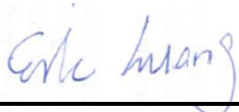


# FCC SAR Test Report

APPLICANT : Butte L.L.C.  
EQUIPMENT : Wireless Device  
MODEL NAME : JK29LP  
FCC ID : 2AETK-1013  
STANDARD : FCC 47 CFR Part 2 (2.1093)  
ANSI/IEEE C95.1-1992  
IEEE 1528-2013

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and had been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Reviewed by: Eric Huang / Deputy Manager



Approved by: Jones Tsai / Manager



## **SPORTON INTERNATIONAL INC.**

No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.)



## Table of Contents

1. Administration Data .....	3
2. Equipment Under Test (EUT) Information .....	3
2.1 General Information .....	3
3. Conducted RF Output Power (Unit: dBm) .....	4
4. Bluetooth Exclusions Applied .....	4

## Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA5O0723-03	Rev. 01	This is a variant report for 2nd source crystal of BLE and updated WLAN 2.4GHz frequency range. All the test cases were performed on original report which can be referred to Sporton Report Number FA5O0723-01, Model name : JK29LP, FCC ID:2AETK-1013.	Jul. 20, 2016

## **1. Administration Data**

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978

Applicant	
Company Name	Butte L.L.C.
Address	100 M Street, S.E., Suite 600 Washington, District Of Columbia, 20003

## **2. Equipment Under Test (EUT) Information**

### **2.1 General Information**

Product Feature & Specification	
Equipment Name	Wireless Device
Model Name	JK29LP
FCC ID	2AETK-1013
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2412 MHz ~ 2472 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Mode	· 802.11b/g/n HT20 · Bluetooth v4.1-LE

### 3. Conducted RF Output Power (Unit: dBm)

	Mode	Channel	Frequency (MHz)	Data Rate	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b	CH 1	2412	1Mbps	17.22	17.50	100.00
		CH 6	2437		17.79	18.00	
		CH 11	2462		17.27	17.50	
		CH 12	2467		14.25	14.50	
		CH 13	2472		10.21	10.50	
	802.11g	CH 1	2412	6Mbps	15.15	15.50	97.22
		CH 6	2437		17.86	18.00	
		CH 11	2462		13.47	14.00	
		CH 12	2467		11.96	12.00	
		CH 13	2472		10.09	10.50	
	802.11n-HT20	CH 1	2412	MCS0	14.58	15.00	97.02
		CH 6	2437		17.81	18.00	
		CH 11	2462		12.27	13.00	
		CH 12	2467		12.39	12.50	
		CH 13	2472		10.77	11.00	

**Note :**

Channel #12 and #13 SAR testing are not necessary, due to the maximum power is even lower than the other channels.

### 4. Bluetooth Exclusions Applied

Mode Band	Average power(dBm)
	Bluetooth v4.1+LE
2.4GHz Bluetooth	1.0

**Note:**

- Per KDB 447498 D01v06, 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:  

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$
for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR
  - f(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

Bluetooth Max Power (dBm)	Separation Distance (mm)	Frequency (GHz)	exclusion thresholds
1	< 5	2.48	0.31

**Note:**

Per KDB 447498 D01v06, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 0.31ch is  $\leq 7.5$ , SAR testing is not required.



## ***Appendix A. Plots of System Performance Check***

The plots are shown as follows.



---

## ***Appendix B. Plots of SAR Measurement***

The plots are shown as follows.



---

**Appendix C.     DASYS Calibration Certificate**

The DASYS calibration certificates are shown as follows.