

FCC TEST REPORT (PART 22)

REPORT NO.: RF120502C13

MODEL NO.: F-12D

FCC ID: VQK-F12D

RECEIVED: May 02, 2012

TESTED: May 15 ~ May 16, 2012

ISSUED: May 31, 2012

APPLICANT: FUJITSU LIMITED

ADDRESS: 1-1, Kamikodanaka 4-chome, Nakahara-ku,

Kawasaki 211-8588, Japan

ISSUED BY: Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New

Taipei City, Taiwan (R.O.C.)

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei

Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120502C13	Original release	May 31, 2012



1 CERTIFICATION

PRODUCT: Mobile Phone

MODEL: F-12D

BRAND: FOMA

APPLICANT: FUJITSU LIMITED

TESTED: May 15 ~ May 16, 2012

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC PART 22, Subpart H

The above equipment (model: F-12D) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch,** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : , DATE : May 31, 2012

Pettie Chen / Specialist

APPROVED BY : ______, DATE : _____May 31, 2012

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2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 22 & Part 2					
STANDARD SECTION	TEST TYPE	RESULT	REMARK		
2.1046 22.913 (a)	Effective radiated power	PASS	Meet the requirement of limit.		
2.1055 22.355	Frequency Stability	PASS	Meet the requirement of limit.		
2.1049	Occupied Bandwidth	PASS	Meet the requirement of limit.		
22.917	Band Edge Measurements	PASS	Meet the requirement of limit.		
2.1051 22.917	Conducted Spurious Emissions	PASS	Meet the requirement of limit.		
2.1053 22.917	Radiated Spurious Emissions		Meet the requirement of limit. Minimum passing margin is -24.86dB at 30.00MHz.		

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
	30MHz ~ 200MHz	3.34 dB
Radiated emissions	200MHz ~1000MHz	3.35 dB
Nadiated emissions	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



2.2 TEST SITE AND INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver Agilent	N9038A	MY51210203	Dec. 22, 2011	Dec. 21, 2012
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2011	Dec. 20, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Dec. 20, 2011	Dec. 19, 2012
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Dec. 20, 2011	Dec. 19, 2012
ORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 20, 2011	Dec. 19, 2012
Preamplifier EMCI	EMC 012645	980115	Dec. 30, 2011	Dec. 29, 2012
Preamplifier EMCI	EMC 330H	980112	Dec. 30, 2011	Dec. 29, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4	Oct. 21, 2011	Oct. 20, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Jan. 02, 2012	Jan. 01, 2013
RF signal cable Worken	RG-213	NA	Jan. 02, 2012	Jan. 01, 2013
Software	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower &Turn Table Controller MF	MF-7802	NA	NA	NA
Mini-Circuits Power Splitter	ZN2PD-9G	NA	May 25, 2011	May 24, 2012
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
Universal Radio Communication Tester R&S	CMU200	123121	Oct. 13, 2011	Oct. 12, 2012

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

- 2. The test was performed in HwaYa Chamber 9.
- 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The FCC Site Registration No. is 460141.
- 5. The IC Site Registration No. is IC 7450F-4.



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Mobile Phone	
MODEL NO.	F-12D	
POWER SUPPLY	3.7Vdc (Li-ion battery)	
POWER SUPPLY	5.4Vdc (Adapter)	
MODULATION TYPE	GSM, GPRS: GMSK	
MODULATION TIPE	WCDMA: BPSK	
FREQUENCY RANGE	GSM, GPRS: 824.2MHz ~ 848.8MHz	
TREQUENCT RANGE	WCDMA: 826.4MHz ~ 846.6MHz	
MAX. ERP POWER	GSM: 28.29dBm (0.67Watts)	
WAX. ERP FOWER	WCDMA: 17.46dBm (0.06Watts)	
MULTI-SLOTS CLASS	12	
WCDMA RELEASE VERSION	6	
ANTENNA TYPE	λ/4 Monopole antenna with -3.60dBi gain	
DATA CABLE	NA	
I/O PORTS	Refer to user's manual	
ACCESSORY DEVICES	Battery	

