



RADIO TEST REPORT

Report No: STS1911194W01

Issued for

Sun Cupid Technology (HK) Ltd.

16/F, CEO Tower, 77 Wing Hong St, Cheung Sha Wan, Kowloon, Hong Kong, China.

Product Name:	Smart phone
Brand Name:	NUU
Model Name:	X6
Series Model:	N/A
FCC ID:	2ADINS5702L
Test Standard:	FCC Part 22H and 24E

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TEST RESULT CERTIFICATION

Applicant's Name Sun Cupid Technology (HK) Ltd.

Hong Kong, China.

Manufacture's Name Sun Cupid Technology (HK) Ltd.

Hong Kong, China.

Product Description

Product Name Smart phone

Brand Name: NUU

Model Name: X6

Series Model: N/A

Test Standards FCC Part 22H and 24E

Test Procedure KDB 971168 D01 v03r01,ANSI C63.26(2015)

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test.....

Date (s) of performance of tests .: 12 Nov. 2019 ~ 21 Nov. 2019

Date of Issue 26 Nov. 2019

Test Result Pass

Testing Engineer :

(Chris Chen)

Technical Manager :

(Sunday Hu)

(Vita Li)

Authorized Signatory :



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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	26 Nov. 2019	STS1911194W01	ALL	Initial Issue





SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

The radiated emission testing was performed according to the procedures of KDB 971168 D01 v03r01 and ANSI C63.26(2015)

FCC Rules	Test Description	Test Limit	Test Result	Reference
2.1046	Conducted OutputPower	Reporting Only	PASS	
22.913d 24.232d	Peak-to-AverageRatio	< 13 dB	PASS	
2.1046 22.913 24.232	Effective Radiated Power/Equivalent Isotropic Radiated Power	< 7 Watts max. ERP(Part 22) < 2 Watts max. EIRP(Part 24)	PASS	
2.1049 22.917 24.238	Occupied Bandwidth	Reporting Only	PASS	
2.1055 22.355 24.235	Frequency Stability	< 2.5 ppm (Part 22) Emission must remain in band (Part 24)	PASS	
2.1051 22.917 24.238	Spurious Emission at Antenna Terminals	< 43+10log10(P[Watts])	PASS	
2.1053 22.917 24.238	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	
2.1051 22.917 24.238	Band Edge	< 43+10log10(P[Watts])	PASS	



1 INTRODUCTION

1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add.: A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ,

Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569 IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95% level of confidence. The measurement data shown herein meets or exceeds the UCISPR measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

No.	Item	Uncertainty
1	RF output power, conducted	±0.68dB
2	Unwanted Emissions, conducted	±2.988dB
3	All emissions, radiated 30-1GHz	±6.7dB
4	All emissions, radiated 1G-6GHz	±5.5dB
5	All emissions, radiated>6G	±5.8dB
6	Conducted Emission (9KHz-150KHz)	±4.43dB
7	Conducted Emission (150KHz-30MHz)	±5dB



2 PRODUCT INFORMATION

Product Name	Smart phone
Trade Name	NUU
Model Name	X6
Series Model	N/A
Model Difference	N/A
Tx Frequency:	GSM/GPRS/EDGE: 850: 824 MHz ~ 849MHz 1900: 1850 MHz ~ 1910MHz WCDMA: Band V: 824 MHz ~ 849 MHz Band II: 1850 MHz ~ 1910 MHz
Rx Frequency:	GSM/GPRS/EDGE: 850: 869 MHz ~ 894 MHz 1900: 1930 MHz ~ 1990MHz WCDMA: Band V: 869 MHz ~ 894 MHz Band II: 1930 MHz ~ 1990 MHz
Max RF Output Power:	GSM850(1-Slot):31.67dBm, GSM1900(1-Slot):28.45dBm GPRS850(1-Slot):28.17dBm, GPRS1900(1-Slot):24.81dBm GPRS850(2-Slot):27.75dBm, GPRS1900(2-Slot):25.39Bm GPRS850(3-Slot):27.32dBm, GPRS1900(3-Slot):24.34dBm GPRS850(4-Slot):26.88dBm, GPRS1900(4-Slot):23.91dBm EDGE 850(1-Slot):28.15dBm, EDGE 1900(1-Slot):24.70dBm EDGE 850(2-Slot):27.41dBm, EDGE 1900(2-Slot):23.94dBm EDGE 850(3-Slot):26.66dBm, EDGE 1900(3-Slot):23.21dBm EDGE 850(4-Slot):22.46dBm, EDGE 1900(4-Slot):22.46dBm WCDMA Band V:21.35dBm, WCDMA Band II:22.36dBm
Type of Emission:	GSM(850): 318KGXW; GSM(1900): 319KGXW GPRS(850): 324KGXW; GPRS(1900): 320KGXW EDGE(850): 322KG7W; EDGE(1900): 321KG7W WCDMA850: 4M68F9W WCDMA1900: 4M68F9W
Modulation Characteristics:	GMSK for GSM/GPRS; GMSK and 8PSK for EDGE WCDMA: QPSK; HSDPA:QPSK/16QAM; HSUPA:BPSK
SIM Card:	SIM 1 and SIM 2 is a chipset unit and tested as single chipset, SIM 1 is used to tested
Antenna:	PIFA Antenna
Antenna gain:	GSM 850: -2.03dBi ,PCS 1900:-0.21dBiWCDMA 850: -2.03dBi, WCDMA1900:0.36dBi,
Battery parameter:	Rated Voltage: 3.8V Charge Limit: 4.35V Capacity: 2800mAh
Adapter:	Input: AC100-240V, 0.2A, 50/60Hz Output: 5.0V, 1.0A
GPRS/EDGE Class:	Multi-Class12
Extreme Vol. Limits:	DC 3.4V~ DC 4.35V(Normal: DC 3.8V)



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Extreme Temp. Tolerance:	-30℃ to +50℃
Hardware version number:	N/A
Software version number:	N/A

^{**} Note: The High Voltage 4.35V and Low Voltage 3.4V was declared by manufacturer, The EUT couldn't be operate normally with higher or lower voltage.





3 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 and ANSI C63.26 2015 Power Meas. License Digital Systems with maximum output power.

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

Radiated emissions were investigated as following frequency range:

- 1. 30 MHz to 10th harmonic for GSM850 and WCDMA Band V.
- 2. 30 MHz to 10th harmonic for GSM1900 and WCDMA Band II.

All modes and data rates and positions were investigated.

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

	TEST MODES		
BAND	RADIATED TCS	CONDUCTED TCS	
GSM 850	GSM LINK GPRS/EDGE CLASS 12 LINK	GSM LINK GPRS/EDGE CLASS 12 LINK	
GSM 1900	GSM LINK GPRS/EDGE CLASS 12 LINK	GSM LINK GPRS/EDGE CLASS 12 LINK	
WCDMA BAND V	RMC 12.2KBPS LINK	RMC 12.2KBPS LINK	
WCDMA BAND II	RMC 12.2KBPS LINK	RMC 12.2KBPS LINK	



4 MEASUREMENT INSTRUMENTS

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2019.07.29	2020.07.28
Signal Analyzer	Agilent	N9020A	MY51110105	2019.03.02	2020.03.01
Wireless Communications Test Set	R&S	CMW 500	133884	2019.03.02	2020.03.01
Bilog Antenna	TESEQ	CBL6111D	34678	2017.11.02	2020.11.01
Horn Antenna	SCHWARZBECK	BBHA 9120D(1201)	9120D-1343	2018.10.19	2021.10.18
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2018.03.11	2021.03.10
Pre-Amplifier (0.1M-3GHz)	EM	EM330	060665	2019.10.09	2020.10.08
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2019.10.09	2020.10.08
turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
Temperature & Humidity	HH660	Mieo	N/A	2018.10.11	2019.10.10
Test SW	BULUN	BL410-E/18.905			

RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Universal Radio communication tester	R&S	CMU200	11764	2019.10.09	2020.10.08
Wireless Communications Test Set	R&S	CMW 500	133884	2019.03.02	2020.03.01
Signal Analyzer	Agilent	N9020A	MY49100060	2019.10.09	2020.10.08
Temperature & Humidity	HH660	Mieo	N/A	2019.10.12	2020.10.11
Test SW	FARAD		LZ-RF /Lz	Rf-3A3	

Equipment with a calibration date of "NCR" shown in this list was not used to make direct calibrated measurements.



5 TEST ITEMS

5.1 CONDUCTED OUTPUT POWER

Test overview

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.

Test procedures

- 1. The transmitter output port was connected to the system simulator.
- 2. Set eut at maximum power through the system simulator.
- 3. Select lowest, middle, and highest channels for each band and different modulation.
- 4. Measure and record the power level from the system simulator.

Test setup





5.2 PEAK TO AVERAGE RATIO

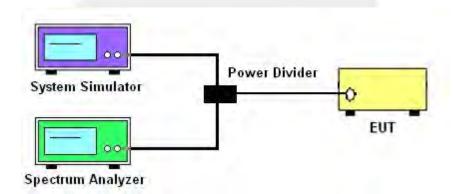
TEST OVERVIEW

According to §24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 db.

TEST PROCEDURES

- 1. The testing follows fcckdb 971168 v03r01 section
- 2. The eut was connected to the and peak and av system simulator& spectrum analysis reads
- 3. Select lowest, middle, and highest channels for each band and different modulation.
- 4. Set the test probe and measure average power of the spectrum analysis

TEST SETUP





5.3 TRANSMITTER RADIATED POWER (EIRP/ERP) TEST OVERVIEW

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI C63.26 2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

TEST PROCEDURE

- 1. The testing follows FCC KDB 971168 Section 5.8 and ANSI C63.26-2015 Section 5.2.
- 2. The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.
- 3. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
- 4. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
- 5. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a nonradiating cable. The absolute levels of the spurious emissions were measured by the substitution.
- 6. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to ANSI C63.26-2015. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. Tx Cable loss + Substitution antenna gain Analyzer reading. Then the EUT's EIRP/ERP was calculated with the correction factor, ERP/EIRP = P.SG + GT LC

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMe as, typically dBW or dBm);

PMeas(PK) = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.



5.4 OCCUPIED BANDWIDTH

TEST OVERVIEW

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured.

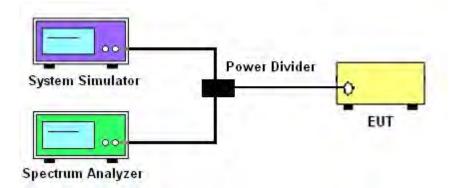
The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth)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

All modes of operation were investigated and the worst case configuration results are reported in this section.

