24.35	**24.40**	23.92	24.65	**24.70**	24.61
1xEVDO RETAP 4096Bits	24.32	24.38	23.91	24.60	24.65	24.57

<ASDIV Antenna>

Conducted Power (*Unit: dBm)						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GSM	31.79	32.00	31.62	28.90	28.96	28.82
GPRS class 8	31.81	32.04	31.67	28.91	29.00	28.86
GPRS class 10	30.93	31.03	30.97	27.86	27.91	27.52
GPRS class 11	29.13	29.16	29.04	26.89	26.41	26.30
GPRS class 12	28.09	28.07	27.91	25.06	25.14	24.84
EGPRS class 8	25.87	26.08	25.93	24.96	25.11	24.46
EGPRS class 10	25.68	25.91	25.83	24.59	24.58	23.78
EGPRS class 11	23.83	24.09	23.97	23.47	23.22	22.76
EGPRS class 12	21.86	22.11	21.83	22.42	22.28	21.65

Conducted Power (*Unit: dBm)						
Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency	826.4	836.4	846.6	1852.4	1880	1907.6
RMC 12.2K	24.12	24.14	24.13	24.46	24.39	24.27
HSDPA Subtest-1	23.26	23.28	23.28	23.12	23.49	23.38
HSDPA Subtest-2	23.23	23.30	23.27	23.12	23.51	23.40
HSDPA Subtest-3	22.78	22.81	22.80	22.60	23.00	22.90
HSDPA Subtest-4	22.75	22.79	22.80	22.62	23.06	22.86
HSUPA Subtest-1	23.22	23.24	23.27	23.15	23.44	23.34
HSUPA Subtest-2	21.22	21.27	21.25	21.13	21.11	20.99
HSUPA Subtest-3	22.26	22.31	22.25	22.12	22.10	21.99
HSUPA Subtest-4	21.23	21.31	21.24	21.12	21.12	21.03
HSUPA Subtest-5	23.30	23.30	23.20	23.20	23.10	23.00

Conducted Power (*Unit: dBm)			
Band	WCDMA Band IV		
Channel	1312	1413	1513
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	24.63	**24.65**	24.62
HSDPA Subtest-1	23.77	23.78	23.78
HSDPA Subtest-2	23.74	23.81	23.76
HSDPA Subtest-3	23.29	22.94	23.25
HSDPA Subtest-4	23.24	23.24	23.31
HSUPA Subtest-1	23.75	23.78	23.72
HSUPA Subtest-2	21.51	21.49	21.51
HSUPA Subtest-3	22.45	22.47	22.49
HSUPA Subtest-4	21.41	21.52	21.48
HSUPA Subtest-5	23.50	23.50	23.50

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	24.33	24.38	24.25	24.56	24.46	24.21
1xRTT RC3 SO55	24.36	**24.42**	24.26	**24.58**	24.47	24.25
1xRTT RC3 SO32 (+ F-SCH)	24.35	24.41	24.25	24.52	24.45	24.25
1xRTT RC3 SO32 (+SCH)	24.33	24.37	24.23	24.50	24.41	24.20
1xEVDO RTAP 153.6Kbps	24.31	**24.45**	24.27	**24.60**	24.48	24.28
1xEVDO RETAP 4096Bits	24.30	24.41	24.23	24.57	24.46	24.25

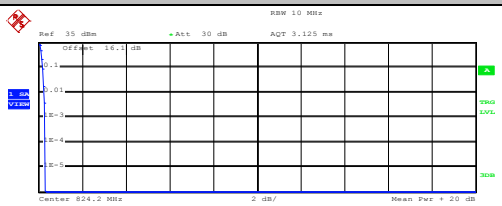
A2. GSM

Peak-to-Average Ratio

Mode	GSM850		Limit: 13dB
Mod.	GPRS class 8	EDGE class 8	Result
Lowest CH	0.32	3.40	PASS
Middle CH	0.28	3.32	
Highest CH	0.28	3.48	
Mode	GSM1900		Limit: 13dB
Mod.	GPRS class 8	EDGE class 8	Result
Lowest CH	0.44	3.00	PASS
Middle CH	0.64	3.00	
Highest CH	0.72	3.20	

GSM850 (GPRS class 8)

Lowest Channel



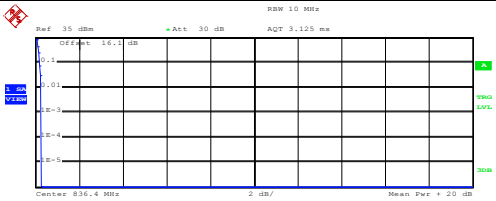
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 31.86 dBm
Peak 32.15 dBm
Crest 0.29 dB

10 % 0.20 dB
1 % 0.28 dB
.1 % 0.32 dB
.01 % 0.32 dB

Date: 18.MAY.2020 17:45:50

Middle Channel



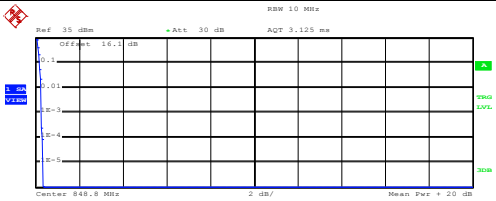
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 31.95 dBm
Peak 32.22 dBm
Crest 0.27 dB

10 % 0.20 dB
1 % 0.28 dB
.1 % 0.28 dB
.01 % 0.28 dB

Date: 18.MAY.2020 17:46:11

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

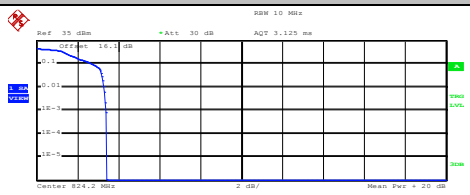
Trace 1
Mean 31.60 dBm
Peak 31.94 dBm
Crest 0.34 dB

10 % 0.20 dB
1 % 0.28 dB
.1 % 0.28 dB
.01 % 0.32 dB

Date: 18.MAY.2020 17:46:29

GSM850 (EDGE class 8)

Lowest Channel



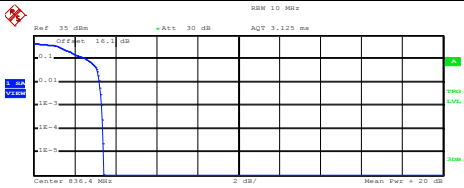
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 25.41 dBm
Peak 28.83 dBm
Crest 3.42 dB

10 % 2.76 dB
1 % 3.28 dB
.1 % 3.40 dB
.01 % 3.44 dB

Date: 18.MAY.2020 17:53:01

Middle Channel



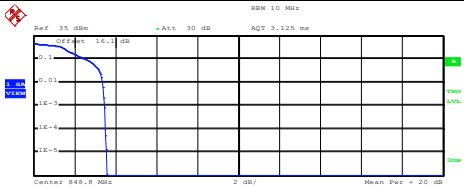
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 25.33 dBm
Peak 28.76 dBm
Crest 3.43 dB

10 % 2.60 dB
1 % 3.20 dB
.1 % 3.32 dB
.01 % 3.40 dB

Date: 18.MAY.2020 17:53:19

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

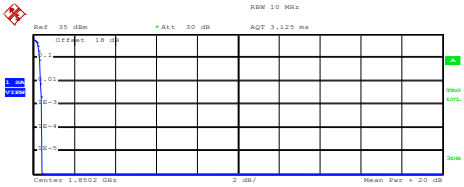
Trace 1
Mean 24.77 dBm
Peak 28.34 dBm
Crest 3.57 dB

10 % 2.60 dB
1 % 3.36 dB
.1 % 3.48 dB
.01 % 3.52 dB

Date: 18.MAY.2020 17:53:37

GSM1900 (GPRS class 8)

Lowest Channel

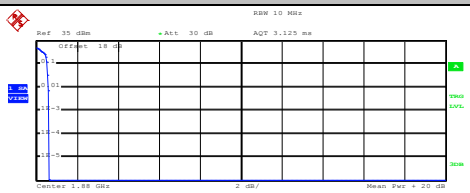


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	28.63 dBm
Peak	29.05 dBm
Crest	0.41 dB
10 %	0.32 dB
1 %	0.36 dB
.1 %	0.44 dB
.01 %	0.44 dB

Date: 18.MAY.2020 16:51:12

Middle Channel

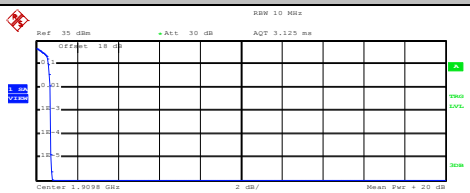


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	28.69 dBm
Peak	29.33 dBm
Crest	0.64 dB
10 %	0.52 dB
1 %	0.60 dB
.1 %	0.64 dB
.01 %	0.64 dB

Date: 18.MAY.2020 16:51:34

Highest Channel



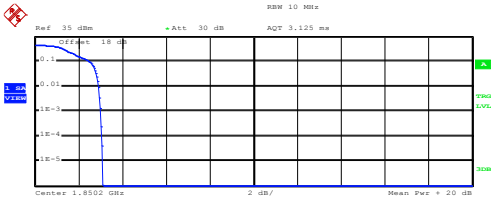
Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	28.28 dBm
Peak	29.05 dBm
Crest	0.77 dB
10 %	0.60 dB
1 %	0.68 dB
.1 %	0.72 dB
.01 %	0.72 dB

Date: 18.MAY.2020 16:51:49

GSM1900 (EDGE class 8)

Lowest Channel

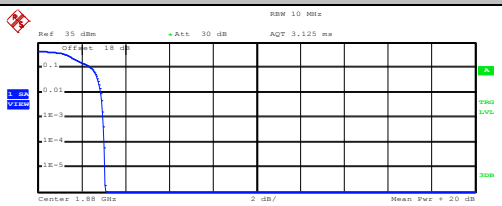


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	25.12 dBm
Peak	28.20 dBm
Crest	3.08 dB
10 %	2.52 dB
1 %	2.92 dB
.1 %	3.00 dB
.01 %	3.08 dB

Date: 18.MAY.2020 17:02:59

Middle Channel

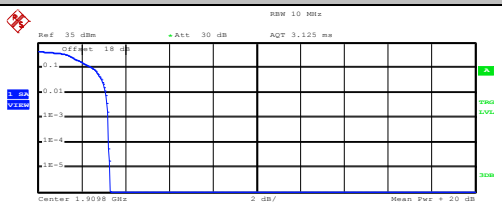


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	25.34 dBm
Peak	28.41 dBm
Crest	3.08 dB
10 %	2.44 dB
1 %	2.88 dB
.1 %	3.00 dB
.01 %	3.04 dB

Date: 18.MAY.2020 17:03:16

Highest Channel



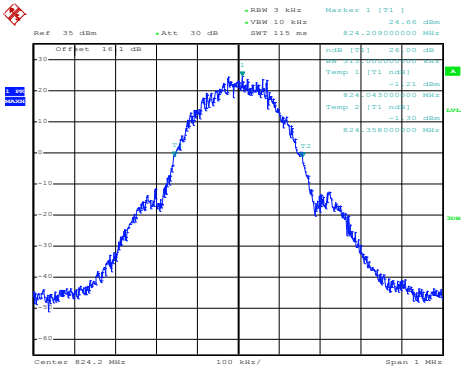
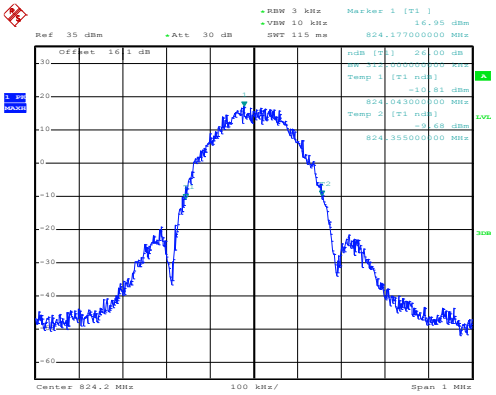
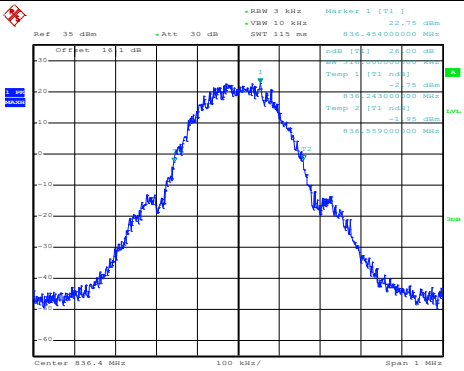
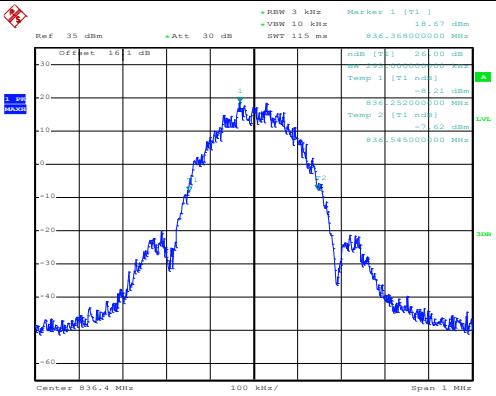
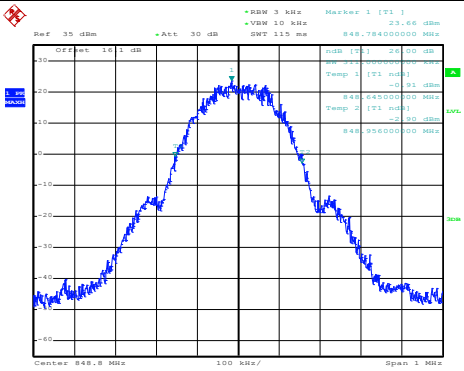
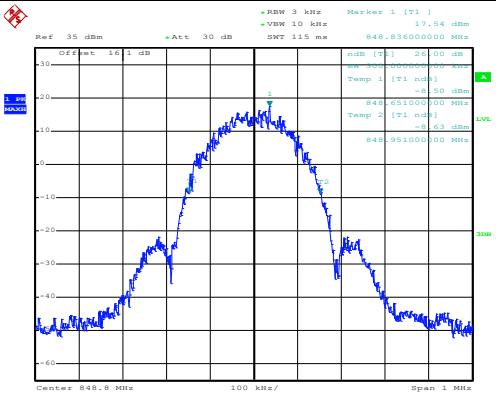
Complementary Cumulative Distribution Function (100000 samples)

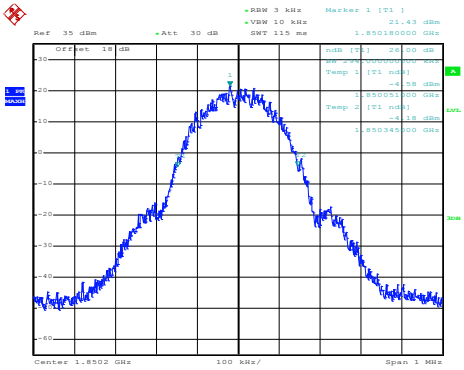
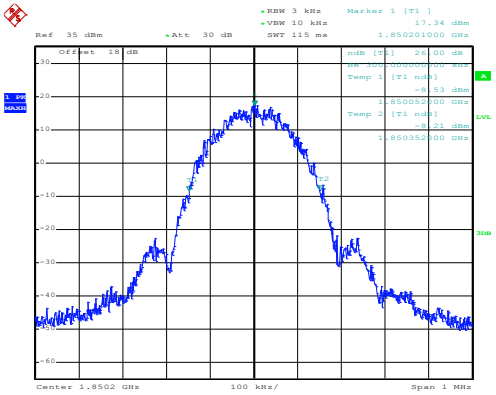
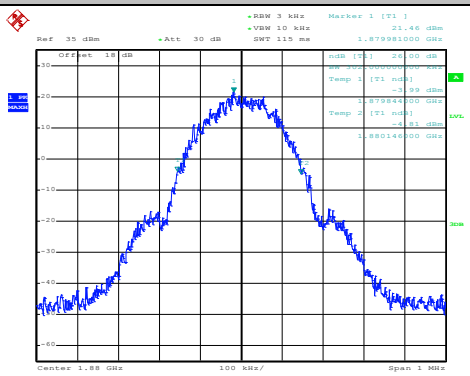
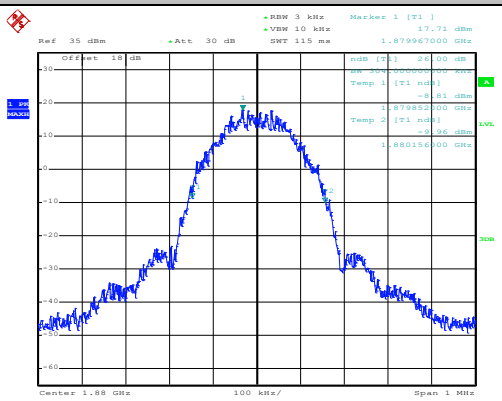
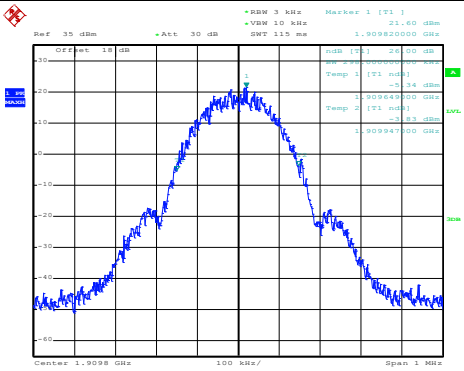
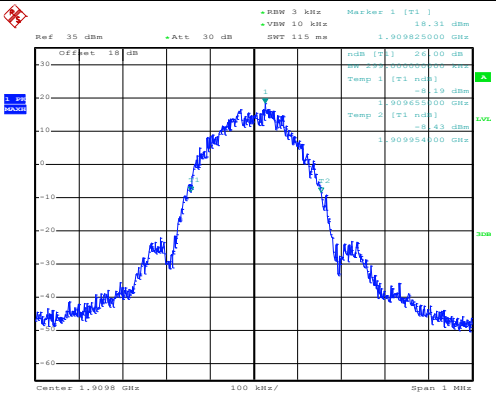
	Trace 1
Mean	24.84 dBm
Peak	28.13 dBm
Crest	3.29 dB
10 %	2.48 dB
1 %	3.08 dB
.1 %	3.20 dB
.01 %	3.24 dB

