



RADIO TEST REPORT

Report No: STS1912170W01

Issued for

ITALCOM GROUP

1728 Coral Way, Coral Gables, Miami, Florida, United States 33145(Zip code: 518048)

A	
В	

Product Name:	4G LTE
Brand Name:	NYX Mobile
Model Name:	SILVER
Series Model:	N/A
FCC ID:	YPVITALCOMSILVER
Test Standard:	FCC Part 22H and 24E

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TEST RESULT CERTIFICATION

Applicant's Name:	ITALCOM GROUP
Address:	1728 Coral Way, Coral Gables, Miami, Florida, United States 33145(Zip code : 518048)
Manufacture's Name:	Teesso intelligent technology co. LTD
Address:	Room 702, Qilong Center, Xili Town, NanShan District, Shenzhen, China.
Product Description	
Product Name:	4G LTE
Brand Name:	NYX Mobile
Model Name:	SILVER
Series Model:	N/A
Test Standards:	FCC Part 22H and 24E
Test Procedure	KDB 971168 D01 v03r01,ANSI C63.26(2015)
under test (EUT) is in compliance sample identified in the report. This report shall not be reproduce	been tested by STS, the test results show that the equipment with the FCC requirements. And it is applicable only to the tested ed except in full, without the written approval of STS, this document is, personal only, and shall be noted in the revision of the document.
Date of Test:	
Date of receipt of test item:	04 Dec. 2019
Date (s) of performance of tests:	04 Dec. 2019 ~ 19 Dec. 2019
Date of Issue:	24 Dec. 2019
Test Result:	Pass
Testing Engineer	(Chris Chen)
Technical Manag	ger : Sunday Jul APPROVAL (Sunday Hu)
Authorized Signa	atory:
	(Vita Li)



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Revision History

Rev.	Issue Date Report NO.		v. Issue Date Report NO.		Effect Page	Contents
00	24 Dec. 2019	STS1912170W01	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 INFORMATION						
Product Name	4G LTE					
Trade Name	NYX Mobile					
Model Name	SILVER					
Series Model	N/A					
Model Difference	N/A					
	GSM/GPRS/EDGE:					
	850: 824 MHz ~ 849MHz					
Ty Francisco	1900: 1850 MHz ~ 1910MHz					
Tx Frequency:	WCDMA:					
	Band V: 824 MHz ~ 849 MHz					
	Band II: 1850 MHz ~ 1910 MHz					
	GSM/GPRS/EDGE:					
	850: 869 MHz ~ 894 MHz					
Dy Fraguency:	1900: 1930 MHz ~ 1990MHz					
Rx Frequency:	WCDMA:					
	Band V: 869 MHz ~ 894 MHz					
	Band II: 1930 MHz ~ 1990 MHz					
Max RF Output Power:	GSM850(1-Slot):31.98dBm, GSM1900(1-Slot):28.32dBm GPRS850(1-Slot):31.86dBm, GPRS1900(1-Slot):28.09dBm GPRS850(2-Slot):31.36dBm, GPRS1900(2-Slot):27.66Bm GPRS850(3-Slot):30.95dBm, GPRS1900(3-Slot):27.26dBm GPRS850(4-Slot):30.51dBm, GPRS1900(4-Slot):26.80dBm EDGE 850(1-Slot):31.88dBm, EDGE 1900(1-Slot):28.22dBm EDGE 850(2-Slot):31.22dBm, EDGE 1900(2-Slot):27.43dBm EDGE 850(3-Slot):30.42dBm, EDGE 1900(3-Slot):26.72dBm EDGE 850(4-Slot):29.67dBm, EDGE 1900(4-Slot):26.00dBm WCDMA Band V:22.09dBm, WCDMA Band II:21.87dBm					
Type of Emission:	GSM(850): 312KGXW; GSM(1900): 313KGXW GPRS(850): 318KGXW; GPRS(1900): 320KGXW EDGE(850): 318KG7W; EDGE(1900): 311KG7W WCDMA850: 4M64F4W WCDMA1900: 4M66F2W					
Modulation Characteristics:	GMSK for GSM/GPRS; GMSK and 8PSK for EDGE WCDMA: QPSK; HSDPA:QPSK/16QAM; HSUPA:BPSK					
SIM Card:	Only support single SIM Card.					
Antenna:	PIFA					
Antenna gain:	GSM 850: 0.8dBi ,PCS 1900:1.2dBiWCDMA 850: 0.8dBi, WCDMA1900: 1.2dBi,					
Battery parameter:	Rated Voltage: 3.8V Charge Limit: 4.35					
	Capacity: 2450mA					



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Adoptor	Input: AC100-240V, 0.2A,50-60Hz
Adapter:	Output: DC5V, 1000mA
GPRS/EDGE Class:	Multi-Class12
Extreme Vol. Limits:	DC 3.5 V to 4.35 V (Nominal DC3.8V)
Extreme Temp. Tolerance:	-30℃ to +50℃
Hardware version number:	WW867-MB-V8.9
Software version number:	SILVER_AMXNYX_V001R

^{**} Note: The High Voltage 4.35V and Low Voltage 3.5V 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	2019.7.29	2020.07.28
			MY51110105		
Signal Analyzer	Agilent	N9020A	WITSTITUTUS	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	2019.10.9	2020.10.8
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2019.10.12	2020.10.11
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	2019.10.12	2020.10.11
Test SW	BULUN	BL410-E/18.905			

RF Connected Test

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

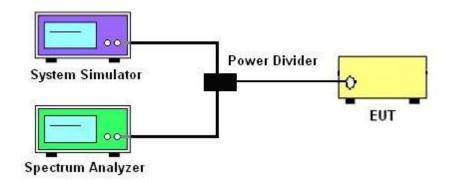
TEST OVERVIEW

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.

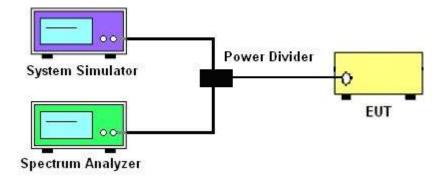
The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) 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

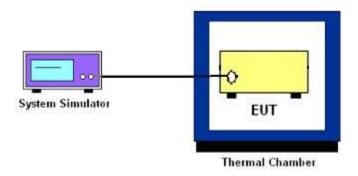
Temperature Variation

- 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

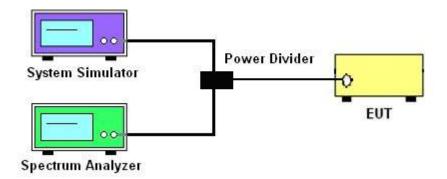
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

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.

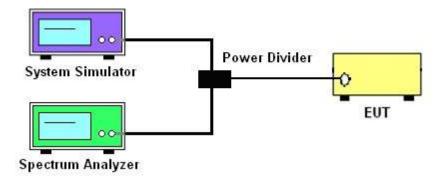
TEST PROCEDURE

- 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 $43 + 10\log(P)$ 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 \geq 3 x RBW
- 4. Span = 1.5 times the OBW
- 5.No. of sweep points $> 2 \times \text{span/RBW}$
- 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;

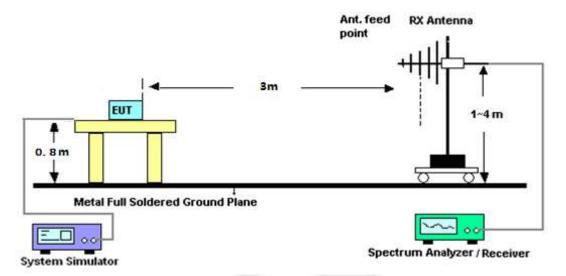
GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

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

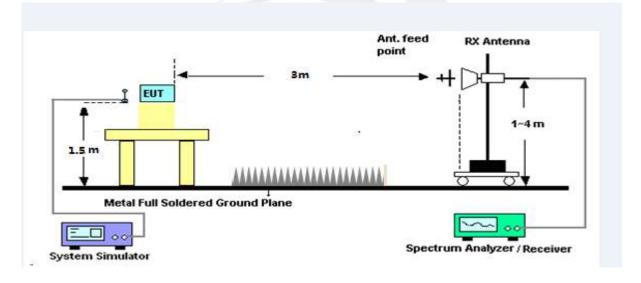


TEST SETUP

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	31.98
	836.6	31.91
(GMSK,1-Slot)	848.8	31.59
CDDC	824.2	31.86
GPRS (CMSK 1 Slot)	836.6	31.78
(GMSK,1-Slot)	848.8	31.46
CDDC	824.2	31.36
GPRS	836.6	31.33
(GMSK,2-Slot)	848.8	31.01
CDDC	824.2	30.95
GPRS	836.6	30.87
(GMSK,3-Slot)	848.8	30.55
CDDC	824.2	30.51
GPRS	836.6	30.42
(GMSK,4-Slot)	848.8	30.07
FORDS	824.2	31.88
EGPRS	836.6	31.82
(8PSK,1-Slot)	848.8	31.47
ECDDC.	824.2	31.22
EGPRS	836.6	31.13
(8PSK,2-Slot)	848.8	30.79
ECDDC	824.2	30.42
EGPRS	836.6	30.38
(8PSK,3-Slot)	848.8	30.02
ECDDS	824.2	29.67
EGPRS	836.6	29.64
(8PSK,4-Slot)	848.8	29.30



