



HCT CO., LTD.

Product Compliance Division

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FCC Certification

Applicant Name:

Franklin Technology Inc.

Address:

1505 Digital Tower Aston, 505-15 Gasan-dong,
Gumcheon-gu, Seoul, Korea

Date of Issue:

April 14, 2011

Location:

HCT CO., LTD., 105-1, Jangam-ri, Majang-Myeon, Icheon-si,
Kyunggi-Do, Korea

Test Report No.: HCTR1104FR13

HCT FRN: 0005866421

IC Recognition No.: IC 5944A-3

FCC ID : XHG-M600A

APPLICANT : Franklin Technology Inc.

Model(s):

M600A

EUT Type:

3G 4G Module

Tx Frequency:

2 498.5 MHz ~ 2 687.5 MHz (5 MHz Bandwidth)
2 501.0 MHz ~ 2 685.0 MHz (10 MHz Bandwidth)

Rx Frequency:

2 498.5 MHz ~ 2 687.5 MHz (5 MHz Bandwidth)
2 501.0 MHz ~ 2 685.0 MHz (10 MHz Bandwidth)

Max.**Conducted Power:**

0.208 W 5 MHz 16QAM(23.18 dBm)/ 0.220 W 5MHz QPSK(23.42 dBm)/
0.195 W 10 MHz 16QAM(22.90 dBm)/ 0.192 W 10MHz QPSK(22.84 dBm)

Emission**Designator(s):**

5 MHz BW : 4M45G7D (QPSK) / 4M40W7D(16QAM)
10 MHz BW : 9M06G7D (QPSK) / 9M14W7D(16QAM)

FCC Classification:

Licensed Non-Broadcast Transmitter (TNB)

FCC Rule Part(s):

§27, §2

The measurements shown in this report were made in accordance with the procedures specified in §2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S. C.853(a)

Hyo Sun Kwak

Report prepared by
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Test engineer of RF Team

Chang Seok Choi

Approved by
: Chang Seok Choi
Manager of RF Team

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FCC CERTIFICATION REPORT			www.hct.co.kr
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Version

TEST REPORT NO.	DATE	DESCRIPTION
HCTR1104FR13	April 14, 2011	First Approval Report

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MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name: Franklin Technology Inc.

Address: 1505 Digital Tower Aston, 505-15 Gasan-dong, Gumcheon-gu, Seoul, Korea

FCC ID: XHG-M600A

Application Type: Certification

FCC Classification: Licensed Non-Broadcast Transmitter (TNB)

FCC Rule Part(s): §27, §2

EUT Type: 3G 4G Module

Model(s): M600A

Tx Frequency: 2 498.5 MHz ~ 2 687.5 MHz (5 MHz Bandwidth)
2 501.0 MHz ~ 2 685.0 MHz (10 MHz Bandwidth)

Rx Frequency: 2 498.5 MHz ~ 2 687.5 MHz (5 MHz Bandwidth)
2 501.0 MHz ~ 2 685.0 MHz (10 MHz Bandwidth)

Max. Conducted Power: 0.208 W 5 MHz 16QAM(23.18 dBm)/ 0.220 W 5MHz QPSK(23.42 dBm)/
0.195 W 10 MHz 16QAM(22.90 dBm)/ 0.192 W 10MHz QPSK(22.84 dBm)

Emission Designator(s): 5 MHz BW : 4M45G7D (QPSK) / 4M40W7D(16QAM)
10 MHz BW : 9M06G7D (QPSK) / 9M14W7D(16QAM)

Date(s) of Tests: April 07, 2011 ~ April 14, 2011

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2. INTRODUCTION

2.1. EUT DESCRIPTION

The Diffon Corporation M600A 3G 4G Module consists of Cellular CDMA, PCS CDMA, EVDO Rev.0, A and **wimax**.

2.2. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

2.3. TEST FACILITY

The SAC(Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at the 105-1, Jangam-ri , Majang-Myeon, Icheon-si, 467-811, KOREA.

