

## RF Exposure Report

**Report No.:** SA171206E01D

**FCC ID:** O9YJKS6

**Test Model:** JKS6A

**Serial Model:** JKS6B, JKS6C, JKS6D, ATS100-YZ-S, ATS100-Y-S, ATS100-Z-S,  
ATS100-S

**Received Date:** Feb. 18, 2019

**Test Date:** Feb. 26 ~ Mar. 18, 2019

**Issued Date:** Mar. 26, 2019

**Applicant:** Spireon Inc.

**Address:** 9724 Kingstone Pike, suite 800, Knoxville, Tennessee, USA, 37922

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan  
(R.O.C.)

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
33383, TAIWAN (R.O.C.)

**FCC Registration /** 788550 / TW0003

**Designation Number:**



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### Release Control Record

Issue No.	Description	Date Issued
SA171206E01D	Original release	Mar. 26, 2019

## 1 Certificate of Conformity

**Product:** GPS Tracker

**Brand:** Spireon

**Test Model:** JKS6A

**Serial Model:** JKS6B, JKS6C, JKS6D, ATS100-YZ-S, ATS100-Y-S, ATS100-Z-S, ATS100-S

**Sample Status:** Engineering sample

**Applicant:** Spireon Inc.

**Test Date:** Feb. 26 ~ Mar. 18, 2019

**Standards:** FCC Part 2 (Section 2.1091)  
KDB 447498 D01 General RF Exposure Guidance v06  
IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

**Prepared by :**  , **Date:** Mar. 26, 2019  
Polly Chien / Specialist

**Approved by :**  , **Date:** Mar. 26, 2019  
Bruce Chen / Project Engineer

## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$r$  = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

## 3 Calculation Result of Maximum Conducted Power

Function	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WCDMA Band 2	1852.4-1907.6	22.41	3.6	20	0.079	1
WCDMA Band 5	826.4-846.6	23.76	1.4	20	0.065	0.550
LTE Band 2	1850.7-1909.3	23.35	3.6	20	0.099	1
LTE Band 4	1710.7-1754.3	23.50	2.8	20	0.085	1
LTE Band 5	824.7-848.3	24.03	1.4	20	0.069	0.549
LTE Band 12	699.7-715.3	24.20	1.8	20	0.079	0.466
LTE Band 25	1850.7-1914.3	23.10	3.6	20	0.093	1
LTE Band 26	814.7-848.3	24.06	1.4	20	0.070	0.543

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The Max. Power = Max. tune up power

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