PCS 1900:

	PCS 1900	
Mode	Frequency (MHz)	AVG Power(dBm)
GSM	1850.2	28.30
(GMSK,1-Slot)	1880.0	28.21
(GIVISK, 1-3101)	1909.8	28.32
CDDC	1850.2	28.09
GPRS (GMSK,1-Slot)	1880.0	28.09
	1909.8	28.00
CDDC	1850.2	27.66
GPRS (GMSK,2-Slot)	1880.0	27.64
	1909.8	27.59
GPRS (GMSK,3-Slot)	1850.2	27.26
	1880.0	27.16
	1909.8	27.19
CDDC	1850.2	26.80
GPRS	1880.0	26.73
(GMSK,4-Slot)	1909.8	26.74
EGPRS	1850.2	28.01
	1880.0	28.13
(8PSK,1-Slot)	1909.8	28.22
FODDC	1850.2	27.22
EGPRS	1880.0	27.36
(8PSK,2-Slot)	1909.8	27.43
FORRE	1850.2	26.45
EGPRS	1880.0	26.62
(8PSK,3-Slot)	1909.8	26.72
ECDDS	1850.2	25.67
EGPRS	1880.0	25.90
(8PSK,4-Slot)	1909.8	26.00



UMTS BAND V

	UMTS BAND V	
Mode	Frequency(MHz)	AVG Power
WCDMA 850	826.4	21.55
RMC —	836.6	21.54
IXIVIC	846.6	21.69
HSDPA	826.4	21.53
Subtest 1	836.6	21.50
Sublest 1	846.6	21.65
HSDPA	826.4	21.13
Subtest 2	836.6	21.03
Juniesi Z	846.6	21.24
HSDPA	826.4	20.81
Subtest 3	836.6	20.61
Juniesi 3	846.6	20.85
HSDPA	826.4	20.37
Subtest 4	836.6	20.26
Sublest 4	846.6	20.40
HSUPA	826.4	21.81
Subtest 1	836.6	22.09
Sublest 1	846.6	21.97
HCHDA	826.4	20.88
HSUPA Subtest 2	836.6	21.18
Sublest 2	846.6	21.04
HCLIDA	826.4	20.76
HSUPA Subtest 3	836.6	20.71
Sublest 3	846.6	20.58
HCHDA	826.4	20.39
HSUPA	836.6	20.35
Subtest 4	846.6	20.19
LICLIDA	826.4	18.91
HSUPA	836.6	18.91
Subtest 5	846.6	18.79



UMTS BAND II

	UMTS BAND II	
Mode	Frequency(MHz)	AVG Power
WCDMA 1900	1852.4	21.78
RMC —	1880	21.23
IXIVIC	1907.6	21.58
HSDPA	1852.4	21.58
Subtest 1	1880	21.27
Sublest 1	1907.6	21.56
HSDPA	1852.4	21.16
Subtest 2	1880	20.80
Sublest 2	1907.6	21.11
HSDPA	1852.4	20.70
Subtest 3	1880	20.40
Sublest 5	1907.6	20.70
HSDPA	1852.4	20.28
Subtest 4	1880	19.98
Sublest 4	1907.6	20.37
HSUPA	1852.4	21.87
Subtest 1	1880	21.84
Sublest I	1907.6	21.83
HSUPA	1852.4	20.94
Subtest 2	1880	20.25
Sublest 2	1907.6	20.67
LICLIDA	1852.4	20.89
HSUPA Subtest 3	1880	19.85
Sublest 3	1907.6	20.21
LICLIDA	1852.4	20.45
HSUPA Subtest 4	1880	19.49
Sublest 4	1907.6	19.86
LICLIDA	1852.4	19.03
HSUPA	1880	18.08
Subtest 5	1907.6	18.40



A2. PEAK-TO-AVERAGE RADIO

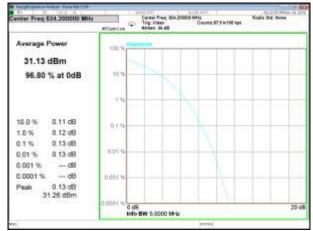
	GSM 850	
Mode	Frequency (MHz)	PAR
	824.2	0.13
GSM 850	836.6	0.12
	848.8	0.12
	824.2	0.12
GPRS 850	836.6	0.12
	848.8	0.12
	824.2	2.71
EGPRS 850	836.6	2.37
	848.8	2.53

	PCS 1900	
Mode	Frequency (MHz)	PAR
	1850.2	0.19
PCS1900	1880	0.20
	1909.8	0.21
	1850.2	0.19
GPRS1900	1880	0.20
	1909.8	0.21
7	1850.2	3.06
EGPRS1900	1880	2.88
-	1909.8	2.80

UMTS Band II						
Mode	Frequency (MHz)	PAR				
WCDMA 1900	1852.4	2.96				
RMC	1880	3.00				
	1907.6	2.85				
	1852.4	3.91				
HSDPA 1900	1880	3.53				
	1907.6	3.79				
	1852.4	3.66				
HSUPA 1900	1880	3.85				
	1907.6	3.64				

	UMTS Band V						
Mode	Mode Frequency (MHz)						
WCDMA 850	826.4	3.05					
RMC	836.6	2.92					
	846.6	3.12					
	826.4	3.92					
HSDPA 850	836.6	3.82					
	846.6	3.83					
	826.4	4.07					
HSUPA 850	836.6	3.73					
	846.6	3.78					







GSM850 Lower

Corner Freq. 856,000000 series
Trig. Video County, 45,6 kr36 kps
64/care. 56-08 Radio Std. None enter Freq 836,600000 MHz Average Power 96.80 % at 0dB 10.0 % 0.11 dB 1.0% 0.12 dB 0.1% 0.01 % 0.12 dB 0.001 % -- dB 0.0001 % -- dB Peak 0.12 dB 31.18 dBm 0 dB Info BW 5,0000 MHz