Date: 18.MAY.2020 17:03:29

26dB Bandwidth

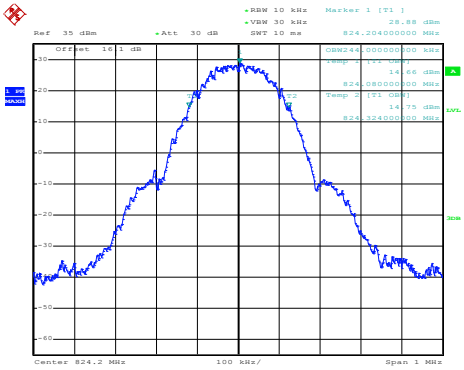
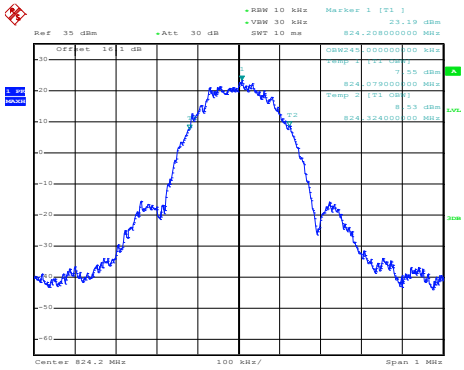
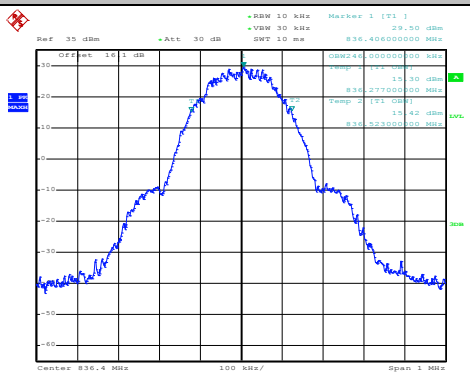
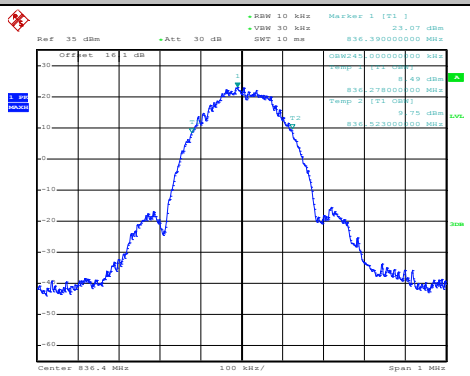
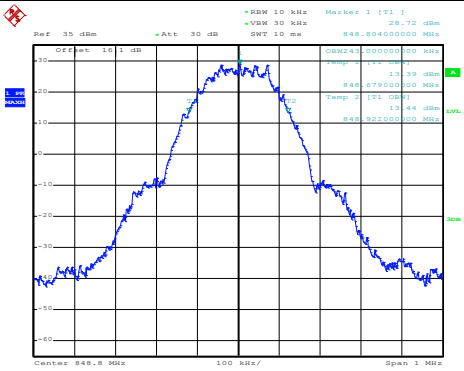
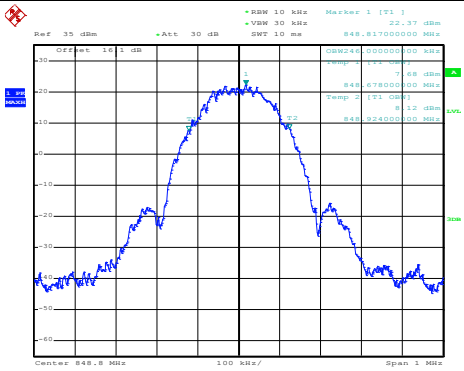
Mode	GSM850: 26dB BW(MHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.315	0.312
Middle CH	0.316	0.293
Highest CH	0.311	0.300
Mode	GSM1900	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.294	0.300
Middle CH	0.302	0.304
Highest CH	0.298	0.299

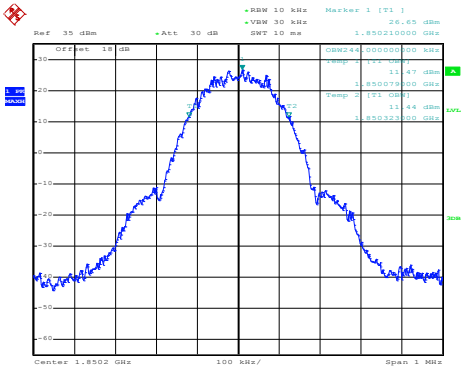
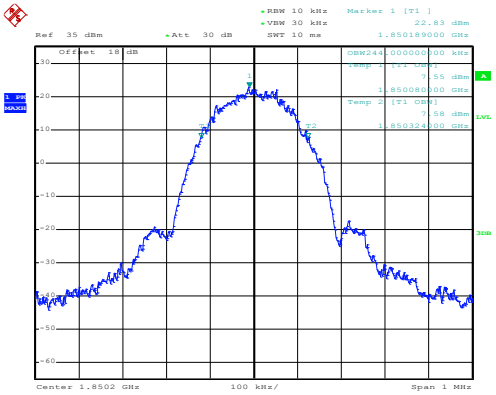
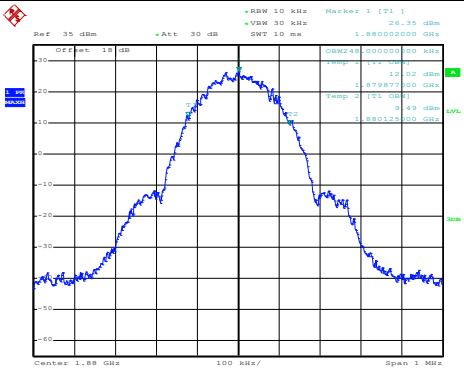
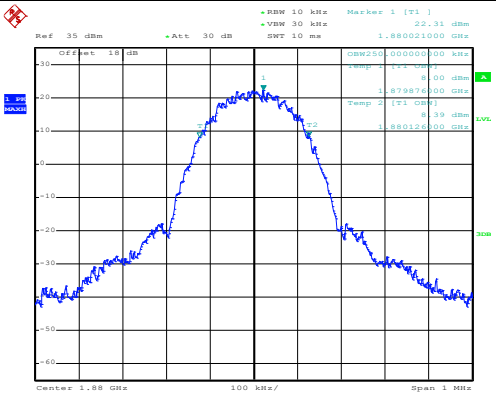
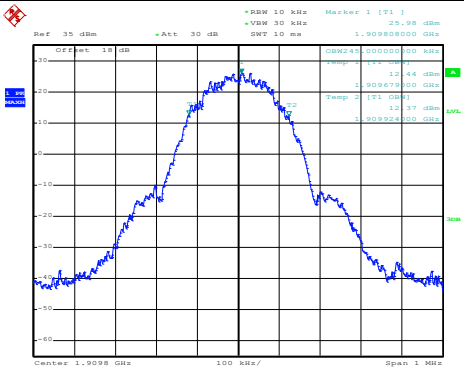
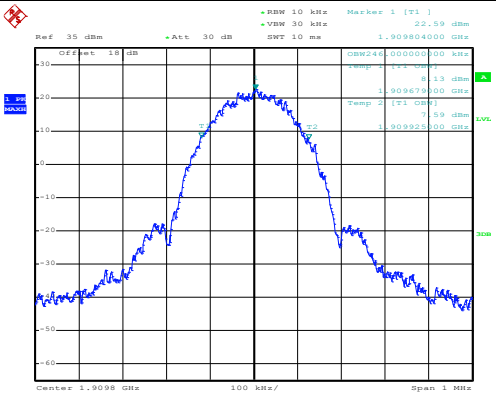
GSM850 (GPRS class 8)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 18.MAY.2020 17:34:35	Date: 18.MAY.2020 17:48:30
Middle Channel	**Middle Channel**
	
Date: 18.MAY.2020 17:35:28	Date: 18.MAY.2020 17:49:11
Highest Channel	**Highest Channel**
	
Date: 18.MAY.2020 17:36:02	Date: 18.MAY.2020 17:49:45

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
 Date: 18.MAY.2020 16:46:48	 Date: 18.MAY.2020 17:01:17
Middle Channel	**Middle Channel**
 Date: 18.MAY.2020 16:47:21	 Date: 18.MAY.2020 17:01:59
Highest Channel	**Highest Channel**
 Date: 18.MAY.2020 16:47:54	 Date: 18.MAY.2020 17:02:32

Occupied Bandwidth

Mode	GSM850: 99% OBW (MHz)	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.244	0.245
Middle CH	0.246	0.245
Highest CH	0.243	0.246
Mode	GSM1900	
Mod.	GPRS class 8	EDGE class 8
Lowest CH	0.244	0.244
Middle CH	0.248	0.250
Highest CH	0.245	0.246

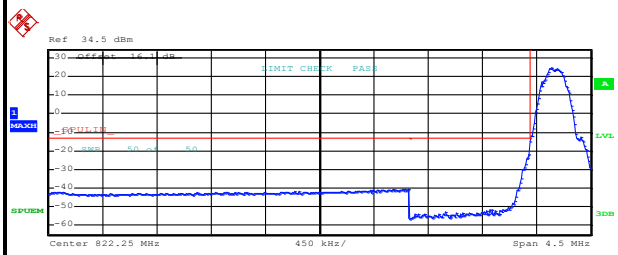
GSM850 (GPRS class 8)	GSM850 (EDGE class 8)
Lowest Channel	**Lowest Channel**
 Date: 18.MAY.2020 17:39:36	 Date: 18.MAY.2020 17:54:15
Middle Channel	**Middle Channel**
 Date: 18.MAY.2020 17:40:10	 Date: 18.MAY.2020 17:54:48
Highest Channel	**Highest Channel**
 Date: 18.MAY.2020 17:40:43	 Date: 18.MAY.2020 17:55:21

GSM1900 (GPRS class 8)	GSM1900 (EDGE class 8)
Lowest Channel	**Lowest Channel**
	
Date: 18.MAY.2020 16:52:35	Date: 18.MAY.2020 17:06:15
Middle Channel	**Middle Channel**
	
Date: 18.MAY.2020 16:53:10	Date: 18.MAY.2020 17:06:47
Highest Channel	**Highest Channel**
	
Date: 18.MAY.2020 16:53:44	Date: 18.MAY.2020 17:07:20

Conducted Band Edge

GSM850 (GPRS class 8)

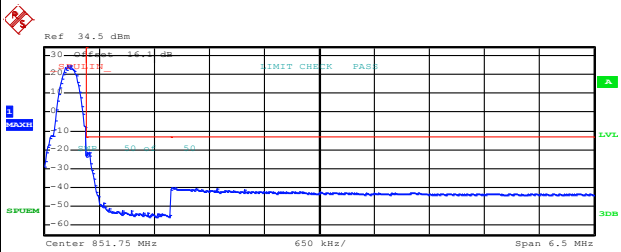
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.994000 M	-40.80	-27.80
823.000 M	824.000 M	3.00 k	823.980000 M	-21.67	-8.67
824.000 M	824.500 M	10.00 k	824.178000 M	24.99	-10.01

Date: 18.MAY.2020 17:42:29

Highest Band Edge

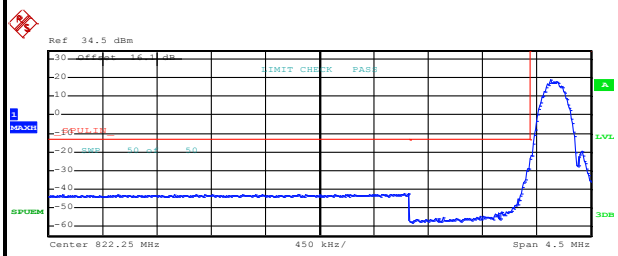


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.779000 M	24.70	-10.30
849.000 M	850.000 M	3.00 k	849.008000 M	-21.23	-8.23
850.000 M	855.000 M	100.00 k	850.045000 M	-39.78	-26.78

Date: 18.MAY.2020 17:45:29

GSM850 (EDGE class 8)

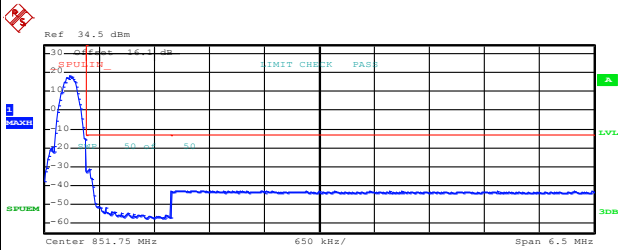
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.994000 M	-42.52	-29.52
823.000 M	824.000 M	3.00 k	823.988000 M	-29.00	-16.00
824.000 M	824.500 M	10.00 k	824.169500 M	19.10	-15.90

Date: 18.MAY.2020 17:57:04

Highest Band Edge

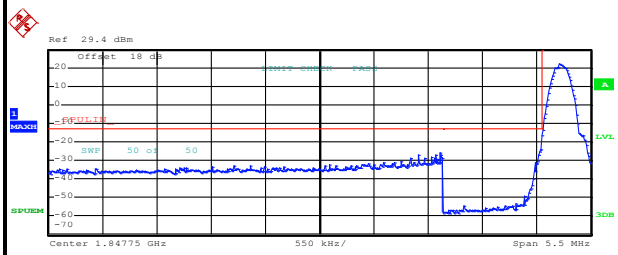


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
848.500 M	849.000 M	10.00 k	848.800000 M	18.27	-16.73
849.000 M	850.000 M	3.00 k	849.032000 M	-31.20	-18.20
850.000 M	855.000 M	100.00 k	850.180000 M	-42.72	-29.72

Date: 18.MAY.2020 17:58:36

GSM1900 (GPRS class 8)

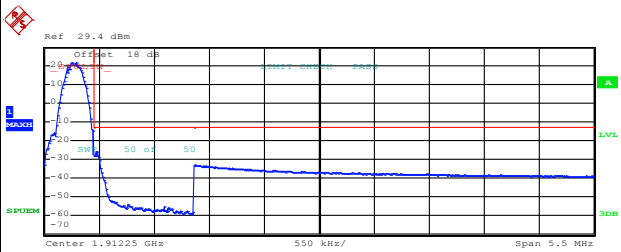
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848972 G	-25.71	-12.71
1.849 G	1.850 G	3.00 k	1.849980 G	-25.32	-12.32
1.850 G	1.851 G	10.00 k	1.850176 G	22.01	-12.99

Date: 18.MAY.2020 16:55:26

Highest Band Edge

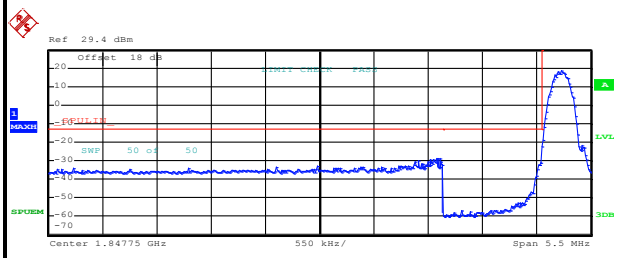


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909814 G	21.49	-13.51
1.910 G	1.911 G	3.00 k	1.910024 G	-25.85	-12.85
1.911 G	1.915 G	1.00 M	1.911008 G	-33.16	-20.16

Date: 18.MAY.2020 16:57:00

GSM1900 (EDGE class 8)

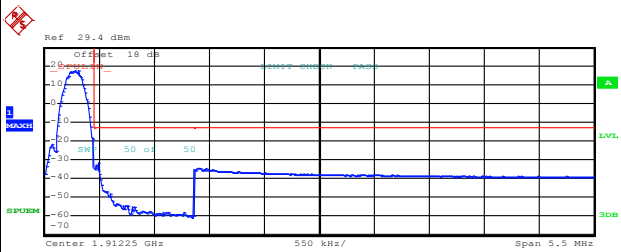
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848932 G	-28.57	-15.57
1.849 G	1.850 G	3.00 k	1.849988 G	-31.19	-18.19
1.850 G	1.851 G	10.00 k	1.850201 G	18.56	-16.44

