Prüfbericht - Nr.: *Test Report No.:*	**17005270 001**		**Seite 1 von 41** *Page 1 of 41*
Auftraggeber: *Client:*	**GREENFIELD INVEST & Trade INC.** **Swiss Tower Piso 16, Calle 53E, Urb. Obarrio, Panama City, Panama**		
Gegenstand der Prüfung: *Test item:*	**Fixed Wireless Terminal**		
Bezeichnung: *Identification:*	**SILVER FWT-400**	**Serien-Nr.:** *Serial No.:*	**n.a.**
Wareneingangs-Nr.: *Receipt No.:*	**163023727**	**Eingangsdatum:** *Date of receipt:*	**2006-08-25**
Prüfort: *Testing location:*	**Audix Technology (Shenzhen) Co., Ltd.** **No. 6, Ke Feng Road, Block 52, Shenzhen Science & Industry Park, Nantou, Shenzhen, Guangdong, P.R. China** NVLAP Accredited by the National Voluntary Laboratory Accreditation Program for FCC Part 15 and CISPR 22 under Lab Code 200372-0		
Prüfgrundlage: *Test specification:*	**FCC CFR47 Part 2: Subpart J** **FCC CFR47 Part 24: Subpart E** **FCC CFR47 Part 15: Subpart B**		
Prüfergebnis: *Test Result:*	**Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).** *The test item passed the test specification(s).*		
Prüflaboratorium *Testing Laboratory*	**TÜV Rheinland (Shenzhen) Co., Ltd.**		

geprüft/ *tested by:*			**kontrolliert/** *reviewed by:*		
2006-09-29	Sam Lin/ Engineer		2006-09-30	Shawn Peng/ Senior Project Manager	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

Sonstiges/ *Other Aspects:*

Abkürzungen:	*P(ass)*	=	*entspricht Prüfgrundlage*	*Abbreviations:*	*P(ass)*	=	*passed*
	F(ail)	=	*entspricht nicht Prüfgrundlage*		*F(ail)*	=	*failed*
	N/A	=	*nicht anwendbar*		*N/A*	=	*not applicable*
	N/T	=	*nicht getestet*		*N/T*	=	*not tested*

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

TEST SUMMARY

5.1 EFFECTIVE RADIATED POWER OF TRANSMITTER
RESULT: Passed

5.2 MODULATION CHARACTERISTICS
RESULT: Passed

5.3 OCCUPIED BANDWIDTH
RESULT: Passed

5.4 BAND EDGE
RESULT: Passed

5.5 SPURIOUS EMISSION AT ANTENNA TERMINAL
RESULT: Passed

5.6 FIELD STRENGTH OF SPURIOUS EMISSION
RESULT: Passed

5.7 FREQUENCY STABILITY
RESULT: Passed

5.8 CONDUCTED EMISSIONS
RESULT: Passed

5.9 RADIATED EMISSIONS OF IDLE MODE
RESULT: Passed

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1. General Remarks

1.1 Complementary Materials

None

2. Test Sites

2.1 Test Facilities

AUDIX Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Road, Block 52
Shenzhen Science & Industry Park
Nantou, Shenzhen
Guangdong
P.R. China

The tests at the test site have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Conducted emissions				
Receiver	R/S	ESHS 20	8366001006	2007-05-14
LISN	Anritsu	KNW-407	8-1628-5	2007-05-14
Field strength of Spurious emissions and Radiated emissions and E.R.P				
Amplifier	HP	8447D	2944A07794	2007-09-12
Amplifier	HP	8449B	3008A00863	2007-05-14
Antenna	EMCO	3115	9607-4877	2007-12-09
Spectrum analyzer	Agilent	E4407B	MY41440292	2007-05-14
Modulation Characteristics				
Wireless Communication	Agilent	E5515C	GB44300243	2007-05-15
Occupied Bandwidth				
Spectrum analyzer	Agilent	E4407B	MY41440292	2007-05-14
Wireless Communication	Agilent	E5515C	GB44300243	2007-05-15
Band Edge				
Spectrum analyzer	Agilent	E4407B	MY41440292	2007-05-14
Wireless Communication	Agilent	E5515C	GB44300243	2007-05-15
Frequency Stability				
Wireless Communication	Agilent	E5515C	GB44300243	2007-05-15
Temp&Humi	TERCHY	MHQ-120CLUB	BP2006040071	N/A
Spurious Emission at Antenna Terminal				
Wireless Communication	Agilent	E5515C	GB44300243	2007-05-15
Spectrum analyzer	Agilent	E4407B	MY41440292	2007-05-14

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements are ±3dB.

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Audix Technology (Shenzhen) Co., Ltd. test facility located at No. 6 Ke Feng Road 52 Block Shenzhen, Science & Industry Park, Nantou, Shenzhen, Guangdong is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUT is Fixed Wireless Terminal that is based on CDMA2000 1X technology. The frequency band is PCS band. It provides a set of features such as CDMA signal transmitting and receiving, CDMA protocol processing, Voice call, high-speed data service, and other related functionalities.

3.2 Ratings and System Details

Table 2: Rating of EUT

Kind of Equipment:	Fixed Wireless Terminal
Type Designation:	SILVER FWT-400
FCC ID	UNWTC800A

Table 3: Technical Specification of EUT

Technical Specification	**Value**
Uplink Operating Frequency band	1850MHz ~ 1910MHz (PCS Band)
Downlink Operation Frequecny band	1930MHz ~ 1990MHz (PCS Band)
Channel separation	1.25MHz
Extreme Temperature Range	-10ºC to +55ºC
Operation Voltage	DC 7.5V
Modulation	OQPSK
Antenna Type	External Antenna
Antenna Gain	3.0dB
Conversion Method	Heterodyne
Oscillation Method	VCTCXO & PLL Synthesizer
RF Output Power	Maximum 0.2W (23dBm) Minimum 10nW (-50dBm)
Frequency Stability	< +/- 300Hz
Open Loop Power Control output Power	RX= -25dBm TX = -57.5 ~ -38.5dBm RX= -65dBm TX = -17.5 ~ +1.5dBm RX= -104dBm TX = +18 ~ +30dBm
Spurious Emission	RX band -81dBm at 1MHz RBW TX band -61dBm at 1MHz RBW Other Frequency -47dBm at 30KHz RBW

Table 4: Rating of Technical Data of Adapter

Adapter Technical Specification	Value
AC/DC Adapter Model:	QXA-920751000
Manufacturer:	Huizhou Qiaoxing Famous Science & Technology Co., Ltd
Rating Input Voltage:	AC 100V – 240V 50/60Hz
Rating Output Voltage:	DC 7.5V
Rating Output Current	1000mA

Table 5: Rating Technical Data of Battery

Battery Technical Specification	Value
Type:	lithium-ion rechargeable battery
Manufacturer:	Guangzhou Binghai Electronics Technology Ltd.
Battery Model:	Para FWT-400
Rating Voltage:	3.6V
Rating Capacitance:	1500mA

3.3 Independent Operation Modes

The basic operation modes are:

A. Transmitting
   1. On
   2. Off
B. Idel Mode

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material
- Circuit Diagram
- PCB Layout
- Photo Document
- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5.

4.3 Special Accessories and Auxiliary Equipment

None.

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

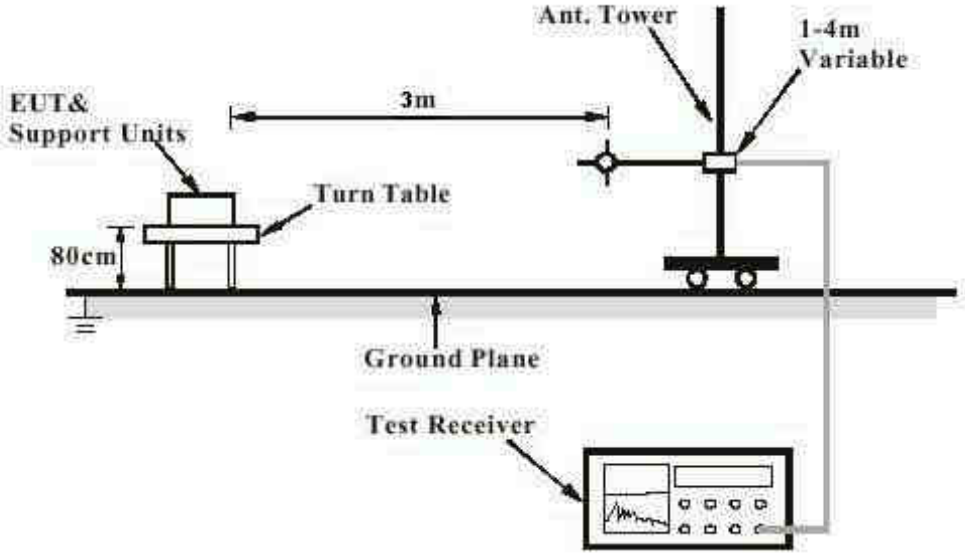


Diagram of Measurement Equipment Configuration for Conduction Measurement

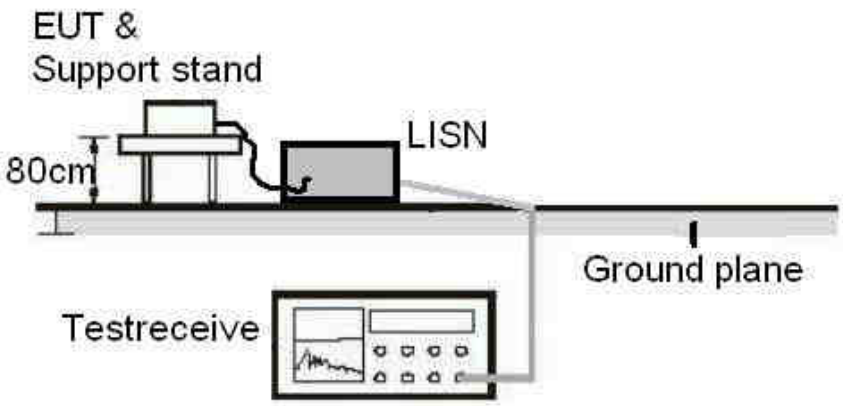
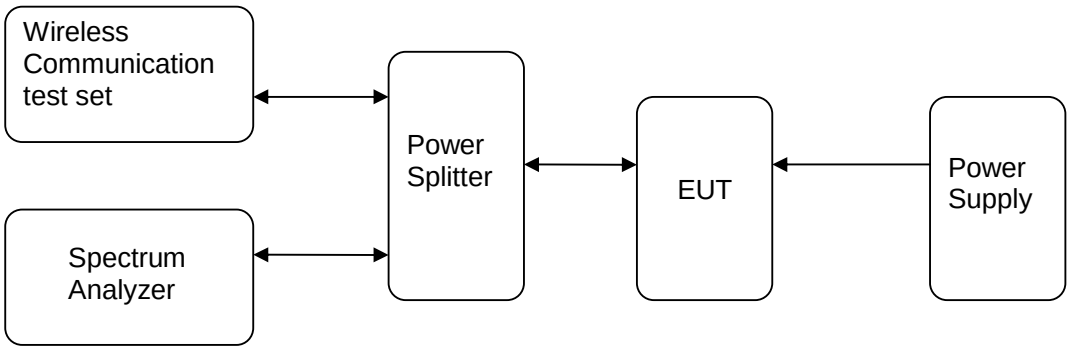


