

Report No.: NTC2407242F01

# RF EVALUATION TEST REPORT

Applicant.....::Vornado Air LLC

Address.....: :415 East 13th Street, Andover KS, USA

Manufacturer.....: :Jiangmen Honetian Technology Co., Ltd. (G&H)

Address.....: No.71, Xinle Third Road, Lile, Jianghai District, Jiangmen, Guangdong, China

Factory.....: :Jiangmen Honetian Technology Co., Ltd. (G&H)

Address.....: No.71, Xinle Third Road, Lile, Jianghai District, Jiangmen, Guangdong, China

Product Name.....: :Remote Control

Brand Name.....: : VORNADO, SHARPER IMAGE

Model No. .....: :UH200

FCC ID.....: :WOT-UH200

Measurement Standard.....: :47 CFR PART 2, Section 2.1093

Receipt Date of Samples.... : July 10, 2024

Date of Report.....: September 11, 2024

This report shows that above equipment is technically compliant with the requirements of the standards above. All test results in this report apply only to the tested sample(s). Without prior written approval of Dongguan Nore

Testing Center Co., Ltd, this report shall not be reproduced except in full.

Prepared by

Alina Guo / Project Engineer

Iori Fan / Authorized Signatory





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## **Revision History**

Report Number	Description	Issued Date
NTC2407242F01	Initial Issue	2024-09-11





## 1. General Description of EUT

Product Information	
Product Name:	Remote Control
Main Model Name:	UH200
Additional Model Name:	N/A
Model Difference:	N/A
S/N:	2407-4008
Brand Name:	VORNADO, SHARPER IMAGE
Hardware Version:	HTD-2229-V02
Software Version:	8M203G-SSOP20-0x7BEF-V1.1-20230307
Rating:	DC 3V from AAA battery*2
Classification:	Class B
Typical arrangement:	Table-top
I/O Port:	Refer to the user manual
Accessories Information	
Adapter:	N/A
Cable:	N/A
Other:	N/A
Additional Information	
Note:	N/A
Remark:	All the information above are provided by the manufacturer. More detailed feature
	of the EUT please refers to the user manual.





Technical Specification			
Declaring the Frequency:	433.90MHz		
Modulation Type:	ASK		
Antenna Type:	PCB antenna		
Antenna Gain:	0 dBi (Declared by manufacturer)		
Number of Channels:	1		





## 2. Test Facility and Location

Test Site	:	Dongguan Nore Testing Center Co., Ltd. (Dongguan NTC Co., Ltd.)			
Accreditations and	:	The Laboratory has been assessed and proved to be in compliance with			
Authorizations		CNAS/CL01			
		Listed by CNAS, August 13, 2018			
		The Certificate Registration Number is L5795.			
		The Certificate is valid until August 13, 2030			
		The Laboratory has been assessed and proved to be in compliance with			
		ISO17025			
		Listed by A2LA, November 01, 2017			
		The Certificate Registration Number is 4429.01			
		The Certificate is valid until December 31, 2025			
		Listed by FCC, November 06, 2017			
		Test Firm Registration Number: 907417			
		Listed by Industry Canada, June 08, 2017			
		The Certificate Registration Number. Is 46405-9743A			
		The CAB identifier number: CN0015			
Test Site Location	:	Building D, Gaosheng Science and Technology Park, Hongtu Road,			
		Nancheng District, Dongguan City, Guangdong Province, China			





## 3. Applicable Standards and References

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

### **Test Standards:**

47 CFR Part 1, 1.1307 47 CFR Part 2, 2.1093 KDB 447498 D04 v01



### 4. Maximum Permissible Exposure Limit

According to 47 CFR Part 1, 1.1307, for single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if: 47 CFR Part 1, 1.1307

- (A) The available maximum time- averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);
- (B) Or the available maximum time- averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold  $P_{th}$  (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by:

$$P_{th} \; (\text{mW}) = \begin{cases} ERP_{20 \; cm} (d/20 \; \text{cm})^x & d \leq 20 \; \text{cm} \\ \\ ERP_{20 \; cm} & 20 \; \text{cm} < d \leq 40 \; \text{cm} \end{cases}$$

Where.

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ cm}\sqrt{f}}\right)$$
 and  $f$  is in GHz;

And,

$$ERP_{20\;cm}\;({\rm mW}) = \begin{cases} 2040f & 0.3\;{\rm GHz} \le f < 1.5\;{\rm GHz} \\ \\ 3060 & 1.5\;{\rm GHz} \le f \le 6\;{\rm GHz} \end{cases}$$

d = the minimum separation distance (cm) in any direction from any part of the device antenna(s) or radiating structure(s) to the body of the device user.

For multiple RF sources: Multiple RF sources are exempt if:



- (A) The available maximum time- averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters be-tween any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required). This exemption may not be used in conjunction with other exemption criteria other than those is paragraph (b)(3)(i)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(i)(A).
- (B) in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^{a} \frac{P_i}{P_{th,i}} + \sum_{j=1}^{b} \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^{c} \frac{Evaluated_k}{Exposure\ Limit_k} \le 1$$

Where.

a = number of fixed, mobile, or portable RF sources claiming exemption using para-graph (b)(3)(i)(B) of this section for P<sub>th</sub>, including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using para-graph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or port-able RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

*P<sub>i</sub>*= the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

 $P_{th,i}$ = the exemption threshold power (Pth) ac-cording to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i.

ERP;= the ERP of fixed, mobile, or portable RF source j.

 $ERP_{th,j}$ = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least  $\lambda/2\pi$  according to the applicable formula of paragraph (b)(3)(i)(C) of this section.



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 $Evaluated_k$ = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

Exposure Limit<sub>k</sub>= either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from  $\S 1.1310$  of this chapter.

#### 5. RF Exposure Evaluation Results

Single RF Source						
Mode Frequency (MHz)		Max. Power E (dBuV/m)	Max. Power EIRP (dBm)	Max. Power (mW)	Part 1.1307 Option (A) P <sub>th</sub> (mW)	
ASK	433.90	82.69	-12.57	0.055	1	

EIRP = E +20log d - 104.8

where d is the measurement distance = 3m, E=82.69dBuv/m

#### Conclusion:

According to 47 CFR §1.1307 option A and 47 CFR §2.1093, the RF exposure analysis concludes that the product is compliant with the FCC RF exposure requirements in portable environment without distance restrictions.