Partial FCC RF Test Report

APPLICANT	:	**Getac Technology Corporation**
EQUIPMENT	:	**PDA**
BRAND NAME	:	**Getac**
MODEL NAME	:	**PS236**
FCC ID	:	**QYLPS236G**
STANDARD	:	**FCC 47 CFR Part 2, 22(H), 24(E)**
CLASSIFICATION	:	**PCS Licensed Transmitter Held to Ear (PCE)**
Tx/Rx FREQUENCY RANGE	:	**GSM850 : 824.2 ~ 848.8 MHz / 869.2 ~ 893.8 MHz** **GSM1900 : 1850.2 ~ 1909.8 MHz / 1930.2 ~ 1989.8 MHz** **WCDMA Band V : 826.4 ~ 846.6 MHz / 871.4 ~ 891.6 MHz** **WCDMA Band II : 1852.4 ~ 1907.6 MHz / 1932.4 ~ 1987.6 MHz**
MAX. ERP/EIRP POWER	:	**GSM850 (GSM) : 0.63 W** **GSM850 (EDGE 8) : 0.20 W** **GSM1900 (GSM) : 0.89 W** **GSM1900 (EDGE 8) : 0.45 W** **WCDMA Band V (HSDPA) : 0.04 W** **WCDMA Band II (HSDPA) : 0.21 W**

This is a partial report which is only valid combined with the integrated WWAN Module (Brand name: Siemens / Model name: HC25, FCC ID: QIPHC25) Report. The product was received on Jul. 13, 2009 and completely tested on Aug. 03, 2009. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Roy Wu / Manager

SPORTON INTERNATIONAL INC.
No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG971335	Rev. 01	Initial issue of report	Aug. 18, 2009

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result
3.1	§22.913(a)(2)	RSS-132(4.4) SRSP-503(5.1.3)	Effective Radiated Power	< 7 Watts for FCC (<6.3 Watts for IC)	PASS
3.2	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS
3.2	§2.1053 §22.917(a) §24.238(a)	RSS-132 (4.5.1) RSS-133 (6.5.1)	Field Strength of Spurious Radiation	< $43+10\log_{10}$(P[Watts])	PASS

1 General Description

1.1 Applicant

Getac Technology Corporation

5F., Building A, No. 209, Sec.1, Nangang Rd., Nangang Dist., Taipei City 11568, Taiwan, R.O.C.

1.2 Manufacturer

GeTAC Technology(Kunshan) LTD.

No. 269, 2nd Road, Export Processing Zone, Changjiang South Road, Kunshan, Jiangsu, P.R.C.

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	PDA
Brand Name	Getac
Model Name	PS236
FCC ID	QYLPS236G
Tx Frequency	GSM850 : 824 MHz ~ 849 MHz GSM1900 : 1850 MHz ~ 1910 MHz WCDMA Band V : 824 MHz ~ 849 MHz WCDMA Band II : 1850 MHz ~ 1910 MHz
Rx Frequency	GSM850 : 869 MHz ~ 894 MHz GSM1900 : 1930 MHz ~ 1990 MHz WCDMA Band V : 869 MHz ~ 894 MHz WCDMA Band II : 1930 MHz ~ 1990 MHz
Maximum ERP/EIRP	GSM850 (GSM) : 0.63 W (28.01 dBm) GSM850 (EDGE 8) : 0.20 W (23.02 dBm) GSM1900 (GSM) : 0.89 W (29.47 dBm) GSM1900 (EDGE 8) : 0.45 W (26.52 dBm) WCDMA Band V (HSDPA) : 0.04 W (16.02 dBm) WCDMA Band II (HSDPA) : 0.21 W (23.18 dBm)
Antenna Type	Fixed Internal Antenna
HW Version	R0C
SW Version	005
Type of Modulation	GSM / GPRS : GMSK EDGE : 8PSK WCDMA : QPSK HSDPA : QPSK / 16QAM
EUT Stage	Identical Prototype

Remark:

1. For other wireless features of this EUT, the test report will be issued separately.

2. This test report recorded only product characteristics and test results of PCS Licensed Transmitter Held to Ear (PCE).

List of Accessory:

Specification of Accessory		
AC Adapter	**Brand Name**	FSP
	Model Name	FSP050-1AD101C
	Power Rating	I/P:100-240Vac, 50-60Hz, 1.3A; O/P: 12Vdc, 4.16A, 50W
	DC Power Cord Type	1.05 meter shielded cable with ferrite core
Battery	**Brand Name**	Sanyo
	Model Name	PS236
	Power Rating	3.7Vdc, 5600mAh, 21Wh
	Type	Li-ion
USB Cable	**Brand Name**	ncare
	Model Name	KYCPDX00051
	Signal Line Type	1.0 meter shielded cable without ferrite core

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. For accessories equipped with this EUT, please refer to the appendix of the external photo.

1.4 Testing Site

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	**FCC/IC Registration No.**
	03CH07-HY	TW1022/4086B-1

1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- Preliminary Guidance for Receiving Applications for Certification of 3G Device. May 9, 2006.
- FCC 47 CFR Part 2, 22(H), 24(E)
- ANSI C63.4-2003
- ANSI / TIA / EIA-603-C-2004
- IC RSS-132 Issue 2
- IC RSS-133 Issue 5

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.

2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B (DoC), recorded in a separate test report.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU200	N/A	N/A	Unshielded, 1.8 m

2 Test Configuration of Equipment Under Test

2.1 Test Mode

Only the radiated emission, ERP and EIRP of the EUT was performed in this report, and the conducted test cases can be referred to WWAN module report (FCC ID: QIPHC25). During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Frequency range investigated for radiated emission is as follows:

1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V.
2. 30 MHz to 19000 MHz for GSM1900 and WCDMA Band II.

Test Modes	
Band	**Radiated TCs**
GSM 850	■ GSM Link ■ EDGE 8 Link ■ GSM Link + Bluetooth Tx CH39
GSM 1900	■ GSM Link ■ EDGE 8 Link ■ GSM Link + Bluetooth Tx CH39
WCDMA Band V	■ HSDPA Link
WCDMA Band II	■ HSDPA Link

Note: The maximum power levels are GSM mode for GMSK link, EDGE multi-slot class 8 mode for 8PSK link, HSDPA mode for QPSK link, only these modes were used for all tests.