Diagram of Measurement Equipment Configuration for Transmitter Measurement



5. Test Results of Transmitter

5.1 Effective Radiated Power of Transmitter

RESULT: **Passed**

Test date	:	2006-09-21
Test standard	:	FCC Part 24.232 and Part 2.1046
Basic standard	:	ANSI/TIA-603-C: 2004 ANSI/TIA-98-E: 2003
Limit	:	Maximum Output Power (watts) < 2 watts Maximum Output Power (dBm) < 33 dBm

Test setup

Test Channel	:	Bottom/ Middle/ Top
Operation Mode	:	A.1
Ambient temperature	:	23.1℃
Relative humidity	:	52.6%
Atmospheric pressure	:	101 kPa

Table 6: Test result of Effective Radiated Power

Effective Radiated Power of Transmitter					
Channel B		Channel M		Channel T	
Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)	Measured (dBm)	Limit (dBm)
24.35	33	25.35	33	24.67	33

5.2 Modulation Characteristics

RESULT: **Passed**

Test date	:	2006-09-21
Test standard	:	FCC Part 24 subpart E and Part 2.1047
Basic standard	:	ANSI/TIA-603-C: 2004 ANSI/TIA-98-E: 2003
Limit	:	No Limit

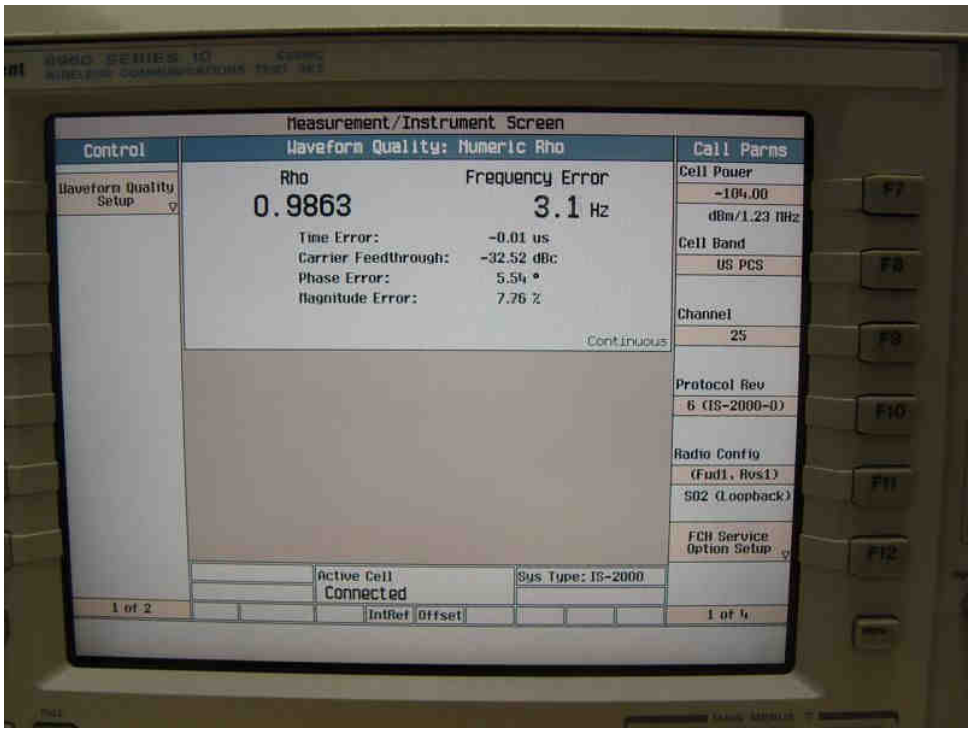
Test setup

Test Channel	:	Bottom
Operation Mode	:	A.1
Ambient temperature	:	23.2℃
Relative humidity	:	53.1%
Atmospheric pressure	:	101 kPa

Table 7: Test result of Modulation Characteristics

Modulation Characteristics			
Rho	0.9863	Frequency error	3.1Hz

Test Plots of Modulation Characteristics



5.3 Occupied Bandwidth

RESULT: **Passed**

Date of testing	:	2006-09-13
Test standard	:	FCC Part 24 subpart E and part 2.1049
Basic standard	:	ANSI/TIA-603-C: 2004 ANSI/TIA-98-E: 2003
Limits	:	0.5% of the total power shall not exceed 1.48MHz
Kind of test site	:	Shielded room

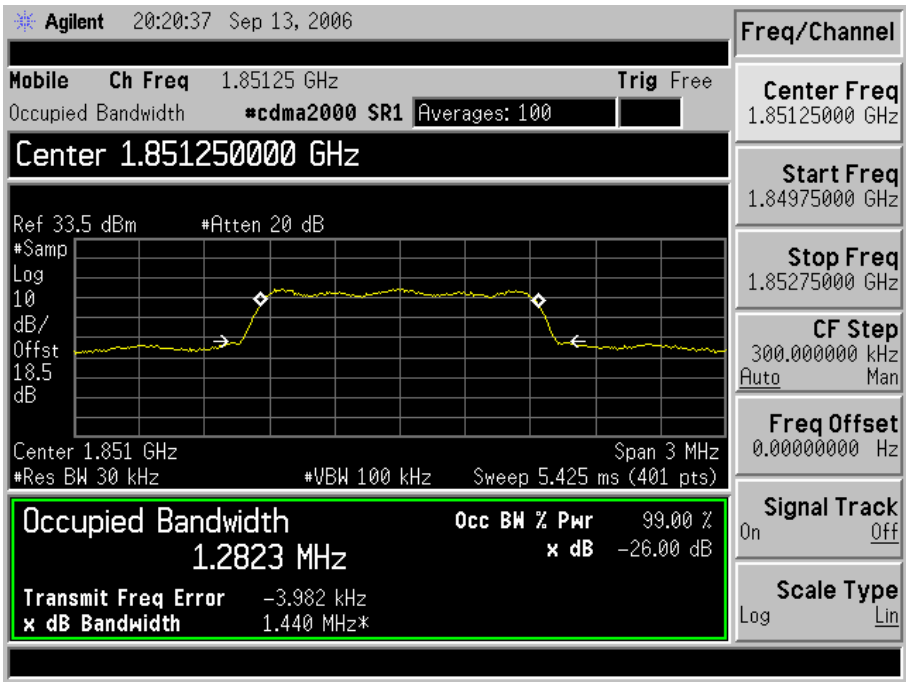
Test setup

Test Channel	:	Bottom/ Middle/ Top
Operation Mode	:	A.1
Ambient temperature	:	23.2℃
Relative humidity	:	53.1%
Atmospheric pressure	:	101 kPa

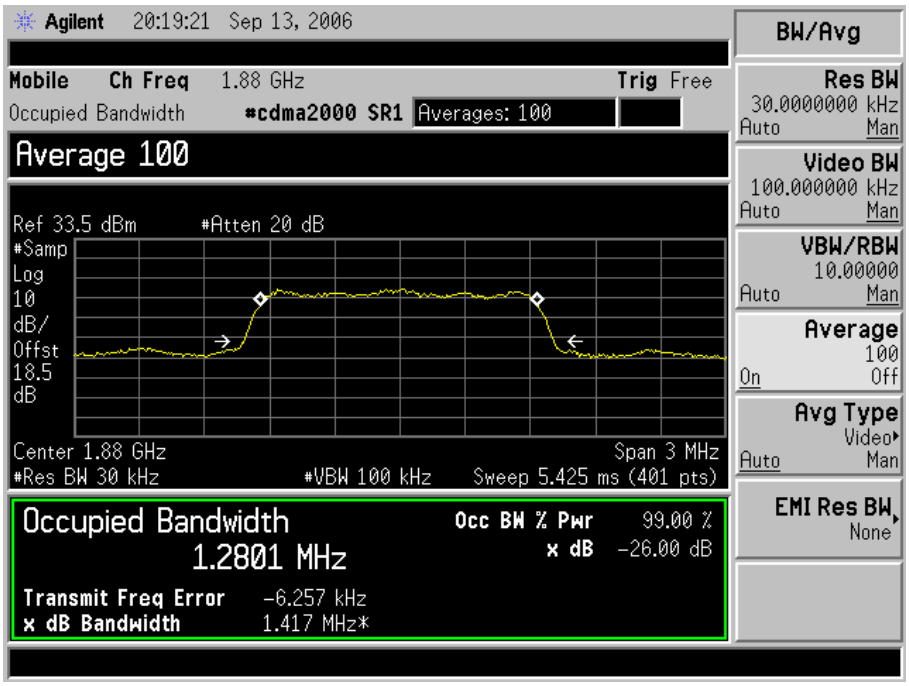
Table 8: Test result of Occupied Bandwidth

Occupied Bandwidth		
Channel B (MHz)	Channel M (MHz)	Channel T (MHz)
1.2823	1.2801	1.2804

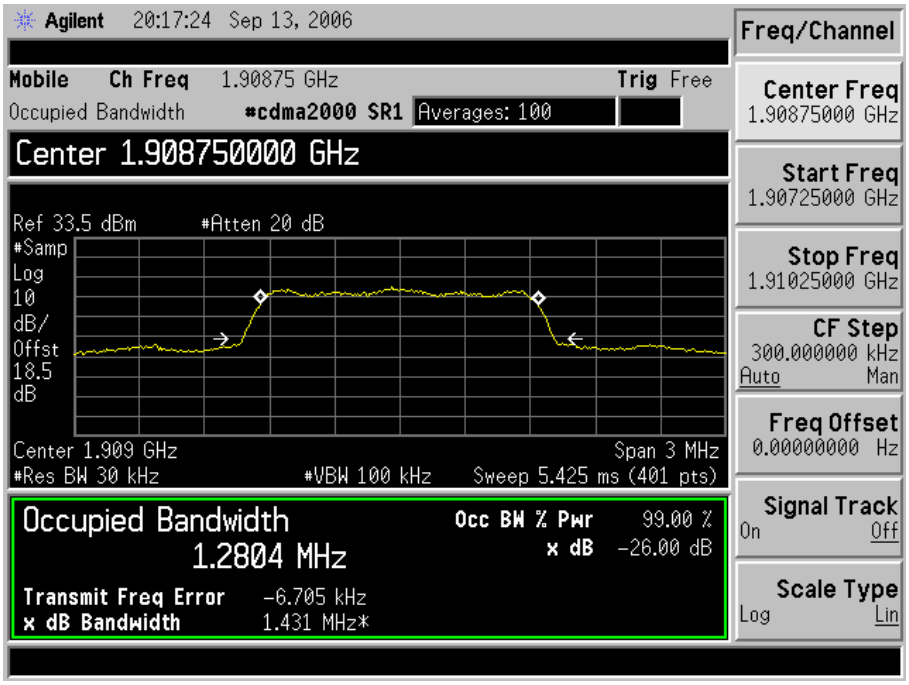
Test Plots of Occupied Bandwidth of Channel B