NOTE:

1. The EUT consumes power from the following internal Li-ion battery and wireless charger.

BATTERY				
BRAND Fujitsu Limited				
MODEL F25				
RATING	3.7Vdc, 1800mAh, 6.7Wh			

2. The following accessory is for support units only.

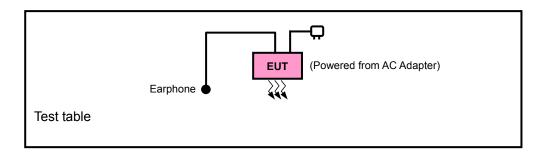
PRODUCT	BRAND	MODEL	DESCRIPTION
Adapter	SMK	NA	I/P: 100-240Vac, 50-60Hz, 0.12A O/P: 5.4Vdc, 700mA

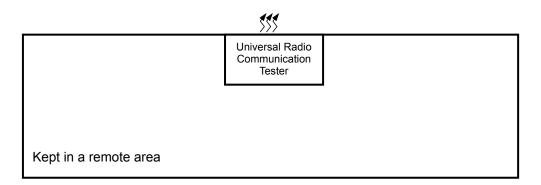
- 3. SW version is R09.4e.
- 4. HW version is V1.3.0.
- 5. IMEI Code: 352179050009170.
- 6. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.



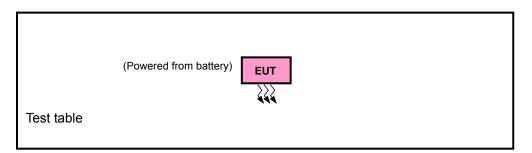
3.2 CONFIGURATION OF SYSTEM UNDER TEST

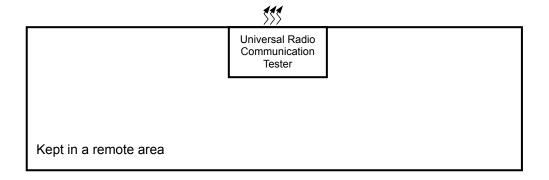
FOR RADIATION EMISSION TEST





FOR E.R.P. TEST







3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	EARPHONE	HTC	NA	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.2m audio cable.

NOTE: All power cords of the above support units are non shielded (1.8m).



3.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned on Y-plane for ERP and Z-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

GSM MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
ERP	128 to 251	128, 189, 251	GSM
FREQUENCY STABILITY	128 to 251	128	GSM
OCCUPIED BANDWIDTH	128 to 251	128, 189, 251	GSM
BAND EDGE	128 to 251	128, 251	GSM
CONDCUDETED EMISSION	128 to 251	128, 189, 251	GSM
RADIATED EMISSION	128 to 251	189	GSM

WCDMA MODE

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
ERP	4132 to 4233	4132, 4182, 4233	WCDMA
FREQUENCY STABILITY	4132 to 4233	4182	WCDMA
OCCUPIED BANDWIDTH	4132 to 4233	4132, 4182, 4233	WCDMA
BAND EDGE	4132 to 4233	4132, 4233	WCDMA
CONDCUDETED EMISSION	4132 to 4233	4132, 4182, 4233	WCDMA
RADIATED EMISSION	4132 to 4233	4182	WCDMA

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	25deg. C, 65%RH	3.7Vdc	Phoenix Chen
FREQUENCY STABILITY	26deg. C, 65%RH	3.7Vdc	Phoenix Chen
OCCUPIED BANDWIDTH	26deg. C, 65%RH	3.7Vdc	Phoenix Chen
BAND EDGE	26deg. C, 65%RH	3.7Vdc	Phoenix Chen
CONDCUDETED EMISSION	26deg. C, 65%RH	3.7Vdc	Phoenix Chen
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu,



3.5 EUT OPERATING CONDITIONS

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.6 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2 FCC 47 CFR Part 22 ANSI/TIA/EIA-603-C 2004

NOTE: All test items have been performed and recorded as per the above standards.



