

# FCC TEST REPORT (PART 24)

**REPORT NO.:** RF121002C10-1

**MODEL NO.:** U3500

FCC ID: XHZU3500

**RECEIVED:** Oct. 02, 2012

**TESTED:** Oct. 05 ~ Oct. 06, 2012

**ISSUED:** Oct. 22, 2012

APPLICANT: Longsung Technology(Shanghai) Co.Ltd

**ADDRESS:** Building 5, 299 Bisheng Rd., Zhangjiang Hi-tech

Park, Pudong, Shanghai 201204 P.R.China

**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
RF121002C10-1	Original release	Oct. 22, 2012

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### 1 CERTIFICATION

**PRODUCT:** Module

**MODEL:** U3500

**BRAND:** LongSung

APPLICANT: Longsung Technology(Shanghai) Co.Ltd

**TESTED:** Oct. 05 ~ Oct. 06, 2012

**TEST SAMPLE: ENGINEERING SAMPLE** 

STANDARDS: FCC Part 24, Subpart E

The above equipment (model: U3500) 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: Area Area, DATE: Oct. 22, 2012

Andrea Hsia / Specialist

APPROVED BY: DATE: Oct. 22, 2012

Anderson Chiu / Senior Engineer



### 2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

	APPLIED STANDARD: FCC Part 24 & Part 2						
STANDARD TEST TYPE		RESULT	REMARK				
2.1046 24.232	Equivalent isotropically radiated power	PASS	Meet the requirement of limit.				
2.1055 24.235	Frequency Stability	PASS	Meet the requirement of limit.				
2.1049 24.238(b)	Occupied Bandwidth	PASS	Meet the requirement of limit.				
24.238(b)	Band Edge Measurements	PASS	Meet the requirement of limit.				
2.1051 24.238 Conducted Spurious Emissions		PASS	Meet the requirement of limit.				
2.1053 24.238	Radiated Spurious Emissions		Meet the requirement of limit. Minimum passing margin is -26.35dB at 49.98MHz.				

### 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	150kHz~30MHz	2.44 dB
	30MHz ~ 200MHz	2.93 dB
Radiated emissions	200MHz ~1000MHz	2.95 dB
Radiated 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	Mar. 23, 2012	Mar. 22, 2013
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
Communications Tester-Wireless	E5515C	MY50266653	Oct. 08, 2012	Oct. 27, 2013
Radio Communication Analyzer	MT8820C	6201127458	May 25, 2012	May 24, 2013

**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

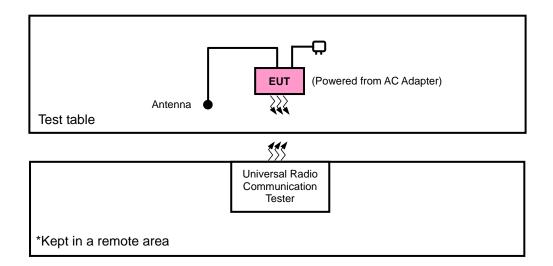
EUT	Module				
MODEL NO.	U3500				
POWER SUPPLY	3.8Vdc				
MODUL ATION TYPE	GSM/GPRS	GMSK			
MODULATION TYPE	EDGE	8PSK			
FREQUENCY RANGE	GSM/GPRS/EDGE	1850.2MHz ~ 1909.8MHz			
MAX. EIRP POWER	GSM	365.83mW			
WAX. EIRP POWER	EDGE	169.04mW			
EMISSION DESIGNATOR	GSM	250KGXW			
EWISSION DESIGNATOR	EDGE	251KG7W			
MULTI-SLOTS CLASS	12				
WCDMA RELEASE VERSION	6				
ANTENNA TYPE	GSM	Fixed External antenna with 3dRi gain			
ANTENNA TIPE	EDGE	Fixed External antenna with 3dBi gain			
I/O PORTS	Refer to users' manual				
DATA CABLE	NA				
ACCESSORY DEVICES	NA				

### NOTE:

1. The above EUT information was 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



### 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	UNIVERSAL RADIO COMMUNICATION TESTER	R&S	CMU 200	101095	NA
2	ANTENNA	HIGH CLOUD	HC-HSPA-SMA-10	N/A	NA
3	ADAPTER	3JTech	RSS1002-063063-W2B-B	N/A	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	NA
3	NA .

