SGS-CSTC Standards Technical Services
(Shanghai) Co., Ltd.

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1 Cover Page

FCC MPE REPORT

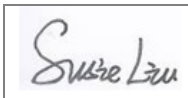
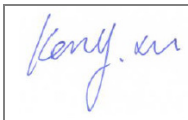
Application No.:	SHEM1511004139CR
Applicant:	Camec Pty Ltd
FCC ID:	2AGDW0006V2
Equipment Under Test (EUT): **NOTE:** The following sample(s) submitted was/were identified on behalf of the client as	
Product Name:	BLUETOOTH SPEAKER
Model No.(EUT):	RVM2000(043441)
Add Model No.:	RVM2001(043440)
Standards:	FCC Rules 47 CFR §2.1091 KDB447498 D01 General RF Exposure Guidance v05r02
Date of Receipt:	November 11, 2015
Date of Test:	November 20, 2015 to November 22, 2015
Date of Issue:	December 04, 2015
Test Result:	**Pass***

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Parlam Zhan
E&E Section Manager
SGS-CSTC (Shanghai) Co., Ltd.

2 Version

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
00	/	December 04, 2015	/	Original

Authorized for issue by:				
Engineer		Eddy Zong **Print Name**		
Clerk		Susie Liu **Print Name**		
Reviewer		Keny Xu **Print Name**		

3 Contents

4 General Information

4.1 Client Information

Applicant:	Camec Pty Ltd
Address of Applicant:	47-63 Remington Drive Dandenong South, Victoria. 3175. Australia
Manufacturer:	NINGBO CODE LIGHTING TECHNOLOGY CO., LTD
Address of Manufacturer:	Building #3, No.181-197, Shanshan Road, Wangchun Industrial Zone, Yinzhou District, Ningbo, China
Factory:	NINGBO CODE LIGHTING TECHNOLOGY CO., LTD
Address of Factory:	Building #3, No.181-197, Shanshan Road, Wangchun Industrial Zone, Yinzhou District, Ningbo, China

4.2 General Description of E.U.T.

Product Description:	Fixed product with BT function
Brand Name:	RV Media
Rate Voltage:	DC 12V

4.3 Technical Specifications

Operation Frequency:	BT:2402MHz~2480MHz BT 4.0: 2402MHz~2480MHz
Bluetooth Version:	BT: 4.0 Dual mode BT 4.0: 4.0 Dual mode
Modulation Technique:	BT: FHSS (GFSK, π/4DQPSK, 8DPSK) BT 4.0: GFSK
Number of Channel:	BT: 79 BT 4.0: 40
Antenna Type	BT: PIFA Antenna BT 4.0: PIFA Antenna
Antenna Gain	BT: 0 dBi BT 4.0: 0 dBi

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

No.588 West Jindu Road, Songjiang District, Shanghai, China.201612.

Tel: +86 21 6191 5666

Fax: +86 21 6191 5678

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L0599)**

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. Date of expiry: 2017-07-14.

- **FCC – Registration No.: 402683**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683, Expiry Date: 2017-09-16.

- **Industry Canada (IC) – IC Assigned Code: 8617A**

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1. Expiry Date: 2017-06-18.

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868, C-4336, T-2221, G-830 respectively. Date of Expiry: 2017-11-16.

5 Test Standards and Limits

According to§1.1310 Radiofrequency radiation exposure limits:

The limit for general population/uncontrolled exposures

Frequency	Power density(mW/cm^2)	Averaging time(minutes)
300MHz~1.5GHz	f/1500	30
1.5GHz~100GHz	1.0	30

6 Measurement and Calculation

6.1 Maximum transmit power

The Power Data is based on the RF Test Report SHEM151100413802 & SHEM151100413803.

For BT:

Test Mode	Test Frequency (MHz)	Output Power (dBm)	Reading Power (mW)
GFSK	2402	0.14	1.03
	2441	-0.25	0.94
	2480	0.75	1.19
π/4DQPSK	2402	0.42	1.10
	2441	0.42	1.10
	2480	0.23	1.05
8DPSK	2402	0.75	1.19
	2441	0.85	1.22
	2480	0.48	1.12

For BT 4.0:

Test Mode	Test Frequency (MHz)	Output Power (dBm)	Output Power (mW)
GFSK	2412	4.35	2.72
	2437	4.48	**2.81**
	2462	3.41	2.19

6.2 MPE Calculation

According to the formula S= $\frac{PG}{4R^2\pi}$, we can calculate S which is MPE.

Note:

1) P (Watts) =Power Input to antenna = $10^{\frac{dBm}{10}}$ / 1000

2) G (Antenna gain in numeric) = 10^ (Antenna gain in dBi /10)

3) R = distance to the center of radiation of antenna (in meter) = 20cm

4) MPE limit = 1mW/cm²

The Max Conducted Peak Output Power is 2.81mW;

The best case gain of the antenna is 0dBi. 0dB logarithmic terms convert to numeric result is nearly 1

So, S= $\frac{PG}{4R^2\pi}$ = $\frac{2.81\times 1}{4\times 400\times 3.14}$ =0.00056 mW/cm^2

The BT and the BT 4.0 modules cann't simultaneous transmitting at frequency 2.4GHz band, according to the KDB447498 section 7.1 determine the device is exclusion from SAR test.

7 EUT Constructional Details

Refer to the < RVM2000(043441)_External Photos > & < RVM2000(043441)_Internal Photos>.

--End of the Report--