

RF Exposure Evaluation Report

Product : Remote Control
Trade mark : N/A
Model/Type reference : YKR019
Serial Number : N/A
Report Number : EED32P80915602
FCC ID : 2BCCFYKR0198864
Date of Issue : Aug. 07, 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:

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2 General Information

2.1 Client Information

Applicant:	SHANGHAI YANGKAI ELECTRONICS CO., LTD
Address of Applicant:	Room 3798, Building 31, No. 86, Xinan Road, Luxiang Town, Jinshan District, Shanghai
Manufacturer:	SHANGHAI YANGKAI ELECTRONICS CO., LTD
Address of Manufacturer:	Room 3798, Building 31, No. 86, Xinan Road, Luxiang Town, Jinshan District, Shanghai
Factory:	SHANGHAI YANGKAI ELECTRONICS CO., LTD
Address of Factory:	Room 3798, Building 31, No. 86, Xinan Road, Luxiang Town, Jinshan District, Shanghai

2.2 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default (Power level is built-in set parameters and cannot be changed and selected)
Test Software of EUT:	RTL8762x_RFTesTool.exe(manufacturer declare)
Antenna Type:	PCB antenna
Antenna Gain:	2.42dBi
Power Supply:	DC 3.0V
Test Voltage:	DC 3.0V
Sample Received Date:	Jul. 13, 2023
Sample tested Date:	Jul. 13,2023 to Jul.15, 2023
Remark: 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.	

2.3 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

2.4 Deviation from Standards

None.

2.5 Abnormalities from Standard Conditions

None.

2.6 Other Information Requested by the Customer

None.

3 SAR Evaluation

3.1 RF Exposure Compliance Requirement

3.1.1 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 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

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

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 ERP20cm 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.

3.1.2 Test Procedure

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

3.1.3 EUT RF Exposure Evaluation

For Stand alone:

For BLE

Frequency (MHz)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2480	3.85	1.70	1.479	2.717	PASS

Note:

- ① EIRP=conducted power+antenna gain;
- ② ERP=EIRP-2.15
- ③ The separation distance is 0.5cm;
- ④ The test data refer to the report of EED32P80915601, 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 ***