RF EXPOSURE EVALUATION REPORT

Applicant	:	MicroTech Medical (Hangzhou) Co.,Ltd.
Address of Applicant	:	No. 108 Liuze St., Cangqian, Yuhang District, Hangzhou, 311121 Zhejiang P.R.China.
Product Name	:	Blood Glucose Meter
Brand Name	:	GoChek2 Connect
Model Name	:	1018U+
Sample Acquisition Method	:	Sent by Client
Sample No.	:	H24110002-01#01
FCC ID	:	2ATOV-1018U
Standard	:	FCC Part 2.1093
Date of Receipt	:	2024-11-11
Date of Test	:	2024-11-11~ 2024-11-12
Date of Issue	:	2024-11-13

Remark:

This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

Prepared by: Erik. Yang (Erik Yang) Reviewed by: Jennifer zhou (Jennifer Zhou) Approved by: Echo Mu (Authorized signatory: Echo Mu)

RF EXPOSURE EVALUATION REPORT

Contents

RF EXPOSURE EVALUATION REPORT

1 General Information

1.1 Testing Laboratory

Company Name	ICAS Testing Technology Service (Shanghai) Co., Ltd.
Address	No.1298, Pingan Road, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

1.2 Details of Application

Applicant Company Name	MicroTech Medical (Hangzhou) Co.,Ltd.
Address	No. 108 Liuze St., Cangqian, Yuhang District, Hangzhou, 311121 Zhejiang P.R.China.
Contact Person	Xiaojing Zhao
Telephone	18989848417
Email	xiaojing.zhao@microtechmd.com
Manufacturer Company Name	MicroTech Medical (Hangzhou) Co.,Ltd.
Address	No. 108 Liuze St., Cangqian, Yuhang District, Hangzhou, 311121 Zhejiang P.R.China.
Factory Company Name	MicroTech Medical (Hangzhou) Co.,Ltd.
Address	No. 108 Liuze St., Cangqian, Yuhang District, Hangzhou, 311121 Zhejiang P.R.China.

1.3 Details of EUT

Product Name	Blood Glucose Meter
Brand Name	GoChek2 Connect
Test Model Name	1018U+
FCC ID	2ATOV-1018U
Frequency Range	2402MHz ~ 2480MHz
Modulation Type	GFSK
RF Output Power	0.71dBm
Antenna Type	PCB Antenna
Antenna Gain	0.01dBi
Hardware Version	DX-BT05
Software Version	V5.2.0

Note:

1. *The above information was declared by the manufacture.*
2. *For more details, please refer to the User's manual of the EUT.*

2 Assessment methods

According to KDB 447498 D04 Interim General RF Exposure Guidance v01

Appendix B

Exemptions for Single RF Sources

SAR-based thresholds are derived based on frequency, power, and separation distance of the RF source. The formula defines the thresholds in general for either available maximum time-averaged power or maximum time-averaged ERP, whichever is greater.

If the ERP of a device is not easily determined, such as for a portable device with a small form factor, the applicant may use the available maximum time-averaged power exclusively if the device antenna or radiating structure does not exceed an electrical length of λ/4.

As for devices with antennas of length greater than λ/4 where the gain is not well defined, but always less than that of a half-wave dipole (length λ/2), the available maximum time-averaged power generated by the device may be used in place of the maximum time-averaged ERP, where that value is not known.

The separation distance is the smallest distance from any part of the antenna or radiating structure for all persons, during operation at the applicable ERP. In the case of mobile or portable devices, the separation distance is from the outer housing of the device where it is closest to the antenna.

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 Pth (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). Pth is given by Formula (B.2).

$$P_{\text{th}}\ (\text{mW}) = \begin{cases} ERP_{20\ \text{cm}}(d/20\ \text{cm})^{x} & d \le 20\ \text{cm} \\ ERP_{20\ \text{cm}} & 20\ \text{cm} < d \le 40\ \text{cm} \end{cases} \qquad \text{(B.2)}$$

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 $ERP_{20\text{cm}}$ is per Formula (B.1).

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

The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)										
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

3 Conclusion

Per KDB 447498 D04 Interim General RF Exposure Guidance v01 Appendix B,

when the minimum test separation distance is 5mm, a distance of 5mm is applied to determine SAR test exclusion. The test exclusion threshold is <2.79mW(f=2.402GHz).

