

# **RF Exposure Evaluation Declaration**

FCC ID: 2ATTC-C1

Applicant: Shenzhen Lefeet Innovation Technology Co., Ltd

Brand Name: LEFEET

- Product: C1 Remote Controller
- Model No.: C1
- FCC Rule Part(s): FCC Part 2.1093
- Result: Complies

Reviewed By:

Sunny Sun

Approved By:

Robin Wu



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

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# **Revision History**

Report No.	Version	Description	Issue Date	Note
2301RSU006-U4	V01	Initial Report	2023-04-26	Valid



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### 1. General Information

### 1.1. Applicant

Shenzhen Lefeet Innovation Technology Co., Ltd

Zone A, 2/F, Building A, Junxiangda, 9 Zhongshanyuan Road, Nanshan District, 518040 Shenzhen, China

#### 1.2. Manufacturer

Shenzhen Lefeet Innovation Technology Co., Ltd

Zone A, 2/F, Building A, Junxiangda, 9 Zhongshanyuan Road, Nanshan District, 518040 Shenzhen, China

#### 1.3. Testing Facility

	Test Site – MRT Suzhou Laboratory						
	Laboratory Location (Suzhou - Wuzhong)						
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China Laboratory Location (Suzhou - SIP)						
	4b Building, Liand	lo U Valley, No.200	Xingpu Rd., Shengpu	u Town, Suzhou Indu	strial Park, China		
	Laboratory Accre	editations					
	A2LA: 3628.01		CNAS	5: L10551			
	FCC: CN1166		ISED:	CN0001			
	VCCI:	□R-20025	□G-20034	C-20020	T-20020		
	VCCI	□R-20141	□G-20134	C-20103	□T-20104		
	Test Site – MRT S	Shenzhen Laborat	ory				
	Laboratory Loca	tion (Shenzhen)					
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China						
	Laboratory Accreditations						
	A2LA: 3628.02	LA: 3628.02 CNAS: L10551					
	FCC: CN1284	84 ISED: CN0105					
	Test Site – MRT Taiwan Laboratory						
	Laboratory Location (Taiwan)						
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) Laboratory Accreditations						
	TAF: L3261-19072	25					
	FCC: 291082, TW	/3261	ISED:	TW3261			



#### **1.4. Product Information**

Product Name C1 Remote Controller		
Model No.	C1	
SRD Specification	923MHz	
Temperature	-10 ~ 40°C	
Power Supply	By Battery	
Nata		

Note:

The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.

#### 1.5. Applied Standards

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

• FCC Part 2.1093 & KDB 447498 D04 Interim General RF Exposure Guidance v01

#### **1.6. Device Classification**

According to the user manual, this device is classified as a portable device. So, the RF exposure evaluation requirements of § 2.1093 for portable device exposure conditions subject to MPE limits.



## 2. **RF Exposure Evaluation**

#### 2.1. Test Limits

According to FCC §1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in §1.1307(b)

Frequency Range	Electric Field	Magnetic Field	Power Density	Average Time	
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm <sup>2</sup> )	(Minutes)	
	(A) Limits fo	r Occupational/ Contro	l Exposures		
0.3-3.0	614	1.63	*(100)	≤6	
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	<6	
30-300	61.4	0.163	1.0	<6	
300-1,500			f/300	<6	
1,500-100,000			5	<6	
	(B) Limits for General Population/ Uncontrolled Exposures				
0.3-1.34	614	1.63	*(100)	<30	
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	<30	
30-300	27.5	0.073	0.2	<30	
300-1,500			f/1500	<30	
1,500-100,000			1.0	<30	

Limits For Maximum	Permissible	Exposure (MPE)

f= frequency in MHz. \* = Plane-wave equivalent power density.



#### 2.2. MPE Exemptions

**For single RF sources** (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph §1.1307(b)(2) of this section): A single RF source is exempt if:

**(Option 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 §1.1307(b)(3)(ii)(A) of this section.

Medical implant devices may only use this exemption and that in paragraph §1.1307(b)(3)(ii)(A);

**(Option 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 (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 is given by: P th(mW) =  $\{ERP_{20cm}(d / 20cm)^x d \le 20cm\}$ 

 $P th(mW) = \{ERP_{20cm} \ 20cm < d \le 40cm\}$ 

Where

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

and

 $ERP_{20cm}(mW) = \{2040f \ 0.3GHz \le f < 1.5GHz \\ ERP_{20cm}(mW) = \{3060 \ 1.5GHz \le f \le 6GHz \}$ 

(**Option C**) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of  $\lambda/4$  or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).



RF Source Frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1920R <sup>2</sup>
1.34-30	3450R <sup>2</sup> /f <sup>2</sup>
30-300	3.83R <sup>2</sup>
300-1,500	0.0128R <sup>2</sup> f
1,500-100,000	19.2R <sup>2</sup>

Table 1 to §1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

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 between 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 \$1.1307(b)(3)(i)(A) of this section. Medical implant devices may only use this exemption and that in paragraph \$1.1307(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.

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

1.

Where:

**a** = number of fixed, mobile, or portable RF sources claiming exemption using paragraph \$1.1307(b)(3)(i)(B) of this section for  $P_{th}$ , including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph 1.1307(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 portable 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 ( $P_{th}$ ) according to paragraph §1.1307(b)(3)(i)(B) of this section for fixed, mobile, or portable RF source *i*.

**ERP**<sub>*j*</sub> = the ERP of fixed, mobile, or portable RF source *j*.



**ERP**<sub>th,j</sub> = 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 §1.1307(b)(3)(i)(C) of this section.

**Evaluated**<sub>k</sub> = 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 §1.1310 of this chapter.



#### 2.3. Calculated Result

Product	C1 Remote Controller
Test Item	RF Exposure Evaluation

Test Mode	Frequency Range Max. Fundamental Radiated		Max. EIRP (dBm)	Tune-up EIRP
	(MHz)	Emission (dBµV/m)@3m		(dBm)
SRD	923	82.402	-12.798	-10

Note 1: Max. EIRP (dBm) = E (dBµV/m)@3m - 95.2 = -12.798 dBm

Note 2: Tune-up EIRP was declared by manufacturer.

#### For single RF source, Option A

The EUT available maximum time-averaged power is no more than 1 mW (0dBm).

Therefore, the device qualifies for RF exposure exemption.

The End