### NOTE:

- 1. All power cords of the above support units are non-shielded (1.8m).
- 2. Item 1 acted as communication partner to transfer data.
- 3. Items 2-3 were provided by client.



### 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 X-plane. Following channel(s) was (were) selected for the final test as listed below:

### **GSM MODE**

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	EIRP	512 to 810	512, 661, 810	GSM, EDGE
-	FREQUENCY STABILITY	512 to 810	661	GSM, EDGE
-	OCCUPIED BANDWIDTH	512 to 810	512, 661, 810	GSM, EDGE
-	- BAND EDGE		512, 810	GSM, EDGE
-	- CONDCUDETED EMISSION		661	GSM
-	RADIATED EMISSION	512 to 810	661	GSM, EDGE

### **TEST CONDITION:**

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY	
EIRP	26deg. C, 58%RH	3.8Vdc	Phoenix Chen	
FREQUENCY STABILITY	26deg. C, 58%RH	3.8Vdc	Phoenix Chen	
OCCUPIED BANDWIDTH	26deg. C, 58%RH	3.8Vdc	Phoenix Chen	
BAND EDGE	26deg. C, 58%RH	3.8Vdc	Phoenix Chen	
CONDCUDETED EMISSION	26deg. C, 58%RH	3.8Vdc	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 24 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 and portable stations are limited to 2 watts EIRP

### 4.1.2 TEST PROCEDURES

### **EIRP MEASUREMENT:**

- a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 1MHz for GSM, GPRS & EDGE.
- 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.

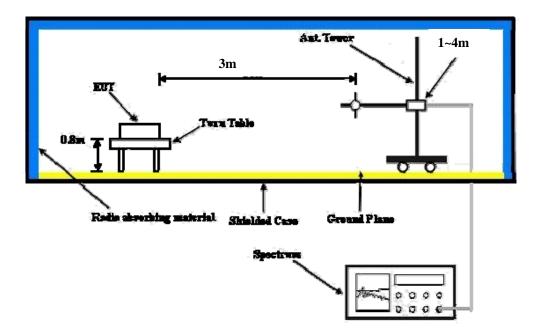
### **CONDUCTED POWER MEASUREMENT:**

The EUT was set up for the maximum power with GSM, GPRS & EDGE 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.



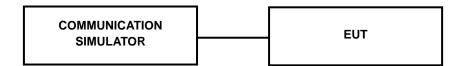
### 4.1.3 TEST SETUP

### **EIRP 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	GSM1900			
Channel	512	661	810	
Frequency (MHz)	1850.2	1880.0	1909.8	
GSM (GMSK, 1 Uplink)	28.83	28.92	28.76	
GPRS 8 (GMSK, 1 Uplink)	28.77	28.86	28.72	
GPRS 10 (GMSK, 2 Uplink)	25.84	25.93	25.79	
GPRS 11 (GMSK, 3 Uplink)	23.70	23.79	23.65	
GPRS 12 (GMSK, 4 Uplink)	22.61	22.70	22.56	
EDGE 8 (MCS1)	28.47	28.56	28.42	
EDGE 10 (MCS1)	25.62	25.71	25.57	
EDGE 11 (MCS1)	23.49	23.58	23.44	
EDGE 12 (MCS1)	22.38	22.47	22.33	
EDGE 8 (MCS9)	25.55	25.64	25.50	
EDGE 10 (MCS9)	23.91	24.00	23.86	
EDGE 11 (MCS9)	22.82	22.91	22.77	
EDGE 12 (MCS9)	21.72	21.81	21.67	

## EIRP POWER (dBm)

### **GSM**

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
	512	1850.2	-20.28	38.19	17.91	61.80	Н
	661	1880.0	-21.60	38.70	17.10	51.29	Н
Z	810	1909.8	-21.24	38.43	17.19	52.36	Н
	512	1850.2	-13.06	38.48	25.42	348.34	V
	661	1880.0	-13.08	38.59	25.51	355.63	V
	810	1909.8	-13.19	38.87	25.68	369.83	V

### **EDGE**

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
	512	1850.2	-23.93	38.19	14.26	26.67	Н
	661	1880.0	-24.52	38.70	14.18	26.18	Н
Z	810	1909.8	-23.68	38.43	14.75	29.85	Н
	512	1850.2	-16.20	38.48	22.28	169.04	V
	661	1880.0	-16.56	38.59	22.03	159.59	V
	810	1909.8	-16.77	38.87	22.10	162.18	V



