



ISO/IEC17025 Accredited Lab.

FCC ID TEST REPORT

for

OTT

MODEL: FREEOTT

Trade Mark: N/A

FCC ID: 2AACAFFREEOTT

Test Report Number: 1304001374

Issued Date: May 16, 2013

Issued for

Syabas Technology Hong Kong, Limited

FLAT/RM 316A 3/F , ENTERPRISE PLACE PHASE ONE HONG KONG SCIENCE
PARK PAK SHEK KOK TAI PO NT

Issued By:

SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO., LTD.

5/F,Block 4, Anhua Industrial Zone., No.8 Tairan Rd. Chegongmiao,
Futian District Shenzhen, China

TEL: +86-755-83448688

FAX: +86-755-83442996

TABLE OF CONTENTS

1 TEST CERTIFICATION3

2 EUT DESCRIPTION4

3. MAXIMUM PERMISSIBLE EXPOSURE.....5

3.1 APPLICABLE STANDARD5

3.2 MPE CALCULATION METHOD6

3.3 CALCULATED RESULT AND LIMIT6

1 TEST CERTIFICATION

Product:	OTT
Model:	FREEOTT
Trade Mark	N/A
Applicant:	Syabas Technology Hong Kong, Limited FLAT/RM 316A 3/F , ENTERPRISE PLACE PHASE ONE HONG KONG SCIENCE PARK PAK SHEK KOK TAI PO NT
Manufacturer:	Syabas Technology Hong Kong, Limited FLAT/RM 316A 3/F , ENTERPRISE PLACE PHASE ONE HONG KONG SCIENCE PARK PAK SHEK KOK TAI PO NT
Tested:	April 14, 2013 ~ April 26, 2013
Test Voltage:	DC 5V (Adapter Input AC 120V/60Hz)
Applicable Standards:	OET Bulletin 65 ANSI C63.4:2003

The above equipment has been tested by SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO., LTD. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Tested By:  *Date:* 2013-06-11
(Brown Lu)

Check By:  *Date:* 2013-06-11
(Terry Tang)

Approved By:  *Date:* 2013-06-11
(Jack Chung)

2 EUT DESCRIPTION

Product	OTT
Trade Mark	N/A
Model	FREEOTT
Applicant	Syabas Technology Hong Kong, Limited
EUT Type	<input checked="" type="checkbox"/> Engineering Sample. <input type="checkbox"/> Product Sample, <input type="checkbox"/> Mass Product Sample.
Serial Number	N/A
Antenna Type	PCB Antenna
Antenna Gain	0dBi
EUT Power Rating	DC 5V Adapter: RG05U-CE Input: AC 100-240V 50/60Hz 0.2A Output: DC 5.0V 1A
Temperature Range(Operating)	-10~50℃
Operating Frequency (WIFI)	802.11b/g/n-HT20: 2412MHz - 2462MHz
Type of Modulation	CCK, DQPSK, DBPSK for DSSS BPSK, QPSK, 16QAM and 64QAM for OFDM
Number of Channels	802.11b/g/n-HT20: 11 channels
Data rate	802.11b: 1-11Mbps 802.11g: 6-54Mbps 802.11n-20M: 6.5-72.2Mbps

Note: N/A stand for no applicable.

3. Maximum permissible exposure

3.1 applicable standard

Systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

(A) Limits for Occupational/Controlled 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)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	F/300	6
1500-100,000	-	-	5	6

(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)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	F/1500	30
1500-100,000	-	-	1.0	30

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

3.2 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d}$$

$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Average RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

From the EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained.

3.3 Calculated Result and Limit

Antenna Type: PCB Antenna

Antenna Gain: 0dBi(

Max conducted output power: 16.78dBm (refer to Page 45 of Report: **1304001374**)

Antenna Gain (numeric)	Peak Output Power(dBm)	Peak Output Power (mW)	Power Density(s) (mW/cm ²)	Limit of Power Density(s) (mW/cm ²)	Test Result
1	16.78	47.64	0.1	1.0	Compliance