

TEST REPORT

RF Exposure Evaluation

Report No.:	CISRR25121732203
Project No.:	CISR251217322
FCC ID:	2BFL4-JYD-C20
Applicant:	Shenzhen Jiayouda Electronics Co.,Ltd
Address:	711, Building C, Langkou Baoke Industrial Zone, Longhua District, Shenzhen City, China
Manufacturer:	Shenzhen Jiayouda Electronics Co.,Ltd
Address:	711, Building C, Langkou Baoke Industrial Zone, Longhua District, Shenzhen City, China
Product Name:	Helmet Bluetooth Headset
Trade Mark:	-
Model/Type reference:	JYD-C20
Listed Model(s):	-
Standard:	47 CFR Part 2.1093
Issue date:	December 23, 2025
Test result:	Complied

Morgan Tan

Reviewed by: Morgan Tan

Hans Hu
Approved by: Hans Hu


The test results relate only to the tested samples.

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1. APPLICABLE STANDARD

[47 CFR Part2.1093](#): Radio frequency radiation exposure evaluation: portable devices

[ANSI C95.1–3999](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

[FCC KDB publication 447498 D01](#) General RF Exposure Guidance v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

[47 CFR Part1.1307](#): Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

2. REPORT VERSION

Version No.	Issue date	Description
00	December 23, 2025	Original

3. RADIO SPECIFICATION DESCRIPTION

Bluetooth

Supported type:

☒ BR☐ EDR☒ LE-1Mbps☐ LE-2Mbps

Note: Please refer to RF report for detailed technical specifications

4. SIMULTANEOUS TRANSMISSION ANALYSIS

These devices use a single transmitter module and antenna for both BT, BT cannot transmit simultaneously.

5. TEST RESULT

5.1. Standalone transmission

Limit:

KDB447498 D01 v06, Clause 4.3.1 a)

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0$ 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 calculation³¹
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) 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 4.1 f) is applied to determine SAR test exclusion.

Result:

Passed

Test Data

Radio type	Frequency (GHz)	Maximum output power #1 (dBm)	Antenna gain #2 (dBi)	Maximum EIRP#3 (dBm)	Maximum tune-up EIRP #4 (dBm)	Minimum distance (mm)	Evaluated value	Limit	Result
Bluetooth-BR	2.402	2.22	2.5	4.72	5.00	5.00	0.9802	3.00	PASS
Bluetooth-LE	2.402	2.21	2.5	4.71	5.00	5.00	0.9802	3.00	PASS

Note

#1: This value comes from the RF test report.

#2: This value is declared by the applicant.

#3: $EIRP = \text{Maximum output power} + \text{Antenna gain}$.

#4: This value is declared by the applicant.

5.2. Simultaneous transmission

Limit:

KDB447498 D01 v06, Clause 4.3.2, 47 CFR Part1.1307

In the case of xed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where

a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for P , including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the speci ed minimum distance including existing evaluated transmitters.

P_j = the available maximum time-averaged power or the ERP, whichever is greater, for xed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

P_{th,i} = the exemption threshold power (P) according to paragraph (b)(3)(i)(B) of this section for xed, mobile, or portable RF source i.

ERP_j = the ERP of fixed, mobile, or portable RF source j.

ERP_{th,j} = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least λ/2π according to the applicable formula of paragraph (b)(3)(i)(C) of this section.

Evaluated_k = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

Exposure Limit_k = either the general population/uncontrolled maximum permissible exposure (MPE) or speci c absorption rate (SAR) limit for each xed, mobile, or portable RF source k, as applicable from § 1.1310 of this chapter.

Result:

Not Applicable

-----End of Report-----