### 4.2 FREQUENCY STABILITY MEASUREMENT

### 4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

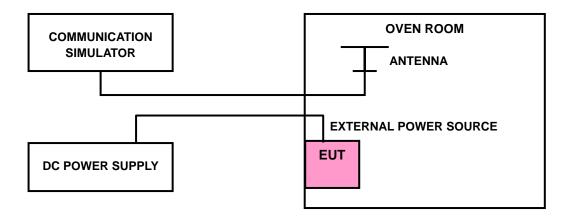
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

### 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  $\pm 0.5$ °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





### 4.2.4 TEST RESULTS

### FREQUENCY ERROR VS. VOLTAGE

	FREQUENCY		
VOLTAGE (Volts)	GPRS	EDGE	LIMIT (ppm)
3.8	0.01	-0.02	2.5
3.5	0.01	-0.02	2.5
4.2	0.01	-0.03	2.5

**NOTE:** The applicant defined the normal working voltage of the battery is from 3.5Vdc to 4.2Vdc.

### FREQUENCY ERROR vs. TEMPERATURE.

	FREQUENCY		
<b>TEMP.</b> (°C)	GPRS	EDGE	LIMIT (ppm)
-30	0.01	-0.02	2.5
-20	0.01	-0.03	2.5
-10	0.01	-0.03	2.5
0	0.01	-0.03	2.5
10	0.01	-0.02	2.5
20	0.01	-0.02	2.5
30	0.01	-0.03	2.5
40	0.01	-0.03	2.5
50	0.01	-0.03	2.5

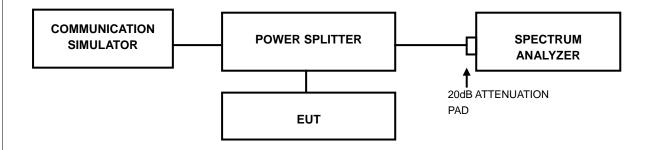


### 4.3 OCCUPIED BANDWIDTH MEASUREMENT

### 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.

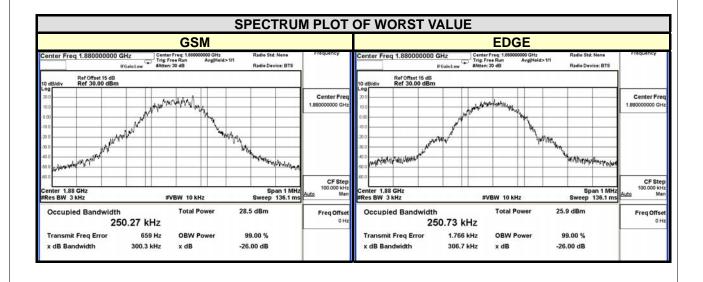
### 4.3.2 TEST SETUP





### 4.3.3 TEST RESULTS

CHANNEL	FREQUENCY	99% OCCUPIED BANDWIDTH (kHz)				
CHANNEL	(MHz)	GSM	EDGE			
512	1850.2	250.02	247.86			
661	1880.0	250.27	250.73			
810	1909.8	249.98	245.07			



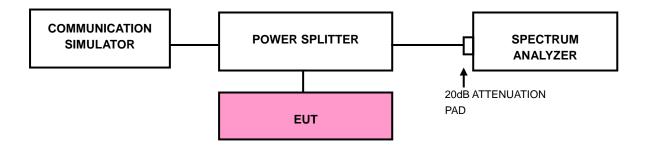


### 4.4 BAND EDGE MEASUREMENT

### 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

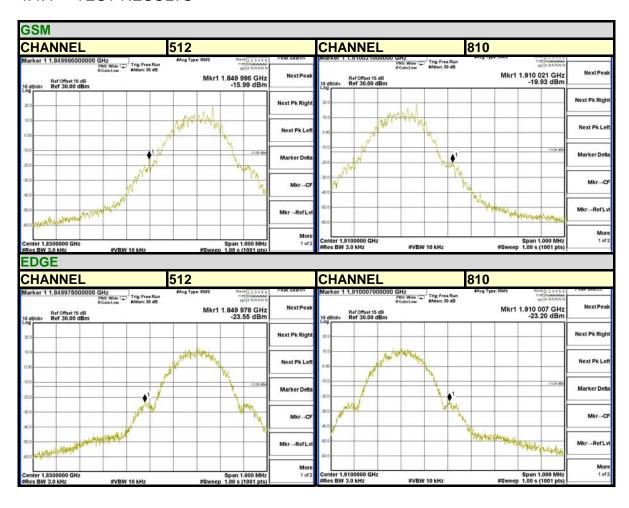


### 4.4.3 TEST PROCEDURES

- 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 MHz. RB of the spectrum is 3kHz and VB of the spectrum is 10kHz (GSM/GPRS/ EDGE).
- c. Record the max trace plot into the test report.



