

TEST REPORT

No. 2010TAR001

for

Nokia (China) investment CO.LTD.

GSM/TD mobile phone

Model Name: RM-636

FCC ID: QTLRM-636

with

Hardware Version: 4000

Software Version: 10.1.5

Issued Date: Jan 12th, 2010

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of TMC Beijing.

Test Laboratory:

DAR accreditation (DIN EN ISO/IEC 17025): No. DAT-P-114/01-01

FCC 2.948 Listed: No.733176
IC O.A.T.S listed: No.6629A-1

TMC Beijing, Telecommunication Metrology Center of Ministry of Industry and Information Technology

No. 52, Huayuan Bei Road, Haidian District, Beijing, P. R. China 100083.

Tel:+86(0)10-62303288-2105, Fax:+86(0)10-62304793 Email:welcome@emcite.com. www.emcite.com
©Copyright. All rights reserved by TMC Beijing.



CONTENTS

1.	TEST LABORATORY	3
1.1.	TESTING LOCATION	3
1.2.	TESTING ENVIRONMENT	3
1.3.	PROJECT DATA	3
1.4.	SIGNATURE	3
2.	CLIENT INFORMATION	4
2.1.	APPLICANT INFORMATION	4
2.2.	MANUFACTURER INFORMATION	4
3.	EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)	5
3.1.	ABOUT EUT	5
3.2.	INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST	5
3.3.	INTERNAL IDENTIFICATION OF AE USED DURING THE TEST	5
3.4.		
4.	REFERENCE DOCUMENTS	6
4.1.	REFERENCE DOCUMENTS FOR TESTING	6
5.	LABORATORY ENVIRONMENT	7
6.	SUMMARY OF TEST RESULTS	
7.	TEST EQUIPMENTS UTILIZED	9
ANI	NEX A: MEASUREMENT RESULTS	10
Α	.1 OUTPUT POWER	10
	.2 CONDUCTED EMISSION	
	3 FREQUENCY STABILITY	
Α	4 OCCUPIED BANDWIDTH	17
Α	.5 EMISSION BANDWIDTH	23
Α	6 BAND EDGE COMPLIANCE	29
Α	7 CONDUCTED SPURIOUS EMISSION	32



1. Test Laboratory

1.1. Testing Location

Company Name: TMC Beijing, Telecommunication Metrology Center of MII Address: No 52, Huayuan beilu, Haidian District, Beijing, P.R.China

Postal Code: 100083

Telephone: 00861062303288 Fax: 00861062304793

1.2. <u>Testing Environment</u>

Normal Temperature: $15-35^{\circ}$ C Relative Humidity: 20-75%

1.3. Project data

Testing Start Date: Oct 20th,2009
Testing End Date: Nov 9th,2009

1.4. Signature

登晚刚

Zi Xiaogang

(Prepared this test report)

Sun Xiangqian

(Reviewed this test report)

Lu Bingsong

附级村

Deputy Director of the laboratory

(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: Nokia (China) investment CO.LTD.

2,No.5 Donghuan Zhonglu, Beijing Economic Address /Post:

Technological Development Area. Beijing, 100176, P.R.China

City: Beijing Postal Code: 100176 Country: China

Telephone: 0086 10 87111332 0086 10-87114664 Fax:

2.2. Manufacturer Information

Company Name: BYD Precision Manufacturer Co.,Ltd. Beijing Branch

No.1, Kechuang Dong 5 Jie, Tongzhou District Beijing, 101111, P.R.

Address /Post:

China

City: Beijing Postal Code: 101111 Country: China

Telephone: 0086-10-58018888-71158 Fax: 0086-10-58018888-73000



3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description GSM/TD mobile phone

Model Name RM-636
FCC ID QTLRM-636
Frequency PCS 1900MHz

Antenna Internal

Power supply Battery or Charger (AC Adaptor)
Extreme vol. Limits 3.4VDC to 4.2VDC (nominal: 3.8VDC)

Extreme temp. Tolerance -30°C to +50°C

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of Telecommunication Metrology Center of MIIT of People's Republic of China.

3.2. Internal Identification of EUT used during the test

 EUT ID*
 SN or IMEI
 HW Version
 SW Version

 N02
 004401109494266
 4000
 10.1.5

The EUT is a variant model of 6788. All of the results are coming from the 6788.

3.3. Internal Identification of AE used during the test

AE ID*	Description		SN
AE1	Battery		/
AE2	Travel Adapter		/
AE3	Headset		/
AE1			
Model		BL-6F	
Manufacture	er	Nokia	
Capacitance	9	1200mAh	
Nominal Voltage		3.7V	
AE2			
Model		AC-8C	
Manufacture	er	Nokia	
Length of DC line		120cm	
AE3			
Model		WH-102	

Nokia

Manufacturer

^{*}EUT ID: is used to identify the test sample in the lab internally.

^{*}AE ID: is used to identify the test sample in the lab internally.