Date: 18.MAY.2020 17:09:06

Highest Band Edge



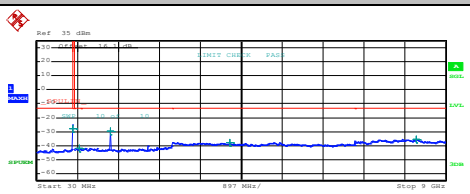
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.910 G	1.910 G	10.00 k	1.909838 G	17.53	-17.47
1.910 G	1.911 G	3.00 k	1.910036 G	-31.59	-18.59
1.911 G	1.915 G	1.00 M	1.911060 G	-34.65	-21.65

Date: 18.MAY.2020 17:10:43

Conducted Spurious Emission

GSM850 (GPRS class 8)

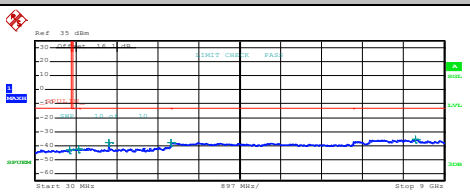
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.802500 M	-27.67	-14.67
855.000 M	1.000 G	1.00 M	970.383758 M	-41.91	-28.91
1.000 G	3.000 G	1.00 M	1.648500 G	-29.42	-16.42
3.000 G	7.000 G	1.00 M	4.267000 G	-37.56	-24.56
7.000 G	9.000 G	1.00 M	8.358500 G	-35.44	-22.44

Date: 18.MAY.2020 17:36:59

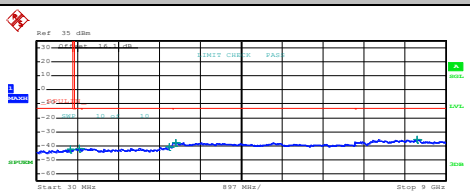
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	787.412500 M	-42.93	-29.93
855.000 M	1.000 G	1.00 M	985.210009 M	-42.41	-29.41
1.000 G	3.000 G	1.00 M	1.649000 G	-37.65	-24.65
3.000 G	7.000 G	1.00 M	3.017000 G	-37.76	-24.76
7.000 G	9.000 G	1.00 M	8.365000 G	-35.52	-22.52

Date: 18.MAY.2020 17:50:50

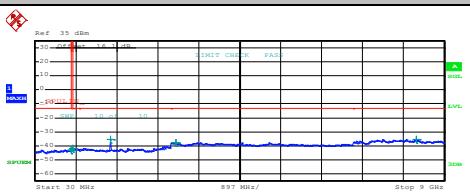
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	763.910000 M	-42.76	-29.76
855.000 M	1.000 G	1.00 M	959.327507 M	-41.89	-28.89
1.000 G	3.000 G	1.00 M	2.943500 G	-40.86	-27.86
3.000 G	7.000 G	1.00 M	3.078000 G	-37.70	-24.70
7.000 G	9.000 G	1.00 M	8.370500 G	-35.54	-22.54

Date: 18.MAY.2020 17:37:50

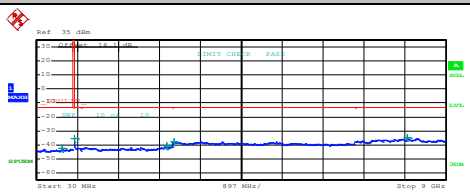
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.802500 M	-42.98	-29.98
855.000 M	1.000 G	1.00 M	856.160000 M	-42.11	-29.11
1.000 G	3.000 G	1.00 M	1.673000 G	-35.24	-22.24
3.000 G	7.000 G	1.00 M	3.115000 G	-37.73	-24.73
7.000 G	9.000 G	1.00 M	8.391500 G	-35.49	-22.49

Date: 18.MAY.2020 17:51:42

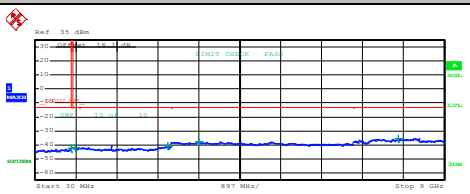
Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	586.950000 M	-42.45	-29.45
855.000 M	1.000 G	1.00 M	855.036250 M	-35.55	-22.55
1.000 G	3.000 G	1.00 M	2.876500 G	-40.65	-27.65
3.000 G	7.000 G	1.00 M	3.042000 G	-38.01	-25.01
7.000 G	9.000 G	1.00 M	8.158000 G	-34.97	-21.97

Date: 18.MAY.2020 17:38:41

Highest Channel

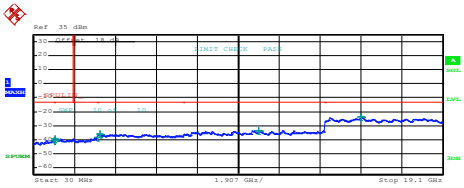


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	813.482500 M	-42.48	-29.48
855.000 M	1.000 G	1.00 M	917.241254 M	-41.76	-28.76
1.000 G	3.000 G	1.00 M	2.944500 G	-40.72	-27.72
3.000 G	7.000 G	1.00 M	3.618000 G	-37.83	-24.83
7.000 G	9.000 G	1.00 M	7.994500 G	-35.61	-22.61

Date: 18.MAY.2020 17:52:33

GSM1900 (GPRS class 8)

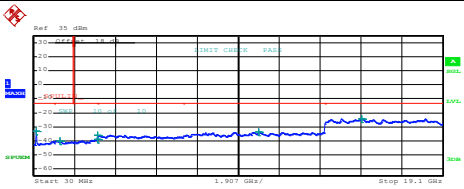
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	972.840000 M	-40.58	-27.58
1.000 G	1.845 G	1.00 M	1.025561 G	-39.33	-26.33
1.915 G	3.000 G	1.00 M	2.995660 G	-38.33	-25.33
3.000 G	7.000 G	1.00 M	3.109000 G	-36.14	-23.14
7.000 G	13.600 G	1.00 M	10.525225 G	-33.51	-20.51
13.600 G	19.100 G	1.00 M	15.291250 G	-23.99	-10.99

Date: 18.MAY.2020 16:48:48

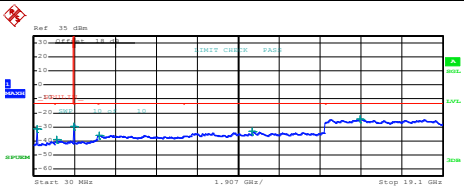
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	141.792500 M	-33.38	-20.38
1.000 G	1.845 G	1.00 M	1.246318 G	-39.94	-26.94
1.915 G	3.000 G	1.00 M	3.000000 G	-39.17	-26.17
3.000 G	7.000 G	1.00 M	3.006000 G	-36.04	-23.04
7.000 G	13.600 G	1.00 M	10.518625 G	-33.95	-20.95
13.600 G	19.100 G	1.00 M	15.320125 G	-24.36	-11.36

Date: 18.MAY.2020 16:49:38

Highest Channel

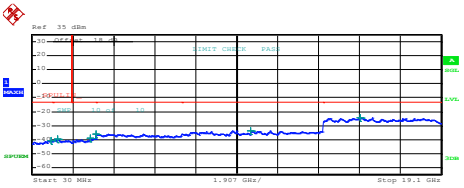


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	171.620000 M	-31.55	-18.55
1.000 G	1.845 G	1.00 M	1.101189 G	-39.05	-26.05
1.915 G	3.000 G	1.00 M	1.915271 G	-29.80	-16.80
3.000 G	7.000 G	1.00 M	3.094000 G	-35.80	-22.80
7.000 G	13.600 G	1.00 M	10.224925 G	-33.36	-20.36
13.600 G	19.100 G	1.00 M	15.261000 G	-24.40	-11.40

Date: 18.MAY.2020 16:50:38

GSM1900 (EDGE class 8)

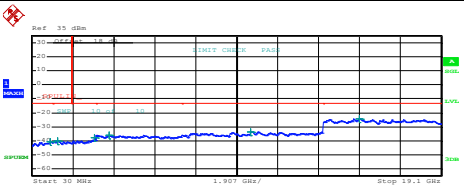
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	890.632500 M	-40.66	-27.66
1.000 G	1.845 G	1.00 M	1.228573 G	-39.46	-26.46
1.915 G	3.000 G	1.00 M	2.724139 G	-39.17	-26.17
3.000 G	7.000 G	1.00 M	3.010000 G	-36.11	-23.11
7.000 G	13.600 G	1.00 M	10.229875 G	-33.76	-20.76
13.600 G	19.100 G	1.00 M	15.322875 G	-24.13	-11.13

Date: 18.MAY.2020 17:11:41

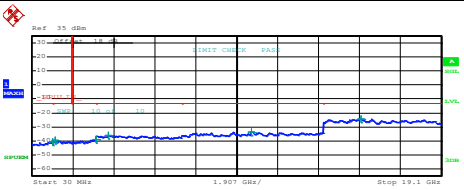
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	857.652500 M	-40.61	-27.61
1.000 G	1.845 G	1.00 M	1.224770 G	-40.16	-27.16
1.915 G	3.000 G	1.00 M	2.910759 G	-37.78	-24.78
3.000 G	7.000 G	1.00 M	3.598000 G	-35.77	-22.77
7.000 G	13.600 G	1.00 M	10.209250 G	-33.47	-20.47
13.600 G	19.100 G	1.00 M	15.267188 G	-24.25	-11.25

Date: 18.MAY.2020 17:12:32

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	997.817500 M	-40.83	-27.83
1.000 G	1.845 G	1.00 M	1.094640 G	-39.42	-26.42
1.915 G	3.000 G	1.00 M	2.998644 G	-38.79	-25.79
3.000 G	7.000 G	1.00 M	3.590000 G	-36.09	-23.09
7.000 G	13.600 G	1.00 M	10.247200 G	-33.64	-20.64
13.600 G	19.100 G	1.00 M	15.362063 G	-24.43	-11.43

Date: 18.MAY.2020 17:13:23

Frequency Stability

Test Conditions	Middle Channel	GSM850 (GPRS class 8)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviation (ppm)		Result
50	Normal Voltage	0.0108	0.0072	PASS
40	Normal Voltage	0.0036	0.0036	
30	Normal Voltage	0.0072	0.0012	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0000	0.0036	
0	Normal Voltage	0.0000	0.0012	
-10	Normal Voltage	0.0024	0.0012	
-20	Normal Voltage	0.0024	0.0000	
-30	Normal Voltage	0.0048	0.0012	
20	Maximum Voltage	0.0012	0.0000	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0048	0.0000	

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	0.0037	0.0027	PASS
40	Normal Voltage	0.0016	0.0005	
30	Normal Voltage	0.0011	0.0016	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0011	0.0005	
0	Normal Voltage	0.0005	0.0005	
-10	Normal Voltage	0.0021	0.0016	
-20	Normal Voltage	0.0043	0.0027	
-30	Normal Voltage	0.0069	0.0043	
20	Maximum Voltage	0.0005	0.0000	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0005	0.0005	

Note:

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

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

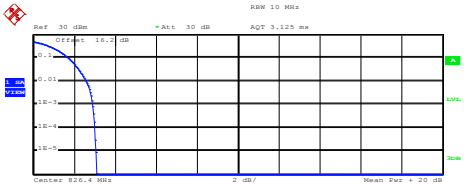
A3. WCDMA

Peak-to-Average Ratio

Mode	WCDMA Band V	WCDMA Band II	WCDMA Band IV	Limit: 13dB
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps	Result
Lowest CH	2.92	2.92	2.96	PASS
Middle CH	2.88	2.92	2.96	
Highest CH	2.92	2.92	2.92	

WCDMA Band V (RMC 12.2Kbps)

Lowest Channel



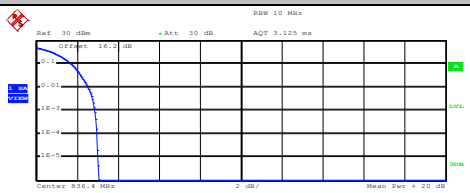
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 22.56 dBm
Peak 25.66 dBm
Crest 3.11 dB

10 % 1.72 dB
1 % 2.60 dB
.1 % 2.92 dB
.01 % 3.04 dB

Date: 15.MAY.2020 15:03:26

Middle Channel



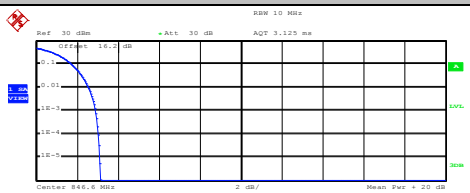
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 23.54 dBm
Peak 26.58 dBm
Crest 3.04 dB

10 % 1.72 dB
1 % 2.52 dB
.1 % 2.88 dB
.01 % 2.96 dB

Date: 15.MAY.2020 15:03:54

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

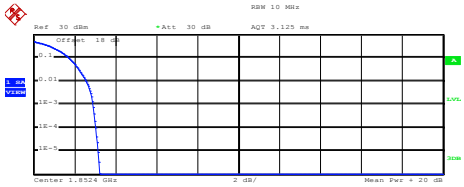
Trace 1
Mean 23.53 dBm
Peak 26.65 dBm
Crest 3.12 dB

10 % 1.72 dB
1 % 2.56 dB
.1 % 2.92 dB
.01 % 3.04 dB

Date: 15.MAY.2020 15:04:04

WCDMA Band II (RMC 12.2Kbps)

Lowest Channel



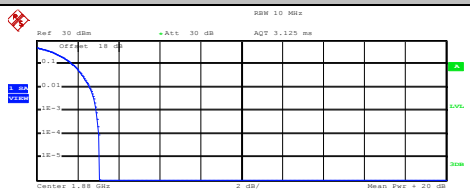
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 23.01 dBm
Peak 26.23 dBm
Crest 3.22 dB

10 % 1.72 dB
1 % 2.56 dB
.1 % 2.92 dB
.01 % 3.04 dB

Date: 15.MAY.2020 15:28:22

Middle Channel



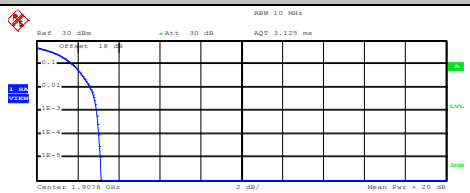
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 22.95 dBm
Peak 26.02 dBm
Crest 3.07 dB

10 % 1.76 dB
1 % 2.60 dB
.1 % 2.92 dB
.01 % 3.04 dB

Date: 15.MAY.2020 15:28:32

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

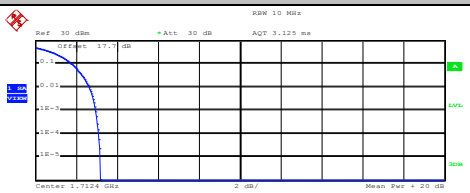
Trace 1
Mean 22.94 dBm
Peak 26.09 dBm
Crest 3.15 dB

10 % 1.76 dB
1 % 2.60 dB
.1 % 2.92 dB
.01 % 3.04 dB

Date: 15.MAY.2020 15:28:45

WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



Complementary Cumulative Distribution Function (100000 samples)

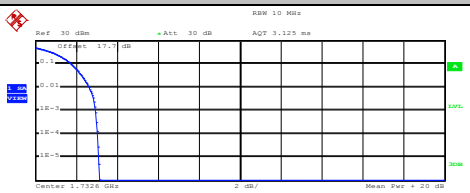
Trace 1

Mean 23.19 dBm
Peak 26.37 dBm
Crest 3.18 dB

10 % 1.80 dB
1 % 2.64 dB
.1 % 2.96 dB
.01 % 3.12 dB

Date: 15.MAY.2020 16:08:48

Middle Channel



Complementary Cumulative Distribution Function (100000 samples)