4 TEST TYPES AND RESULTS

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Mobile / Portable station are limited to 7 watts e.r.p.

4.1.2 TEST PROCEDURES

EIRP / ERP MEASUREMENT:

- a. All measurements were done at low, middle and high operational frequency range. RWB and VBW is 1MHz for GSM, GPRS and 5MHz for WCDMA mode.
- b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a tx cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step b. Record the power level of S.G
- d. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power 2.15dBi.

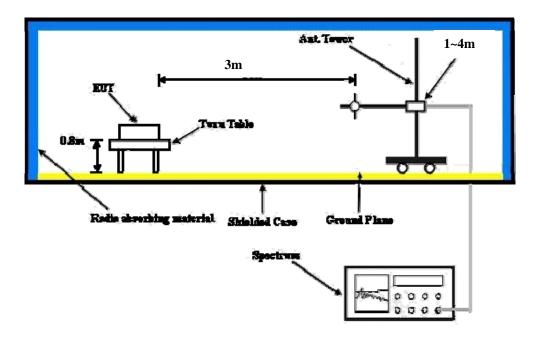
CONDUCTED POWER MEASUREMENT:

The EUT was set up for the maximum power with GSM, GPRS & WCDMA link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



4.1.3 TEST SETUP

EIRP / ERP MEASUREMENT:



For the actual test configuration, please refer to the attached file (Test Setup Photo).

CONDUCTED POWER MEASUREMENT:



For the actual test configuration, please refer to the attached file (Test Setup Photo).



4.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band		GSM850	
Channel	128	190	251
Frequency (MHz)	824.2	836.6	848.8
GSM	32.98	32.85	32.60
GPRS 8	32.71	32.80	32.60
GPRS 10	30.48	30.26	29.99
GPRS 11	28.33	28.21	28.04
GPRS 12	25.61	25.76	25.59
DTM 9 (GPRS)	30.47	30.25	30.30
DTM 11 (GPRS)	28.50	28.42	28.30

Band		WCDMA V	
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	23.58	23.44	23.29
HSDPA Subtest-1	23.34	23.19	23.10
HSDPA Subtest-2	21.23	21.17	21.00
HSDPA Subtest-3	20.36	20.29	20.28
HSDPA Subtest-4	20.10	19.93	19.97
HSUPA Subtest-1	21.66	21.52	21.35
HSUPA Subtest-2	20.18	20.03	19.91
HSUPA Subtest-3	19.88	19.73	19.69
HSUPA Subtest-4	20.25	20.52	20.49
HSUPA Subtest-5	20.91	20.77	20.69



ERP POWER

GSM 850

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(W)	Polarization (H/V)
	128	824.2	-2.18	32.62	28.29	0.67	Н
	189	836.4	-2.55	32.52	27.82	0.61	Н
v	251	848.8	-2.65	32.65	27.85	0.61	Н
Y	128	824.2	-10.45	32.76	20.16	0.10	V
	189	836.4	-10.71	32.39	19.53	0.09	V
	251	848.8	-10.44	32.54	19.95	0.10	V

WCDMA 850

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(W)	Polarization (H/V)
	4132	826.4	-13.01	32.62	17.46	0.06	Н
	4182	836.4	-12.93	32.52	17.44	0.06	Н
Y	4233	846.6	-13.54	32.65	16.96	0.05	Н
ĭ	4132	826.4	-21.40	32.76	9.21	0.01	V
	4182	836.4	-21.07	32.39	9.17	0.01	V
	4233	846.6	-21.26	32.54	9.13	0.01	V