The conducted power tables are as follows:

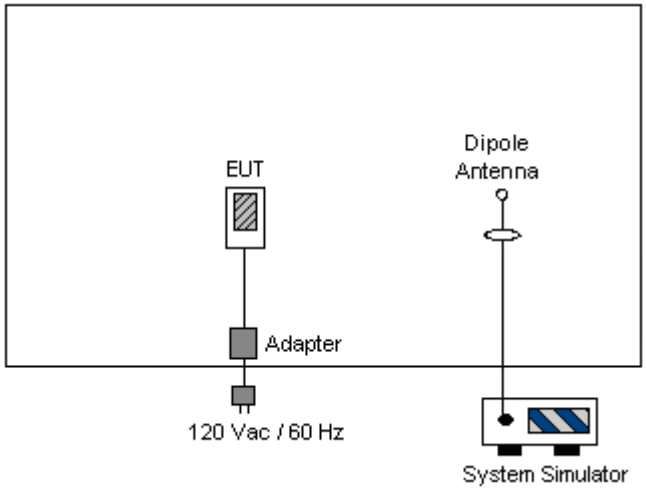
Conducted Power						
Band	**GSM850**			**GSM1900**		
Channel	**128**	**189**	**251**	**512**	**661**	**810**
Frequency	**824.2**	**836.4**	**848.8**	**1850.2**	**1880.0**	**1909.8**
GSM	31.70	31.57	**31.79**	29.14	**29.25**	29.06
GPRS 8	31.34	31.53	31.75	29.08	29.19	28.99
GPRS 10	29.76	29.97	30.21	27.51	27.63	27.44
EGPRS 8	26.36	26.56	**26.82**	25.87	**26.00**	25.81
EGPRS 10	24.37	24.58	24.78	23.79	23.95	23.86

(*Unit: dBm)

Conducted Power						
Band	**WCDMA Band V**			**WCDMA Band II**		
Channel	**4132**	**4182**	**4233**	**9262**	**9400**	**9538**
Frequency	**826.4**	**836.4**	**846.6**	**1852.4**	**1880.0**	**1907.6**
RMC 12.2K	22.14	22.41	22.40	22.65	22.72	22.63
HSDPA Subtest-1	22.31	22.42	22.44	22.74	22.78	**22.84**
HSDPA Subtest-2	22.12	**22.45**	22.41	22.80	22.83	22.74
HSDPA Subtest-3	20.52	20.79	20.90	21.46	21.55	21.63
HSDPA Subtest-4	19.63	19.56	19.77	20.37	20.34	20.51

(*Unit: dBm)

2.2 Connection Diagram of Test System



3 Test Result

3.1 Effective Radiated Power and Effective Isotropic Radiated Power Measurement

3.1.1 Description of the ERP/EIRP Measurement

ERP/EIRP is measured by substitution method according to
ANSI / TIA / EIA-603-C-2004. The ERP of mobile transmitters must not exceed 7 Watts and the EIRP of mobile transmitters are limited to 2 Watts.

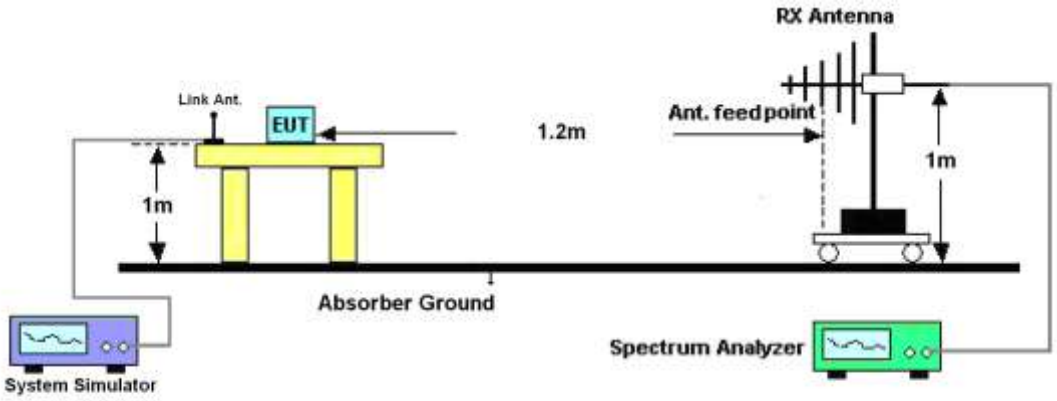
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The EUT was placed on a turntable with 1.0 meter height in a fully anechoic chamber.
2. The EUT was set at 1.2 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiated power.
4. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
5. Taking the record of maximum ERP/EIRP.
6. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
7. The conducted power at the terminal of the dipole antenna is measured.
8. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
9. ERP/EIRP = Ps + Et – Es + Gs = Ps + Rt – Rs + Gs
   Ps (dBm)：Input power to substitution antenna.
   Gs (dBi or dBd)：Substitution antenna Gain.
   Et = Rt + AF
   Es = Rs + AF
   AF (dB/m)：Receive antenna factor
   Rt：The highest received signal in spectrum analyzer for EUT.
   Rs：The highest received signal in spectrum analyzer for substitution antenna.

3.1.4 Test Setup



3.1.5 Test Result of ERP

GSM850 (GSM) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBd)**	**ERP (dBm)**	**ERP (W)**
824.20	-20.20	-48.12	0.00	-1.08	26.84	0.48
836.40	-19.34	-48.28	0.00	-0.93	28.01	0.63
848.80	-20.59	-48.35	0.00	-0.76	27.00	0.50
Vertical Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBd)**	**ERP (dBm)**	**ERP (W)**
824.20	-23.73	-47.97	0.00	-1.08	23.16	0.21
836.40	-22.36	-48.01	0.00	-0.93	24.72	0.30
848.80	-22.66	-48.05	0.00	-0.76	24.63	0.29

GSM850 (EDGE 8) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBd)**	**ERP (dBm)**	**ERP (W)**
824.20	-25.26	-48.12	0.00	-1.08	21.78	0.15
836.40	-24.33	-48.28	0.00	-0.93	23.02	0.20
848.80	-25.62	-48.35	0.00	-0.76	21.97	0.16
Vertical Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBd)**	**ERP (dBm)**	**ERP (W)**
824.20	-28.61	-47.97	0.00	-1.08	18.28	0.07
836.40	-27.08	-48.01	0.00	-0.93	20.00	0.10
848.80	-27.58	-48.05	0.00	-0.76	19.71	0.09

WCDMA Band V (HSDPA) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBd)**	**ERP (dBm)**	**ERP (W)**
826.40	-31.43	-48.12	0.00	-1.08	15.61	0.04
836.40	-31.33	-48.28	0.00	-0.93	16.02	0.04
846.60	-32.15	-48.35	0.00	-0.76	15.44	0.03
Vertical Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBd)**	**ERP (dBm)**	**ERP (W)**
826.40	-34.83	-47.97	0.00	-1.08	12.06	0.02
836.40	-34.06	-48.01	0.00	-0.93	13.02	0.02
846.60	-34.19	-48.05	0.00	-0.76	13.10	0.02

3.1.6 Test Result of EIRP

GSM1900 (GSM) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBi)**	**EIRP (dBm)**	**EIRP (W)**
1850.20	-24.84	-51.88	0.00	1.96	29.00	0.79
1880.00	-25.57	-52.99	0.00	2.00	29.42	0.87
1909.80	-27.57	-54.28	0.00	1.98	28.69	0.74
Vertical Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBi)**	**EIRP (dBm)**	**EIRP (W)**
1850.20	-24.62	-52.13	0.00	1.96	29.47	0.89
1880.00	-27.12	-53.17	0.00	2.00	28.05	0.64
1909.80	-30.31	-54.13	0.00	1.98	25.80	0.38

GSM1900 (EDGE 8) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBi)**	**EIRP (dBm)**	**EIRP (W)**
1850.20	-27.85	-51.88	0.00	1.96	25.99	0.40
1880.00	-28.47	-52.99	0.00	2.00	26.52	0.45
1909.80	-30.44	-54.28	0.00	1.98	25.82	0.38
Vertical Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBi)**	**EIRP (dBm)**	**EIRP (W)**
1850.20	-27.93	-52.13	0.00	1.96	26.16	0.41
1880.00	-30.16	-53.17	0.00	2.00	25.01	0.32
1909.80	-32.72	-54.13	0.00	1.98	23.39	0.22

