## **FCC TEST REPORT**

for

**Infinite Play Controller** MODEL: F-PS3-G7789LVS, G7789

> **Test Report Number:** SZ080901B11-RP

> > Issued for

Shenzhen Litestar Electronics Technology CO.,LTD Xinghong Science & Technology Park, Fenghuanggang 1st Industrial Zone, Xixiang, Bao'an District, Shenzhen, China

Issued by:

**COMPLIANCE CERTIFICATION SERVICES (SHENZHEN) INC.** (aka Compliance Engineering Service (China))

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Issued Date: September 28, 2008



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## **Revision History**

	Issue		Effect	
Rev.	Date	Revisions	Page	Revised By
00	September 28, 2008	Initial Issue	ALL	Clinton Kao



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### 1 TEST CERTIFICATION

**Product:** Infinite Play Controller

Model: F-PS3-G7789LVS, G7789

Brand: N/A

Tested: September 01-28, 2008

Applicant: Shenzhen Litestar Electronics Technology CO.,LTD

Xinghong Science & Technology Park, Fenghuanggang 1st Industrial Zone, Xixiang,

Bao'an District, Shenzhen, China

Manufacturer: Shenzhen Litestar Electronics Technology CO.,LTD

Xinghong Science & Technology Park, Fenghuanggang 1<sup>st</sup> Industrial Zone, Xixiang,

Bao'an District, Shenzhen, China

Buyer: INTEC INC.

7600 CORPORATE CENTER DRIVE, SUITE 400 MIAMI, FL 33126

APPLICABLE STANDARDS				
STANDARD TEST RESULT				
FCC 47 CFR Part 15 Subpart C	No non-compliance noted			
DEVIATION FROM APPLICABLE STANDARD				
None				

## We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.249.

The test results of this report relate only to the tested sample EUT identified in this report.

Approved by:	Reviewed by:
Climate Law	Vincent Jao
Clinton Kao Manager Compliance Certification Service Inc.	Vincent Yao Assistant manager Compliance Certification Service Inc.

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## **2 EUT DESCRIPTION**

Product	Infinite Play Controller
Trade Name	N/A
Model Number	F-PS3-G7789LVS, G7789
Model Discrepancy	All models are identical to each other except for market designation for marketing purpose.
Serial Number	N/A
Power Supply	DC5V powered from host device
Frequency Range	2402-2480 MHz
Transmit Power	96.75 dBuV/m (Max.)
Modulation Technique	GFSK
Number of Channels	79 Channel
Antenna Specification	PCB Antenna Gain: 4.0dBi (Max)

**Note:** 1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.

2. This submittal(s) (test report) is intended for <u>FCC ID: SBIRFPS3</u> filing to comply with Section 15.207, 15.209 and 15.249 of the FCC Part 15, Subpart C Rules.

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## 3 TEST METHODOLOGY

### 3.1. DESCRIPTION OF TEST MODES

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz, which worst case was in normal link mode only, and power line conducted emission below 30MHz, which worst case was in normal link mode with charging only.

Channel Low (2402MHz), Channel Mid (2440MHz) and Channel High (2480MHz) were chosen for the final testing.

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## **TEST METHODOLOGY**

The tests documented in this report were performed in accordance with ANSI C63.4 and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, 15.207, 15.209 and 15.249.

#### 4.1. EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to its specifications, the EUT must comply with the requirements of the Section 15.107 and 15.109 under the FCC Rules Part 15 Subpart B and Section 15.207, 15.209,15.249 under the FCC Rules Part 15 Subpart C.