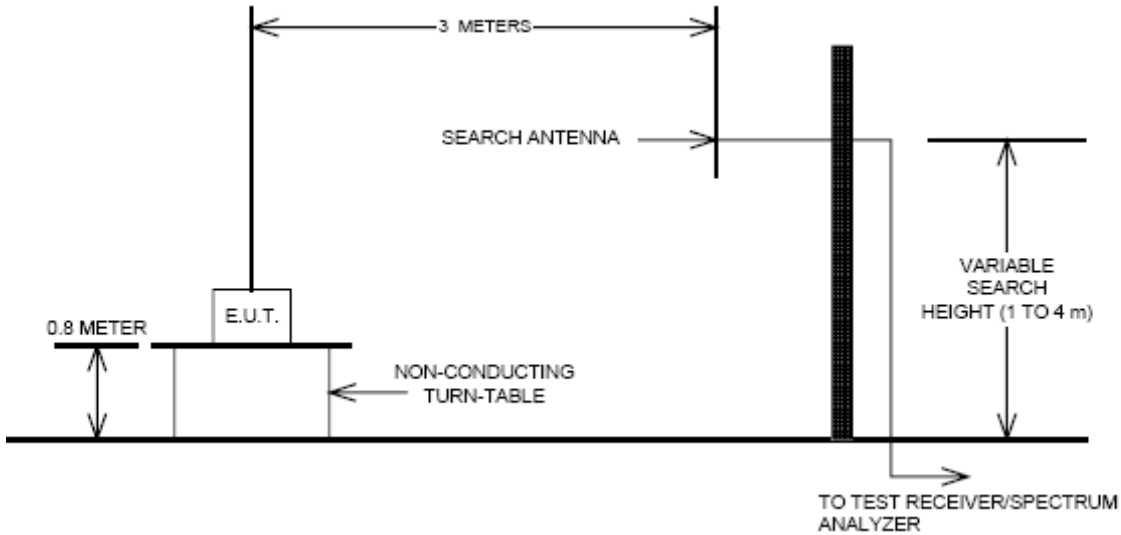
The site is constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated September 03, 2010 (Registration Number: 90661)

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3. DESCRIPTION OF TESTS

3.1 EQUIVALENT ISOTROPIC RADIATED POWER

Test Set-up



Test Procedure

Radiated emission measurements were performed at an SAC(Semi-Anechoic Chamber)

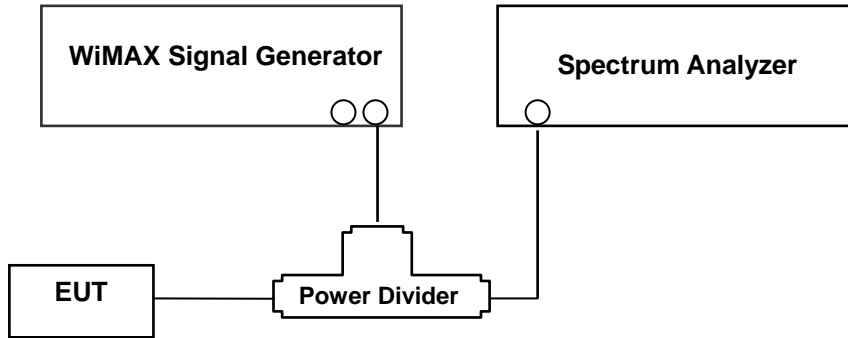
The equipment under test is placed on a non-conductive styrofoam resin table 3-meters from the receive antenna. A styrofoam turntable was rotated 360° and the receiving antenna scanned from 1-4m in order to capture the maximum emission. A half wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the previously recorded signal was duplicated.

The maximum EIRP was calculated by adding the forward power to the calibrated source plus its appropriate gain value. These steps were carried out with the receiving antenna in both vertical and horizontal polarization. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic antenna are taken into consideration.

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3.2 OCCUPIED BANDWIDTH.

Test set-up



(Configuration of conducted Emission measurement)

Test Procedure

The EUT was setup to maximum output power at its lowest channel. The occupied bandwidth was measured using a spectrum analyzer. The measurements are repeated for the highest and a middle channel. The EUT's occupied bandwidth is measured as the width of the signal between two points, one below the carrier center frequency and one above the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Plots of the EUT's occupied bandwidth are shown herein.