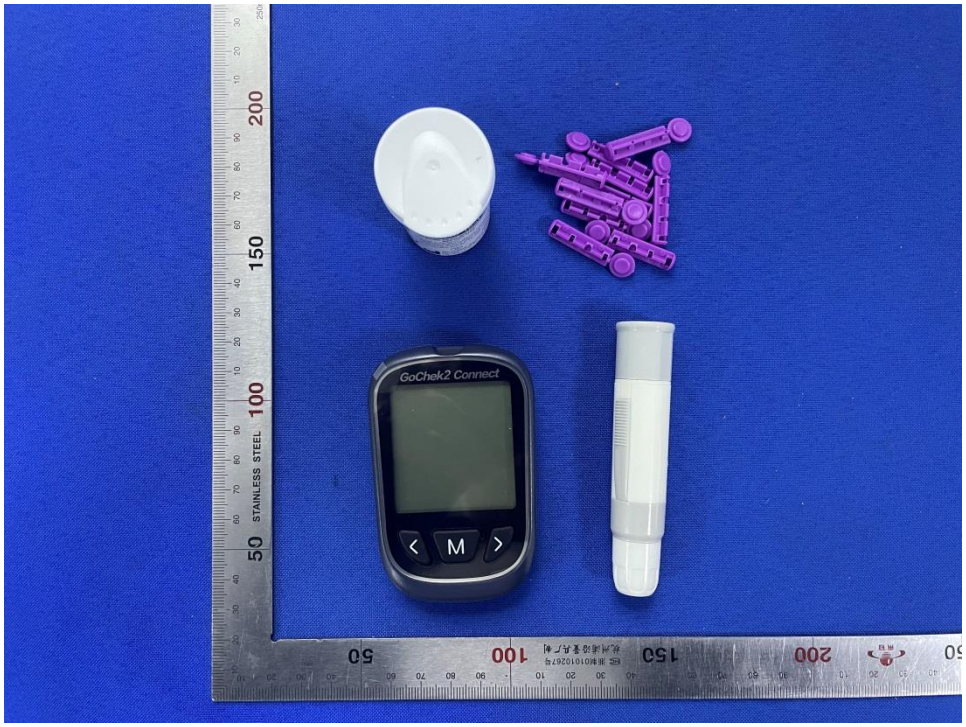
RF Maximum Output Power is 0.71dBm; EIRP=0.72dBm; ERP=EIRP-2.15=-1.43dBm