TEST PROCEDURE

- 1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
- 2. RBW = 1 5% of the expected OBW
- 3. VBW ≥ $3 \times RBW$
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep = auto couple
- 7. The trace was allowed to stabilize
- 8. If necessary, steps 2 7 were repeated after changing the RBW such that it would be within
- 1 5% of the 99% occupied bandwidth observed in Step 7

TEST SETUP





5.5 FREQUENCY STABILITY

Test Overview

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26 2015. The frequency stability of the transmitter is measured by:

- a.) Temperature: The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Part 22, the frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5 ppm) of the center frequency. For Part 24 the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Procedure

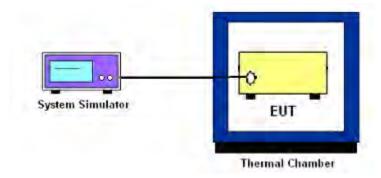
Temperature Variation

- 1. The testing follows fcckdb 971168 D01 section 9.0
- 2. The EUT was set up in the thermal chamber and connected with the system simulator.
- 3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
- 4. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

Voltage Variation

- 1. The testing follows FCC KDB 971168 D01 Section 9.0.
- 2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
- 3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
- 4. The variation in frequency was measured for the worst case.

TEST SETUP





5.6 SPURIOUS EMISSIONS AT ANTENNA TERMINALS Test Overview

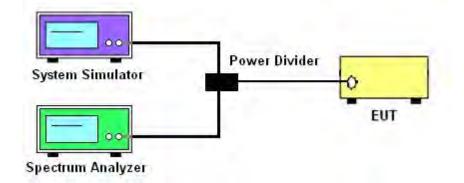
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

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

Test procedure

- 1. The testing FCC KDB 971168 D01 v03r01 Section 6.0. and ANSI C63.26-2015-Section 5.5
- 2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
- 3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 4. The middle channel for the highest RF power within the transmitting frequency was measured.
- 5. The conducted spurious emission for the whole frequency range was taken.
- 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 7. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)
- = P(W) [43 + 10log(P)] (dB)
- = [30 + 10log(P)] (dBm) [43 + 10log(P)] (dB)
- = -13dBm.

Test Setup





5.7 BAND EDGE

OVERVIEW

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level of any spurious emission is 43 + log10(P[Watts]), where P is the transmitter power in Watts.

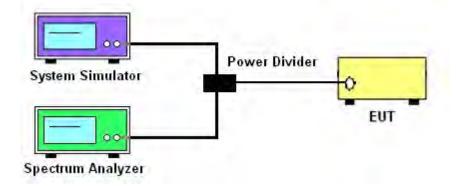
TEST PROCEDURE

- 1.The testing FCC KDB 971168 D01 v03r01 Section 6.0. and ANSI C63.26-2015-Section 5.7
- 2. Start and stop frequency were set such that the band edge would be placed in the center of the Plot.
- 3. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
- 4. 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.

- 5. The band edges of low and high channels for the highest RF powers were measured.
- 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 7. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)
- = P(W) [43 + 10log(P)] (dB)
- = [30 + 10log(P)] (dBm) [43 + 10log(P)] (dB)
- = -13dBm.

TEST SETUP





5.8 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

Test overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signalsoperating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarizedhorn antennas. All measurements are performed as peak measurements while the EUT isoperating at maximum power and at the appropriate frequencies.

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

Test procedure

- 1. The testing FCC KDB 971168 D01 Section 5.8 and ANSI C63.26-2015-Section 5.5.
- 2. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
- 3. VBW ≥ 3 x RBW
- 4. Span = 1.5 times the OBW
- 5.No. of sweep points > 2 x span/RBW
- 6. Detector = Peak
- 7. Trace mode = max hold
- 8. The trace was allowed to stabilize
- 9. Effective Isotropic Spurious Radiation was measured by substitution method according to TIA/EIA-603-D. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. Tx Cable loss + Substitution antenna gain Analyzer reading. Then the EUT's EIRP/ERP was calculated with the correction factor,

ERP/EIRP = P.SG + GT - LC

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, t ypically dBW or dBm);

P.SG = measured transmitter output power or PSD, in dBm or dBW;

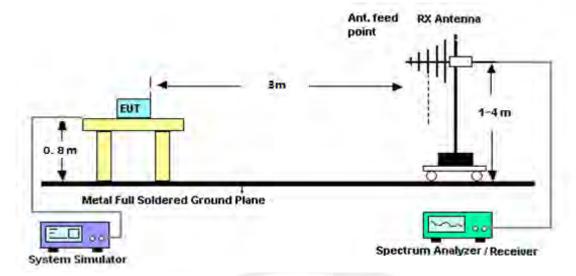
GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

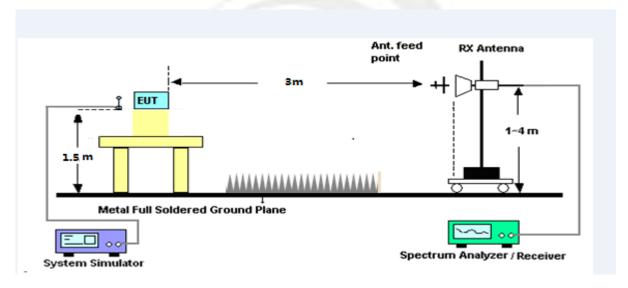


TEST SETUP

For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz





APPENDIX A.TESTRESULT A1.CONDUCTED OUTPUT POWER GSM 850:

	GSM 850	
Mode	Frequency (MHz)	AVG Power(dBm)
GSM	824.2	<mark>31.67</mark>
(GMSK,1-Slot)	836.6	31.56
(GIVISK, 1-SIUL)	848.8	31.51
GPRS	824.2	28.17
(GMSK,1-Slot)	836.6	28.09
(GIVISIX, 1-3101)	848.8	28.06
GPRS	824.2	27.75
(GMSK,2-Slot)	836.6	27.62
(GIVISK,2-SIUL)	848.8	27.59
GPRS	824.2	27.32
(GMSK,3-Slot)	836.6	27.19
(GIVISK,3-3IUL)	848.8	27.09
GPRS	824.2	26.88
(GMSK,4-Slot)	836.6	26.72
(GM3K,4-3l0t)	848.8	26.64
EGPRS	824.2	28.15
(8PSK,1-Slot)	836.6	28.05
(OF 3R, 1-3l0t)	848.8	28.01
EGPRS	824.2	27.41
	836.6	27.28
(8PSK,2-Slot)	848.8	27.25
EGPRS	824.2	26.66
	836.6	26.51
(8PSK,3-Slot)	848.8	26.46
FCDDS	824.2	25.89
EGPRS	836.6	25.79
(8PSK,4-Slot)	848.8	25.74



PCS 1900:

	PCS 1900	
Mode	Frequency (MHz)	AVG Power(dBm)
GSM	1850.2	<mark>28.45</mark>
(GMSK,1-Slot)	1880.0	28.30
(GIVISIX, 1-SIOL)	1909.8	28.22
GPRS	1850.2	24.78
	1880.0	24.79
(GMSK,1-Slot)	1909.8	24.81
CDDC	1850.2	24.29
GPRS	1880.0	24.34
(GMSK,2-Slot)	1909.8	24.32
CDDC	1850.2	23.85
GPRS	1880.0	23.84
(GMSK,3-Slot)	1909.8	23.91
ODDO	1850.2	23.39
GPRS	1880.0	23.37
(GMSK,4-Slot)	1909.8	23.46
50000	1850.2	24.70
EGPRS	1880.0	24.63
(8PSK,1-Slot)	1909.8	24.62
ECDDC	1850.2	23.94
EGPRS	1880.0	23.87
(8PSK,2-Slot)	1909.8	23.88
FORRO	1850.2	23.21
EGPRS	1880.0	23.16
(8PSK,3-Slot)	1909.8	23.11
FODDO	1850.2	22.46
EGPRS	1880.0	22.39
(8PSK,4-Slot)	1909.8	22.35



UMTS BAND V

	UMTS BAND V						
Mode	Frequency(MHz)	AVG Power					
WCDMA 850	826.4	21.09					
RMC	836.6	21.06					
RIVIC	846.6	<mark>21.35</mark>					
HSDPA	826.4	19.91					
Subtest 1	836.6	20.00					
Sublest I	846.6	20.24					
HSDPA	826.4	19.44					
Subtest 2	836.6	19.52					
Sublest 2	846.6	19.82					
HSDPA	826.4	19.02					
Subtest 3	836.6	19.04					
Sublest 3	846.6	19.37					
HSDPA	826.4	18.62					
Subtest 4	836.6	18.65					
Sublest 4	846.6	19.04					
HSUPA	826.4	19.90					
Subtest 1	836.6	20.00					
Sublest 1	846.6	20.20					
HSUPA	826.4	19.03					
Subtest 2	836.6	19.00					
Sublest 2	846.6	19.21					
HSUPA	826.4	18.85					
Subtest 3	836.6	18.59					
Sublest 3	846.6	18.73					
HSUPA	826.4	18.42					
Subtest 4	836.6	18.22					
3uviesi 4	846.6	18.33					
HSUPA	826.4	17.00					
Subtest 5	836.6	16.74					
Sublest 5	846.6	16.89					



UMTS BAND II

UMTS BAND II						
Mode	Frequency(MHz)	AVG Power				
WCDMA 1900	1852.4	<mark>22.36</mark>				
RMC	1880	21.58				
RIVIC	1907.6	21.97				
HSDPA —	1852.4	19.40				
Subtest 1	1880	19.34				
Sublest 1	1907.6	19.47				
HSDPA —	1852.4	18.96				
Subtest 2	1880	18.87				
Sublest 2	1907.6	19.06				
HCDDA	1852.4	18.57				
HSDPA Subtest 3	1880	18.46				
Sublest 3	1907.6	18.69				
HSDPA —	1852.4	18.08				
Subtest 4	1880	18.07				
Sublest 4	1907.6	18.22				
HSUPA -	1852.4	19.36				
Subtest 1	1880	19.30				
Sublest 1	1907.6	19.40				
HSUPA -	1852.4	18.46				
Subtest 2	1880	18.39				
Sublest 2	1907.6	18.48				
HCLIDA	1852.4	18.33				
HSUPA Subtest 3	1880	17.94				
Sublest 3	1907.6	18.11				
HCLIDA	1852.4	17.86				
HSUPA — Subtest 4 —	1880	17.48				
Sublest 4	1907.6	17.68				
HCLIDA	1852.4	16.46				
HSUPA — Subtest 5 —	1880	16.04				
Sublest 5	1907.6	16.26				



