

#### Shenzhen Huaxia Testing Technology Co., Ltd

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### Report Template Revision Date: 2018-07-06

Report Template Version: V04

# **RF Exposure Evaluation Report**

**Report No.:** CQASZ20240601135E-02

Applicant: Shenzhen YiGuo Electronic Technology Co., Ltd.

Address of Applicant: 3F-10 Building, JiaYiDa Industrial Park, LiaoKeng New Village, Langxin

community, Shiyan Street, Baoan District, Shen Zhen, China

**Equipment Under Test (EUT):** 

**EUT Name:** Solar tire pressure monitoring

Model No.: KM-2T, KM-4T, KM-6T, KM-BT, KM-TK, KM-OE

Test Model No.: KM-6T
Brand Name: N/A

FCC ID: 2BHIA-KM-6T

Standards: 47 CFR Part 1.1307

47 CFR Part 2.1093

KDB447498D01 General RF Exposure Guidance v06

**Date of Receipt:** 2024-06-21

**Date of Test**: 2024-06-21 to 2024-07-10

Date of Issue: 2024-07-12
Test Result: PASS\*

\*In the configuration tested, the EUT complied with the standards specified above

Tested By:

(Lewis Zhou)

Timo Lei

(Timo Lei)

Approved By:

(Alex Wang)



The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.





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# 1 Version

### **Revision History Of Report**

Report No.	Version	Description	Issue Date
CQASZ20240601135E-02	Rev.01	Initial report	2024-07-12





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### Shenzhen Huaxia Testing Technology Co., Ltd

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# 3 General Information

# 3.1 Client Information

Applicant:	Shenzhen YiGuo Electronic Technology Co., Ltd.	
Address of Applicant:	3F-10 Building, JiaYiDa Industrial Park, LiaoKeng New Village, Langxin community,Shiyan Street,Baoan District,ShenZhen,China	
Manufacturer:	Shenzhen YiGuo Electronic Technology Co., Ltd.	
Address of Manufacturer:	3F-10 Building, JiaYiDa Industrial Park, LiaoKeng New Village, Langxin community,Shiyan Street,Baoan District,ShenZhen,China	
Factory:	Shenzhen YiGuo Electronic Technology Co., Ltd.	
Address of Factory:  3F-10 Building, JiaYiDa Industrial Park, LiaoKeng New Village, L community, Shiyan Street, Baoan District, ShenZhen, China		

# 3.2 General Description of EUT

Product Name:	Solar tire pressure monitoring		
Model No.:	KM-2T, KM-4T, KM-6T, KM-BT, KM-TK, KM-OE		
Test Model No.:	KM-6T		
Trade Mark:	N/A		
Software Version:	V01		
Hardware Version:	V5		
Sample Type:	☐ Mobile ☐ Portable		
Operation Frequency:	433.92MHz		
Channel Numbers:	1		
Modulation Type:	FSK		
Antenna Type:	PCB antenna		
Antenna Gain:	-5.76dBi		
Power Supply:	Button battery: DC 3V		



#### Shenzhen Huaxia Testing Technology Co., Ltd

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### 4 SAR Evaluation

### 4.1 RF Exposure Compliance Requirement

#### 4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### **4.1.2 Limits**

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $\leq$  5 mm, a distance of 5 mm is applied to determine SAR test exclusion





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### 4.1.3 EUT RF Exposure

$$EIRP = E_{Meas} + 20\log(d_{Meas}) - 104.7$$

where

EIRP is the equivalent isotropically radiated power, in dBm

 $E_{\rm Meas}$  is the field strength of the emission at the measurement distance, in dB $\mu$ V/m

 $d_{\text{Meas}}$  is the measurement distance, in m

Channel	EIRP (dBm)	Maximum tune-up Power (mW)	Exclusion threshold (mW)
Lowest			4
(2403MHz)	-20.31	0.01	1

EIRP=74.89-95.2=-20.31dbm=0.01mW<1mW

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20240601135E-01.