ERP is -1.43dBm (0.72mW) <2.79mW

So SAR testing is not required. RF exposure Evaluation Results: Compliance

4 Appendixes

4.1 Sample Photograph

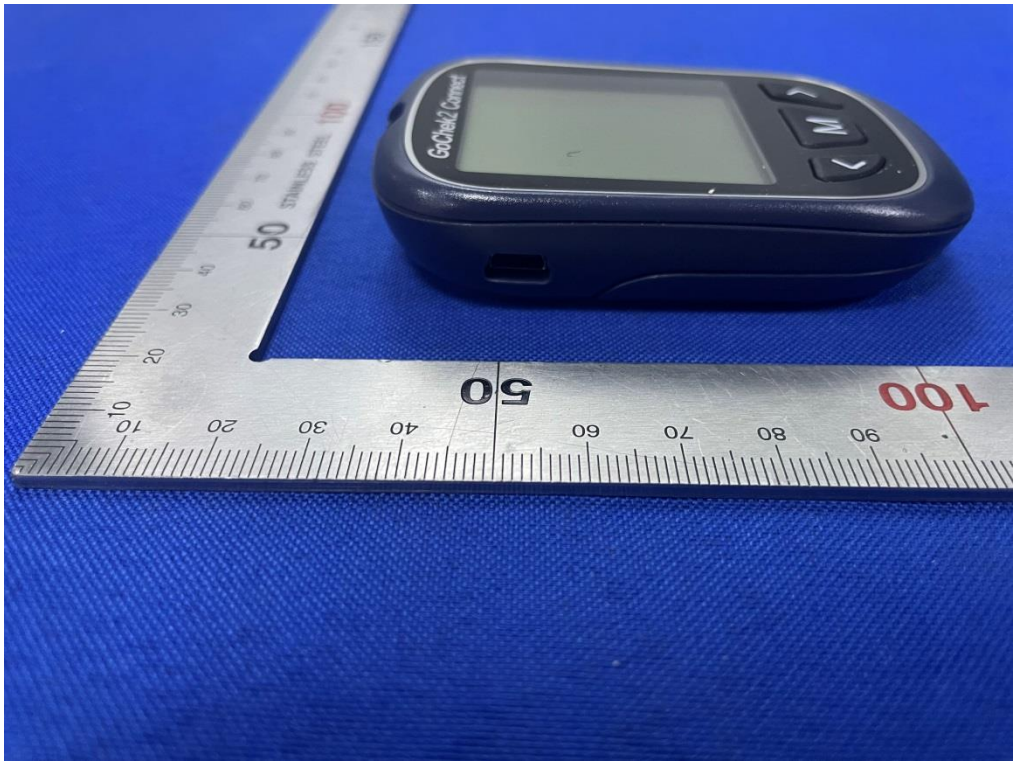


All of the sample

Front of the sample

RF EXPOSURE EVALUATION REPORT

Rear of the sample



Left of the sample

Right of the sample

Top of the sample