4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

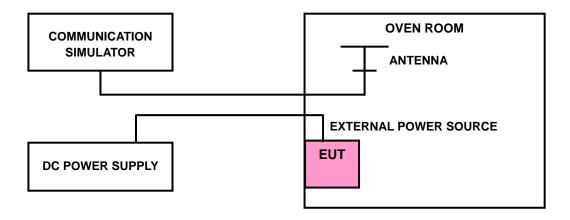
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

4.2.2 TEST PROCEDURE

- a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}$ C during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

4.2.3 TEST SETUP



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4.2.4 TEST RESULTS

FREQUENCY ERROR vs. VOLTAGE

VOLTAGE (Volta)	FREQUENCY	LIMIT (nome)	
VOLTAGE (Volts)	GSM	WCDMA	LIMIT (ppm)
3.33	-0.05	0.02	2.5
3.7	-0.05	0.02	2.5
4.07	-0.05	-0.02	2.5

NOTE: The applicant defined the normal working voltage of the battery is from 3.33Vdc to 4.07Vdc.

FREQUENCY ERROR vs. TEMPERATURE

TEMP. (°C)	FREQUENCY	FREQUENCY ERROR (ppm)				FREQUENCY ERROR (ppm)	
TEMP. (C)	GSM	WCDMA	LIMIT (ppm)				
-10	-0.04	0.02	2.5				
0	-0.04	-0.02	2.5				
10	-0.04	-0.02	2.5				
20	-0.04	-0.02	2.5				
30	-0.04	0.02	2.5				
40	-0.04	0.02	2.5				
50	-0.04	0.02	2.5				
55	-0.04	0.02	2.5				

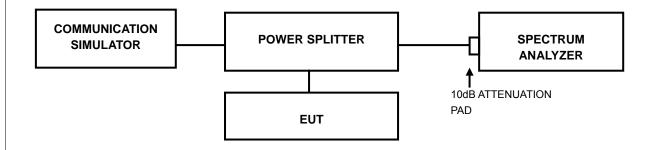


4.3 OCCUPIED BANDWIDTH MEASUREMENT

4.3.1 TEST PROCEDURES

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

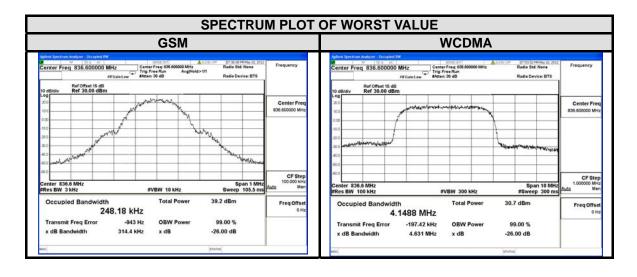
4.3.2 TEST SETUP





4.3.3 TEST RESULTS

CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (kHz) GSM	CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz) WCDMA
128	824.2	243.98	4132	826.4	4.14
189	836.4	248.18	4182	836.4	4.15
251	848.8	242.39	4233	846.6	4.14



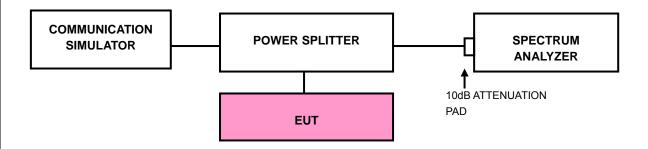


4.4 BAND EDGE MEASUREMENT

4.4.1 LIMITS OF BAND EDGE MEASUREMENT

Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. 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.