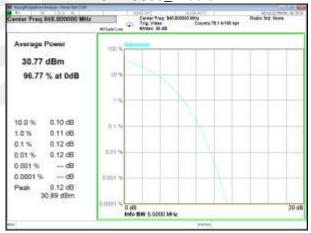




GSM850_Middle



GPRS850 Middle

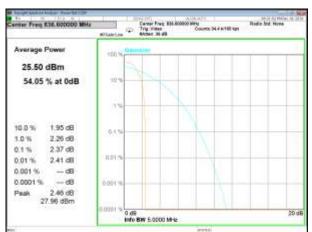


GSM850_Higher

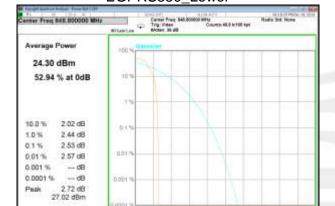
GPRS850_Higher







EGPRS850_Middle



EGPRS850_Higher

0 dB Info BW 5,0000 MHz







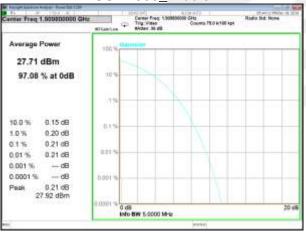
GSM1900 Lower



GPRS1900 Lower



GSM1900 Middle



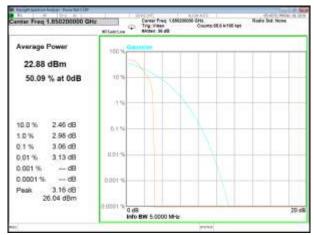
GPRS1900 Middle



GSM1900_Higher

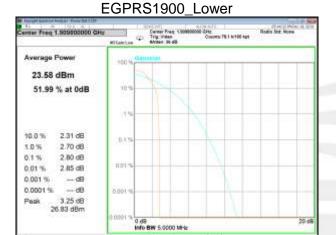
GPRS1900_Higher





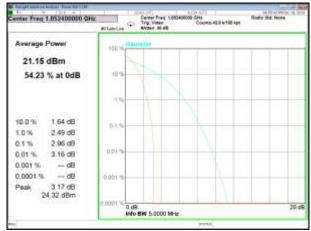


EGPRS1900_Middle

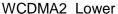


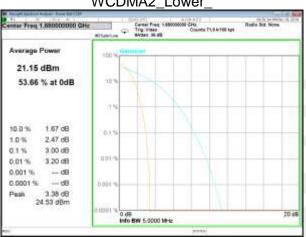
EGPRS1900_Higher







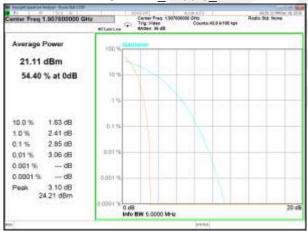




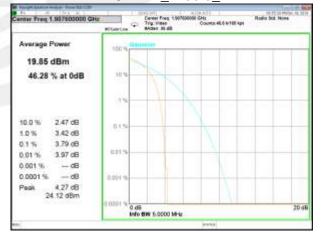
HSDPA2 Lower



WCDMA2 Middle



HSDPA2 Middle

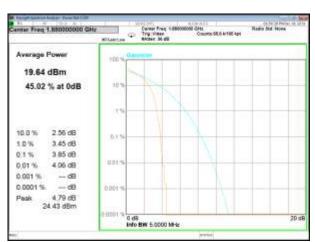


WCDMA2_Higher_

HSDPA2_Higher_

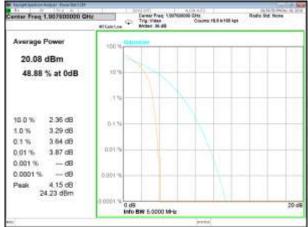






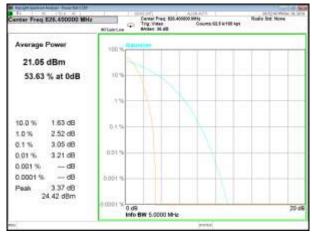
HSUPA2_Middle_



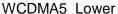


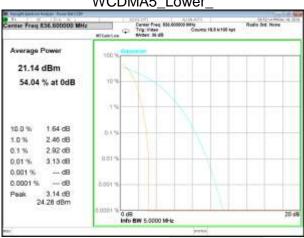
HSUPA2_Higher_







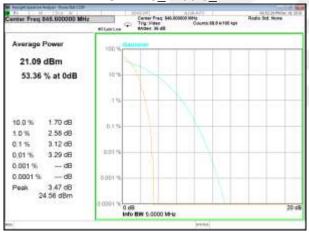




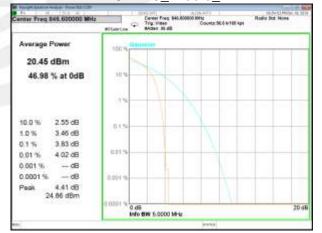
HSDPA5 Lower



WCDMA5_Middle



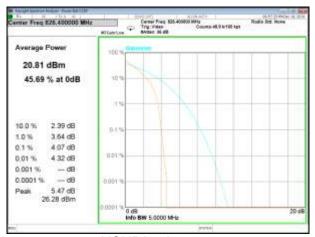
HSDPA5_Middle



WCDMA5_Higher_

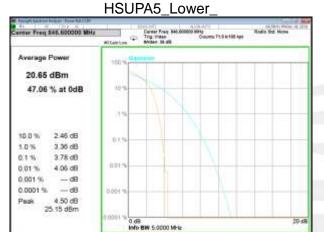
HSDPA5_Higher_







HSUPA5_Middle_



HSUPA5_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								
			Result						
Mode	Fraguenay	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	25.12	0.44	6.5	31.18	Vertical	Pass		
GSM850	836.6	22.99	0.45	6.5	29.04	Horizontal	Pass		
GSIVIOSO	836.6	24.97	0.45	6.5	31.02	Vertical	Pass		
	848.8	22.99	0.46	6.5	29.03	Horizontal	Pass		
	848.8	24.90	0.46	6.5	30.94	Vertical	Pass		
	824.2	23.12	0.44	6.5	29.18	Horizontal	Pass		
	824.2	25.14	0.44	6.5	31.20	Vertical	Pass		
GPRS850	836.6	22.80	0.45	6.5	28.85	Horizontal	Pass		
GPRS050	836.6	24.97	0.45	6.5	31.02	Vertical	Pass		
	848.8	22.70	0.46	6.5	28.74	Horizontal	Pass		
	848.8	24.73	0.46	6.5	30.77	Vertical	Pass		
	824.2	22.90	0.44	6.5	28.96	Horizontal	Pass		
	824.2	25.26	0.44	6.5	31.32	Vertical	Pass		
EGPRS850	836.6	22.88	0.45	6.5	28.93	Horizontal	Pass		
EGFK3030	836.6	25.13	0.45	6.5	31.18	Vertical	Pass		
	848.8	22.33	0.46	6.5	28.37	Horizontal	Pass		
	848.8	24.70	0.46	6.5	30.74	Vertical	Pass		
Limit	ERP<7W=38.45dBm								

	F	Radiated P	ower (E	IRP) for	PCS 1900 MHZ		
	v As			R	Result		
Mode	Frequency	S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.I.R.P.(dBm)	Polarization Of Max. ERP	Conclusion
	1850.2	17.72	2.41	10.35	25.66	Horizontal	Pass
	1850.2	19.63	2.41	10.35	27.57	Vertical	Pass
PCS1900	1880	17.67	2.42	10.35	25.60	Horizontal	Pass
PC31900	1880	19.45	2.42	10.35	27.38	Vertical	Pass
	1909.8	17.91	2.43	10.35	25.83	Horizontal	Pass
	1909.8	19.72	2.43	10.35	27.64	Vertical	Pass
	1850.2	16.54	2.41	10.35	24.48	Horizontal	Pass
	1850.2	18.95	2.41	10.35	26.89	Vertical	Pass
GPRS1900	1880	16.57	2.42	10.35	24.50	Horizontal	Pass
GFK31900	1880	19.05	2.42	10.35	26.98	Vertical	Pass
	1909.8	16.83	2.43	10.35	24.75	Horizontal	Pass
	1909.8	18.89	2.43	10.35	26.81	Vertical	Pass
	1850.2	17.23	2.41	10.35	25.17	Horizontal	Pass
	1850.2	19.43	2.41	10.35	27.37	Vertical	Pass
EGPRS1900	1880	17.37	2.42	10.35	25.30	Horizontal	Pass
	1880	19.54	2.42	10.35	27.47	Vertical	Pass
	1909.8	17.3	2.43	10.35	25.22	Horizontal	Pass
	1909.8	19.75	2.43	10.35	27.67	Vertical	Pass
Limit				EIRP<	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	11.44	2.41	10.35	19.38	Horizontal	Pass		
	1852.4	13.29	2.41	10.35	21.23	Vertical	Pass		
WCDMA	1880	10.81	2.42	10.35	18.74	Horizontal	Pass		
VVCDIVIA	1880	12.64	2.42	10.35	20.57	Vertical	Pass		
	1907.4	11.28	2.43	10.35	19.20	Horizontal	Pass		
	1907.4	13.15	2.43	10.35	21.07	Vertical	Pass		
	1852.4	11.26	2.41	10.35	19.20	Horizontal	Pass		
	1852.4	13.13	2.41	10.35	21.07	Vertical	Pass		
HSUPA	1880	10.87	2.42	10.35	18.80	Horizontal	Pass		
ПЗОРА	1880	12.78	2.42	10.35	20.71	Vertical	Pass		
	1907.4	11.26	2.43	10.35	19.18	Horizontal	Pass		
	1907.4	13.1	2.43	10.35	21.02	Vertical	Pass		
	1852.4	11.62	2.41	10.35	19.56	Horizontal	Pass		
	1852.4	13.39	2.41	10.35	21.33	Vertical	Pass		
HSDPA	1880	11.29	2.42	10.35	19.22	Horizontal	Pass		
HODEA	1880	13.15	2.42	10.35	21.08	Vertical	Pass		
	1907.4	11.1	2.43	10.35	19.02	Horizontal	Pass		
	1907.4	13.05	2.43	10.35	20.97	Vertical	Pass		
Limit				EIRP<2	:W=33dBm	li i			

Radiated Power (ERP) for WCDMA Band V								
Result								
Mode	Frequency	S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	Conclusion	
	826.4	12.95	0.44	6.5	19.01	Horizontal	Pass	
	826.4	14.84	0.44	6.5	20.90	Vertical	Pass	
WCDMA	836.6	13.24	0.45	6.5	19.29	Horizontal	Pass	
VVCDIVIA	836.6	14.96	0.45	6.5	21.01	Vertical	Pass	
	846.4	13.31	0.46	6.5	19.35	Horizontal	Pass	
	846.4	15.02	0.46	6.5	21.06	Vertical	Pass	
	826.4	13.18	0.44	6.5	19.24	Horizontal	Pass	
	826.4	14.95	0.44	6.5	21.01	Vertical	Pass	
HSUPA	836.6	12.77	0.45	6.5	18.82	Horizontal	Pass	
ПЗОРА	836.6	14.75	0.45	6.5	20.80	Vertical	Pass	
	846.4	13.01	0.46	6.5	19.05	Horizontal	Pass	
	846.4	14.91	0.46	6.5	20.95	Vertical	Pass	
	826.4	13.03	0.44	6.5	19.09	Horizontal	Pass	
	826.4	14.98	0.44	6.5	21.04	Vertical	Pass	
HSDPA	836.6	13.54	0.45	6.5	19.59	Horizontal	Pass	
HOUFA	836.6	15.38	0.45	6.5	21.43	Vertical	Pass	
	846.4	13.36	0.46	6.5	19.40	Horizontal	Pass	
	846.4	15.30	0.46	6.5	21.34	Vertical	Pass	
Limit								





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

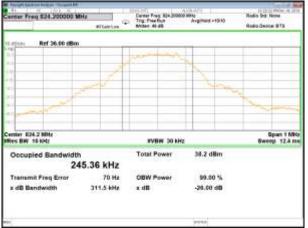
	,				,		
GSM Bandwidth [KHz]							
Mode	Lowest		Middle		Highest		
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW	
GSM850	245.36	311.5	241.26	306.8	245.22	309.2	
GPRS850	247.09	318.4	244.33	317	246.19	316.5	
EGPRS850	243.37	317.8	247.95	299.1	239.35	301.3	