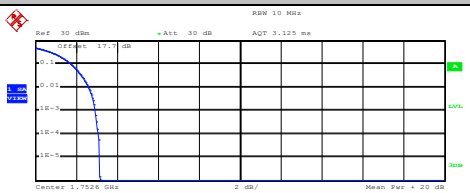
Trace 1

Mean 23.04 dBm
Peak 26.16 dBm
Crest 3.12 dB

10 % 1.76 dB
1 % 2.64 dB
.1 % 2.96 dB
.01 % 3.04 dB

Date: 15.MAY.2020 16:09:01

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

Trace 1

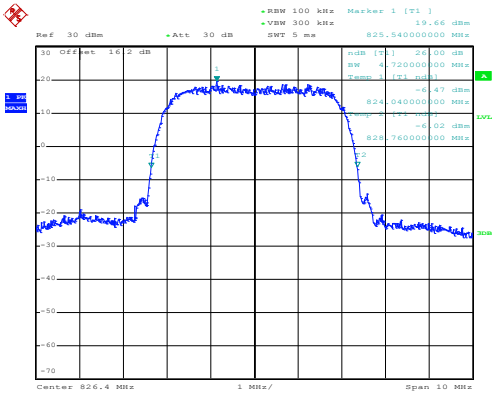
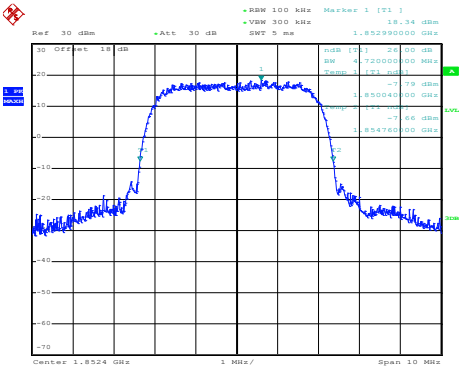
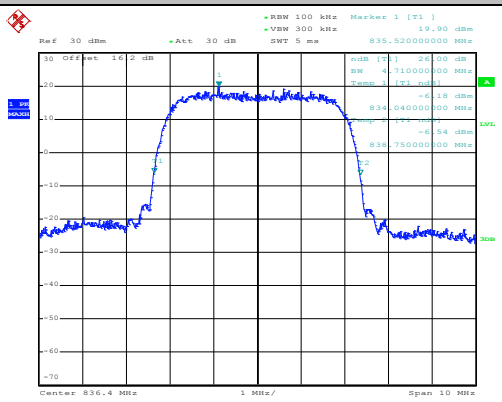
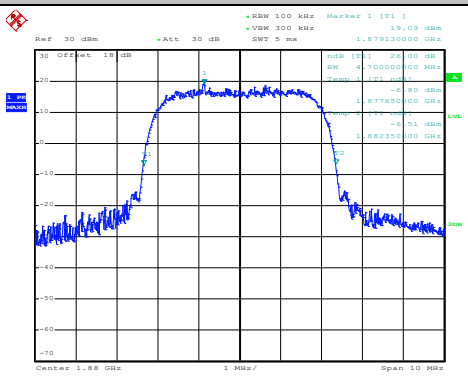
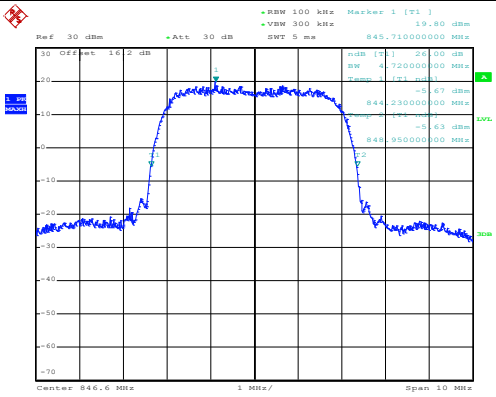
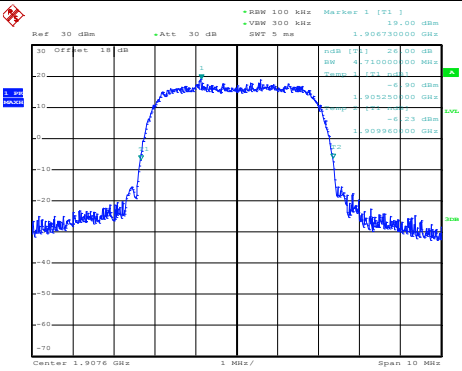
Mean 23.07 dBm
Peak 26.23 dBm
Crest 3.15 dB

10 % 1.76 dB
1 % 2.60 dB
.1 % 2.92 dB
.01 % 3.08 dB

Date: 15.MAY.2020 16:09:40

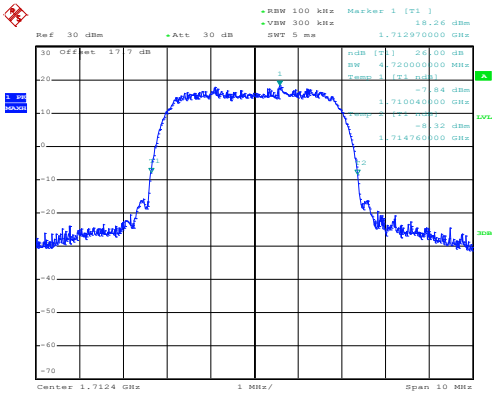
26dB Bandwidth

Mode	WCDMA Band V 26dB BW(MHz)	WCDMA Band II 26dB BW(MHz)	WCDMA Band IV 26dB BW(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.72	4.72	4.72
Middle CH	4.71	4.70	4.71
Highest CH	4.72	4.71	4.72

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
 Date: 15.MAY.2020 14:56:19	 Date: 15.MAY.2020 15:20:37
Middle Channel	**Middle Channel**
 Date: 15.MAY.2020 14:56:55	 Date: 15.MAY.2020 15:21:17
Highest Channel	**Highest Channel**
 Date: 15.MAY.2020 14:57:29	 Date: 15.MAY.2020 15:25:15

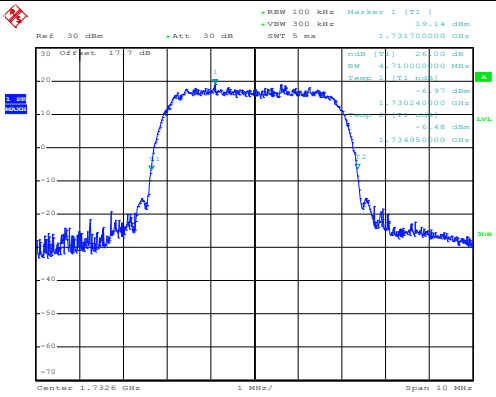
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



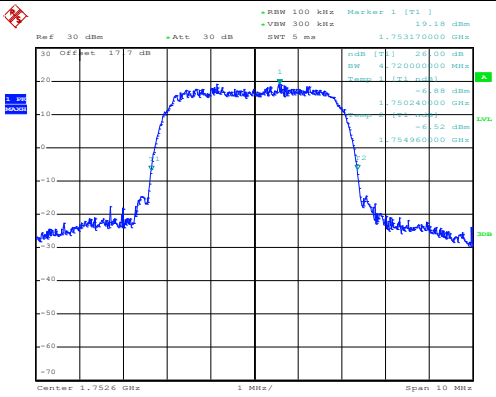
Date: 15.MAY.2020 15:39:52

Middle Channel



Date: 15.MAY.2020 15:40:27

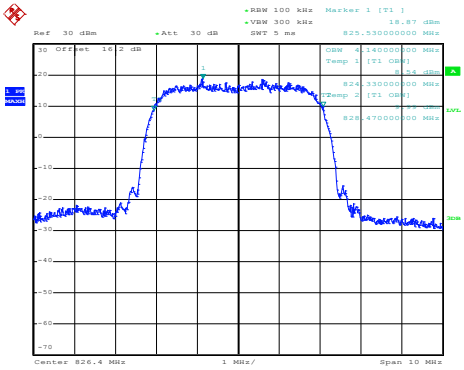
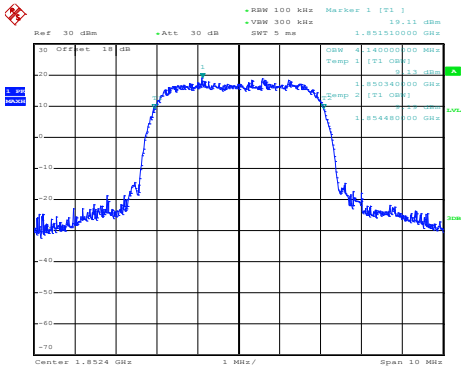
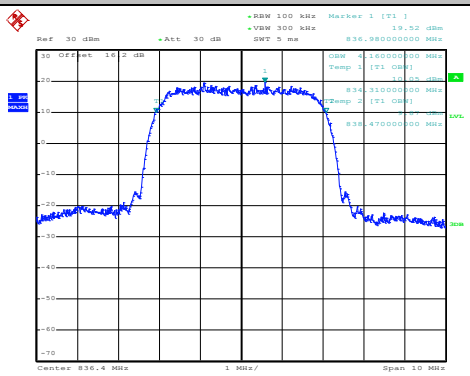
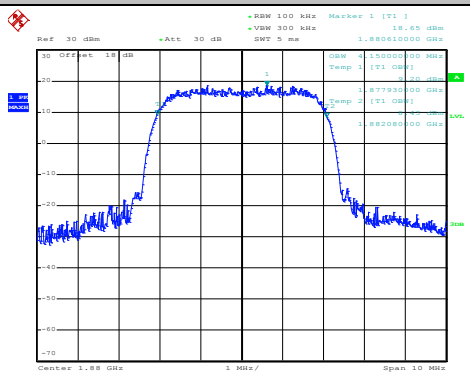
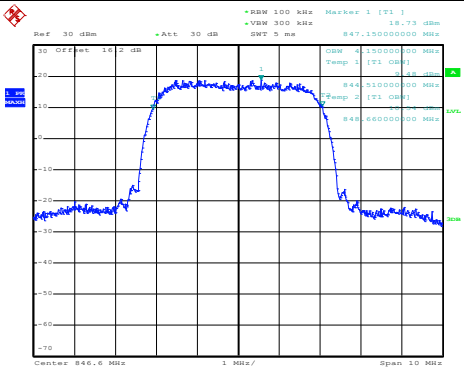
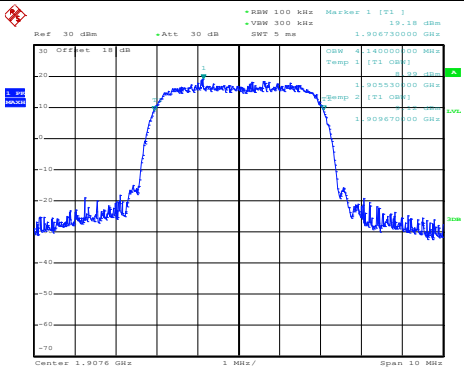
Highest Channel



Date: 15.MAY.2020 15:44:43

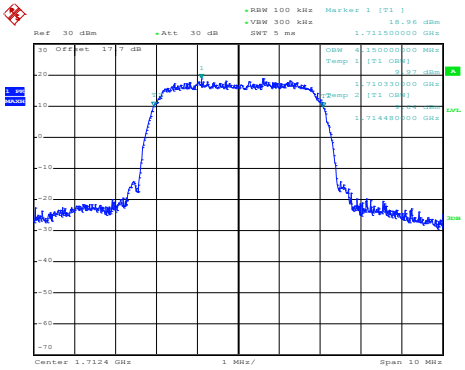
Occupied Bandwidth

Mode	WCDMA Band V 99% OBW(MHz)	WCDMA Band II 99% OBW(MHz)	WCDMA Band IV 99% OBW(MHz)
Mod.	RMC 12.2Kbps	RMC 12.2Kbps	RMC 12.2Kbps
Lowest CH	4.14	4.14	4.15
Middle CH	4.16	4.15	4.14
Highest CH	4.15	4.14	4.15

WCDMA Band V (RMC 12.2Kbps)	WCDMA Band II (RMC 12.2Kbps)
Lowest Channel	**Lowest Channel**
 Date: 15.MAY.2020 15:04:49	 Date: 15.MAY.2020 15:29:29
Middle Channel	**Middle Channel**
 Date: 15.MAY.2020 15:05:26	 Date: 15.MAY.2020 15:30:02
Highest Channel	**Highest Channel**
 Date: 15.MAY.2020 15:06:03	 Date: 15.MAY.2020 15:30:37

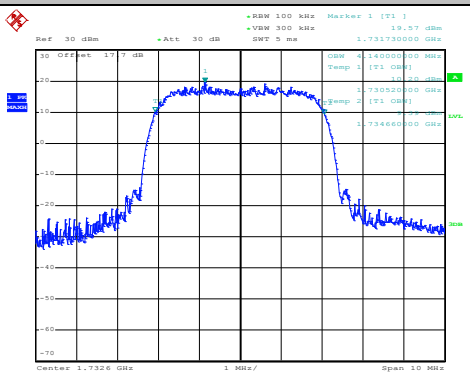
WCDMA Band IV (RMC 12.2Kbps)

Lowest Channel



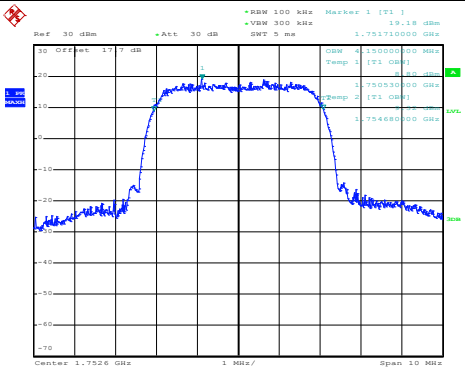
Date: 15.MAY.2020 16:11:01

Middle Channel



Date: 15.MAY.2020 16:11:42

Highest Channel

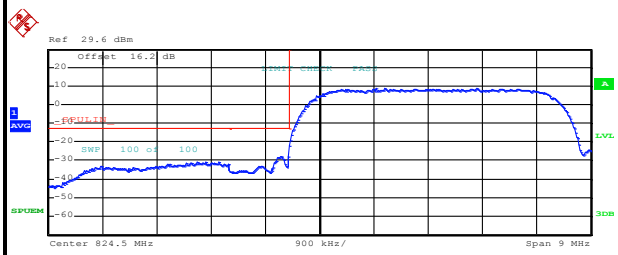


Date: 15.MAY.2020 16:12:37

Conducted Band Edge

WCDMA Band V (RMC 12.2Kbps)

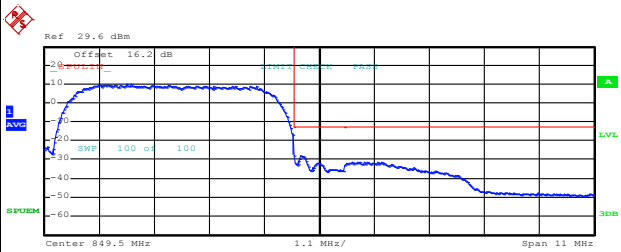
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.610000 M	-30.69	-17.69
823.000 M	824.000 M	50.00 k	823.844000 M	-28.05	-15.05
824.000 M	829.000 M	100.00 k	825.425000 M	9.05	-25.95

Date: 15.MAY.2020 15:08:55

Highest Band Edge

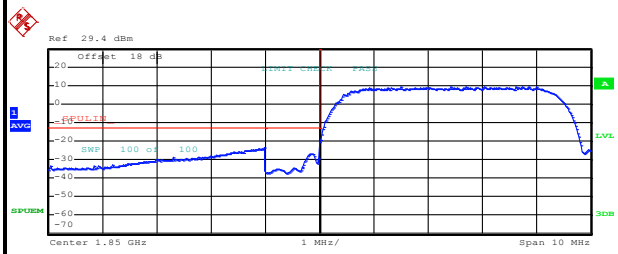


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
844.000 M	849.000 M	100.00 k	845.645000 M	10.05	-24.95
849.000 M	850.000 M	50.00 k	849.132000 M	-28.00	-15.00
850.000 M	855.000 M	100.00 k	850.150000 M	-31.23	-18.23

Date: 15.MAY.2020 15:11:44

WCDMA Band II (RMC 12.2Kbps)

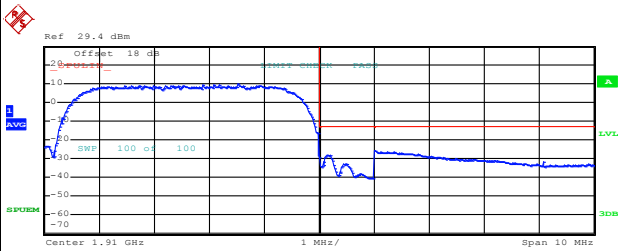
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.849000 G	-23.73	-10.73
1.849 G	1.850 G	50.00 k	1.849808 G	-26.75	-13.75
1.850 G	1.855 G	100.00 k	1.853865 G	9.45	-25.55

Date: 15.MAY.2020 15:34:36

Highest Band Edge

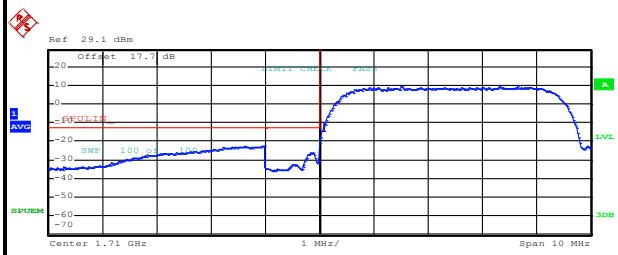


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.908510 G	9.61	-25.39
1.910 G	1.911 G	50.00 k	1.910144 G	-28.17	-15.17
1.911 G	1.915 G	1.00 M	1.911004 G	-25.63	-12.63

Date: 15.MAY.2020 15:37:30

WCDMA Band IV (RMC 12.2Kbps)

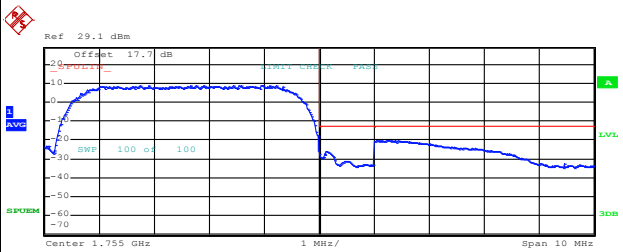
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.705 G	1.709 G	1.00 M	1.708952 G	-22.66	-9.66
1.709 G	1.710 G	50.00 k	1.709844 G	-26.17	-13.17
1.710 G	1.715 G	100.00 k	1.713660 G	9.84	-25.16

