LTA
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YUKYUNG Technologies

Dates of Tests : May 7 ~ 19, 2010 2010
Test Report S/N: LR500191005D
Test Site : LTA CO., LTD

CERTIFICATION OF COMPLIANCE

FCC ID. **XBQ-N5**

APPLICANT **YUKYUNG TECHNOLOGIES INC.**

Classification	:	**Licensed Transmitter worn on body (PCT)**
Manufacturing Description	:	**MID(MOBILE INTERNET DEVICE)**
Manufacturer	:	**YUKYUNG TECHNOLOGIES INC.**
Manufacturer (RF Module)	:	**Huawei Technologies Co.,Ltd (FCC ID:QISEM770W)**
Model name	:	**N5**
Test Device Serial No.:	:	**Identical prototype**
Rule Part(s)	:	**§24(E), §22(H), §2**
Frequency Range (Tx / Rx)	:	**826.40~846.60 MHz / 871.40~891.60 MHz (Cellular WCDMA)**
		1852.4~1907.6 MHz / 1932.4~1987.6 MHz (PCS WCDMA)
Max. RF Output Power	:	**0.105W ERP Cellular WCDMA**
		0.168 W EIRP PCS WCDMA
Data of issue	:	**May 24, 2010**

This test report is issued under the authority of:

Kyung-Taek LEE, Technical Manager

The test was supervised by:

Hyun-Chae You, Test Engineer

This test result only responds to the tested sample. It is not allowed to copy this report even partly without the allowance of the test laboratory. This report must not be used by the applicant to claim product endorsement by any agency.

NVLAP

NVLAP LAB Code.: 200723-0

TABLE OF CONTENTS

1. General information's

1-1 Test Performed

Company name : LTA Co., Ltd.

Address : 243, Jubug-ri,Yangji-Myeon,Youngin-Si, Kyunggi-Do, Korea. 449-822

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Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competents of calibration and testing laboratory".

1-2 Accredited agencies

LTA Co., Ltd. is approved to perform EMC testing by the following agencies:

Agency	Country	Accreditation No.	Validity	Reference
NVLAP	U.S.A	200723-0	2010-09-30	ECT accredited Lab.
RRL	KOREA	KR0049	2011-06-20	EMC accredited Lab.
FCC	U.S.A	610755	2011-04-22	FCC filing
VCCI	JAPAN	R2133, C2307	2011-06-21	VCCI registration
IC	CANADA	IC5799	2012-05-14	IC filing

2. Information's about test item

2-1 Applicant & Manufacturer

Company name	:	YUKYUNG TECHNOLOGIES INC.
Address	:	200-11, Anyang-Dong, Manan-Ku, Anyang-Si, Kyunggi-Do, Korea
Tel / Fax	:	TEL No : +82-31-463-6906 / FAX No : +82-31-445-5995

2-2 Equipment Under Test (EUT)

Trade name	:	MID(MOBILE INTERNET DEVICE)
Model name	:	N5
Date of receipt	:	May 7, 2010
EUT condition	:	Pre-production, not damaged
HSDPA Module	:	Huawei Technologies Co.,Ltd (FCC ID:QISEM770W) Identification mark: 0682
Antenna type	:	Swivel Antenna
RF output power	:	Cellular WCDMA(21.82dBm) / PCS WCDMA(21.68dBm) – Conducted power
Modulation	:	QPSK
Temperature range	:	0℃ ~ +40℃
Power for Batt.	:	Battery Pack: 3.7V (Polymer Lithium Ion Battery)
Power Source for Adaptor.	:	Input: 100-240VAC, 0.4A Output: 5.0VDC, 3A

2-3 Tested frequency

	Cellular WCDMA		PCS WCDMA	
	Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
LOW	4132	826.4	9262	1852.4
MID	4182	836.4	9400	1880.0
HIGH	4233	846.6	9538	1907.6

2-4 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
PC	HP Compaq dx2200	CNG6500RWK	HP
MONITOR	HPL1710	CNC816QH92	HP
Keyboard	SK-8115	68A-04Q6	DELL
Mouse	MO56UOA	F0J00NOL	DELL
PRINTER	STYLUS C65	N/A	EPSON
EARPHONE	N/A	N/A	N/A
SD CARD	N/A	N/A	SAN DISK
USB Memories	UM4	902RLRZN18670	LG

3. Test Report

3.1 Summary of tests

Parameter	Status
Transmitter Requirements	
I. FCC Part Section(s)	
Output Power(conducted)	C
Output Power(Radiated)	C
Occupied Bandwidth	C
Band Edges Compliance	C
Spurious emission	C
Frequency Stability	C
AC Conducted Emissions	C

Note 1: C=Complies NC=Not Complies NT=Not Tested NA=Not Applicable

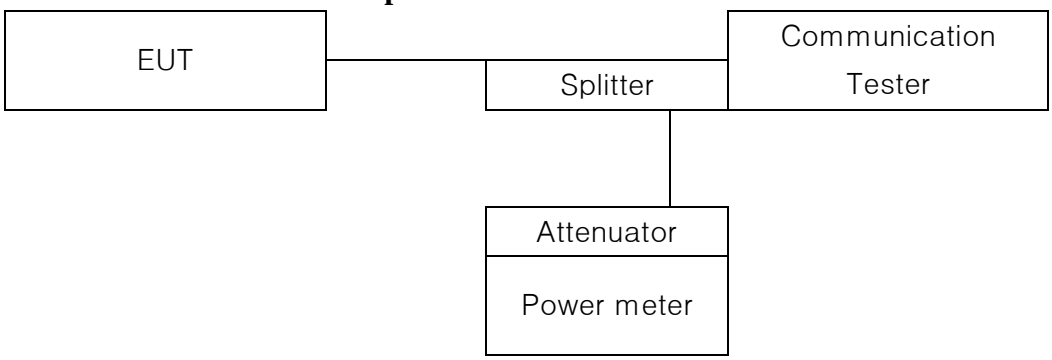
Note 2: The data in this test report are traceable to the national or international standards.

The sample was tested according to the following specification:

ANSI C-63.4-2003

3.2 Technical Characteristics Test

3.2.1 Conducted Power Output



The transmitter output was connected to calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power in dBm. The power output at the transmitter antenna port was determined by adding the vaule of attenuator to the power meter reading. The procedure of KDB941125 (SAR Measurement Procedures for 3G devices, WCDMA/HSDPA) was used for EUT

3.2.2 Effective Radiated Power Output

Effective Radiated Power Output Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. For GSM signals, an average detector is used, with RBW=VBW=3MHz, SPAN=10MHz. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. The conducted power at the terminals of the dipole is measured. The ERP is recorded.

3.2.3 Radiation Spurious and Harmonic Emissions

Effective Radiated Power Output Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:

Radiation and harmonic emissions are measured outdoors at our 3-meter test range. The equipment under test is placed on a wooden turntable 3-meters from the receive antenna.

The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. The Spectrum was investigated from 30MHz to the 10^{th} Harmonic of the fundamental. A peak detector is used. With RBW=VBW=1MHz. The value that we could measure was only reported. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer reading. This level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

3.3 DESCRIPTION OF TESTS

3.3.1 Output Power(CONDUCTED)

Mode		WCDMA(dBm)
Subtests		
BAND	Channel	
V	4132	21.82
	4182	21.80
	4233	21.79
II	9262	21.65
	9400	21.68
	9538	21.66

Mode		HSDPA(dBm)			
Subtests		1	2	3	4
BAND	Channel				
V	4132	21.78	21.75	21.73	21.73
	4182	21.73	21.68	21.67	21.68
	4233	21.76	21.71	21.66	21.64
II	9262	21.64	21.59	21.55	21.54
	9400	21.66	21.65	21.63	21.61
	9538	21.61	21.60	21.59	21.58

3.3.2 Output Power (RADIATED)

Effective Radiated Power Output (Cellular WCDMA)

Measurement Data: WCDMA

Channel	Frequency (MHz)	TEST CONDITIONS				
		Ref. level (dBm)	Pol. (H/V)	CORR. FACTOR (dB)	ERP (dBm)	ERP (W)
4132	826.4	14.98	V	5.1	20.08	0.102
4182	836.4	15.12	V	5.1	20.22	0.105
4233	846.6	14.76	V	5.1	19.86	0.100

Measurement Data: HSDPA

Channel	Frequency (MHz)	TEST CONDITIONS				
		Ref. level (dBm)	Pol. (H/V)	CORR. FACTOR (dB)	ERP (dBm)	ERP (W)
4132	826.4	14.88	V	5.1	19.98	0.100
4182	836.4	14.97	V	5.1	20.07	0.102
4233	846.6	14.62	V	5.1	19.72	0.093

Note 1: Radiated measurements at 3 meters by Substitution Method.