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3.3 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL.

Test Procedure

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer.

The EUT was setup to maximum output power at its lowest channel. The Resolution BW of the analyzer is set to 1 % of the emission bandwidth to show compliance with the -13 dBm limit, in the 1 MHz bands immediately outside and adjacent to the edge of the frequency block. The 1 MHz RBW was used to scan from 30 MHz to 26.5 GHz.. A display line was placed at -25 dBm to show compliance. The high, lowest and a middle channel were tested for out of band measurements.

- Band Edge Requirement : When measuring conducted band edge, the ACP feature of the signal analyzer was used. For each segment of the band edge, the allowed integration bandwidth was configured to calculate the channel power that is highest within that band edge segment.

- Occupied Bandwidth Emission Limits

· On any frequency outside but within 5.5 MHz from the band edge of a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10\log(P)$ dB. At frequencies greater than 5.5 MHz from any in-band channel edge, the transmitter power (P) shall be attenuated by at least $55 + 10\log(P)$ dB.

· Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

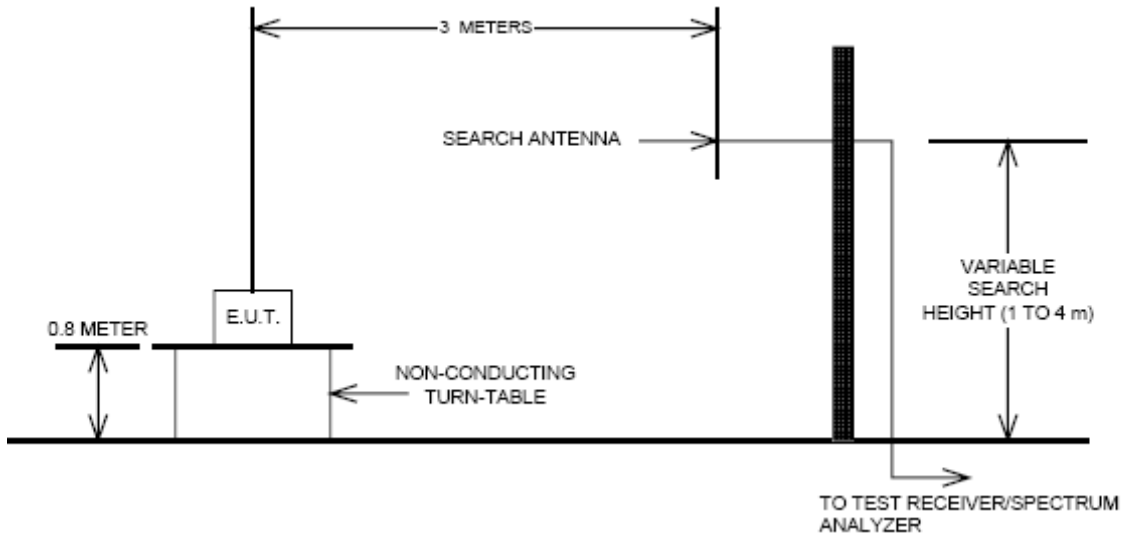
· When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

· The measurement of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

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3.4 RADIATED SPURIOUS AND HARMONIC EMISSIONS

Test Set-up



The measurement facilities used for this test have been documented in previous filings with the commission pursuant to section § 2.948. The SAC(Semi-Anechoic Chamber) meets requirements in ANSI C63.4 –2003. A mast capable of lifting the receiving antenna from a height of one to four meters is used together with a rotatable styrofoam platform mounted at three from the antenna mast.

- 1) The unit mounted on a styrofoam turntable 1.5 m × 1.0 m × 0.80 m is 0.8 meter above test site ground level.
- 2) During the emission test, the turntable is rotated and the EUT is manipulated to find the configuration resulting in maximum emission under normal condition of installation and operation.
- 3) The antenna height and polarization are also varied from 1 to 4 meters until the maximum signal is found.
- 4) The spectrum shall be scanned up to the 10th harmonic of the fundamental frequency.