Date: 15.MAY.2020 15:54:27

Highest Band Edge



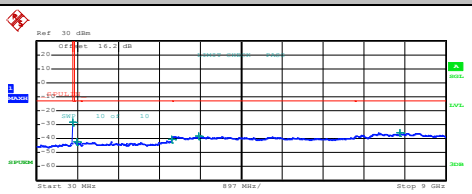
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.750 G	1.755 G	100.00 k	1.754215 G	9.10	-25.90
1.755 G	1.756 G	50.00 k	1.755136 G	-26.18	-13.18
1.756 G	1.760 G	1.00 M	1.756320 G	-20.20	-7.20

Date: 15.MAY.2020 15:57:23

Conducted Spurious Emission

WCDMA Band V (RMC 12.2Kbps)

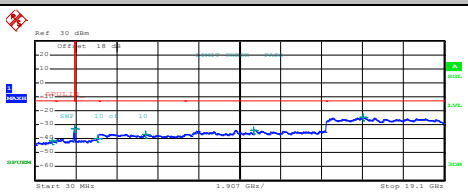
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.802500 M	-28.27	-15.27
855.000 M	1.000 G	1.00 M	917.857504 M	-42.46	-29.46
1.000 G	3.000 G	1.00 M	2.990500 G	-40.54	-27.54
3.000 G	7.000 G	1.00 M	3.581000 G	-38.26	-25.26
7.000 G	9.000 G	1.00 M	7.986500 G	-36.02	-23.02

Date: 15.MAY.2020 14:59:27

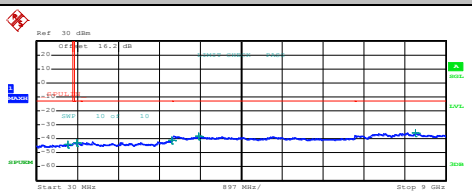
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	818.367500 M	-41.43	-28.43
1.000 G	1.845 G	1.00 M	1.842888 G	-32.65	-19.65
1.915 G	3.000 G	1.00 M	2.942495 G	-39.76	-26.76
3.000 G	7.000 G	1.00 M	5.162000 G	-36.70	-23.70
7.000 G	13.600 G	1.00 M	10.207600 G	-34.17	-21.17
13.600 G	19.100 G	1.00 M	15.312563 G	-24.73	-11.73

Date: 15.MAY.2020 15:26:18

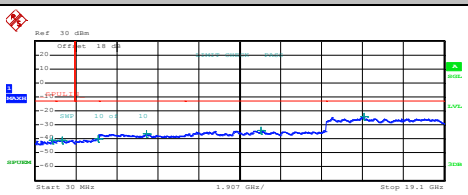
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	715.917500 M	-43.83	-30.83
855.000 M	1.000 G	1.00 M	905.170003 M	-42.75	-29.75
1.000 G	3.000 G	1.00 M	2.999000 G	-41.20	-28.20
3.000 G	7.000 G	1.00 M	3.576000 G	-38.29	-25.29
7.000 G	9.000 G	1.00 M	8.342500 G	-35.90	-22.90

Date: 15.MAY.2020 15:00:25

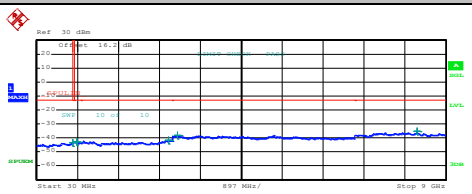
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	846.497500 M	-40.83	-27.83
1.000 G	1.845 G	1.00 M	1.280118 G	-40.83	-27.83
1.915 G	3.000 G	1.00 M	2.949819 G	-39.90	-26.90
3.000 G	7.000 G	1.00 M	5.228000 G	-36.63	-23.63
7.000 G	13.600 G	1.00 M	10.574725 G	-34.15	-21.15
13.600 G	19.100 G	1.00 M	15.343500 G	-24.19	-11.19

Date: 15.MAY.2020 15:27:10

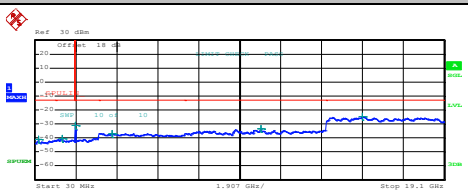
Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	816.642500 M	-43.67	-30.67
855.000 M	1.000 G	1.00 M	905.786254 M	-43.01	-30.01
1.000 G	3.000 G	1.00 M	2.911000 G	-41.88	-28.88
3.000 G	7.000 G	1.00 M	3.117000 G	-37.99	-24.99
7.000 G	9.000 G	1.00 M	8.366500 G	-34.92	-21.92

Date: 15.MAY.2020 15:01:17

Highest Channel

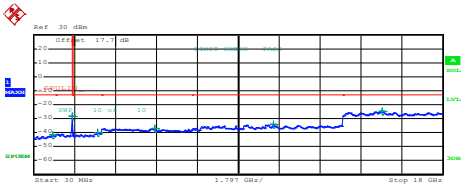


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	168.225000 M	-40.83	-27.83
1.000 G	1.845 G	1.00 M	1.295539 G	-40.64	-27.64
1.915 G	3.000 G	1.00 M	1.915814 G	-31.23	-18.23
3.000 G	7.000 G	1.00 M	3.615000 G	-36.77	-23.77
7.000 G	13.600 G	1.00 M	10.559050 G	-33.62	-20.62
13.600 G	19.100 G	1.00 M	15.285063 G	-24.83	-11.83

Date: 15.MAY.2020 15:28:03

WCDMA Band IV (RMC 12.2Kbps)

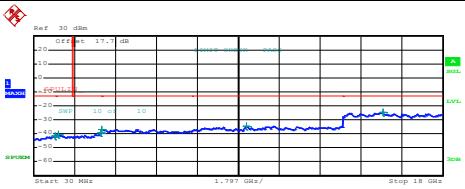
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	841.647500 M	-41.49	-28.49
1.000 G	1.705 G	1.00 M	1.703238 G	-27.92	-14.92
1.760 G	3.000 G	1.00 M	2.817720 G	-39.66	-26.66
3.000 G	7.000 G	1.00 M	5.365000 G	-36.77	-23.77
7.000 G	13.600 G	1.00 M	10.558225 G	-34.17	-21.17
13.600 G	18.000 G	1.00 M	15.343500 G	-24.42	-11.42

Date: 15.MAY.2020 16:03:35

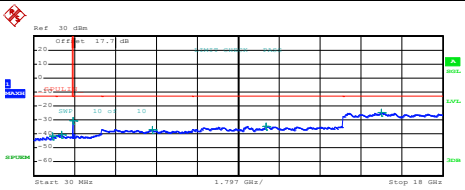
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	949.317500 M	-41.43	-28.43
1.000 G	1.705 G	1.00 M	1.105574 G	-40.50	-27.50
1.760 G	3.000 G	1.00 M	2.979540 G	-39.46	-26.46
3.000 G	7.000 G	1.00 M	3.024000 G	-36.94	-23.94
7.000 G	13.600 G	1.00 M	9.378475 G	-34.65	-21.65
13.600 G	18.000 G	1.00 M	15.378700 G	-24.44	-11.44

Date: 15.MAY.2020 16:04:28

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	870.990000 M	-41.77	-28.77
1.000 G	1.705 G	1.00 M	1.268253 G	-40.23	-27.23
1.760 G	3.000 G	1.00 M	1.761240 G	-30.73	-17.73
3.000 G	7.000 G	1.00 M	5.232000 G	-37.00	-24.00
7.000 G	13.600 G	1.00 M	10.222450 G	-34.60	-21.60
13.600 G	18.000 G	1.00 M	15.299500 G	-24.72	-11.72

Date: 15.MAY.2020 15:47:39

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	0.0060	PASS
40	Normal Voltage	0.0060	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0132	
-10	Normal Voltage	0.0132	
-20	Normal Voltage	0.0143	
-30	Normal Voltage	0.0132	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0024	

Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0032	PASS
40	Normal Voltage	0.0027	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Test Conditions	Middle Channel	WCDMA Band IV (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0046	PASS
40	Normal Voltage	0.0040	
30	Normal Voltage	0.0035	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

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

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

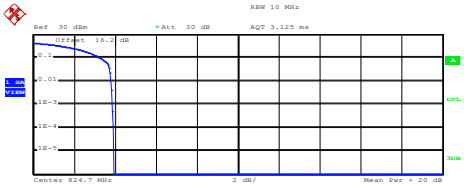
A4. CDMA

Peak-to-Average Ratio

Mode	CDMA BC0	CDMA BC1	Limit: 13dB
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0	Result
Lowest CH	3.88	3.80	PASS
Middle CH	3.72	3.76	
Highest CH	3.92	3.76	

CDMA BC0 (1xEV-DO Rev. 0)

Lowest Channel



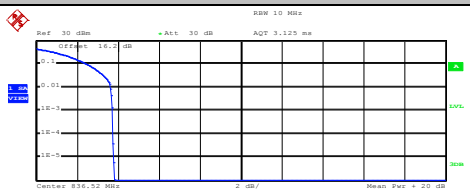
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 23.29 dBm
Peak 27.22 dBm
Crest 3.93 dB

10 % 3.28 dB
1 % 3.80 dB
.1 % 3.88 dB
.01 % 3.92 dB

Date: 15.MAY.2020 16:44:02

Middle Channel



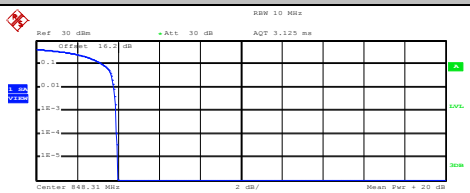
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 23.21 dBm
Peak 27.00 dBm
Crest 3.80 dB

10 % 2.48 dB
1 % 3.64 dB
.1 % 3.72 dB
.01 % 3.76 dB

Date: 15.MAY.2020 16:44:16

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

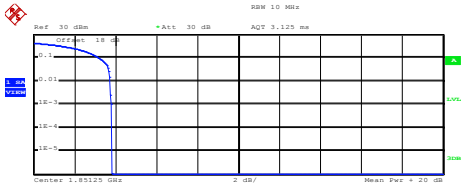
Trace 1
Mean 22.95 dBm
Peak 26.93 dBm
Crest 3.98 dB

10 % 3.24 dB
1 % 3.80 dB
.1 % 3.92 dB
.01 % 3.92 dB

Date: 15.MAY.2020 16:45:28

CDMA BC1 (1xEV-DO Rev. 0)

Lowest Channel



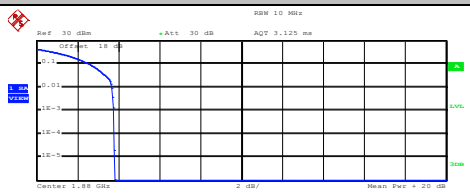
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 23.47 dBm
Peak 27.29 dBm
Crest 3.82 dB

10 % 3.20 dB
1 % 3.72 dB
.1 % 3.80 dB
.01 % 3.84 dB

Date: 15.MAY.2020 16:26:42

Middle Channel



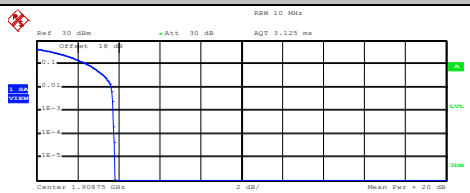
Complementary Cumulative Distribution Function (100000 samples)

Trace 1
Mean 23.56 dBm
Peak 27.36 dBm
Crest 3.79 dB

10 % 2.60 dB
1 % 3.68 dB
.1 % 3.76 dB
.01 % 3.80 dB

Date: 15.MAY.2020 16:26:51

Highest Channel



Complementary Cumulative Distribution Function (100000 samples)

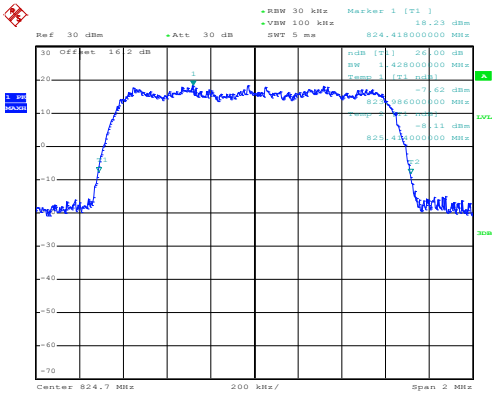
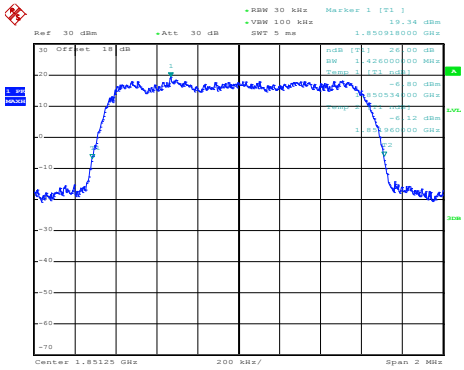
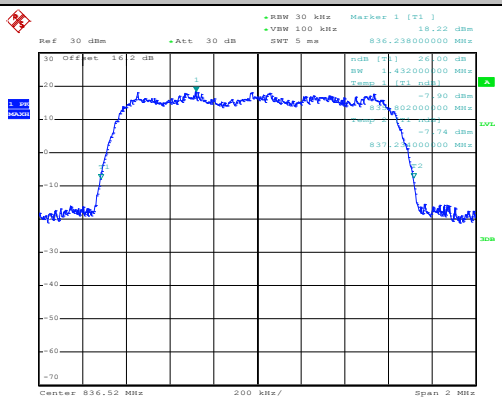
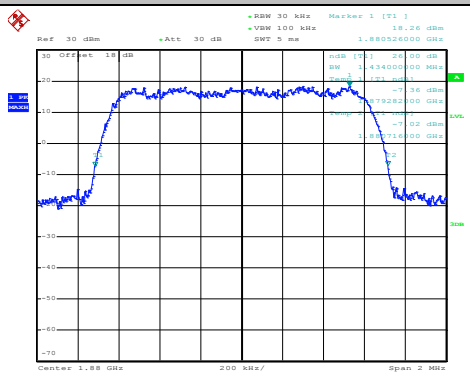
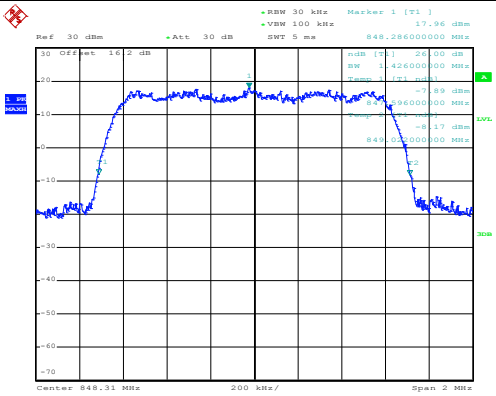
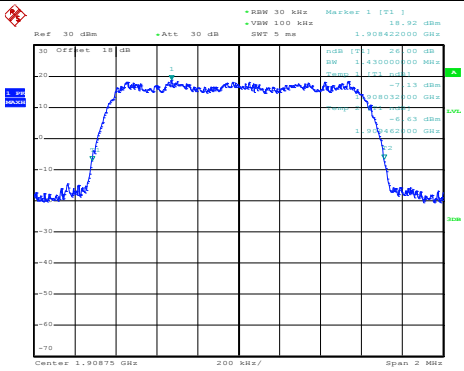
Trace 1
Mean 23.48 dBm
Peak 27.29 dBm
Crest 3.80 dB