Test Plots of Occupied Bandwidth of Channel M



Test Plots of Occupied Bandwidth of Channel T



5.4 Band Edge

RESULT: **Passed**

Date of testing	:	2006-09-13
Test standard	:	FCC part 24.238 and part 2.1051
Basic standard	:	ANSI/TIA-603-C: 2004 ANSI/TIA-98-E: 2003
Rated Power	:	0.2W (23dBm)
Required attenuation	:	$43+10\log_{10}0.2 = 36$ (dBm)
Absolute limit	:	-13dBm
Kind of test site	:	Shield room

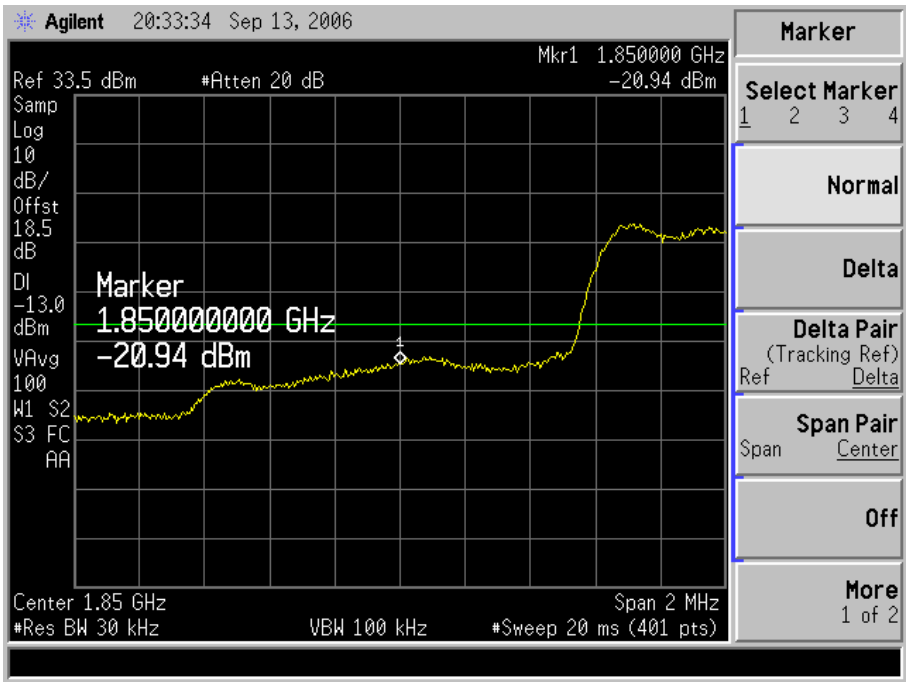
Test setup

Test Channel	:	Bottom/ Top
Operation mode	:	A.1
Ambient temperature	:	23.3℃
Relative humidity	:	53.1%
Atmospheric pressure	:	101 kPa

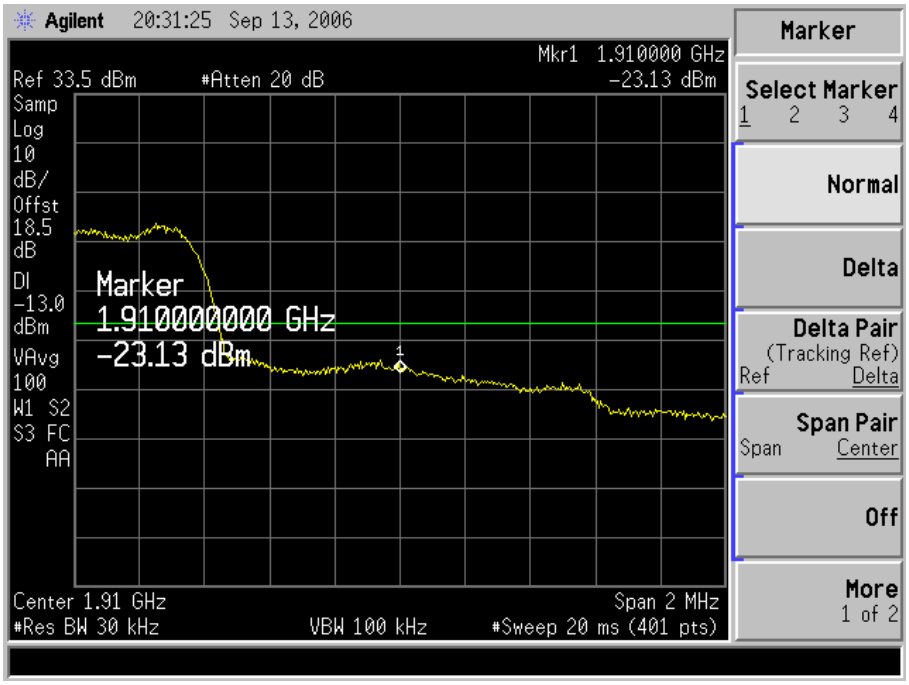
Table 9: Test result of Band Edge

Band Edge			
Channel B		Channel T	
1850 MHz	-20.94 dBm	1910 MHz	-23.13 dBm

Test Plots of Band Edge of Channel B



Test Plots of Band Edge of Channel T



5.5 Spurious Emission at Antenna Terminal

RESULT: **Passed**

Date of testing	:	2006-09-13
Test standard	:	FCC part 24.238 and part 2.1051
Basic standard	:	ANSI/TIA-603-C: 2004 ANSI/TIA-98-E: 2003
Rated Power	:	0.2W (23 dBm)
Required attenuation	:	$43+10\log_{10}0.2 = 36$ (dBm)
Limits	:	-13 dBm
Kind of test site	:	Shield room

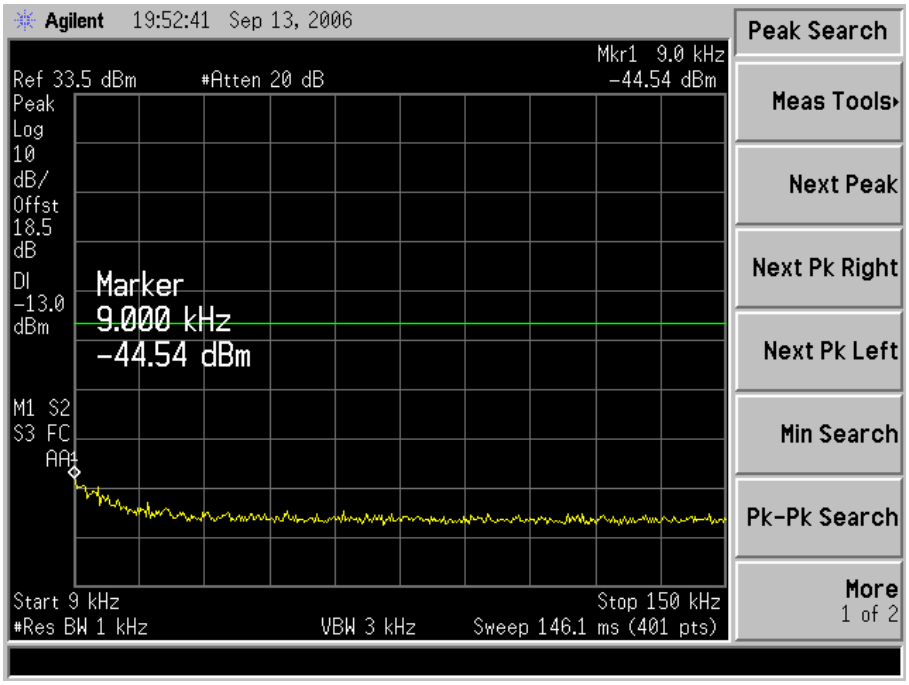
Test setup

Test Channel	:	Bottom/ Middle/ Top
Operation mode	:	A.1
Ambient temperature	:	23.2℃
Relative humidity	:	53.2%
Atmospheric pressure	:	101 kPa

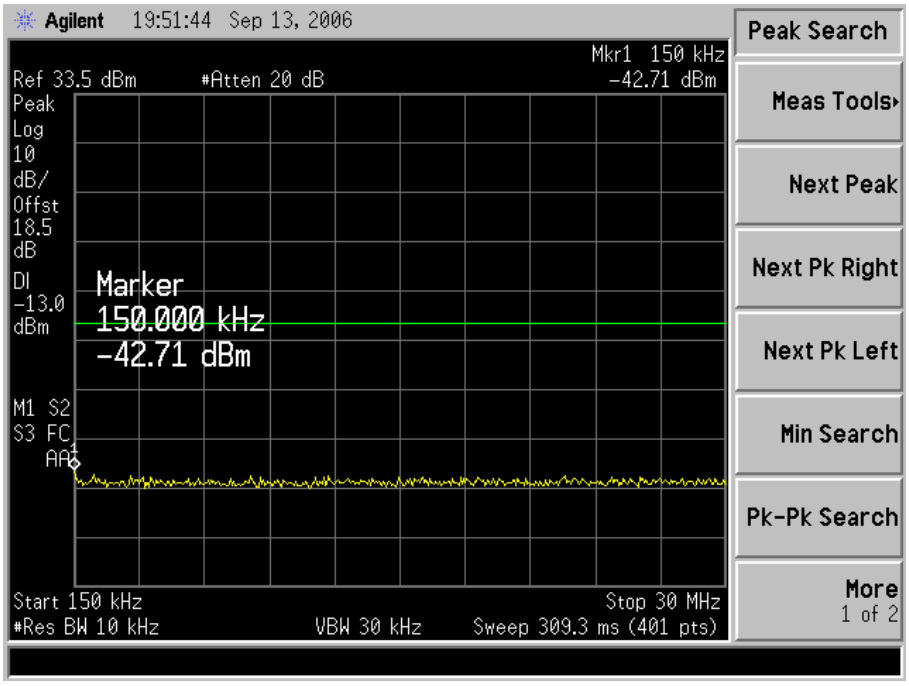
Table 10: Test result of Spurious Emission at Antenna terminal

Spurious emission at Antenna terminal						
Frequency band	Channel B		Channel M		Channel T	
	Frequency	Result (dBm)	Frequency	Result (dBm)	Frequency	Result (dBm)
9kHz ~ 150kHz	9.0kHz	-44.54	11.81kHz	-45.46	10.8kHz	-44.57
150kHz ~ 30MHz	150.0kHz	-42.71	150.0kHz	-42.13	150.0kHz	-41.21
30MHz ~ 1GHz	357.0kHz	-32.07	842.0MHz	-32.28	309MHz	-32.64
1GHz ~ 10GHz	2.98GHz	-23.02	2.96GHz	-22.26	2.96GHz	-22.58
10GHz ~ 20GHz	13.45GHz	-23.07	14.0GHz	-23.13	14.25GHz	-22.47