A2. PEAK-TO-AVERAGE RADIO

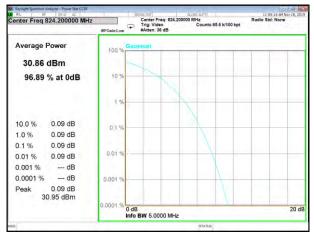
GSM 850					
Mode	Frequency (MHz) PAF				
	824.2	0.09			
GSM 850	836.6	0.09			
	848.8	0.09			
	824.2	0.10			
GPRS 850	836.6	0.10			
	848.8	0.09			
	824.2	3.12			
EGPRS 850	836.6	3.08			
	848.8	3.16			

PCS 1900					
Mode	Frequency (MHz)	PAR			
	1850.2	0.06			
PCS1900	1880	0.07			
	1909.8	0.06			
	1850.2	0.08			
GPRS1900	1880	0.07			
	1909.8	0.08			
	1850.2	2.89			
EGPRS1900	1880	2.92			
	1909.8	3.00			

	UMTS Band II	
Mode	Frequency (MHz)	PAR
WCDMA 1900	1852.4	3.17
RMC	1880	3.06
	1907.6	3.07
	1852.4	3.21
HSDPA 1900	1880	3.46
	1907.6	3.48
	1852.4	3.58
HSUPA 1900	1880	3.37
	1907.6	3.33

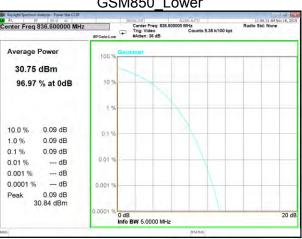
UMTS Band V						
Mode	Frequency (MHz)					
WCDMA 850	826.4	3.00				
RMC	836.6	2.96				
	846.6	3.15				
	826.4	3.40				
HSDPA 850	836.6	3.46				
	846.6	3.37				
	826.4	3.40				
HSUPA 850	836.6	3.47				
	846.6	3.43				







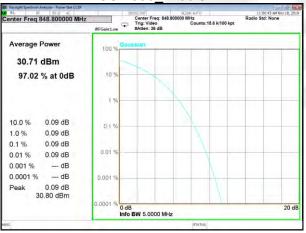
GSM850 Lower







GSM850_Middle



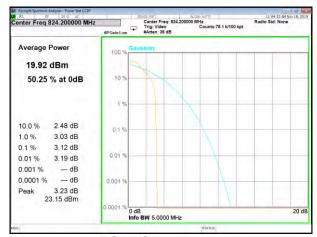
GPRS850_Middle



GSM850_Higher

GPRS850_Higher





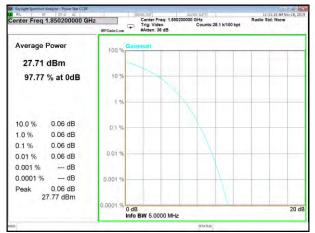


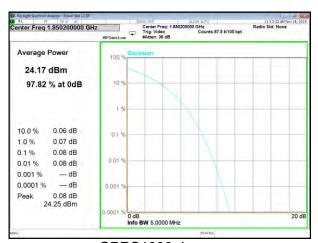
EGPRS850_Middle



EGPRS850_Higher

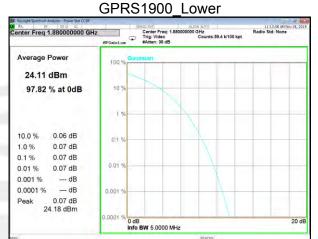






GSM1900 Lower

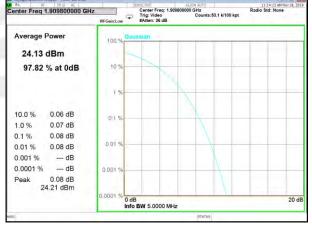




GSM1900_Middle



GPRS1900_Middle



GSM1900_Higher

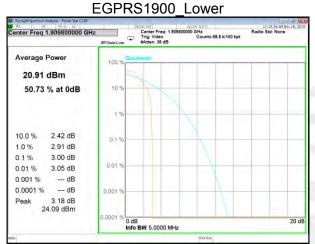
GPRS1900_Higher





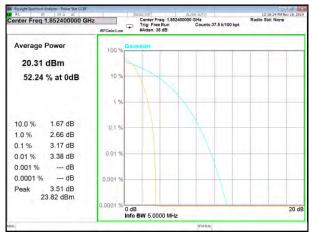


EGPRS1900_Middle



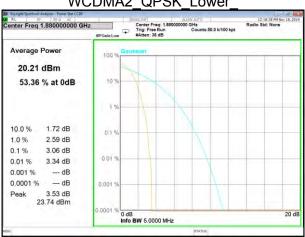
EGPRS1900_Higher











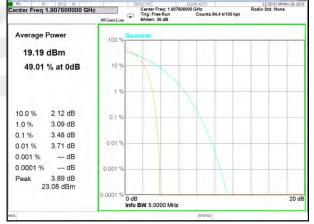
HSDPA2 QPSK Lower



WCDMA2_QPSK_Middle



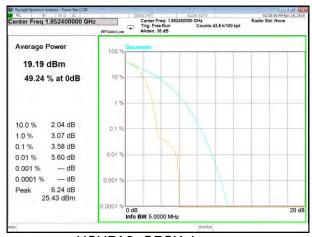
HSDPA2_QPSK_Middle



WCDMA2 QPSK Higher

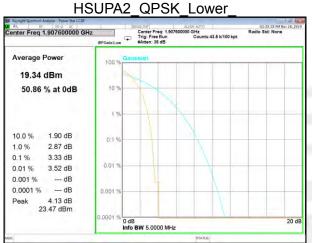
HSDPA2_QPSK_Higher_





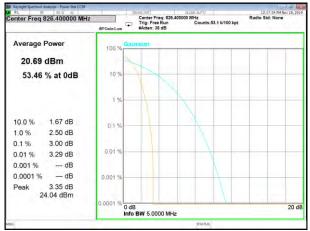


HSUPA2_QPSK_Middle_



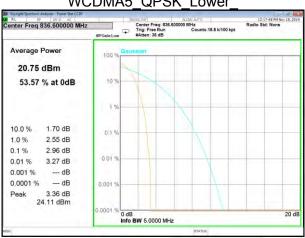
HSUPA2_QPSK_Higher_











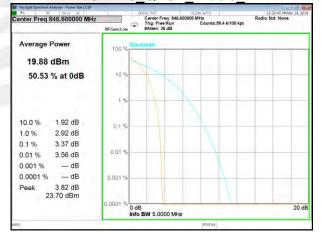
HSDPA5 QPSK Lower



WCDMA5_QPSK_Middle



HSDPA5_QPSK_Middle



WCDMA5_QPSK_Higher_

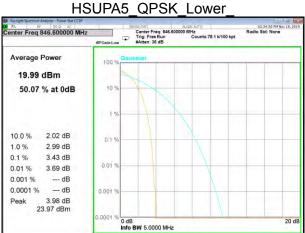
HSDPA5 QPSK QPSK Higher







HSUPA5_QPSK_Middle_



HSUPA5_QPSK_Higher_



A3. TRANSMITTER RADIATED POWER (EIRP/ERP)

Note: Test is divided into three directions, X/Y/Z. X pattern for the worst

Radiated Power (ERP) for GSM 850 MHZ							
				Res	ult		
Mada	Eroguenev	S	Cable		PMeas	Polarization	Conclusion
Mode	Frequency	G.Level (dBm)	loss	Gain(dBi)	E.R.P(dBm)	Of Max. ERP	Conclusion
	824.2	23.17	0.44	6.5	29.23	Horizontal	Pass
	824.2	25.01	0.44	6.5	<mark>31.07</mark>	Vertical	Pass
GSM850	836.6	22.98	0.45	6.5	29.03	Horizontal	Pass
GSIVIOSU	836.6	24.85	0.45	6.5	30.90	Vertical	Pass
848	848.8	23.18	0.46	6.5	29.22	Horizontal	Pass
	848.8	24.89	0.46	6.5	30.93	Vertical	Pass
	824.2	19.17	0.44	6.5	25.23	Horizontal	Pass
	824.2	21.55	0.44	6.5	<mark>27.61</mark>	Vertical	Pass
GPRS850	836.6	19.21	0.45	6.5	25.26	Horizontal	Pass
GFR3030	836.6	21.41	0.45	6.5	27.46	Vertical	Pass
	848.8	19.03	0.46	6.5	25.07	Horizontal	Pass
	848.8	21.43	0.46	6.5	27.47	Vertical	Pass
	824.2	18.91	0.44	6.5	24.97	Horizontal	Pass
	824.2	21.36	0.44	6.5	<mark>27.42</mark>	Vertical	Pass
EGPRS850	836.6	18.96	0.45	6.5	25.01	Horizontal	Pass
EGFRS000	836.6	21.35	0.45	6.5	27.40	Vertical	Pass
	848.8	18.86	0.46	6.5	24.90	Horizontal	Pass
	848.8	21.24	0.46	6.5	27.28	Vertical	Pass
Limit				ERP<7W=	38.45dBm		_

Radiated Power (EIRP) for PCS 1900 MHZ								
		Result						
Mode	Frequency	S	Cable	Gain	PMeas	Polarization	Conclusion	
iviode	Frequency	G.Level (dBm)	loss	(dBi)	E.I.R.P.(dBm)	Of Max. ERP	Conclusion	
	1850.2	18.08	2.41	10.35	26.02	Horizontal	Pass	
	1850.2	19.89	2.41	10.35	<mark>27.83</mark>	Vertical	Pass	
PCS1900	1880	17.81	2.42	10.35	25.74	Horizontal	Pass	
PCS 1900	1880	19.79	2.42	10.35	27.72	Vertical	Pass	
	1909.8	17.5	2.43	10.35	25.42	Horizontal	Pass	
	1909.8	19.41	2.43	10.35	27.33	Vertical	Pass	
	1850.2	13.73	2.41	10.35	21.67	Horizontal	Pass	
	1850.2	15.85	2.41	10.35	<mark>23.79</mark>	Vertical	Pass	
GPRS1900	1880	13.63	2.42	10.35	21.56	Horizontal	Pass	
GFK31900	1880	15.71	2.42	10.35	23.64	Vertical	Pass	
	1909.8	13.45	2.43	10.35	21.37	Horizontal	Pass	
	1909.8	15.62	2.43	10.35	23.54	Vertical	Pass	
	1850.2	13.58	2.41	10.35	21.52	Horizontal	Pass	
	1850.2	16.06	2.41	10.35	<mark>24.00</mark>	Vertical	Pass	
EGPRS1900	1880	13.75	2.42	10.35	21.68	Horizontal	Pass	
EGFK31900	1880	16	2.42	10.35	23.93	Vertical	Pass	
	1909.8	13.88	2.43	10.35	21.80	Horizontal	Pass	
	1909.8	16.01	2.43	10.35	23.93	Vertical	Pass	
Limit				EIRP<2	2W=33dBm			