10 % 2.48 dB
1 % 3.64 dB
.1 % 3.76 dB
.01 % 3.80 dB

Date: 15.MAY.2020 16:27:07

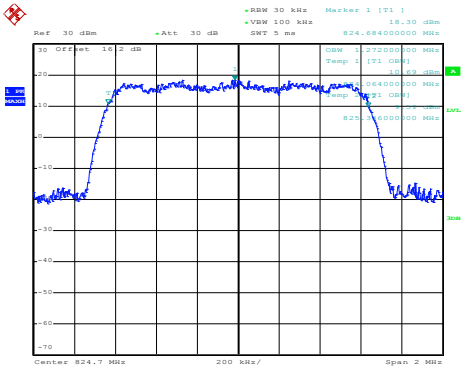
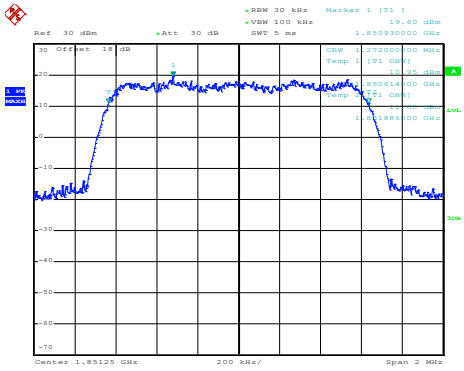
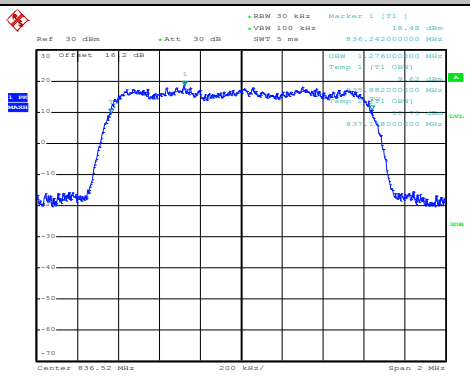
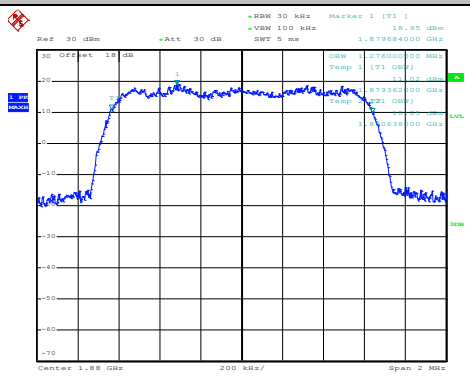
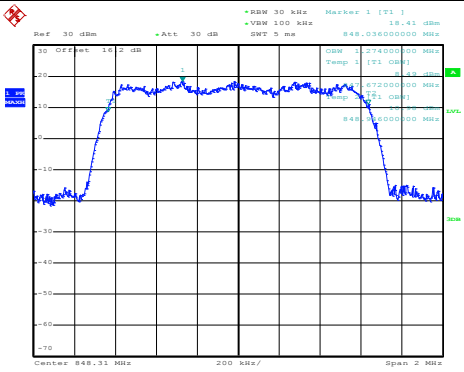
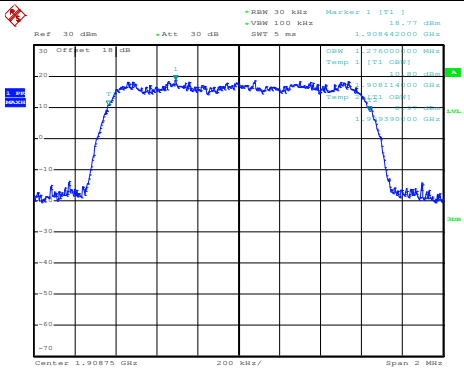
26dB Bandwidth

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

CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
 Date: 15.MAY.2020 16:39:58	 Date: 15.MAY.2020 16:22:21
Middle Channel	**Middle Channel**
 Date: 15.MAY.2020 16:40:32	 Date: 15.MAY.2020 16:22:56
Highest Channel	**Highest Channel**
 Date: 15.MAY.2020 16:41:05	 Date: 15.MAY.2020 16:23:30

Occupied Bandwidth

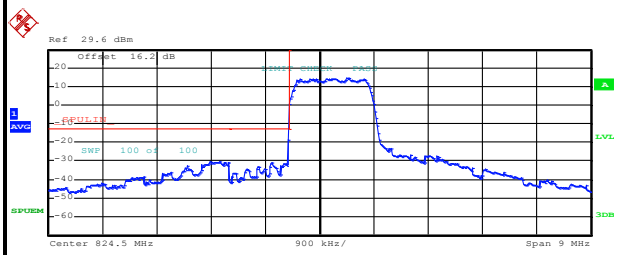
Mode	CDMA BC0 99% OBW(MHz)	CDMA BC1 99% OBW(MHz)
Mod.	1xEV-DO Rev. 0	1xEV-DO Rev. 0
Lowest CH	1.27	1.27
Middle CH	1.28	1.28
Highest CH	1.27	1.28

CDMA BC0 (1xEV-DO Rev. 0)	CDMA BC1 (1xEV-DO Rev. 0)
Lowest Channel	**Lowest Channel**
 Date: 15.MAY.2020 16:46:28	 Date: 15.MAY.2020 16:27:49
Middle Channel	**Middle Channel**
 Date: 15.MAY.2020 16:47:01	 Date: 15.MAY.2020 16:28:24
Highest Channel	**Highest Channel**
 Date: 15.MAY.2020 16:47:34	 Date: 15.MAY.2020 16:28:58

Conducted Band Edge

CDMA BC0 (1xEV-DO Rev. 0)

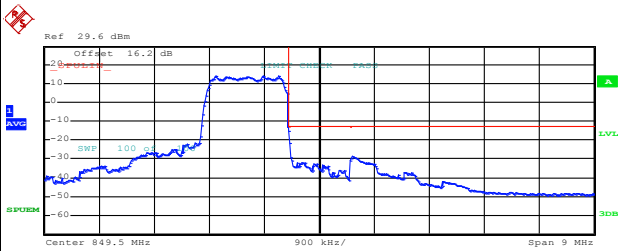
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
820.000 M	823.000 M	100.00 k	822.844000 M	-30.19	-17.19
823.000 M	824.000 M	14.00 k	823.996000 M	-19.40	-6.40
824.000 M	829.000 M	100.00 k	824.945000 M	14.56	-20.44

Date: 15.MAY.2020 16:50:29

Highest Band Edge

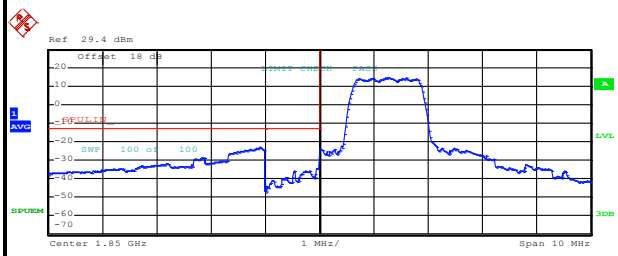


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
845.000 M	849.000 M	100.00 k	848.572000 M	14.21	-20.79
849.000 M	850.000 M	14.00 k	849.004000 M	-15.62	-2.62
850.000 M	854.000 M	100.00 k	850.036000 M	-28.42	-15.42

Date: 15.MAY.2020 16:53:18

CDMA BC1 (1xEV-DO Rev. 0)

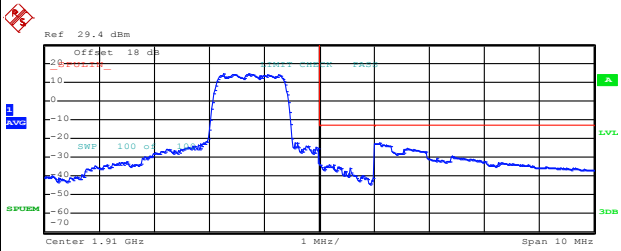
Lowest Band Edge



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.845 G	1.849 G	1.00 M	1.848892 G	-23.11	-10.11
1.849 G	1.850 G	14.00 k	1.849980 G	-34.39	-21.39
1.850 G	1.855 G	100.00 k	1.851215 G	14.69	-20.31

Date: 15.MAY.2020 16:32:04

Highest Band Edge



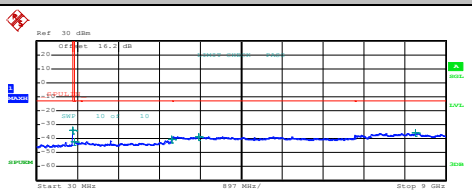
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.905 G	1.910 G	100.00 k	1.908265 G	14.35	-20.65
1.910 G	1.911 G	14.00 k	1.910036 G	-33.25	-20.25
1.911 G	1.915 G	1.00 M	1.911088 G	-22.59	-9.59

Date: 15.MAY.2020 16:34:56

Conducted Spurious Emission

CDMA BC0 (1xEV-DO Rev. 0)

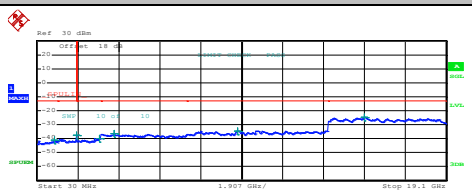
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	819.802500 M	-33.76	-20.76
855.000 M	1.000 G	1.00 M	863.192501 M	-42.40	-29.40
1.000 G	3.000 G	1.00 M	2.991000 G	-40.43	-27.43
3.000 G	7.000 G	1.00 M	3.588000 G	-38.53	-25.53
7.000 G	9.000 G	1.00 M	8.334500 G	-35.79	-22.79

Date: 15.MAY.2020 16:42:01

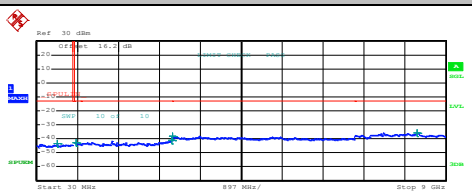
Lowest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	821.762500 M	-41.08	-28.08
1.000 G	1.845 G	1.00 M	1.844789 G	-37.35	-24.35
1.915 G	3.000 G	1.00 M	2.920524 G	-39.69	-26.69
3.000 G	7.000 G	1.00 M	3.617000 G	-36.63	-23.63
7.000 G	13.600 G	1.00 M	9.386725 G	-34.35	-21.35
13.600 G	19.100 G	1.00 M	15.289875 G	-24.44	-11.44

Date: 15.MAY.2020 16:24:27

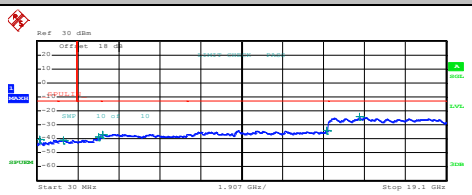
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	480.892500 M	-43.63	-30.63
855.000 M	1.000 G	1.00 M	885.486252 M	-42.88	-29.88
1.000 G	3.000 G	1.00 M	2.981500 G	-40.91	-27.91
3.000 G	7.000 G	1.00 M	3.005000 G	-38.26	-25.26
7.000 G	9.000 G	1.00 M	8.370000 G	-35.65	-22.65

Date: 15.MAY.2020 16:42:52

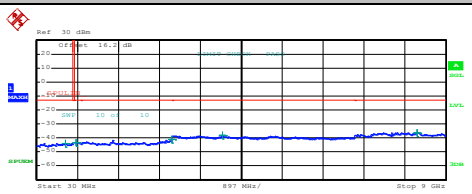
Middle Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	141.550000 M	-40.60	-27.60
1.000 G	1.845 G	1.00 M	1.247796 G	-40.76	-27.76
1.915 G	3.000 G	1.00 M	2.886075 G	-38.67	-25.67
3.000 G	7.000 G	1.00 M	3.090000 G	-36.76	-23.76
7.000 G	13.600 G	1.00 M	13.546375 G	-34.11	-21.11
13.600 G	19.100 G	1.00 M	15.042375 G	-24.32	-11.32

Date: 15.MAY.2020 16:25:27

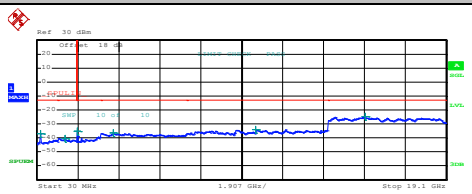
Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	820.000 M	1.00 M	662.395000 M	-43.75	-30.75
855.000 M	1.000 G	1.00 M	882.477502 M	-43.11	-30.11
1.000 G	3.000 G	1.00 M	2.984500 G	-41.16	-28.16
3.000 G	7.000 G	1.00 M	4.110000 G	-38.31	-25.31
7.000 G	9.000 G	1.00 M	8.373000 G	-36.10	-23.10

Date: 15.MAY.2020 16:43:43

Highest Channel



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
30.000 M	1.000 G	1.00 M	170.407500 M	-37.17	-24.17
1.000 G	1.845 G	1.00 M	1.314974 G	-40.20	-27.20
1.915 G	3.000 G	1.00 M	1.915271 G	-35.08	-22.08
3.000 G	7.000 G	1.00 M	3.589000 G	-36.63	-23.63
7.000 G	13.600 G	1.00 M	10.213375 G	-34.19	-21.19
13.600 G	19.100 G	1.00 M	15.324938 G	-24.44	-11.44

Frequency Stability

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	0.0012	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0406	
-10	Normal Voltage	0.0418	
-20	Normal Voltage	0.0454	
-30	Normal Voltage	0.0418	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Test Conditions	Middle Channel	CDMA BC1 (1xEV-DO Rev. 0)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0032	PASS
40	Normal Voltage	0.0037	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0043	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0037	
-30	Normal Voltage	0.0037	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

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

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

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

ERP/EIRP

<Primary Antenna>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	31.88	1.5417	26.93	0.4932
Middle	GPRS class 8	32.15	1.6406	27.20	0.5248
Highest	(GT - LC = -2.8 dB)	31.83	1.5241	26.88	0.4875
Lowest	GSM850	25.69	0.3707	20.74	0.1186
Middle	EDGE class 8	25.65	0.3673	20.70	0.1175
Highest	(GT - LC = -2.8 dB)	25.57	0.3606	20.62	0.1153
Lowest	WCDMA Band V	24.02	0.2523	19.07	0.0807
Middle	RMC 12.2Kbps	24.07	0.2553	19.12	0.0817
Highest	(GT - LC = -2.8 dB)	24.06	0.2547	19.11	0.0815
Lowest	CDMA BC0	24.25	0.2661	19.30	0.0851
Middle	1xRTT	24.31	0.2698	19.36	0.0863
Highest	(GT - LC = -2.8 dB)	23.83	0.2415	18.88	0.0773
Lowest	CDMA BC0	24.35	0.2723	19.40	0.0871
Middle	1xEV-DO	24.40	0.2754	19.45	0.0881
Highest	(GT - LC = -2.8 dB)	23.92	0.2466	18.97	0.0789
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	28.73	0.7464	30.93	1.2388
Middle	GPRS class 8	28.99	0.7925	31.19	1.3152
Highest	(GT - LC = 2.2 dB)	28.94	0.7834	31.14	1.3002
Lowest	GSM1900	25.35	0.3428	27.55	0.5689
Middle	EDGE class 8	25.54	0.3581	27.74	0.5943
Highest	(GT - LC = 2.2 dB)	25.23	0.3334	27.43	0.5534
Lowest	WCDMA Band II	24.57	0.2864	26.77	0.4753
Middle	RMC 12.2Kbps	24.58	0.2871	26.78	0.4764
Highest	(GT - LC = 2.2 dB)	24.41	0.2761	26.61	0.4581
Lowest	CDMA BC1	24.67	0.2931	26.87	0.4864
Middle	1xRTT	24.68	0.2938	26.88	0.4875
Highest	(GT - LC = 2.2 dB)	24.58	0.2871	26.78	0.4764
Lowest	CDMA BC1	24.65	0.2917	26.85	0.4842
Middle	1xEV-DO	24.70	0.2951	26.90	0.4898
Highest	(GT - LC = 2.2 dB)	24.61	0.2891	26.81	0.4797
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	24.70	0.2951	25.90	0.3890
Middle	RMC 12.2Kbps	24.74	0.2979	25.94	0.3926
Highest	(GT - LC = 1.2 dB)	24.67	0.2931	25.87	0.3864
Limit	EIRP < 1W	Result		PASS	

<ASDIV Antenna>

Channel	Mode	Conducted		ERP	
		Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	GSM850	31.81	1.5171	26.16	0.4130
Middle	GPRS class 8	32.04	1.5996	26.39	0.4355
Highest	(GT - LC = -3.5 dB)	31.67	1.4689	26.02	0.3999
Lowest	GSM850	25.87	0.3864	20.22	0.1052
Middle	EDGE class 8	26.08	0.4055	20.43	0.1104
Highest	(GT - LC = -3.5 dB)	25.93	0.3917	20.28	0.1067
Lowest	WCDMA Band V	24.12	0.2582	18.47	0.0703
Middle	RMC 12.2Kbps	24.14	0.2594	18.49	0.0706
Highest	(GT - LC = -3.5 dB)	24.13	0.2588	18.48	0.0705
Lowest	CDMA BC0	24.36	0.2729	18.71	0.0743
Middle	1xRTT	24.42	0.2767	18.77	0.0753
Highest	(GT - LC = -3.5 dB)	24.26	0.2667	18.61	0.0726
Lowest	CDMA BC0	24.31	0.2698	18.66	0.0735
Middle	1xEV-DO	24.45	0.2786	18.80	0.0759
Highest	(GT - LC = -3.5 dB)	24.27	0.2673	18.62	0.0728
Limit	ERP < 7W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	GSM1900	28.91	0.7780	29.31	0.8531
Middle	GPRS class 8	29.00	0.7943	29.40	0.8710
Highest	(GT - LC = 0.4 dB)	28.86	0.7691	29.26	0.8433
Lowest	GSM1900	24.96	0.3133	25.36	0.3436
Middle	EDGE class 8	25.11	0.3243	25.51	0.3556
Highest	(GT - LC = 0.4 dB)	24.46	0.2793	24.86	0.3062
Lowest	WCDMA Band II	24.46	0.2793	24.86	0.3062
Middle	RMC 12.2Kbps	24.39	0.2748	24.79	0.3013
Highest	(GT - LC = 0.4 dB)	24.27	0.2673	24.67	0.2931
Lowest	CDMA BC1	24.58	0.2871	24.98	0.3148
Middle	1xRTT	24.47	0.2799	24.87	0.3069
Highest	(GT - LC = 0.4 dB)	24.25	0.2661	24.65	0.2917
Lowest	CDMA BC1	24.60	0.2884	25.00	0.3162
Middle	1xEV-DO	24.48	0.2805	24.88	0.3076
Highest	(GT - LC = 0.4 dB)	24.28	0.2679	24.68	0.2938
Limit	EIRP < 2W	Result		PASS	