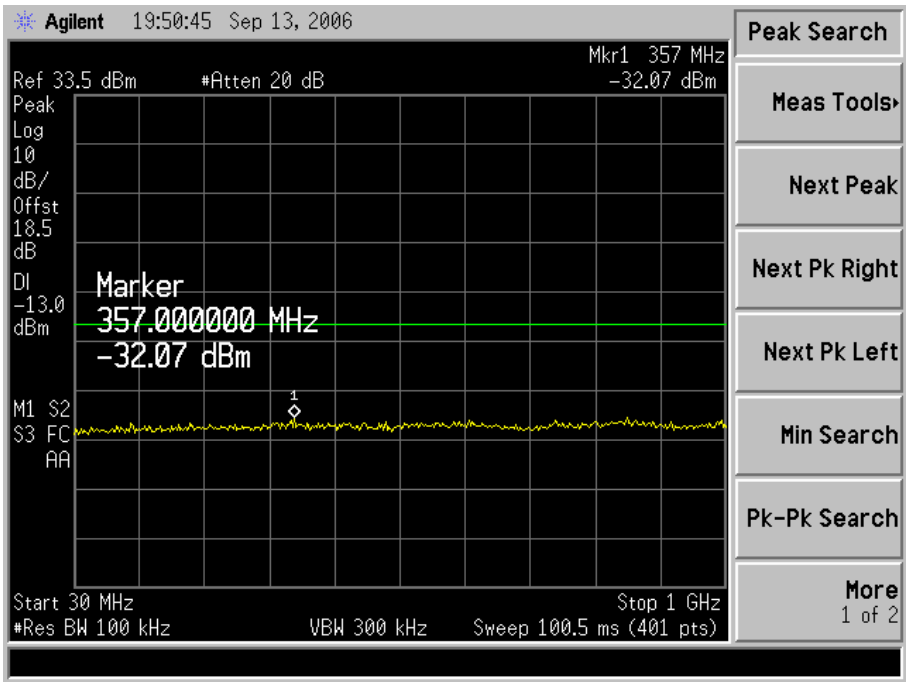
Test Plots of Spurious emission at Antenna terminal of Channel B – 9kHz to 150kHz



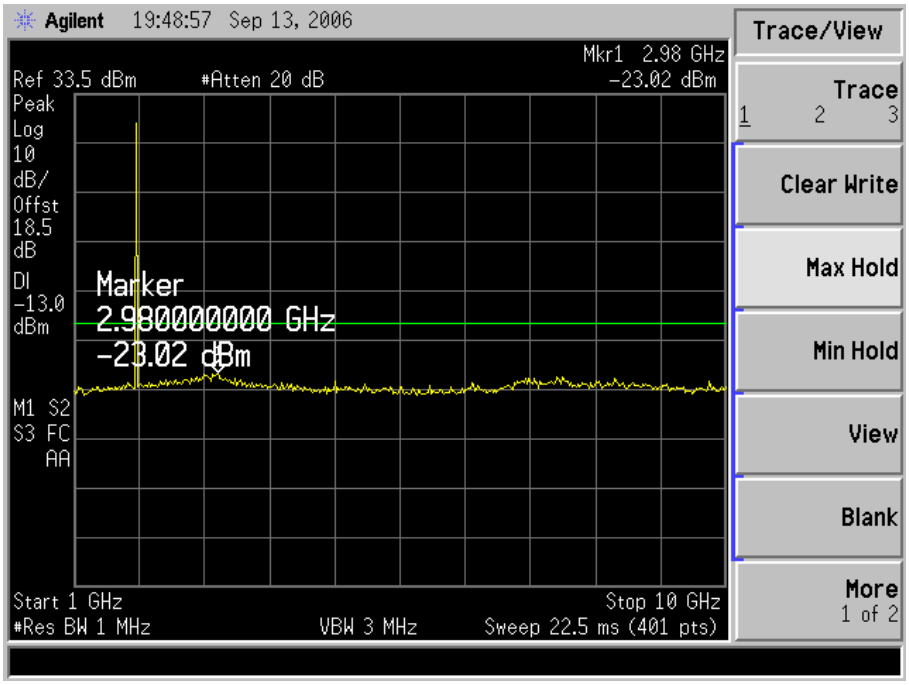
Test Plots of Spurious emission at Antenna terminal of Channel B – 150kHz to 30MHz



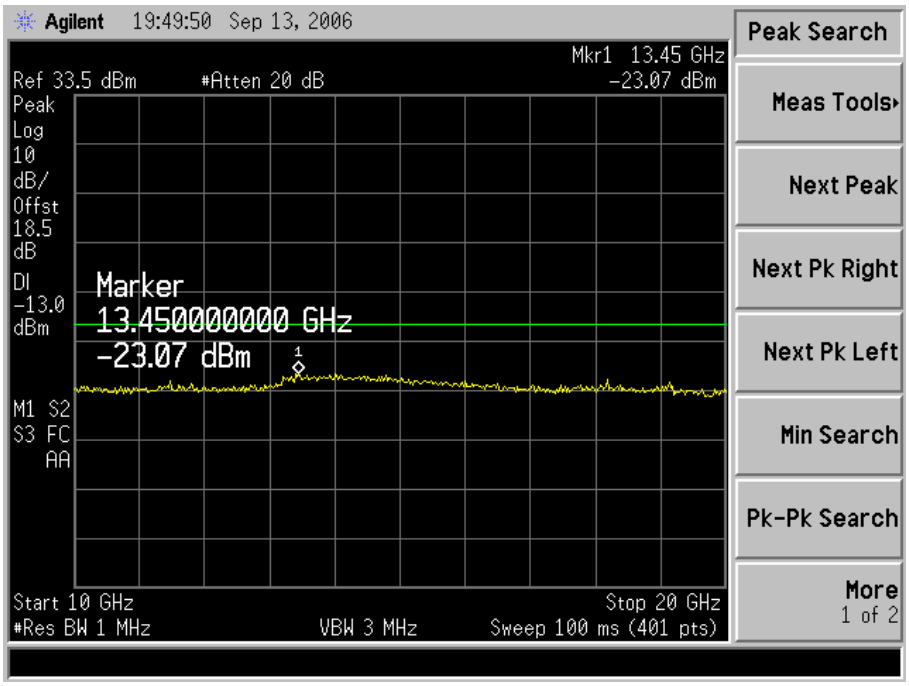
Test Plots of Spurious emission at Antenna terminal of Channel B – 30MHz to 1GHz



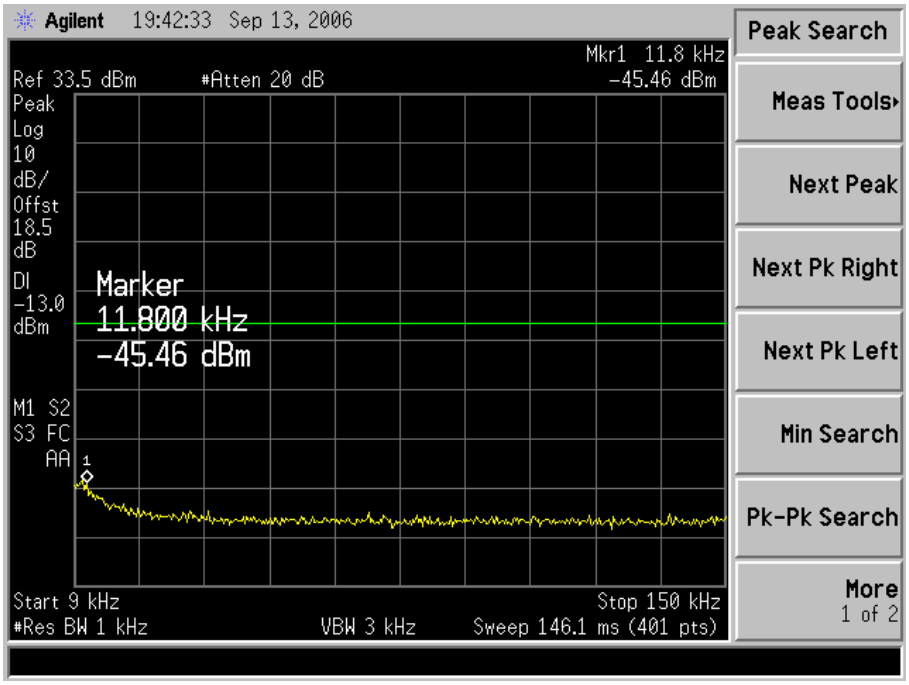
Test Plots of Spurious emission at Antenna terminal of Channel B – 1GHz to 10GHz



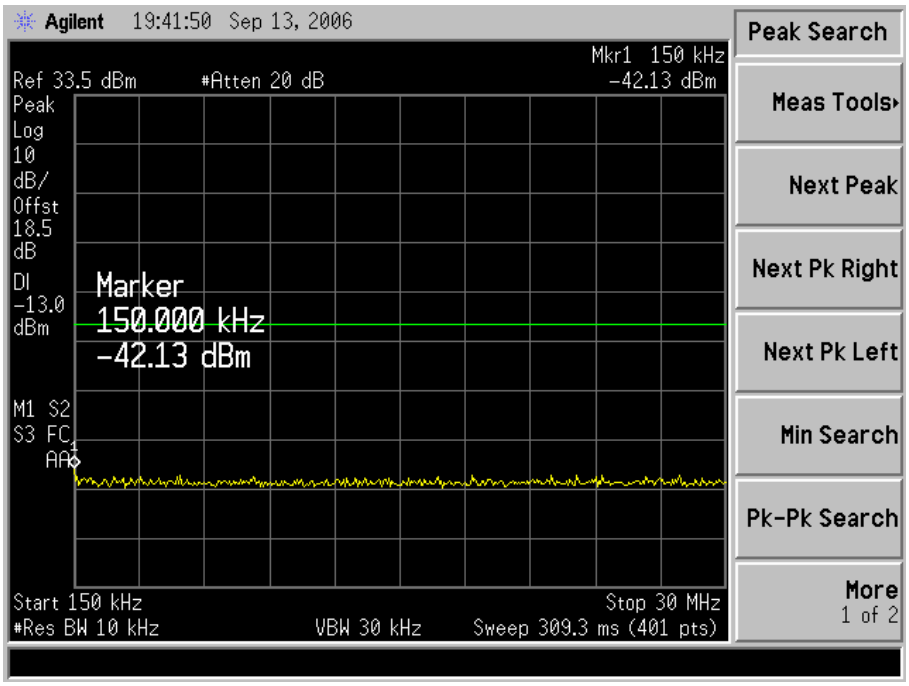
Test Plots of Spurious emission at Antenna terminal of Channel B – 10GHz to 20GHz