Test Procedure

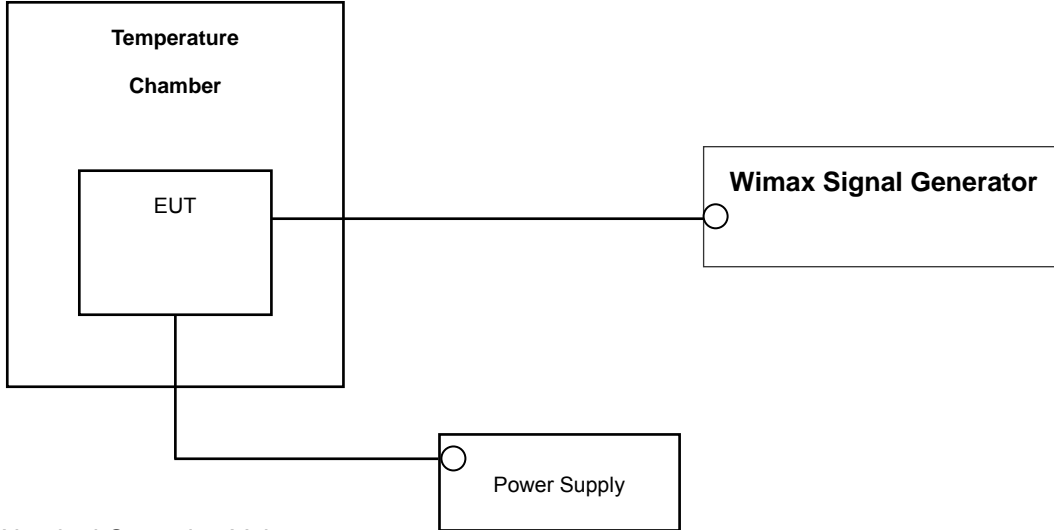
The equipment under test is placed on a non-conductive styrofoam resin table 3-meters from the receive antenna. A styrofoam turntable was rotated 360° and the receiving antenna scanned from 1-4m in order to capture the maximum emission. A half wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the previously recorded signal was duplicated.

The maximum EIRP was calculated by adding the forward power to the calibrated source plus its appropriate gain value. These steps were carried out with the receiving antenna in both vertical and horizontal polarization. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic antenna are taken into consideration.

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3.5 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

Test Set-up



* Nominal Operating Voltage

Test Procedure

The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from - 30 °C to + 50 °C using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from battery end point to 115 % of the voltage normally at the input to the device or at the power supply terminals if cables are not normally supplied.

Specification — the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ (± 2.5 ppm) of the center frequency.

Time Period and Procedure:

The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).

1. The equipment is turned on in a “standby” condition for one minute before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
2. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

NOTE: The EUT is tested down to the battery endpoint.

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4. LIST OF TEST EQUIPMENT

Manufacture	Model/ Equipment	Serial Number	Calibration Interval	Calibration Due
R&S	ESI40/ Spectrum Analyzer	831564/003	Annual	10/29/2011
Agilent	E4416A/ Power Meter	GB41291412	Annual	01/04/2012
Agilent	E9327A/ Power Sensor	MY4442009	Annual	07/23/2011
Agilent	E4438C / SIGNAL GENERATOR	MY42082646	Annual	11/11/2011
MITEQ	AMF-6D-001180-35-20P/AMP	990893	Annual	05/20/2011
Wainwright	WHK1.2/15G-10EF/H.P.F	2	Annual	06/25/2011
Wainwright	WHK3.3/18G-10EF/H.P.F	1	Annual	06/25/2011
Agilent	775D/ Dual Directional Coupler	12922	Annual	12/29/2011
Agilent	11636B/ Power Divider	11377	Annual	12/29/2011
Digital	EP-3010/ Power Supply	3110117	Annual	01/04/2012
Schwarzbeck	UHAP/ Dipole Antenna	557	Biennial	03/11/2013
Schwarzbeck	UHAP/ Dipole Antenna	558	Biennial	03/11/2013
Korea Engineering	KR-1005L / Chamber	KRAB07063-2CH	Annual	12/28/2011
Schwarzbeck	BBHA 9120D/ Horn Antenna	296	Biennial	09/23/2011
Schwarzbeck	BBHA 9120D/ Horn Antenna	147	Biennial	04/13/2012
Agilent	N9020A / Spectrum Analyzer	US46220219	Annual	06/09/2011

