

Report No. : AG029556-001 Date : 2006 December 16

Application No. : LG211875(2)

Client : Lexibook America

19591 NE10 AV Bay E - FL33179 Miami Beach

Miami Beach, FL 33180

United States

Sample Description : One(1) submitted sample(s) stated to be <u>Super Motor TV Game</u>

of Model No. JG5000US

Radio Frequency : 2.4G Hz Transmitter
Rating : 4 x 1.5V AA size batteries

No. of submitted sample: Two (2) set(s) ***

Date Received : 2006 November 07

Test Period : 2006 November 07 – 2006 Nov 13

Test Requested : FCC Part 15 Certification.

Test Method : 47 CFR Part 15 (10-1-05 Edition)

ANSI C63.4 – 2003

Test Result : See attached sheet(s) from page 2 to 11.

Conclusion : The submitted sample was found to comply with requirement of FCC Part 15

Subpart C.

For and on behalf of

CMA Industrial Development Foundation Limited

Authorized Signature : _______ V C C Danny Chui

Deputy Manager - EL. Division

Page 1 of 11



Report No. : AG029556-001 Date : 2006 December 16

Table of Contents

1	Gen	eral Information	3
	1.1	General Description	3
	1.2	Location of the test site	
	1.3	List of measuring equipment	5
2	Desc	cription of the radiated emission test	
	2.1	Test Procedure	
	2.2	Test Result	
	2.3	Radiated Emission Measurement Data	
3	Desc	cription of the Line-conducted Test	8
	3.1	Test Procedure	. 8
	3.2	Test Result	. 8
	3.3	Graph and Table of Conducted Emission Measurement Data	8
4 Photograp		ograph	. 9
	4.1	Photographs of the Test Setup for Radiated Emission and Conduction Emission	9
	4.2	Photographs of the External and Internal Configurations of the EUT	. 9
5	Supp	plementary document	
	5.1	Bandwidth	1(
	5.2	Duty cycle	1(
	5.3	Transmission time	1(
6	App	endices	1 1



Report No. : AG029556-001 Date : 2006 December 16

1 General Information

1.1 General Description

The equipment under test (EUT) is a transmitter for Super Motor TV Game. It operates at 2.45 GHz which is controlled by UZ2400 module. The EUT is powered by 4 x 1.5V AA size batteries and there are four control triggers in the EUT. When it switched on and press trigger keys once, it will transmit the radio signal to receiver.

The brief circuit description is listed as follows:

- U2 2400 and associated circuit act as RF module.
- Crystal 20MHz and associated circuit act as oscillator.
- GPC41A2 and associated circuit act as encoder.



Report No. : AG029556-001 Date : 2006 December 16

1.2 Location of the test site

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2003. A Semi-Anechoic Chamber Testing Site is set up for investigation and located at:

Ground Floor, Yan Hing Centre, 9 – 13 Wong Chuk Yeung Street, Fo Tan, Shatin, New Territories, Hong Kong.

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.4 – 2003. A shielded room is located at :

Ground Floor, Yan Hing Centre, 9 – 13 Wong Chuk Yeung Street, Fo Tan, Shatin, New Territories, Hong Kong.



Report No. : AG029556-001 Date : 2006 December 16

1.3 List of measuring equipment

Equipment	Manufacturer	Model No.	Serial No.
EMI Test Receiver	R&S	ESCI	100152
Spectrum Analyzer	R&S	FSP30	100628
Horn Antenna	Schwarzbeck	9120D	9120D-531
Broadband Pre-amplify	Schwarzbeck	9718	9178-119



Report No. : AG029556-001 Date : 2006 December 16

2 Description of the radiated emission test

2.1 Test Procedure

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 - 2003.

The equipment under test (EUT) was placed on a non-conductive turntable with dimensions of 1.5m x 1m and 0.8m high above the ground. 3m from the EUT, a broadband antenna mounting on the mast received the signal strength. The turntable was rotated to maximize the emission level. The antenna was then moving along the mast from 1m up to 4m until no more higher value was found. Both horizontal and vertical polarization of the antenna were placed and investigated.

For below 30MHz, a loop antenna with its vertical plane is placed 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1 m above the ground.

The device was rotated through three orthogonal axes to determine which attitude and configuration produce the highest emission during measurement.

2.2 Test Result

Peak Detector data was measured unless otherwise stated.

* Emissions appearing within the restricted bands shall follow the requirement of section 15.205.

It was found that the EUT meet the FCC requirement.

All other measurements are well below the limit. Thus, those highest emissions were presented in next page (section 2.3).

Page 6 of 11



Report No. : AG029556-001 Date : 2006 December 16

2.3 Radiated Emission Measurement Data

Radiated emission

pursuant to

the requirement of FCC Part 15 subpart C

Frequency (GHz)	Polarity (H/V)	Reading at 3m	Antenna and Cable factor	Field Strength	Limit at 3m (dBµV/m)	Margin (dB)
, ,		$(dB\mu V/m)$	(dB)	$(dB\mu V/m)$	• /	,
2.450	Н	60.3	27.7	88.0	94.0	-6.0
*4.900	Н	12.9	31.4	44.3	54.0	-9.7
*7.350	Н	5.5	36.5	42.0	54.0	-12.0
9.794	Н	5.2	38.2	43.4	54.0	-10.6
12.251	Н	5.3	38.6	43.9	54.0	-10.1
14.702	Н	4.7	41.4	46.1	54.0	-7.9



Report No. : AG029556-001 Date : 2006 December 16

3 Description of the Line-conducted Test

3.1 Test Procedure

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.4 - 2003. The EUT was setup as described in the procedures, and both lines were measured.

3.2 Test Result

No measurement is required as the EUT is a battery-operated product.

3.3 Graph and Table of Conducted Emission Measurement Data

Not Applicable



Report No. : AG029556-001 Date : 2006 December 16

4 Photograph

4.1 Photographs of the Test Setup for Radiated Emission and Conduction Emission

For electronic filing, the photos are saved with filename TSup1.jpg to TSup2.jpg

4.2 Photographs of the External and Internal Configurations of the EUT

For electronic filing, the photos are saved with filename ExPho1.jpg to ExPho2.jpg and InPho1.jpg to InPho2.jpg.



Report No. : AG029556-001 Date : 2006 December 16

5 Supplementary document

The following document were submitted by applicant, and for electronic filing, the document are saved with the following filenames:

Document	Filename
ID Label/Location	LabelSmp.jpg
Block Diagram	BlkDia.pdf
Schematic Diagram	Schem.pdf
Users Manual	UserMan.pdf
Operational Description	OpDes.pdf

5.1 Bandwidth

The plot on saved in TestRpt2.pdf shows the fundamental emission is confined in the specified band. It also shows that the band edge met the 15.215 requirement.

5.2 Duty cycle

N/A

5.3 Transmission time

N/A



Report No. : AG029556-001 Date : 2006 December 16

6 Appendices

A1.	Photos of the set-up of Radiated Emissions	1	page
A2.	Photos of External Configurations	1	page
A3.	Photos of Internal Configurations	1	page
A4.	ID Label/Location	1	page
A5.	Bandwidth Plot	1	page
A6.	Block Diagram	1	page
A7.	Schematics Diagram	1	page
A8.	User Manual	15	pages
A9.	Operation Description	1	page

***** End of Report *****