

TEST REPORT

Product Name : RIC Behind-the-ear Hearing Aid
Brand Mark : TUITUI
Model No. : Dion
Extension model : Dion 1, Dion 2, Dion 3, Dion 4, Dion 5,
Dion 6, Dion 7, Dion 8, Dion 9, Dion X,
Dion 1 Pro, Dion 3 Pro, Dion 5 Pro, Dion
X Pro
FCC ID : 2A5WV-DION
Report Number : BLA-EMC-202203-A12403
Date of Sample Receipt : 2022/3/31
Date of Test : 2022/3/31 to 2022/4/13
Date of Issue : 2022/4/13
Test Standard : 47 CFR Part 1.1307, Part 2.1093, KDB
447498
Test Result : Pass

Prepared for:

Shenzhen Eartech Company Ltd.
4-516, Tusincere Science Park, Qingchun Road, Longcheng Street,
Longgang, Shenzhen, Guangdong, P.R. China

Prepared by:

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2022/4/13



REPORT REVISE RECORD

Version No.	Date	Description
00	2022/4/13	Original

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TABLE OF CONTENTS

1	TEST SUMMARY.....	4
2	GENERAL INFORMATION.....	5
3	GENERAL DESCRIPTION OF E.U.T.....	5
4	LABORATORY LOCATION.....	6
5	RF EXPOSURE COMPLIANCE REQUIREMENT.....	7
5.1	STANDARD REQUIREMENT.....	7
5.2	LIMITS.....	7
5.3	EUT RF EXPOSURE.....	7

1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
RF Exposure	47 CFR Part 1.1307, Part 2.1093, KDB 447498	CFR 47 Part 2.1093	CFR 47 Part 2.1093	Pass

2 GENERAL INFORMATION

Applicant	Shenzhen Eartech Company Ltd.
Address	4-516, Tusincere Science Park, Qingchun Road, Longcheng Street, Longgang, Shenzhen, Guangdong, P.R. China
Manufacturer	Shenzhen Eartech Company Ltd.
Address	4-516, Tusincere Science Park, Qingchun Road, Longcheng Street, Longgang, Shenzhen, Guangdong, P.R. China
Factory	Shenzhen Eartech Company Ltd.
Address	4-516, Tusincere Science Park, Qingchun Road, Longcheng Street, Longgang, Shenzhen, Guangdong, P.R. China
Product Name	RIC Behind-the-ear Hearing Aid
Test Model No.	Dion
Extension model	Dion 1, Dion 2, Dion 3, Dion 4, Dion 5, Dion 6, Dion 7, Dion 8, Dion 9, Dion X, Dion 1 Pro, Dion 3 Pro, Dion 5 Pro, Dion X Pro
Note	All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are model name for commercial purpose.

3 GENERAL DESCRIPTION OF E.U.T.

Hardware Version	R1P1
Software Version	N/A
Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK
Channel Spacing:	2MHz
Number of Channels:	40
Antenna Type:	Chip Antenna
Antenna Gain:	1.3dBi(Provided by the applicant)

4 LABORATORY LOCATION

All tests were performed at:
BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673
No tests were sub-contracted.

5 RF EXPOSURE COMPLIANCE REQUIREMENT

5.1 STANDARD REQUIREMENT

According to KDB447498D01 General RF Exposure Guidance v06

Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.2 LIMITS

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot \sqrt{f(\text{GHz})} \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

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 is applied to determine SAR test exclusion

5.3 EUT RF EXPOSURE

Operational Mode: BLE						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dB)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
2402 MHz	-1.475	±1	-0.475	0.90	0.28	3.0
2442 MHz	-1.288	±1	-0.288	0.94	0.29	
2480 MHz	-1.495	±1	-0.495	0.89	0.28	
Conclusion: the calculated value ≤3.0. SAR is exempted.						

----END OF REPORT----

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