

RF Exposure Evaluation Report

Product : ELEHEAR Alpha
Trade mark : N/A
Model/Type reference : RIC 01
Serial Number : N/A
Report Number : EED32O81572703
FCC ID : 2A2EV-RIC01
Date of Issue : Mar. 03, 2023
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1091
47 CFR Part 2.1093
447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

Elevoc Technology Co.,Ltd
5 / F, Unit B, Block 12, Shenzhenwan Science
and Technology Ecological Garden, Nanshan Dist.,
Shenzhen, Guangdong, China

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Compiled by:

mark.chen.

Reviewed by:

Tom Chen

Mark Chen

Tom Chen

Approved by:

Aaron Ma

Date:

Mar. 03, 2023

Aaron Ma

Check No.:2412081022



2 Version

Version No.	Date	Description
00	Mar. 03, 2023	Original

3 Contents

	Page
1 COVER PAGE	1
2 VERSION	2
3 CONTENTS	3
4 GENERAL INFORMATION	4
4.1 CLIENT INFORMATION	4
4.2 GENERAL DESCRIPTION OF EUT	4
4.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD	4
4.4 TEST LOCATION	5
4.5 DEVIATION FROM STANDARDS	5
4.6 ABNORMALITIES FROM STANDARD CONDITIONS	5
4.7 OTHER INFORMATION REQUESTED BY THE CUSTOMER	5
5 SAR EVALUATION	6
5.1 RF EXPOSURE COMPLIANCE REQUIREMENT	6
5.1.1 Limits	6
5.1.2 Test Procedure	6
5.1.3 EUT RF Exposure Evaluation	7

4 General Information

4.1 Client Information

Applicant:	Elevoc Technology Co.,Ltd
Address of Applicant:	5 / F, Unit B, Block 12, Shenzhenwan Science and Technology Ecological Garden, Nanshan Dist., Shenzhen, Guangdong, China
Manufacturer:	Elevoc Technology Co.,Ltd
Address of Manufacturer:	5 / F, Unit B, Block 12, Shenzhenwan Science and Technology Ecological Garden, Nanshan Dist., Shenzhen, Guangdong, China
Factory:	Xiamen Wenatong Medical Technology Co., Ltd.
Address of Factory:	Room 805A, South Building A, Jianye Building, No. 96, Xiangxing Road, Hi-tech Torch Zone (Xiang 'an) Industrial Zone, Xiamen,China

4.2 General Description of EUT

Product Name:	ELEHEAR Alpha
Model No.(EUT):	RIC 01
Trade Mark:	N/A

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Test Power Grade:	Default
Test Software of EUT:	Non Signaling Test Tool
Antenna Type:	FPC Antenna
Antenna Gain:	0.76dBi
Power Supply:	DC 3.6V
Sample Received Date:	Jan. 10, 2023
Sample tested Date:	Jan. 10, 2023 to Feb. 28, 2023

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.

4.4 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

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 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 $ERP_{20 \text{ cm}}$ 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.

5.1.2 Test Procedure

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

5.1.3 EUT RF Exposure Evaluation**For Stand alone:****For BLE**

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2402	3.16	0.76	1.770	1.503	2.788	PASS

For BT Classic

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2402	3.07	0.76	1.680	1.472	2.788	PASS

Note:

- ① EIRP=conducted power+antenna gain;
- ② ERP=EIRP-2.15
- ③ 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 *****