WCDMA Band II (HSDPA) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBi)**	**EIRP (dBm)**	**EIRP (W)**
1852.40	-31.14	-51.88	0.00	1.96	22.70	0.19
1880.00	-31.91	-52.99	0.00	2.00	23.08	0.20
1907.60	-33.08	-54.28	0.00	1.98	23.18	0.21
Vertical Polarization						
Frequency (MHz)	**Rt (dBm)**	**Rs (dBm)**	**Ps (dBm)**	**Gs (dBi)**	**EIRP (dBm)**	**EIRP (W)**
1852.40	-31.24	-52.13	0.00	1.96	22.85	0.19
1880.00	-33.34	-53.17	0.00	2.00	21.83	0.15
1907.60	-35.48	-54.13	0.00	1.98	20.63	0.12

3.2 Field Strength of Spurious Radiation Measurement

3.2.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

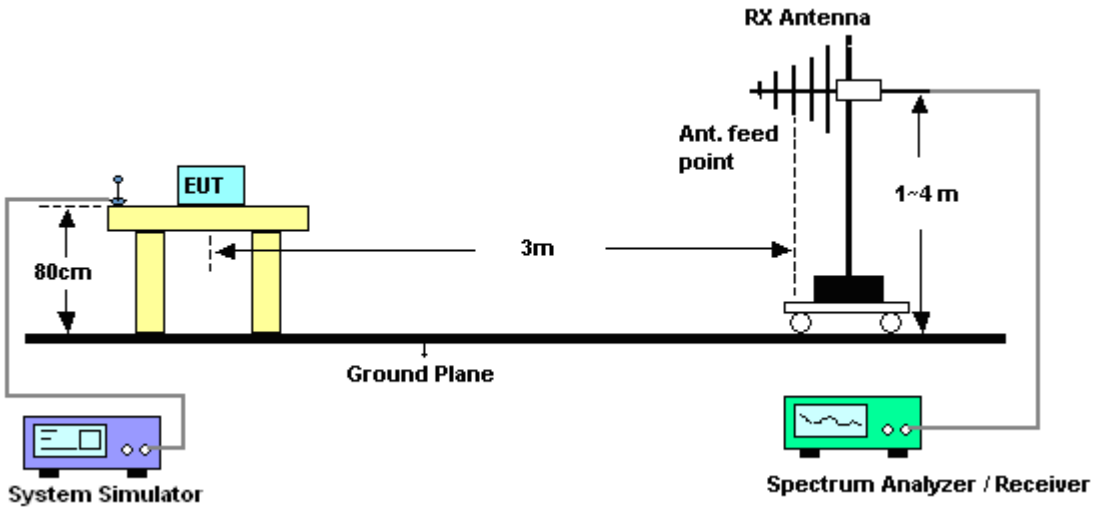
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

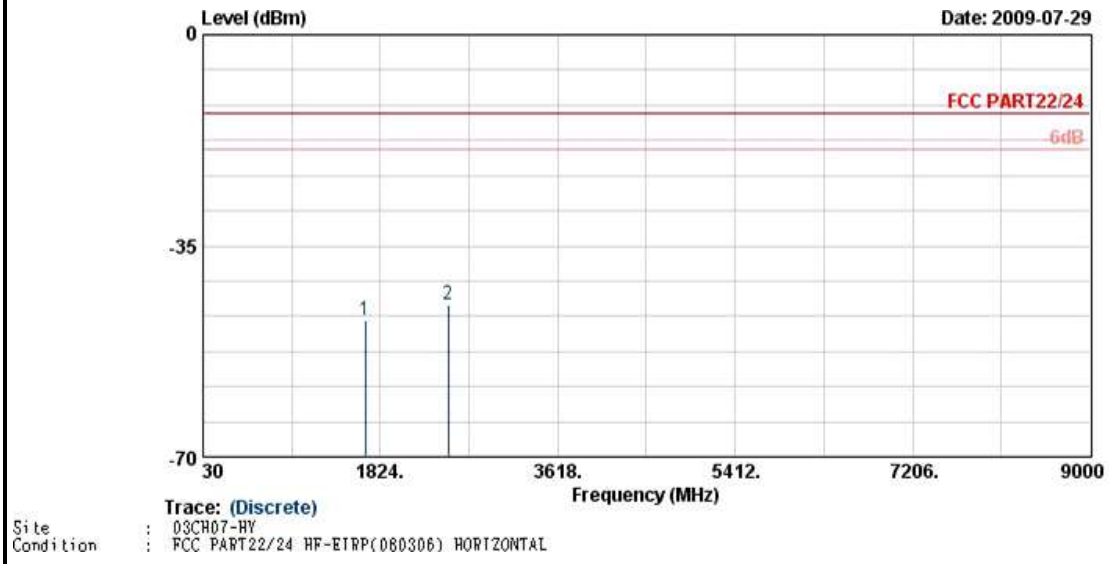
1. The EUT was placed on a rotatable wooden table with 0.8 meter about ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15

3.2.4 Test Setup



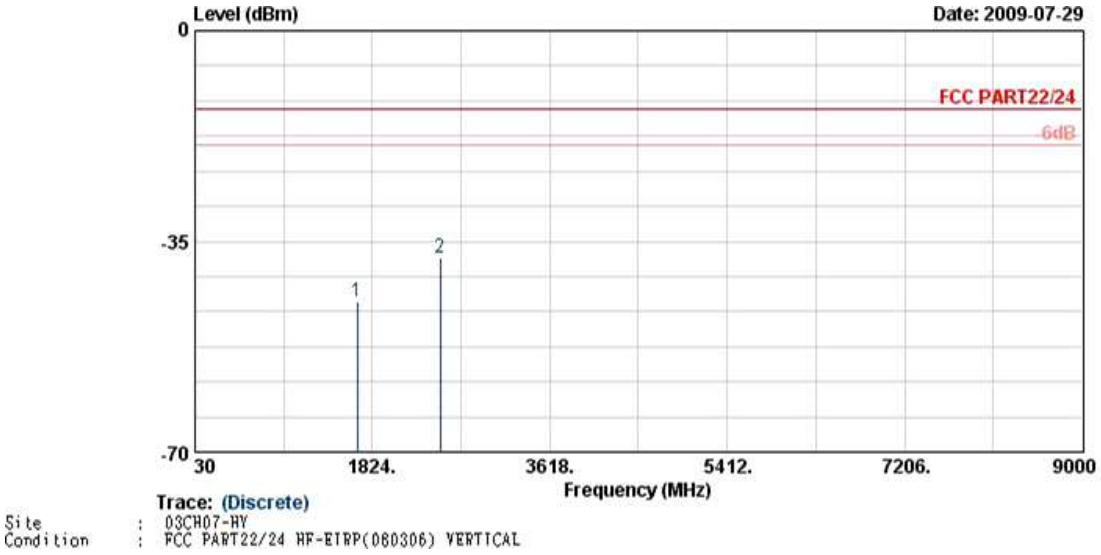
3.2.5 Test Result of Field Strength of Spurious Radiated