Channel	Mode	Conducted		EIRP	
		Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	WCDMA Band IV	24.63	0.2904	25.43	0.3491
Middle	RMC 12.2Kbps	24.65	0.2917	25.45	0.3508
Highest	(GT - LC = 0.8 dB)	24.62	0.2897	25.42	0.3483
Limit	EIRP < 1W	Result		PASS	

Radiated Spurious Emission

<Primary Antenna>

<Ant. 0>

GPRS 850

GPRS 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-52.69	-13	-39.69	-66.17	-58.28	0.92	8.66	H
	2473	-47.93	-13	-34.93	-66.24	-55.30	1.14	10.66	H
	3297	-54.42	-13	-41.42	-74.57	-62.96	1.32	12.01	H
									H
									H
									H
	1648	-52.15	-13	-39.15	-65.1	-57.74	0.92	8.66	V
	2473	-52.11	-13	-39.11	-70.57	-59.48	1.14	10.66	V
	3297	-54.43	-13	-41.43	-75.06	-62.97	1.32	12.01	V
									V
									V
									V
Middle	1672	-51.91	-13	-38.91	-65.46	-57.59	0.93	8.75	H
	2512	-49.75	-13	-36.75	-68.09	-57.16	1.15	10.71	H
	3346	-54.54	-13	-41.54	-74.57	-63.19	1.33	12.13	H
									H
									H
									H
	1672	-52.19	-13	-39.19	-65.11	-57.87	0.93	8.75	V
	2512	-48.57	-13	-35.57	-67.11	-55.98	1.15	10.71	V
	3346	-53.63	-13	-40.63	-74.12	-62.28	1.33	12.13	V
									V
									V
									V

Highest	1698	-49.77	-13	-36.77	-63.39	-55.54	0.94	8.85	H
	2546	-45.01	-13	-32.01	-63.36	-52.45	1.16	10.76	H
	3395	-54.85	-13	-41.85	-74.78	-63.61	1.34	12.25	H
									H
									H
									H
	1698	-50.18	-13	-37.18	-63.08	-55.95	0.94	8.85	V
	2546	-51.78	-13	-38.78	-70.23	-59.22	1.16	10.76	V
	3395	-54.38	-13	-41.38	-74.74	-63.14	1.34	12.25	V
									V
									V
									V

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

EDGE 850

EDGE 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-60.80	-13	-47.80	-74.36	-66.39	0.92	8.66	H
	2472	-55.89	-13	-42.89	-74.2	-63.26	1.14	10.66	H
	3296	-55.05	-13	-42.05	-75.21	-63.59	1.32	12.01	H
									H
									H
									H
									H
	1648	-61.11	-13	-48.11	-74.06	-66.70	0.92	8.66	V
	2472	-55.96	-13	-42.96	-74.42	-63.33	1.14	10.66	V
	3296	-54.29	-13	-41.29	-74.92	-62.83	1.32	12.01	V
									V
									V
									V
									V
Middle	1672	-59.78	-13	-46.78	-73.33	-65.46	0.93	8.75	H
	2512	-56.72	-13	-43.72	-75.06	-64.13	1.15	10.71	H
	3344	-54.80	-13	-41.80	-74.84	-63.44	1.33	12.13	H
									H
									H
									H
									H
	1672	-61.38	-13	-48.38	-74.3	-67.06	0.93	8.75	V
	2512	-56.27	-13	-43.27	-74.8	-63.68	1.15	10.71	V
	3344	-54.66	-13	-41.66	-75.15	-63.30	1.33	12.13	V
									V
									V
									V
									V

Highest	1696	-58.26	-13	-45.26	-71.88	-64.02	0.94	8.84	H
	2544	-56.93	-13	-43.93	-75.27	-64.37	1.16	10.75	H
	3392	-54.23	-13	-41.23	-74.17	-62.98	1.34	12.24	H
									H
									H
									H
									H
	1696	-58.69	-13	-45.69	-71.6	-64.45	0.94	8.84	V
	2544	-56.30	-13	-43.30	-74.75	-63.74	1.16	10.75	V
	3392	-54.54	-13	-41.54	-74.91	-63.29	1.34	12.24	V
									V
									V
									V
									V

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

WCDMA Band V

WCDMA Band V									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1653	-60.16	-13	-47.16	-73.66	-65.77	0.92	8.68	H
	2479	-55.79	-13	-42.79	-74.11	-63.17	1.15	10.67	H
	3304	-54.85	-13	-41.85	-74.98	-63.40	1.32	12.03	H
									H
									H
									H
									H
	1653	-61.21	-13	-48.21	-74.16	-66.82	0.92	8.68	V
	2479	-55.64	-13	-42.64	-74.13	-63.02	1.15	10.67	V
	3304	-54.56	-13	-41.56	-75.15	-63.11	1.32	12.03	V
									V
									V
									V
									V
Middle	1673	-59.86	-13	-46.86	-73.41	-65.54	0.93	8.76	H
	2509	-55.43	-13	-42.43	-73.77	-62.84	1.15	10.71	H
	3346	-54.68	-13	-41.68	-74.71	-63.33	1.33	12.13	H
									H
									H
									H
									H
	1673	-61.24	-13	-48.24	-74.16	-66.92	0.93	8.76	V
	2509	-54.95	-13	-41.95	-73.49	-62.36	1.15	10.71	V
	3346	-54.50	-13	-41.50	-74.98	-63.15	1.33	12.13	V
									V
									V
									V
									V

Highest	1693	-60.49	-13	-47.49	-74.09	-66.24	0.94	8.83	H
	2540	-55.63	-13	-42.63	-73.97	-63.07	1.16	10.75	H
	3386	-55.43	-13	-42.43	-75.37	-64.17	1.34	12.23	H
									H
									H
									H
									H
	1693	-61.34	-13	-48.34	-74.24	-67.09	0.94	8.83	V
	2540	-56.61	-13	-43.61	-75.07	-64.05	1.16	10.75	V
	3386	-55.02	-13	-42.02	-75.4	-63.76	1.34	12.23	V
									V
									V
									V
									V

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

CDMA2000 BC0

CDMA2000 BC0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1649	-59.98	-13	-46.98	-73.46	-65.58	0.92	8.67	H
	2474	-48.83	-13	-35.83	-67.14	-56.20	1.14	10.66	H
	3298	-54.36	-13	-41.36	-74.51	-62.90	1.32	12.02	H
									H
									H
									H
									H
	1649	-60.52	-13	-47.52	-73.47	-66.12	0.92	8.67	V
	2474	-53.37	-13	-40.37	-71.83	-60.74	1.14	10.66	V
	3298	-54.18	-13	-41.18	-74.8	-62.72	1.32	12.02	V
									V
									V
									V
									V
Middle	1673	-59.69	-13	-46.69	-73.24	-65.37	0.93	8.76	H
	2509	-55.44	-13	-42.44	-73.78	-62.85	1.15	10.71	H
	3344	-54.05	-13	-41.05	-74.09	-62.69	1.33	12.13	H
									H
									H
									H
									H
	1673	-60.34	-13	-47.34	-73.26	-66.02	0.93	8.76	V
	2509	-55.64	-13	-42.64	-74.18	-63.05	1.15	10.71	V
	3344	-53.84	-13	-40.84	-74.33	-62.48	1.33	12.13	V
									V
									V
									V
									V

Highest	1696	-59.92	-13	-46.92	-73.54	-65.68	0.94	8.84	H
	2544	-56.25	-13	-43.25	-74.59	-63.69	1.16	10.75	H
	3393	-54.48	-13	-41.48	-74.41	-63.23	1.34	12.24	H
									H
									H
									H
									H
	1696	-58.91	-13	-45.91	-71.82	-64.67	0.94	8.84	V
	2544	-56.28	-13	-43.28	-74.73	-63.72	1.16	10.75	V
	3393	-53.96	-13	-40.96	-74.33	-62.71	1.34	12.24	V
									V
									V
									V
									V

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

<Ant. 2>

WCDMA Band IV

WCDMA Band IV									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3424	-53.87	-13	-40.87	-74.73	-64.84	1.35	12.32	H
	5137	-50.22	-13	-37.22	-76.68	-61.37	1.65	12.79	H
	6849	-46.32	-13	-33.32	-75.95	-56.69	1.74	12.11	H
									H
									H
									H
	3424	-52.79	-13	-39.79	-74.07	-63.76	1.35	12.32	V
	5137	-50.27	-13	-37.27	-76.48	-61.42	1.65	12.79	V
	6849	-46.83	-13	-33.83	-76.06	-57.20	1.74	12.11	V
									V
									V
									V
Middle	3465	-53.89	-13	-40.89	-75.16	-64.95	1.35	12.42	H
	5198	-50.25	-13	-37.25	-76.75	-61.47	1.66	12.88	H
	6930	-45.63	-13	-32.63	-75.61	-55.90	1.73	12.00	H
									H
									H
									H
									H
	3465	-53.40	-13	-40.40	-75.06	-64.46	1.35	12.42	V
	5198	-50.05	-13	-37.05	-76.39	-61.27	1.66	12.88	V
	6930	-45.96	-13	-32.96	-75.49	-56.23	1.73	12.00	V
									V
									V
									V
									V

Highest	3505	-53.05	-13	-40.05	-74.69	-64.19	1.36	12.50	H
	5257	-49.72	-13	-36.72	-76.41	-61.00	1.68	12.96	H
	7010	-45.33	-13	-32.33	-75.64	-55.49	1.73	11.88	H
									H
									H
									H
									H
	3505	-52.83	-13	-39.83	-74.81	-63.97	1.36	12.50	V
	5257	-50.05	-13	-37.05	-76.51	-61.33	1.68	12.96	V
	7010	-45.63	-13	-32.63	-75.46	-55.79	1.73	11.88	V
									V
									V
									V
									V

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

GPRS 1900

GPRS 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-43.08	-13	-30.08	-65.83	-54.29	1.41	12.62	H
	5550	-46.82	-13	-33.82	-74.54	-58.38	1.74	13.30	H
	7400	-43.55	-13	-30.55	-74.49	-52.87	1.94	11.26	H
									H
									H
									H
									H
	3700	-43.94	-13	-30.94	-66.83	-55.15	1.41	12.62	V
	5550	-47.79	-13	-34.79	-75.03	-59.35	1.74	13.30	V
	7400	-43.83	-13	-30.83	-74.61	-53.15	1.94	11.26	V
									V
									V
									V
									V
Middle	3760	-43.76	-13	-30.76	-66.72	-54.99	1.43	12.66	H
	5640	-47.76	-13	-34.76	-75.48	-59.33	1.73	13.30	H
	7520	-44.08	-13	-31.08	-74.4	-53.19	1.99	11.10	H
									H
									H
									H
									H
	3760	-47.67	-13	-34.67	-70.85	-58.90	1.43	12.66	V
	5640	-47.88	-13	-34.88	-75.19	-59.45	1.73	13.30	V
	7520	-44.23	-13	-31.23	-74.51	-53.34	1.99	11.10	V
									V
									V
									V
									V

Highest	3820	-43.93	-13	-30.93	-67.09	-55.18	1.44	12.69	H
	5730	-47.32	-13	-34.32	-75.43	-58.89	1.73	13.30	H
	7640	-44.30	-13	-31.30	-74.14	-53.42	2.01	11.13	H
									H
									H
									H
									H
	3820	-47.58	-13	-34.58	-70.97	-58.83	1.44	12.69	V
	5730	-45.60	-13	-32.60	-75.07	-57.17	1.73	13.30	V
	7640	-44.69	-13	-31.69	-74.43	-53.81	2.01	11.13	V
									V
									V
									V
									V

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

EDGE 1900

EDGE 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-42.39	-13	-29.39	-65.14	-53.60	1.41	12.62	H
	5550	-46.73	-13	-33.73	-74.45	-58.29	1.74	13.30	H
	7400	-43.32	-13	-30.32	-74.26	-52.64	1.94	11.26	H
									H
									H
									H
									H
	3700	-43.81	-13	-30.81	-66.7	-55.02	1.41	12.62	V
	5550	-47.47	-13	-34.47	-74.71	-59.03	1.74	13.30	V
	7400	-43.22	-13	-30.22	-74	-52.54	1.94	11.26	V
									V
									V
									V
									V
Middle	3760	-41.49	-13	-28.49	-64.45	-52.72	1.43	12.66	H
	5640	-47.65	-13	-34.65	-75.37	-59.22	1.73	13.30	H
	7520	-43.89	-13	-30.89	-74.21	-53.00	1.99	11.10	H
									H
									H
									H
									H
	3760	-38.65	-13	-25.65	-61.83	-49.88	1.43	12.66	V
	5640	-48.15	-13	-35.15	-75.46	-59.72	1.73	13.30	V
	7520	-44.32	-13	-31.32	-74.6	-53.43	1.99	11.10	V
									V
									V
									V
									V

Highest	3820	-43.08	-13	-30.08	-66.24	-54.33	1.44	12.69	H
	5730	-47.38	-13	-34.38	-75.49	-58.95	1.73	13.30	H
	7640	-44.44	-13	-31.44	-74.28	-53.56	2.01	11.13	H
									H
									H
									H
									H
	3820	-42.86	-13	-29.86	-66.25	-54.11	1.44	12.69	V
	5730	-47.72	-13	-34.72	-75.19	-59.29	1.73	13.30	V
	7640	-43.50	-13	-30.50	-73.24	-52.62	2.01	11.13	V
									V
									V
									V
									V

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

WCDMA Band II

WCDMA Band II									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3708	-47.74	-13	-34.74	-70.52	-58.95	1.41	12.62	H
	5556	-47.19	-13	-34.19	-74.89	-58.75	1.74	13.30	H
	7410	-43.64	-13	-30.64	-74.53	-52.94	1.94	11.24	H
									H
									H
									H
									H
	3708	-48.38	-13	-35.38	-71.31	-59.59	1.41	12.62	V
	5556	-47.54	-13	-34.54	-74.79	-59.10	1.74	13.30	V
	7410	-44.00	-13	-31.00	-74.74	-53.30	1.94	11.24	V
									V
									V
									V
									V
Middle	3760	-48.67	-13	-35.67	-71.63	-59.90	1.43	12.66	H
	5640	-47.72	-13	-34.72	-75.44	-59.29	1.73	13.30	H
	7520	-43.99	-13	-30.99	-74.31	-53.10	1.99	11.10	H
									H
									H
									H
									H
	3760	-49.21	-13	-36.21	-72.39	-60.44	1.43	12.66	V
	5640	-48.54	-13	-35.54	-75.85	-60.11	1.73	13.30	V
	7520	-44.35	-13	-31.35	-74.63	-53.46	1.99	11.10	V
									V
									V
									V
									V

Highest	3815	-48.18	-13	-35.18	-71.32	-59.43	1.44	12.69	H
	5722	-47.57	-13	-34.57	-75.65	-59.14	1.73	13.30	H
	7630	-45.13	-13	-32.13	-74.97	-54.25	2.01	11.13	H
									H
									H
									H
									H
	3815	-48.71	-13	-35.71	-72.09	-59.96	1.44	12.69	V
	5722	-48.48	-13	-35.48	-75.94	-60.05	1.73	13.30	V
	7630	-45.01	-13	-32.01	-74.77	-54.13	2.01	11.13	V
									V
									V
									V
									V

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

CDMA2000 BC1

CDMA2000 BC1									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-46.29	-13	-33.29	-69.05	-57.50	1.41	12.62	H
	5557	-47.10	-13	-34.10	-74.81	-58.66	1.74	13.30	H
	7405	-44.08	-13	-31.08	-74.99	-53.39	1.94	11.25	H
									H
									H
									H
									H
	3702	-47.66	-13	-34.66	-70.57	-58.87	1.41	12.62	V
	5557	-48.15	-13	-35.15	-75.39	-59.71	1.74	13.30	V
	7405	-43.84	-13	-30.84	-74.6	-53.15	1.94	11.25	V
									V
									V
									V
									V
Middle	3760	-46.08	-13	-33.08	-69.04	-57.31	1.43	12.66	H
	5640	-47.88	-13	-34.88	-75.6	-59.45	1.73	13.30	H
	7520	-44.51	-13	-31.51	-74.83	-53.62	1.99	11.10	H
									H
									H
									H
									H
	3760	-49.25	-13	-36.25	-72.43	-60.48	1.43	12.66	V
	5640	-48.35	-13	-35.35	-75.66	-59.92	1.73	13.30	V
	7520	-44.33	-13	-31.33	-74.61	-53.44	1.99	11.10	V
									V
									V
									V
									V

Highest	3817	-46.20	-13	-33.20	-69.35	-57.45	1.44	12.69	H
	5726	-47.37	-13	-34.37	-75.46	-58.94	1.73	13.30	H
	7635	-44.91	-13	-31.91	-74.75	-54.03	2.01	11.13	H
									H
									H
									H
									H
	3817	-45.51	-13	-32.51	-68.9	-56.76	1.44	12.69	V
	5726	-48.38	-13	-35.38	-75.84	-59.95	1.73	13.30	V
	7635	-45.20	-13	-32.20	-74.95	-54.32	2.01	11.13	V
									V
									V
									V
									V

