



MPE Report

Report No.:STS2604091H01

Issued for

Wuxi Wisen Innovation Co., Ltd.

Floor 12, Building 1, Phase III, International Life Science
Innovation Park, 6-2 Shensi Road, Xinwu District, Wuxi,
Jiangsu, China

Product Name: Vision Unit (TR)

Brand Name: WiSen®

Model Name: 3004

Series Model(s): 300X, Where X can be 0-F (Hexadecimal).

FCC ID: 2AUZW-3004

Test Standards: FCC 47CFR §2.1091

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.

**TEST REPORT****Applicant's Name** : Wuxi Wisen Innovation Co., Ltd.Address..... : Floor 12, Building 1, Phase III, International Life Science
Innovation Park, 6-2 Shensi Road, Xinwu District, Wuxi, Jiangsu,
China**Manufacturer's Name** : Wuxi Wisen Innovation Co., Ltd.Address..... : Floor 12, Building 1, Phase III, International Life Science
Innovation Park, 6-2 Shensi Road, Xinwu District, Wuxi, Jiangsu,
China**Product Description**

Product Name : Vision Unit (TR)

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Standards : FCC 47CFR §2.1091

447498 D04 Interim General RF Exposure Guidance v01

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reproduced, except in full, without the written approval of the Shenzhen STS Test Services Co., Ltd.**Date of Test**

Date of receipt of test item : 15 Apr. 2026

Date (s) of performance of tests..... : 15 Apr. 2026~21 Apr. 2026

Date of Issue : 21 Apr. 2026

Test Result : **Pass**

Testing Engineer :

(Aaron Bu)

Technical Manager :

(Skylar Li)

Authorized Signatory :

(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	21 Apr. 2026	STS2604091H01	ALL	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Vision Unit (TR)	
Brand	WiSen®	
Model Name	3004	
Series Model(s)	300X, Where X can be 0-F (Hexadecimal).	
Model Difference	Only difference in model name.	
Product Description	Operation Frequency:	LoRa: 902-928MHz GSM 850: 824 MHz ~ 849MHz GSM 1900: 1850 MHz ~ 1910MHz WCDMA 1900: 1850 MHz ~1910MHz WCDMA 1700: 1710 ~1755 MHz WCDMA 850: 824 MHz ~849MHz LTE Band 2:1850~1910MHz LTE Band 4:1710~1755MHz LTE Band 5:824~849MHz LTE Band 12:699~716MHz LTE Band 13:777~787MHz LTE Band 25:1850~1915MHz LTE Band 26:814~849MHz LTE Band 41:2496~2690MHz LTE Band 66:1710~1780MHz
	Modulation Type:	FSK/LoRa GSM: GMSK for GPRS; GMSK and 8PSK for EDGE WCDMA: QPSK; HSDPA:QPSK/16QAM;HSUPA:BPSK LTE: QPSK /16QAM
	Antenna gain:	LoRa: 5dBi GSM850:1dBi, GSM1900:2dBi; WCDMA B2: 2dBi, WCDMA B4: 5dBi, WCDMA B5: 1dBi; LTE Band2:8dBi, LTE Band4:5dBi, LTEBand5:8dBi,LTE Band12:7dBi, LTE Band13:8dBi, LTE Band25:8dBi, LTE Band26:8dBi, LTE Band41:8dBi, LTE Band66:5dBi
	Antenna Designation:	LoRa: Omni-directional GSM/WCDMA/ LTE:Dipole
Power Rating	Input: DC 3.6V form Battery	
Adapter	N/A	
Battery	Model: ER34615 Brand: Forte Rated Voltage: 3.6 V Capacity: 19000mAh	
Hardware Version	V1.2	
Software Version	V4524	



1.2 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01



2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

Follow the maximum permissible exposure (MPE) limits specified in 447498 D04 Interim General Radio Frequency Exposure Guidelines v01. The gain of the antenna used in the product was extracted from the supplied antenna data sheet and the maximum total power input to the antenna was also measured. Calculate the distance from the product to the MPE limit by the formula.

