

RF Exposure Evaluation Report

Product : Wireless Headset
Trade mark : CORSAIR
Model/Type reference : RDA0034
Serial Number : N/A
Report Number : EED32M00213602
FCC ID : 2AAFMRDA0034
Date of Issue : Aug. 28, 2020
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF
Exposure Guidance v06
Test result : PASS

Prepared for:

Corsair Memory Inc
47100 Bayside Pkwy Fremont, CA 94538, U.S.A

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Compiled by:

Sunlight Sun

Reviewed by:

Jok Yang

Sunlight Sun

Jok Yang

Approved by:

Sam Chuang
Sam Chuang

Date:

Aug. 28, 2020

Check No.:3096381001



2 Version

Version No.	Date	Description
00	Aug. 28, 2020	Original

3 Contents

	Page
1 COVER PAGE.....	1
2 VERSION.....	2
3 CONTENTS.....	3
4 GENERAL INFORMATION.....	4
4.1 CLIENT INFORMATION.....	4
4.2 GENERAL DESCRIPTION OF EUT.....	4
4.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD.....	4
4.4 TEST LOCATION.....	5
4.5 DEVIATION FROM STANDARDS.....	5
4.6 ABNORMALITIES FROM STANDARD CONDITIONS.....	5
4.7 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	5
5 SAR EVALUATION.....	6
5.1 RF EXPOSURE COMPLIANCE REQUIREMENT.....	6
5.1.1 Standard Requirement.....	6
5.1.2 Limits.....	6
5.1.3 EUT RF Exposure.....	7
PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS.....	8

4 General Information

4.1 Client Information

Applicant:	Corsair Memory Inc
Address of Applicant:	47100 Bayside Pkwy Fremont, CA 94538, U.S.A
Manufacturer:	Corsair Memory Inc
Address of Manufacturer:	47100 Bayside Pkwy Fremont, CA 94538, U.S.A
Factory 1:	Minami Acoustics Limited
Address of Factory 1:	Shangou Industrial Park GongJiang Town, Yudu County Ganzhou City Jiangxi 342300 China
Factory 2:	Minami Electronics Malaysia Sdn Bhd
Address of Factory 2:	1208 Lorong Perindustrian Bukit Minyak, Kawasan Perindustrian Bukit Minyak, 14100 Simpang Ampat, Penang, Malaysia

4.2 General Description of EUT

Product Name:	Wireless Headset
Model No.(EUT):	RDA0034
Trade Mark:	CORSAIR
Frequency Range of Operation:	BT 5.0 Single mode, 2400MHz to 2483.5MHz

4.3 Product Specification subjective to this standard

Operating Frequency:	2402MHz~2480MHz
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Test Power Grade:	Default
Test Software of EUT:	Lab Test Tool-2.3.7
Antenna Type:	FPC Antenna
Antenna Gain:	1.48 dBi
Power Supply:	DC 5V
Max Conducted Peak Output Power:	BT4.0: 1.819 dBm
	The Max Conducted Peak Output Power data refer to the report EED32M00213601
Sample Received Date:	Jul. 17, 2020
Sample tested Date:	Jul. 17, 2020 to Aug. 24, 2020
The tested sample(s) and the sample information are provided by the client.	

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 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.

5.1.2 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:

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

$f(\text{GHz})$ 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

5.1.3 EUT RF Exposure

The tune-up power is 1 dBm +1 /- 2dB, therefore the highest tune-up power is

2.0 dBm (1.58 mW) @ 2441 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$(1.58\text{mW} / 5\text{mm}) * (2.441\text{GHz}^{0.5}) = 0.5$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 0.5 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32M00213601 for EUT external and internal photos.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***