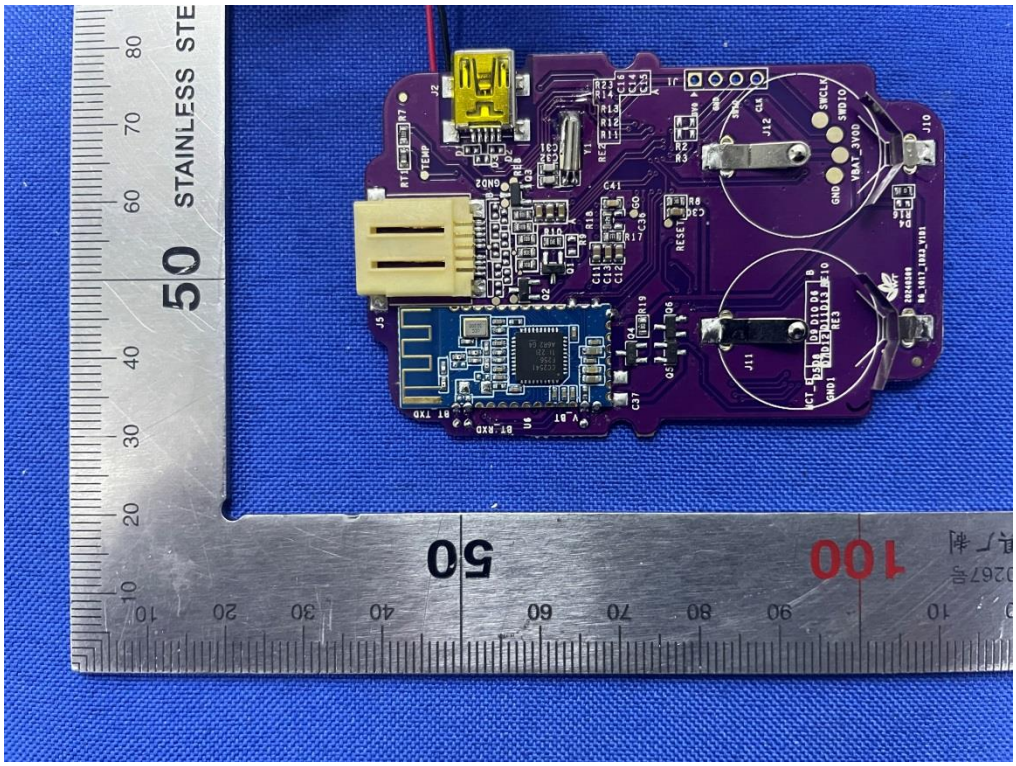
RF EXPOSURE EVALUATION REPORT

Bottom of the sample

Open-1 of the sample

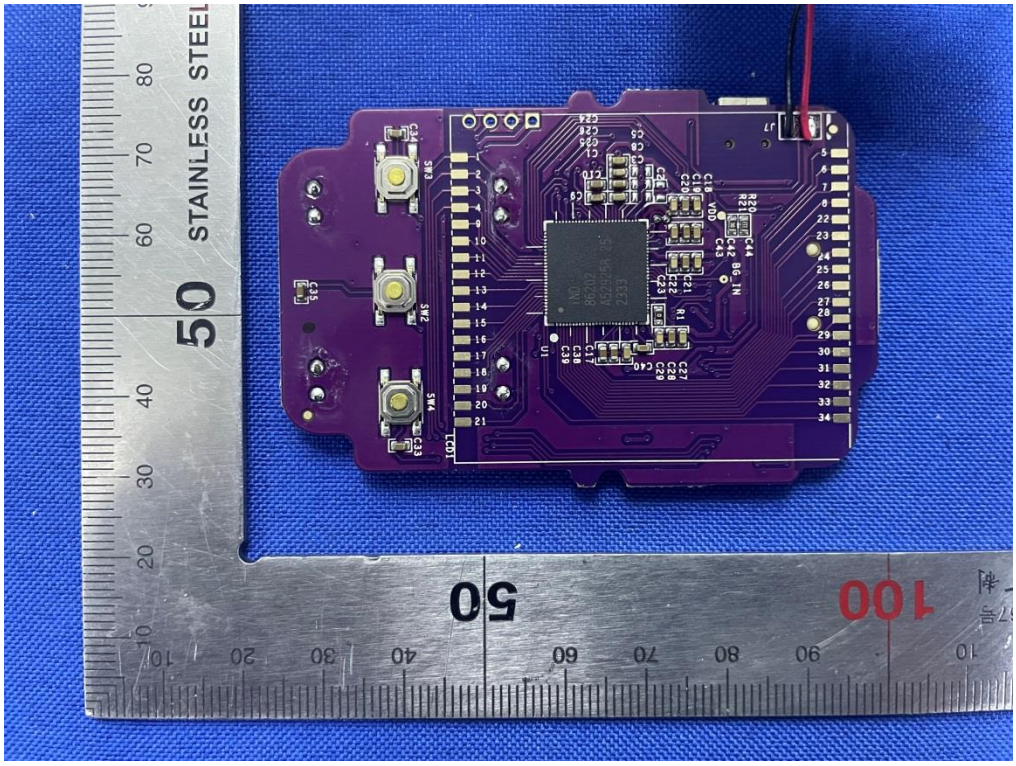
RF EXPOSURE EVALUATION REPORT

Open-2 of the sample

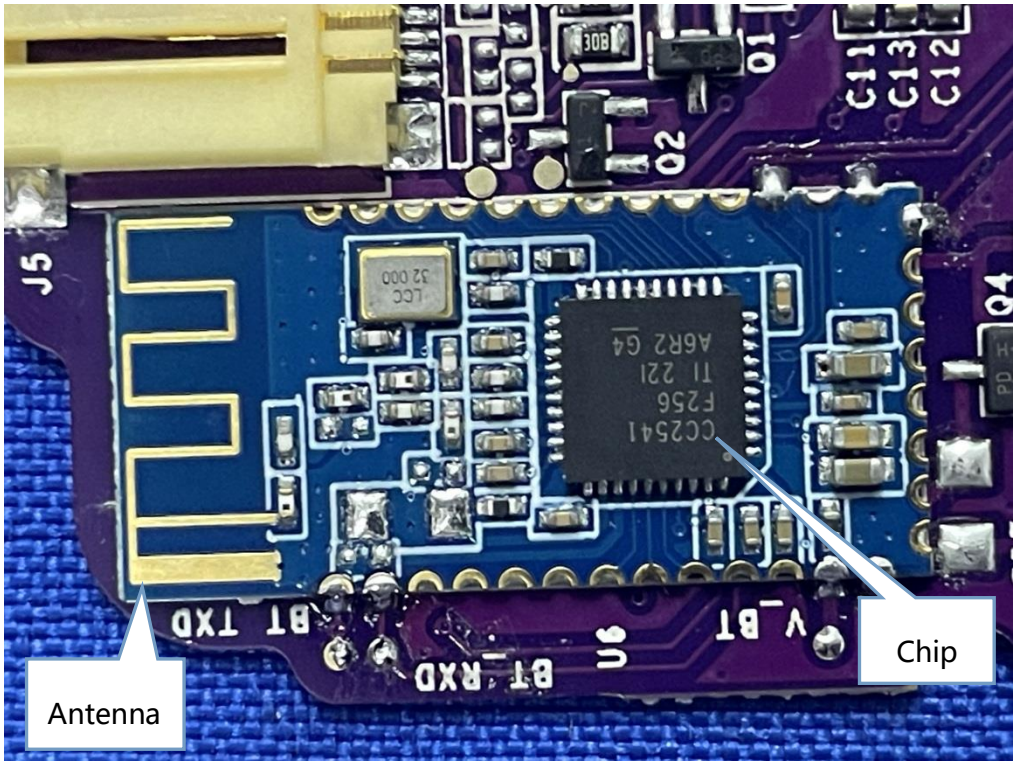


Internal-1 of the sample

RF EXPOSURE EVALUATION REPORT



Internal-2 of the sample



Antenna Position

End of the report