### 4.4.4 TEST RESULTS





### 4.5 CONDUCTED SPURIOUS EMISSIONS

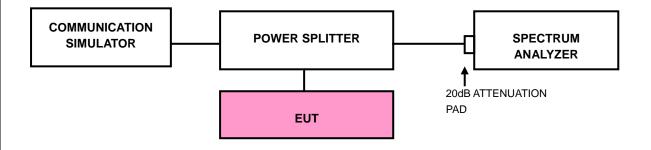
### 4.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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.
- Measuring frequency range is from 30 MHz to 19.1GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

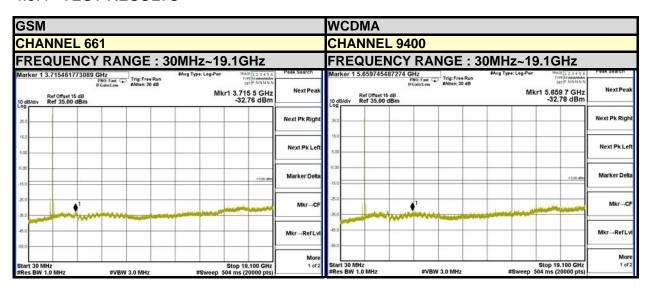
### 4.5.3 TEST SETUP



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### 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.

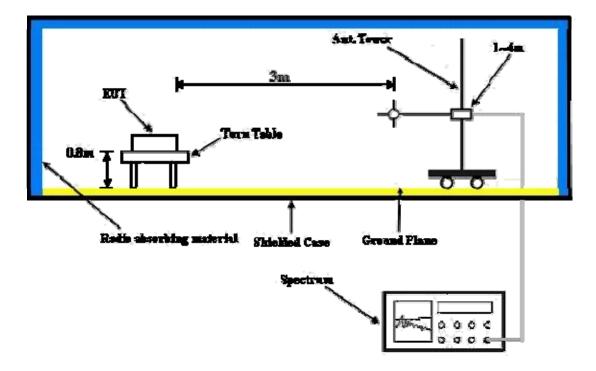
**NOTE:** The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

### 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).

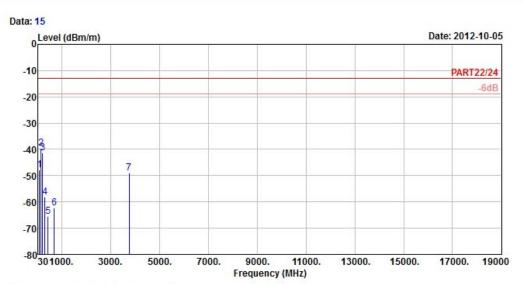


### 4.6.5 TEST RESULTS

### GSM:



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL

Brand/Model: U3500

Remark : PCS1900 Link

Tested by : Kay Wu Temprature : 25°C Humidity : 65% Plane : X

		Freq	Level	Level	Line	Limit	Factor	Remark
	-	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1		87.51	-47.85	-37.36	-13.00	-34.85	-10.49	Peak
2	pp	144.75	-39.54	-33.56	-13.00	-26.54	-5.98	Peak
3		209.55	-41.39	-33.88	-13.00	-28.39	-7.51	Peak
4		300.00	-58.22	-51.84	-13.00	-45.22	-6.38	Peak
5		424.60	-65.67	-60.67	-13.00	-52.67	-5.00	Peak
6		691.30	-62.36	-63.65	-13.00	-49.36	1.29	Peak
7		3760.00	-48.86	-42.13	-13.00	-35.86	-6.73	Peak