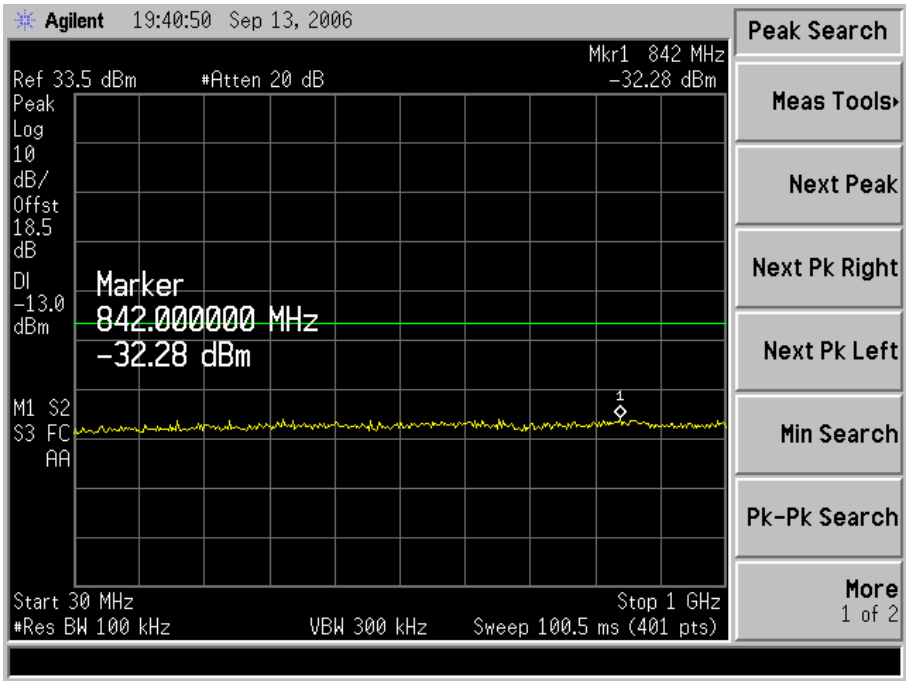
Test Plots of Spurious emission at Antenna terminal of Channel M – 9kHz to 150kHz



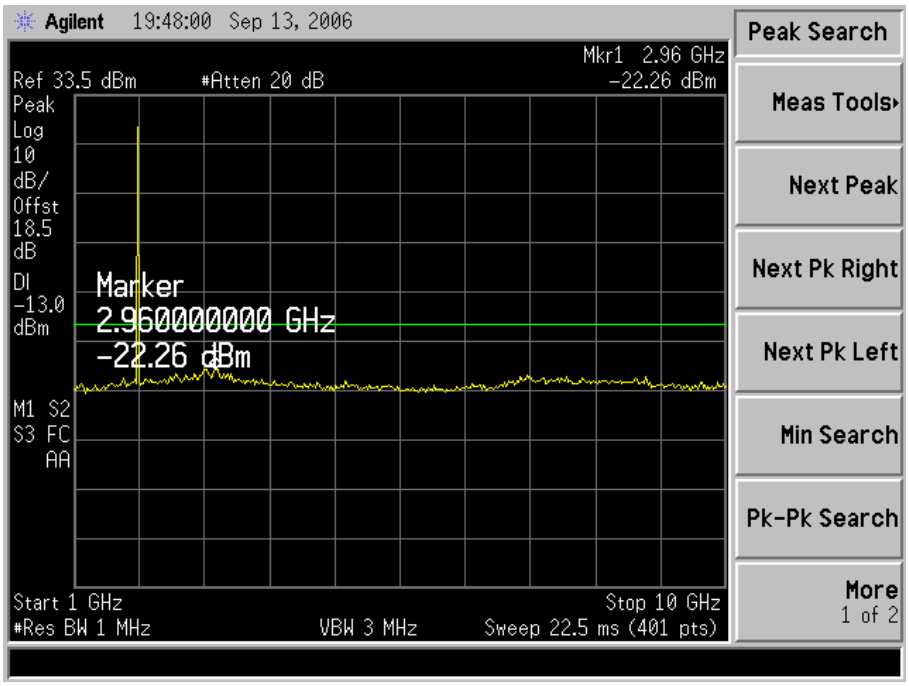
Test Plots of Spurious emission at Antenna terminal of Channel M – 150kHz to 30MHz



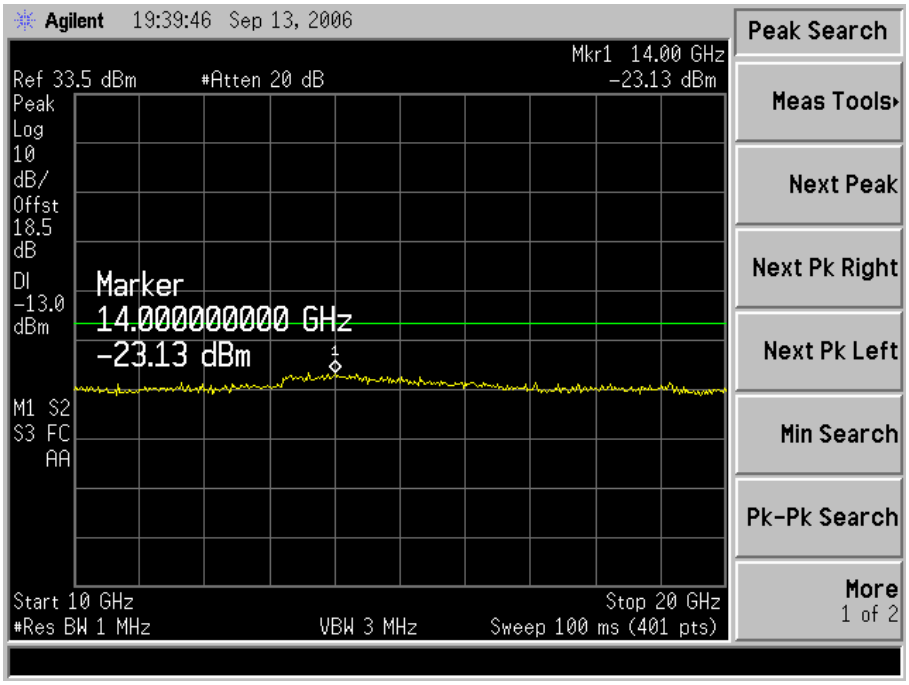
Test Plots of Spurious emission at Antenna terminal of Channel M – 30MHz to 1GHz



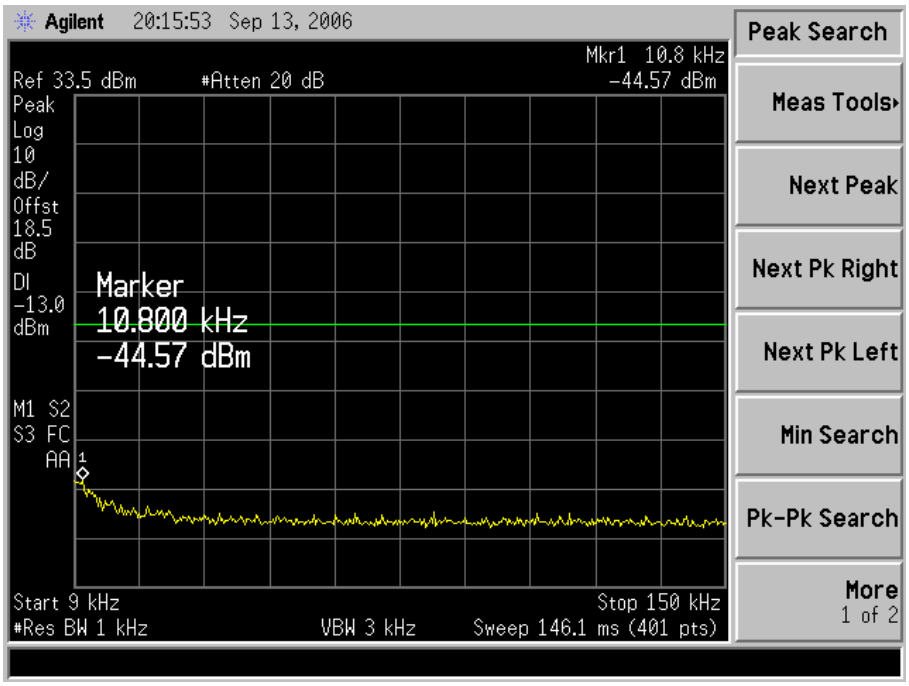
Test Plots of Spurious emission at Antenna terminal of Channel M – 1GHz to 10GHz



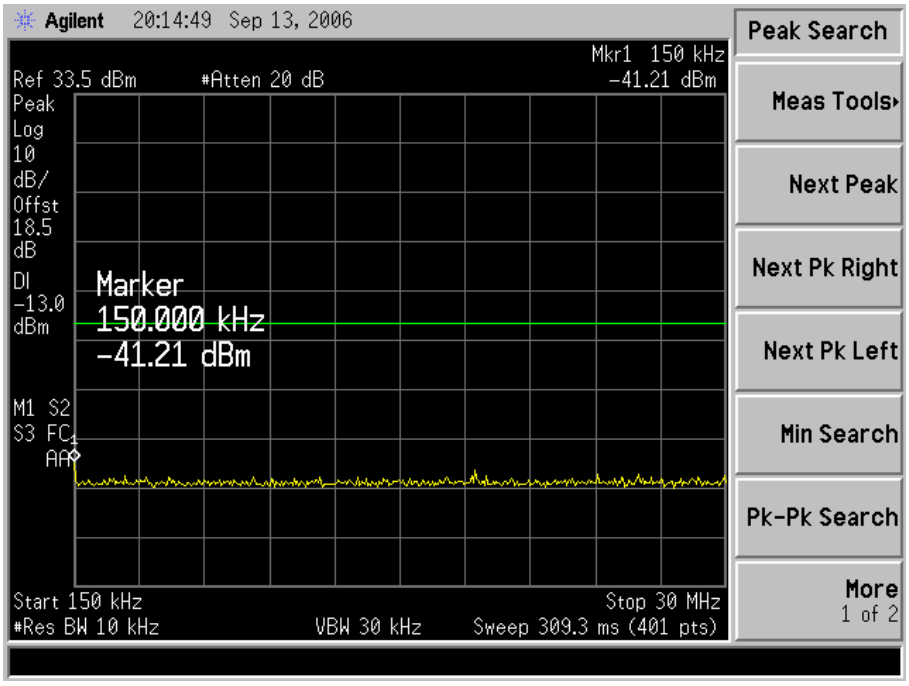
Test Plots of Spurious emission at Antenna terminal of Channel M – 10GHz to 20GHz



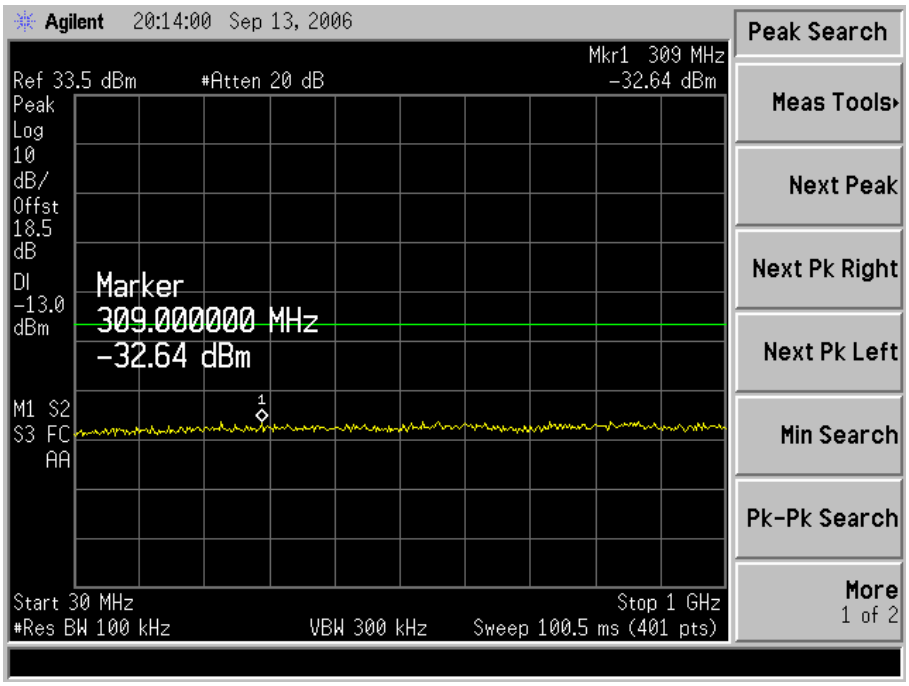
Test Plots of Spurious emission at Antenna terminal of Channel T – 9kHz to 150kHz