#### 4.2. FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110 10.495 - 0.505 2.1735 - 2.1905 4.125 - 4.128 4.17725 - 4.17775 4.20725 - 4.20775 6.215 - 6.218 6.26775 - 6.26825 6.31175 - 6.31225 8.291 - 8.294	16.42 - 16.423 16.69475 - 16.69525 16.80425 - 16.80475 25.5 - 25.67 37.5 - 38.25 73 - 74.6 74.8 - 75.2 108 - 121.94 123 - 138 149.9 - 150.05	399.9 - 410 608 - 614 960 - 1240 1300 - 1427 1435 - 1626.5 1645.5 - 1646.5 1660 - 1710 1718.8 - 1722.2 2200 - 2300 2310 - 2390	4.5 - 5.15 5.35 - 5.46 7.25 - 7.75 8.025 - 8.5 9.0 - 9.2 9.3 - 9.5 10.6 - 12.7 13.25 - 13.4 14.47 - 14.5 15.35 - 16.2
8.362 - 8.366 8.37625 - 8.38675 8.41425 - 8.41475 12.29 - 12.293 12.51975 - 12.52025 12.57675 - 12.57725 13.36 - 13.41	156.52475 - 156.52525 156.7 - 156.9 162.0125 - 167.17 167.72 - 173.2 240 - 285 322 - 335.4	2483.5 - 2500 2655 - 2900 3260 - 3267 3332 - 3339 3345.8 - 3358 3600 - 4400	17.7 - 21.4 22.01 - 23.12 23.6 - 24.0 31.2 - 31.8 36.43 - 36.5 ( <sup>2</sup> )

Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

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<sup>&</sup>lt;sup>2</sup> Above 38.6



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## 5 INSTRUMENT CALIBRATION

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

## **6 SETUP OF EQUIPMENT UNDER TEST**

#### 6.1. 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.	Equipment	Model No.	Serial No.	FCC ID	Trade Name	Data Cable	Power Cord
1	Playstation 3	CECHA12	02-27430191- 9887932	FCC	SONY	Un-shielded, 1.50m	Un-shielded, 1.80m
2	TV	CK15F1	62620051	FCC	Sanyo	N/A	Unshielded 1.5m
3	Infinite Play Controller (Transmitter)	F-PS3-G7789LV S	N/A	SBIH7789LVS	N/A	N/A	N/A

#### Note:

- All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2) Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

#### 6.2. CONFIGURATION OF SYSTEM UNDER TEST

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

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## 7 FACILITIES AND ACCREDITATIONS

#### 7.1. FACILITIES

All measurement facilities used to collect the measurement data are located at No. 5, Jinao industrial park, No.35 Jukeng Road, Dashuikeng Village, Guanlan Town, Baoan District, Shenzhen, China

The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

#### 7.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following accreditation body according to ISO/IEC 17025.

Taiwan TAF

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

USA FCC
Japan VCCI

Canada INDUSTRY CANADA

Taiwan BSMI

Copies of granted accreditation certificates are available for downloading from our web site, http://www.ccsemc.com.tw

#### 7.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in ETR 028:

Measurement	Frequency		Uncertainty
Conducted emissions	9kHz~30MHz		$\pm 3.5863$
	Horizontal	30MHz ~ 200MHz	± 4.7685
Radiated emissions	Honzontal	200MHz ~1000MHz	$\pm4.9330$
Radiated ellissions	Vertical	30MHz ~ 200MHz	± 5.0411
	vertical	200MHz ~1000MHz	± 4.9262

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

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## **FCC PART 15.249 REQUIREMENTS**

#### 8.1. BAND EDGES MEASUREMENT

#### LIMIT

1. In the above emission table, the tighter limit applies at the band edges.

Fraguanay (Uz)	Field Strength	Field Strength	
Frequency (Hz)	(µV/m at 3-meter)	(dBµV/m at 3-meter)	
30-88	100	40	
88-216	150	43.5	
216-960	200	46	
Above 960	500	54	

- 2. As shown in Section 15.35(b), for frequencies above 1000 MHz, the above field strength limits in paragraphs (a) and (b) of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b) of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.
- 3. As shown in Section 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

## **MEASUREMENT EQUIPMENT USED**

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US44300399	02/24/2009

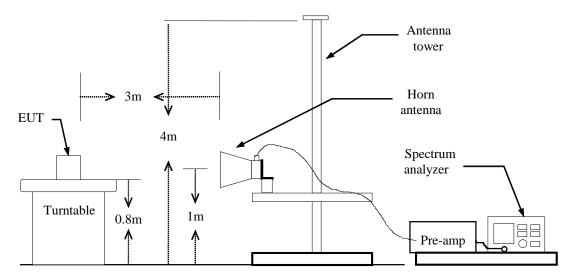
Remark: Each piece of equipment is scheduled for calibration once a year.