Radiated Power (EIRP) for WCDMA Band II								
	Result							
Mode	Frequency	S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.I.R.P.(dBm)	Polarization Of Max. ERP	Conclusion	
	1852.4	11.93	2.41	10.35	19.87	Horizontal	Pass	
	1852.4	13.89	2.41	10.35	<mark>21.83</mark>	Vertical	Pass	
WCDMA	1880	11.28	2.42	10.35	19.21	Horizontal	Pass	
VVCDIVIA	1880	13.14	2.42	10.35	21.07	Vertical	Pass	
	1907.4	11.74	2.43	10.35	19.66	Horizontal	Pass	
	1907.4	13.51	2.43	10.35	21.43	Vertical	Pass	
	1852.4	9.01	2.41	10.35	16.95	Horizontal	Pass	
	1852.4	10.94	2.41	10.35	<mark>18.88</mark>	Vertical	Pass	
HSUPA	1880	8.98	2.42	10.35	16.91	Horizontal	Pass	
ПЗОРА	1880	10.8	2.42	10.35	18.73	Vertical	Pass	
	1907.4	8.74	2.43	10.35	16.66	Horizontal	Pass	
	1907.4	10.73	2.43	10.35	18.65	Vertical	Pass	
	1852.4	8.92	2.41	10.35	16.86	Horizontal	Pass	
	1852.4	10.66	2.41	10.35	18.60	Vertical	Pass	
HSDPA	1880	9.04	2.42	10.35	16.97	Horizontal	Pass	
HODEA	1880	10.79	2.42	10.35	18.72	Vertical	Pass	
	1907.4	8.99	2.43	10.35	16.91	Horizontal	Pass	
	1907.4	10.91	2.43	10.35	<mark>18.83</mark>	Vertical	Pass	
Limit				EIRP<2	:W=33dBm			

Radiated Power (ERP) for WCDMA Band V								
				Re	sult			
Mode Frequ	Frequency	S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	Conclusion	
	826.4	12.78	0.44	6.5	18.84	Horizontal	Pass	
	826.4	14.49	0.44	6.5	20.55	Vertical	Pass	
WCDMA	836.6	12.78	0.45	6.5	18.83	Horizontal	Pass	
VVCDIVIA	836.6	14.49	0.45	6.5	20.54	Vertical	Pass	
	846.4	13.03	0.46	6.5	19.07	Horizontal	Pass	
84	846.4	14.76	0.46	6.5	<mark>20.80</mark>	Vertical	Pass	
	826.4	11.23	0.44	6.5	17.29	Horizontal	Pass	
	826.4	13.12	0.44	6.5	19.18	Vertical	Pass	
HSUPA	836.6	11.41	0.45	6.5	17.46	Horizontal	Pass	
ПЗОРА	836.6	13.30	0.45	6.5	19.35	Vertical	Pass	
	846.4	11.69	0.46	6.5	17.73	Horizontal	Pass	
	846.4	13.55	0.46	6.5	<mark>19.59</mark>	Vertical	Pass	
	826.4	11.41	0.44	6.5	17.47	Horizontal	Pass	
	826.4	13.27	0.44	6.5	19.33	Vertical	Pass	
HSDPA	836.6	11.55	0.45	6.5	17.60	Horizontal	Pass	
HOUFA	836.6	13.43	0.45	6.5	19.48	Vertical	Pass	
	846.4	11.70	0.46	6.5	17.74	Horizontal	Pass	
	846.4	13.59	0.46	6.5	<mark>19.63</mark>	Vertical	Pass	
Limit			E	RP<7W	=38.45dBm			



A4. OCCUPIED BANDWIDTH (99% OCCUPIED BANDWIDTH/26dB BANDWIDTH)

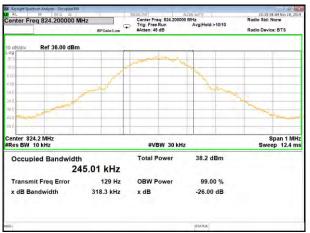
GSM Bandwidth [KHz]									
Mode	Lov	west	Mid	ddle	Highest				
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW			
GSM850	245.01	318.3	246.38	316.6	243.63	314.5			
GPRS850	246.79	323.6	245.44	322.8	244.02	319			
EGPRS850	245.1	286.5	242.9	316.8	244.23	321.8			

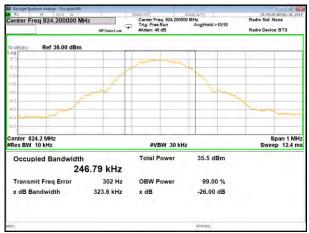
GSM Bandwidth [KHz]									
Mode	Lov	west	Mid	ddle	Highest				
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW			
GSM1900	243.21	313.8	244.1	313.9	246.33	318.9			
GPRS1900	245.6	317.7	244.36	315.7	245.14	320.1			
EGPRS1900	250.29	320.7	250.79	318.4	249.22	317.8			

WCDMA Bandwidth [MHz]									
Mode	Lowest		Middle		Highest				
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW			
WCDMA II	4.1639	4.665	4.1688	4.677	4.1597	4.673			
HSDPA II	4.1789	4.683	4.172	4.662	4.1681	4.681			
HSUPA II	4.1766	4.789	4.1659	4.666	4.1673	4.676			

WCDMA Bandwidth [MHz]									
Mode	Lowest		Middle		Highest				
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW			
WCDMA V	4.1569	4.68	4.1557	4.675	4.1578	4.68			
HSDPA V	4.1725	4.704	4.1739	4.728	4.1619	4.677			
HSUPA V	4.173	4.689	4.1798	4.683	4.1764	4.674			



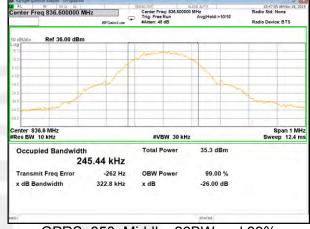




GSM 850 Lower 26BW and 99%

enter Freq 836.600000 MHz Radio Device: BTS Center 836.6 MHz #Res BW 10 kHz Span 1 MHz eep 12.4 ms Occupied Bandwidth **Total Power** 38.1 dBm 246.38 kHz Transmit Freq Error 1.529 kHz **OBW Power** 99.00 % x dB Bandwidth 316.6 kHz x dB -26.00 dB