3.4. General Description

The Equipment Under Test (EUT) is a model of GSM/TD mobile phone with integrated antenna. It consists of Hand Telephone Set and normal options: lithium battery, charger.

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the Client.

4. Reference Documents

4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version	
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	V 10.1.09	
ANSI/TIA-603-C	Land Mobile FM or PM Communications Equipment	2004	
	Measurement and Performance Standards		
ANSI C63.4	Methods of Measurement of Radio-Noise Emissions from		
	Low-Voltage Electrical and Electronic Equipment in the		
	Range of 9 kHz to 40 GHz		



5. LABORATORY ENVIRONMENT

Semi-anechoic chamber (23 meters × 17meters × 10meters) did not exceed following limits along the EMC testing:

_ 3		
Temperature	Min. = 15 °C, Max. = 30 °C	
Relative humidity	Min. = 30 %, Max. = 60 %	
Shielding effectiveness	> 110 dB	
Electrical insulation	> 10 kΩ	
Ground system resistance	< 0.5 Ω	
Normalised site attenuation (NSA)	< ±3.2 dB, 10 m distance, from 30 to 1000 MHz	
Uniformity of field strength	Between 0 and 6 dB, from 80 to 2000 MHz	

Control room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 $^{\circ}$ C, Max. = 35 $^{\circ}$ C	
Relative humidity	Min. =30 %, Max. = 60 %	
Shielding effectiveness	> 110 dB	
Electrical insulation	> 10 kΩ	
Ground system resistance	< 0.5 Ω	

Conducted chamber did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω

Fully-anechoic chamber (6.8 meters × 3.08 meters × 3.53 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 30 °C	
Relative humidity	Min. = 30 %, Max. = 60 %	
Shielding effectiveness	> 110 dB	
Electrical insulation	> 10 kΩ	
Ground system resistance	< 0.5 Ω	
Uniformity of field strength	Between 0 and 6 dB, from 80 to 2000 MHz	



6. SUMMARY OF TEST RESULTS

Items	List	Clause in FCC rules	Verdict
1	Output Power	24.232(b)	Р
2	Conducted Emission	15.107/207	Р
3	Frequency Stability	2.1055/24.235	Р
4	Occupied Bandwidth	2.1049(h)(i)	Р
5	Emission Bandwidth	24.238(b)	Р
6	Band Edge Compliance	24.238(b)	Р
7	Conducted Spurious Emission	2.1057/24.238	Р



7. Test Equipments Utilized

NO.	NAME	TYPE	SERIES NUMBER	PRODUCER	CAL DUE DATE
1	Test Receiver	ESS	847151/015	R&S	2010-10-30
2	Test Receiver	ESI40	831564/002	R&S	2010-2-11
3	BiLog Antenna	3142B	9908-1403	EMCO	2010-1-16
4	BiLog Antenna	3142B	9908-1405	EMCO	2010-9-19
5	Signal Generator	SMT06	831285/005	R&S	2010-12-26
6	Signal Generator	SMP04	100070	R&S	2010-4-20
7	LISN	ESH2-Z5	829991/012	R&S	2010-8
8	Spectrum Analyzer	FSU26	200030	R&S	2010-6-18
9	Universal Radio Communication Tester	CMU200	100680	R&S	2010-8-23
10	Dual-Ridge Waveguide Horn Antenna	3115	9906-5827	EMCO	2010-3
11	Dual-Ridge Waveguide Horn Antenna	3115	9906-5831	EMCO	2010-3
12	Dual-Ridge Waveguide Horn Antenna	3116	2663	EMCO	2010-3
13	Dual-Ridge Waveguide Horn Antenna	3116	2661	EMCO	2010-3
14	Climatic chamber	PL-2G	343074	ESPEC	2010-5-15



ANNEX A: MEASUREMENT RESULTS

A.1 OUTPUT POWER (§24.232(b))

A.1.1 Summary

During the process of testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication tester (CMU-200) to ensure max power transmission and proper modulation.

This result contains peak output power and EIRP measurements for the EUT.

In all cases, output power is within the specified limits.

A.1.2 Conducted

A.1.2.1 Method of Measurements

The EUT was set up for the max output power with pseudo random data modulation.

The power was measured with Rhode & Schwarz Spectrum Analyzer FSU (peak)

These measurements were done at 3 frequencies, 1850.2 MHz, 1880.0MHz and 1909.8MHz for PCS1900 band; (bottom, middle and top of operational frequency range).