4.4.2 TEST SETUP

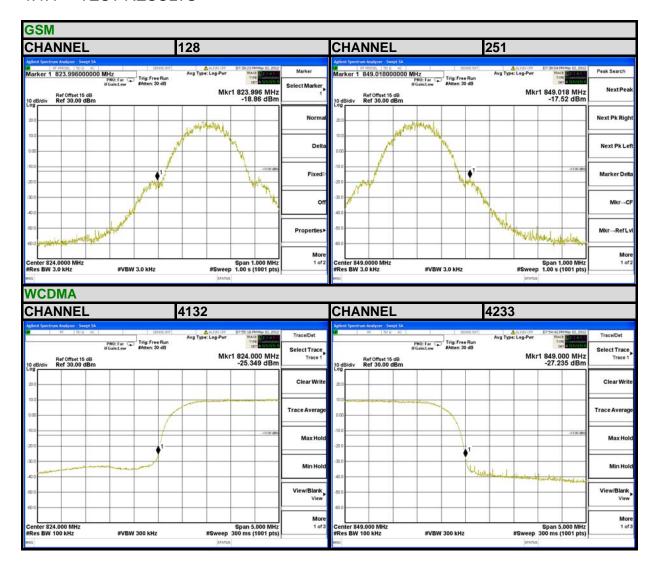


4.4.3 TEST PROCEDURES

- a. All measurements were done at low and high operational frequency range.
- b. The center frequency of spectrum is the band edge frequency and span is 1.5 MHz. RB of the spectrum is 3kHz and VB of the spectrum is 10kHz (GSM/GPRS).
- c. The center frequency of spectrum is the band edge frequency and span is 10MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (WCDMA).
- d. Record the max trace plot into the test report.



4.4.4 TEST RESULTS





4.5 CONDUCTED SPURIOUS EMISSIONS

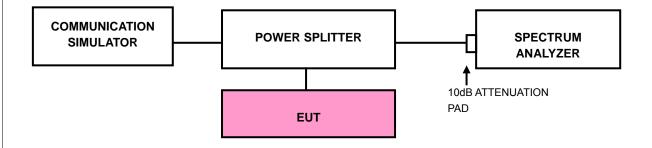
4.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P) dB$. The emission limit equal to -13dBm.

4.5.2 TEST PROCEDURE

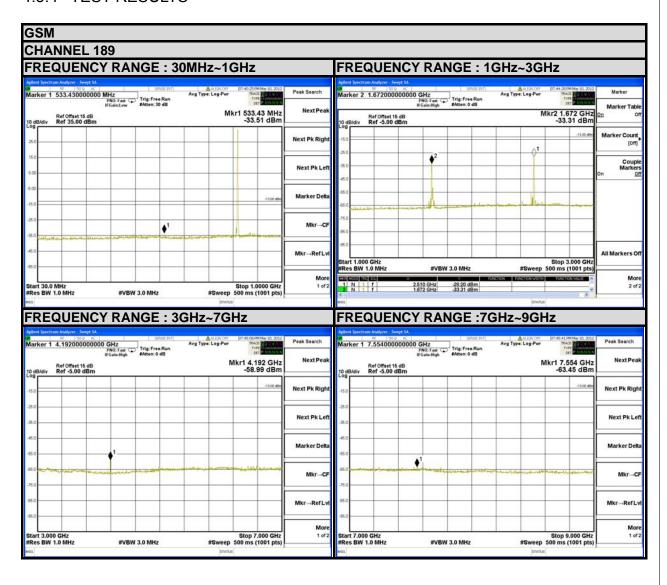
- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 30MHz to 9GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

4.5.3 TEST SETUP

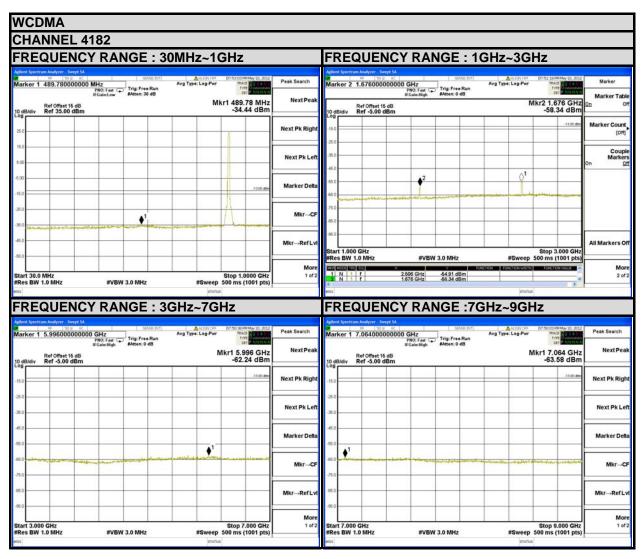




4.5.4 TEST RESULTS









4.6 RADIATED EMISSION MEASUREMENT

4.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P) dB$. The emission limit equal to -13dBm.