Note 2: CORR.FACTOR = Antenna+ Cable- Amp. Gain

Equivalent Isotropic Radiated Power (PCS WCDMA)

Measurement Data: WCDMA

Channel	Frequency (MHz)	TEST CONDITIONS				
		Ref. level (dBm)	Pol. (H/V)	CORR. FACTOR (dB)	EIRP (dBm)	EIRP (W)
9262	1852.4	17.15	V	5.1	22.25	0.168
9400	1880.0	17.02	V	5.1	22.12	0.163
9538	1907.6	16.88	V	5.1	21.98	0.158

Measurement Data: HSDPA

Channel	Frequency (MHz)	TEST CONDITIONS				
		Ref. level (dBm)	Pol. (H/V)	CORR. FACTOR (dB)	EIRP (dBm)	EIRP (W)
9262	1852.4	17.05	V	5.1	22.15	0.164
9400	1880.0	16.87	V	5.1	21.97	0.157
9538	1907.6	16.82	V	5.1	21.92	0.156

Note 1: Radiated measurements at 3 meters by Substitution Method.

Note 2: CORR.FACTOR = Antenna+ Cable- Amp. Gain

3.3.3 Occupied Bandwidth

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

Span = 10 MHz (approximately 2 or 3 times of the 20 dB bandwidth)

RBW = 50 kHz

VBW = 500 kHz

Trace = max hold

Sweep = auto

Detector function = peak

dB/Div = 10dB

Measurement Data: Cellular WCDMA

Frequency (MHz)	Channel No.(DL)	Channel No.(UL)	Test Results(MHz)
			99% Bandwidth
826.4	4357	4132	4.18
836.4	4407	4182	4.18
846.6	4458	4233	4.17

Measurement Data: PCS WCDMA

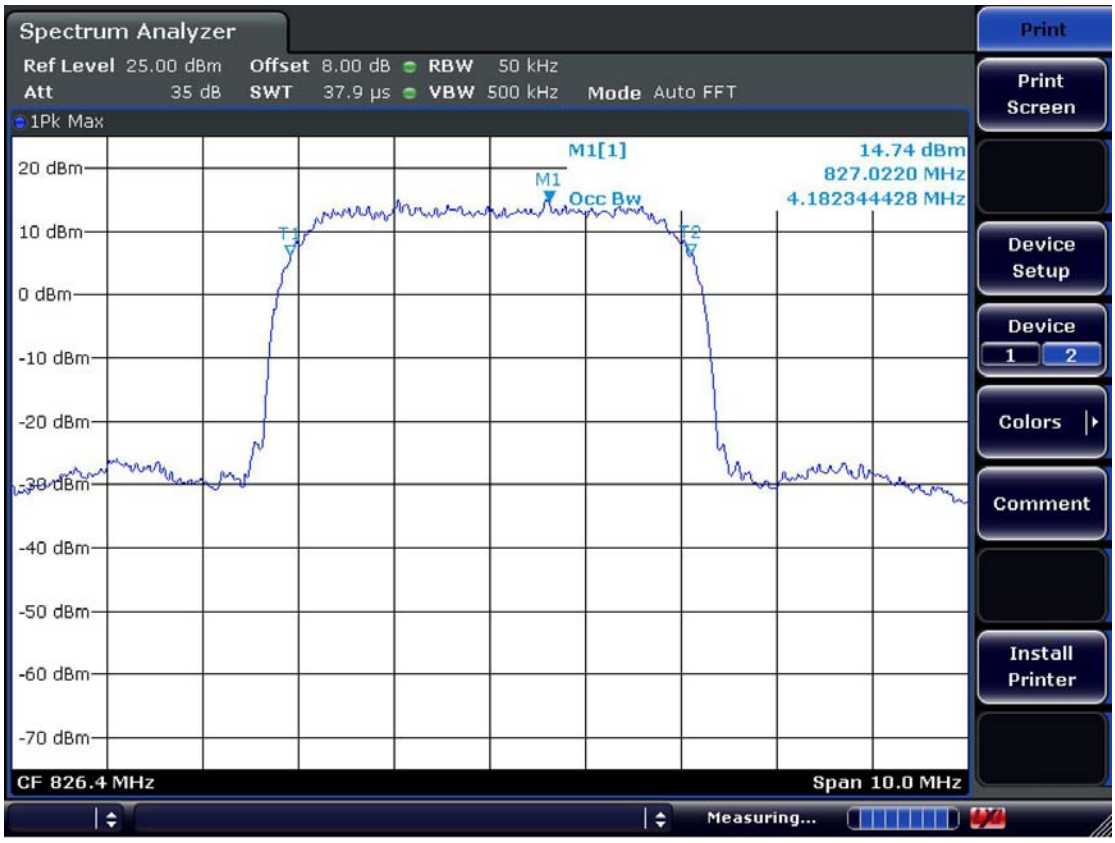
Frequency (MHz)	Channel No.(DL)	Channel No.(UL)	Test Results(MHz)
			99% Bandwidth
1852.4	9662	9262	4.18
1880.0	9800	9400	4.15
1907.6	9938	9538	4.15

- See next pages for actual measured spectrum plots.

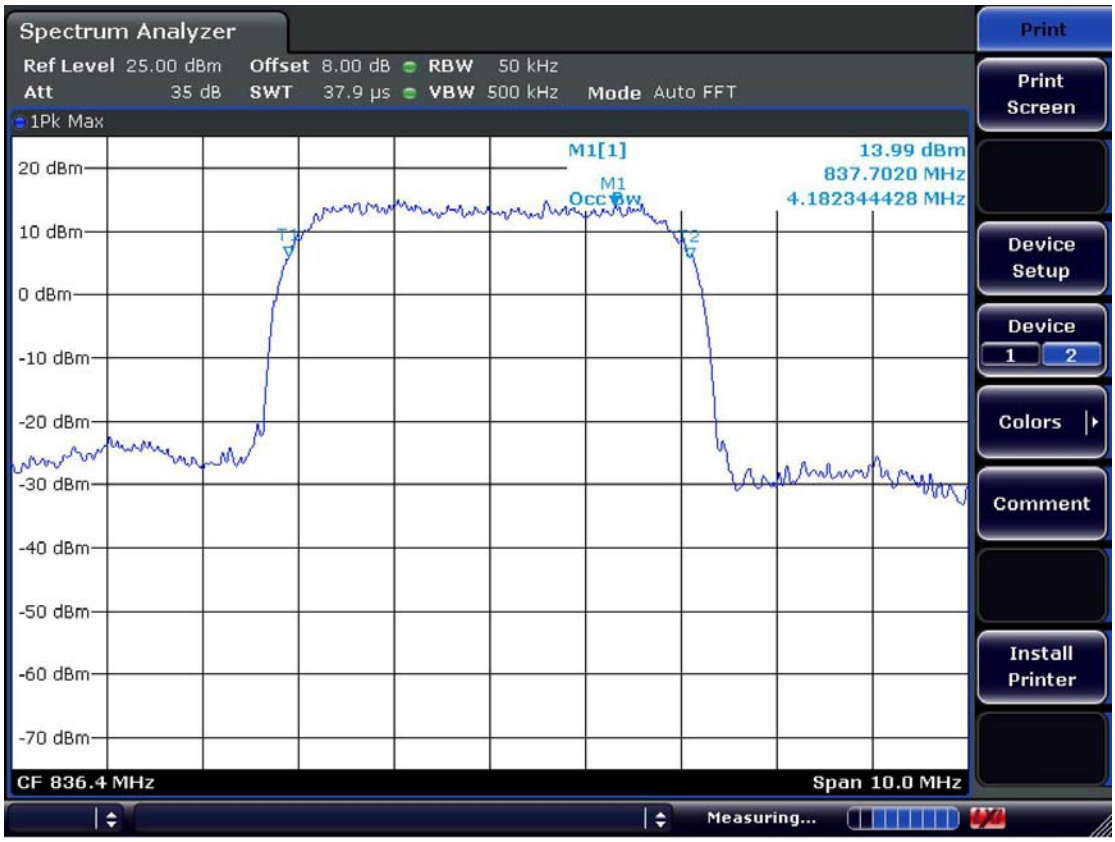
Minimum Standard:

N/A

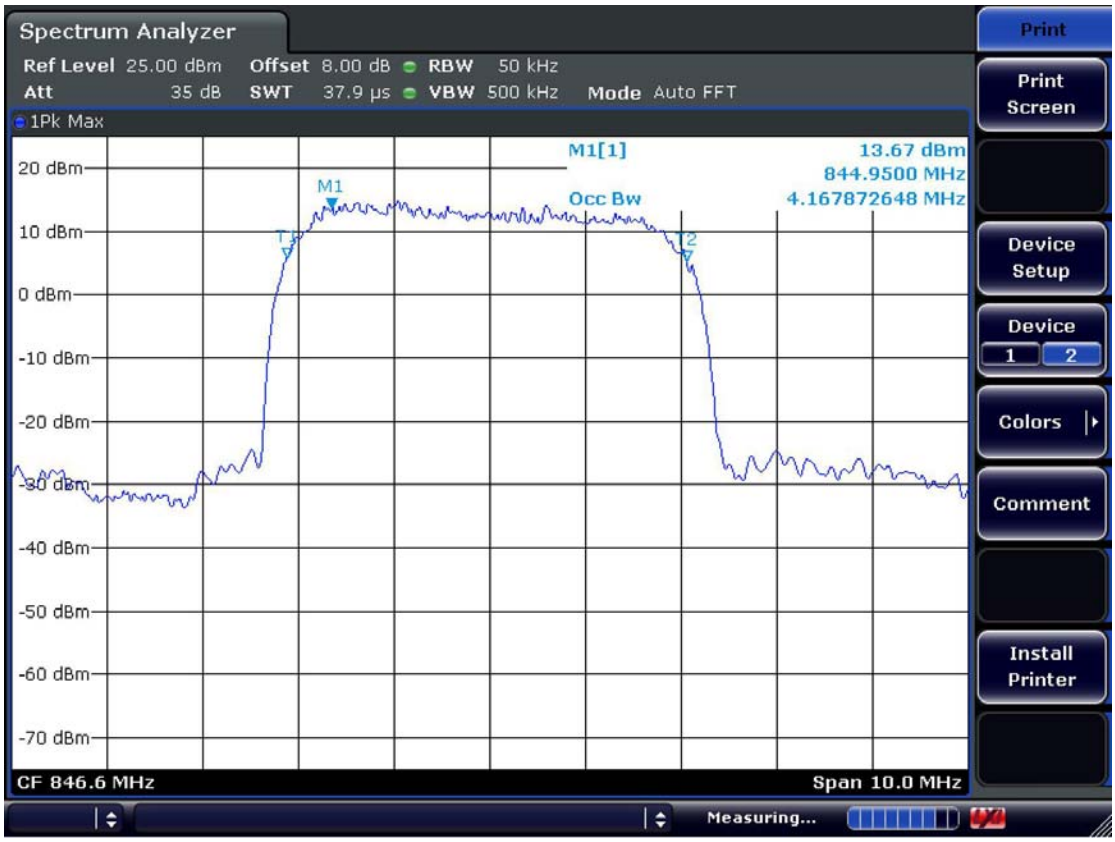
Channel 4132 of Cellular WCDMA



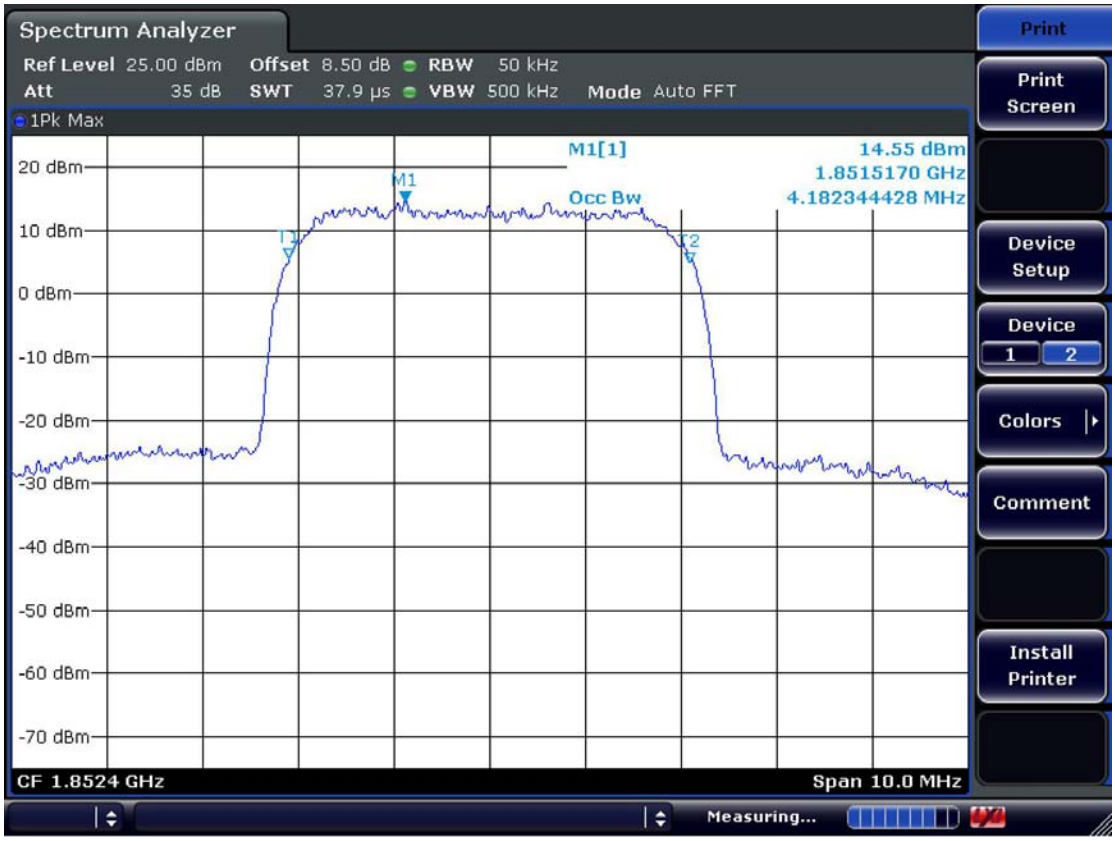
Channel 4182 of Cellular WCDMA



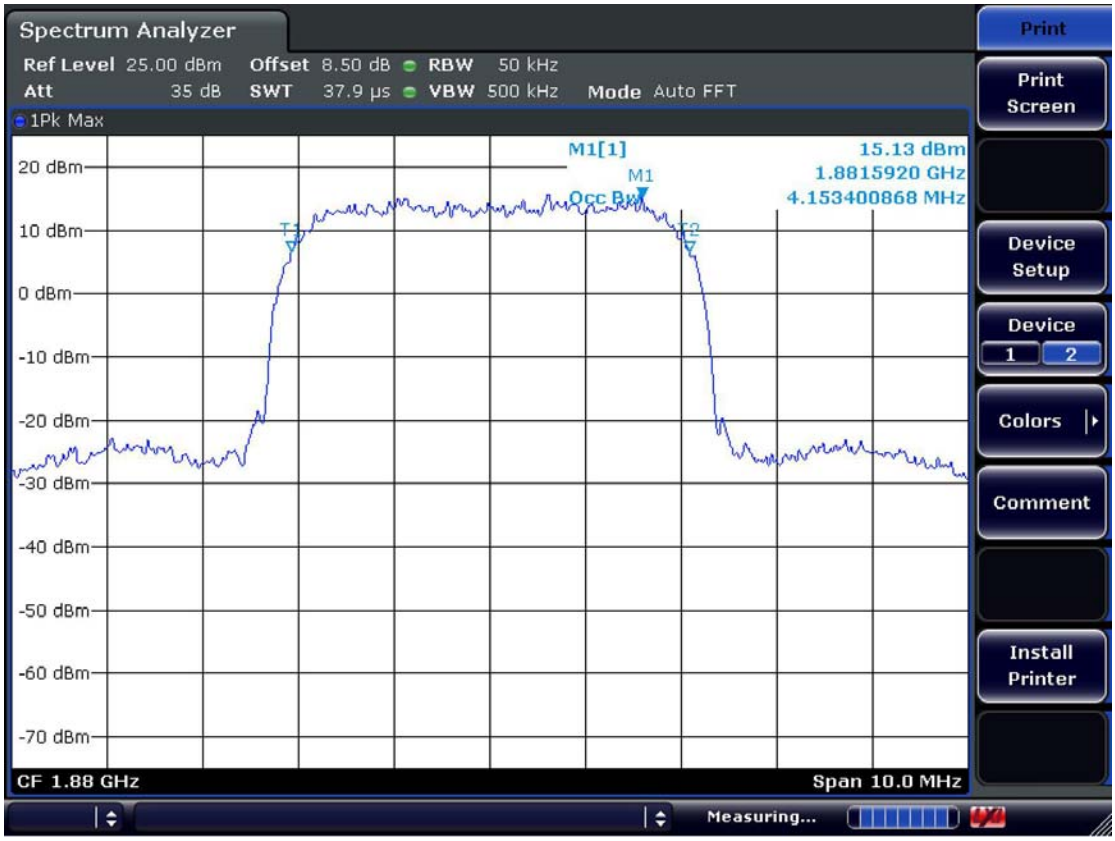
Channel 4233 of Cellular WCDMA



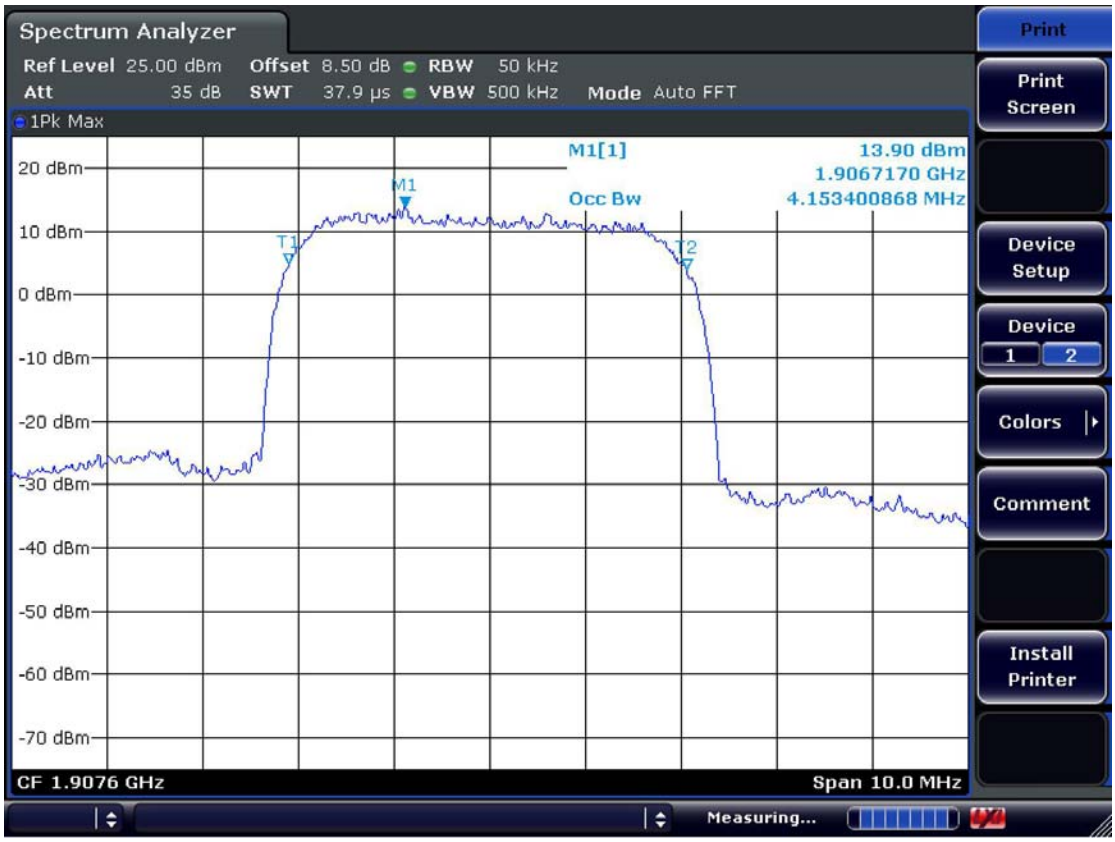
Channel 9262 of PCS WCDMA



Channel 9400 of PCS WCDMA



Channel 9538 of PCS WCDMA



3.3.4 BAND EDGES COMLIANCE

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

