

Application for FCC Certification
On behalf of

Huang Zhou International(HK) Ltd

Product Name: Electric heater

Model No.: ND-36

FCC ID: 2ALY0SHWZ001

(MPE Calculation)

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Report No. : ACI-F17205
Date of Test : Jun. 01, 2017
Date of Report : Jun. 20, 2017

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TEST REPORT FOR FCC CERTIFICATE

Applicant : Huang Zhou International(HK) Ltd
Manufacturer : Shanghai Huangzhou Industry Co.,Ltd

EUT Description : Electric heater
(A) Model No. : ND-36,
(B) Power Supply : AC 120V/60Hz
(C) Test Voltage : AC 120V/60Hz

Test Procedure Used:

FCC OET Bulletin 65

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: ND-36), which was tested on Jun. 01, 2017 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 contains data that are not covered by the NVLAP accreditation.

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 : Jun. 01, 2017 Date of Report : Jun. 20, 2017

Producer : Alan He
ALAN HE / Assistant

Review : Byron Wu
BYRON WU / Deputy Assistant Manager

AUDIX[®] For and on behalf of
Audix Technology (Shanghai) Co., Ltd.

Signatory : Byron Kwo
Authorized Signature(s) BYRON KWO/Assistant General Manager

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test

Description : Electric heater

Model Number : ND-36

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

Radio Tech : Bluetooth (GFSK, $\pi/4$ -DQPSK)

Freq. Band : 2402 MHz ~ 2480 MHz
Total 79 Channels

Tested Freq. : 2402 MHz (Channel 00)
2441 MHz (Channel 39)
2480 MHz (Channel 78)

Antenna Gain : 1.2 dBi

Applicant : Huang Zhou International(HK) Ltd
Room 12B, no.83 An Shun Road Shanghai

Manufacturer : Shanghai Huangzhou Industry Co.,Ltd

1.2 Description of Test Facility

Site Description (Semi-Anechoic Chamber) : Sept. 17, 1998 file on
Jan. 15, 2015 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 : $U = 1.56 \text{ dB}$

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 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/150	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

*Plane-wave equivalent power density

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/cm² 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/ cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

(the measured power value see Report: F17204 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)

2.4 Calculated Result

2.4.1 Radio Frequency Radiation Exposure Evaluation – DH1

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm ²)	(mW/cm ²)
2402	0.751	1.2	1.318	0.00019691	1.0
2441	0.809	1.2	1.318	0.00021213	1.0
2480	0.667	1.2	1.318	0.00017489	1.0

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm ²)	(cm)
2402	0.751	1.2	1.318	1.0	0.28
2441	0.809	1.2	1.318	1.0	0.29
2480	0.667	1.2	1.318	1.0	0.26

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.29cm from all persons.

2.4.2 Radio Frequency Radiation Exposure Evaluation – 2DH5

Frequency	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm ²)	(mW/cm ²)
2402	0.910	1.2	1.318	0.0002386	1.0
2441	0.664	1.2	1.318	0.0001741	1.0
2480	0.656	1.2	1.318	0.0001720	1.0

Separation distance R= 20cm.

Frequency	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(mW)	(dBi)	(Numeric)	(mW/cm ²)	(cm)
2402	0.910	1.2	1.318	1.0	0.31
2441	0.664	1.2	1.318	1.0	0.26
2480	0.656	1.2	1.318	1.0	0.26

The antenna used for this transmitter must be installed to provide a separation distance of at least 0.31cm from all persons.