

RF Exposure Evaluation Report

Product : CARISTA EVO
Trade mark : CARISTA
Model/Type reference : COBD-EVO
Serial Number : N/A
Report Number : EED32P81220503
FCC ID : 2BBBR-COBD-EVO
Date of Issue : Sep. 18, 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:

Prizmos Ltd.

Mladost 4, bl. 438, vh. 2, apt. 6, Sofia 1715, Bulgaria

Prepared by:

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Sep. 18, 2023



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2 Version

Version No.	Date	Description
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4 General Information

4.1 Client Information

Applicant:	Prizmos Ltd.
Address of Applicant:	Mladost 4, bl. 438, vh. 2, apt. 6, Sofia 1715, Bulgaria
Manufacturer:	Shenzhen CheboTong Technology Co., LTD
Address of Manufacturer:	5C, 5th Floor, Building 2, Peninsula Chengbang Garden Phase II, Jinshiji Road, Dongjiaotou, Shekou Street, Nanshan District, Shenzhen
Factory:	Shenzhen CheboTong Technology Co., LTD
Address of Factory:	5C, 5th Floor, Building 2, Peninsula Chengbang Garden Phase II, Jinshiji Road, Dongjiaotou, Shekou Street, Nanshan District, Shenzhen

4.2 General Description of EUT

Product Name:	CARISTA EVO
Model No.(EUT):	COBD-EVO
Trade Mark:	CARISTA

4.3 Product Specification subjective to this standard

Frequency Range:	2420MHz to 2480MHz
Modulation Type:	BLE: GFSK BT: GFSK, $\pi/4$ DQPSK, 8DPSK
Test Power Grade:	Default
Test Software of EUT:	HCITester Tool_TI
Antenna Type:	PCB Antenna
Antenna Gain:	-1.24dBi
Power Supply:	DC 12V
Test Voltage:	DC 12V
Sample Received Date:	Aug. 07, 2023
Sample tested Date:	Aug. 07, 2023 to Aug. 13, 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.	

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 P_{th} (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). P_{th} is given by Formula

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

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 $ERP_{20 \text{ cm}}$ is per Formula (B.1).

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

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)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2480	9.61	-1.24	8.37	6.22	4.188	3060	PASS

For BT

Frequency (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Limit (mW)	Result
2402	5.56	-1.24	4.32	2.17	1.648	3060	PASS

Note:

- ① EIRP=conducted power+antenna gain;
- ② ERP=EIRP-2.15
- ③ Only the worst case data was recorded in the report.

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 *****