Span = 10 MHz (approximately 2 or 3 times of the 20 dB bandwidth)

RBW = 50 kHz

VBW = 200 kHz

Trace = max hold

Sweep = auto

Detector function = peak

dB/Div = 10dB

Measurement Data: Complies

- See next pages for actual measured spectrum plots.

Minimum Standard:

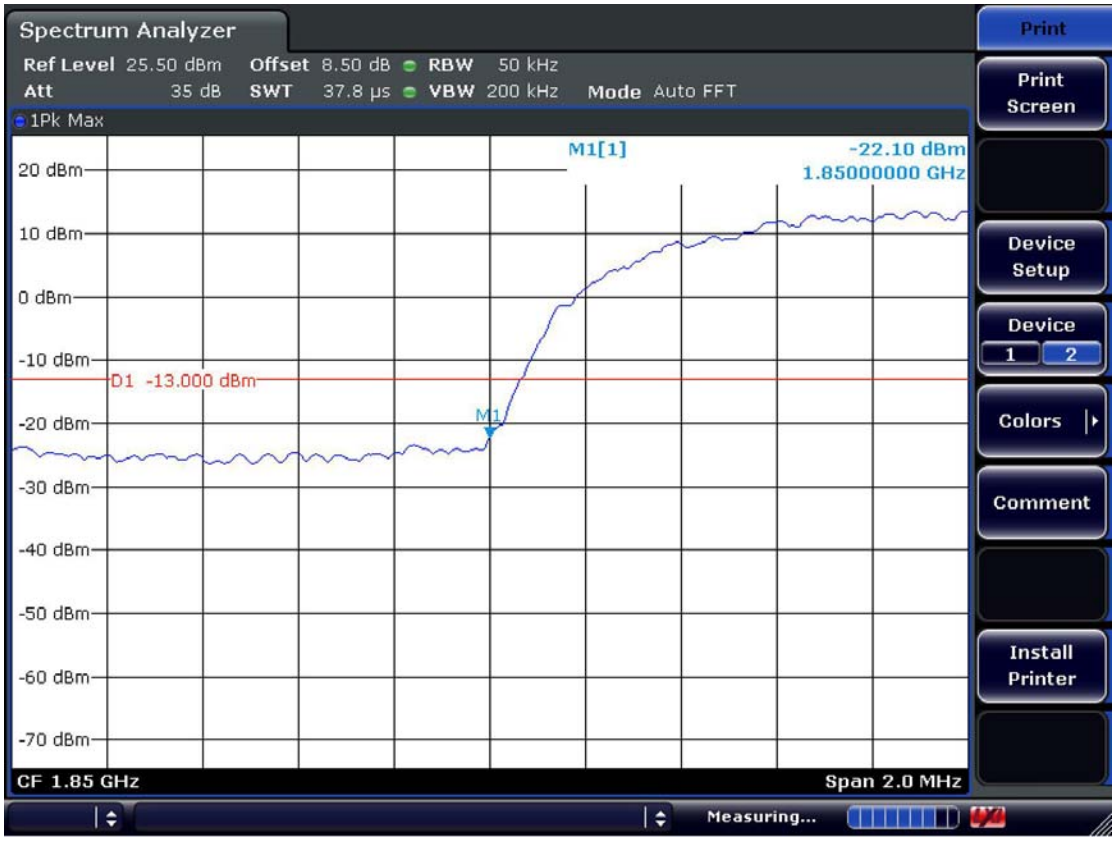
Compliance with part 22.917, all spurious emission must be attenuated below the transmitter power by at least 43 +10 log10 P（W）. (Whereas P is the rated power of the EUT).