GSM Bandwidth [KHz]							
Mode	Lowest		Middle		Highest		
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW	
GSM1900	243.57	312.5	242.48	312.5	244.47	312.4	
GPRS1900	246.15	319.9	245.38	313.6	241.77	313.8	
EGPRS1900	238.58	309	235.52	305.5	242.35	310.9	

WCDMA Bandwidth [MHz]							
Mode	Lowest		Middle		Highest		
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW	
WCDMA II	4.142	4.641	4.155	4.635	4.151	4.644	
HSDPA II	4.147	4.631	4.147	4.634	4.147	4.641	
HSUPA II	4.15	4.639	4.148	4.638	4.152	4.632	

WCDMA Bandwidth [MHz]							
Mode	Lowest		Middle		Highest		
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW	
WCDMA V	4.144	4.639	4.151	4.64	4.145	4.64	
HSDPA V	4.1372	4.647	4.144	4.63	4.146	4.644	
HSUPA V	4.138	4.662	4.14	4.633	4.15	4.65	



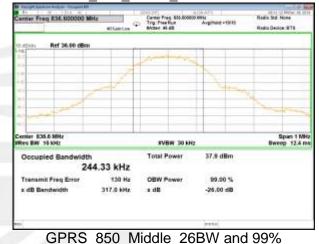




GSM_850_Lower 26BW and 99%

EVBW 30 kHz Total Power 241.26 kHz 306.8 kHz -26.00 dB

GPRS_850_Lower_26BW and 99%



GSM 850 Middle 26BW and 99%



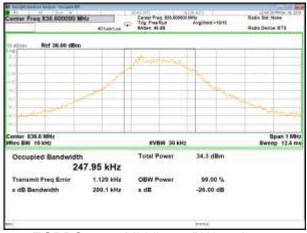
GSM 850 Higher 26BW and 99%

er Freq 848.800000 MHz Ref 36,00 dBm 246.19 kHz dB Bande 316.5 kHz -26.00 dB

GPRS 850 Higher 26BW and 99%







EGPRS_850_Middle_26BW and 99%

EGPRS_850_Lower_26BW and 99%

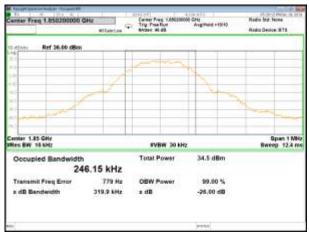


EGPRS_850_Higher_26BW and 99%

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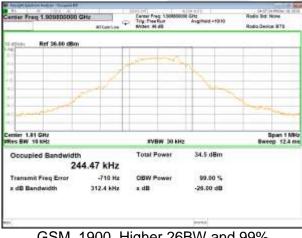
GSM_1900_Lower 26BW and 99%

ter Freq 1.680000000 GHz may 1.88 GH es BW 10 kH Occupied Bandwidth Total Power 34.8 dBm 242.48 kHz Transmit Freq Error 1.701 kHz OBW Power 99.00% z dB Bandwidth 312.5 kHz n dB -26.00 dB

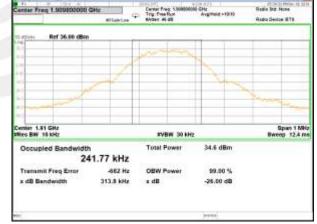
GPRS_1900_Lower 26BW and 99%



GSM_1900_Middle 26BW and 99%



GPRS_1900_Middle 26BW and 99%

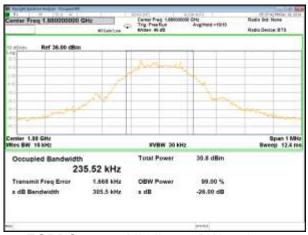


GSM_1900_Higher 26BW and 99%

GPRS_1900_Higher 26BW and 99%







EGPRS_1900_Middle_ 26BW and 99%

EGPRS_1900_Lower 26BW and 99%



EGPRS_1900_Higher 26BW and 99%







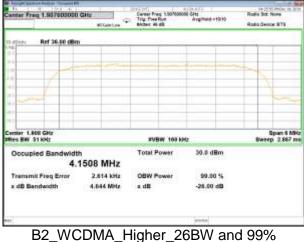
B2_WCDMA_Lower_26BW and 99%



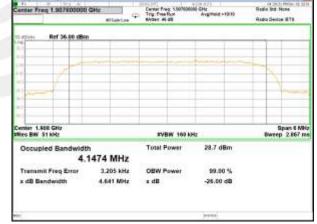
B2_HSDPA_Lower_26BW and 99%



B2_WCDMA_Middle_26BW and 99%



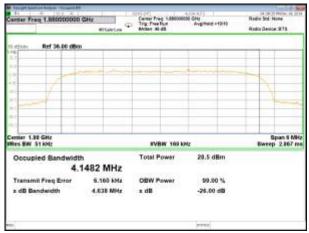
B2_HSDPA_Middle_26BW and 99%



B2_HSDPA_Higher_26BW and 99%

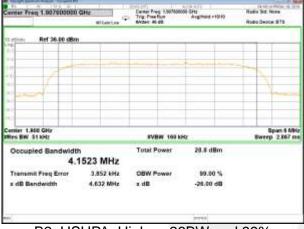






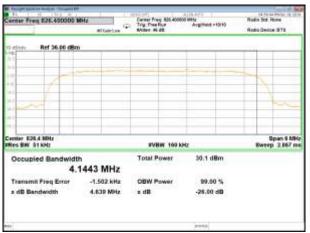
B2_HSUPA_Middle_26BW and 99%

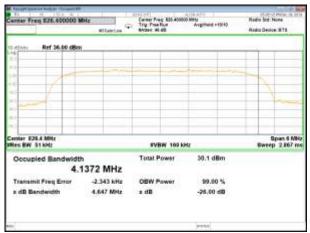
B2_HSUPA_Lower_26BW and 99%



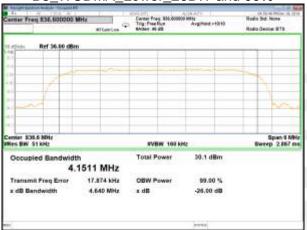
B2_HSUPA_Higher_26BW and 99%



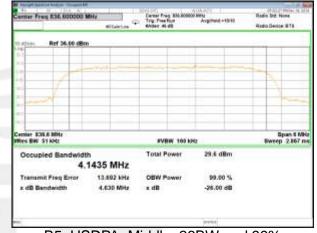




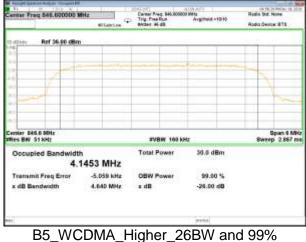
B5_WCDMA_Lower_26BW and 99%



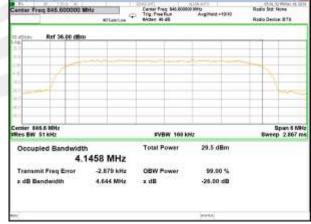
B5_HSDPA_Lower_26BW and 99%



B5_WCDMA_Middle_26BW and 99%



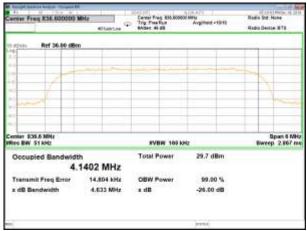
B5_HSDPA_Middle_26BW and 99%



B5_HSDPA_Higher_26BW and 99%

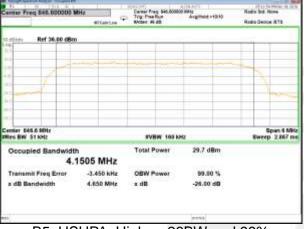






B5_HSUPA_Middle_26BW and 99%

B5_HSUPA_Lower_26BW and 99%



B5_HSUPA_Higher_26BW and 99%



A5.FREQUENCY STABILITY

Normal Voltage = \${Nor.}; Battery End Point (BEP) = 3.5V; Maximum Voltage =4.35V

	GSM 850 /836.6MHz								
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
remperature (C)	(Volt)	(Hz)	(ppm)	LIIIII	Nesuit				
50		32.62	0.039						
40		15.59	0.019						
30		13.49	0.016						
20		22.18	0.027		PASS				
10	Normal Voltage	16.24	0.019						
0		29.85	0.036	2.5ppm					
-10		23.12	0.028						
-20		32.96	0.039						
-30		11.93	0.014						
25	Maximum Voltage	22.09	0.026						
25	BEP	25.65	0.031						

	GPRS 850 /836.6MHz									
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result					
Temperature (C)	(Volt)	(Hz)	(ppm)	LIIIII	Nesuit					
50		20.50	0.025							
40		15.26	0.018							
30		20.48	0.024							
20		13.33	0.016		PASS					
10	Normal Voltage	19.29	0.023							
0		23.61	0.028	2.5ppm						
-10		24.46	0.029]						
-20		13.55	0.016]						
-30		24.26	0.029							
25	Maximum Voltage	24.89	0.030							
25	BEP	26.32	0.031							