Band :	GSM850	**Temperature :**	28~29°C
Test Mode :	GSM Link	**Relative Humidity :**	39~40%
Test Engineer :	Kay Wang	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



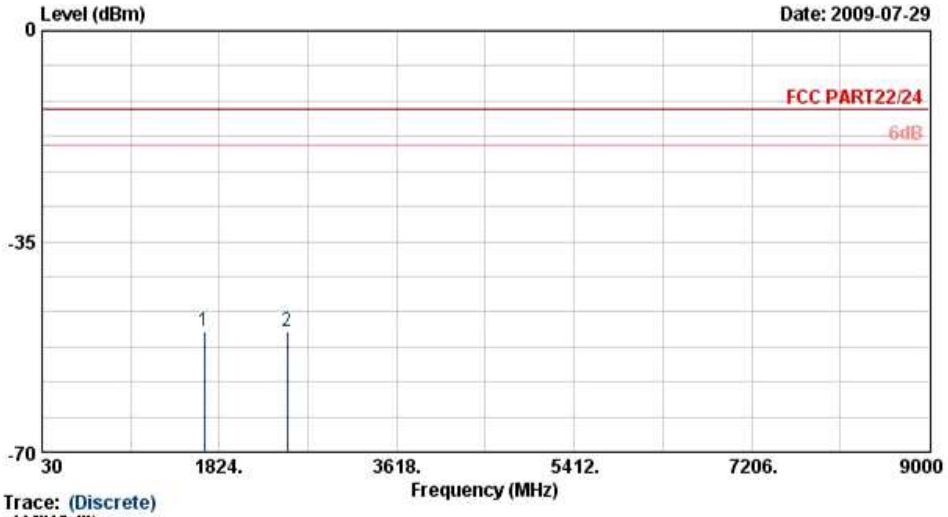
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1669.00	-47.25	-13.00	-34.25	-54.42	-47.10	3.39	5.39	H	Pass
2509.00	-44.64	-13.00	-31.64	-52.36	-44.90	3.71	6.12	H	Pass

Band :	GSM850	Temperature :	28~29°C
Test Mode :	GSM Link	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



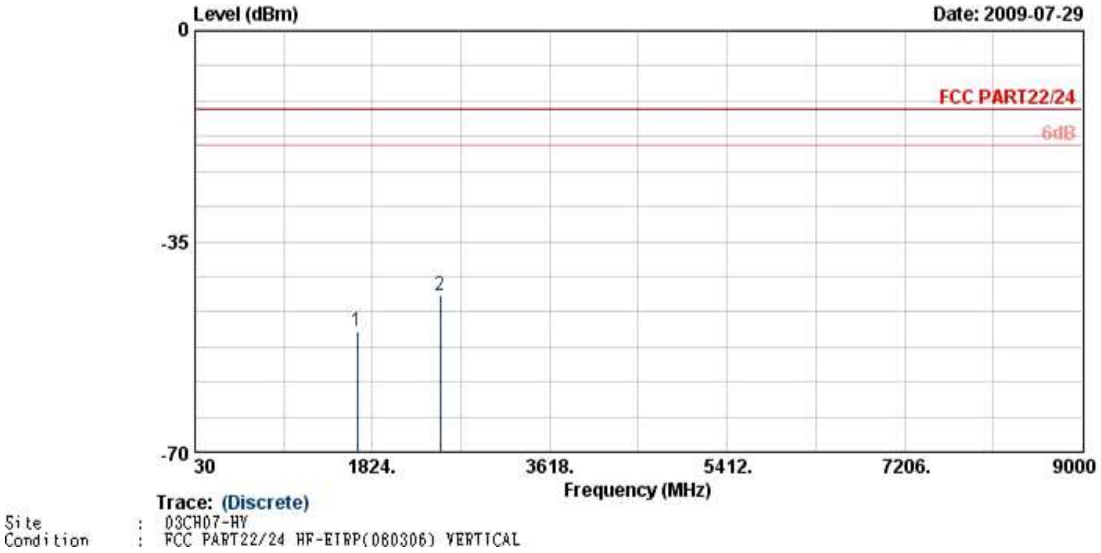
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1669.00	-44.97	-13.00	-31.97	-52.97	-44.82	3.39	5.39	V	Pass
2509.00	-37.82	-13.00	-24.82	-49.55	-38.08	3.71	6.12	V	Pass

Band :	GSM850	Temperature :	28~29°C
Test Mode :	EDGE 8 Link	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



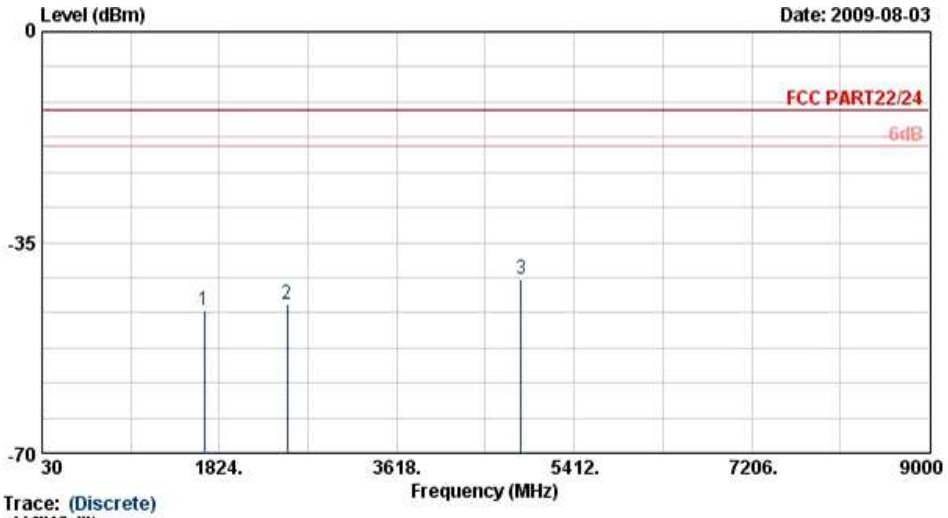
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1669.00	-50.09	-13.00	-37.09	-57.18	-49.94	3.39	5.39	H	Pass
2509.00	-49.96	-13.00	-36.96	-60.10	-50.22	3.71	6.12	H	Pass

Band :	GSM850	Temperature :	28~29°C
Test Mode :	EDGE 8 Link	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



