

## FCC Maximum Permissible Exposure (MPE) Estimation Report

Report Number : **68.950.22.0919.01** Date of Issue: **2022-12-12**

Model : **CCAmpV1**

Product Type : Bluetooth Audio Amplifier

Applicant : Club Car LLC

Address : 4125 Washington Rd, Evans, Georgia, United States

Manufacturer : Club Car LLC

Address : 4125 Washington Rd, Evans, Georgia, United States

Test Result : **■ Positive** **□ Negative**

Total pages including Appendices : **8**

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

## 1 Table of Contents

1	Table of Contents.....	2
2	Details about the Test Laboratory.....	3
3	Description of the Equipment Under Test.....	4
4	Test Specifications.....	5
5	General Information .....	6
6	RF Exposure Requirements.....	7
7	RF Exposure Evaluation .....	8

## 2 Details about the Test Laboratory

### Details about the Test Laboratory

#### Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch  
Building 12 & 13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2,  
Nanshan District  
Shenzhen 518052  
P.R. China

Telephone: 86 755 8828 6998

Fax: 86 755 8828 5299

FCC Registration No.: 514049

FCC Designation Number: CA5009

IC Registration No.: 10320A

### 3 Description of the Equipment Under Test

Product:	Bluetooth Audio Amplifier
Model no.:	CCampV1
Brand name:	Club Car
FCC ID:	2A9KH-CCAMPV1
Options and accessories:	N/A
Rating:	Supplied by 12VDC
RF Transmission Frequency:	2402MHz-2480MHz
No. of Operated Channel:	79
Modulation:	GFSK, π/4-DQPSK, 8DPSK
Antenna Type:	Chip Antenna
Antenna	Gain: 2.1dBi
Description of the EUT:	The Equipment Under Test (EUT) is a Bluetooth Audio Amplifier which support Bluetooth function.

NOTE: The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

## 4 Test Specifications

Test Standards	
ANSI Std C95.1-1992	Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.(IEEE Std C95.1-1991)
KDB 447498 D01	General RF Exposure Guidance v06

## 5 General Information

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

Prepared By  
Project Engineer

2022-12-12

Date

Warlen Song

Name

*Warlen Song*

Signature



Approved by  
Section Manager

2022-12-12

Date

John Zhi

Name

*John Zhi*

Signature

## 6 RF Exposure Requirements

According to §15.247(e)(i) and §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.

According to KDB 447498 D01 General RF Exposure Guidance v06, no SAR required if power is lower than the flowing threshold:

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

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})]$

$[\sqrt{f_{(\text{GHz})}}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  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 calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  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.

## 7 RF Exposure Evaluation

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 3.0$

Conducted Power + tune up tolerance = 9.75dBm = 9.44mW

Distance = 5 mm

f = 2.402 GHz

$$[9.44/5] * \text{SQRT}(2.402) = 2.92$$

$$2.92 \leq 3.0$$

Therefore, excluded from SAR testing.