PCS1900

Limit

	Power step	Nominal Peak output	Tolerance (dB)	Target
		power (dBm)		(dB)
GSM	0	30dBm(1W)	± 2	30±1
GPRS	3	30dBm(1W)	±2	29±1
EGPRS	5	26 dBm(0.4W)	±2	26±1

Measurement result

GSM

Frequency(MHz)	Power Step	Peak output power(dBm)
1850.2	0	30.24
1880.0	0	29.90
1909.8	0	29.68

GPRS

Frequency(MHz)	Power Step	Peak output power(dBm)
1850.2	3	29.17
1880.0	3	28.78
1909.8	3	28.52

EGPRS

Frequency(MHz)	Power Step	Peak output power(dBm)
1850.2	5	25.67
1880.0	5	25.58
1909.8	5	25.48



A.2 CONDUCTED EMISSION (§15.107§15.207)

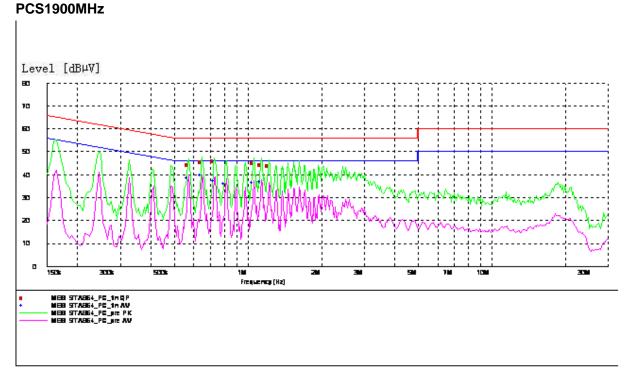
The measurement procedure in ANSI C63.4-1003 is used. Conducted Emission is measured with travel charger.

A.2.1 Limit

Frequency of Emission (MHz)	Conducted Limit (dBµV)			
Frequency of Emission (MH2)	Quasi -Peak	Average		
0.15 – 0.5	66 to 56*	56 to 46*		
0.5 – 5	56	46		
5 – 30	60	50		
* Decreases with logarithm of the frequency				



A.2.2 Measurement result



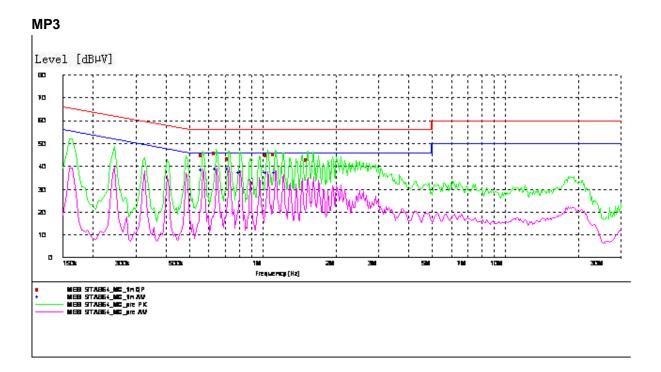
MEASUREMENT RESULT: "9TA864_PC_fin QP"

			_ `			
Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.570000	44.50	10.1	56	11.5	L1	GND
0.650000	45.80	10.1	56	10.2	L1	GND
0.730000	45.90	10.1	56	10.1	L1	GND
1.055000	45.20	10.1	56	10.8	L1	GND
1.140000	44.30	10.1	56	11.7	L1	GND
1.220000	43.90	10.1	56	12.1	L1	GND

MEASUREMENT RESULT: "9TA864_PC_fin AV"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.570000	38.80	10.1	46	7.2	L1	GND
0.650000	40.00	10.1	46	6.0	L1	GND
0.735000	37.40	10.1	46	8.6	L1	GND
0.815000	36.10	10.1	46	9.9	L1	GND
1.055000	36.40	10.1	46	9.6	L1	FLO
1.140000	37.10	10.1	46	8.9	L1	GND





MEASUREMENT RESULT: "9TA864_MC_fin QP"

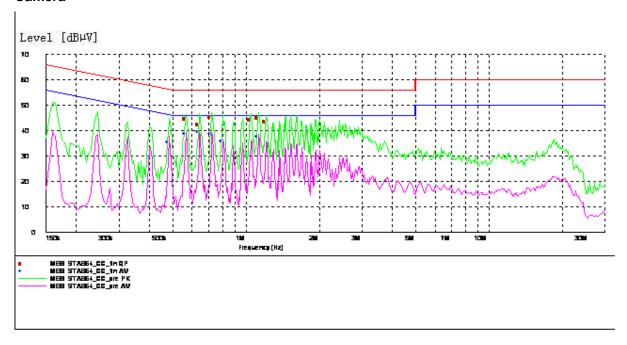
Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.565000	45.20	10.1	56	10.8	L1	GND
0.645000	45.70	10.1	56	10.3	L1	GND
0.730000	43.40	10.1	56	12.6	L1	FLO
1.050000	45.20	10.1	56	10.8	L1	GND
1.130000	45.50	10.1	56	10.5	L1	GND
1.535000	43.10	10.1	56	12.9	L1	FLO

MEASUREMENT RESULT: "9TA864_MC_fin AV"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.565000	38.40	10.1	46	7.6	L1	GND
0.650000	38.60	10.1	46	7.4	L1	GND
0.730000	38.90	10.1	46	7.1	L1	GND
0.810000	37.00	10.1	46	9.0	L1	GND
1.050000	37.00	10.1	46	9.0	L1	GND
1.135000	37.10	10.1	46	8.9	L1	GND



Camera



MEASUREMENT RESULT: "9TA864_CC_fin QP"

Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.565000	44.90	10.1	56	11.1	L1	GND
0.640000	42.80	10.1	56	13.2	L1	GND
0.725000	45.70	10.1	56	10.3	L1	GND
1.045000	44.50	10.1	56	11.5	L1	GND
1.130000	45.20	10.1	56	10.8	L1	GND
1.210000	43.80	10.1	56	12.2	L1	GND

MEASUREMENT RESULT: "9TA864_CC_fin AV"

			_			
Frequency	Level	Transd	Limit	Margin	Line	PE
MHz	dΒμV	dB	dΒμV	dB		
0.485000	35.80	10.1	46	10.4	L1	GND
0.565000	38.90	10.1	46	7.1	L1	GND
0.645000	39.70	10.1	46	6.3	L1	GND
0.725000	38.80	10.1	46	7.2	L1	GND
0.805000	36.10	10.1	46	9.9	L1	GND
1.130000	37.70	10.1	46	8.3	L1	GND



A.3 FREQUENCY STABILITY (§2.1055/§24.235)

A.3.1 Method of Measurement

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S CMU200 DIGITAL RADIO COMMUNICATION TESTER.

- 1. Measure the carrier frequency at room temperature.
- 2. Subject the EUT to overnight soak at -30°C.
- 3. With the EUT, powered via nominal voltage, connected to the CMU200 and in a simulated call on channel 661 for PCS 1900, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
- 4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.
- 5. Remeasure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments remeasuring carrier frequency at each voltage. Pause at nominal voltage for 1 1/2 hours unpowered, to allow any self-heating to stabilize, before continuing.
- 6. Subject the EUT to overnight soak at $+50^{\circ}$ C.
- 7. With the EUT, powered via nominal voltage, connected to the CMU200 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
- 8. Repeat the above measurements at 10 C increments from +50°C to -30°C. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.
- 9. At all temperature levels hold the temperature to \pm 0.5 °C during the measurement procedure.

A.3.2 Measurement Limit

A.3.2.1 For Hand carried battery powered equipment

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of between 3.4VDC and 4.2VDC, with a nominal voltage of 3.8VDC. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress. These voltages represent a tolerance of -10 % and +12.5 %. For the purposes of measuring frequency stability these voltage limits are to be used.

A.3.2.2 For equipment powered by primary supply voltage

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. For this EUT section



2.1055(d)(1) applies. This requires varying primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

A.3.3 Measurement results

PCS 1900

Frequency Error vs Voltage

Voltage(V)	Frequency error(Hz)	Frequency error(ppm)
3.4	-23	0.012
3.8	-22	0.012
4.2	-25	0.013

Frequency Error vs Temperature

temperature(°C)	Frequency error(Hz)	Frequency error(ppm)
-30	-48	0.026
-20	-45	0.024
-10	-37	0.020
0	-27	0.015
10	-22	0.012
20	-23	0.012
30	-29	0.015
40	-35	0.019
50	-44	0.023



A.4 OCCUPIED BANDWIDTH (§2.1049(h)(i))

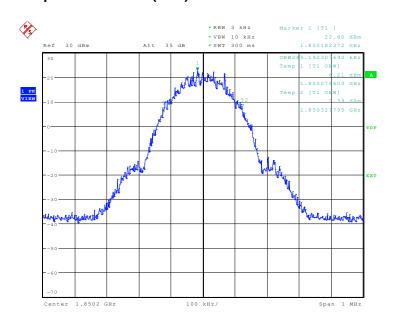
A.4.1 Occupied Bandwidth Results

Similar to conducted emissions; occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the USPCS frequency band. The table below lists the measured -20dBc BW (99%). Spectrum analyzer plots are included on the following pages.

PCS 1900(99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)
1850.2	245.192
1880.0	246.794
1909.8	245.192

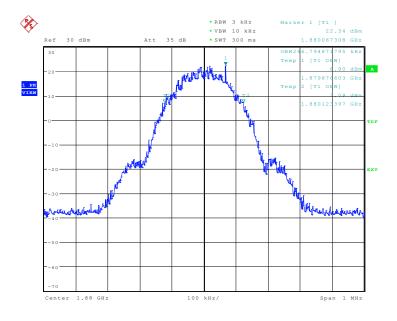
PCS 1900 Channel 512-Occupied Bandwidth (99%)



Date: 11.AUG.2009 04:07:34

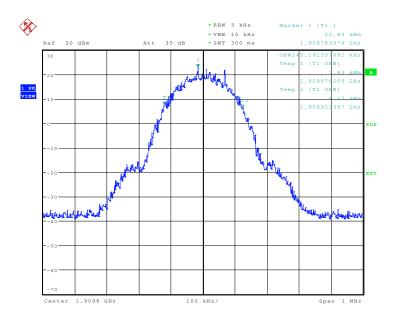


Channel 661-Occupied Bandwidth (99%)



Date: 11.AUG.2009 04:08:06

Channel 810-Occupied Bandwidth (99%)