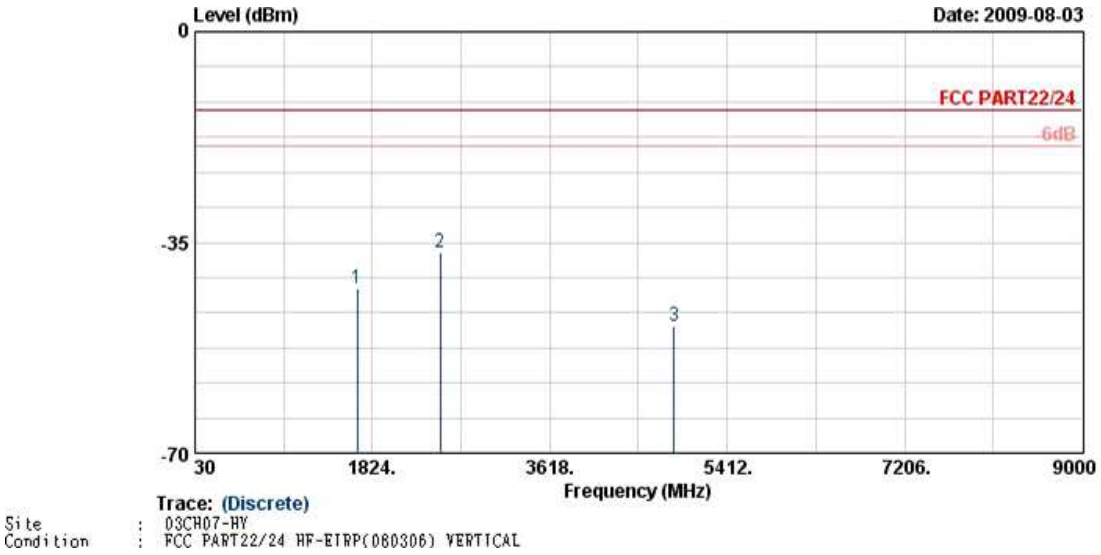
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1669.00	-49.90	-13.00	-36.90	-57.15	-49.75	3.39	5.39	V	Pass
2509.00	-43.89	-13.00	-30.89	-54.76	-44.15	3.71	6.12	V	Pass

Band :	GSM850	Temperature :	28~29°C
Test Mode :	GSM Link + Bluetooth Tx CH39	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



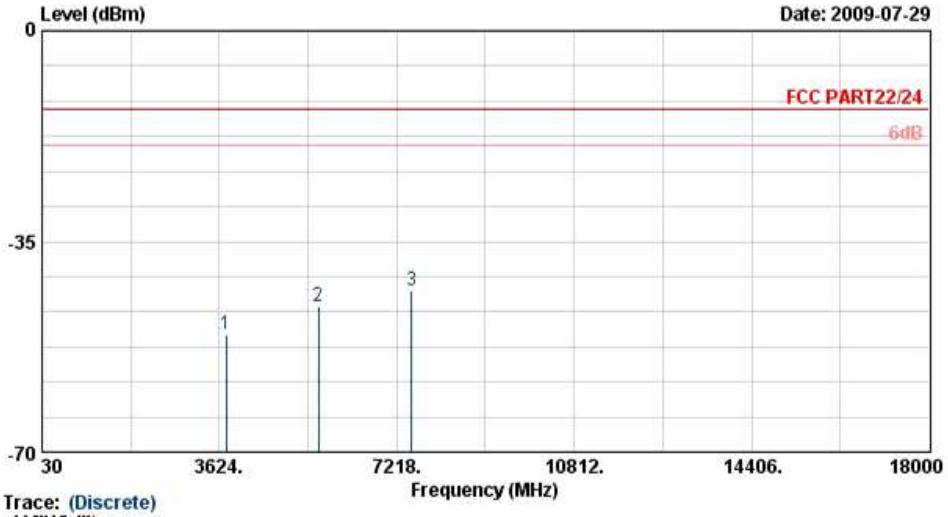
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1669.00	-46.26	-13.00	-33.26	-53.97	-46.11	3.39	5.39	H	Pass
2509.00	-45.33	-13.00	-32.33	-53.03	-45.59	3.71	6.12	H	Pass
4875.00	-41.13	-13.00	-28.13	-55.41	-42.53	7.50	11.05	H	Pass

Band :	GSM850	Temperature :	28~29°C
Test Mode :	GSM Link + Bluetooth Tx CH39	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



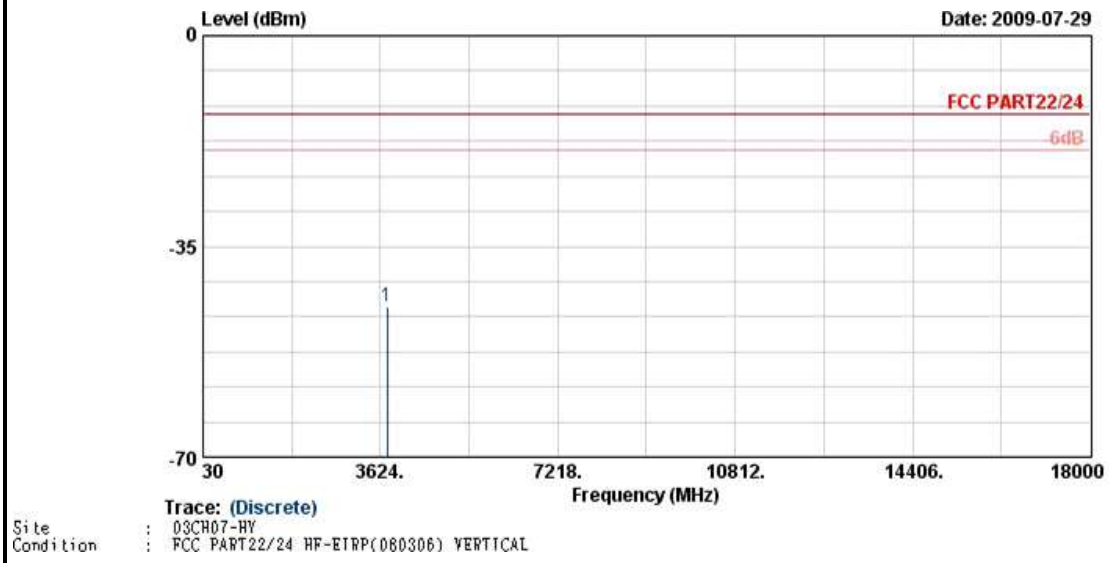
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1669.00	-42.62	-13.00	-29.62	-50.97	-42.47	3.39	5.39	V	Pass
2509.00	-36.68	-13.00	-23.68	-48.30	-36.94	3.71	6.12	V	Pass
4875.00	-48.96	-13.00	-35.96	-63.61	-50.36	7.50	11.05	V	Pass

Band :	GSM1900	Temperature :	28~29°C
Test Mode :	GSM Link	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



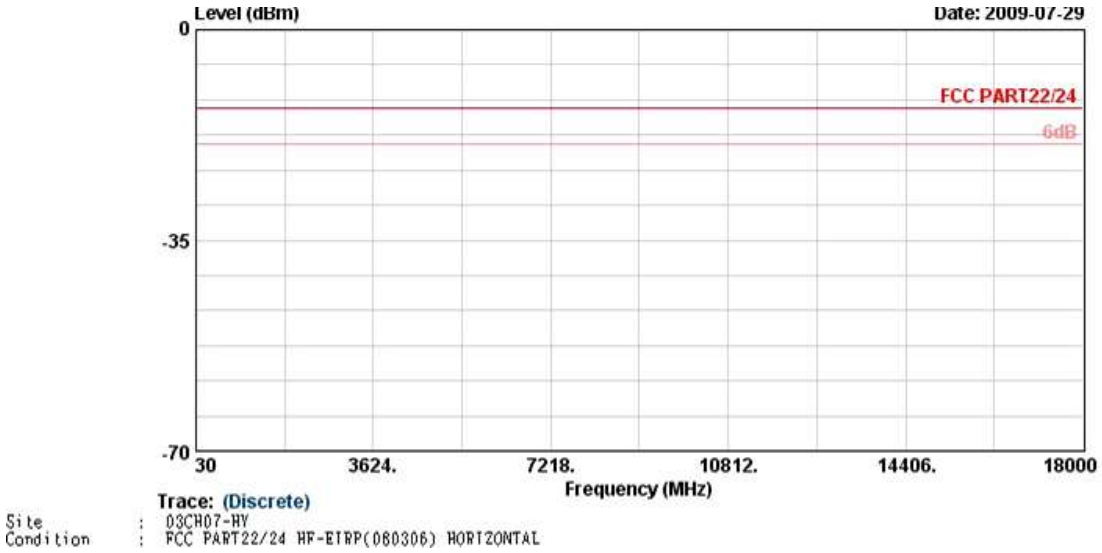
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760.00	-50.38	-13.00	-37.38	-62.03	-52.90	4.88	7.40	H	Pass
5636.00	-45.82	-13.00	-32.82	-64.06	-49.08	5.55	8.81	H	Pass
7520.00	-43.12	-13.00	-30.12	-63.93	-46.19	6.64	9.71	H	Pass