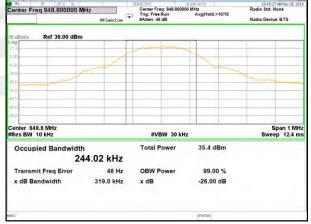
GPRS 850 Lower 26BW and 99%



GSM_850_Middle 26BW and 99%



GPRS_850_Middle_26BW and 99%

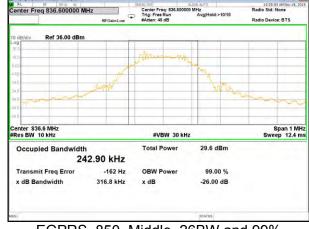


GSM_850_Higher 26BW and 99%

GPRS_850_Higher_26BW and 99%

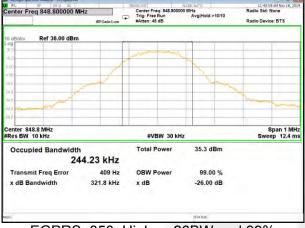






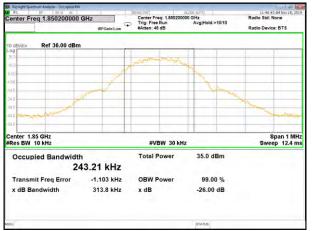
EGPRS_850_Middle_26BW and 99%

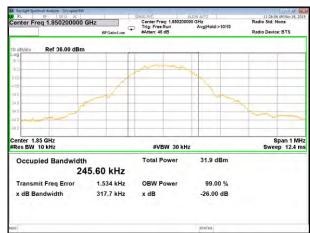
EGPRS 850 Lower 26BW and 99%



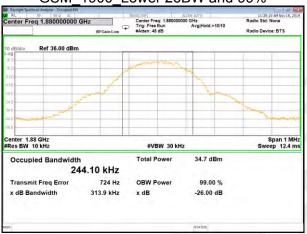
EGPRS_850_Higher_26BW and 99%



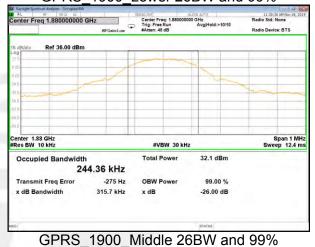




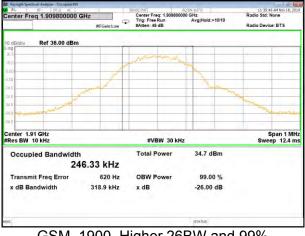
GSM 1900 Lower 26BW and 99%

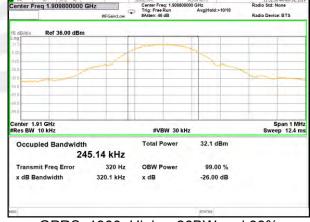


GPRS 1900 Lower 26BW and 99%



GSM_1900_Middle 26BW and 99%



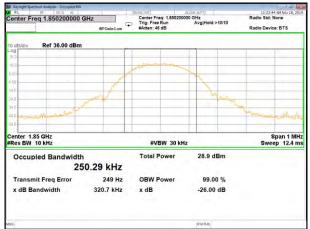


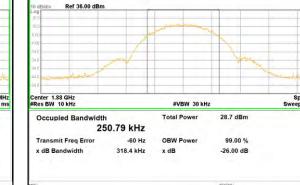
GSM_1900_Higher 26BW and 99%

GPRS_1900_Higher 26BW and 99%

Center Freq 1.880000000 GHz

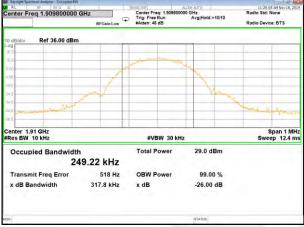






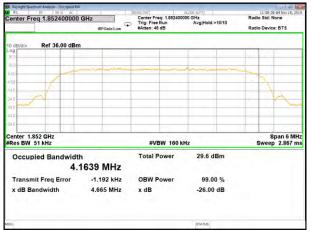
EGPRS_1900_Middle_ 26BW and 99%

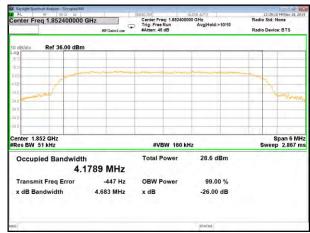




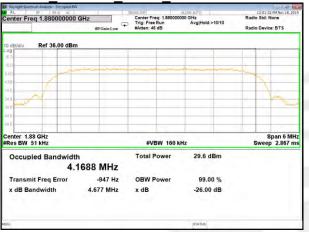
EGPRS_1900_Higher 26BW and 99%



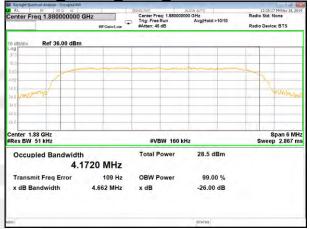




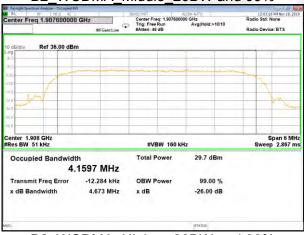
B2_WCDMA_Lower_26BW and 99%



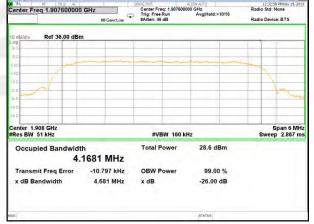
B2 HSDPA Lower 26BW and 99%



B2_WCDMA_Middle_26BW and 99%



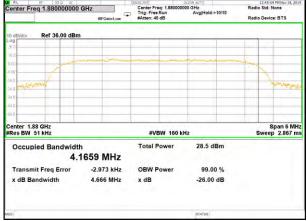
B2_HSDPA_Middle_26BW and 99%



B2 WCDMA_Higher_26BW and 99%

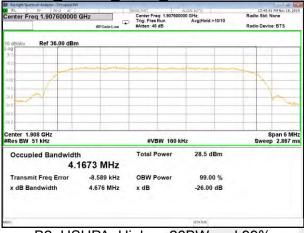
B2 HSDPA Higher 26BW and 99%





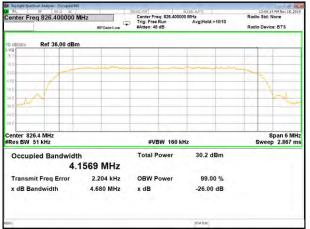
B2_HSUPA_Middle_26BW and 99%

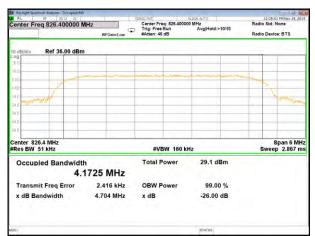
B2_HSUPA_Lower_26BW and 99%



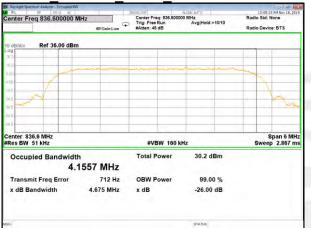
B2_HSUPA_Higher_26BW and 99%



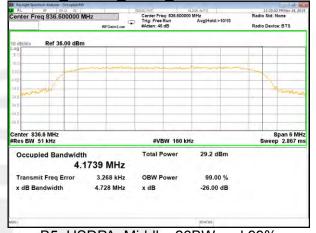




B5_WCDMA_Lower_26BW and 99%



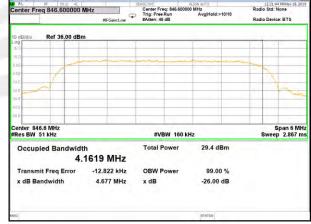
B5 HSDPA Lower 26BW and 99%



B5_WCDMA_Middle_26BW and 99%



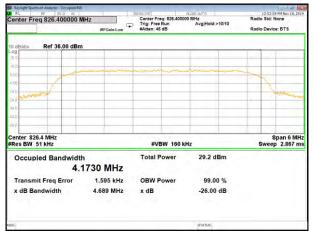
B5_HSDPA_Middle_26BW and 99%



B5 WCDMA_Higher_26BW and 99%

B5_HSDPA_Higher_26BW and 99%

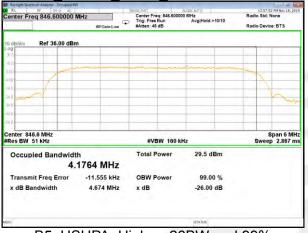






B5_HSUPA_Middle_26BW and 99%

B5_HSUPA_Lower_26BW and 99%



B5_HSUPA_Higher_26BW and 99%



A5.FREQUENCY STABILITY

Normal Voltage = 3.8V; Battery End Point (BEP) = 3.4V; Maximum Voltage =4.35V

	GSM 850 /836.6MHz									
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result					
remperature (C)	(Volt)	(Hz)	(ppm)	LIIIII	Result					
50		22.70	0.027							
40		32.43	0.039							
30		26.73	0.032		PASS					
20		27.61	0.033	2.5ppm						
10	Normal Voltage	33.63	0.040							
0		11.79	0.014							
-10		28.85	0.034]						
-20		28.45	0.034							
-30		14.10	0.017	-						
25	Maximum Voltage	22.17	0.027	1						
25	BEP	20.30	0.024	1						

	GPRS 850 /836.6MHz									
Tomporature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Dogult					
Temperature (°C)	(Volt)	(Hz)	(ppm)	LIIIII	Result					
50		15.39	0.018							
40		16.22	0.019							
30		13.58	0.016		PASS					
20		31.84	0.038	2.5ppm						
10	Normal Voltage	27.30	0.033							
0		31.09	0.037							
-10		33.52	0.040	1						
-20		35.97	0.043							
-30		18.75	0.022	<u></u>						
25	Maximum Voltage	26.45	0.032							
25	BEP	32.96	0.039							

EGPRS 850 /836.6MHz									
Tomporoturo (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
Temperature (°C)	(Volt)	(Hz)	(ppm)	LIIIII	Result				
50		19.22	0.023						
40		12.94	0.015	1					
30		35.72	0.043	1	PASS				
20		34.25	0.041	2.5ppm					
10	Normal Voltage	17.17	0.021						
0		26.93	0.032						
-10		20.10	0.024						
-20		23.25	0.028						
-30		35.63	0.043						
25	Maximum Voltage	14.43	0.017	1					
25	BEP	22.24	0.027	1					



	GSM 1900 / 1880MHz								
Temperature	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)						
50		23.89	0.013						
40		30.70	0.016						
30		17.27	0.009						
20		34.03	0.018						
10	Normal Voltage	33.56	0.018						
0		19.77	0.011	Within Authorized	PASS				
-10		19.05	0.010	Band	PASS				
-20		27.24	0.014						
-30		35.02	0.019						
25	Maximum Voltage	13.47	0.007						
25	BEP	16.52	0.009						

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	GPRS 1900 / 1880MHz								
Temperature	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)		- toodii				
50		34.02	0.018						
40		34.95	0.019						
30		32.33	0.017	Within Authorized					
20		31.39	0.017						
10	Normal Voltage	24.87	0.013						
0		18.49	0.010		DACC				
-10		28.58	0.015	Band	PASS				
-20		14.07	0.007						
-30		35.91	0.019						
25	Maximum Voltage	24.75	0.013]					
25	BEP	19.79	0.011						

	EGPRS 1900 / 1880MHz									
Temperature	Voltage	Freq.	Freq.							
•	voitage	Dev.	Dev.	Limit	Result					
(°C)	(Volt)	(Hz)	(ppm)							
50		16.51	0.009							
40		15.54	0.008							
30		20.36	0.011							
20		32.87	0.017							
10	Normal Voltage	22.09	0.012							
0		33.36	0.018	Within Authorized	PASS					
-10		18.32	0.010	Band	PASS					
-20		13.75	0.007							
-30		23.57	0.013							
25	Maximum Voltage	12.99	0.007]						
25	BEP	18.96	0.010							



	UMTS Band II /1880MHz								
Temperature	e Voltage	Freq.	Freq.						
•	voltage	Dev.	Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)						
50		32.42	0.017						
40		13.65	0.007						
30		12.35	0.007						
20		19.47	0.010						
10	Normal Voltage	11.94	0.006						
0		12.30	0.007	Within Authorized	PASS				
-10		22.85	0.012	Band	PASS				
-20		16.05	0.009						
-30		34.81	0.019						
25	Maximum Voltage	24.60	0.013]					
25	BEP	20.06	0.011						

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	HSDPA Band II /1880MHz								
Temperature	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)	LIIIII	Result				
50	(1314)	35.22	0.019						
40		26.19	0.014						
30		29.20	0.016						
20		28.13	0.015						
10	Normal Voltage	12.03	0.006						
0		12.82	0.007	Within Authorized	PASS				
-10		27.80	0.015	Band	PASS				
-20		26.02	0.014						
-30		36.39	0.019						
25	Maximum Voltage	30.18	0.016]					
25	BEP	16.46	0.009						

HSUPA Band II /1880MHz									
Temperature	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)						
50		23.58	0.013						
40		13.38	0.007						
30		24.37	0.013						
20		21.82	0.012						
10	Normal Voltage	23.59	0.013						
0		31.05	0.017	Within Authorized	PASS				
-10		25.14	0.013	Band	PASS				
-20		36.10	0.019						
-30		20.63	0.011						
25	Maximum Voltage	32.61	0.017						
25	BEP	27.73	0.015						



	UMTS Band V / 836.6MHz									
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result					
Temperature (C)	(Volt)	(Hz)	(ppm)	LIIIII	Result					
50		24.59	0.029							
40		13.97	0.017							
30		34.80	0.042		PASS					
20		33.31	0.040	2.5ppm						
10	Normal Voltage	34.07	0.041							
0		31.04	0.037							
-10		33.41	0.040	1						
-20		34.21	0.041	1						
-30		28.91	0.035	1						
25	Maximum Voltage	17.14	0.020	1						
25	BEP	22.97	0.027	1						

HSDPA Band V / 836.6MHz								
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result			
remperature (C)	(Volt)		(ppm)	LIIIII	Result			
50		14.24	0.017					
40		23.60	0.028					
30		32.71	0.039	2.5ppm	PASS			
20		29.01	0.035					
10	Normal Voltage	34.68	0.041					
0		31.62	0.038					
-10		31.02	0.037					
-20		20.71	0.025					
-30		22.65	0.027	1				
25	Maximum Voltage	14.33	0.017	1				
25	BEP	12.46	0.015					

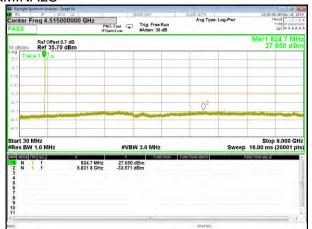
	HSUPA Band V / 836.6MHz									
Tomporature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result					
Temperature (°C)	(Volt)	(Hz)	(ppm)	LIIIIII	Resuit					
50		17.96	0.021							
40		14.67	0.018							
30		33.22	0.040		PASS					
20		34.04	0.041	2.5ppm						
10	Normal Voltage	23.28	0.028							
0		35.56	0.043							
-10		26.49	0.032							
-20		29.33	0.035]						
-30		34.71	0.041]						
25	Maximum Voltage	35.19	0.042							
25	BEP	29.10	0.035							

1. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

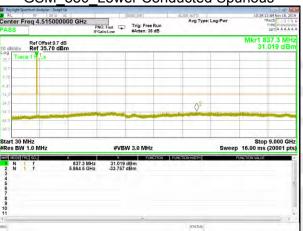


A6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS





GSM_850_Lower Conducted Spurious



GPRS_850_Lower_Conducted Spurious



GSM 850 Middle Conducted Spurious



GPRS_850_Middle_Conducted Spurious

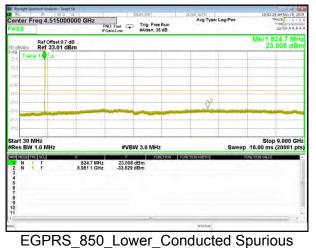


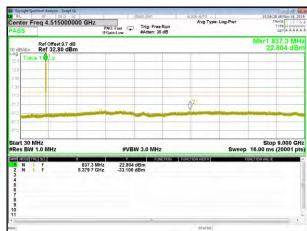
GSM_850_Higher Conducted Spurious

GPRS_850_Higher_Conducted Spurious

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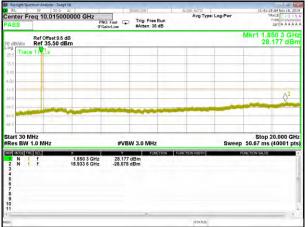
EGPRS_850_Middle_Conducted Spurious

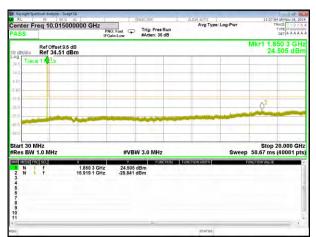


Stop 9.000 GHz Sweep 16.00 ms (20001 pts Start 30 MHz #Res BW 1.0 MHz **#VBW 3.0 MHz**

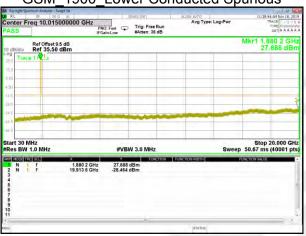
EGPRS_850_Higher_Conducted Spurious



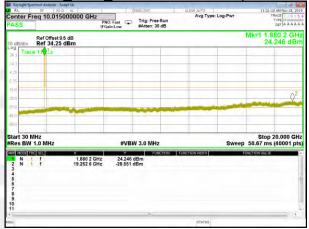




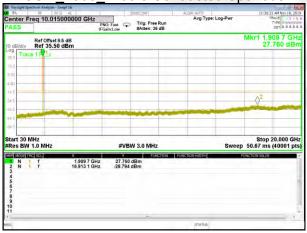
GSM_1900_Lower Conducted Spurious



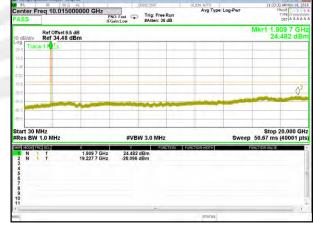
GPRS_1900_Lower Conducted Spurious



GSM_1900_Middle Conducted Spurious



GPRS_1900_Middle Conducted Spurious

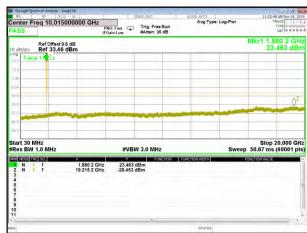


GSM_1900_Higher Conducted Spurious

GPRS_1900_Higher Conducted Spurious







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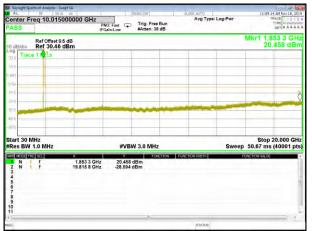
EGPRS_1900_Middle Conducted Spurious

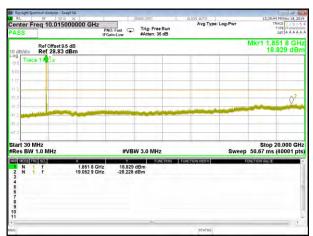
EGPRS_1900_Lower Conducted Spurious



EGPRS_1900_Higher Conducted Spurious

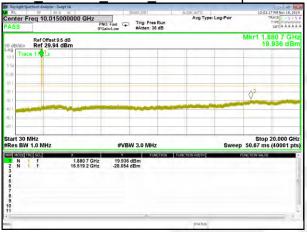




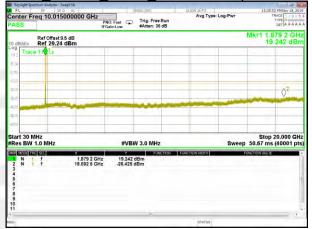


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B2_WCDMA_Lower_Conducted Spurious



B2_HSDPA_Lower_Conducted Spurious



B2_WCDMA_Middle_Conducted Spurious



B2_HSDPA_Middle_Conducted Spurious



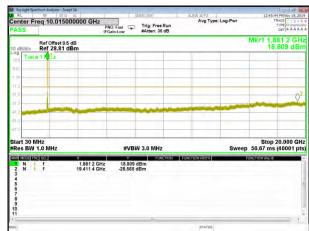
B2 WCDMA Higher Conducted Spurious

B2 HSDPA Higher Conducted Spurious

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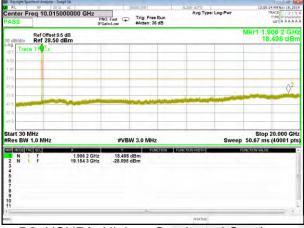






B2_HSUPA_Middle_Conducted Spurious

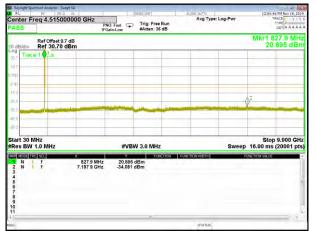


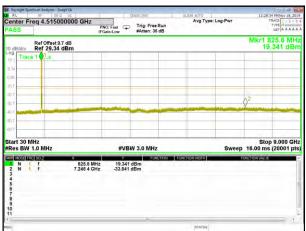


B2_HSUPA_Higher_Conducted Spurious

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B5_WCDMA_Lower_Conducted Spurious



B5_HSDPA_Lower_Conducted Spurious



B5_WCDMA_Middle_Conducted Spurious



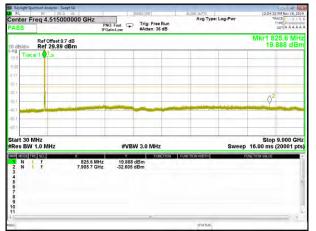
B5_HSDPA_Middle_Conducted Spurious

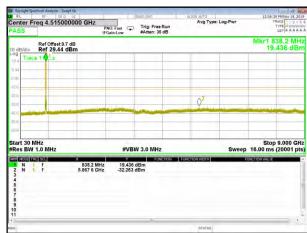


B5_WCDMA_Higher_Conducted Spurious

B5 HSDPA Higher Conducted Spurious







B5_HSUPA_Middle_Conducted Spurious





B5_HSUPA_Higher_Conducted Spurious

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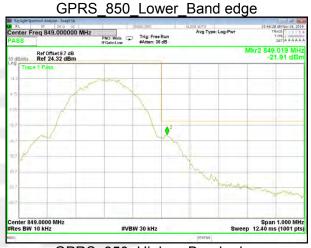
A7. BAND EDGE







Span 1.000 MHz Sweep 12.40 ms (1001 pts







EGPRS_850_Lower_Band edge

EGPRS_850_Higher_Band edge

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Span 1.000 MHz Sweep 12.40 ms (1001 pts







EGPRS_1900_Lower Band edge

EGPRS_1900_Higher Band edge

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B2_WCDMA_Lower_Band edge





B2_WCDMA_Higher_Band edge



B2_HSDPA_Higher_Band edge RL P 500 2 Center Freq 1.910000000 GHz PNO: Wide |FGaint.ow | Trig: Free Run #Atten: 36 dB



B2 HSUPA Lower Band edge

B2_HSUPA_Higher_Band edge







B5 WCDMA Lower Band edge



B5 HSDPA Lower Band edge



B5_WCDMA_Higher_Band edge



B5_HSDPA_Higher_Band edge



B5 HSUPA Lower Band edge

B5 HSUPA Higher Band edge



A8. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

Note: (1) Below 30MHz no Spurious found is the worst condition.

- (2) Above 3.5GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value
- (3)Test is divided into three directions, X/Y/Z. X pattern for the worst.

		GSM 85	50: (30-90	000)MHz			
	The Wo	rst Test Res	sults Cha	nnel 128/8	324.2 MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
1648.20	-40.14	9.40	4.75	-35.49	-13.00	-22.49	Н
2472.41	-39.20	10.60	8.39	-36.99	-13.00	-23.99	Н
3296.47	-32.01	12.00	11.79	<mark>-31.80</mark>	-13.00	-18.80	Н
1648.39	-43.59	9.40	4.75	-38.94	-13.00	-25.94	V
2472.41	-45.32	10.60	8.39	-43.11	-13.00	-30.11	V
3296.85	-43.19	12.00	11.79	-42.98	-13.00	-29.98	V
	The Wo	rst Test Res	sults Cha	nnel 190/8	336.6 MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
1672.84	-41.40	9.50	4.76	-36.66	-13.00	-23.66	Н
2509.90	-39.83	10.70	8.40	-37.53	-13.00	-24.53	Н
3346.00	-31.94	12.20	11.80	<mark>-31.54</mark>	-13.00	-18.54	Н
1673.28	-43.56	9.40	4.75	-38.91	-13.00	-25.91	V
2509.89	-44.83	10.60	8.39	-42.62	-13.00	-29.62	V
3346.34	-42.85	12.20	11.82	-42.47	-13.00	-29.47	V
		rst Test Res	sults Cha	nnel 251/8	348.8 MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
1697.31	-41.54	9.60	4.77	-36.71	-13.00	-23.71	Н
2546.53	-40.09	10.80	8.50	-37.79	-13.00	-24.79	Н
3395.04	-31.98	12.50	11.90	<mark>-31.38</mark>	-13.00	-18.38	Н
1697.42	-44.33	9.60	4.77	-39.50	-13.00	-26.50	V
2546.27	-44.90	10.80	8.50	-42.60	-13.00	-29.60	V
3394.86	-42.79	12.50	11.90	-42.19	-13.00	-29.19	V