2.2 LIMIT

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

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

(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_{th} (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_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

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

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);



(C) Or using below table 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 λ 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	$1,920 R^2$.
1.34-30	$3,450 R^2/f^2$.
30-300	$3.83 R^2$.
300-1,500	$0.0128 R^2 f$.
1,500-100,000	$19.2 R^2$.



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

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

Where:

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

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of Part 1.1307 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_i = 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 (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i.

ERP_j = the ERP of fixed, mobile, or portable RF source j.

ERP_{th,j} = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least λ/2π according to the applicable formula of paragraph (b)(3)(i)(C) of Part 1.1307.

Evaluated_k = 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_k = 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.



2.3 TEST RESULT

Tune up

Mode	Detector	Turn up Power
GPRS 850	AV	34±1dBm
GPRS 1900	AV	30±1dBm
WCDMA Band 2	AV	24±1dBm
WCDMA Band 4	AV	23±1dBm
WCDMA Band 5	AV	24±1dBm
LTE Band 2	AV	23±1dBm
LTE Band 4	AV	23±1dBm
LTE Band 5	AV	25±1dBm
LTE Band 12	AV	24±1dBm
LTE Band 13	AV	21±1dBm
LTE Band 25	AV	23±1dBm
LTE Band 26	AV	23±1dBm
LTE Band 26(Part 90)	AV	24±1dBm
LTE Band 41	AV	23±1dBm
LTE Band 66	AV	22±1dBm

RF Function	Tune Up Power (dBm)	Tune Up Power (dBm)
SRD	12±1	13

RF Function	Frequency (GHz)	Separation distance (cm)	Tune Up Power (dBm)	ANT Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (W)	Limit (W)	Ratio	Result
SRD	0.905	20	13	5	18	15.85	0.038	0.463	0.083	Pass



Protocol	Fre. (MHz)	Separati on distance (cm)	Max Turn up power (dBm)	ANT Gain (dBi)	Max EIRP (dBm)	Max EIRP (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Ratio	Result
GPRS 850*	824	20	30	1	27.99	629.5	0.125	0.55	0.228	Pass
GPRS 1900*	1850	20	24	2	22.99	199.067	0.040	1	0.04	Pass
WCDMA B2	1850	20	25	2	27.00	501.187	0.100	1	0.1	Pass
WCDMA B4	1710	20	24	5	29.00	794.328	0.158	1	0.158	Pass
WCDMA B5	824	20	25	1	26.00	398.107	0.079	0.55	0.144	Pass
LTE B2	1910	20	24	8	24.00	251.19	0.3153	1.00	0.315	Pass
LTE B4	1755	20	24	5	24.00	251.19	0.1580	1.00	0.158	Pass
LTE B5	849	20	26	8	26.00	398.11	0.4997	0.57	0.877	Pass
LTE B12	716	20	25	7	25.00	316.23	0.3153	0.48	0.657	Pass
LTE B13	787	20	23	8	23.00	199.53	0.2505	0.52	0.482	Pass
LTE B25	1915	20	24	8	24.00	251.19	0.3153	1.00	0.315	Pass
LTE B26	849	20	24	8	24.00	251.19	0.3153	0.57	0.553	Pass
LTE B26(Part90)	849	20	25	8	25.00	316.23	0.3969	0.57	0.696	Pass
LTE B41	2690	20	24	8	24.00	251.19	0.3153	1.00	0.315	Pass
LTE B66	1780	20	24	5	24.00	251.19	0.1580	1.00	0.158	Pass

Multiple transmission:

$$\text{SRD} + \text{LTE B26(Part90)} = 0.083 + 0.696 = 0.779 < 1$$

Note: 1. The Maximum power is less than the limit, complies with the exemption requirements.

2. ERP=EIRP-2.15

*****END OF THE REPORT*****