Band :	GSM1900	Temperature :	28~29°C
Test Mode :	GSM Link	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

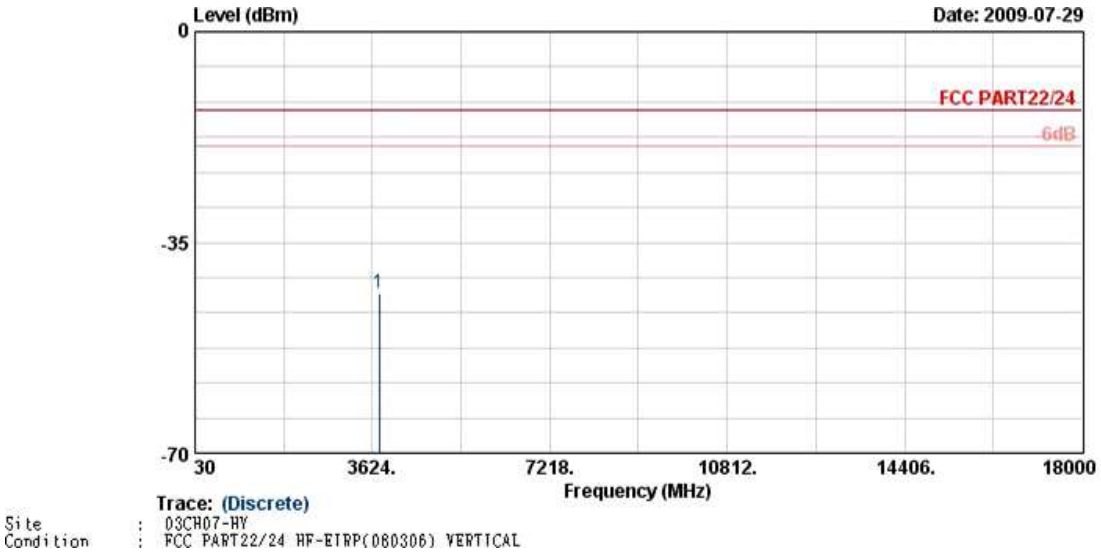


Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760.00	-44.93	-13.00	-31.93	-60.36	-47.96	4.88	7.91	V	Pass

Band :	GSM1900	**Temperature :**	28~29°C
Test Mode :	EDGE 8 Link	**Relative Humidity :**	39~40%
Test Engineer :	Kay Wang	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line. Spurious emissions within 1000MHz ~ 10th harmonic were not found any signal.		

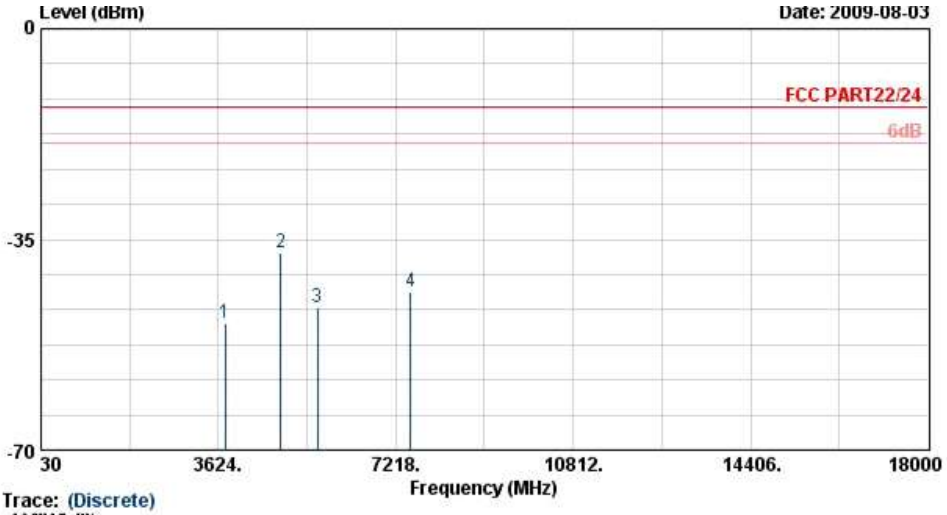


Band :	GSM1900	Temperature :	28~29°C
Test Mode :	EDGE 8 Link	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



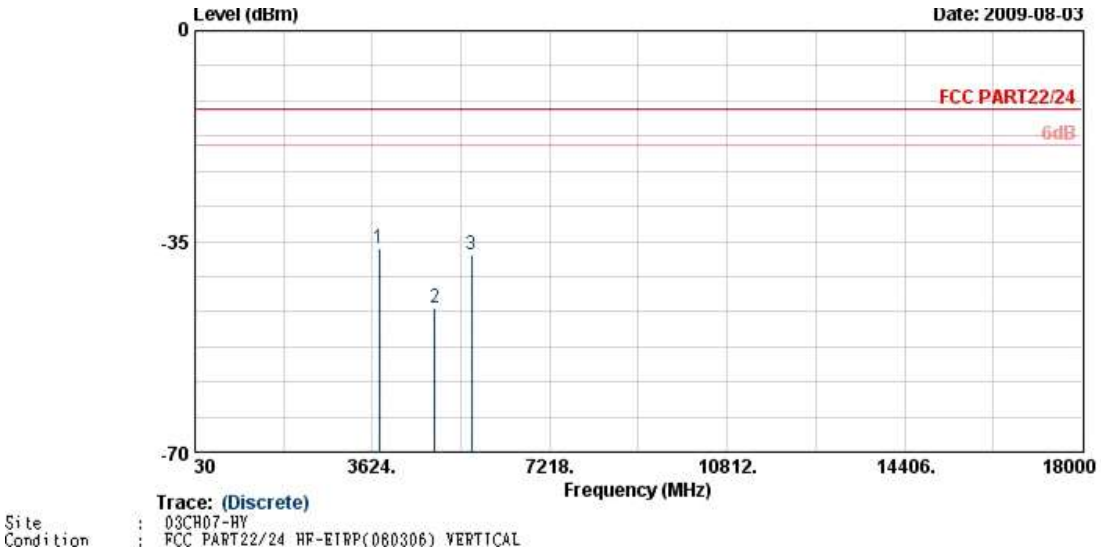
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760.00	-43.56	-13.00	-30.56	-59.36	-46.59	4.88	7.91	V	Pass