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## **Test Configuration**



### **TEST PROCEDURE**

- 1. The EUT is placed on a turntable, which is 0.8m above the ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
  - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
- Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.

## **TEST RESULTS**

Refer to attach spectrum analyzer data chart.

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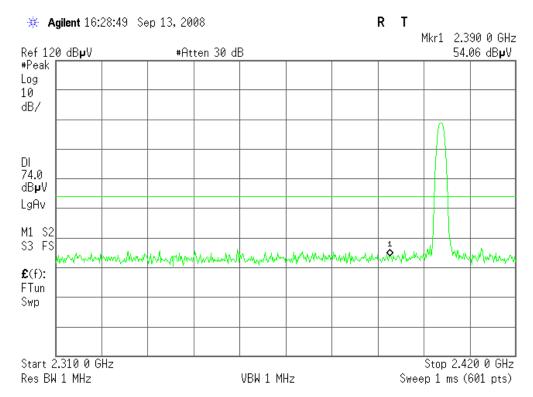
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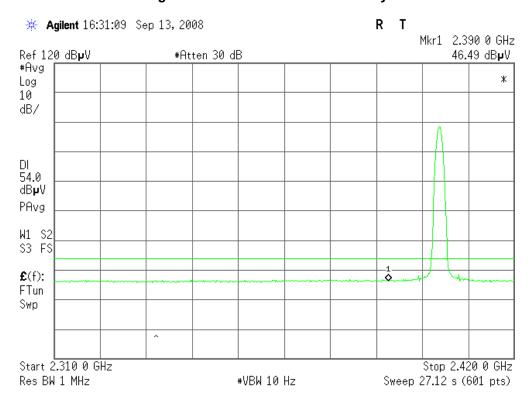
#### **Test Data**

### **Band Edges (CH-Low)**

Detector mode: Peak Polarity: Vertical



#### Detector mode: Average Polarity: Vertical



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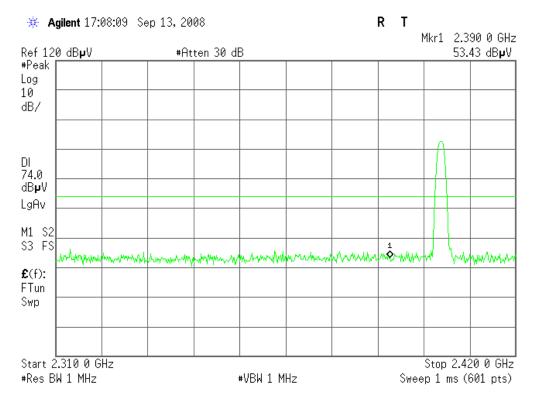
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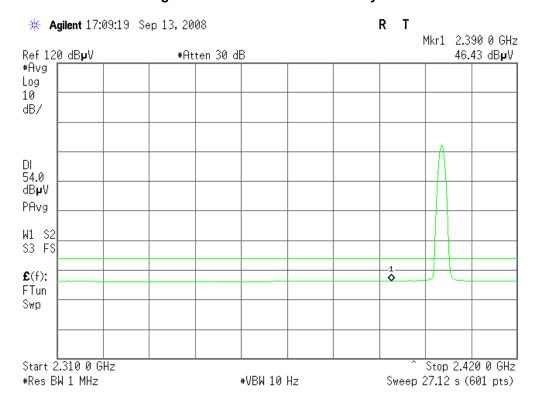
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#### Detector mode: Peak Polarity: Horizontal



