


RF Exposure Evaluation Report

Product : Wireless electronic endoscope
Trade mark :  戴杰斯特
Model/Type reference : See section 4.2
Serial Number : N/A
Report Number : EED32Q80318202
FCC ID : 2BFK8-GOSLINGQQ
Date of Issue : Apr. 17, 2024
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1091
47 CFR Part 2.1093
KDB 447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

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1 Version

Version No.	Date	Description
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3 General Information

3.1 Client Information

Applicant:	Huizhou Gosling Medical Technology Co. LTD
Address of Applicant:	Huinan Kechuang Center, Huatai South Road, Huihuan Street, Huicheng District, Huizhou city, Guangdong Province
Manufacturer:	Huizhou Gosling Medical Technology Co. LTD
Address of Manufacturer:	Huinan Kechuang Center, Huatai South Road, Huihuan Street, Huicheng District, Huizhou city, Guangdong Province
Factory:	Huizhou Gosling Medical Technology Co. LTD
Address of Factory:	Huinan Kechuang Center, Huatai South Road, Huihuan Street, Huicheng District, Huizhou city, Guangdong Province

3.2 General Description of EUT

Product Name:	Wireless electronic endoscope
Model No.(EUT):	QQ100P,QQ240P,QQ320P,QQ480P,QQ720P,QQ1080P,QQ1280P,QQ1560P,QQ2K,QQ4K,QQ8K,TT100P,TT240P,TT320P,TT480P,TT720P,TT1080P,TT1280P,TT1560P,TT2K,TT4K,TT8K,CC100P,CC240P,CC320P,CC480P,CC720P,CC1080P,CC1280P,CC1560P,CC2K,CC4K,CC8K,A1,A2,A3,A4,A5,A6,A7,A8,A9,X1,X2,X3,X4,X5,X6,X7,X8,M1,M2,M3,M4,M5,M6,M7,M8,M9,S1,S2,S3,S4,S5,S6,S7,S8,S9
Test Model No.:	QQ100P
Trade mark:	

3.3 Product Specification subjective to this standard

Frequency Range:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz IEEE 802.11n(HT40): 2422MHz to 2452MHz
Modulation Type:	IEEE for 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g :OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20 and HT40) : OFDM (64QAM, 16QAM,QPSK,BPSK)
Test Power Grade:	Default
Test Software of EUT:	Wifi Test Tool
Antenna Type:	PCB Antenna
Antenna Gain:	-4.12dBi
Power Supply:	Battery DC 3.7V
Sample Received Date:	Mar. 20, 2024
Sample tested Date:	Mar. 20, 2024 to Apr. 07, 2024
Remark:	<p>Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.</p> <p>Model No.: QQ100P,QQ240P,QQ320P,QQ480P,QQ720P,QQ1080P,QQ1280P,QQ1560P,QQ2K,QQ4K,QQ8K,TT100P,TT240P,TT320P,TT480P,TT720P,TT1080P,TT1280P,TT1560P,TT2K,TT4K,TT8K,CC100P,CC240P,CC320P,CC480P,CC720P,CC1080P,CC1280P,CC1560P,CC2K,CC4K,CC8K,A1,A2,A3,A4,A5,A6,A7,A8,A9,X1,X2,X3,X4,X5,X6,X7,X8,M1,M2,M3,M4,M5,M6,M7,M8,M9,S1,S2,S3,S4,S5,S6,S7,S8,S9</p> <p>Only the model QQ100P was tested. The difference between product models is only due to inconsistent sales channels, resulting in differences in models, other unchanged, will not affect the test results.</p>

3.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.

3.7 Other Information Requested by the Customer

None.

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 Limits

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula

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

where

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

and f is in GHz, d is the separation distance (cm), and ERP_{20cm} is per Formula (B.1).

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

4.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

4.1.3 EUT RF Exposure Evaluation

For Stand alone:

For 2.4G Wi-Fi:

Frequency (MHz)	Available maximum time-averaged power (dBm)	Antenna gain (dBi)	ERP (dBm)	Available maximum time-averaged power (mW)	Limit (mW)	Result
2437	3.88	-4.12	-2.39	2.443	≤2.756	PASS

Note:

- ① EIRP=Available maximum time-averaged power+Antenna gain;
- ② ERP=EIRP-2.15;
- ③ According to § 1.1307(b)(3)(i)(B), RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).
- ④ The test data please refer to the report of EED32Q80318201 and only the worst case data was recorded in the report.

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 CTI, this report can't be reproduced except in full.

*** End of Report ***