RF EXPOSURE REPORT



Report No.: 17070296-FCC-H V1

Supersede Report No.: N/A

FiVo Solutions Inc. d/b/a TiVo Inc. REMOTE CONTROL UNIT				
S6V				
CRB97XBB(X stands for A`Z, BB stands	for 00`99)			
FCC 2.1093:2016				
April 25 to May 14, 2017				
July 17, 2017				
Pass Fail				
Equipment complied with the specification				
comply with the specification				
orog David Huang				
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er Checked By	Checked By			
This test report may be reproduced in full only				
Test result presented in this test report is applicable to the tested sample only				
	CC 2.1093:2016 April 25 to May 14, 2017 uly 17, 2017 Pass Pass Fail d with the specification comply with the specification Comply with the specification David Huang Checked By This test report may be reproduced in fu			

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

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Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

Accreditations for Conformity Assessment



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1. Report Revision History

Report No.	Report Version	Description	Issue Date	
17070296-FCC-H	NONE	Original	May 15, 2017	
17070296-FCC-H V1	V1	Updated the applicant name and address	July 17, 2017	

2. Customer information

Applicant Name	TiVo Solutions Inc. d/b/a TiVo Inc.
Applicant Add	2160 Gold Street San Jose California United States
Manufacturer	REMOTE SOLUTION HK LTD
Manufacturer Add	NO.7, 6 ROAD, GAOLI INDUSTRIAL ZONE, TANGXIA TOWN,
	DONG GUAN CITY, CHINA

3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES			
	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park			
Lab Address South Side of Zhoushi Road, Bao' an District, Shenzhen, Guang				
	518108			
FCC Test Site No.	718246			
IC Test Site No.	4842E-1			
Test Software	Radiated Emission Program-To Shenzhen v2.0			



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4. Equipment under Test (EUT) Information

Description of EUT:	REMOTE CONTROL UNIT
Main Model:	S6V
Serial Model:	CRB97XBB(X stands for A`Z, BB stands for 00`99)
Date EUT received:	April 24, 2017
Test Date(s):	April 25 to May 14, 2017
Antenna Gain:	-0.8dBii
Antenna Type:	Patch antenna
Type of Modulation:	GFSK
RF Operating Frequency (ies):	2402-2480 MHz
Number of Channels:	40CH
Port:	N/A
Input Power:	DC 3V
Trade Name :	N/A
FCC ID:	TGN-CRB97



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5. <u>FCC §2.1093 - Radiofrequency radiation exposure evaluation: portable</u> devices.

5.1 RF Exposure

Standard Requirement:

According to §15.247 (i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission' s guidelines.

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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·

- $[\sqrt{f_{(GHz)}}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,¹⁶ where
- f_(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation¹⁷
- The result is rounded to one decimal place for comparison

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 \leq 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

result = $P\sqrt{F}/D$

P= Maximum turn-up power in mW

- F= Channel frequency in GHz
- D= Minimum test separation distance in mm



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5.2 Test Result

BLE Mode:

Modulation	СН	Freq (MHz)	Conducted Power (dBm)	Tune Up Power (dBm)	Max Tune Up Power (dBm)	Max Tune Up Power (mW)	Result	Limit
GFSK	Low	2402	5.927	5.2±1	6.2	4.169	1.29	3
	Mid	2440	4.882	5.2±1	6.2	4.169	1.30	3
	High	2480	4.419	5.2±1	6.2	4.169	1.31	3

Result: Compliance

No SAR measurement is required.