

RF Exposure Evaluation Report

Report No.: 2405T75792EC

Applicant: Shenzhen Teslong Technology Co., Ltd.

Address: 2nd Floor, Block 4, Jinhua Industrial Park, East of Donghuan 2 avenue, Longhua, Shenzhen, China

Product Name: Smart inspection camera

Product Model: SI 400

Multiple Models: N/A

Trade Mark: **WÖHLER**

FCC ID: 2AXAVSI4002405

Standards: 47 CFR §1.1310
KDB 447498 D01 General RF Exposure Guidance v06

Test Date: 2024-05-16

Test Result: Complied

Report Date: 2024-05-30

Reviewed by:

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Revision History

Version No.	Issued Date	Description
00	2024-05-30	Original

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1 General Information

1.1 Client Information

Applicant:	Shenzhen Teslong Technology Co., Ltd.
Address:	2nd Floor, Block 4, Jinhua Industrial Park, East of Donghuan 2 avenue, Longhua, Shenzhen, China
Manufacturer:	Shenzhen Teslong Technology Co., Ltd.
Address:	2nd Floor, Block 4, Jinhua Industrial Park, East of Donghuan 2 avenue, Longhua, Shenzhen, China

1.2 Product Description of EUT

The EUT is Smart inspection camera that contains 2.4G WLAN radio.

Sample Serial Number	2LA6-1 (assigned by WATC)
Sample Received Date	2024-04-26
Sample Status	Good Condition
Frequency Range	2412MHz - 2472MHz(802.11b, g, n-HT20)
Maximum Conducted Output Power	9.16dBm
Modulation Technology	DSSS, OFDM
Antenna Gain [#]	0.67dBi
Spatial Streams	SISO (1TX, 1RX)
Power Supply	DC 3.7V from battery or DC 5.0V from USB port
Operating temperature [#]	0 deg.C to +45 deg.C
Adapter Information	N/A
Modification	Sample No Modification by the test lab

1.3 Laboratory Location

World Alliance Testing & Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Tel: +86-755-29691511, Email: qa@watc.com.cn

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

2 RF Exposure Evaluation

2.1 Standard

According to §1.1310, radio frequency devices shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB447498 D01 General RF Exposure Guidance v06:

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:

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

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

2.2 Result

Radio	Frequency (MHz)	Maximum Conducted Power including Tune-up Tolerance		Min. test separation distance (mm)	Result (1-g SAR)	Exclusion Limit (1-g SAR)	Verdict
		(dBm)	(mW)				
2.4G WLAN	2412-2472	9.5	8.91	5	2.8	3.0	Pass

Note: The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

Result: Complied, No need standalone SAR test.

---End of Report---