Band :	GSM1900	Temperature :	28~29°C
Test Mode :	GSM Link + Bluetooth Tx CH39	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		



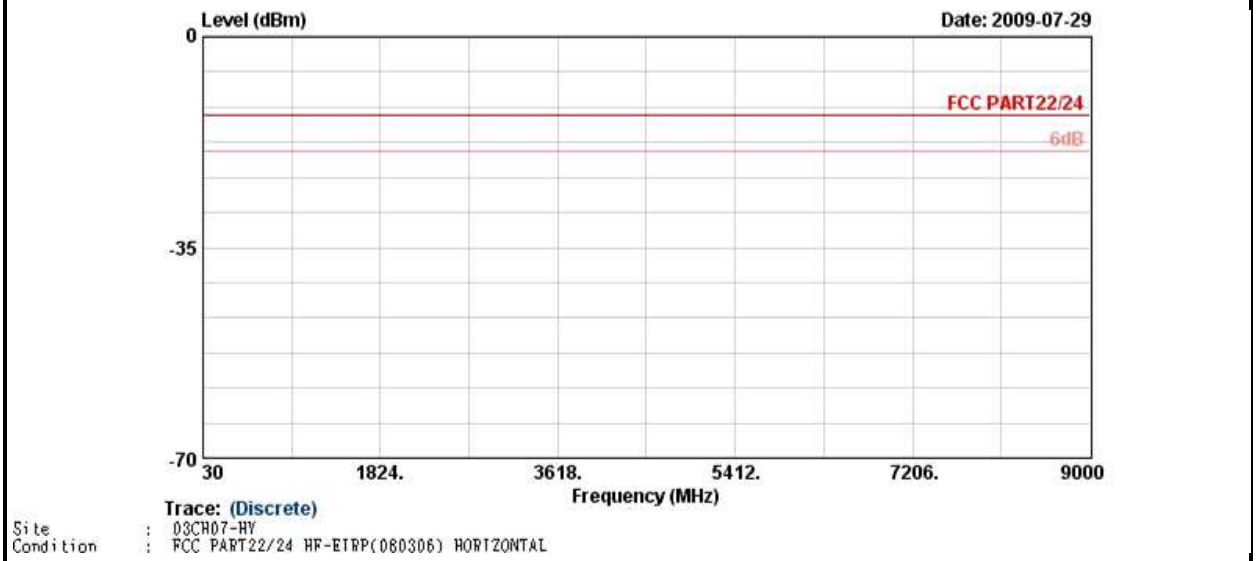
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760.00	-48.80	-13.00	-35.80	-61.62	-51.32	4.88	7.40	H	Pass
4880.00	-37.31	-13.00	-24.31	-53.74	-38.31	10.06	11.06	H	Pass
5636.00	-46.40	-13.00	-33.40	-63.99	-49.66	5.55	8.81	H	Pass
7520.00	-43.77	-13.00	-30.77	-64.37	-46.84	6.64	9.71	H	Pass

Band :	GSM1900	Temperature :	28~29°C
Test Mode :	GSM Link + Bluetooth Tx CH39	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.		

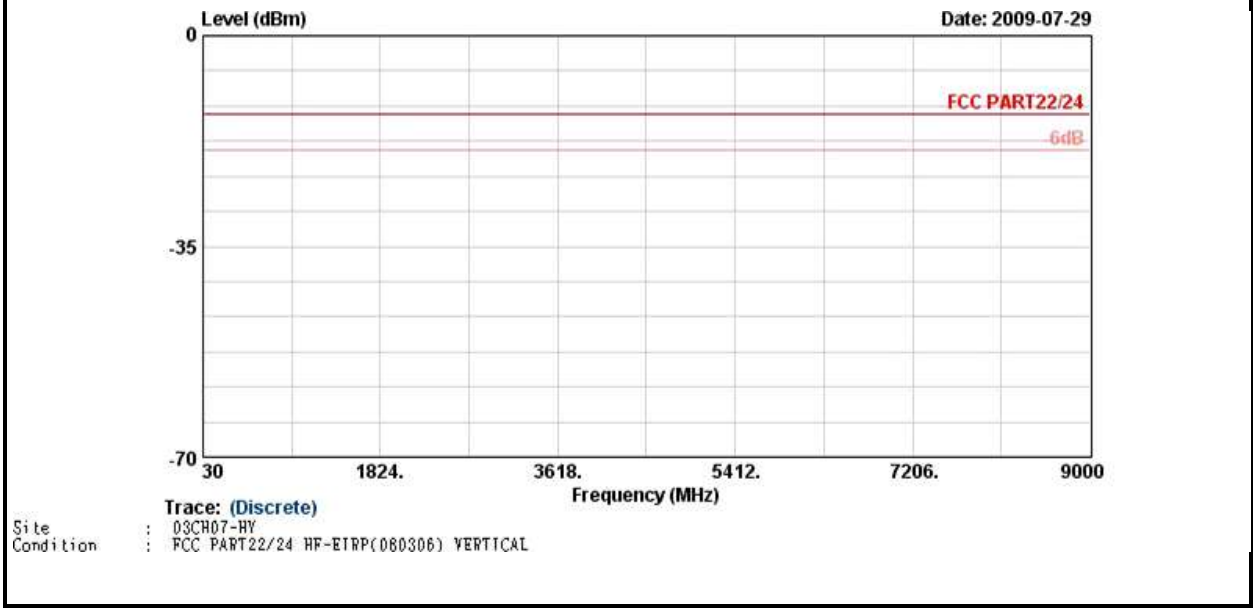


Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3760.00	-36.23	-13.00	-23.23	-53.55	-39.26	4.88	7.91	V	Pass
4880.00	-46.16	-13.00	-33.16	-62.96	-47.16	10.06	11.06	V	Pass
5636.00	-37.13	-13.00	-24.13	-58.77	-41.35	5.55	9.77	V	Pass

