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MPE REPORT

According to
FCC Rules 47 CFR §2.1091 & FCC OET Bulletin 65 supplement C

Application No.:	SHEM110900119402
Address of Applicant:	Hansong(Nanjing) Technology Ltd.
Equipment Under Test (EUT):	
NOTE: The following sample(s) submitted was/were identified on behalf of the client as	
FCC ID:	XCO-HSG17AIR
IC:	7756A-HSG17AIR
Fundamental Frequency :	2412-2462 MHz
Marking:	Klipsch
Name:	Klipsch G-17 Air
Model No.:	G-17 Air
Standards:	FCC OET Bulletin 65 supplement C: 2001
Date of Receipt:	Oct. 22, 2011
Date of Test:	Oct. 27, 2011 to February 10, 2012
Date of Issue:	February 31, 2012
Test Result :	**PASS***

* In the configuration tested, the EUT complied with the standards specified above.

E&E Section Head
SGS-CSTC(Shanghai) Co., Ltd.

E&E EMC Engineer
SGS-CSTC(Shanghai) Co., Ltd.

Contents

1 General Information

1.1 Client Information

Applicant:	Hansong(Nanjing) Technology Ltd.
Address of Applicant:	8th Kangping Road, Jiangning Economy and Technology Development Zone,Nanjing,201106,China
Manufacturer:	Hansong(Nanjing) Technology Ltd.
Address of Manufacturer:	8th Kangping Road, Jiangning Economy and Technology Development Zone,Nanjing,201106,China

1.2 General Description of E.U.T.

EUT Name:	Klipsch
Model No.:	Klipsch G-17 Air
Frequency Band and Channels :	2412-2462 MHz
	11 Channel(Low :2412, Middle:2437, High: 2462)
Modulation Type:	802.11b DSSS
	802.11g OFDM

1.3 Details of E.U.T.

Hardware Version:	N/A
Software Version:	N/A
Power Supply:	Input:100-240VAC,50/60Hz 1.6A, Output:27.0VDC, 2.4A

1.4 Test Location

All tests were performed at SGS E&E EMC lab

SGS-CSTC EMC Laboratory, No.588 West Jindu Road,Songjiang District,Shanghai,China
Tel:+86 21 6191 5666 Fax:+86 21 6191 5655

1.5 Test Equipment Information

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due date
1	Spectrum Analyzer	Rohde & Schwarz	FSP-30	100324	2011-04-19	2012-04-18

1.6 Test Confident level

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L0599)**

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. Date of expiry: 2014-07-26.

- **FCC – Registration No.: 402683**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683, Expiry Date: 2015-02-22.

- **Industry Canada (IC) – IC Assigned Code: 8617A**

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A. Expiry Date: 2014-09-20.

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3172 and C-3514 respectively. Date of Registration: 2009-11-30. Date of Expiry: 2012-03-17.

2 Test Standards and Limits

The Equipment under Test (EUT) has been tested at SGS's (own or subcontracted) laboratories.

The following table summarizes the specific reference documents such as harmonized standards or test specifications which were used for testing as SGS's (own or subcontracted) laboratories.

Identity	Document Title	Version
FCC Rules 47 CFR§2.1091	Radiofrequency radiation exposure evaluation:mobile devices	-
FCC OET Bulletin 65 supplement C	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields	2001

In the configuration tested, the EUT complied with the standards specified above.

FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	$(180/f^2)$*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz *Plane-wave equivalent power density

3 Summary of Results

Frequency Band	Limit (mW/cm^2)	Result (mW/cm^2)	Verdict
2405-2480MHz	1.0	0.017	Pass

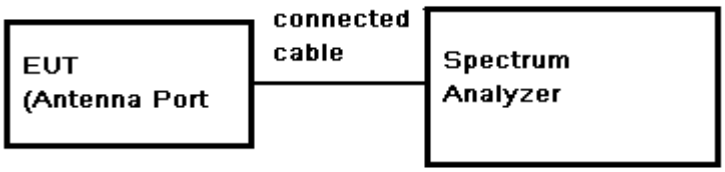
4 Measurement and Calculation

4.1 Maximum transmit power

Test Date: Oct 30 2011

EUT Operation:: Test in fixing frequency operating mode at lowest, middle and highest frequency.

Test Configuration:



Test Results

The test was performed with 802.11b, the data was shown the worst case 802.11b 1Mbps.

CH	Frequency (MHz)	Reading Peak Power(dBm)	Cable Loss (dB)	Output Peak Power (dBm)	Limit (dBm)	Result	Max Out Power (mW)
LOW	2412	10.36	2.30	12.66	30	PASS	18.45
MID	2437	9.55	2.30	11.85	30	PASS	15.31
HIGH	2462	9.96	2.30	12.26	30	PASS	16.83

The test was performed with 802.11g, the data was shown the worst case 802.11g 6Mbps.

CH	Frequency (MHz)	Reading Peak Power(dBm)	Cable Loss (dB)	Output Peak Power (dBm)	Limit (dBm)	Result	Max Out Power (mW)
LOW	2412	15.10	2.30	17.40	30	PASS	54.95
MID	2437	14.03	2.30	16.33	30	PASS	42.95
HIGH	2462	13.65	2.30	15.95	30	PASS	39.36

4.2 SAR Calculation

Test Results: MPE Limit Calculation: the EUT's operating frequencies 2412MHz to 2462MHz; the highest power is 802.11g 6Mbps mode Low channel(2412MHz). The Measured maximum radiated power is 17.40 dBm(54.95mW).with maximum peak gain is 2.0dBi. Duty factor is 100%

Equation from page 19 of OET 65, Edition 97-01

$S = PG^* \text{ Duty factor} / 4\pi R^2$

P =Power Input to antenna (54.95mWatts)
G =Antenna Gain (1.58numeric)
R = distance to the center of radiation of antenna (in meter) = 20cm
$S = (54.95 * 1.58 * 1) / (4\pi * 20^2) = 0.017 mW/cm^2$

MPE limit = $1.0 mW/cm^2$

Note:

1) P (Watts)= $10^{\frac{dBm}{10}}$ / 1000

2) G (Antenna gain in numeric) = 10^ (Antenna gain in dBi /10)

5 EUT Constructional Photos

For the detail information of construction photos please refer to the External photo.pdf and Internal photo.pdf

THE END OF REPORT