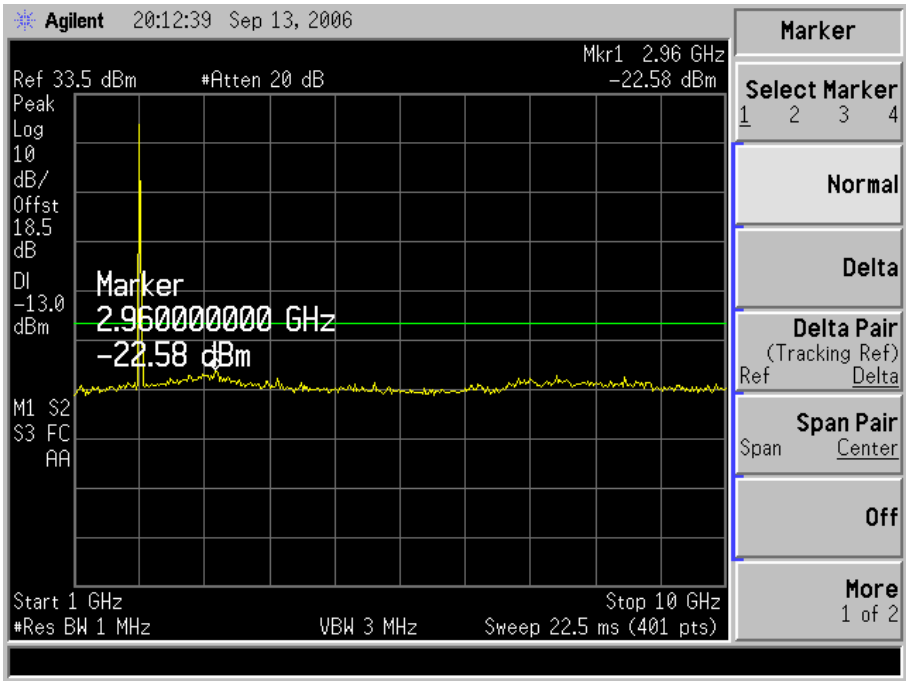
Test Plots of Spurious emission at Antenna terminal of Channel T – 150kHz to 30MHz



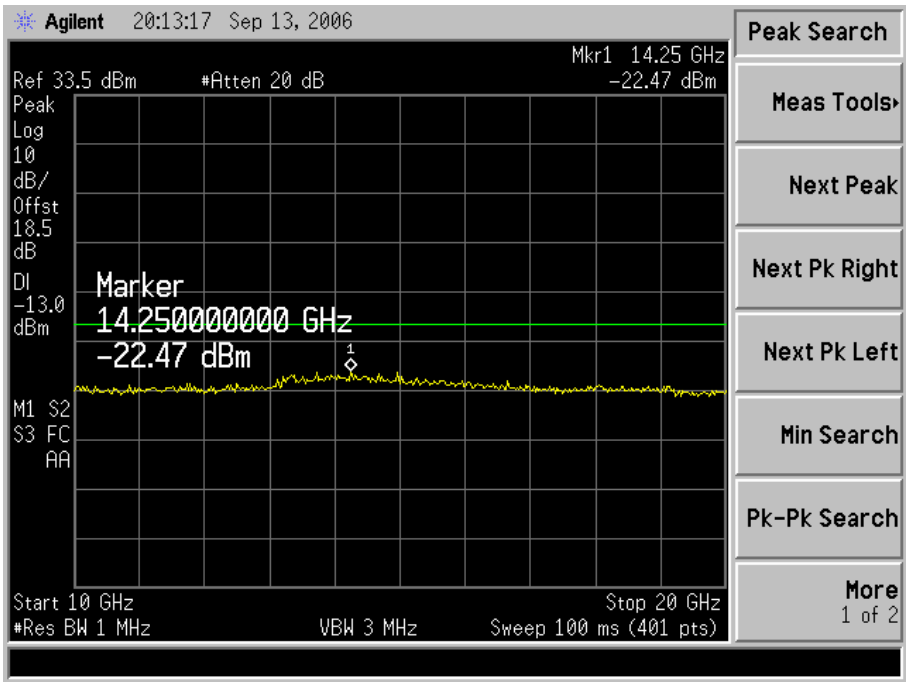
Test Plots of Spurious emission at Antenna terminal of Channel T – 30MHz to 1GHz



Test Plots of Spurious emission at Antenna terminal of Channel T – 1GHz to 10GHz



Test Plots of Spurious emission at Antenna terminal of Channel T – 10GHz to 20GHz



5.6 Field strength of spurious emission

RESULT: **Passed**

Date of testing	:	2006-09-21
Test standard	:	FCC part 24.238 and part 2.1053
Basic standard	:	ANSI/TIA-603-C: 2004 ANSI/TIA-98-E: 2003
Rated Power	:	0.2W (23 dBm)
Required attenuation	:	$43+10\log_{10}0.2 = 36$ (dBm)
Limit	:	-13 dBm
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Bottom/ Middle/ Top
Operation Mode	:	A.1
Ambient temperature	:	23.1℃
Relative humidity	:	53.2%
Atmospheric pressure	:	101 kPa

Table 11: Test result of Field strength of spurious emission

Channel B								
Frequency	**Antenna Polarity**	**FS**	**OPSG**	**CL**	**IGSA**	**e.r.p.**	**Limit of e.r.p.**	**Margin**
(MHz)	**(Horizontal/ Vertical)**	**(dBµV/m)**	**(dBm)**	**(dB)**	**(dBi)**	**(dBm)**	**(dBm)**	**(dB)**
40.67	Vertical	28.6	-76.3	1.1	0	-79.55	-13	-66.55
301.60	Vertical	28.16	-71.9	4.05	0	-78.1	-13	-65.1
3703.00	Vertical	64.67	-42.5	8.32	9.8	-43.17	-13	-30.17
5539.00	Vertical	70.57	-37.0	9.67	10.3	-38.52	-13	-25.52
7409.00	Vertical	63.61	-40	10.8	9.8	-43.15	-13	-30.15
123.4	Horizontal	23.24	-77.5	2.47	0	-82.12	-13	-69.12
543.5	Horizontal	30.5	-76	4.5	0	-82.65	-13	-69.65
821.8	Horizontal	29.8	-60	4.9	0	-67.05	-13	-54.05
2649.00	Horizontal	53.13	-54	6.61	9.8	-52.96	-13	-39.96
3703.00	Horizontal	79.47	-26	8.32	9.5	-26.97	-13	-13.97
5539.00	Horizontal	84.47	-22	9.67	10.2	-23.62	-13	-10.62

Channel M								
Frequency	**Antenna Polarity**	**FS**	**OPSG**	**CL**	**IGSA**	**e.r.p.**	**Limit of e.r.p.**	**Margin**
(MHz)	**(Horizontal/ Vertical)**	**(dBµV/m)**	**(dBm)**	**(dB)**	**(dBi)**	**(dBm)**	**(dBm)**	**(dB)**
189.60	Vertical	23.01	-70	2.86	0	-75.01	-13	-62.01
285.56	Vertical	26.39	-76.5	3.33	0	-81.98	-13	-68.98
896.43	Vertical	30	-69	4.9	0	-76.05	-13	-63.05
2743.00	Vertical	51.95	-54	6.74	9.8	-53.09	-13	-40.09
3754.00	Vertical	77.13	-28	8.38	9.5	-29.03	-13	-16.03
5624.00	Vertical	82.41	-23.5	9.72	10.2	-25.17	-13	-12.17
136.30	Horizontal	22.26	-78	2.21	0	-82.36	-13	-69.36
258.35	Horizontal	26.39	-74.5	2.86	0	-79.51	-13	-66.51
565.0	Horizontal	27.6	-71	3.5	0	-76.65	-13	-63.65
2938.0	Horizontal	48.92	-61	7.12	9.8	-60.47	-13	-47.47
4078.0	Horizontal	70.09	-35	8.69	9.5	-36.34	-13	-23.34
6168.0	Horizontal	72.55	-31.5	10.17	9.6	-34.22	-13	-21.22

Channel T								
Frequency	**Antenna Polarity**	**FS**	**OPSG**	**CL**	**IGSA**	**e.r.p.**	**Limit of e.r.p.**	**Margin**
(MHz)	**(Horizontal/ Vertical)**	**(dBµV/m)**	**(dBm)**	**(dB)**	**(dBi)**	**(dBm)**	**(dBm)**	**(dB)**
201.31	Vertical	26.39	-74.5	3.32	0	-79.97	-13	-66.97
589.00	Vertical	28.3	-72	4.2	0	-78.35	-13	-65.35
895.41	Vertical	29	-69	4.9	0	-76.05	-13	-63.05
1545.80	Vertical	32.2	-71	5.1	7.5	-70.75	-13	-57.75
3817.50	Vertical	43.1	-66	8.39	9.6	-66.94	-13	-53.94
5726.25	Vertical	48.3	-62	9.5	10.1	-63.55	-13	-50.55
175.85	Horizontal	23.5	-77	2.86	0	-82.01	-13	-69.01
589.60	Horizontal	29	-73	4.2	0	-79.35	-13	-66.35
865.31	Horizontal	30.1	-70	4.8	0	-76.95	-13	-63.95
2173.00	Horizontal	47.24	-61	5.86	7.5	-61.51	-13	-48.51
3817.50	Horizontal	45	-65	8.39	9.6	-65.94	-13	-52.94
5726.25	Horizontal	49.4	-60	9.5	10.1	-61.55	-13	-48.55

Notes:

e.r.p. = OPSG – CL + IGSA - 2.15

OPSG: Output power of the signal generator

CL: Cable loss

IGSA: Isotropic gain of the substitution antenna

E.R.P: Effective radiated power

5.7 Frequency Stability

RESULT: **Passed**

Date of testing	:	2006-09-21
Test standard	:	FCC part 24.235 and part 2.1055
Basic standard	:	ANSI/TIA-603-C: 2004 ANSI/TIA-98-E: 2003
Limits	:	The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.
Kind of test site	:	Climate Chamber

Test setup

Test Channel	:	Bottom/ Middle/ Top
Operation Mode	:	A.1
Test Voltage range	:	DC 6.4V ~ 8.6V
Test Temperature range	:	-30℃ ~ +50℃
Ambient temperature	:	23.1℃
Relative humidity	:	52.6%
Atmospheric pressure	:	101 kPa

Table 12: Test result of Frequency Stability VS Variation of Temperature

Measurement Results VS Variation of Temperature						
Temperature	Channel B		Channel M		Channel T	
	Nominal Frequency (MHz)	Measured Frequency Error (Hz)	Nominal Frequency (MHz)	Measured Frequency Error (Hz)	Nominal Frequency (MHz)	Measured Frequency Error (Hz)
-30℃*	1851.25	N/A	1880	N/A	1908.75	N/A
-20℃	1851.25	14.7	1880	15	1908.75	14
-10℃	1851.25	10.4	1880	15.5	1908.75	15
0℃	1851.25	14.5	1880	13	1908.75	12
10℃	1851.25	15	1880	12	1908.75	13
20℃	1851.25	12	1880	14	1908.75	13
30℃	1851.25	14	1880	15	1908.75	12
40℃	1851.25	14.5	1880	12	1908.75	15
50℃	1851.25	16	1880	13	1908.75	13

Remark:

The EUT doesn't working when temperature is -30℃, therefore there is no test result.