ECDDS 050 /026 6MHz										
EGPRS 850 /836.6MHz										
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result					
remperature (C)	(Volt)	(Hz)	(ppm)	LIIIII	Nesuit					
50		26.69	0.032							
40		29.52	0.035							
30		29.58	0.035							
20		30.92	0.037	2.5ppm						
10	Normal Voltage	21.76	0.026							
0		21.77	0.026		PASS					
-10		25.21	0.030							
-20		23.96	0.029]						
-30		19.65	0.023							
25	Maximum Voltage	27.46	0.033							
25	BEP	13.86	0.017							



	GSM 1900 / 1880MHz								
Temperature	Voltage	Freq.	Freq.						
•	voltage	Dev.	Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)						
50		24.32	0.013						
40		17.86	0.010						
30		13.35	0.007						
20		11.76	0.006						
10	Normal Voltage	21.28	0.011						
0		26.87	0.014	Within Authorized	DACC				
-10		16.88	0.009	Band	PASS				
-20		27.02	0.014						
-30		35.84	0.019						
25	Maximum Voltage	33.39	0.018						
25	BEP	16.20	0.009						

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	GPRS 1900 / 1880MHz								
Temperature	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)						
50		14.41	0.008						
40		20.71	0.011						
30		32.70	0.017						
20		36.39	0.019						
10	Normal Voltage	25.67	0.014						
0		27.12	0.014	Within Authorized	PASS				
-10		28.06	0.015	Band	PASS				
-20		20.82	0.011						
-30		36.12	0.019	/					
25	Maximum Voltage	17.78	0.009						
25	BEP	31.24	0.017						

50000 (000 / (000 H)									
	EGPRS 1900 / 1880MHz								
Temperature	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)						
50		20.52	0.011						
40		24.84	0.013						
30		29.42	0.016						
20		28.11	0.015						
10	Normal Voltage	16.68	0.009						
0		23.94	0.013	Within Authorized	PASS				
-10		26.35	0.014	Band	PASS				
-20		18.65	0.010						
-30		20.08	0.011						
25	Maximum Voltage	20.67	0.011]					
25	BEP	27.38	0.015						



	UMTS Band II /1880MHz								
Temperature	e Voltage	Freq.	Freq.						
•	voltage	Dev.	Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)						
50		14.54	0.008						
40		36.20	0.019						
30		22.07	0.012						
20		29.67	0.016						
10	Normal Voltage	25.85	0.014						
0		30.89	0.016	Within Authorized	PASS				
-10		17.09	0.009	Band	PASS				
-20		34.39	0.018						
-30		12.45	0.007						
25	Maximum Voltage	30.47	0.016						
25	BEP	28.81	0.015						

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	HSDPA Band II /1880MHz								
Temperature	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result				
(°C)	(Volt)	(Hz)	(ppm)	Liitiit	Nesun				
50		30.15	0.016						
40		28.62	0.015						
30		17.60	0.009						
20		27.76	0.015						
10	Normal Voltage	14.16	0.008						
0		13.44	0.007	Within Authorized	PASS				
-10		21.85	0.012	Band	PASS				
-20		30.74	0.016						
-30		17.20	0.009						
25	Maximum Voltage	16.85	0.009						
25	BEP	29.40	0.016						

HSUPA Band II /1880MHz								
Temperature	Voltage	Freq.	Freq.					
•	voltage	Dev.	Dev.	Limit	Result			
(°C)	(Volt)	(Hz)	(ppm)					
50		31.64	0.017					
40		25.25	0.013					
30		25.32	0.013					
20		13.93	0.007					
10	Normal Voltage	17.09	0.009					
0		19.44	0.010	Within Authorized	PASS			
-10		32.10	0.017	Band	PASS			
-20		26.84	0.014					
-30		17.53	0.009					
25	Maximum Voltage	28.19	0.015					
25	BEP	30.12	0.016					



	UMTS Band V / 836.6MHz									
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result					
remperature (C)	(Volt)	(Hz)	(ppm)	LIIIII	Kesuit					
50		16.68	0.020							
40		27.84	0.033							
30		16.89	0.020		PASS					
20		22.71	0.027							
10	Normal Voltage	18.89	0.023							
0		13.46	0.016	2.5ppm						
-10		31.35	0.037							
-20		16.35	0.020							
-30		14.19	0.017	1						
25	Maximum Voltage	23.50	0.028	1						
25	BEP	24.14	0.029	1						

	HSDPA Band V / 836.6MHz									
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result					
Temperature (C)	(Volt)		(ppm)	LIIIII	Nesuit					
50		22.69	0.027							
40		34.14	0.041							
30		21.31	0.025	2.5ppm	PASS					
20		21.35	0.026							
10	Normal Voltage	33.64	0.040							
0		24.58	0.029							
-10		29.83	0.036]						
-20		36.33	0.043]						
-30		24.63	0.029							
25	Maximum Voltage	21.82	0.026	1						
25	BEP	35.59	0.043	1						

	HSUPA Band V / 836.6MHz									
Tomporoturo (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result					
Temperature (°C)	(Volt)	(Hz)	(ppm)	LITTIIL	Result					
50		15.08	0.018							
40		16.48	0.020							
30		28.87	0.035							
20		29.89	0.036		PASS					
10	Normal Voltage	35.56	0.043							
0		32.91	0.039	2.5ppm						
-10		21.52	0.026							
-20		24.02	0.029							
-30		18.76	0.022							
25	Maximum Voltage	32.05	0.038							
25	BEP	13.51	0.016							

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

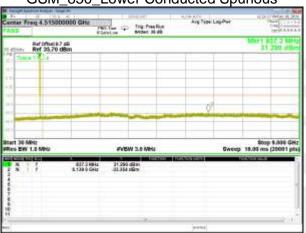


A6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS





GSM_850_Lower Conducted Spurious



GPRS_850_Lower_Conducted Spurious



GSM 850 Middle Conducted Spurious



GPRS_850_Middle_Conducted Spurious



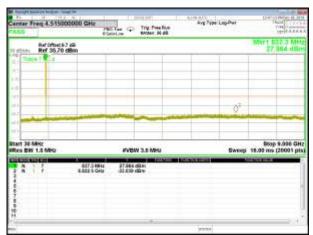
GSM_850_Higher Conducted Spurious

GPRS_850_Higher_Conducted Spurious

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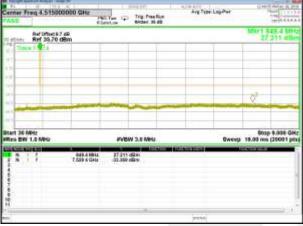






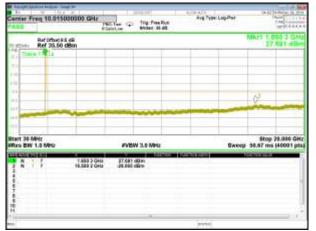
EGPRS_850_Middle_Conducted Spurious

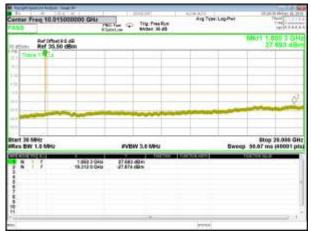




EGPRS_850_Higher_Conducted Spurious





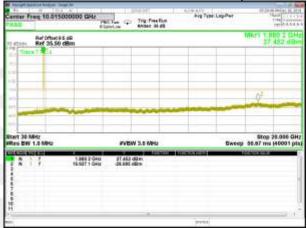


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GSM_1900_Lower Conducted Spurious

er Freq 10.015000000 GHz 1,880 Z 27,444 s Ref 35.50 dBm Stop 28,006 GHz Sweep 58,07 ms (46001 pts)

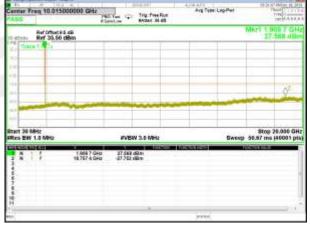
GPRS_1900_Lower Conducted Spurious



GSM_1900_Middle Conducted Spurious



GPRS_1900_Middle Conducted Spurious



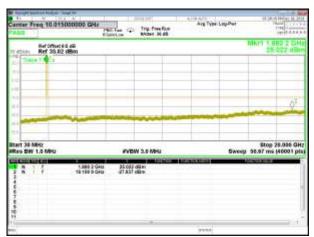
GSM_1900_Higher Conducted Spurious

GPRS_1900_Higher Conducted Spurious

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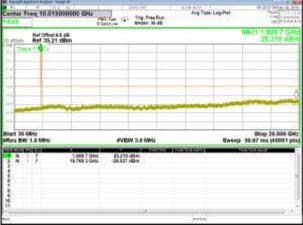






