

EMF TEST REPORT

Test Report No. : OT-239-RWD-030
Reception No. : 2309002924
Applicant : BLUECOM Co., Ltd
Address : 116, Venture-ro, Yeonsu-gu, Incheon, Korea
Manufacturer : BLUECOM Co., Ltd
Address : 116, Venture-ro, Yeonsu-gu, Incheon, Korea
Type of Equipment : Bluetooth NeckBand Headset
FCC ID. : U3WFLEX800
Model Name : FLEX800
Multiple Model Name : N/A
Serial number : N/A
Total page of Report : 7 pages (including this page)
Date of Incoming : September 11, 2023
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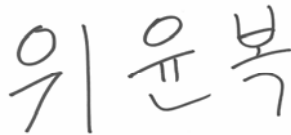
SUMMARY

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.



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Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-239-RWD-030	September 22, 2023	Initial Release	All

1. VERIFICATION OF COMPLIANCE

Applicant : BLUECOM Co., Ltd
 Address : 116, Venture-ro, Yeonsu-gu, Incheon, Korea
 FCC ID : U3WFLEX800
 Model Name : FLEX800
 Brand Name : -
 Serial Number : N/A
 Date : September 22, 2023

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	Bluetooth NeckBand Headset
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 BLUECOM Co., Ltd, Model FLEX800 (referred to as the EUT in this report) is a Bluetooth NeckBand Headset. The product specification described herein was obtained from product data sheet or user’s manual.

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	Bluetooth NeckBand Headset
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247 KDB 558074 D01 15.247 Meas Guidance v05r02
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

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

-. None

3. EUT MODIFICATIONS

-. None

4. MAXIMUM PERMISSIBLE EXPOSURE

4.1 Applicable Standard

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission’s guideline.

This is a Portable device with its physical nature to be used nearby, the distance between radiating structure and human is less than 20 cm.

As per KDB 447498 D01, The 1-g and 10-g SAR test exclusion thesholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are detrmined by:

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

< 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

F(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison.

4.2 EUT Description

Kind of EUT	Bluetooth NeckBand Headset
Device Category	<input checked="" type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input type="checkbox"/> Others
Exposure Evaluation Applied	<input type="checkbox"/> MPE <input type="checkbox"/> SAR <input checked="" type="checkbox"/> N/A

4.3 Calculated RF Exposure

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

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

$$= (2.87/5) \times \sqrt{2.441} = 0.897$$

Operating Mode	Frequency (MHz)	Target Power W/tolerance (dBm)	Max Target power (dBm)	Antenna Gain (dBi)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
Bluetooth	2 441	2.74 ± 0.5	3.24	1.34	4.58	2.87	5	0.897
Bluetooth LE	2 440	0.43 ± 0.5	0.95	1.34	2.29	1.69	5	0.529

$$\text{Max tune up power(dBm)} = \text{Max Targer Power(dBm)} + \text{Antenna Gain(dBi)}$$

Conclusion:

SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required.