Table 13: Test result of Frequency Stability VS Variation of Voltage

Measurement Results VS. Variation of Voltage						
Voltage	Channel B		Channel M		Channel T	
	Nominal Frequency (MHz)	Measured Frequency Error (Hz)	Nominal Frequency (MHz)	Measured Frequency Error (Hz)	Nominal Frequency (MHz)	Measured Frequency Error (Hz)
6.4 V	1851.25	13.5	1880	13	1908.75	16
7.5 V	1851.25	15	1880	12	1908.75	14
8.6 V	1851.25	13	1880	12	1908.75	15

5.8 Conducted emissions

RESULT: **Passed**

Date of testing	:	2006-09-15
Test standard	:	FCC Part 15.107
Basic standard	:	ANSI C63.4: 2003
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.107(a)
Kind of test site	:	Shield room

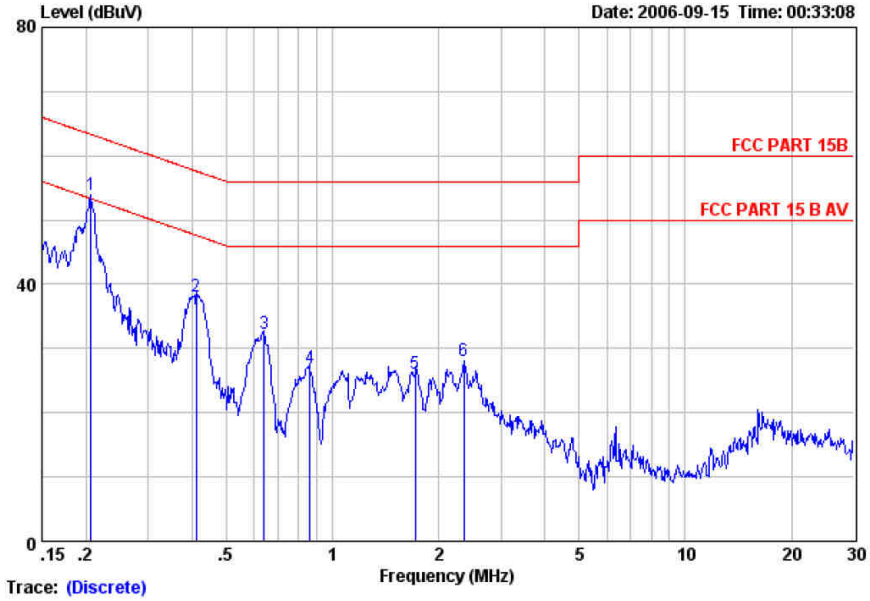
Test setup

Input Voltage (of AC/DC adaptor)	:	AC 120V, 60Hz
Operation Mode	:	A, B
Earthing	:	Not Connected
Ambient temperature	:	23.7℃
Relative humidity	:	50.0%
Atmospheric pressure	:	100.0 kPa

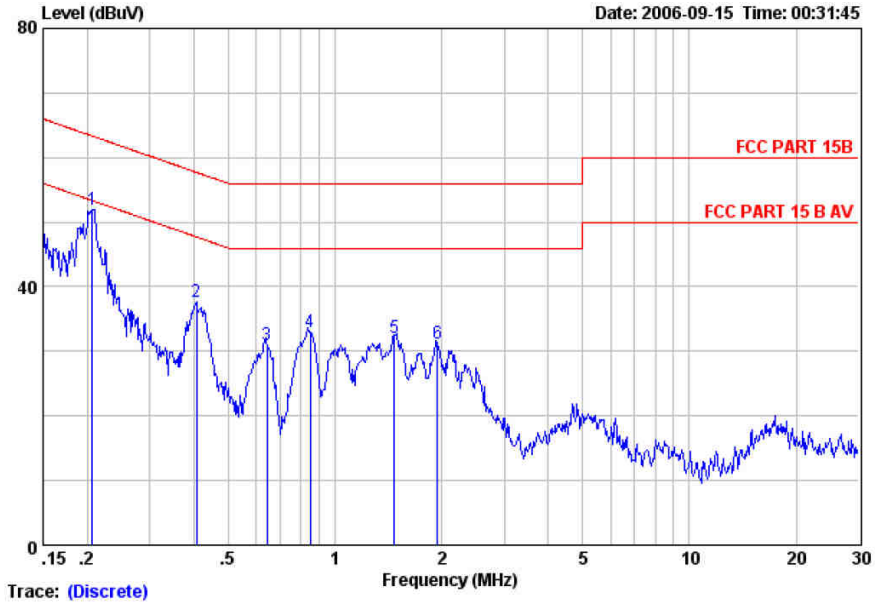
Table 14: Test result of Conducted emissions

Frequency [MHz]	Phase	Level QP [dB(μ V)]	Level AV [dB(μ V)]	Limit QP [dB(μ V)]	Limit AV [dB(μ V)]	Margin QP [dB]	Margin AV [dB]
0.21	L	53.82	42.17	63.36	53.36	9.54	11.19
0.41	L	38.04	29.51	57.64	47.64	19.6	18.13
0.64	L	32.30	27.19	56.00	46.00	23.7	18.81
0.86	L	26.91	24.38	56.00	46.00	29.09	21.62
1.72	L	26.17	23.21	56.00	46.00	29.83	22.79
2.36	L	28.01	20.74	56.00	46.00	27.99	25.26
0.21	N	51.95	43.91	63.36	53.36	11.41	9.45
0.41	N	37.72	39.54	57.73	47.73	20.01	8.19
0.64	N	30.88	32.17	56.00	46.00	25.12	13.83
0.85	N	33.05	31.06	56.00	46.00	22.95	14.94
1.47	N	32.17	26.75	56.00	46.00	23.83	19.25
1.95	N	31.09	28.16	56.00	46.00	24.91	17.84

Test Plots of Conducted emissions - Live



Test Plots of Conducted emissions - Neutral



5.9 Radiated emissions of Idle Mode

RESULT: **Passed**

Date of testing	:	2006-09-09
Test standard	:	FCC Part 15.109
Basic standard	:	ANSI C63.4: 2003
Frequency range	:	30 – 1000MHz
Limits	:	FCC Part 15.109(a)
Kind of test site	:	3m Semi-Anechoic Chamber

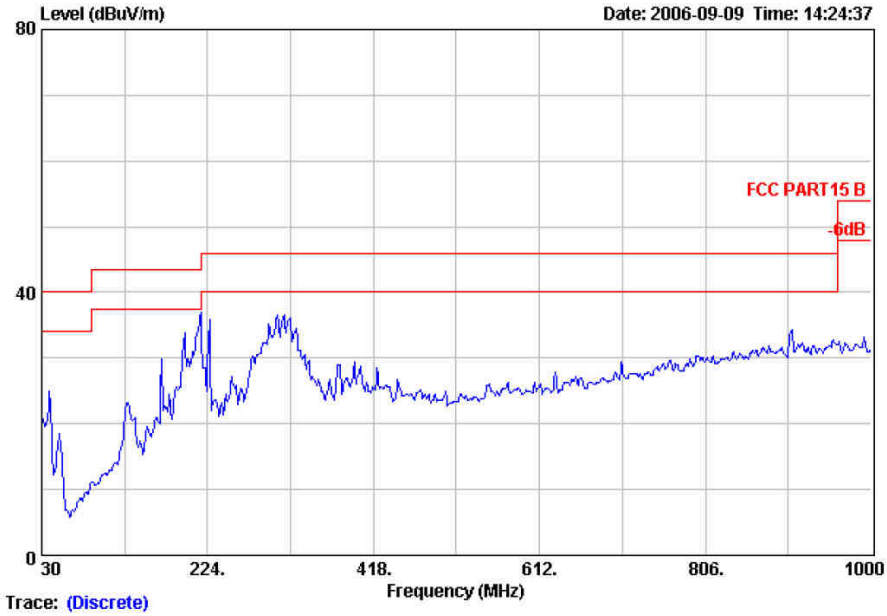
Test Setup

Input Voltage (of AC/DC adaptor)	:	AC 120V, 60Hz
Operation Mode	:	B
Earthing	:	Not Connected
Ambient temperature	:	23.7℃
Relative humidity	:	50.0%
Atmospheric pressure	:	100.0 kPa

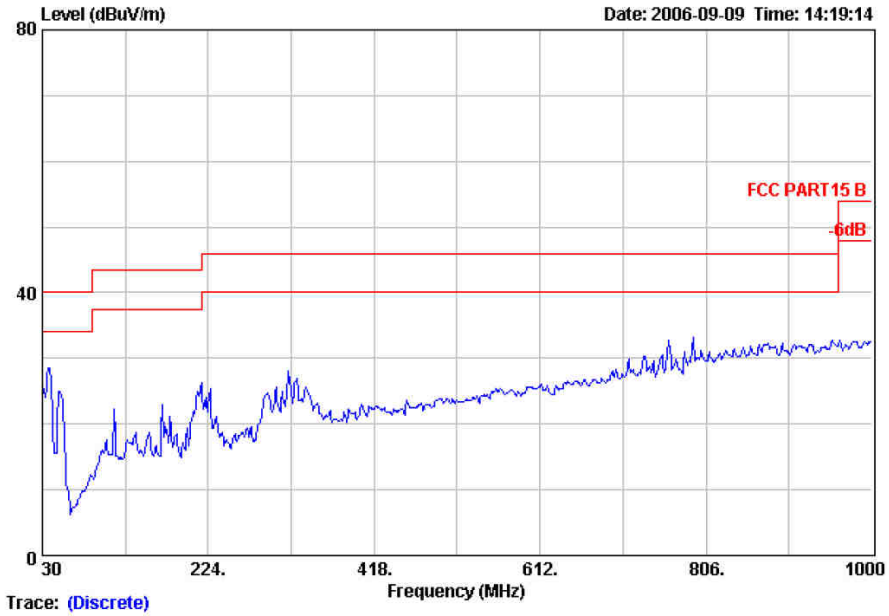
Table 15: Test result of Radiated emissions of Idle Mode