4.6.2 TEST PROCEDURES

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- c. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power 2.15dBi.

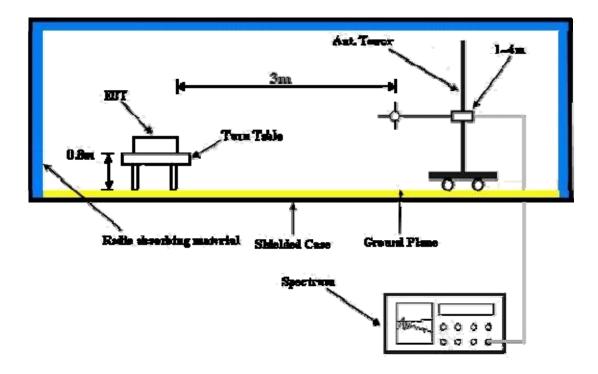
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

4.6.3 DEVIATION FROM TEST STANDARD

No deviation



4.6.4 TEST SETUP



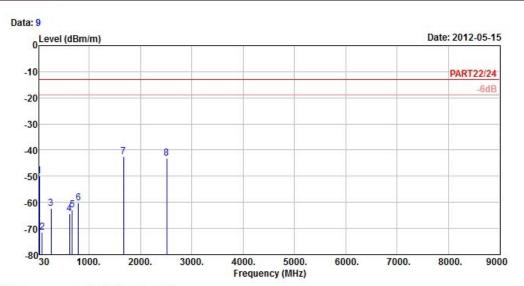
For the actual test configuration, please refer to the attached file (Test Setup Photo).



4.6.5 TEST RESULTS



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

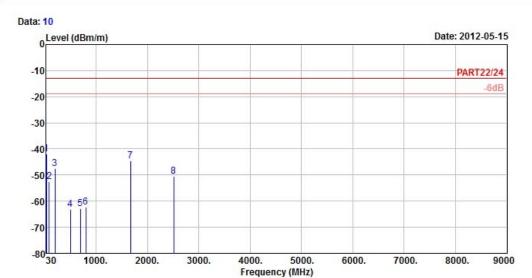
Brand/Model: F-12D Remark : GSM850 Link Tested by : Kay Wu Temprature : 25℃ Humidity : 65% Plane : Z

	Freq	Level		Limit Line	Over Limit	Factor	Remark
<u> </u>	MHz	dBm/m	dBm	dBm/m	dB	dB/m	<u> </u>
1	31.89	-49.86	-49.47	-13.00	-36.86	-0.39	Peak
2	87.24	-71.52	-61.03	-13.00	-58.52	-10.49	Peak
3	258.42	-62.18	-56.39	-13.00	-49.18	-5.79	Peak
4	620.60	-64.27	-64.29	-13.00	-51.27	0.02	Peak
5	670.30	-62.92	-63.83	-13.00	-49.92	0.91	Peak
6	790.70	-60.18	-62.24	-13.00	-47.18	2.06	Peak
7 pp	1672.80	-42.62	-29.80	-13.00	-29.62	-12.82	Peak
8	2509.20	-43.02	-33.85	-13.00	-30.02	-9.17	Peak





Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5 Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: F-12D Remark : GSM850 Link Tested by : Kay Wu Temprature : 25℃ Humidity : 65% Plane : Z