5. SUMMARY OF TEST RESULTS

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result
2.1049, 27.53(l)(6)	Occupied Bandwidth	N/A	CONDUCTED	PASS
2.1051, 27.53(l)(4)(6)	Band Edge	< 43 + 10log ₁₀ (P[Watts]) within 5.5MHz from the band edge		PASS
2.1046	Conducted Output Power	N/A		PASS
2.1051, 27.53(l)(4)(6)	Conducted Spurious Emissions	< 55 + 10log ₁₀ (P[Watts]) for all emissions greater than 5.5MHz from the band edge		PASS
2.1055, 27.54	Frequency stability	Fundamental emissions must stay within the allotted band		PASS
27.50(h)(2)	Equivalent Isotropic Radiated Power	< 2 Watts max. EIRP	RADIATED	PASS
2.1053, 27.53(l)(4)	Undesirable Emissions	< 55 + 10log ₁₀ (P[Watts]) for all out-of-band emissions		PASS

6. SAMPLE CALCULATION

A. ERP Sample Calculation

Mode	Ch./ Freq.	Measured Level(dBm)	Substitute LEVEL(dBm)	Ant. Gain	C.L	Pol.	ERP	
	Freq.(MHz)						W	dBm
WiMAX	2596.00	-18.19	15.16	10.28	2.33	H	0.205	23.11

ERP = SubstituteLEVEL(dBm) + Ant. Gain – CL(Cable Loss)

- 1) The EUT mounted on a wooden tripod is 0.8 meter above test site ground level.
- 2) During the test , the turn table is rotated and the antenna height is also varied from 1 to 4 meters until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item (3).
- 6) The signal generator output level with Ant. Gain and cable loss are the rating of effective radiated power (ERP).

B. Emission Designator

Wimax Emission Designator

Emission Designator = 1M27F9W

QPSK Modulation

Emission Designator = 9M11G7D

Wimax BW = 9.11 MHz (Measured at the 99% power bandwidth)

G= Phase Modulation

7 = Quantized/Digital Info

D= Amplitude/Angle Modulated

16QAM / 64QAM Modulation

Emission Designator = 9M12W7D

Wimax BW = 9.12 MHz (Measured at the 99% power bandwidth)

W= Combination (Audio/Data)

7 = Quantized/Digital Info

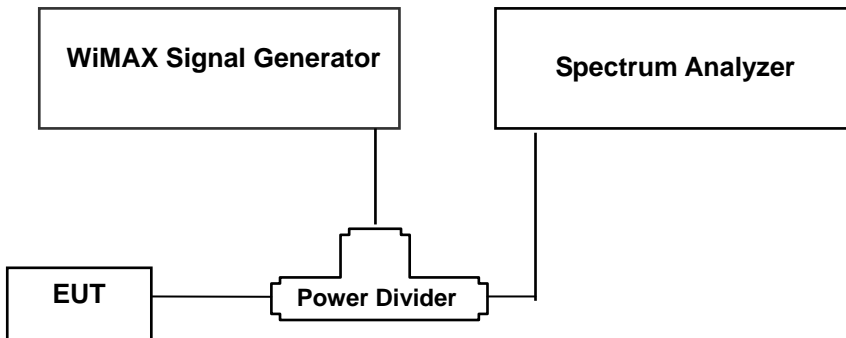
D= Amplitude/Angle Modulated

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7. TEST DATA

7.1 CONDUCTED OUTPUT POWER

A base station simulator was used to establish communication with the EUT. The base station simulator parameters were set to produce the maximum power from the EUT. This device was tested under all configurations and the highest power is reported. Conducted Output Powers of EUT are reported below.