Frequ. [MHz]	Antenna Orientation	Level QP [dB(µV)]	Limit [dB(µV/m)]	Margin QP [dB]
38.37	Horizontal	24.89	40	15.11
130.88	Horizontal	23.24	43.5	20.26
169.68	Horizontal	29.80	43.5	13.7
196.84	Horizontal	33.92	43.5	9.58
216.24	Horizontal	36.99	46	9.01
313.24	Horizontal	36.62	46	9.38
37.76	Vertical	28.60	40	11.4
51.34	Vertical	25.04	40	14.96
114.39	Vertical	22.26	43.5	21.24
169.68	Vertical	23.01	43.5	20.49
216.24	Vertical	26.39	46	19.61
318.09	Vertical	28.16	46	17.84

Test Plots of Radiated emissions of Idle Mode - Horizontal

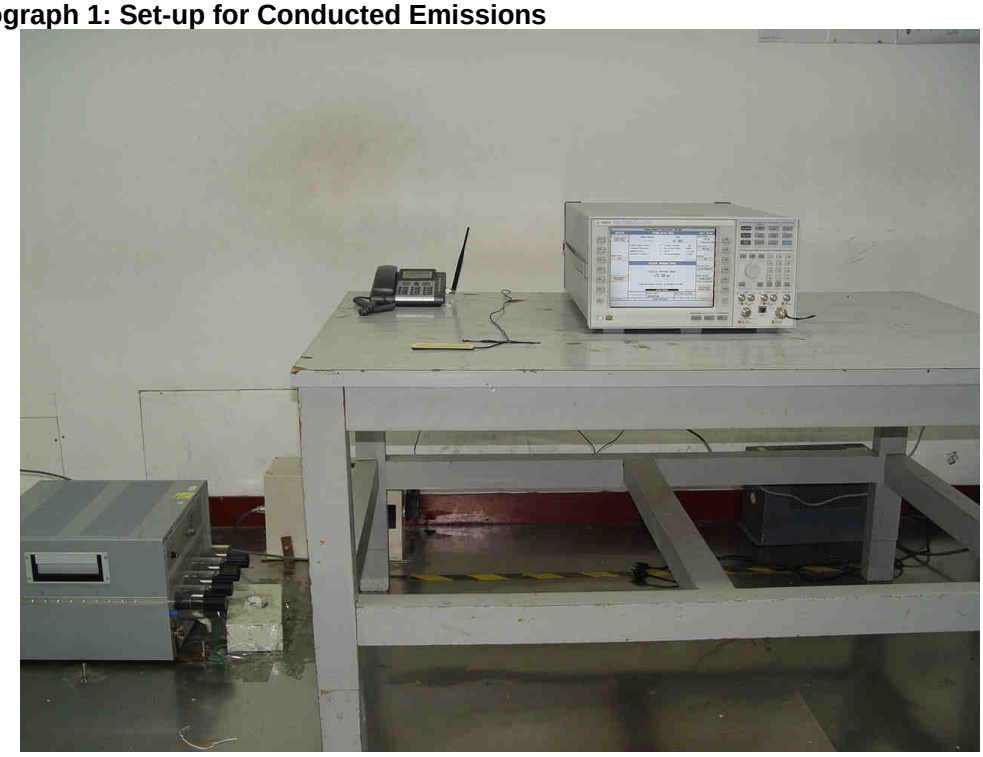


Test Plots of Radiated emissions of Idle Mode - Vertical

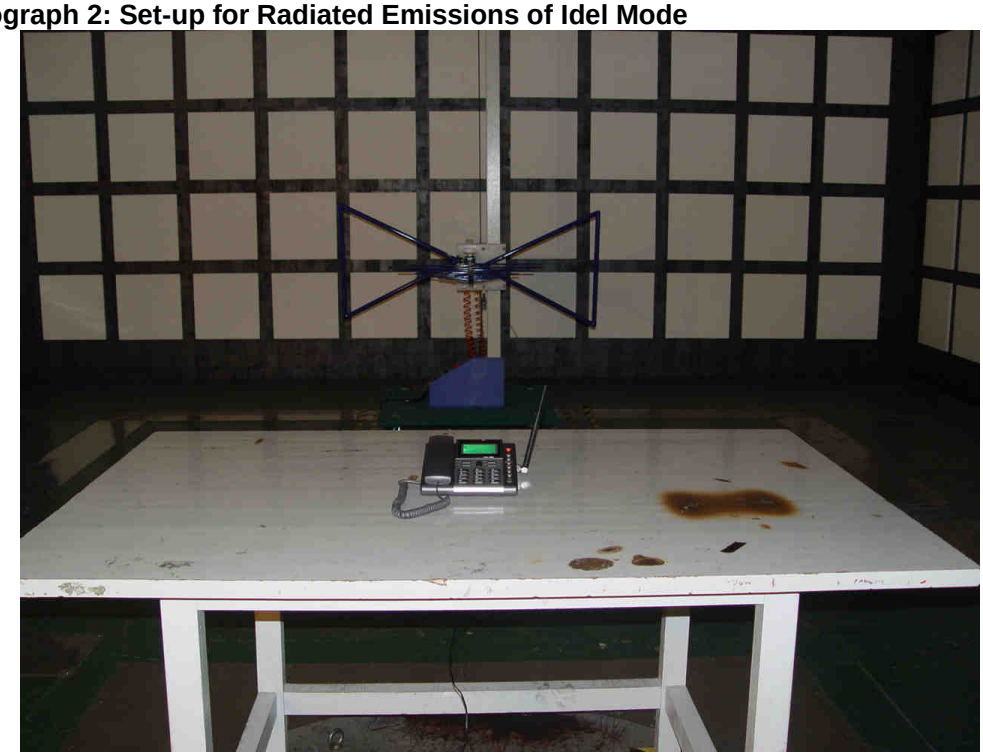


6. Photographs of the Test Set-Up

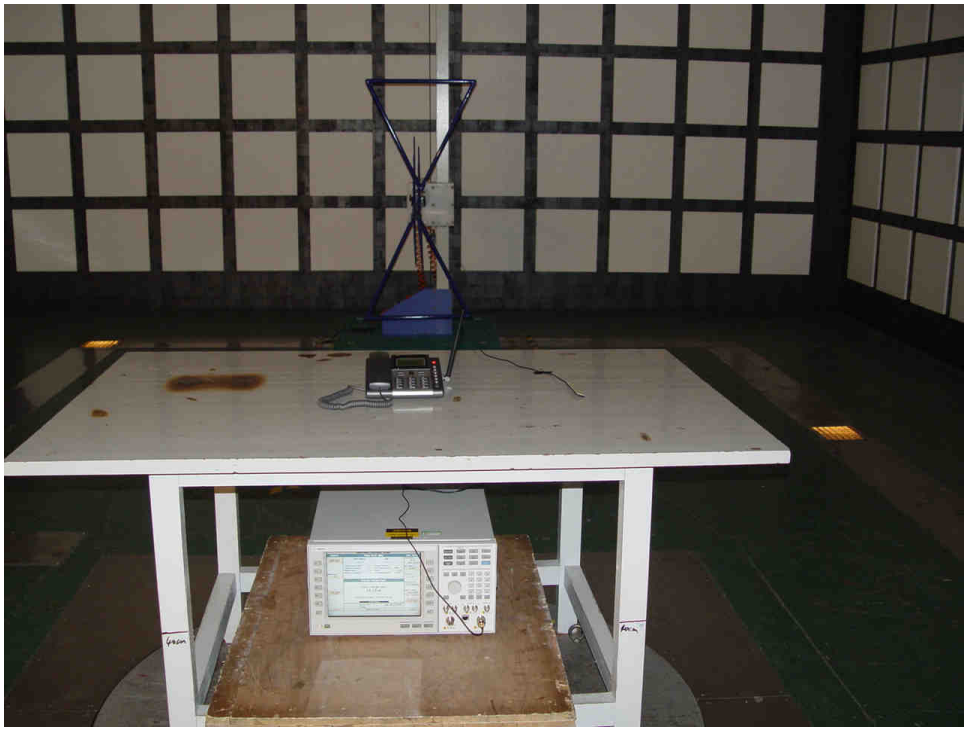
Photograph 1: Set-up for Conducted Emissions



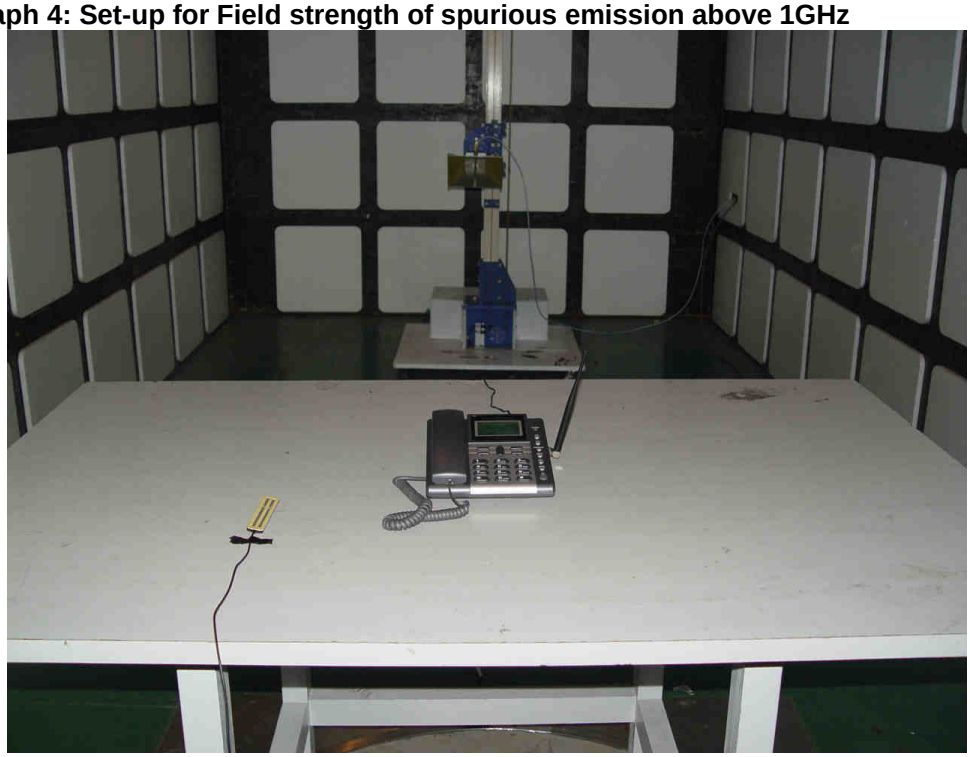
Photograph 2: Set-up for Radiated Emissions of Idel Mode



Photograph 3: Set-up for Field strength of spurious emission below 1GHz



Photograph 4: Set-up for Field strength of spurious emission above 1GHz



Photograph 5: Set-up for Frequency Stability

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