### Detector mode: Average Polarity: Horizontal



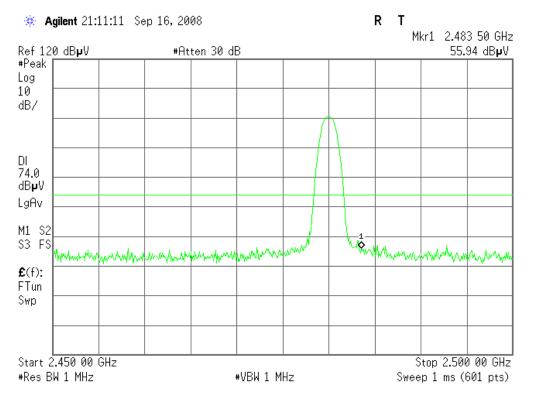


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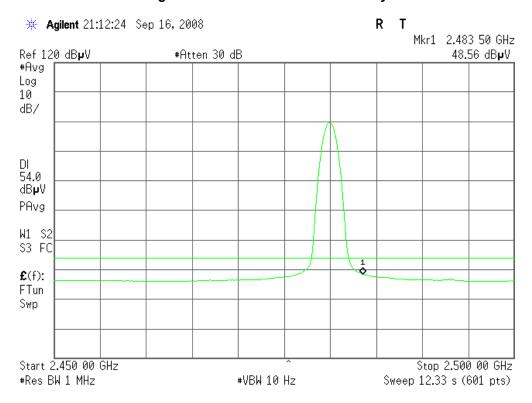
## **Band Edges (CH-High)**

Detector mode: Peak Polarity: Vertical



#### Detector mode: Average

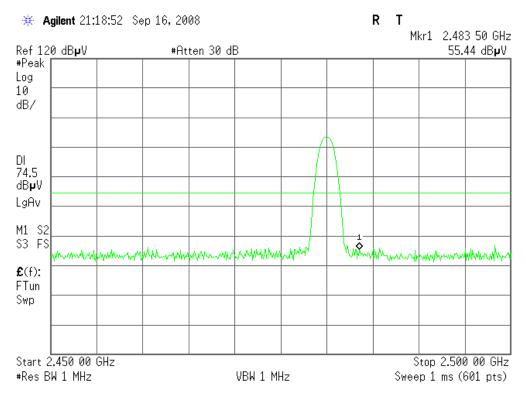
### Polarity: Vertical



Reference No.:

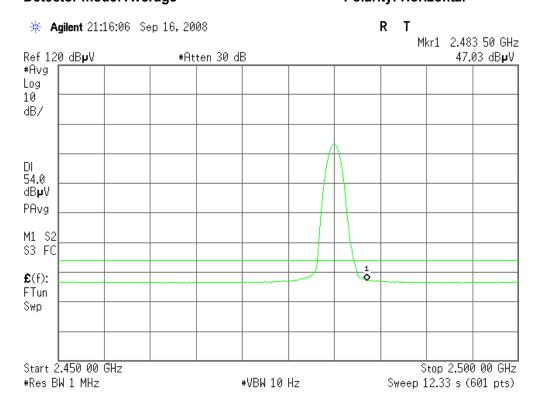
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Detector mode: Peak Polarity: Horizontal



#### Detector mode: Average

#### Polarity: Horizontal



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#### 8.2. POWER LINE CONDUCTED EMISSIONS MEASUREMENT

#### 8.2.1. LIMITS OF CONDUCTED EMISSIONS MEASUREMENT

According to §15.207(a), except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range	Limits (dΒμV)			
(MHz)	Quasi-peak	Average		
0.15 to 0.50	66 to 56*	56 to 46*		
0.50 to 5	56	46		
5 to 30	60	50		

#### NOTE:

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
- (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### **TEST INSTRUMENTS**

Conducted Emission Test Site G							
Name of Equipment	Serial Number	Calibration Due					
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100088	02/24/2009			
LISN	EMCO	3825/2	1371	02/24/2009			
LISN	EMCO	3825/2	8901-1459	02/24/2009			

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. N.C.R = No Calibration Request.

