

FCC TEST REPORT  
for  
SHENZHEN EGREAT TECHNOLOGY CO.,LTD.  
HD Network Set-Top Box  
Model Number:  
X3,X1,X2,X5,X6,X7,X8,X9,X10,X20,X30,X60,X70  
FCC ID: 2AAWZX3

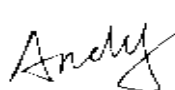


Prepared for : ShenZhen Egreat Technology Co.,Ltd.  
Address : 4/F, 1Building, ShaSan Chuang Ye Industrial Park, Sha Jing,  
            Bao An,ShenZhen ,China

Prepared by : Keyway Testing Technology Co., Ltd.  
Address : Baishun Industrial Zone, Zhangmutou Town,  
            Dongguan, Guangdong, China

Tel: 86-769-8718 2258  
Fax: 86-769-8718 1058

Report No. : 13KWE0827F  
Date of Test : Aug. 18~25, 2013  
Date of Report : Aug. 26, 2013

# Keyway Testing Technology Co., Ltd.

<b>Applicant:</b>	ShenZhen Egreat Technology Co.,Ltd.		
<b>Address:</b>	4/F, 1Building, ShaSan Chuang Ye Industrial Park, Sha Jing, Bao An, ShenZhen ,China		
<b>Manufacturer:</b>	ShenZhen Egreat Technology Co.,Ltd.		
<b>Address:</b>	4/F, 1Building, ShaSan Chuang Ye Industrial Park, Sha Jing, Bao An, ShenZhen ,China		
<b>E.U.T:</b>	HD Network Set-Top Box		
<b>Model Number:</b>	X3,X1,X2,X5,X6,X7,X8,X9,X10,X20,X30,X60,X70		
<b>Trade Name:</b>	-----	<b>Serial No.:</b>	-----
<b>Date of Receipt:</b>	Aug. 16, 2013	<b>Date of Test:</b>	Aug. 18~25, 2013
<b>Test Specification:</b>	FCC Part 15, Subpart C: Oct. 1, 2012 ANSI C63.4:2009		
<b>Test Result:</b>	The equipment under test was found to be compliance with the requirements of the standards applied.		
	<b>Issue Date: Aug. 26, 2013</b>		
<b>Tested by:</b>	<b>Reviewed by:</b>	<b>Approved by:</b>	
			
Andy Gao / Engineer	Jade Yang/ Supervisor	Chris Du / Manager	
<b>Other Aspects:</b>	None.		
Abbreviations: OK/P=passed    fail/F=failed    n.a/N=not applicable    E.U.T=equipment under			
This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Keyway Testing Technology Co., Ltd.			

# 1. RF EXPOSURE EVALUATION

## 1.1. Limits

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f <sup>2</sup> )	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				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	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**

**Friis transmission formula:  $P_d = (P_{out} * G) / (4 * \pi * r^2)$**

Where

**P<sub>d</sub>** = power density in mW/cm<sup>2</sup>, **P<sub>out</sub>** = output power to antenna in mW;

**G** = gain of antenna in linear scale, **π** = 3.1416;

**R** = distance between observation point and center of the radiator in cm

P<sub>d</sub> is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

## 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

## 1.3. Test Result of RF Exposure Evaluation

	<b>Channel Frequency (MHz)</b>	<b>Output power to antenna (mW)</b>	<b>Power Density at R=20cm (mW/cm<sup>2</sup>)</b>	<b>Limit (mW/cm<sup>2</sup>)</b>	<b>Result</b>
802.11b	2412	20.512	0.0051	1.0	Pass
	2437	20.654	0.0052	1.0	Pass
	2462	20.559	0.0052	1.0	Pass
802.11g	2412	10.186	0.0026	1.0	Pass
	2437	10.257	0.0026	1.0	Pass
	2462	10.399	0.0026	1.0	Pass
802.11n (HT20)	2412	10.209	0.0026	1.0	Pass
	2437	10.375	0.0026	1.0	Pass
	2462	10.116	0.0025	1.0	Pass
802.11n (HT40)	2422	9.268	0.0023	1.0	Pass
	2437	9.705	0.0024	1.0	Pass
	2452	9.419	0.0024	1.0	Pass