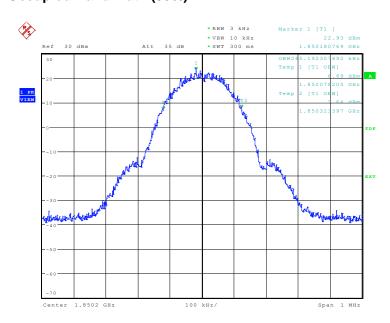
Date: 11.AUG.2009 04:08:38



GPRS 1900(99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)
1850.2	245.192
1880.0	245.192
1909.8	245.192

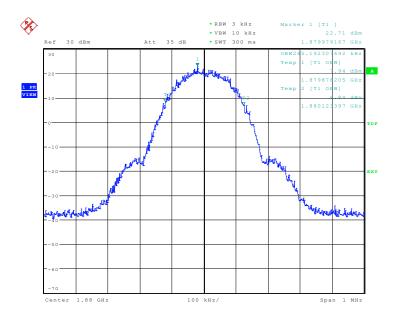
GPRS 1900 Channel 512-Occupied Bandwidth (99%)



Date: 11.AUG.2009 04:50:47

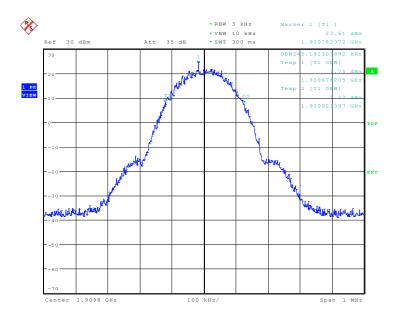


Channel 661-Occupied Bandwidth (99%)



Date: 11.AUG.2009 04:51:19

Channel 810-Occupied Bandwidth (99%)



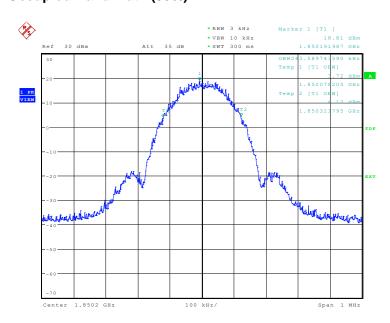
Date: 11.AUG.2009 04:51:51



EGPRS 1900(99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
1850.2	243.589		
1880.0	245.192		
1909.8	243.589		

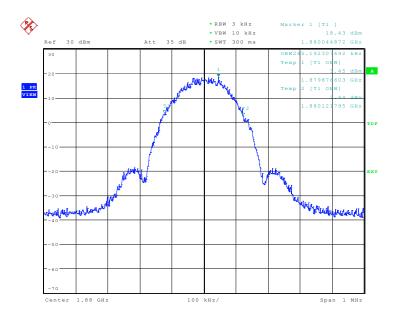
EGPRS 1900 Channel 512-Occupied Bandwidth (99%)



Date: 11.AUG.2009 05:02:16

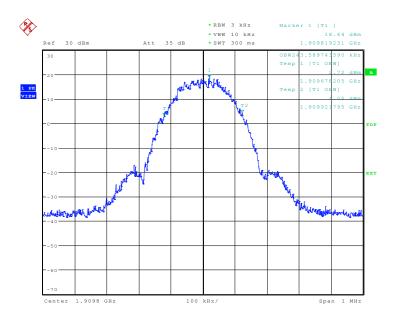


Channel 661-Occupied Bandwidth (99%)



Date: 11.AUG.2009 05:02:49

Channel 810-Occupied Bandwidth (99%)



Date: 11.AUG.2009 05:03:22



A.5 EMISSION BANDWIDTH (§24.238(b))

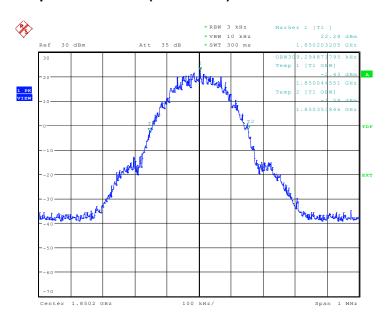
A.5.1Emission Bandwidth Results

Similar to conducted emissions; Emission bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the PCS1900 band. Table below lists the measured -26dBc BW. Spectrum analyzer plots are included on the following pages.