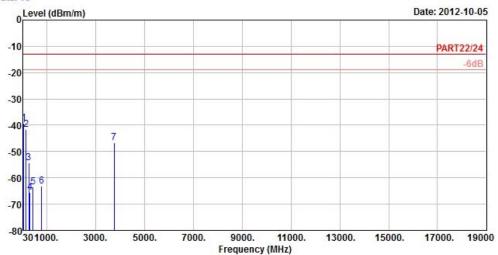
Read Limit Over





### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch





Site : 966 Chamber 5

Condition : PART22/24 3m EIRP\_RSE\_1G~19G\_3 VERTICAL

Brand/Model: U3500

Remark : PCS1900 Link

Tested by : Kay Wu Temprature : 25℃ Humidity : 65% Plane : X

Read Limit Over

Freq Level Level Line Limit Factor Remark

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

 1 pp
 49.98 -39.35 -34.75 -13.00 -26.35 -4.60 Peak

 2
 144.21 -41.76 -35.78 -13.00 -28.76 -5.98 Peak

 3
 265.17 -54.18 -48.29 -13.00 -41.18 -5.89 Peak

 4
 305.60 -65.61 -59.27 -13.00 -52.61 -6.34 Peak

 5
 431.60 -63.43 -58.60 -13.00 -50.43 -4.83 Peak

 6
 785.10 -63.29 -65.31 -13.00 -50.29 2.02 Peak

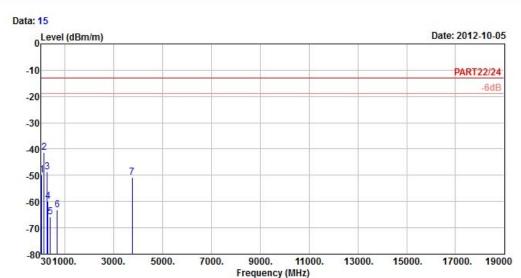
 7
 3760.00 -46.58 -39.85 -13.00 -33.58 -6.73 Peak



### **EDGE**:



### Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition : PART22/24 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL

Brand/Model: U3500

Remark : EDGE1900 Link Tested by : Kay Wu

Temprature : 25°C Humidity : 65% Plane : X

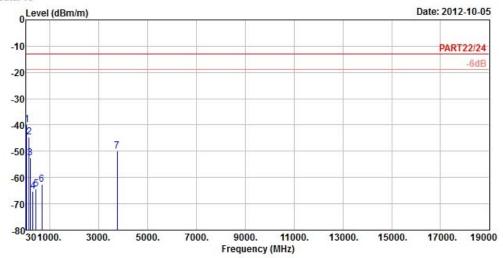
				Kead	Limit	Over		
		Freq	Level	Level	Line	Limit	Factor	Remark
	(i)	MHz	dBm/m	dBm	dBm/m	dB	dB/m	<u> </u>
1		50.79	-50.02	-45.42	-13.00	-37.02	-4.60	Peak
2	pp	143.94	-41.31	-35.39	-13.00	-28.31	-5.92	Peak
3		268.95	-48.80	-42.86	-13.00	-35.80	-5.94	Peak
4		300.00	-59.81	-53.43	-13.00	-46.81	-6.38	Peak
5		407.80	-65.96	-60.52	-13.00	-52.96	-5.44	Peak
6		690.60	-63.11	-64.39	-13.00	-50.11	1.28	Peak
7		3760.00	-50.86	-44.13	-13.00	-37.86	-6.73	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: U3500

Remark : EDGE1900 Link

Tested by : Kay Wu Temprature :  $25^{\circ}$ C Humidity : 65% Plane : X

Read Limit Over

Freq Level Level Line Limit Factor Remark

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

1 pp 50.25 -39.84 -35.24 -13.00 -26.84 -4.60 Peak 
2 143.94 -44.45 -38.53 -13.00 -31.45 -5.92 Peak 
3 199.02 -52.65 -44.81 -13.00 -39.65 -7.84 Peak 
4 307.00 -65.20 -58.88 -13.00 -52.20 -6.32 Peak 
5 430.20 -64.25 -59.39 -13.00 -51.25 -4.86 Peak 
665.40 -62.70 -63.52 -13.00 -49.70 0.82 Peak 
7 3760.00 -50.01 -43.28 -13.00 -37.01 -6.73 Peak



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

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### **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.



CHANGES TO THE EUT BY THE LAB
No any modifications were made to the EUT by the lab during the test.
END
END