

FURN FAN CORPORATION

TEST REPORT

Model:

FT1210ZW

REPORT NUMBER

240700059THC-001

ISSUE DATE

Aug. 13, 2024

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DOCUMENT CONTROL NUMBER

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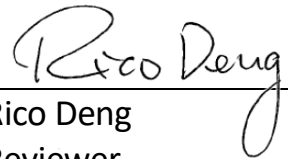
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Maximum Permissible Exposure (MPE) Evaluation Report

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


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Revision History

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

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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 ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

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

Appendix A

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 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	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
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	SAR Test Exclusion Threshold (mW)
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
1500	73	86	98	110	122	
1900	65	76	87	98	109	
2450	57	67	77	86	96	
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	

Note: 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.



X axis



Y axis



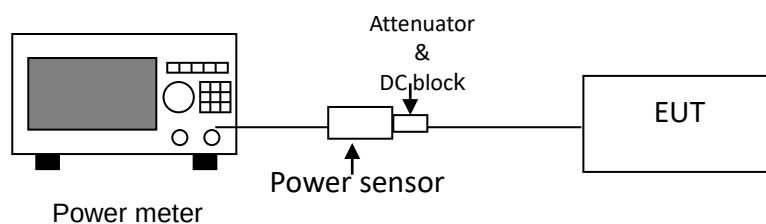
Z axis

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 °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