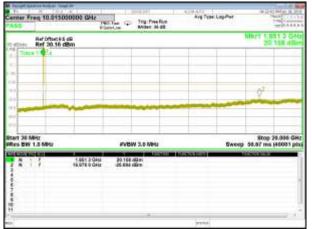
EGPRS_1900_Middle Conducted Spurious

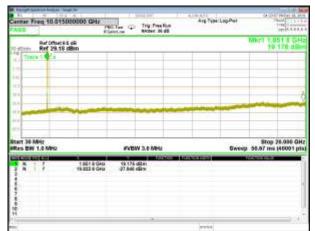
EGPRS_1900_Lower Conducted Spurious



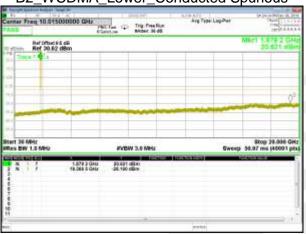
EGPRS_1900_Higher Conducted Spurious



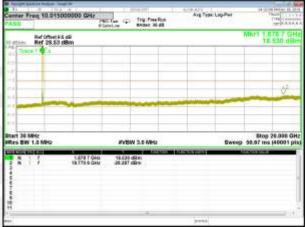




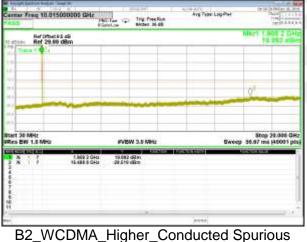
B2_WCDMA_Lower_Conducted Spurious



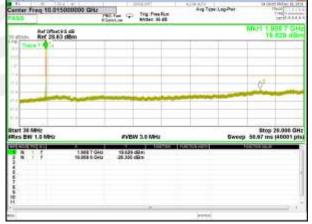
B2_HSDPA_Lower_Conducted Spurious



B2_WCDMA_Middle_Conducted Spurious



B2_HSDPA_Middle_Conducted Spurious



B2_HSDPA_Higher_Conducted Spurious

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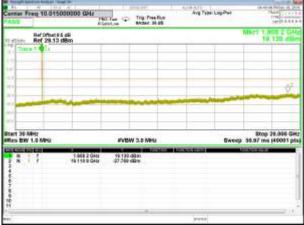






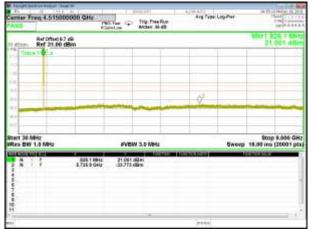
B2_HSUPA_Middle_Conducted Spurious

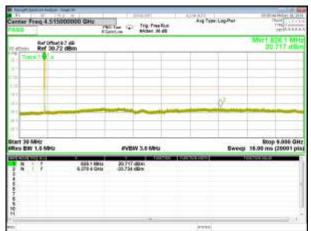
B2_HSUPA_Lower_Conducted Spurious



B2_HSUPA_Higher_Conducted Spurious







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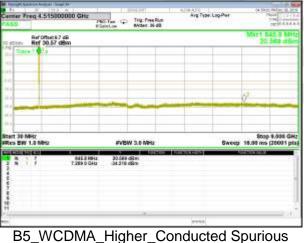
B5_WCDMA_Lower_Conducted Spurious

er Freq 4,515000000 GHz Ref 0ffset 6.7 dis Ref 31.24 dBm Stop 9,006 GHz Sweep 16,00 ms (20001 pts IVEW 3.0 MHs 21.225 dBm 34.687 dBm

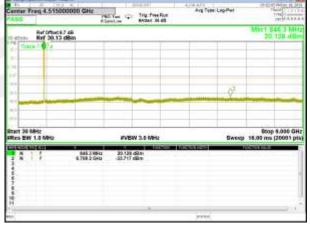
B5_HSDPA_Lower_Conducted Spurious



B5_WCDMA_Middle_Conducted Spurious

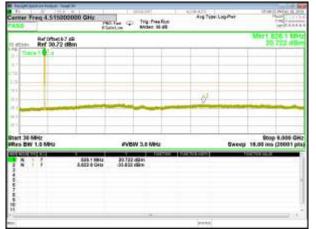


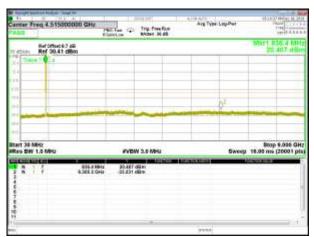
B5_HSDPA_Middle_Conducted Spurious



B5_HSDPA_Higher_Conducted Spurious

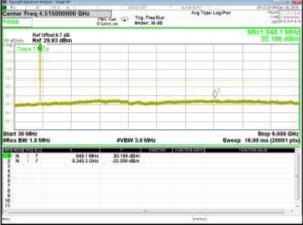






B5_HSUPA_Middle_Conducted Spurious

B5_HSUPA_Lower_Conducted Spurious



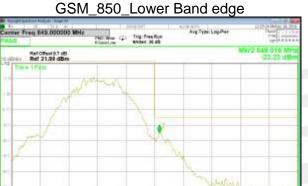
B5_HSUPA_Higher_Conducted Spurious

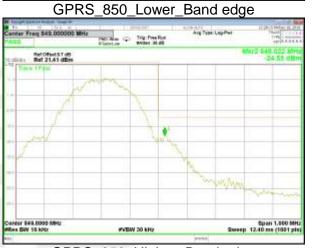
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A7. BAND EDGE













EGPRS_850_Lower_Band edge

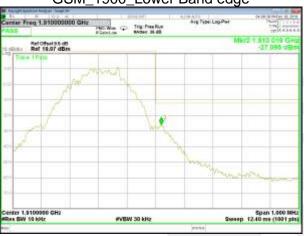
EGPRS_850_Higher_Band edge







GSM_1900_Lower Band edge



GPRS_1900_Lower Band edge



GSM_1900_Higher Band edge



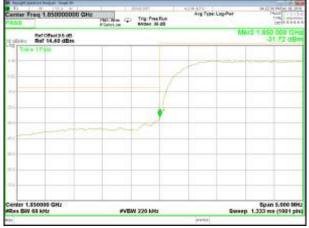
GPRS_1900_Higher Band edge



EGPRS_1900_Lower Band edge

EGPRS_1900_Higher Band edge







B2_WCDMA_Lower_Band edge



B2_HSDPA_Lower_Band edge



B2_WCDMA_Higher_Band edge



B2_HSDPA_Higher_Band edge



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.

, ,		-	•	000)MHz				
	The Wo	rst Test Res			324.2 MHz			
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
1648.35	-40.43	9.40	4.75	-35.78	-13.00	-22.78	Н	
2472.26	-39.39	10.60	8.39	-37.18	-13.00	-24.18	Н	
3296.54	-32.30	12.00	11.79	-32.09	-13.00	-19.09	Н	
1648.33	-44.53	9.40	4.75	-39.88	-13.00	-26.88	V	
2472.31	-44.12	10.60	8.39	-41.91	-13.00	-28.91	V	
3296.58	-43.29	12.00	11.79	-43.08	-13.00	-30.08	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	
1673.06	-40.94	9.50	4.76	-36.20	-13.00	-23.20	Н	
2509.75	-39.75	10.70	8.40	-37.45	-13.00	-24.45	Н	
3346.10	-31.46	12.20	11.80	-31.06	-13.00	-18.06	Н	
1673.13	-43.99	9.40	4.75	-39.34	-13.00	-26.34	V	
2509.77	-45.08	10.60	8.39	-42.87	-13.00	-29.87	V	
3346.00	-43.93	12.20	11.82	-43.55	-13.00	-30.55	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	
1697.18	-41.08	9.60	4.77	-36.25	-13.00	-23.25	Н	
2546.35	-39.48	10.80	8.50	-37.18	-13.00	-24.18	Н	
3395.22	-31.59	12.50	11.90	-30.99	-13.00	-17.99	Н	
1697.28	-44.25	9.60	4.77	-39.42	-13.00	-26.42	V	
2546.52	-44.07	10.80	8.50	-41.77	-13.00	-28.77	V	
3394.92	-43.36	12.50	11.90	-42.76	-13.00	-29.76	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				
1648.01	-40.90	9.40	4.75	-36.25	-13.00	-23.25	Н				
2472.63	-40.27	10.60	8.39	-38.06	-13.00	-25.06	Η				
3296.52	-32.26	12.00	11.79	-32.05	-13.00	-19.05	Η				
1648.46	-43.87	9.40	4.75	-39.22	-13.00	-26.22	>				
2472.41	-45.30	10.60	8.39	-43.09	-13.00	-30.09	V				
3296.43	-43.47	12.00	11.79	-43.26	-13.00	-30.26	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				
1672.89	-41.06	9.50	4.76	-36.32	-13.00	-23.32	Н				
2509.66	-39.28	10.70	8.40	-36.98	-13.00	-23.98	Н				
3346.24	-32.04	12.20	11.80	-31.64	-13.00	-18.64	Н				
1673.02	-44.47	9.40	4.75	-39.82	-13.00	-26.82	V				
2509.76	-44.11	10.60	8.39	-41.90	-13.00	-28.90	V				
3346.03	-43.66	12.20	11.82	-43.28	-13.00	-30.28	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				
1697.34	-41.04	9.60	4.77	-36.21	-13.00	-23.21	Н				
2546.49	-39.78	10.80	8.50	-37.48	-13.00	-24.48	Н				
3394.95	-31.08	12.50	11.90	-30.48	-13.00	-17.48	Н				
1697.60	-44.20	9.60	4.77	-39.37	-13.00	-26.37	V				
2546.55	-45.07	10.80	8.50	-42.77	-13.00	-29.77	V				
3395.10	-43.51	12.50	11.90	-42.91	-13.00	-29.91	V				

