

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

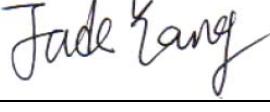
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Report No. : 13KWE0827F
Date of Test : Aug. 18~25, 2013
Date of Report : Aug. 26, 2013

Keyway Testing Technology Co., Ltd.

Applicant:	ShenZhen Egreat Technology Co.,Ltd. 4/F, 1Building, ShaSan Chuang Ye Industrial Park, Sha Jing, Bao An, ShenZhen ,China		
Manufacturer:	ShenZhen Egreat Technology Co.,Ltd. 4/F, 1Building, ShaSan Chuang Ye Industrial Park, Sha Jing, Bao An, ShenZhen ,China		
E.U.T:	HD Network Set-Top Box		
Model Number:	X3,X1,X2,X5,X6,X7,X8,X9,X10,X20,X30,X60,X70		
Trade Name:	-----	Serial No.:	-----
Date of Receipt:	Aug. 16, 2013	Date of Test:	Aug. 18~25, 2013
Test Specification:	FCC Part 15, Subpart C: Oct. 1, 2012 ANSI C63.4:2009		
Test Result:	The equipment under test was found to be compliance with the requirements of the standards applied.		
Issue Date: Aug. 26, 2013			
Tested by:	Reviewed by:	Approved by:	
			
Andy Gao / Engineer	Jade Yang/ Supervisor	Chris Du / Manager	
Other Aspects:			
None.			
Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under			
<i>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.</i>			

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 ²)	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 ²)	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 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

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

Where

P_d = power density in mW/cm², **P_{out}** = output power to antenna in mW;

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

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

P_d is the limit of MPE, 1 mW/cm². 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

	Channel Frequency (MHz)	Output power to antenna (mW)	Power Density at R=20cm (mW/cm ²)	Limit (mW/cm ²)	Result
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