

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**

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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

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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, $\pi/4$ -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.

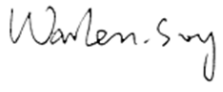

NOTE: The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.


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

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Prepared By Project Engineer	2022-12-12	Warlen Song	
	Date	Name	Signature
Approved by Section Manager	2022-12-12	John Zhi	
	Date	Name	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 ≤ 50 mm are determined by:

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

$$[\sqrt{f_{(\text{GHz})}}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

- $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before 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 ≤ 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

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

$$2.92 \leq 3.0$$

Therefore, excluded from SAR testing.