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# Application for FCC Certification On behalf of

Hisense Electric Co., Ltd.

Product Name: Remote Control

Model No.: ERF6C11

FCC ID: W9HBRCB0005

(MPE Calculation)

Prepared For: Hisense Electric Co., Ltd.

No.218 Qianwangang Road, Economy & Technology

Development Zone, Qingdao, China

Prepared By: Audix Technology (Shanghai) Co., Ltd.

3F 34Bldg 680 Guiping Rd., Caohejing Hi-Tech Park, Shanghai 200233, China

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Report No. : ACI-F14014 Date of Test : Feb. 12, 2014 Date of Report : Feb. 20, 2014 Hisense Electric Co., Ltd. FCC ID: W9HBRCB0005 Page 2 of 7

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Feb. 20, 2014

#### TEST REPORT FOR FCC CERTIFICATE

**Applicant** 

Hisense Electric Co., Ltd.

Manufacturer

Hisense Electric Co., Ltd.

EUT Description:

Remote Control

(A) Model No.

ERF6C11,

(B) Power Supply :

DC 3V (AA Battery\*3)

(C) Test Voltage

DC 3V

Test Procedure Used:

FCC OET Bulletin 65 August 1997

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC OET Bulletin 65.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report also shows that the EUT (M/N: ERF6A11, ERF6B11), which was tested on Feb. 12, 2014 is technically compliance with the FCC limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test:	Feb. 12, 2014	Date of Report :
Producer :	Zmily Zm EMILY ZHU / Assistant	
Review:	DIO YANG / Deputy Manager	
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For and on behalf of Audix Technology (Shanghai) Co., Ltd.

Signatory:

Authorized Signature EMC SAMMY

CHEN / Deputy Manager

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# 1 GENERAL INFORMATION

# 1.1 Description of Equipment Under Test

Description : Remote Control

Model Number : ERF6C11

Type of EUT ☐ Production ☐ Pre-product ☐ Pro-type

Radio Tech : Bluetooth

Freq. Band :  $2402 \text{ MHz} \sim 2480 \text{ MHz}$ 

Total 79 Channels

Tested Freq. : 2402 MHz (Channel 00)

2441 MHz (Channel 39) 2480 MHz (Channel 78)

Antenna Gain : -2.0 dBi

Applicant : Hisense Electric Co., Ltd.

No.218 Qianwangang Road, Economy & Technology

Development Zone, Qingdao, China

Manufacturer : Hisense Electric Co., Ltd.

No.218 Qianwangang Road, Economy & Technology

Development Zone, Qingdao, China

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# 1.2 Description of Test Facility

Site Description : Sept. 17, 1998 file on (Semi-Anechoic Chamber) Mar 16, 2012 Renewed

Federal Communications Commission

FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046, USA

Name of Firm : Audix Technology (Shanghai) Co., Ltd.

Site Location : 3 F 34 Bldg 680 Guiping Rd.,

Caohejing Hi-Tech Park, Shanghai 200233, China

FCC registration Number : 91789

Accredited by NVLAP, Lab Code: 200371-0

# 1.3 Measurement Uncertainty

Output Power Expanded Uncertainty :  $U = \pm 1.56 \text{ dB}$ 

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#### 2 SUMMARY OF STANDARDS AND RESULTS

### 2.1 Applicable Standard

FCC OET Bulletin 65:1997

#### 2.2 Specification Limits

Limits for General Population/Uncontrolled Exposure

Frequency	Electric Field	Magnetic Field	Power	Averaging Time
Range	Strength (E)	Strength (H)	Density (S)	$ E ^2$ , $ H ^2$ or S
(MHz)	(V/m)	(A/m)	$(mW/cm^2)$	(minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f2)*	30
30-300	27.5	0.073	0.2	30
300-1500			f/150	30
1500-100,000			1.0	30

f = frequency in MHz

NOTE: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The limit value 1.0mW/cm<sup>2</sup> is available for this EUT.

#### 2.3 MPE Calculation Method

$$S = PG/(4 \pi R^2)$$

$$R = [PG/(4 \pi S)]^{0.5}$$

where: S = power density (in appropriate units, e.g. mW/ cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW) (the measured power value see Report: F13102 Section 5.6)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

<sup>\*</sup>Plane-wave equivalent power density

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#### 2.4 Calculated Result

### 2.4.1 Radio Frequency Radiation Exposure Evaluation – Non-EDR

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	$(mW/cm^2)$	$(mW/cm^2)$
2402	0.64	-2.0	0.63	0.000080	1.0
2441	0.64	-2.0	0.63	0.000080	1.0
2480	0.57	-2.0	0.63	0.000071	1.0

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	$(mW/cm^2)$	(cm)
2402	0.64	-2.0	0.63	1.0	0.18
2441	0.64	-2.0	0.63	1.0	0.18
2480	0.57	-2.0	0.63	1.0	0.17

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.18cm from all persons.

### 2.4.2 Radio Frequency Radiation Exposure Evaluation – EDR

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	$(mW/cm^2)$	$(mW/cm^2)$
2402	0.79	-2.0	0.63	0.000099	1.0
2441	0.79	-2.0	0.63	0.000099	1.0
2480	0.71	-2.0	0.63	0.000089	1.0

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm <sup>2</sup> )	(cm)
2402	0.79	-2.0	0.63	1.0	0.20
2441	0.79	-2.0	0.63	1.0	0.20
2480	0.71	-2.0	0.63	1.0	0.19

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.20cm from all persons.