

EMF TEST REPORT

Test Report No. : OT-245-RWD-019
Reception No. : 2312004386
Applicant : Amp'ed RF Technology
Address : 1879 Lundy Ave #138, San Jose, California, 95131, United States
Manufacturer : Amp'ed RF Technology
Address : 1879 Lundy Ave #138, San Jose, California, 95131, United States
Type of Equipment : Bluetooth Module
FCC ID. : X3ZBTMOD4
Model Name : BT33LT
Serial number : N/A
Total page of Report : 6 pages (including this page)
Date of Incoming : March 20, 2024
Date of issue : May 17, 2024

SUMMARY

The equipment complies with the regulation; **FCC CFR 47 PART 2.1093**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

This report is not correlated with the "KS Q ISO/IEC 17025 and KOLAS accreditation" of Korean Laboratory Accreditation Scheme.





Tested by
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Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-245-RWD-019	May 17, 2024	Initial Release	All

1. VERIFICATION OF COMPLIANCE

Applicant : Amp'ed RF Technology
Address : 1879 Lundy Ave #138, San Jose, California, 95131, United States
Contact Person : Annie, Cai / Operations Manager
Telephone No. : +408-213-9530
FCC ID : X3ZBTMOD4
Model Name : BT33LT
Brand Name : -
Serial Number : N/A
Date : May 17, 2024

EQUIPMENT CLASS	DSS – PART 15 SPREAD SPECTRUM TRANSMITTER
E.U.T. DESCRIPTION	Bluetooth Module
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	KDB 447498 D01 General RF Exposure Guidance v06
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
Modifications on the Equipment to Achieve Compliance	None

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. GENERAL INFORMATION

2.1 Product Description

The Amp'ed RF Technology, Model BT33LT (referred to as the EUT in this report) is a Bluetooth Module. The product specification described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	Bluetooth Module
OPERATING FREQUENCY	2 402 MHz ~ 2 480 MHz
MODULATION TYPE	GFSK for 1 Mbps, $\pi/4$ -DQPSK for 2 Mbps, 8-DPSK for 3 Mbps
RF OUTPUT POWER	3.04 dBm (1 Mbps), 0.76 dBm (2 Mbps), 0.95 dBm (3 Mbps)
NUMBER OF CHANNEL	79 Channel
ANTENNA TYPE	Chip Antenna
ANTENNA GAIN	-0.97 dBi
Electrical Rating	DC 3.70 V
List of each Osc. or crystal Freq.(Freq. ≥ 1 MHz)	38.4 MHz

2.2 Alternative type(s)/model(s); also covered by this test report.

-. None

3. EUT MODIFICATIONS

-. None

4. RF EXPOSURE EVALUATION

4.1 RF Exposure Calculation

According to the FCC rule §4.3. General SAR test exclusion guidance, the limit for 1-g and 10-g SAR test exclusion thresholds are ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR by the device operating 100 MHz to 6 GHz and test separation distances ≤ 50 mm

4.2 EUT Description

Kind of EUT	Bluetooth Module
Device Category	☒ Portable (< 20 cm separation) ☐ Mobile (> 20 cm separation) ☐ Others
Exposure Evaluation Applied	☐ MPE ☐ SAR ☒ N/A

4.3 Test Result

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3.0$$

$$= [(2.26/5)] \times \sqrt{2.441} = 0.71$$

4.3.1 Test data for Bluetooth BDR

Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
2 441.00	3.04 ± 0.5	3.54	2.26	5	0.71