Rated Power :	24 dBm
Required attenuation :	43+10log(0.25) = 37 , 24dBm-37dB
Absolute level :	-13dBm

Channel 4132 of Cellular WCDMA

Channel 4233 of Cellular WCDMA

Channel 9262 of PCS WCDMA



Channel 9538 of PCS WCDMA

3.3.5 Field Strength of spurious Radiation

OPERATING FREQUENCY : 826.4 MHz

CHANNEL : 4132(Low)

MEASURED OUTPUT POWER : 20.22 dBm = 0.105 W

MODULATION : WCDMA

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 33.21 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBi)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
-	-	-	-	-	-
No emissions were detected are a level greater than 20dB below limit.					
-	-	-	-	-	-

Note1: Radiated measurements at 3 meters by Substitution Method.

--- Blank ---

3.3.5 Field Strength of spurious Radiation --- Continue

OPERATING FREQUENCY : 836.4 MHz

CHANNEL : 4182(Mid)

MEASURED OUTPUT POWER : 20.22 dBm = 0.105 W

MODULATION : WCDMA

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 33.21 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBi)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
-	-	-	-	-	-
No emissions were detected are a level greater than 20dB below limit.					
-	-	-	-	-	-

Note1: Radiated measurements at 3 meters by Substitution Method.

--- Blank ---

3.3.5 Field Strength of spurious Radiation --- Continue

OPERATING FREQUENCY : 846.6 MHz

CHANNEL : 4233(High)

MEASURED OUTPUT POWER : 20.22 dBm = 0.105 W

MODULATION : WCDMA

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 33.21 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBi)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
-	-	-	-	-	-
No emissions were detected are a level greater than 20dB below limit.					
-	-	-	-	-	-

Note1: Radiated measurements at 3 meters by Substitution Method.

--- Blank ---

3.3.5 Field Strength of spurious Radiation --- Continue

OPERATING FREQUENCY : 1852.4 MHz

CHANNEL : 9262(Low)

MEASURED OUTPUT POWER : 22.25 dBm = 0.168 W

MODULATION : WCDMA

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 35.25 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBi)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
-	-	-	-	-	-
No emissions were detected are a level greater than 20dB below limit.					
-	-	-	-	-	-

Note1: Radiated measurements at 3 meters by Substitution Method.

--- Blank ---

3.3.5 Field Strength of spurious Radiation --- Continue

OPERATING FREQUENCY : 1880.0 MHz

CHANNEL : 9400(Mid)

MEASURED OUTPUT POWER : 22.25 dBm = 0.168 W

MODULATION : WCDMA

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 35.25 dBc

Freq. (MHz)	**LEVEL@ ANTENNA TERMINALS** (dBm)	**SUBSTITUTE ANTENNA GAIN** (dBi)	**CORRECT GENERATOR LEVEL** (dBm)	**POL** (H/V)	(dBc)
-	-	-	-	-	-
No emissions were detected are a level greater than 20dB below limit.					
-	-	-	-	-	-

Note1: Radiated measurements at 3 meters by Substitution Method.

--- Blank ---

3.3.5 Field Strength of spurious Radiation --- Continue

OPERATING FREQUENCY : 1907.6 MHz

CHANNEL : 9538(High)

MEASURED OUTPUT POWER : 22.25 dBm = 0.168 W

MODULATION : WCDMA

DISTANCE : 3 meters

LIMIT : 43 + 10 $\log_{10}$ (W) = 35.25 dBc

Freq. (MHz)	LEVEL@ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBi)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
-	-	-	-	-	-
No emissions were detected are a level greater than 20dB below limit.					
-	-	-	-	-	-

Note1: Radiated measurements at 3 meters by Substitution Method.

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Radiated Emissions – PC Mode

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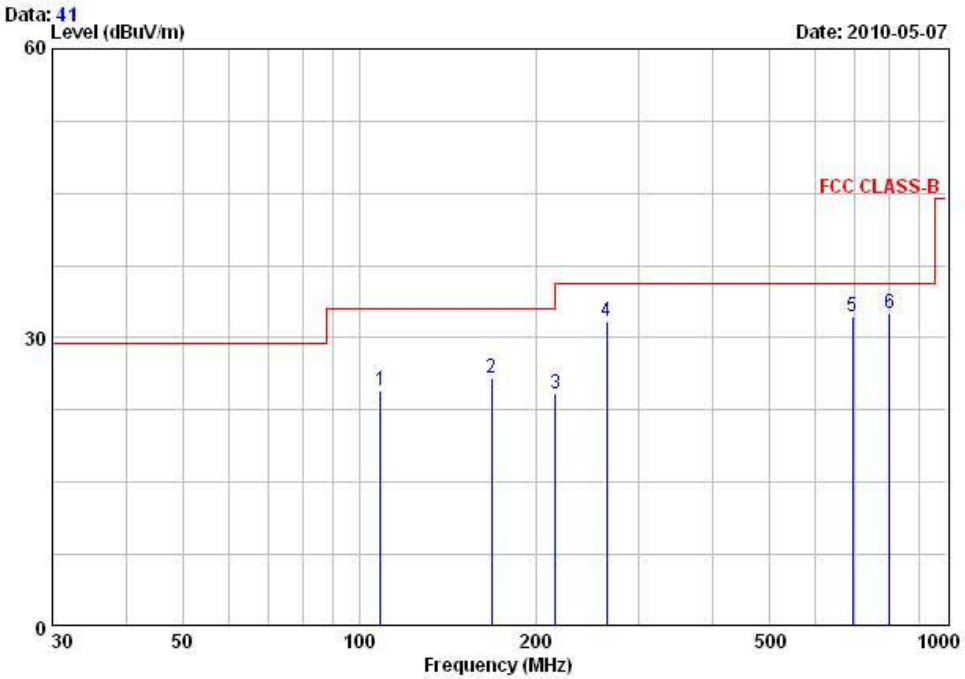
EUT/Model No.: N5 TEST MODE: PC mode

Temp Humi : 15 / 31 Tested by: KIM.K.I



	Freq	Reading	C.F	Result	Limit QP	Margin	Height	Angle	Polarity
	MHz	dBuV/m	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	108.64	39.59	-15.02	24.57	33.00	8.43	250	136	HORIZONTAL
2	168.12	37.50	-11.68	25.82	33.00	7.18	400	127	HORIZONTAL
3	215.91	35.90	-11.73	24.17	33.00	8.83	358	214	HORIZONTAL
4	263.82	41.51	-9.75	31.76	35.60	3.84	308	322	HORIZONTAL
5	694.00	33.34	-1.11	32.23	35.60	3.37	186	75	HORIZONTAL
6	801.24	31.80	0.81	32.61	35.60	2.99	100	73	VERTICAL

