

## **FURN FAN CORPORATION**

# **TEST REPORT**

Model:

FT1210ZW

**REPORT NUMBER** 

240700059THC-001

**ISSUE DATE** 

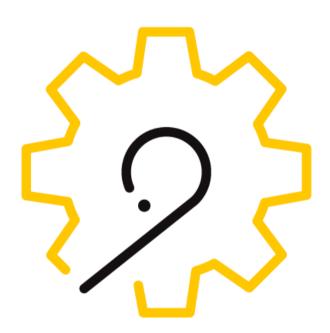
Aug. 13, 2024

**PAGES** 

7



GFT-OP-10h (28-Nov-2018) © 2020 Intertek





# Maximum Permissible Exposure (MPE) Evaluation Report

FURN FAN CORPORATION
No. 12-1, Lane 338, Sec. 2, Feng Hsing Road, Hsin-Tien Village,
Tan-Tzu Hsiang, 427 Taichung, Taiwan
Remote Controller
FT1210ZW
2BHHV-FT1210ZW
47 CFR FCC 1.1310
KDB 447498
Intertek Testing Services Taiwan Ltd
Hsinchu Laboratory
No. 17, Ln. 246, Niupu S. Rd. Xiangshan Dist.,
Hsinchu City 300075, Taiwan
TW0597

Zero Chen Engineer

Rico Deng Reviewer

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.



### **Revision History**

Report No.	Issue Date	Revision Summary
240700059THC-001	Aug. 13, 2024	Original report



#### **Table of Contents**

1. General Information	4
1.1 Identification of the EUT	4
1.2 Antenna description	
1.3 Peripherals equipment	
2. Test specifications	ς.
2.1 RF Exposure calculations	
2.2 Operation mode	
2.3 Test equipment	
2.4 Test Set-up	
·	
3. Test results	7



#### 1. General Information

#### 1.1 Identification of the EUT

Product:	Remote Controller
Model No.:	FT1210ZW
Operating Frequency:	433.92MHz
Rated Power:	DC 12V
Power Cord:	N/A
Sample receiving date:	2024/02/22
Sample condition:	Workable
Test Date(s):	2024/06/06

#### 1.2 Antenna description

Antenna Type : Printed Antenna Connector Type : Fixed

#### 1.3 Peripherals equipment

Peripherals	Brand	Model No.	Serial No.	Data cable
Battery (Customer provided)	ALLKEY	N/A	N/A	N/A



#### 2. Test specifications

#### 2.1 RF Exposure calculations

According to KDB 447498 D01, Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

Clause 4.3: General SAR test reduction and exclusion guidance Sub , clause 4.3.1: Standalone SAR test exclusion considerations

a) For 100 MHz to 6 GHz and test separation distances  $\leq$  50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)]  $\cdot$  [Vf(GHz)]  $\leq$  3.0 for 1-g SAR, and  $\leq$  7.5 for 10-g extremity SAR, where

 $Appendix \ A$   $SAR \ Test \ Exclusion \ Thresholds \ for \ 100 \ MHz - 6 \ GHz \ and \le 50 \ mm$ 

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	
300	27	55	82	110	137	1
450	22	45	67	89	112	1
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	SAR Test Exclusion
1900	11	22	33	44	54	Threshold (mW)
2450	10	19	29	38	48	Threshold (III VI)
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	
MHz	30	35	40	45	50	mm
150	232	271	310	349	387	
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
			120	1.12		
1500	73	86	98	110	122	SAR Test
1500 1900	65	86 76	98 87			SAR Test Exclusion Threshold (mW)
		86	98	110	122	Exclusion
1900	65	86 76	98 87 77 63	110 98 86 71	122 109	Exclusion
1900 2450	65 57	86 76 67	98 87 77	110 98 86	122 109 96	Exclusion
1900 2450 3600	65 57 47	86 76 67 55	98 87 77 63	110 98 86 71	122 109 96 79	Exclusion

<u>Note</u>: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g SAR Test Exclusion Thresholds indicated above. These thresholds do not apply, by extrapolation or other means, to occupational exposure limits.



#### 2.2 Operation mode

Press EUT button to transmit

The signal is maximized through rotation and placement in the three orthogonal axes.

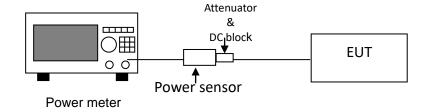


After verifying three axes, we found the maximum electromagnetic field was occurred at Y axis. The final test data was executed under this configuration.

#### 2.3 Test equipment

Equipment	Brand	Model No.	Serial No.	Calibration Date	Next Calibration Date
Power Meter	Anritsu	ML2495A	0844001	2024/01/08	2025/01/07
Power Sensor	Anritsu	MA2491A	031543	2024/01/08	2025/01/07
20dB Attenuator	Mini-Circuits	BW-S20W5+	N/A	2024/05/23	2025/05/23

#### 2.4 Test Set-up



Remark: Cable loss = 21 dB



#### 3. Test results

Temperature: 23  $^{\circ}$ C Relative Humidity: 76 % Test date: 2024/06/06

Frequency (MHz)	Output Power (dBm)	Tune-up Tolerance (dB)	Tune-up Output Power (dBm)	Tune-up Output Power (mW)	Exemption Limit (mW)
433.92	1.2	2	3.2	2.09	22.54

KDB 447498: SAR evaluation – Exemption limits for routine evaluation for 5mm