RF Exposure Evaluation Report

Product	:	RollerMouse Red Wireless
Trade mark	:	CONTOUR
Model/Type reference	:	See content 4.2
Serial Number	:	N/A
Report Number	:	EED32P81306403
FCC ID	:	2AG6O-REW2
Date of Issue	:	Dec. 20, 2023
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 1.1310 47 CFR Part 2.1091 47 CFR Part 2.1093 447498 D04 Interim General RF Exposure Guidance v01
Test result	:	PASS

Prepared for:

CONTOUR (GUANGZHOU) DESIGN, INC.
Building B21-2F, Huachuang Animation Park, Panyu, GuangZhou, China

Prepared by:

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Check No.: 9452180823

2 Version

Version No.	Date	Description
00	Dec. 20, 2023	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	CONTOUR (GUANGZHOU) DESIGN, INC.
Address of Applicant:	Building B21-2F, Huachuang Animation Park, Panyu, GuangZhou, China
Manufacturer:	CONTOUR (GUANGZHOU) DESIGN, INC.
Address of Manufacturer:	Building B21-2F, Huachuang Animation Park, Panyu, GuangZhou, China
Factory:	CONTOUR (GUANGZHOU) DESIGN, INC.
Address of Factory:	Building B21-2F, Huachuang Animation Park, Panyu, GuangZhou, China

4.2 General Description of EUT

Product Name:	RollerMouse Red Wireless
Model No.(EUT):	CDRMRED10110, RM-RED-WL,RM-RED PLUS-WL, RM-RED PLUS-WLB, RM-RED PLUS-WL-TK, RM-RED PLUS-B,BUNDLE-RED-WL-BALANCE-US, CDRMRED10210,CDRMREDPN10213,CDRMREDUS10113, 6002, 6006, 121299, 9021,9022
Test Model No:	CDRMRED10110
Trade mark:	CONTOUR

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	N/A
Antenna Type:	PCB Antenna
Antenna Gain:	5.66dBi
Power Supply:	Battery DC 3.7V
Sample Received Date:	Aug. 18, 2023
Sample tested Date:	Aug. 18, 2023 to Aug. 29, 2023

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
Model No.: CDRMRED10110,RM-RED-WL, RM-RED PLUS-WL, RM-RED PLUS-WL-B, RM-RED PLUS-WL-TK, RM-RED PLUS-B, BUNDLE-RED-WL-BALANCE-US, CDRMRED10210, CDRMREDPN10213, CDRMREDUS10113, 6002, 6006, 121299, 9021,9022.
Only the model CDRMRED10110 was tested.Their electrical circuit design, layout, components used and internal wiring are identical, Only the appearance color, Logo and model name are different.

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 Limits

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).
This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by Formula

$$P_{\text{th}}\,(\text{mW}) = \begin{cases} ERP_{20\text{ cm}}(d/20\text{ cm})^{x} & d \le 20\text{ cm} \\ ERP_{20\text{ cm}} & 20\text{ cm} < d \le 40\text{ cm} \end{cases}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\text{ cm}}\sqrt{f}}\right)$$

and f is in GHz, d is the separation distance (cm), and ERP20cm is per Formula (B.1).

$$P_{\text{th}}\,(\text{mW}) = ERP_{20\text{ cm}}\,(\text{mW}) = \begin{cases} 2040f & 0.3\text{ GHz} \le f < 1.5\text{ GHz} \\ 3060 & 1.5\text{ GHz} \le f \le 6\text{ GHz} \end{cases} \qquad (\text{B.1})$$

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

5.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

5.1.3 EUT RF Exposure Evaluation

For Stand alone:

For BLE

Frequency (MHz)	Separation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2402	0.50	-2.64	5.66	3.02	0.87	1.222	2.788	PASS

For 2.4G

Frequency (MHz)	Separation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2402	0.50	-2.64	5.66	3.02	0.87	1.222	2.788	PASS

Note：

①EIRP=conducted power+antenna gain；

②ERP=EIRP-2.15

③Only the worst case data was recorded in the report.

*** End of Report ***