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

Radiated Emissions – HSDPA Mode

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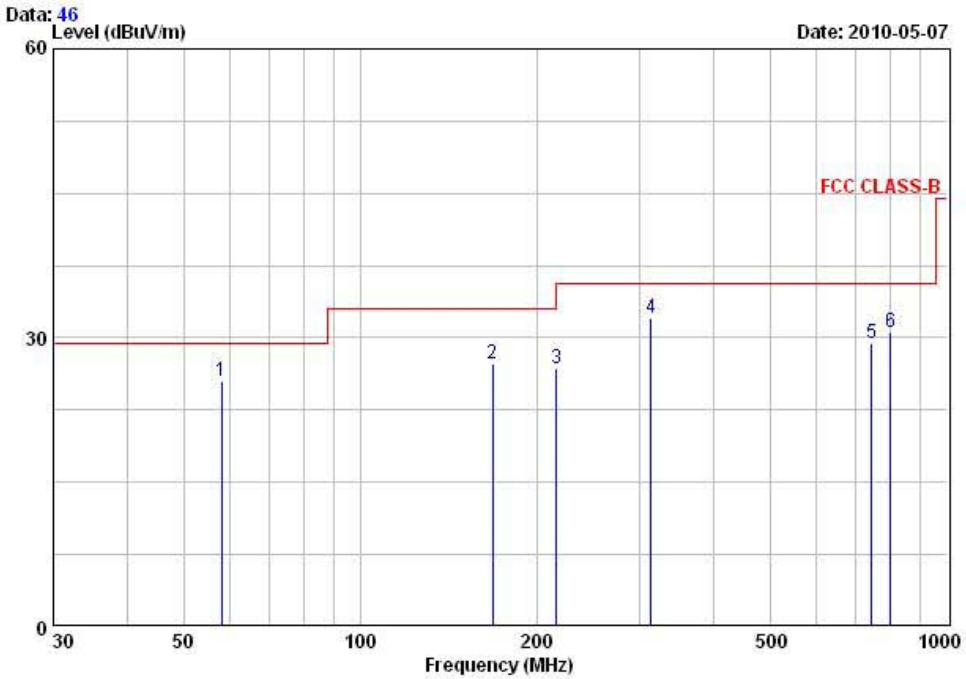
Fax:+82-31-3236010

EUT/Model No.: N5 TEST MODE: HSDPA mode

Temp Humi : 15 / 31 Tested by: KIM.K.I



	Freq	Reading	C.F	Result	Limit QP	Margin	Height	Angle	Polarity
	MHz	dBuV/m	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	58.10	39.67	-14.16	25.51	29.50	3.99	100	200	VERTICAL
2	168.00	39.00	-11.68	27.32	33.00	5.68	400	53	HORIZONTAL
3	216.00	38.50	-11.72	26.78	33.00	6.22	366	319	HORIZONTAL
4	313.16	40.30	-8.24	32.06	35.60	3.54	399	16	HORIZONTAL
5	744.11	29.60	-0.19	29.41	35.60	6.19	283	76	HORIZONTAL
6	801.00	29.80	0.81	30.61	35.60	4.99	153	68	VERTICAL

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

3.3.6 Frequency Stability

Procedure:

The frequency stability shall be measured with variation of ambient temperature as follows:

(1) From -30 ° to +50 ° centigrade for all equipment except that specified in subparagraphs

(2) and (3) of paragraph 2.1055

(a) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10° centigrade through the range. A period of time sufficient to stabilize all of the components of the oscillator circuit at each temperature level shall be allowed prior to frequency measurement. The short-term transient effects on the frequency of the transmitter due to keying (except for broadcast transmitters) and any heating element cycling normally occurring at each ambient temperature level also shall be shown. Only the portion or portions of the transmitter containing the frequency determining and stabilizing circuitry need be subjected to the temperature variation test.

(b) The frequency stability shall be measured with variation of primary supply voltage as follows:

(1) Vary primary supply voltage from 95 to 105 percent of the nominal value for other than hand carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point, which shall be specified by the manufacturer.

(3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided. Effects on frequency of transmitter keying (except for broadcast transmitters) and any heating element cycling at the nominal supply voltage and at each extreme also shall be shown.

(c) When deemed necessary, the Commission may require tests of frequency stability under conditions in addition to those specifically set out in paragraphs (a), (b), (c) of this section. (For example, measurements showing the effect of proximity to large metal objects, or of various types of antennas, may be required for portable equipment.)

Measurement Data: Measurement Results vs. Variation of Temperature

- See next pages

Minimum Standard:

N/A

Measurement Data: Cellular WCDMA 3.7V DC Channel 4182

Temperature	Nominal Frequency (MHz)	Measured Frequency Error (Hz)	Result
-30 °C	836.4	19	Pass
-20 °C	836.4	34	Pass
-10 °C	836.4	25	Pass
0 °C	836.4	17	Pass
+10 °C	836.4	9	Pass
+20 °C	836.4	21	Pass
+30 °C	836.4	58	Pass
+40 °C	836.4	17	Pass
+50 °C	836.4	34	Pass

Measurement Data: PCS WCDMA 3.7V DC Channel 9400

Temperature	Nominal Frequency (MHz)	Measured Frequency Error (Hz)	Result
-30 °C	1880.0	25	Pass
-20 °C	1880.0	14	Pass
-10 °C	1880.0	17	Pass
0 °C	1880.0	16	Pass
+10 °C	1880.0	32	Pass
+20 °C	1880.0	18	Pass
+30 °C	1880.0	20	Pass
+40 °C	1880.0	54	Pass
+50 °C	1880.0	31	Pass

Measurement Data: Cellular WCDMA 3.7V DC Channel 4182

	Voltage	Nominal Frequency (MHz)	Measured Frequency Error (Hz)	Result
primary supply voltage	3.7V	836.4	11	Pass
operating end point	3.4V	836.4	23	Pass

Measurement Data: PCS WCDMA 3.7V DC Channel 9400

	Voltage	Nominal Frequency (MHz)	Measured Frequency Error (Hz)	Result
primary supply voltage	3.7V	1880.0	21	Pass
operating end point	3.4V	1880.0	18	Pass

Minimum Standard:

N/A

3.3.7 AC Conducted Emissions

Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its hopping function disabled at the middle channels in line with Section 15.31(m). Emissions closest to the limit are measured in the quasi-peak mode (QP) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

Measurement Data: Complies

- See next pages for actual measured spectrum plots.
- No emissions were detected at a level greater than 10dB below limit.

Minimum Standard: FCC Part 15.207(a)/EN 55022

Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

AC Conducted Emissions – PC – Line

Laboratory for Test & Approval Co.,Ltd.