Test Result

5 MHz channel BW		
Frequency(MHz)	Modulation	Average Power (dBm)
2498.5	QPSK 1/2	23.42
	QPSK 3/4	23.07
	16QAM 1/2	23.18
	16QAM 3/4	23.18
2593.0	QPSK 1/2	23.11
	QPSK 3/4	23.00
	16QAM 1/2	22.97
	16QAM 3/4	23.09
2687.5	QPSK 1/2	23.10
	QPSK 3/4	23.13
	16QAM 1/2	23.06
	16QAM 3/4	22.93

(WiMAX Conducted Average Output Powers)

10 MHz channel BW		
Frequency(MHz)	Modulation	Average Power (dBm)
2501.0	QPSK 1/2	22.76
	QPSK 3/4	22.84
	16QAM 1/2	22.85
	16QAM 3/4	22.90
2593.0	QPSK 1/2	22.62
	QPSK 3/4	22.63
	16QAM 1/2	22.71
	16QAM 3/4	22.72
2685.0	QPSK 1/2	22.61
	QPSK 3/4	22.56
	16QAM 1/2	22.62
	16QAM 3/4	22.54

(WiMAX Conducted Average Output Powers)

Note : Detecting mode is average.

- 5 MHz: Plots of the EUT's Conducted Output Power are shown Page 25 ~ 30.

- 10 MHz: Plots of the EUT's Conducted Output Power are shown Page 31 ~ 36.

7.2 OCCUPIED BANDWIDTH

5 MHz

Frequency [MHz]	Modulation	Occupied Bandwidth [MHz]
2498.5	QPSK 1/2	4.4460
	QPSK 3/4	4.4218
	16QAM 1/2	4.3839
	16QAM 3/4	4.3923
2593.0	QPSK 1/2	4.4483
	QPSK 3/4	4.4231
	16QAM 1/2	4.3939
	16QAM 3/4	4.3957
2687.5	QPSK 1/2	4.4517
	QPSK 3/4	4.4243
	16QAM 1/2	4.4015
	16QAM 3/4	4.3954

10 MHz

Frequency [MHz]	Modulation	Occupied Bandwidth [MHz]
2501.0	QPSK 1/2	8.9644
	QPSK 3/4	9.0498
	16QAM 1/2	9.1317
	16QAM 3/4	8.9634
2593.0	QPSK 1/2	8.9695
	QPSK 3/4	9.0553
	16QAM 1/2	9.1324
	16QAM 3/4	8.9740
2685.0	QPSK 1/2	8.9757
	QPSK 3/4	9.0620
	16QAM 1/2	9.1346
	16QAM 3/4	8.9821

- 5 MHz: Plots of the EUT's Occupied Bandwidth are shown Page 37 ~ 42.

- 10 MHz: Plots of the EUT's Occupied Bandwidth are shown Page 43 ~ 48.

7.3 CONDUCTED SPURIOUS EMISSIONS

5 MHz

Frequency(MHz)	Modulation	Frequency of Maximum Harmonic (GHz)	Maximum Data (dBm)
2498.5	QPSK 1/2	25.684	-30.582
	QPSK 3/4	24.511	-31.147
	16QAM 1/2	25.735	-30.816
	16QAM 3/4	25.123	-31.003
2593.0	QPSK 1/2	25.327	-31.278
	QPSK 3/4	25.608	-31.404
	16QAM 1/2	25.531	-31.140
	16QAM 3/4	24.996	-30.786
2687.5	QPSK 1/2	24.537	-31.296
	QPSK 3/4	25.812	-30.399
	16QAM 1/2	24.970	-31.166
	16QAM 3/4	25.072	-31.043

10 MHz

Frequency(MHz)	Modulation	Frequency of Maximum Harmonic (GHz)	Maximum Data (dBm)
2501.0	QPSK 1/2	25.684	-31.067
	QPSK 3/4	25.225	-31.349
	16QAM 1/2	25.047	-30.888
	16QAM 3/4	25.710	-32.053
2593.0	QPSK 1/2	26.169	-30.566
	QPSK 3/4	25.123	-30.628
	16QAM 1/2	24.996	-30.999
	16QAM 3/4	25.047	-30.654
2685.0	QPSK 1/2	25.990	-30.784
	QPSK 3/4	26.092	-31.316
	16QAM 1/2	25.302	-30.450
	16QAM 3/4	25.531	-31.336

- 5 MHz: Plots of the EUT's Conducted Spurious Emissions are shown Page 57 ~ 68.

