



MPE Report

Applicant : Tomofun Co., Ltd.

Product Type : Furbo Dog Camera

Trade Name : Furbo

Model Number : Furbo2.5T

Applicable Standard : IEEE Std.C95.1

47 CFR § 2.1091 / 47 CFR § 1.1310

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Issued by

Approved By : KYUS

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Taiwan Accreditation Foundation accreditation number: 1330

Test Firm MRA designation number: TW0010

Note:

- 1. The test results are valid only for samples provided by customers and under the test conditions described in this report.
- 2. This report shall not be reproduced except in full, without the written approval of A Test Lab Technology Corporation.
- 3.The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.

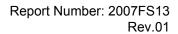






Revision History

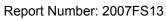
Rev.	Issued Date	Revisions	Revised By		
00	Jul. 13, 2020) Initial Issue Nicol			
01	Jul. 24, 2020	P7 Revised Test Result	Nicole Chu		





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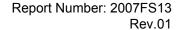




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1. Reference Applicable Standard

Standard	Description	Version	
ANSI/IEEE C95.1	American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300 KHz to 100 GHz, New York.	1992	
47 CFR Part §2.1091	Radiofrequency radiation exposure evaluation: mobile devices.	-	
47 CFR Part §1.1310	Radiofrequency radiation exposure limits.	-	





2. Description of Equipment under Test (EUT)

Applicant	Tomofun Co., Ltd. 4F., No.178, Sec. 3, Minquan E,Rd.,Songshan Dist Taipei City 105, Taiwan							
Manufacturer	Chicony Electronics (Thailand) Co., Ltd. 700/60 Moo 1 T.Bankao A.Phanthong Chonburi Province 20160							
Product Type	Furbo Dog Camera	a						
Trade Name	Furbo							
Model Number	Furbo2.5T							
FCC ID	2AIBVTFFBV3	2AIBVTFFBV3						
		Frequency Range (MHz)						
Frequency Range	IEEE 802.11b / 802	2412 - 2462						
	Bluetooth LE	2402 - 2480						
	Model	Туре	Max. Gain	(dBi)				
Antenna Information	Funda 2 FT	EDC Antonno	WLAN 2.4 GHz	1.18				
	Furbo2.5T	FPC Antenna	Bluetooth	1.18				
Antenna Delivery	1TX							
RF Evaluation	0.016 mW/cm ²							
Operate Temp. Range	ate Temp. Range 0~+35°C							

The above equipment was tested by A Test Lab Techno Corp. For compliance with the requirements set forth in 47 CFR § 2.1091 / 47 CFR § 1.1310. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.



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3. Human Exposure Assessment

Due to the design and installation of this product, it is not possible to conduct SAR evaluation. This is because client either manufactures or supplies the antenna(s) that will be used in the installation of this product. Therefore, this product will be evaluated as a mobile device per 47 CFR § 1.1310 titled "Radiofrequency radiation exposure limits", generally referred to as MPE limits.

In 47 CFR § 2.1091, paragraph (b) defines a mobile device as "a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 cm is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. " This product is intended to be installed into a vehicle such that the unit is physically secured at one location. In the installation guide supplied with the product,

Client has made the following statement: "IMPORTANT: To meet the FCC's RF Exposure Guidelines, the antenna should be installed so there is at least 20 cm of separation between the body of the user and nearby persons and the antenna". Based on the installation of the transceiver and the antenna, the transmitters radiating structure is more than 20 cm from the user. Thus, this product is a "mobile device" as defined in section § 2.1091 paragraph (b).

Exposure evaluation

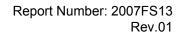
$$S_{eirp} = \frac{EIRP}{4\pi d^2} = \frac{PG}{4\pi d^2} \left(W / m^2 \right)$$

Where

S: is the input power (W);

G: is the antenna gain;

d: is the distance between antennas and evaluation point (m).

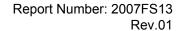




3.1 Conducted Power

Band	Date Rate or Sub-test	СН	Frequency (MHz)	Average Conducted power		
				ANT-0		
				dBm		
	1M	1	2412	17.25		
802.11b		6	2437	17.31		
		11	2462	17.29		
	6M	1	2412	16.94		
802.11g		6	2437	16.98		
		11	2462	17.07		
		1	2412	16.51		
802.11n_HT20	6.5M	6	2437	16.88		
		11	2462	16.81		

Band	Date Rate	Frequency (MHz)	Average Conducted power (dBm)	
		2402	6.32	
Bluetooth LE	1Mbps	2440	6.24	
		2480	6.90	





4. Power Density Limit – RF Exposure Evaluation

Thy In 47 CFR § 1.1310, use of the device as based upon the user's awareness and ability to exercise control over human exposure. The two categories defined are Occupational / Controlled Exposure and General Population / Uncontrolled. These two categories are defined as follow:

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/cm²)	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 / 1,500	30				
1,500-100,000 -		-	1.0	30				
	Limits for O	ccupational / Controlled	Exposure					
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time E ², H ² or S (minutes)				
0.3-3.0	0.3-3.0 614 1		(100)*	6				
3.0-30	3.0-30 1,842 / f		(900 / f ²)*	6				
30-300	30-300 61.4		1.0	6				
300-1,500	300-1,500 -		F/300	6				
1,500-100,000	-	-	5	6				



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5. Test Result

	I Rand I	Frequency	Limit (mw)/cm ²	Distance	Tune-up Power	ANT N Gain		Duty Cycle	Power with Duty cycle	Power Density
Antenna		(MHz)		(cm)	(dBm)		Gain		(mW)	(mw)/cm ²
				[R]	[P]	(dBi)	[G]		[P]x[G]	[S]
Bluetooth	2.4GHz	2402-2480	10	20	7.00	1.18	1.31	1	6.57	0.001
Wi-Fi Antenna	2.4GHz	2412-2462	10	20	17.50	1.18	1.31	1	73.67	0.015

Note:

- Mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less.
- 2. We used the maximum power and gain to provide MPE results.
- 3. The Numeric Gain calculated by 10^(ant. Gain(dBi) /10).
- 4. The MPE results are evaluated by lowest data rate for WLAN.

Simultaneous Transmitting:

Total MPE = 2.4GHz MPE = 0.001 + 0.015 = 0.016 (mw)/ cm² < 10 (mw)/ cm²

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