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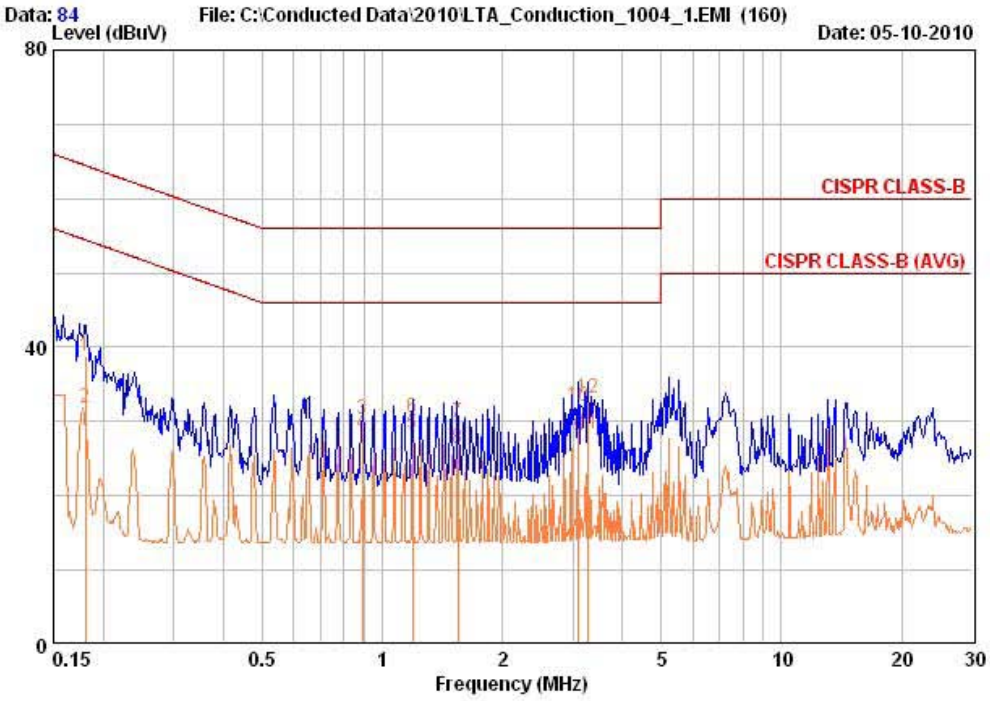
Fax:+82-31-3236010

EUT / Model No.	: N5	Phase	: LINE
Test Mode	: PC mode	Test Power	: 120 / 60
Temp./Humi.	: 21 / 35	Test Engineer	: PARK H W



Freq	RD QP	RD AV	C.F	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
MHz	dBuV	dBuV	dB	dBuV	dBuV	dBuV	dBuV	dB	dB
0.180	29.19	22.09	9.65	38.84	31.74	64.49	54.49	25.64	22.74
0.893	20.55	18.65	9.78	30.33	28.43	56.00	46.00	25.67	17.57
1.192	20.75	18.65	9.79	30.54	28.44	56.00	46.00	25.46	17.56
1.550	20.05	16.65	9.80	29.85	26.45	56.00	46.00	26.15	19.55
3.100	22.24	18.14	9.85	32.09	27.99	56.00	46.00	23.91	18.01
3.275	23.24	18.44	9.86	33.10	28.30	56.00	46.00	22.90	17.70

Remarks: C.F (Correction Factor) = Insertion loss + Cable loss

AC Conducted Emissions – PC – Neutral

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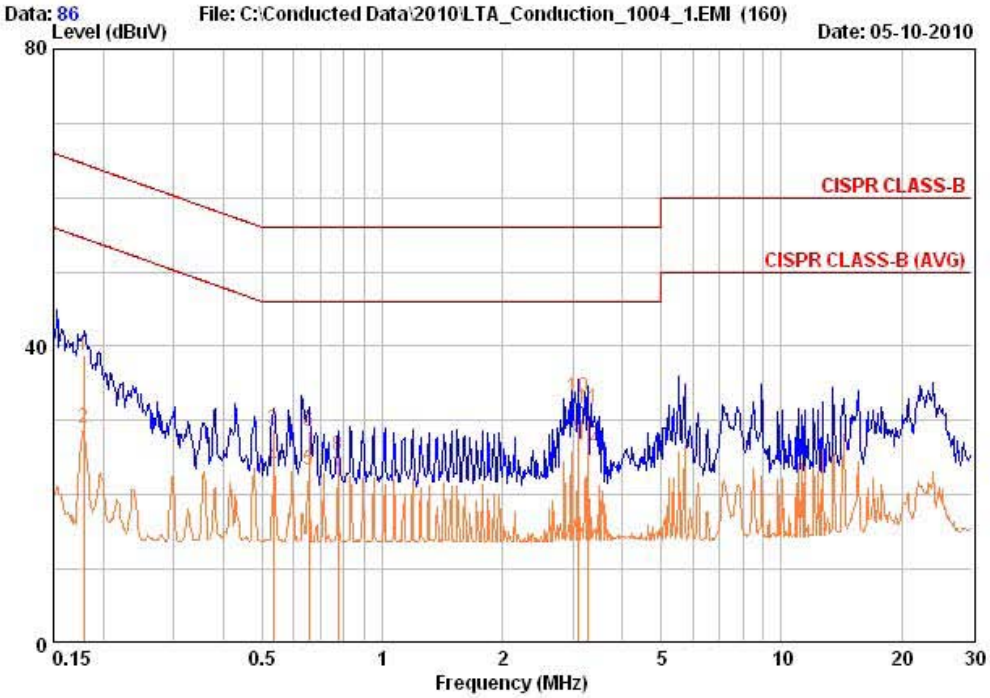
EUT / Model No.	: N5	Phase	: NEUTRAL
Test Mode	: PC mode	Test Power	: 120 / 60
Temp./Humi.	: 21 / 35	Test Engineer	: PARK H W



Freq	RD QP	RD AV	C.F	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
MHz	dBuV	dBuV	dB	dBuV	dBuV	dBuV	dBuV	dB	dB
0.179	29.19	19.29	9.66	38.85	28.95	64.53	54.53	25.68	25.58
0.534	19.15	14.05	9.68	28.83	23.73	56.00	46.00	27.17	22.27
0.654	18.84	13.54	9.75	28.59	23.29	56.00	46.00	27.41	22.71
0.776	15.44	12.74	9.77	25.22	22.52	56.00	46.00	30.78	23.48
3.101	23.24	17.94	9.85	33.09	27.79	56.00	46.00	22.91	18.21
3.280	21.74	16.84	9.86	31.60	26.70	56.00	46.00	24.40	19.30

Remarks: C.F (Correction Factor) = Insertion loss + Cable loss

AC Conducted Emissions – HSDPA – Line

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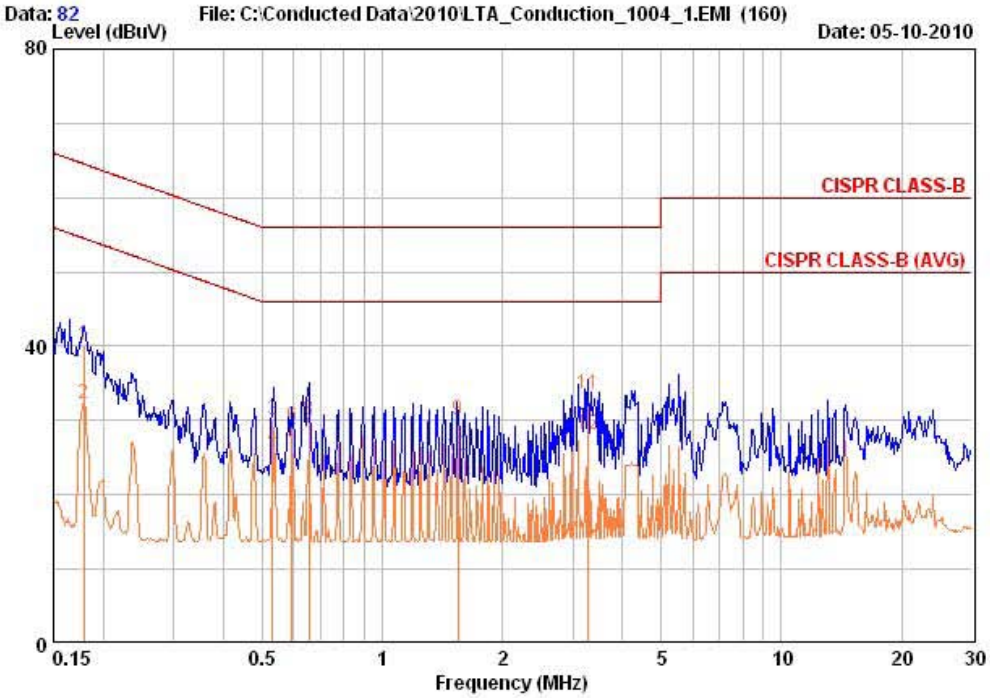
EUT / Model No.	: N5	Phase	: LINE
Test Mode	: HSDPA mode	Test Power	: 120 / 60
Temp./Humi.	: 21 / 35	Test Engineer	: PARK H W