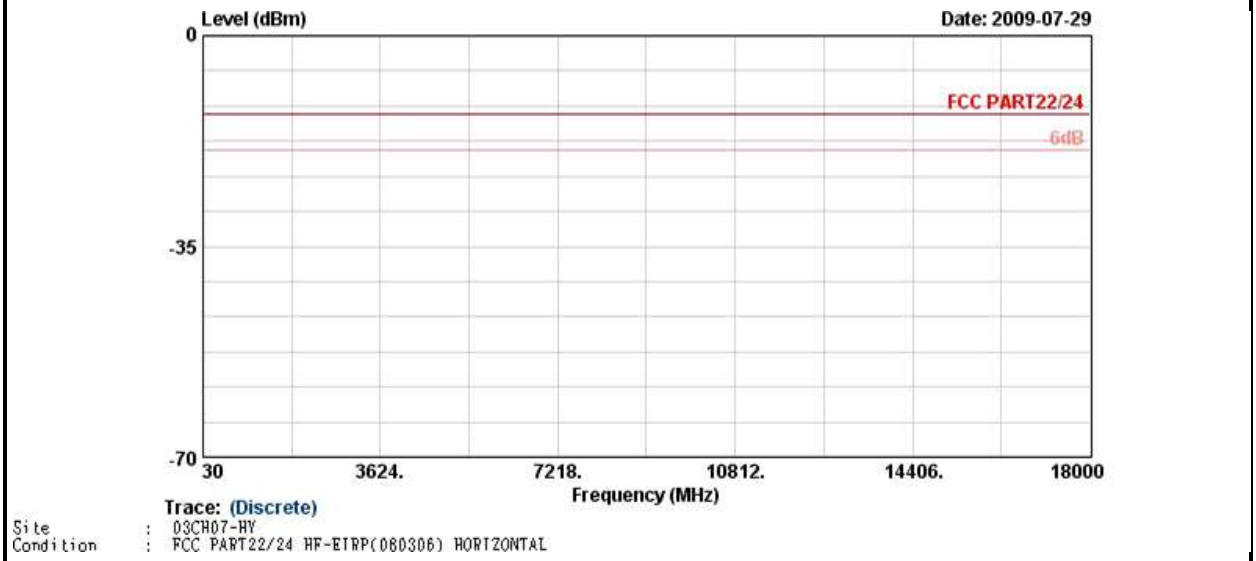
Band :	WCDMA Band V	**Temperature :**	28~29°C
Test Mode :	HSDPA Link	**Relative Humidity :**	39~40%
Test Engineer :	Kay Wang	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line. Spurious emissions within 1000MHz ~ 10th harmonic were not found any signal.		



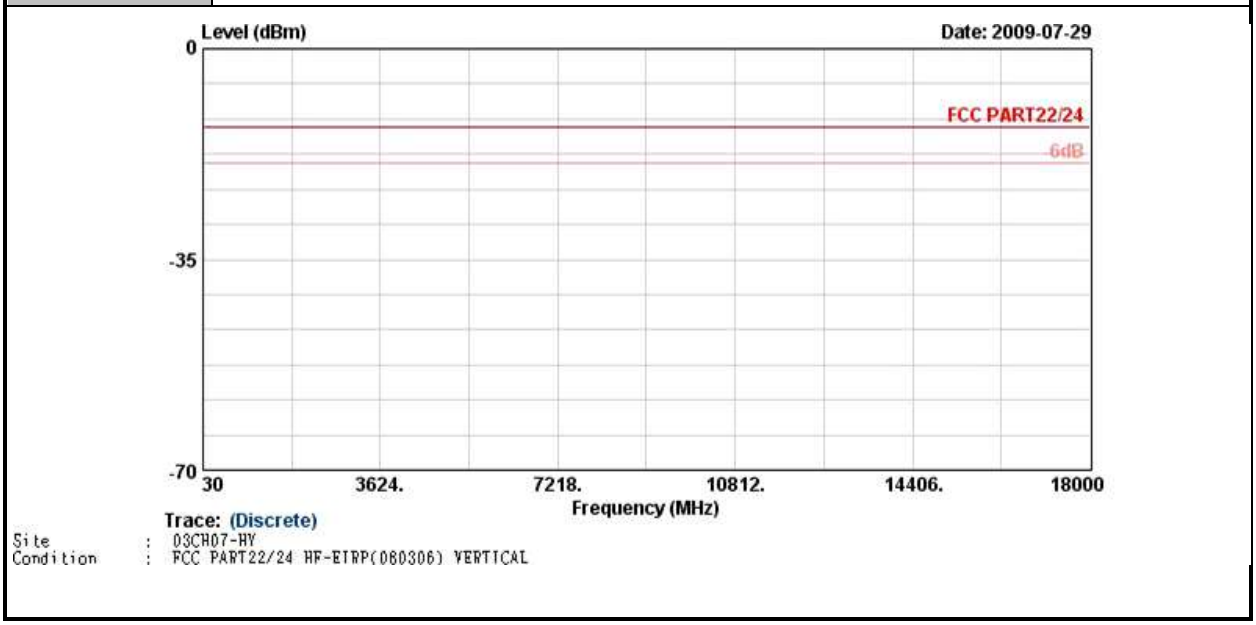
Band :	WCDMA Band V	Temperature :	28~29°C
Test Mode :	HSDPA Link	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line. Spurious emissions within 1000MHz ~ 10th harmonic were not found any signal.		



Band :	WCDMA Band II	**Temperature :**	28~29°C
Test Mode :	HSDPA Link	**Relative Humidity :**	39~40%
Test Engineer :	Kay Wang	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line. Spurious emissions within 1000MHz ~ 10th harmonic were not found any signal.		



Band :	WCDMA Band II	Temperature :	28~29°C
Test Mode :	HSDPA Link	Relative Humidity :	39~40%
Test Engineer :	Kay Wang	Polarization :	Vertical
Remark :	Spurious emissions within 30-1000MHz were found more than 20dB below limit line. Spurious emissions within 1000MHz ~ 10th harmonic were not found any signal.		



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Bilog Antenna	SCHAFFNER	CBL6111C	2726	30MHz~1GHz	Nov. 20, 2008	Nov. 19, 2009	Radiation (03CH07-HY)
Spectrum Analyzer	R&S	FSP	101067	9kHz~30GHz	Dec. 02, 2008	Dec. 01, 2009	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1G~18GHz	Aug. 18, 2008	Aug. 17, 2009	Radiation (03CH07-HY)
Pre Amplifier	Agilent	8449B	3008A02362	1G~26.5GHz	Dec. 17, 2008	Dec. 16, 2009	Radiation (03CH07-HY)
Pre Amplifier	COM-POWER	PA-103A	161241	10~1000MHz. 32dB.GAIN	Mar. 27, 2009	Mar. 26, 2010	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00066584	1G~18GHz	Aug. 06, 2008	Aug. 05. 2009	Radiation (03CH07-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz~30 MHz	May 22, 2008	May 21, 2010	Radiation (03CH07-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	BBHA9170251	15G~40GHz	Oct. 16, 2008	Oct. 15, 2009	Radiation (03CH07-HY)
System Simulator	R&S	CMU200	117997	N/A	May 14, 2009	May 13, 2011	Radiation (03CH07-HY)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch	+0.39/-0.41	U-shaped	0.28
Combined standard uncertainty Uc(y)	**1.27**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.54**		

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Contribution	Uncertainty of x_i		$u(x_i)$	Ci	$Ci*u(x_i$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR Γ1= 0.197 Antenna VSWR Γ2= 0.194 Uncertainty=20log(1-Γ1*Γ2)	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty Uc(y)	**2.36**				
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**4.72**				

6 Certification of TAF Accreditation

Certificate No. : L1190-090417

財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.
EMC & Wireless Communications Laboratory
No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	:	ISO/IEC 17025:2005
Accreditation Number	:	1190
Originally Accredited	:	December 15, 2003
Effective Period	:	January 10, 2007 to January 09, 2010
Accredited Scope	:	Testing Field, see described in the Appendix
Specific Accreditation Program	:	Accreditation Program for Designated Testing Laboratory for Commodities Inspection Accreditation Program for Telecommunication Equipment Testing Laboratory Accreditation Program for BSMI Mutual Recognition Arrangment with Foreign Authorities

Jay-San Chen
President, Taiwan Accreditation Foundation
Date : April 17, 2009

P1, total 20 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix

Appendix A. Photographs of EUT

Please refer to Sporton report number EP971335 as below.