- 10 MHz: Plots of the EUT's Conducted Spurious Emissions are shown Page 69 ~ 80.

7.3.1 CHANNEL EDGE

- 5 MHz: Plots of the EUT's Band Edge are shown Page 49 ~ 52.

- 10 MHz: Plots of the EUT's Band Edge are shown Page 53 ~ 56.

7.4 RADIATED SPURIOUS EMISSIONS

7.4.1 RADIATED SPURIOUS EMISSIONS (WiMAX 5 MHz-QPSK)

- MODULATION SIGNAL: WiMAX 5 MHz
 DISTANCE: 3 meters
 LIMIT: = - 25.00 dBm

Operating Freq. (MHz)	Freq.(MHz)	Measured Level [dBm]	Ant. Gain (dBd)	Substitute Level [dBm]	C.L	Pol.	ERP (dBm)
2498.50	4,997.00	-37.08	12.45	-34.25	5.81	H	-28.21
	7,495.50	-47.05	10.84	-35.23	6.90	H	-31.29
	9,994.00	-	-	-	-	-	-
2593.00	5,186.00	-37.63	12.50	-34.52	6.41	H	-28.43
	7,779.00	-45.27	10.89	-32.99	7.68	H	-29.78
	10,372.00	-	-	-	-	-	-
2687.50	5,375.00	-37.33	12.55	-34.66	6.53	H	-28.64
	8,062.50	-45.37	11.00	-30.68	7.77	H	-28.45
	10,750.00	-	-	-	-	-	-

- NOTES:**
1. Radiated Spurious Emission Measurements at 3 meters by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:
 2. The magnitude of spurious emissions attenuated more than 20dB below the limit above 5th Harmonic for all channel.
 3. we have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
 4. Worst case is QPSK 3/4.

7.4.2 RADIATED SPURIOUS EMISSIONS (WiMAX 10 MHz-16QAM)

- ▣ MODULATION SIGNAL: WiMAX 10 MHz
- ▣ DISTANCE: 3 meters
- ▣ LIMIT: - 25.00 dBm

Operating Freq. (MHz)	Freq.(MHz)	Measured Level [dBm]	Ant. Gain (dBd)	Substitute Level [dBm]	C.L	Pol.	ERP (dBm)
2501.00	5,002.00	-39.14	12.45	-36.91	5.81	H	-30.27
	7,503.00	-49.26	10.84	-37.44	6.90	H	-33.50
	10,004.00	-	-	-	-	-	-
2593.00	5,186.00	-41.47	12.50	-38.36	6.41	H	-32.27
	7,779.00	-51.56	10.89	-39.28	7.68	H	-36.07
	10,372.00	-	-	-	-	-	-
2685.00	5,370.00	-46.73	12.55	-44.06	6.53	H	-38.04
	8,055.00	-46.12	11.00	-32.43	7.77	H	-29.20
	10,740.00	-	-	-	-	-	-