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#### **8.2.2. TEST PROCEDURES** (please refer to measurement standard)

The EUT and Support equipment, if needed, was placed on a non-conducted table, which is 0.8m above the ground plane and 0.4m away from the conducted wall.

- The test equipment EUT installed received AC main power, through a Line Impedance Stabilization Network (LISN), which supplied power source and was grounded to the ground plane. All support equipment power received from a second LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- The EUT test program was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The frequency range from 150 kHz to 30 MHz was searched. The test data of the worst-case condition(s) was recorded. Emission levels under limit 20dB were not recorded.

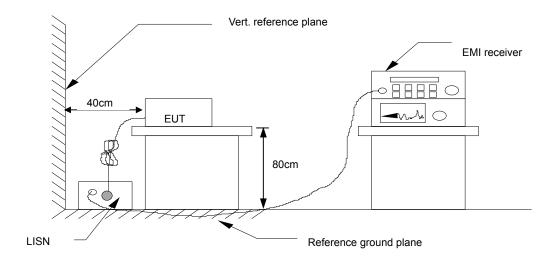
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#### **8.2.3. TEST SETUP**



 For the actual test configuration, please refer to the related item - Photographs of the Test Configuration.

#### 8.2.4. Data Sample:

Freq. (MHz)	'   RaW   RaW   Ilmit		Average Limit (dBuV)	Q.P. Margin (dB)	Average Margin (dB)	Note	
X.XX	43.95	33.00	56.00	46.00	-12.05	-13.00	L1

Frequency (MHz) = Emission frequency in MHz

Reading (dBuV) = Uncorrected Analyzer/Receiver reading

Correction factor (dB) = Insertion loss of LISN Limit (dBuV) = Limit stated in standard

Margin (dB) = Reading (dBuV) – Limit (dBuV) Note = Current carrying line of reading

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## 8.2.5. TEST RESULTS

Test No.	F-PS3-G7789LVS	Test Mode	Normal Link
Environmental Conditions	27deg.C,55% RH, 992 hPa	6dB BANDWIDTH	9 kHz
Tested by:	Breeze Jiang		

FREQ	PEAK	Q.P.	AVG	Q.P.	AVG	Q.P.	AVG
MHz	RAW	RAW	RAW	Limit	Limit	Margin	Margin
	dBuV	dBuV	dBuV	dBuV	dBuV	dB	dB
0.205	45.23			64.41	54.41		-9.18
0.294	40.31			61.87	51.87		-11.56
0.517	42.45			56.00	46.00		-3.55
1.032	43.69			56.00	46.00		-2.31
1.239	42.06			56.00	46.00		-3.94
2.480	41.26			56.00	46.00		-4.74
0.205	45.34			64.41	54.41		-9.07
0.517	41.11			56.00	46.00		-4.89
0.620	41.12			56.00	46.00		-4.88
1.032	42.43			56.00	46.00		-3.57
2.064	41.46			56.00	46.00		-4.54
3.723	38.56			56.00	46.00		-7.44

**REMARKS:** L1 = Line One (Live Line) / L2 = Line Two (Neutral Line)

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### 8.3. SPURIOUS EMISSIONS MEASUREMENT

#### 8.3.1. LIMITS OF RADIATED EMISSIONS MEASUREMENT

1. In the section 15.249(a):

Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental	Field Strength of Fundamental	Field Strength of Harmonics
Frequency	Field Strength (mV/m)	(µV/m)
902-928 MHz	50	500
2400 - 2483.5 MHz	50	500
5725 - 5875 MHz	50	500
24.0 - 24.25 GHz	250	2500

2. Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)		
30-88	100*	3		
88-216	150*	3		
216-960	200*	3		
Above 960	500	3		