GPRS 850: (30-9000)MHz										
The Worst Test Results Channel 128/824.2 MHz										
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
1648.34	-41.17	9.40	4.75	-36.52	-13.00	-23.52	Н			
2472.70	-40.09	10.60	8.39	-37.88	-13.00	-24.88	Н			
3296.76	-31.63	12.00	11.79	-31.42	-13.00	-18.42	Н			
1648.12	-44.41	9.40	4.75	-39.76	-13.00	-26.76	V			
2472.60	-44.46	10.60	8.39	-42.25	-13.00	-29.25	V			
3296.53	-43.27	12.00	11.79	-43.06	-13.00	-30.06	V			



	The Wo	rst Test Res	sults Cha	nnel 190/8	336.6 MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
1673.18	-41.32	9.50	4.76	-36.58	-13.00	-23.58	Н
2509.74	-40.55	10.70	8.40	-38.25	-13.00	-25.25	Н
3345.96	-31.31	12.20	11.80	-30.91	-13.00	-17.91	Н
1673.20	-43.74	9.40	4.75	-39.09	-13.00	-26.09	V
2509.50	-44.80	10.60	8.39	-42.59	-13.00	-29.59	V
3346.30	-43.17	12.20	11.82	-42.79	-13.00	-29.79	V
	The Wo	rst Test Res	sults Cha	nnel 251/8	348.8 MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
1697.38	-40.76	9.60	4.77	-35.93	-13.00	-22.93	Н
2546.27	-39.64	10.80	8.50	-37.34	-13.00	-24.34	Н
3395.24	-31.68	12.50	11.90	<mark>-31.08</mark>	-13.00	-18.08	Н
1697.33	-44.56	9.60	4.77	-39.73	-13.00	-26.73	V
2546.15	-44.48	10.80	8.50	-42.18	-13.00	-29.18	V
3394.87	-43.09	12.50	11.90	-42.49	-13.00	-29.49	V

EGPRS 850: (30-9000)MHz										
		orst Test Res	sults Cha			_				
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
1648.42	-41.14	9.40	4.75	-36.49	-13.00	-23.49	Н			
2472.56	-39.96	10.60	8.39	-37.75	-13.00	-24.75	Н			
3296.67	-32.10	12.00	11.79	<mark>-31.89</mark>	-13.00	-18.89	Н			
1648.10	-43.18	9.40	4.75	-38.53	-13.00	-25.53	>			
2472.23	-45.25	10.60	8.39	-43.04	-13.00	-30.04	V			
3296.69	-43.80	12.00	11.79	-43.59	-13.00	-30.59	V			
	The Worst Test Results Channel 190/836.6 MHz									
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
1672.87	-40.95	9.50	4.76	-36.21	-13.00	-23.21	Н			
2509.62	-40.58	10.70	8.40	-38.28	-13.00	-25.28	Н			
3345.98	-30.88	12.20	11.80	<mark>-30.48</mark>	-13.00	-17.48	Н			
1673.02	-43.34	9.40	4.75	-38.69	-13.00	-25.69	V			
2509.73	-44.67	10.60	8.39	-42.46	-13.00	-29.46	V			
3346.31	-43.55	12.20	11.82	-43.17	-13.00	-30.17	V			
	The Wo	rst Test Res	sults Cha	nnel 251/8	348.8 MHz					
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
1697.62	-41.63	9.60	4.77	-36.80	-13.00	-23.80	Н			
2546.24	-40.51	10.80	8.50	-38.21	-13.00	-25.21	Н			
3394.98	-32.26	12.50	11.90	<mark>-31.66</mark>	-13.00	-18.66	Н			
1697.45	-44.40	9.60	4.77	-39.57	-13.00	-26.57	V			
2546.53	-45.12	10.80	8.50	-42.82	-13.00	-29.82	V			
3395.13	-43.45	12.50	11.90	-42.85	-13.00	-29.85	V			



		DCS 190	0: (30-20	0000)MHz			
	The Wors	t Test Resu	Its for Ch	annel 512	/1850.2MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
3700.13	-34.53	12.60	12.93	-34.86	-13.00	-21.86	Н
5550.43	-35.27	13.10	17.11	-39.28	-13.00	-26.28	Н
7400.58	-32.68	11.50	22.20	-43.38	-13.00	-30.38	Н
3700.12	-35.44	12.60	12.93	-35.77	-13.00	-22.77	V
5550.29	-34.47	13.10	17.11	-38.48	-13.00	-25.48	V
7400.88	-33.15	11.50	22.20	-43.85	-13.00	-30.85	V
	The Wors	t Test Resu	Its for Ch	annel 661	/1880.0MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
3760.15	-34.72	12.60	12.93	-35.05	-13.00	-22.05	Н
5639.92	-34.24	13.10	17.11	-38.25	-13.00	-25.25	Н
7520.15	-32.69	11.50	22.20	-43.39	-13.00	-30.39	Н
3760.18	-34.59	12.60	12.93	<mark>-34.92</mark>	-13.00	-21.92	V
5639.95	-34.26	13.10	17.11	-38.27	-13.00	-25.27	V
7520.27	-32.99	11.50	22.20	-43.69	-13.00	-30.69	V
	The Wors	t Test Resu	Its for Ch	annel 810	/1909.8MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
3819.61	-34.39	12.60	12.93	-34.72	-13.00	-21.72	Н
5729.21	-34.67	13.10	17.11	-38.68	-13.00	-25.68	Н
7639.28	-33.07	11.50	22.20	-43.77	-13.00	-30.77	Н
3819.61	-35.73	12.60	12.93	-36.06	-13.00	-23.06	V
5729.53	-34.16	13.10	17.11	-38.17	-13.00	-25.17	V
7639.26	-31.75	11.50	22.20	-42.45	-13.00	-29.45	V

		GPRS19	00: (30-2	0000)MHz	<u>,</u>					
The Worst Test Results for Channel 512/1850.2MHz										
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
3700.02	-33.71	12.60	12.93	-34.04	-13.00	-21.04	Н			
5550.46	-35.13	13.10	17.11	-39.14	-13.00	-26.14	Н			
7400.81	-33.64	11.50	22.20	-44.34	-13.00	-31.34	Н			
3700.06	-35.25	12.60	12.93	-35.58	-13.00	-22.58	V			
5550.28	-34.50	13.10	17.11	-38.51	-13.00	-25.51	V			
7400.73	-32.78	11.50	22.20	-43.48	-13.00	-30.48	V			
	The Wors	t Test Resu	Its for Ch	annel 661	/1880.0MHz					
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
3760.17	-33.89	12.60	12.93	<mark>-34.22</mark>	-13.00	-21.22	Н			
5640.12	-35.05	13.10	17.11	-39.06	-13.00	-26.06	Н			
7520.19	-32.95	11.50	22.20	-43.65	-13.00	-30.65	Н			
3760.00	-34.75	12.60	12.93	-35.08	-13.00	-22.08	V			
5640.19	-33.86	13.10	17.11	-37.87	-13.00	-24.87	V			
7520.13	-32.79	11.50	22.20	-43.49	-13.00	-30.49	V			



The Worst Test Results for Channel 810/1909.8MHz										
	S		10 101 011	PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
3819.39	-34.20	12.60	12.93	-34.53	-13.00	-21.53	Н			
5729.15	-35.42	13.10	17.11	-39.43	-13.00	-26.43	Н			
7639.22	-33.61	11.50	22.20	-44.31	-13.00	-31.31	Н			
3819.38	-36.01	12.60	12.93	-36.34	-13.00	-23.34	V			
5729.50	-35.00	13.10	17.11	-39.01	-13.00	-26.01	V			
7639.14	-32.45	11.50	22.20	-43.15	-13.00	-30.15	V			

		EGPRS 19	900: (30-2	20000)MH	lz		
	The Wors				/1850.2MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
3700.42	-33.99	12.60	12.93	<mark>-34.32</mark>	-13.00	-21.32	Н
5550.40	-34.20	13.10	17.11	-38.21	-13.00	-25.21	Н
7400.57	-32.60	11.50	22.20	-43.30	-13.00	-30.30	Н
3700.18	-35.96	12.60	12.93	-36.29	-13.00	-23.29	V
5550.58	-34.17	13.10	17.11	-38.18	-13.00	-25.18	V
7400.75	-32.54	11.50	22.20	-43.24	-13.00	-30.24	V
	The Wors	t Test Resu	Its for Ch	annel 661	/1880.0MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
3759.95	-34.56	12.60	12.93	<mark>-34.89</mark>	-13.00	-21.89	Н
5640.18	-34.98	13.10	17.11	-38.99	-13.00	-25.99	Н
7519.93	-32.77	11.50	22.20	-43.47	-13.00	-30.47	Н
3760.22	-35.90	12.60	12.93	-36.23	-13.00	-23.23	V
5640.02	-35.20	13.10	17.11	-39.21	-13.00	-26.21	V
7520.20	-32.69	11.50	22.20	-43.39	-13.00	-30.39	V
	The Wors	t Test Resu	Its for Ch	annel 810	/1909.8MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
3819.58	-33.88	12.60	12.93	-34.21	-13.00	-21.21	Н
5729.19	-35.03	13.10	17.11	-39.04	-13.00	-26.04	Н
7638.88	-33.39	11.50	22.20	-44.09	-13.00	-31.09	Н
3819.53	-34.81	12.60	12.93	-35.14	-13.00	-22.14	V
5729.36	-35.12	13.10	17.11	-39.13	-13.00	-26.13	V
7639.06	-32.45	11.50	22.20	-43.15	-13.00	-30.15	V



		WCDMA Ba	and V: (3	0-9000)MI	Hz			
	The w	ost testresu	Its chann	el 4132/8	26.4MHz			
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
1652.17	-41.01	9.40	4.75	-36.36	-13.00	-23.36	Н	
2479.63	-39.51	10.60	8.39	-37.30	-13.00	-24.30	Н	
3305.88	-32.00	12.00	11.79	<mark>-31.79</mark>	-13.00	-18.79	Н	
1652.29	-43.45	9.40	4.75	-38.80	-13.00	-25.80	V	
2479.53	-45.23	10.60	8.39	-43.02	-13.00	-30.02	V	
3305.43	-42.57	12.00	11.79	-42.36	-13.00	-29.36	V	
The Worst Test Results Channel 4183/836.6MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
1672.82	-40.94	9.50	4.76	-36.20	-13.00	-23.20	Н	
2509.60	-40.25	10.70	8.40	-37.95	-13.00	-24.95	Н	
3346.38	-31.40	12.20	11.80	<mark>-31.00</mark>	-13.00	-18.00	Н	
1672.82	-43.87	9.40	4.75	-39.22	-13.00	-26.22	V	
2509.89	-44.35	10.60	8.39	-42.14	-13.00	-29.14	V	
3346.29	-42.73	12.20	11.82	-42.35	-13.00	-29.35	V	
	The Wo	rst Test Res	ults Cha	nnel 4233/	846.6MHz			
	S			PMea	Limit	<u>Margin</u>		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
1693.42	-41.47	9.60	4.77	-36.64	-13.00	-23.64	Н	
2539.27	-40.46	10.80	8.50	-38.16	-13.00	-25.16	Н	
3386.08	-32.10	12.50	11.90	<mark>-31.50</mark>	-13.00	-18.50	Н	
1693.43	-43.20	9.60	4.77	-38.37	-13.00	-25.37	V	
2539.34	-44.20	10.80	8.50	-41.90	-13.00	-28.90	V	
3386.26	-43.34	12.50	11.90	-42.74	-13.00	-29.74	V	