PCS 1900(-26dBc)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(kHz)		
1850.2	309.294		
1880.0	309.294		
1909.8	309.294		

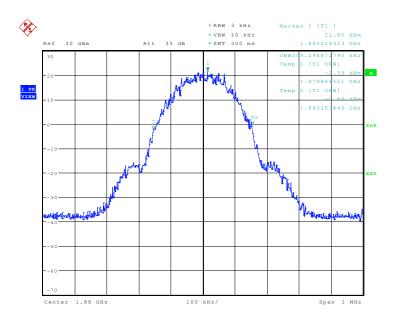
PCS 1900 Channel 512-Occupied Bandwidth (-26dBc BW)



Date: 11.AUG.2009 04:09:12

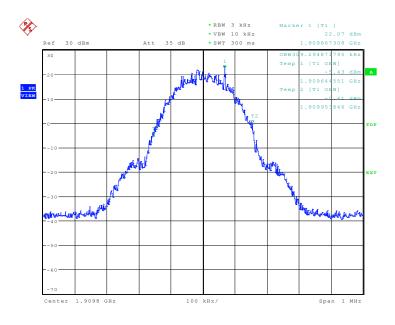


Channel 661-Occupied Bandwidth (-26dBc BW)



Date: 11.AUG.2009 04:09:44

Channel 810-Occupied Bandwidth (-26dBc BW)



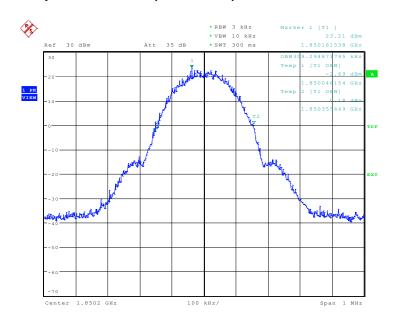
Date: 11.AUG.2009 04:10:16



GPRS 1900(-26dBc)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(kHz)		
1850.2	309.294		
1880.0	310.897		
1909.8	307.692		

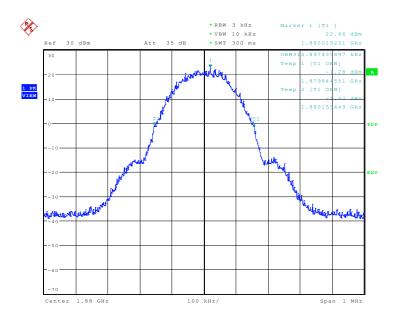
GPRS 1900 Channel 512-Occupied Bandwidth (-26dBc BW)



Date: 11.AUG.2009 04:52:25

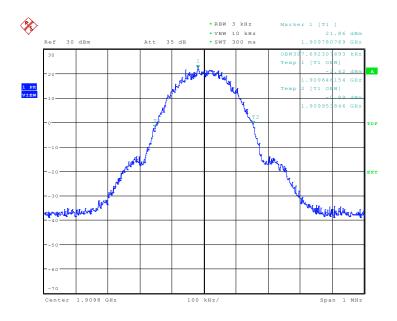


Channel 661-Occupied Bandwidth (-26dBc BW)



Date: 11.AUG.2009 04:52:57

Channel 810-Occupied Bandwidth (-26dBc BW)



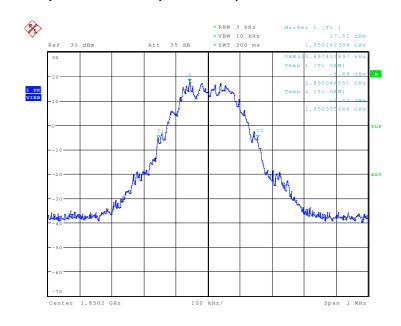
Date: 11.AUG.2009 04:53:29



EGPRS 1900(-26dBc)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(kHz)		
1850.2	310.897		
1880.0	310.897		
1909.8	310.897		

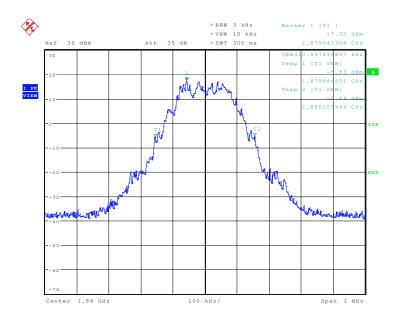
EGPRS 1900 Channel 512-Occupied Bandwidth (-26dBc BW)



Date: 11.AUG.2009 05:03:57

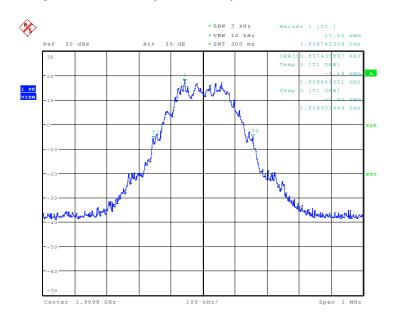


Channel 661-Occupied Bandwidth (-26dBc BW)



Date: 11.AUG.2009 05:04:29

Channel 810-Occupied Bandwidth (-26dBc BW)

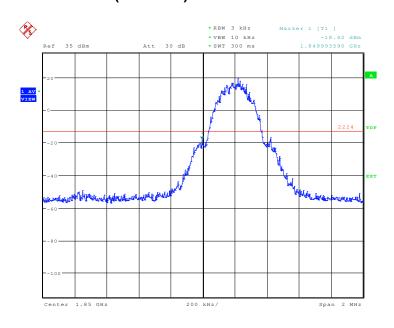


Date: 11.AUG.2009 05:05:01



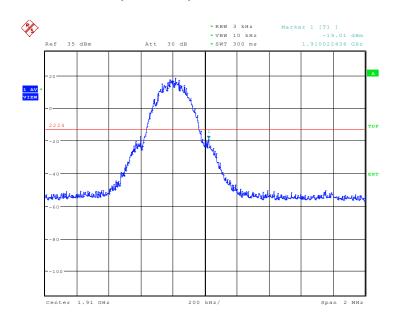
A.6 BAND EDGE COMPLIANCE (§24.238(b))