				9000)MHz						
		orst Test Res	sults Cha							
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
1648.08	-41.29	9.40	4.75	-36.64	-13.00	-23.64	Н			
2472.59	-40.16	10.60	8.39	-37.95	-13.00	-24.95	Н			
3296.71	-32.13	12.00	11.79	-31.92	-13.00	-18.92	Н			
1648.44	-43.95	9.40	4.75	-39.30	-13.00	-26.30	V			
2472.69	-44.78	10.60	8.39	-42.57	-13.00	-29.57	V			
3296.48	-43.27	12.00	11.79	-43.06	-13.00	-30.06	V			
	The Wo	orst Test Res	sults Cha	nnel 190/8	36.6 MHz					
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
1673.14	-41.56	9.50	4.76	-36.82	-13.00	-23.82	Н			
2509.69	-40.03	10.70	8.40	-37.73	-13.00	-24.73	Н			
3346.37	-31.05	12.20	11.80	-30.65	-13.00	-17.65	Н			
1672.96	-43.16	9.40	4.75	-38.51	-13.00	-25.51	V			
2509.48	-44.27	10.60	8.39	-42.06	-13.00	-29.06	V			
3345.97	-43.37	12.20	11.82	-42.99	-13.00	-29.99	V			
	The Wo	orst 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			
1697.39	-41.52	9.60	4.77	-36.69	-13.00	-23.69	Н			
2546.09	-39.40	10.80	8.50	-37.10	-13.00	-24.10	Н			
3394.91	-32.07	12.50	11.90	-31.47	-13.00	-18.47	Н			
1697.55	-44.44	9.60	4.77	-39.61	-13.00	-26.61	V			
2546.31	-45.08	10.80	8.50	-42.78	-13.00	-29.78	V			
3395.31	-43.98	12.50	11.90	-43.38	-13.00	-30.38	V			



DCS 1900: (30-20000)MHz										
	The Word				/1850.2MHz					
	S	st rest ivesu	113 101 011	PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
3700.41	-34.87	12.60	12.93	-35.20	-13.00	-22.20	Н			
5550.31	-35.35	13.10	17.11	-39.36	-13.00	-26.36	Н			
7400.63	-32.18	11.50	22.20	-42.88	-13.00	-29.88	Н			
3700.06	-35.05	12.60	12.93	-35.38	-13.00	-22.38	V			
5550.41	-34.35	13.10	17.11	-38.36	-13.00	-25.36	V			
7400.67	-32.30	11.50	22.20	-43.00	-13.00	-30.00	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			
3759.97	-34.03	12.60	12.93	-34.36	-13.00	-21.36	Н			
5640.00	-34.12	13.10	17.11	-38.13	-13.00	-25.13	Н			
7520.17	-33.22	11.50	22.20	-43.92	-13.00	-30.92	Н			
3760.02	-35.35	12.60	12.93	-35.68	-13.00	-22.68	V			
5640.23	-34.05	13.10	17.11	-38.06	-13.00	-25.06	V			
7519.84	-31.83	11.50	22.20	-42.53	-13.00	-29.53	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			
3819.49	-33.79	12.60	12.93	-34.12	-13.00	-21.12	Н			
5729.41	-34.44	13.10	17.11	-38.45	-13.00	-25.45	Н			
7638.94	-32.85	11.50	22.20	-43.55	-13.00	-30.55	Н			
3819.44	-35.67	12.60	12.93	-36.00	-13.00	-23.00	V			
5729.42	-35.00	13.10	17.11	-39.01	-13.00	-26.01	V			
7639.37	-31.79	11.50	22.20	-42.49	-13.00	-29.49	V			

	GPRS1900: (30-20000)MHz										
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				
3700.25	-33.70	12.60	12.93	-34.03	-13.00	-21.03	Η				
5550.27	-34.57	13.10	17.11	-38.58	-13.00	-25.58	Ι				
7400.73	-32.46	11.50	22.20	-43.16	-13.00	-30.16	Ι				
3700.10	-35.81	12.60	12.93	-36.14	-13.00	-23.14	>				
5550.27	-34.92	13.10	17.11	-38.93	-13.00	-25.93	>				
7400.93	-32.29	11.50	22.20	-42.99	-13.00	-29.99	V				
	The Wors	st 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				
3760.03	-34.29	12.60	12.93	-34.62	-13.00	-21.62	Н				
5639.99	-34.17	13.10	17.11	-38.18	-13.00	-25.18	Н				
7520.04	-33.28	11.50	22.20	-43.98	-13.00	-30.98	Η				
3760.33	-35.04	12.60	12.93	-35.37	-13.00	-22.37	V				
5639.86	-34.45	13.10	17.11	-38.46	-13.00	-25.46	V				
7520.26	-31.82	11.50	22.20	-42.52	-13.00	-29.52	V				



The Worst Test Results for Channel 810/1909.8MHz										
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
3819.39	-34.23	12.60	12.93	-34.56	-13.00	-21.56	Н			
5729.07	-34.13	13.10	17.11	-38.14	-13.00	-25.14	Н			
7638.91	-33.58	11.50	22.20	-44.28	-13.00	-31.28	Н			
3819.33	-35.84	12.60	12.93	-36.17	-13.00	-23.17	V			
5729.12	-33.79	13.10	17.11	-37.80	-13.00	-24.80	V			
7639.33	-33.19	11.50	22.20	-43.89	-13.00	-30.89	V			

	EGPRS 1900: (30-20000)MHz										
	The Wors				/1850.2MHz						
	S			PMea	Limit	Margin					
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity				
3700.05	-34.59	12.60	12.93	-34.92	-13.00	-21.92	Н				
5550.53	-34.21	13.10	17.11	-38.22	-13.00	-25.22	Н				
7400.65	-33.04	11.50	22.20	-43.74	-13.00	-30.74	Н				
3700.21	-35.97	12.60	12.93	-36.30	-13.00	-23.30	V				
5550.33	-34.76	13.10	17.11	-38.77	-13.00	-25.77	V				
7400.54	-32.64	11.50	22.20	-43.34	-13.00	-30.34	V				
The Worst Test Results for Channel 661/1880.0MHz											
	S			PMea	Limit	Margin					
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity				
3760.01	-34.40	12.60	12.93	-34.73	-13.00	-21.73	Н				
5640.26	-34.53	13.10	17.11	-38.54	-13.00	-25.54	Н				
7520.09	-32.67	11.50	22.20	-43.37	-13.00	-30.37	Н				
3759.97	-35.60	12.60	12.93	-35.93	-13.00	-22.93	V				
5640.27	-34.84	13.10	17.11	-38.85	-13.00	-25.85	V				
7519.85	-33.13	11.50	22.20	-43.83	-13.00	-30.83	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				
3819.64	-34.20	12.60	12.93	-34.53	-13.00	-21.53	Н				
5729.26	-35.02	13.10	17.11	-39.03	-13.00	-26.03	Н				
7639.14	-33.10	11.50	22.20	-43.80	-13.00	-30.80	Н				
3819.48	-35.41	12.60	12.93	-35.74	-13.00	-22.74	V				
5729.40	-34.71	13.10	17.11	-38.72	-13.00	-25.72	V				
7639.07	-32.22	11.50	22.20	-42.92	-13.00	-29.92	V				



		WCDMA Ba	and V: (3	0-9000)MI	Hz			
	The w	ost testresu	Its chann	nel 4132/8	26.4MHz			
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
1652.12	-40.53	9.40	4.75	-35.88	-13.00	-22.88	Н	
2479.40	-39.19	10.60	8.39	-36.98	-13.00	-23.98	Н	
3305.69	-32.01	12.00	11.79	-31.80	-13.00	-18.80	Н	
1652.49	-43.76	9.40	4.75	-39.11	-13.00	-26.11	V	
2479.55	-44.21	10.60	8.39	-42.00	-13.00	-29.00	V	
3305.76	-42.95	12.00	11.79	-42.74	-13.00	-29.74	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	
1672.90	-40.22	9.50	4.76	-35.48	-13.00	-22.48	Н	
2509.83	-40.14	10.70	8.40	-37.84	-13.00	-24.84	Н	
3346.33	-30.99	12.20	11.80	-30.59	-13.00	-17.59	Н	
1673.24	-43.26	9.40	4.75	-38.61	-13.00	-25.61	V	
2509.80	-44.35	10.60	8.39	-42.14	-13.00	-29.14	V	
3346.17	-43.01	12.20	11.82	-42.63	-13.00	-29.63	V	
	The Wo	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	
1693.35	-41.10	9.60	4.77	-36.27	-13.00	-23.27	Н	
2539.36	-40.42	10.80	8.50	-38.12	-13.00	-25.12	Н	
3386.04	-31.69	12.50	11.90	-31.09	-13.00	-18.09	Н	
1693.41	-44.40	9.60	4.77	-39.57	-13.00	-26.57	V	
2539.34	-44.57	10.80	8.50	-42.27	-13.00	-29.27	V	
3385.86	-43.35	12.50	11.90	-42.75	-13.00	-29.75	V	

