

TEST REPORT

Product Name : Hi-Res Bluetooth Module
Model Number : BTR-875
FCC ID : XEG-BTR875

Prepared for : TEAC CORPORATION
Address : 1-47 Ochiai, Tama-shi, Tokyo, Japan

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Date of sample receipt : November 09,2025
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1. TEST RESULT CERTIFICATION

Applicant : TEAC CORPORATION
Address : 1-47 Ochiai, Tama-shi, Tokyo, Japan
Manufacturer : TEAC CORPORATION
Address : 1-47 Ochiai, Tama-shi, Tokyo, Japan
Factory : Dongguan TEAC Electronics Co.,Ltd.
Address : Building D 5-6 floors No.1 Shangxing Lu Shangjiao Chang-an Town,Dongguan City,Guangdong,Province,China
EUT : Hi-Res Bluetooth Module
Model Name : BTR-875
Trademark : TEAC

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
§ 15.247(i), § 2.1093	PASS

The above equipment was tested by EMTEK(DONGGUAN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2020) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules FCC § 15.247(i), § 2.1093.

The test results of this report relate only to the tested sample identified in this report

Date of Test : November 09,2025 to January 13,2026



Prepared by :

Una Yu /Editor

Reviewer :



Joe Xia/Supervisor



Approve & Authorized Signer :

Lisa Wang/Manager



Modified History

Version	Report No.	Revision Date	Summary
	ENS2512090230W00802R	/	Original Report



2. EUT Specification

Characteristics	Description
Product:	Hi-Res Bluetooth Module
Model Number:	BTR-875
Sample:	1#
Data Rate:	BLE: 1Mbps for GFSK modulation 2Mbps for GFSK modulation BT: 1Mbps for GFSK modulation 2Mbps for $\pi/4$ -DQPSK modulation 3Mbps for 8DPSK modulation
Modulation:	BLE: GFSK BT: GFSK, $\pi/4$ -DQPSK, 8DPSK
Operating Frequency Range(s) :	2402-2480MHz
Number of Channels:	79 channels
Transmit Power Max:	3.10 dBm(0.002042 W)
Antenna Gain:	7.04 dBi
Power supply:	AC 100~240V 50/60Hz
Evaluation applied:	☒ MPE Evaluation ☐ SAR Evaluation

3. Test Requirement

RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency(RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density(mW/cm ²)	Average Time
(A) Limits for Occupational/Control Exposures				
300-1500	--	--	F/300	6
1500-100000	--	--	5	6
(B) Limits for General Population/Uncontrol Exposures				
300-1500	--	--	F/1500	6
1500-100000	--	--	1	30

Friis transmission formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$

Where

P_d = Power density in mW/cm²

P_{out} =output power to antenna in mW

G = Numeric gain of the antenna relative to isotropic antenna

π =3.1416

R = distance between observation point and center of the radiator in cm

P_d the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

4. Measurement Result

gain:	7.04 dBi	RF Module MPE#						
Mode	Frequency (MHz)	Output Power (dBm)	E.I.R.P(dBm)	Target Power W/tolerance (dBm)	Max tune up power(dBm) tolerance	Power Density at R=20cm (mW/cm ²)	Limit (mW/cm ²)	Verdict
GFSK	2402	0.74	7.78	7±1	8	0.006349	1	PASS
	2441	1.07	8.11	8±1	9	0.007993	1	PASS
	2480	2.57	9.61	9±1	10	0.010063	1	PASS
π/4-DQPSK	2402	0.91	7.95	7±1	8	0.006349	1	PASS
	2441	1.06	8.1	8±1	9	0.007993	1	PASS
	2480	2.67	9.71	9±1	10	0.010063	1	PASS
8DPSK	2402	1.33	8.37	8±1	9	0.007993	1	PASS
	2441	1.34	8.38	8±1	9	0.007993	1	PASS
	2480	3.1	10.14	10±1	11	0.012669	1	PASS

According to KDB 447498, no stand-alone required for BT antenna, and no simultaneous SAR measurement

*** End of Report ***