PCS 1900 LOW BAND EDGE BLOCK-A (PCS-1900)-Channel 512



Date: 11.AUG.2009 04:17:23

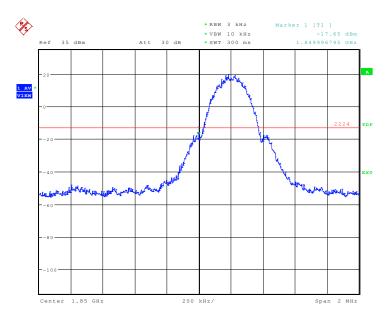
HIGH BAND EDGE BLOCK-C (PCS-1900) -Channel 810



Date: 11.AUG.2009 04:17:57

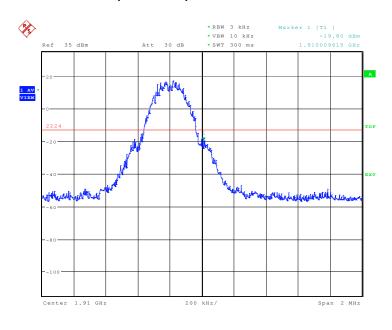


GPRS 1900 LOW BAND EDGE BLOCK-A (PCS-1900)-Channel 512



Date: 11.AUG.2009 04:57:16

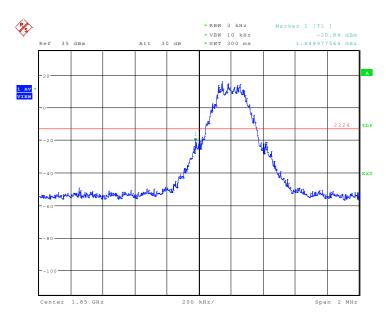
HIGH BAND EDGE BLOCK-C (PCS-1900) -Channel 810



Date: 11.AUG.2009 04:57:50

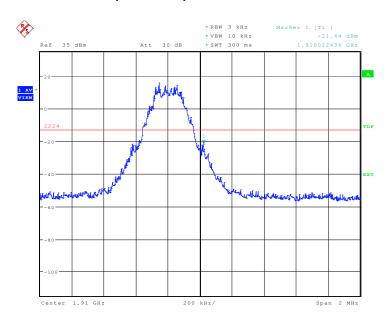


EGPRS 1900 LOW BAND EDGE BLOCK-A (PCS-1900)-Channel 512



Date: 11.AUG.2009 05:08:50

HIGH BAND EDGE BLOCK-C (PCS-1900) -Channel 810



Date: 11.AUG.2009 05:09:24



A.7 CONDUCTED SPURIOUS EMISSION (§2.1057/§24.238)

A.7.1 Measurement Method

The following steps outline the procedure used to measure the conducted emissions from the FUT

- Determine frequency range for measurements: From CFR 2.1057 the spectrum should be investigated from the lowest radio frequency generated in the equipment up to at least the 10th harmonic of the carrier frequency. For the equipment of PCS1900 band, this equates to a frequency range of 30 MHz to 19.1 GHz, data taken from 30 MHz to 20 GHz.
- 2. Determine EUT transmit frequencies: below outlines the band edge frequencies pertinent to conducted emissions testing.

PCS1900 Transmitter

Channel	Frequency (MHz)				
512	1850.2				
661	1880.0				
810	1909.8				

A. 7.2 Measurement Limit

Sec. 24.238 Emission Limits.

(a) On any frequency outside frequency band of the USPCS spectrum, the power of any emission shall be attenuated below the transmitter power (P, in Watts) by at least 43+10Log(P) dB. For all power levels +30 dBm to 0 dBm, this becomes a constant specification limit of -13 dBm.



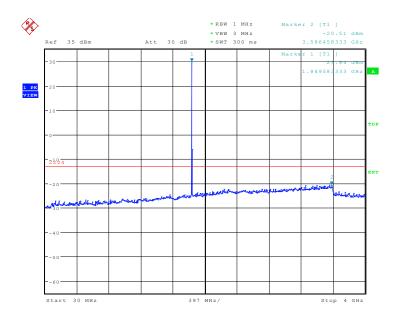
A. 7.3 Measurement result PCS1900

Harmonic	Tx ch. 512 Freq. (MHz)	Level (dBm)	Tx ch. 661 Freq. (MHz)	Level (dBm)	Tx ch. 810 Freq. (MHz)	Level (dBm)
2	3700.4	nf	3760	nf	3819.6	nf
3	5550.6	nf	5640	nf	5729.4	nf
4	7400.8	nf	7520	nf	7639.2	nf
5	9251.0	nf	9400	nf	9549.0	nf
6	11101.2	nf	11280	nf	11458.8	nf
7	12951.4	nf	13160	nf	13368.6	nf
8	14801.6	nf	15040	nf	15278.4	nf
9	16651.8	nf	16920	nf	17188.2	nf
10	18502.0	nf	18800	nf	19098.0	nf
nf: Noise floor						

A. 7.3.1 Channel 512: 30MHz - 4GHz

Spurious emission limit -13dBm.