**Remark:** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

3. In the above emission table, the tighter limit applies at the band edges.

Fraguanay (Uz)	Field Strength	Field Strength		
Frequency (Hz)	(μV/m at 3-meter)	(dBµV/m at 3-meter)		
30-88	100	40		
88-216	150	43.5		
216-960	200	46		
Above 960	500	54		

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#### 8.3.2. TEST INSTRUMENTS

	96	66 RF CHAMBE	R 2	
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US44300399	02/24/2009
EMI Test Receiver	R&S	ESCI	1166.5950 03	01/13/2009
Pre-Amplifier	MITEQ	N/A	AFS42-00102650-42-10 P-42	02/14/2009
Bilog Antenna	SCHWAZBECK	CBL6143	5082	06/09/2009
Turn Table	EMCO	2081-1.21	N/A	N.C.R
Antenna Tower	СТ	N/A	N/A	N.C.R
Controller	СТ	N/A	N/A	N.C.R
RF Comm. Test set	HP	8920B	US36142090	N.C.R
Site NSA	C&C	N/A	N/A	06/09/2009
Horn Antenna	TRC	TRC0301	100204	03/04/2009
Signal Generator	Anritsu	MG3694A	#050125	02/24/2009
Loop Antenna	ARA	PLA-1030/B	1029	02/24/2009

**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 FCC Site Registration number is 101879.
- 4. N.C.R = No Calibration Required.

#### **8.3.3 TEST PROCEDURE** (please refer to measurement standard)

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- Set the spectrum analyzer in the following setting as:

Below 1GHz:

RBW=100kHz / VBW=300kHz / Sweep=AUTO

Above 1GHz:

- (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
- 7. Repeat above procedures until the measurements for all frequencies are complete.

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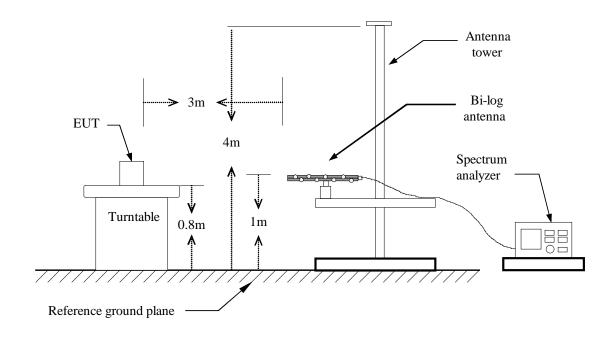


Reference No.:

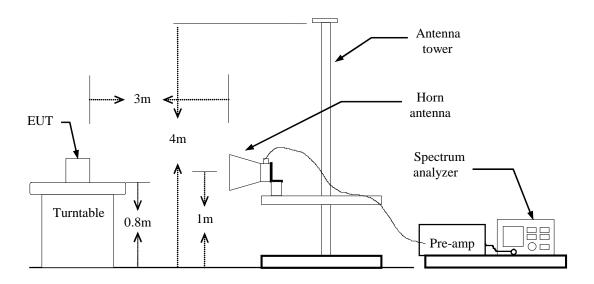
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## 8.3.2.1. TEST SETUP

#### **Below 1 GHz**



#### **Above 1 GHz**



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

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#### 8.3.2.2. Data Sample:

#### **Below 1 GHz**

Frequency (MHz)	Ant.Pol. (H/V)	(Remark)   Factor		Result (Remark) (dBuV/m)	Limit (Peak) (dBuV/m)	Margin (dB)	Remark	
XXX	V	12.12	10.21	22.33	40.00	-17.67	Peak	

#### **Above 1 GHz**

Frequency (MHz)	Ant.Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	IMEI	Remark
XXX	V	65.45	63.00	-11.12	54.33	51.88	74.00	54.00	-2.12	AVG

Frequency (MHz) = Emission frequency in MHz

Ant.Pol. (H/V) = Antenna polarization

Reading (dBuV) = Uncorrected Analyzer / Receiver reading Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)