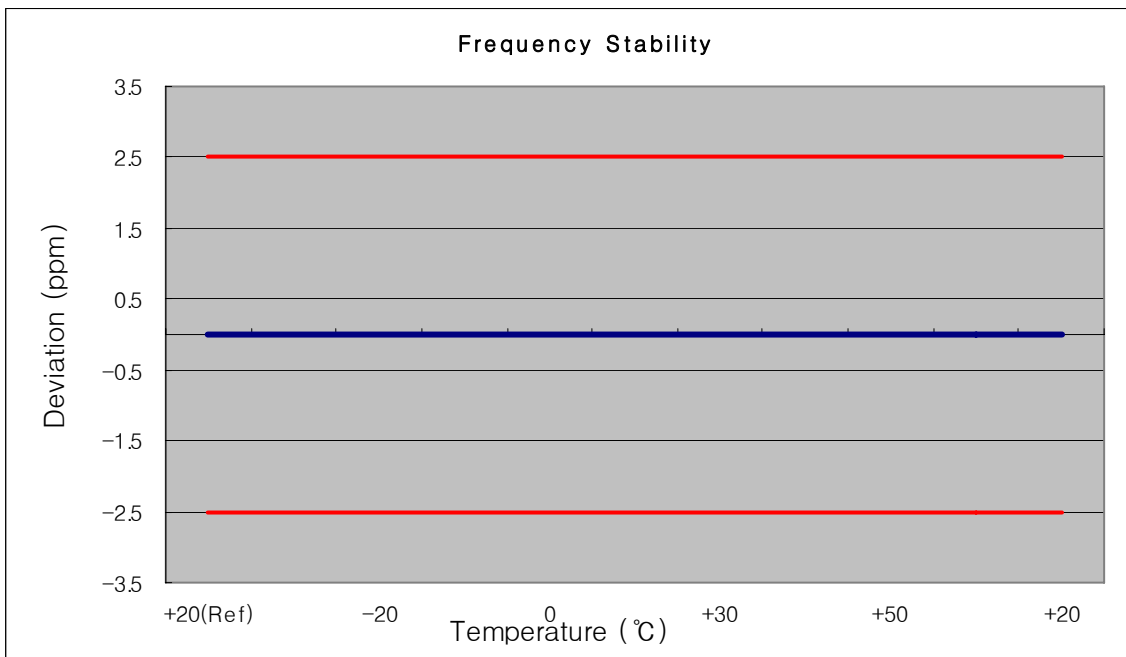
- NOTES:**
1. Radiated Spurious Emission Measurements at 3 meters by Substitution Method according to ANSI/TIA/EIA-603-C-2004, Aug. 17, 2004:
 2. The magnitude of spurious emissions attenuated more than 20dB below the limit above 5th Harmonic for all channel.
 3. we have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
 4. Worst case is 16QAM 3/4.

7.5 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

7.5.1 FREQUENCY STABILITY (WiMAX-5 MHz)

OPERATING FREQUENCY: 2593,000,000 Hz
 REFERENCE VOLTAGE: 5.0 VDC
 DEVIATION LIMIT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100%	5.00	+20(Ref)	2592 999 998	0	0.000 000	0.000
100%		-30	2592 999 996	-3.8	0.000 000	-0.001
100%		-20	2592 999 997	-2.6	0.000 000	-0.001
100%		-10	2592 999 995	-4.8	0.000 000	-0.002
100%		0	2593 000 002	2.1	0.000 000	0.001
100%		+10	2593 000 003	3.4	0.000 000	0.001
100%		+30	2593 000 007	6.6	0.000 000	0.003
100%		+40	2593 000 010	9.8	0.000 000	0.004
100%		+50	2593 000 014	14.1	0.000 001	0.005
115%	5.75	+20	2593 000 002	2.1	0.000 000	0.001
Batt. Endpoint	4.25	+20	2593 000 004	3.5	0.000 000	0.001



7.5.2 FREQUENCY STABILITY (WiMAX-10 MHz)

OPERATING FREQUENCY: 2593,000,000 Hz
 REFERENCE VOLTAGE: 5.0 VDC
 DEVIATION LIM IT: ± 0.000 25 % or 2.5 ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
100%	5.00	+20(Ref)	2592 999 997	0	0.000 000	0.000
100%		-30	2593 000 005	4.6	0.000 000	0.002
100%		-20	2593 000 002	1.5	0.000 000	0.001
100%		-10	2593 000 003	3.4	0.000 000	0.001
100%		0	2593 000 005	4.5	0.000 000	0.002
100%		+10	2593 000 009	8.5	0.000 000	0.003
100%		+30	2593 000 009	9.2	0.000 000	0.004
100%		+40	2593 000 010	9.9	0.000 000	0.004
100%		+50	2593 000 010	10.2	0.000 000	0.004
115%	5.75	+20	2593 000 003	3.4	0.000 000	0.001
Batt. Endpoint	4.25	+20	2593 000 004	4.4	0.000 000	0.002