	Freq	Level	Level	Line	Limit	Factor	Remark
9	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	30.00	-41.84	-42.91	-13.00	-28.84	1.07	Peak
2	84.00	-52.42	-42.03	-13.00	-39.42	-10.39	Peak
3	193.89	-47.51	-40.24	-13.00	-34.51	-7.27	Peak
4	498.80	-63.07	-59.93	-13.00	-50.07	-3.14	Peak
5	694.80	-62.85	-64.20	-13.00	-49.85	1.35	Peak
6	796.30	-62.44	-64.54	-13.00	-49.44	2.10	Peak
7	1672.80	-44.43	-31.61	-13.00	-31.43	-12.82	Peak
8	2509.20	-50.56	-41.39	-13.00	-37.56	-9.17	Peak

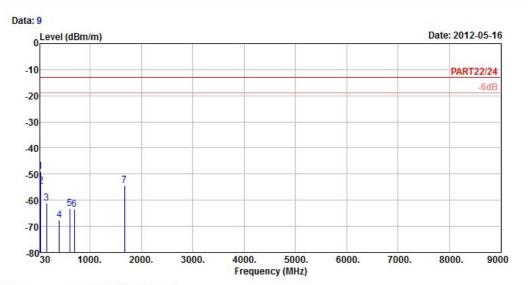
Read Limit Over

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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 HORIZONTAL

Brand/Model: F-12D Remark : Band V Link Tested by : Kay Wu Temprature : 25℃ Humidity : 65%

: Z

Plane

4

5

6

Read Limit Over
Line Limit Factor Remark

MHz dBm/m dBm dBm/m dB dB/m

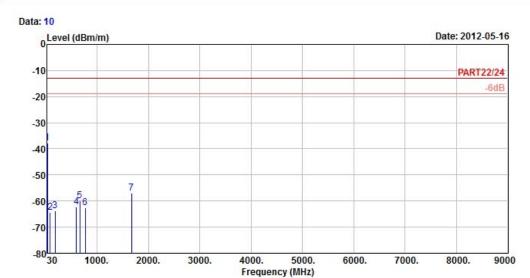
pp 30.00 -48.97 -50.04 -13.00 -35.97 1.07 Peak
37.83 -54.67 -52.72 -13.00 -41.67 -1.95 Peak
153.93 -61.16 -54.74 -13.00 -48.16 -6.42 Peak
401.50 -67.53 -61.94 -13.00 -54.53 -5.59 Peak
601.00 -63.14 -62.81 -13.00 -50.14 -0.33 Peak
691.30 -63.36 -64.65 -13.00 -50.36 1.29 Peak

1672.80 -54.41 -41.59 -13.00 -41.41 -12.82 Peak





Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP_RSE_1G~19G_3 VERTICAL

Brand/Model: F-12D
Remark : Band V Link
Tested by : Kay Wu
Temprature : 25℃
Humidity : 65%
Plane : Z

	Freq	Level		Limit Line		Factor	Remark
89	MHz	dBm/m	dBm	dBm/m	dB	dB/m	99
1 pp	30.00	-37.86	-38.93	-13.00	-24.86	1.07	Peak
2	86.43	-64.45	-53.99	-13.00	-51.45	-10.46	Peak
3	179.85	-63.66	-57.80	-13.00	-50.66	-5.86	Peak
4	599.60	-62.38	-62.00	-13.00	-49.38	-0.38	Peak
5	663.30	-60.03	-60.82	-13.00	-47.03	0.79	Peak
6	767.60	-62.67	-64.58	-13.00	-49.67	1.91	Peak
7	1672.80	-57.05	-44.23	-13.00	-44.05	-12.82	Peak

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5 PHOTOGRAPHS OF THE TEST CONFIGURATION
Please refer to the attached file (Test Setup Photo).



6 INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab: Hsin Chu EMC/RF Lab:

Tel: 886-2-26052180 Tel: 886-3-5935343 Fax: 886-2-26051924 Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab:

Tel: 886-3-3183232 Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.



7 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

---END---

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