	HSUPA Band V: (30-9000)MHz										
	The wost testresults channel 4132/826.4MHz										
	S			PMea	Limit	Margin					
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity				
1652.16	-40.72	9.40	4.75	-36.07	-13.00	-23.07	Н				
2479.70	-40.23	10.60	8.39	-38.02	-13.00	-25.02	Н				
3305.64	-31.84	12.00	11.79	<mark>-31.63</mark>	-13.00	-18.63	Н				
1652.26	-43.80	9.40	4.75	-39.15	-13.00	-26.15	V				
2479.31	-45.44	10.60	8.39	-43.23	-13.00	-30.23	V				
3305.88	-43.26	12.00	11.79	-43.05	-13.00	-30.05	V				
	The Wo	rst Test Res	ults Cha	nnel 4183/	/836.6MHz						
	S			PMea	Limit	Margin					
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity				
1673.27	-40.39	9.50	4.76	-35.65	-13.00	-22.65	Н				
2509.56	-39.72	10.70	8.40	-37.42	-13.00	-24.42	Н				
3346.42	-31.26	12.20	11.80	-30.86	-13.00	-17.86	Н				
1672.85	-43.89	9.40	4.75	-39.24	-13.00	-26.24	V				
2509.42	-44.53	10.60	8.39	-42.32	-13.00	-29.32	V				
3346.41	-43.74	12.20	11.82	-43.36	-13.00	-30.36	V				



The Worst Test Results Channel 4233/846.6MHz										
	S	S		PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
1693.47	-40.74	9.60	4.77	-35.91	-13.00	-22.91	Н			
2539.13	-39.44	10.80	8.50	-37.14	-13.00	-24.14	Н			
3385.91	-31.96	12.50	11.90	<mark>-31.36</mark>	-13.00	-18.36	Н			
1693.51	-43.31	9.60	4.77	-38.48	-13.00	-25.48	V			
2539.38	-45.34	10.80	8.50	-43.04	-13.00	-30.04	V			
3386.01	-42.89	12.50	11.90	-42.29	-13.00	-29.29	V			

		HSDPA Ba	nd V: (30)-9000)MF	łz			
	The w	ost testresu						
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
1652.07	-41.18	9.40	4.75	-36.53	-13.00	-23.53	Н	
2479.48	-40.38	10.60	8.39	-38.17	-13.00	-25.17	Н	
3305.77	-32.32	12.00	11.79	-32.11	-13.00	-19.11	Н	
1652.49	-44.15	9.40	4.75	-39.50	-13.00	-26.50	V	
2479.33	-44.44	10.60	8.39	-42.23	-13.00	-29.23	V	
3305.90	-42.57	12.00	11.79	-42.36	-13.00	-29.36	V	
The Worst Test Results Channel 4183/836.6MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
1672.85	-41.08	9.50	4.76	-36.34	-13.00	-23.34	Н	
2509.78	-40.51	10.70	8.40	-38.21	-13.00	-25.21	Н	
3346.20	-32.00	12.20	11.80	<mark>-31.60</mark>	-13.00	-18.60	Н	
1672.84	-43.82	9.40	4.75	-39.17	-13.00	-26.17	V	
2509.50	-44.28	10.60	8.39	-42.07	-13.00	-29.07	V	
3346.19	-43.41	12.20	11.82	-43.03	-13.00	-30.03	V	
		rst Test Res	ults Cha	nnel 4233/	846.6MHz			
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
1693.55	-40.43	9.60	4.77	-35.60	-13.00	-22.60	Н	
2539.13	-40.39	10.80	8.50	-38.09	-13.00	-25.09	Н	
3386.01	-30.97	12.50	11.90	<mark>-30.37</mark>	-13.00	-17.37	Н	
1693.62	-43.55	9.60	4.77	-38.72	-13.00	-25.72	V	
2539.50	-44.64	10.80	8.50	-42.34	-13.00	-29.34	V	
3386.28	-43.34	12.50	11.90	-42.74	-13.00	-29.74	V	



WCDMA Band II: (30-20000)MHz								
The Worst Test Results for Channel 9262/1852.4MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
3704.04	-34.08	12.60	12.93	-34.41	-13.00	-21.41	Н	
5557.45	-34.93	13.10	17.11	-38.94	-13.00	-25.94	Н	
7409.52	-33.34	11.50	22.20	-44.04	-13.00	-31.04	Н	
3704.19	-34.93	12.60	12.93	-35.26	-13.00	-22.26	V	
5557.67	-34.85	13.10	17.11	-38.86	-13.00	-25.86	V	
7409.74	-31.83	11.50	22.20	-42.53	-13.00	-29.53	V	
The Worst Test Results for Channel 9400/1880MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	lBi) Loss	(dBm)	(dBm)	(dBm)	Polarity	
3759.89	-34.92	12.60	12.93	<mark>-35.25</mark>	-13.00	-22.25	Н	
5639.95	-34.21	13.10	17.11	-38.22	-13.00	-25.22	Н	
7519.83	-32.96	11.50	22.20	-43.66	-13.00	-30.66	Н	
3760.33	-35.72	12.60	12.93	-36.05	-13.00	-23.05	V	
5640.18	-34.92	13.10	17.11	-38.93	-13.00	-25.93	V	
7520.15	-31.76	11.50	22.20	-42.46	-13.00	-29.46	V	
The Worst Test Results for Channel 9538/1907.6MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
3815.30	-33.59	12.60	12.93	<mark>-33.92</mark>	-13.00	-20.92	Н	
5722.37	-34.16	13.10	17.11	-38.17	-13.00	-25.17	Н	
7630.01	-32.16	11.50	22.20	-42.86	-13.00	-29.86	Н	
3815.61	-35.40	12.60	12.93	-35.73	-13.00	-22.73	V	
5722.31	-34.98	13.10	17.11	-38.99	-13.00	-25.99	V	
7630.24	-32.93	11.50	22.20	-43.63	-13.00	-30.63	V	

HSUPA Band II: (30-20000)MHz									
The Worst Test Results for Channel 9262/1852.4MHz									
	S			PMea	Limit	Margin			
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity		
3704.48	-34.18	12.60	12.93	-34.51	-13.00	-21.51	Н		
5557.31	-34.28	13.10	17.11	-38.29	-13.00	-25.29	Н		
7409.94	-32.44	11.50	22.20	-43.14	-13.00	-30.14	Н		
3704.12	-35.86	12.60	12.93	-36.19	-13.00	-23.19	V		
5557.18	-33.77	13.10	17.11	-37.78	-13.00	-24.78	V		
7409.77	-32.31	11.50	22.20	-43.01	-13.00	-30.01	V		
	The Worst Test Results for Channel 9400/1880MHz								
	S			PMea	Limit	Margin			
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity		
3759.77	-34.82	12.60	12.93	-35.15	-13.00	-22.15	Н		
5640.08	-34.94	13.10	17.11	-38.95	-13.00	-25.95	Н		
7520.14	-32.31	11.50	22.20	-43.01	-13.00	-30.01	Н		
3759.99	-34.61	12.60	12.93	<mark>-34.94</mark>	-13.00	-21.94	V		
5640.02	-34.51	13.10	17.11	-38.52	-13.00	-25.52	V		
7519.86	-32.82	11.50	22.20	-43.52	-13.00	-30.52	V		



The Worst Test Results for Channel 9538/1907.6MHz							
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
3815.50	-34.19	12.60	12.93	<mark>-34.52</mark>	-13.00	-21.52	Н
5722.34	-34.47	13.10	17.11	-38.48	-13.00	-25.48	Н
7630.08	-33.16	11.50	22.20	-43.86	-13.00	-30.86	Н
3815.55	-35.11	12.60	12.93	-35.44	-13.00	-22.44	V
5722.04	-34.35	13.10	17.11	-38.36	-13.00	-25.36	V
7630.06	-32.75	11.50	22.20	-43.45	-13.00	-30.45	V

HSDPA Band II: (30-20000)MHz								
The Worst Test Results for Channel 9262/1852.4MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
3704.28	-34.09	12.60	12.93	-34.42	-13.00	-21.42	Н	
5557.42	-34.06	13.10	17.11	-38.07	-13.00	-25.07	Н	
7409.68	-32.86	11.50	22.20	-43.56	-13.00	-30.56	Н	
3704.11	-34.59	12.60	12.93	-34.92	-13.00	-21.92	V	
5557.36	-34.87	13.10	17.11	-38.88	-13.00	-25.88	V	
7409.47	-32.41	11.50	22.20	-43.11	-13.00	-30.11	V	
The Worst Test Results for Channel 9400/1880MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	t(dBi) Loss	(dBm)	(dBm)	(dBm)	Polarity	
3760.24	-34.76	12.60	12.93	<mark>-35.09</mark>	-13.00	-22.09	Н	
5640.18	-34.29	13.10	17.11	-38.30	-13.00	-25.30	Н	
7520.18	-32.85	11.50	22.20	-43.55	-13.00	-30.55	Н	
3759.87	-35.10	12.60	12.93	-35.43	-13.00	-22.43	V	
5639.90	-33.76	13.10	17.11	-37.77	-13.00	-24.77	V	
7520.12	-32.40	11.50	22.20	-43.10	-13.00	-30.10	V	
The Worst Test Results for Channel 9538/1907.6MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
3815.72	-33.71	12.60	12.93	-34.04	-13.00	-21.04	Н	
5722.02	-34.41	13.10	17.11	-38.42	-13.00	-25.42	Н	
7630.15	-33.60	11.50	22.20	-44.30	-13.00	-31.30	Н	
3815.39	-34.73	12.60	12.93	-35.06	-13.00	-22.06	V	
5722.29	-34.03	13.10	17.11	-38.04	-13.00	-25.04	V	
7630.26	-33.03	11.50	22.20	-43.73	-13.00	-30.73	V	



APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

* * * * * END OF THE REPORT * * * *