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

<ASDIV Antenna>

<Ant. 1>

GPRS 850

GPRS 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-56.35	-13	-43.35	-69.83	-61.94	0.92	8.66	H
	2473	-44.66	-13	-31.66	-62.97	-52.03	1.14	10.66	H
	3297	-55.15	-13	-42.15	-75.3	-63.69	1.32	12.01	H
	4121	-46.06	-13	-33.06	-69.4	-55.22	1.47	12.78	H
									H
									H
	1648	-58.34	-13	-45.34	-71.29	-63.93	0.92	8.66	V
	2473	-44.60	-13	-31.60	-63.06	-51.97	1.14	10.66	V
	3297	-54.58	-13	-41.58	-75.21	-63.12	1.32	12.01	V
	4121	-45.47	-13	-32.47	-68.86	-54.63	1.47	12.78	V
									V
									V
Middle	1673	-51.40	-13	-38.40	-64.95	-57.08	0.93	8.76	H
	2509	-39.99	-13	-26.99	-58.33	-47.40	1.15	10.71	H
	3346	-54.16	-13	-41.16	-74.19	-62.81	1.33	12.13	H
	4182	-50.59	-13	-37.59	-74.01	-59.74	1.46	12.76	H
									H
									H
	1673	-51.67	-13	-38.67	-64.59	-57.35	0.93	8.76	V
	2509	-38.98	-13	-25.98	-57.52	-46.39	1.15	10.71	V
	3346	-53.43	-13	-40.43	-73.91	-62.08	1.33	12.13	V
	4182	-49.61	-13	-36.61	-73.16	-58.76	1.46	12.76	V
									V
									V

Highest	1698	-56.95	-13	-43.95	-70.57	-62.72	0.94	8.85	H
	2546	-41.89	-13	-28.89	-60.24	-49.33	1.16	10.76	H
	3395	-55.07	-13	-42.07	-75	-63.83	1.34	12.25	H
	4244	-45.72	-13	-32.72	-69.39	-54.87	1.45	12.75	H
									H
									H
	1698	-57.34	-13	-44.34	-70.24	-63.11	0.94	8.85	V
	2546	-42.64	-13	-29.64	-61.09	-50.08	1.16	10.76	V
	3395	-54.63	-13	-41.63	-74.99	-63.39	1.34	12.25	V
	4244	-44.19	-13	-31.19	-67.93	-53.34	1.45	12.75	V
									V
									V

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

EDGE 850

EDGE 850									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-54.55	-13	-41.55	-68.03	-60.14	0.92	8.66	H
	2472	-53.41	-13	-40.41	-71.72	-60.78	1.14	10.66	H
	3296	-54.73	-13	-41.73	-74.89	-63.27	1.32	12.01	H
									H
									H
									H
									H
	1648	-61.45	-13	-48.45	-74.4	-67.04	0.92	8.66	V
	2472	-56.15	-13	-43.15	-74.61	-63.52	1.14	10.66	V
	3296	-54.19	-13	-41.19	-74.82	-62.73	1.32	12.01	V
									V
									V
									V
									V
Middle	1672	-59.79	-13	-46.79	-73.34	-65.47	0.93	8.75	H
	2512	-52.59	-13	-39.59	-70.93	-60.00	1.15	10.71	H
	3344	-54.83	-13	-41.83	-74.87	-63.47	1.33	12.13	H
									H
									H
									H
									H
	1672	-53.80	-13	-40.80	-66.72	-59.48	0.93	8.75	V
	2512	-52.78	-13	-39.78	-71.31	-60.19	1.15	10.71	V
	3344	-54.48	-13	-41.48	-74.97	-63.12	1.33	12.13	V
									V
									V
									V
									V

Highest	1696	-61.06	-13	-48.06	-74.68	-66.82	0.94	8.84	H
	2544	-56.82	-13	-43.82	-75.16	-64.26	1.16	10.75	H
	3392	-54.89	-13	-41.89	-74.83	-63.64	1.34	12.24	H
									H
									H
									H
									H
	1696	-61.22	-13	-48.22	-74.13	-66.98	0.94	8.84	V
	2544	-56.48	-13	-43.48	-74.93	-63.92	1.16	10.75	V
	3392	-54.53	-13	-41.53	-74.9	-63.28	1.34	12.24	V
									V
									V
									V
									V

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

WCDMA Band V

WCDMA Band V									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1656	-61.05	-13	-48.05	-74.56	-66.67	0.92	8.69	H
	2480	-56.34	-13	-43.34	-74.66	-63.72	1.15	10.67	H
	3304	-55.22	-13	-42.22	-75.35	-63.77	1.32	12.03	H
									H
									H
									H
	1656	-61.50	-13	-48.50	-74.44	-67.12	0.92	8.69	V
	2480	-56.14	-13	-43.14	-74.63	-63.52	1.15	10.67	V
	3304	-54.56	-13	-41.56	-75.16	-63.11	1.32	12.03	V
									V
									V
									V
Middle	1672	-60.52	-13	-47.52	-74.07	-66.20	0.93	8.75	H
	2512	-56.53	-13	-43.53	-74.87	-63.94	1.15	10.71	H
	3346	-54.97	-13	-41.97	-75.01	-63.62	1.33	12.13	H
									H
									H
									H
	1672	-61.20	-13	-48.20	-74.12	-66.88	0.93	8.75	V
	2512	-56.42	-13	-43.42	-74.95	-63.83	1.15	10.71	V
	3344	-54.63	-13	-41.63	-75.12	-63.27	1.33	12.13	V
									V
									V
									V

Highest	1693	-60.56	-13	-47.56	-74.18	-66.31	0.94	8.83	H
	2540	-56.95	-13	-43.95	-75.29	-64.39	1.16	10.75	H
	3386	-55.05	-13	-42.05	-75	-63.79	1.34	12.23	H
									H
									H
									H
	1696	-61.35	-13	-48.35	-74.26	-67.11	0.94	8.84	V
	2536	-56.77	-13	-43.77	-75.24	-64.20	1.16	10.74	V
	3384	-54.74	-13	-41.74	-75.13	-63.47	1.34	12.22	V
									V
									V
									V

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

CDMA2000 BC0

CDMA2000 BC0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1649	-59.89	-13	-46.89	-73.37	-65.49	0.92	8.67	H
	2474	-45.53	-13	-32.53	-63.84	-52.90	1.14	10.66	H
	3298	-54.60	-13	-41.60	-74.75	-63.14	1.32	12.02	H
									H
									H
									H
									H
	1649	-61.26	-13	-48.26	-74.21	-66.86	0.92	8.67	V
	2474	-53.20	-13	-40.20	-71.66	-60.57	1.14	10.66	V
	3298	-54.11	-13	-41.11	-74.73	-62.65	1.32	12.02	V
									V
									V
									V
									V
Middle	1673	-59.11	-13	-46.11	-72.66	-64.79	0.93	8.76	H
	2509	-48.51	-13	-35.51	-66.85	-55.92	1.15	10.71	H
	3344	-54.30	-13	-41.30	-74.34	-62.94	1.33	12.13	H
									H
									H
									H
									H
	1673	-60.91	-13	-47.91	-73.83	-66.59	0.93	8.76	V
	2509	-55.86	-13	-42.86	-74.4	-63.27	1.15	10.71	V
	3344	-54.01	-13	-41.01	-74.5	-62.65	1.33	12.13	V
									V
									V
									V
									V

Highest	1696	-59.32	-13	-46.32	-72.94	-65.08	0.94	8.84	H
	2544	-51.12	-13	-38.12	-69.46	-58.56	1.16	10.75	H
	3393	-54.72	-13	-41.72	-74.65	-63.47	1.34	12.24	H
									H
									H
									H
									H
	1696	-60.81	-13	-47.81	-73.72	-66.57	0.94	8.84	V
	2544	-55.60	-13	-42.60	-74.05	-63.04	1.16	10.75	V
	3393	-54.27	-13	-41.27	-74.63	-63.02	1.34	12.24	V
									V
									V
									V
									V

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

<Ant. 0>

WCDMA Band IV

WCDMA Band IV									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3424	-53.87	-13	-40.87	-74.73	-64.84	1.35	12.32	H
	5137	-50.22	-13	-37.22	-76.68	-61.37	1.65	12.79	H
	6849	-46.32	-13	-33.32	-75.95	-56.69	1.74	12.11	H
									H
									H
									H
	3424	-52.79	-13	-39.79	-74.07	-63.76	1.35	12.32	V
	5137	-50.27	-13	-37.27	-76.48	-61.42	1.65	12.79	V
	6849	-46.83	-13	-33.83	-76.06	-57.20	1.74	12.11	V
									V
									V
									V
Middle	3465	-53.89	-13	-40.89	-75.16	-64.95	1.35	12.42	H
	5198	-50.25	-13	-37.25	-76.75	-61.47	1.66	12.88	H
	6930	-45.63	-13	-32.63	-75.61	-55.90	1.73	12.00	H
									H
									H
									H
									H
	3465	-53.40	-13	-40.40	-75.06	-64.46	1.35	12.42	V
	5198	-50.05	-13	-37.05	-76.39	-61.27	1.66	12.88	V
	6930	-45.96	-13	-32.96	-75.49	-56.23	1.73	12.00	V
									V
									V
									V
									V

Highest	3505	-53.05	-13	-40.05	-74.69	-64.19	1.36	12.50	H
	5257	-49.72	-13	-36.72	-76.41	-61.00	1.68	12.96	H
	7010	-45.33	-13	-32.33	-75.64	-55.49	1.73	11.88	H
									H
									H
									H
									H
	3505	-52.83	-13	-39.83	-74.81	-63.97	1.36	12.50	V
	5257	-50.05	-13	-37.05	-76.51	-61.33	1.68	12.96	V
	7010	-45.63	-13	-32.63	-75.46	-55.79	1.73	11.88	V
									V
									V
									V
									V

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

GPRS 1900

GPRS 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-53.01	-13	-40.01	-75.76	-64.22	1.41	12.62	H
	5550	-48.17	-13	-35.17	-75.89	-59.73	1.74	13.30	H
	7400	-44.38	-13	-31.38	-75.32	-53.70	1.94	11.26	H
									H
									H
									H
									H
	3700	-52.06	-13	-39.06	-74.95	-63.27	1.41	12.62	V
	5550	-48.55	-13	-35.55	-75.79	-60.11	1.74	13.30	V
	7400	-44.61	-13	-31.61	-75.39	-53.93	1.94	11.26	V
									V
									V
									V
									V
Middle	3760	-52.54	-13	-39.54	-75.5	-63.77	1.43	12.66	H
	5640	-48.52	-13	-35.52	-76.24	-60.09	1.73	13.30	H
	7520	-44.88	-13	-31.88	-75.2	-53.99	1.99	11.10	H
									H
									H
									H
									H
	3760	-52.02	-13	-39.02	-75.2	-63.25	1.43	12.66	V
	5640	-49.01	-13	-36.01	-76.32	-60.58	1.73	13.30	V
	7520	-45.31	-13	-32.31	-75.59	-54.42	1.99	11.10	V
									V
									V
									V
									V

Highest	3820	-52.00	-13	-39.00	-75.16	-63.25	1.44	12.69	H
	5730	-48.53	-13	-35.53	-76.64	-60.10	1.73	13.30	H
	7640	-45.12	-13	-32.12	-74.96	-54.24	2.01	11.13	H
									H
									H
									H
									H
	3820	-50.50	-13	-37.50	-73.89	-61.75	1.44	12.69	V
	5730	-49.15	-13	-36.15	-76.62	-60.72	1.73	13.30	V
	7640	-45.59	-13	-32.59	-75.33	-54.71	2.01	11.13	V
									V
									V
									V
									V

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

EDGE 1900

EDGE 1900									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-52.68	-13	-39.68	-75.43	-63.89	1.41	12.62	H
	5550	-47.15	-13	-34.15	-74.87	-58.71	1.74	13.30	H
	7400	-43.57	-13	-30.57	-74.51	-52.89	1.94	11.26	H
									H
									H
									H
									H
	3700	-52.79	-13	-39.79	-75.68	-64.00	1.41	12.62	V
	5550	-47.81	-13	-34.81	-75.05	-59.37	1.74	13.30	V
	7400	-44.01	-13	-31.01	-74.79	-53.33	1.94	11.26	V
									V
									V
									V
									V
Middle	3760	-52.15	-13	-39.15	-75.11	-63.38	1.43	12.66	H
	5640	-47.52	-13	-34.52	-75.24	-59.09	1.73	13.30	H
	7520	-44.36	-13	-31.36	-74.68	-53.47	1.99	11.10	H
									H
									H
									H
									H
	3760	-52.19	-13	-39.19	-75.37	-63.42	1.43	12.66	V
	5640	-48.35	-13	-35.35	-75.66	-59.92	1.73	13.30	V
	7520	-44.30	-13	-31.30	-74.58	-53.41	1.99	11.10	V
									V
									V
									V
									V

Highest	3820	-51.88	-13	-38.88	-75.04	-63.13	1.44	12.69	H
	5730	-47.18	-13	-34.18	-75.29	-58.75	1.73	13.30	H
	7640	-44.44	-13	-31.44	-74.28	-53.56	2.01	11.13	H
									H
									H
									H
									H
	3820	-51.26	-13	-38.26	-74.65	-62.51	1.44	12.69	V
	5730	-47.86	-13	-34.86	-75.33	-59.43	1.73	13.30	V
	7640	-44.75	-13	-31.75	-74.49	-53.87	2.01	11.13	V
									V
									V
									V
									V

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

WCDMA Band II

WCDMA Band II									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3704	-52.75	-13	-39.75	-75.52	-63.96	1.41	12.62	H
	5557	-47.62	-13	-34.62	-75.32	-59.18	1.74	13.30	H
	7409	-43.68	-13	-30.68	-74.57	-52.98	1.94	11.25	H
									H
									H
									H
									H
	3704	-52.60	-13	-39.60	-75.52	-63.81	1.41	12.62	V
	5557	-47.82	-13	-34.82	-75.07	-59.38	1.74	13.30	V
	7409	-43.59	-13	-30.59	-74.33	-52.89	1.94	11.25	V
									V
									V
									V
									V
Middle	3760	-52.30	-13	-39.30	-75.26	-63.53	1.43	12.66	H
	5640	-47.89	-13	-34.89	-75.61	-59.46	1.73	13.30	H
	7520	-44.18	-13	-31.18	-74.5	-53.29	1.99	11.10	H
									H
									H
									H
									H
	3760	-52.02	-13	-39.02	-75.2	-63.25	1.43	12.66	V
	5640	-47.88	-13	-34.88	-75.19	-59.45	1.73	13.30	V
	7520	-44.29	-13	-31.29	-74.57	-53.40	1.99	11.10	V
									V
									V
									V
									V

Highest	3815	-51.90	-13	-38.90	-75.04	-63.15	1.44	12.69	H
	5722	-47.17	-13	-34.17	-75.25	-58.74	1.73	13.30	H
	7630	-44.36	-13	-31.36	-74.2	-53.48	2.01	11.13	H
									H
									H
									H
									H
	3815	-51.25	-13	-38.25	-74.63	-62.50	1.44	12.69	V
	5722	-47.91	-13	-34.91	-75.37	-59.48	1.73	13.30	V
	7630	-44.39	-13	-31.39	-74.15	-53.51	2.01	11.13	V
									V
									V
									V
									V

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

CDMA2000 BC1

CDMA2000 BC1									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3704	-52.85	-13	-39.85	-75.62	-64.06	1.41	12.62	H
	5557	-47.53	-13	-34.53	-75.23	-59.09	1.74	13.30	H
	7410	-43.73	-13	-30.73	-74.62	-53.03	1.94	11.24	H
									H
									H
									H
									H
	3704	-52.47	-13	-39.47	-75.39	-63.68	1.41	12.62	V
	5557	-48.22	-13	-35.22	-75.47	-59.78	1.74	13.30	V
	7410	-44.27	-13	-31.27	-75.01	-53.57	1.94	11.24	V
									V
									V
									V
									V
Middle	3760	-52.46	-13	-39.46	-75.42	-63.69	1.43	12.66	H
	5640	-48.09	-13	-35.09	-75.81	-59.66	1.73	13.30	H
	7520	-44.36	-13	-31.36	-74.68	-53.47	1.99	11.10	H
									H
									H
									H
									H
	3760	-52.40	-13	-39.40	-75.58	-63.63	1.43	12.66	V
	5640	-48.31	-13	-35.31	-75.62	-59.88	1.73	13.30	V
	7520	-44.33	-13	-31.33	-74.61	-53.44	1.99	11.10	V
									V
									V
									V
									V

Highest	3819	-51.99	-13	-38.99	-75.14	-63.24	1.44	12.69	H
	5726	-47.71	-13	-34.71	-75.8	-59.28	1.73	13.30	H
	7635	-45.01	-13	-32.01	-74.85	-54.13	2.01	11.13	H
									H
									H
									H
									H
	3819	-51.55	-13	-38.55	-74.94	-62.80	1.44	12.69	V
	5726	-48.12	-13	-35.12	-75.58	-59.69	1.73	13.30	V
	7635	-45.19	-13	-32.19	-74.94	-54.31	2.01	11.13	V
									V
									V
									V
									V

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

———THE END———