NOTE: peak above the limit line is the carrier frequency.

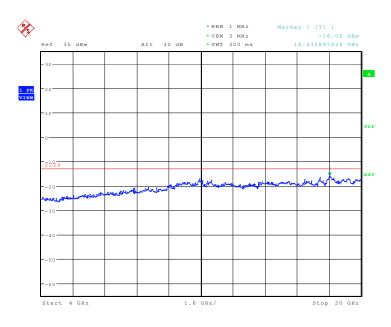


Date: 11.AUG.2009 04:14:03



A. 7.3.2 Channel 512: 4GHz - 20GHz

Spurious emission limit -13dBm.

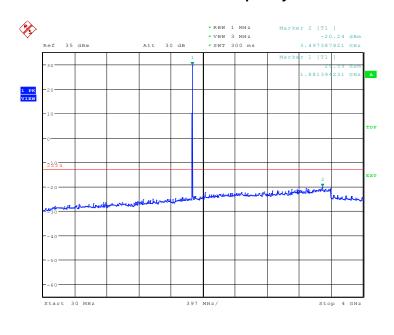


Date: 11.AUG.2009 04:14:36

A. 7.3.3 Channel 661: 30MHz - 4GHz

Spurious emission limit -13dBm

NOTE: peak above the limit line is the carrier frequency.

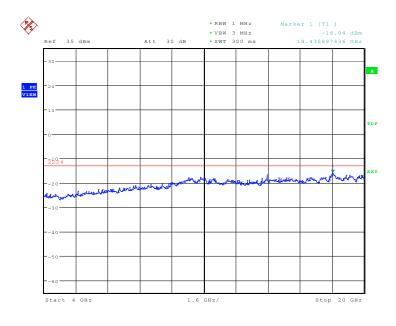


Date: 11.AUG.2009 04:15:10



A. 7.3.4 Channel 661: 4GHz -20GHz

Spurious emission limit -13dBm

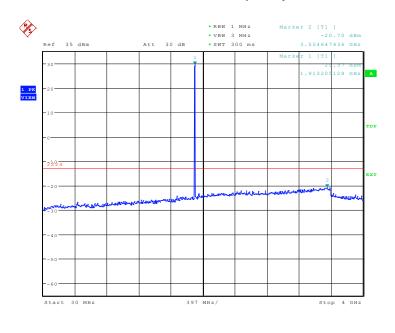


Date: 11.AUG.2009 04:15:43

A. 7.3.5 Channel 810: 30MHz - 4GHz

Spurious emission limit -13dBm.

NOTE: peak above the limit line is the carrier frequency.

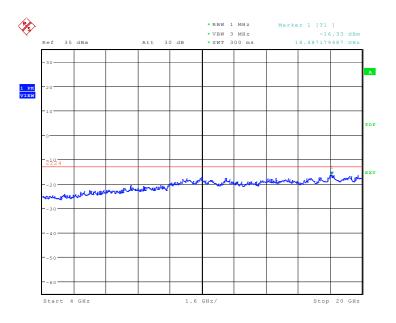


Date: 11.AUG.2009 04:16:16



A. 7.3.6 Channel 810: 4GHz - 20GHz

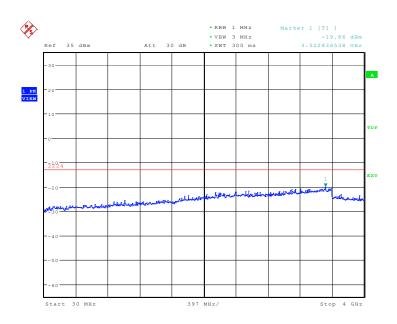
Spurious emission limit -13dBm.



Date: 11.AUG.2009 04:16:50

A. 7.3.7 Idle mode: 30MHz - 4GHz

Spurious emission limit -13dBm.

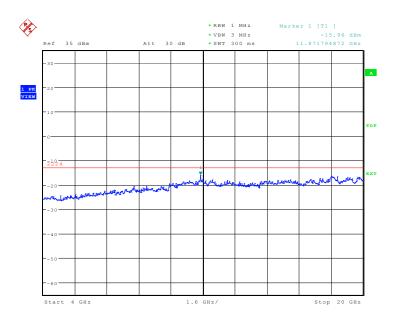


Date: 11.AUG.2009 04:18:31



A. 7.3.8 Idle mode: 4GHz - 20GHz

Spurious emission limit -13dBm.



Date: 11.AUG.2009 04:19:04

END OF REPORT