Limit (dBuV/m) = Limit stated in standard

Margin (dB) = Remark Result (dBuV/m) – Limit (dBuV/m)

Peak = Peak Reading

QP = Quasi-peak Reading AVG = Average Reading

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#### **8.3.2.3. TEST RESULTS**

Below 1 GHz

Operation Mode: Normal Link Test Date: September 12, 2008

Temperature: 27°C Tested by: Breeze Jiang

**Humidity:** 55 % RH **Polarity:** Ver. / Hor.

Freq.	Ant.Pol.	Detector	Reading	Factor	Actual FS	Limit 3m	Safe Margin
(MHz)	H/V	Mode	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
		(PK/QP)					
70.950	V	Peak	45.03	-20.04	24.99	40.00	-15.01
120.000	V	Peak	43.22	-19.57	23.65	43.50	-19.85
158.250	V	Peak	46.54	-19.05	27.49	43.50	-16.01
192.000	V	Peak	47.41	-17.77	29.64	43.50	-13.86
280.650	V	Peak	47.68	-15.03	32.65	46.00	-13.35
335.000	V	Peak	40.86	-13.84	27.02	46.00	-18.98
59.700	Н	Peak	41.06	-19.57	21.49	40.00	-18.51
80.850	Н	Peak	41.42	-19.92	21.50	40.00	-18.50
132.150	Н	Peak	45.06	-19.50	25.56	43.50	-17.94
203.700	Н	Peak	44.41	-17.29	27.12	43.50	-16.38
287.850	Н	Peak	45.99	-14.78	31.21	46.00	-14.79
391.000	Н	Peak	40.80	-11.70	29.10	46.00	-16.90

<sup>\*\*</sup>Note: No emission found between lowest internal used/generated frequency to 30 MHz.

#### **REMARKS**:

- 1. Measuring frequencies from 30 MHz to the 1GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
- 3. Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit or as required by the applicant.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Margin (dB) = Remark result (dBuV/m) Quasi-peak limit (dBuV/m).

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**Above 1 GHz** 

Operation Mode: TX / CH Low Test Date: September 12, 2008

Temperature: 27°C Tested by: Breeze Jiang

**Humidity:** 55% RH **Polarity:** Ver. / Hor.

#### Fundamental

Freq. (MHz)	Ant. Pol H/V	Peak Reading	AV Reading	Ant. / CL CF	Actual Fs		Peak Limit	AV Limit	Peak Margin	AV Margin
		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)	(dB)	(dB)
					(dBuV/m)	(dBuV/m)				
2402	٧	98.24	90.93	-3.86	94.38	87.07	114	94	-19.62	-6.93
2402	Н	90.77	79.83	-3.86	86.91	75.97	114	94	-27.09	-18.03

Freq. (MHz)	Ant. Pol H/V	Peak Reading	AV Reading	Ant. / CL CF	Actu	al Fs	Peak Limit	AV Limit	Margin (dB)	
, ,		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)	` ′	Remark
					(dBuV/m)	(dBuV/m)				
1260.00	V	54.96		-10.74	44.22		74.00	54.00	-9.78	Peak
1446.66	V	55.32		-9.71	45.61		74.00	54.00	-8.39	Peak
3366.66	V	47.39		-1.27	46.12		74.00	54.00	-7.88	Peak
3916.66	V	46.60		1.22	47.82		74.00	54.00	-6.18	Peak
N/A										
1306.66	Н	55.43		-10.48	44.95		74.00	54.00	-9.05	Peak
1450.00	Н	55.16		-9.70	45.46		74.00	54.00	-8.54	Peak
3200.00	Н	46.94		-2.44	44.50		74.00	54.00	-9.50	Peak
3883.33	Н	47.09		0.58	47.67		74.00	54.00	-6.33	Peak
N/A										
				_						

#### **REMARKS**:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

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Reference No.:

Report No.: SZ080901B11-RP(RX)

Operation Mode: TX / CH Mid Test Date: September 12, 2008

**Temperature:** 27°C **Tested by**: Breeze Jiang

**Humidity:** 55% RH **Polarity:** Ver. / Hor.

#### Fundamental

Freq. (MHz)	Ant. Pol H/V	Peak Reading	AV Reading	Ant. / CL CF	Actual Fs		Peak Limit	AV Limit	Peak Margin	AV Margin
		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)	(dB)	(dB)
					(dBuV/m)	(dBuV/m)				
2440	V	100.17	87.27	-3.72	96.45	83.55	114	94	-17.55	-10.45
2440	Н	91.22	77.20	-3.72	87.50	73.48	114	94	-26.50	-20.52

Freq.	Ant. Pol H/V	Peak Reading	AV Reading	Ant. / CL CF	Actual Fs		Peak Limit	AV Limit	Margin	
(MHz)	11/ 🗸	•	"						(dB)	Remark
		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)		
					(dBuV/m)	(dBuV/m)				
1250.00	V	55.25		-10.79	44.46		74.00	54.00	-9.54	Peak
1433.33	V	55.39		-9.79	45.60		74.00	54.00	-8.40	Peak
4391.66	V	45.12		2.02	47.14		74.00	54.00	-6.86	Peak
5083.33	V	44.95		3.27	48.22		74.00	54.00	-5.78	Peak
N/A										
1280.00	Н	55.35		-10.63	44.72		74.00	54.00	-9.28	Peak
1433.33	Н	54.92		-9.79	45.13		74.00	54.00	-8.87	Peak
4233.33	Н	44.64		1.87	46.51		74.00	54.00	-7.49	Peak
4458.33	Н	44.14		2.08	46.22		74.00	54.00	-7.78	Peak
N/A										

#### **REMARKS**:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

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Reference No.:

Report No.: SZ080901B11-RP(RX)

Operation Mode: TX / CH High Test Date: September 12, 2008

**Temperature:** 27°C **Tested by:** Breeze Jiang

**Humidity:** 55 % RH **Polarity:** Ver. / Hor.

#### **Fundamental**

Freq.	Ant. Pol H/V	Peak Reading	AV Reading	Ant. / CL CF	Actual Fs Peak AV		Peak Limit	AV Limit	Peak Margin	AV Margin
(141112)	11/ V	(dBuV)	(dBuV)	(dB)			(dBuV/m)		•	(dB)
					(dBuV/m)	(dBuV/m)				
2480	V	100.31	88.73	-3.56	96.75	85.17	114	94	-17.25	-8.83
2480	Н	91.25	78.23	-3.56	87.69	74.67	114	94	-26.31	-19.33

Freq. (MHz)	Ant. Pol H/V	Peak Reading	AV Reading	Ant. / CL CF	Actual Fs Peak AV		Peak Limit	AV Limit	Margin (dB)	
(		(dBuV)	(dBuV)	(dB)				(dBuV/m)	` '	Remark
					(dBuV/m)	(dBuV/m)				
1250.00	V	55.11		-10.79	44.32		74.00	54.00	-9.68	Peak
1353.33	V	54.84		-10.23	44.61		74.00	54.00	-9.39	Peak
4708.33	V	44.92		2.48	47.40		74.00	54.00	-6.60	Peak
4875.00	V	44.71		2.77	47.48		74.00	54.00	-6.52	Peak
N/A										
1203.33	Н	55.73		-11.05	44.68		74.00	54.00	-9.32	Peak
1376.66	Н	54.77		-10.10	44.67		74.00	54.00	-9.33	Peak
3458.33	Н	55.92	54.09	-2.90	53.02	51.19	74.00	54.00	-2.81	AVG.
3516.66	Н	55.86	53.90	-2.82	53.04	51.08	74.00	54.00	-2.92	AVG.
N/A										
	_			_	_		_			

#### **REMARKS**:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

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