Freq	RD QP	RD AV	C.F	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
MHz	dBuV	dBuV	dB	dBuV	dBuV	dBuV	dBuV	dB	dB
0.179	30.39	22.59	9.65	40.04	32.24	64.53	54.53	24.49	22.29
0.532	20.45	16.75	9.69	30.13	26.43	56.00	46.00	25.87	19.57
0.594	19.54	17.24	9.72	29.26	26.96	56.00	46.00	26.74	19.04
0.655	20.24	18.64	9.75	29.99	28.39	56.00	46.00	26.01	17.61
1.550	20.25	15.45	9.80	30.05	25.25	56.00	46.00	25.95	20.75
3.277	23.74	18.24	9.86	33.60	28.10	56.00	46.00	22.40	17.90

Remarks: C.F (Correction Factor) = Insertion loss + Cable loss

AC Conducted Emissions – HSDPA – Neutral

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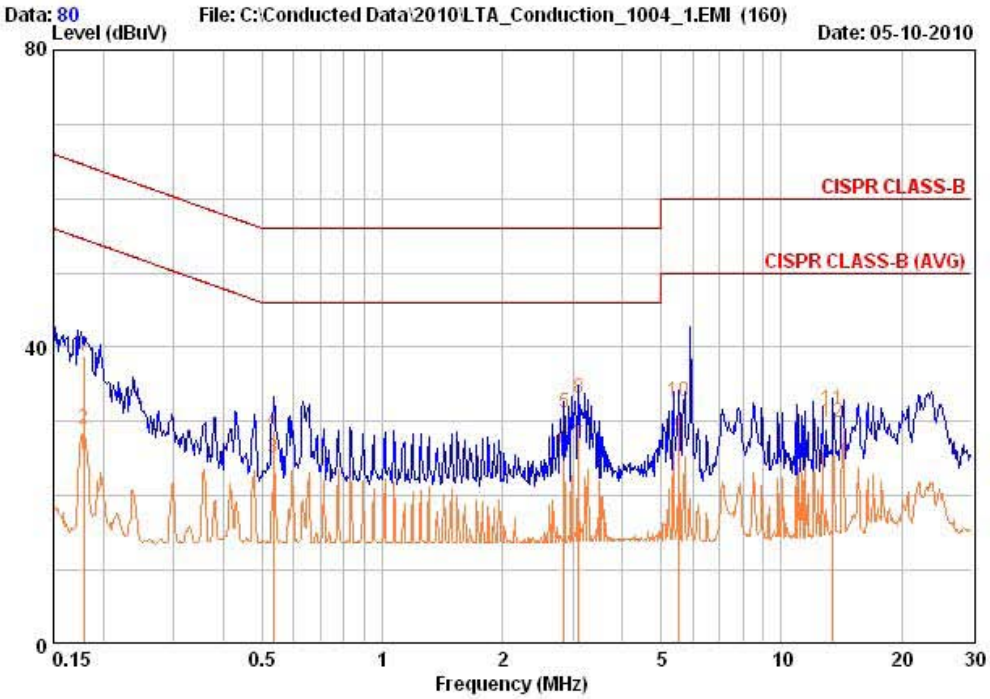
EUT / Model No.	: N5	Phase	: NEUTRAL
Test Mode	: HSDPA mode	Test Power	: 120 / 60
Temp./Humi.	: 21 / 35	Test Engineer	: PARK H W



Freq	RD QP	RD AV	C.F	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV
MHz	dBuV	dBuV	dB	dBuV	dBuV	dBuV	dBuV	dB	dB
0.179	29.19	19.29	9.66	38.85	28.95	64.53	54.53	25.68	25.58
0.533	19.15	15.45	9.68	28.83	25.13	56.00	46.00	27.17	20.87
2.860	21.24	16.24	9.84	31.09	26.09	56.00	46.00	24.91	19.91
3.098	23.34	17.04	9.85	33.19	26.89	56.00	46.00	22.81	19.11
5.542	22.75	17.95	9.94	32.69	27.89	60.00	50.00	27.31	22.11
13.467	21.29	19.49	10.33	31.63	29.83	60.00	50.00	28.37	20.17

Remarks: C.F (Correction Factor) = Insertion loss + Cable loss

APPENDIX

TEST EQUIPMENT USED FOR TESTS

	Description	Model No.	Serial No.	Manufacturer	Next Cal. Date
1	Spectrum Analyzer	FSV-30	100757	R&S	Feb-11
2	Spectrum Analyzer	8563E	3425A02505	HP	Mar-11
3	Spectrum Analyzer	8594E	3710A04074	HP	Oct-10
4	Signal Generator	8648C	3623A02597	HP	Mar-11
5	Signal Generator	83711B	US34490456	HP	Mar-11
6	Attenuator (3dB)	8491A	37822	HP	Oct-10
7	Attenuator (10dB)	8491A	63196	HP	Oct-10
8	Attenuator (30dB)	8498A	1801A06689	HP	Oct-10
9	EMI Test Receiver	ESVD	843748/001	R&S	Mar-11
10	Horn Antenna(18 ~ 40GHz)	SAS-574	154	Schwarzbeck	Nov-10
11	Horn Antenna(18 ~ 40GHz)	SAS-574	155	Schwarzbeck	Nov-10
12	RF Amplifier	8447D	2949A02670	HP	Oct-10
13	RF Amplifier	8449B	3008A02126	HP	Mar-11
14	Test Receiver	ESHS10	828404/009	R&S	Mar-11
15	TRILOG Antenna	VULB 9160	9160-3212	SCHWARZBECK	Apr-11
16	Log.-Per. Antenna	VULP 9118	9118 A 401	SCHWARZBECK	Apr-11
17	Biconical Antenna	BBA 9106	VHA 9103-2315	SCHWARZBECK	Apr-11
18	Horn Antenna	3115	00055005	ETS LINDGREN	Mar-11
19	Horn Antenna	BBHA 9120D	9120D122	SCHWARZBECK	Dec-11
20	Dipole Antenna	VHA9103	2116	SCHWARZBECK	Nov-10
21	Dipole Antenna	VHA9103	2117	SCHWARZBECK	Nov-10
22	Dipole Antenna	VHA9105	2261	SCHWARZBECK	Nov-10
23	Dipole Antenna	VHA9105	2262	SCHWARZBECK	Nov-10
24	Hygro-Thermograph	THB-36	0041557-01	ISUZU	Mar-11
25	Splitter (SMA)	ZFSC-2-2500	SF617800326	Mini-Circuits	-
26	RF Switch	MP59B	6200414971	ANRITSU	-
27	Power Divider	11636A	6243	HP	Oct-10
28	DC Power Supply	6622A	3448A03079	HP	Oct-10
29	Frequency Counter	5342A	2826A12411	HP	Mar-11
30	Power Meter	EPM-441A	GB32481702	HP	Mar-11
31	Power Sensor	8481A	2702A64048	HP	Mar-11
32	Audio Analyzer	8903B	3729A18901	HP	Oct-10
33	Modulation Analyzer	8901B	3749A05878	HP	Oct-10
34	TEMP & HUMIDITY Chamber	YJ-500	LTAS06041	JinYoung Tech	Oct-10
35	LOOP-ANTENNA	FMZB 1516	151602/94	SCHWARZBECK	Mar-11
36	Stop Watch	HS-3	601Q09R	CASIO	Mar-11
37	LISN	ENV216	100408	R&S	Oct-10
38	UNIVERSAL RADIO COMMUNICATION TESTER	CMU200	106243	R&S	May-12