		HSUPA Ba	ind V: (30)-9000)MF	łz					
The wost testresults channel 4132/826.4MHz										
	S			PMea	Limit	Margin				
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity			
1652.41	-40.61	9.40	4.75	-35.96	-13.00	-22.96	Н			
2479.54	-40.18	10.60	8.39	-37.97	-13.00	-24.97	Н			
3305.80	-31.96	12.00	11.79	-31.75	-13.00	-18.75	Н			
1652.36	-44.26	9.40	4.75	-39.61	-13.00	-26.61	V			
2479.23	-44.74	10.60	8.39	-42.53	-13.00	-29.53	V			
3305.57	-42.59	12.00	11.79	-42.38	-13.00	-29.38	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			
1673.05	-40.64	9.50	4.76	-35.90	-13.00	-22.90	Н			
2509.49	-39.27	10.70	8.40	-36.97	-13.00	-23.97	Н			
3346.32	-32.21	12.20	11.80	-31.81	-13.00	-18.81	Н			
1672.89	-43.67	9.40	4.75	-39.02	-13.00	-26.02	V			
2509.52	-44.53	10.60	8.39	-42.32	-13.00	-29.32	V			
3346.32	-43.85	12.20	11.82	-43.47	-13.00	-30.47	V			



The Worst Test Results Channel 4233/846.6MHz										
	S	_		PMea	Limit	Margin				
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			
2539.31	-39.87	10.80	8.50	-37.57	-13.00	-24.57	Н			
3386.21	-30.99	12.50	11.90	-30.39	-13.00	-17.39	H			
1693.66	-43.88	9.60	4.77	-39.05	-13.00	-26.05	V			
2539.43	-44.29	10.80	8.50	-41.99	-13.00	-28.99	V			
3385.92	-43.86	12.50	11.90	-43.26	-13.00	-30.26	V			

		HSDPA Ba	nd V: (30)-9000)MF	łz				
	The w	ost testresu	Its chann	nel 4132/8	26.4MHz				
	S			PMea	Limit	Margin			
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity		
1652.07	-41.32	9.40	4.75	-36.67	-13.00	-23.67	Н		
2479.52	-39.32	10.60	8.39	-37.11	-13.00	-24.11	Н		
3305.47	-31.32	12.00	11.79	-31.11	-13.00	-18.11	Н		
1652.41	-43.93	9.40	4.75	-39.28	-13.00	-26.28	V		
2479.66	-44.44	10.60	8.39	-42.23	-13.00	-29.23	V		
3305.77	-43.61	12.00	11.79	-43.40	-13.00	-30.40	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		
1672.87	-41.49	9.50	4.76	-36.75	-13.00	-23.75	Н		
2509.66	-40.34	10.70	8.40	-38.04	-13.00	-25.04	Н		
3346.36	-31.56	12.20	11.80	-31.16	-13.00	-18.16	Н		
1673.13	-43.34	9.40	4.75	-38.69	-13.00	-25.69	V		
2509.43	-44.66	10.60	8.39	-42.45	-13.00	-29.45	V		
3346.14	-43.02	12.20	11.82	-42.64	-13.00	-29.64	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		
1693.49	-40.77	9.60	4.77	-35.94	-13.00	-22.94	Н		
2539.32	-40.23	10.80	8.50	-37.93	-13.00	-24.93	Н		
3386.00	-31.42	12.50	11.90	-30.82	-13.00	-17.82	Н		
1693.23	-44.06	9.60	4.77	-39.23	-13.00	-26.23	V		
2539.32	-44.32	10.80	8.50	-42.02	-13.00	-29.02	V		
3386.17	-42.89	12.50	11.90	-42.29	-13.00	-29.29	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	
3704.47	-34.08	12.60	12.93	-34.41	-13.00	-21.41	Н	
5557.30	-34.97	13.10	17.11	-38.98	-13.00	-25.98	Н	
7409.87	-33.36	11.50	22.20	-44.06	-13.00	-31.06	Н	
3704.46	-34.88	12.60	12.93	-35.21	-13.00	-22.21	V	
5557.37	-34.87	13.10	17.11	-38.88	-13.00	-25.88	V	
7409.73	-31.86	11.50	22.20	-42.56	-13.00	-29.56	V	
The Worst Test Results for Channel 9400/1880MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	int(dBi) Loss	(dBm)	(dBm)	(dBm)	Polarity	
3759.78	-34.50	12.60	12.93	-34.83	-13.00	-21.83	Н	
5640.14	-35.09	13.10	17.11	-39.10	-13.00	-26.10	Н	
7520.02	-33.49	11.50	22.20	-44.19	-13.00	-31.19	Н	
3759.95	-35.89	12.60	12.93	-36.22	-13.00	-23.22	V	
5640.00	-34.78	13.10	17.11	-38.79	-13.00	-25.79	V	
7520.23	-33.19	11.50	22.20	-43.89	-13.00	-30.89	V	
	The Wors	t Test Resul	ts for Cha	annel 9538	3/1907.6MHz	•		
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity	
3815.54	-34.67	12.60	12.93	-35.00	-13.00	-22.00	Н	
5722.14	-34.50	13.10	17.11	-38.51	-13.00	-25.51	Н	
7630.31	-33.14	11.50	22.20	-43.84	-13.00	-30.84	Н	
3815.38	-35.14	12.60	12.93	-35.47	-13.00	-22.47	V	
5722.09	-35.20	13.10	17.11	-39.21	-13.00	-26.21	V	
7630.27	-33.21	11.50	22.20	-43.91	-13.00	-30.91	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
3704.12	-33.65	12.60	12.93	-33.98	-13.00	-20.98	Н
5557.44	-34.91	13.10	17.11	-38.92	-13.00	-25.92	Н
7409.55	-33.28	11.50	22.20	-43.98	-13.00	-30.98	Н
3704.01	-35.26	12.60	12.93	-35.59	-13.00	-22.59	V
5557.65	-34.99	13.10	17.11	-39.00	-13.00	-26.00	V
7409.89	-32.47	11.50	22.20	-43.17	-13.00	-30.17	V
	The Wors	st Test Resu	Its for Ch	annel 940	0/1880MHz		
	S			PMea	Limit	Margin	
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Loss	(dBm)	(dBm)	(dBm)	Polarity
3760.18	-34.62	12.60	12.93	-34.95	-13.00	-21.95	Н
5640.20	-34.71	13.10	17.11	-38.72	-13.00	-25.72	Н
7520.00	-33.54	11.50	22.20	-44.24	-13.00	-31.24	Н
3759.92	-35.56	12.60	12.93	-35.89	-13.00	-22.89	V
5640.00	-34.97	13.10	17.11	-38.98	-13.00	-25.98	V
7520.23	-32.86	11.50	22.20	-43.56	-13.00	-30.56	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
3815.35	-34.77	12.60	12.93	-35.10	-13.00	-22.10	Н
5722.06	-33.99	13.10	17.11	-38.00	-13.00	-25.00	Н
7630.21	-33.25	11.50	22.20	-43.95	-13.00	-30.95	Н
3815.26	-35.54	12.60	12.93	-35.87	-13.00	-22.87	V
5722.44	-35.13	13.10	17.11	-39.14	-13.00	-26.14	V
7630.00	-32.73	11.50	22.20	-43.43	-13.00	-30.43	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	
3704.17	-34.38	12.60	12.93	-34.71	-13.00	-21.71	Н	
5557.34	-34.42	13.10	17.11	-38.43	-13.00	-25.43	Н	
7409.75	-32.91	11.50	22.20	-43.61	-13.00	-30.61	Н	
3704.33	-34.75	12.60	12.93	-35.08	-13.00	-22.08	V	
5557.21	-33.94	13.10	17.11	-37.95	-13.00	-24.95	V	
7409.46	-32.89	11.50	22.20	-43.59	-13.00	-30.59	V	
The Worst Test Results for Channel 9400/1880MHz								
	S			PMea	Limit	Margin		
Frequency(MHz)	G.Lev (dBm)	Ant(dBi)	Ant(dBi) Loss	(dBm)	(dBm)	(dBm)	Polarity	
3759.92	-33.67	12.60	12.93	-34.00	-13.00	-21.00	Н	
5639.86	-34.99	13.10	17.11	-39.00	-13.00	-26.00	Н	
7519.84	-33.50	11.50	22.20	-44.20	-13.00	-31.20	Н	
3760.28	-35.14	12.60	12.93	-35.47	-13.00	-22.47	V	
5639.93	-33.80	13.10	17.11	-37.81	-13.00	-24.81	V	
7520.31	-32.74	11.50	22.20	-43.44	-13.00	-30.44	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	
3815.68	-34.08	12.60	12.93	-34.41	-13.00	-21.41	Н	
5722.04	-35.01	13.10	17.11	-39.02	-13.00	-26.02	Н	
7630.20	-33.04	11.50	22.20	-43.74	-13.00	-30.74	Н	
3815.58	-35.82	12.60	12.93	-36.15	-13.00	-23.15	V	
5722.30	-34.10	13.10	17.11	-38.11	-13.00	-25.11	V	
7630.02	-31.76	11.50	22.20	-42.46	-13.00	-29.46	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***

