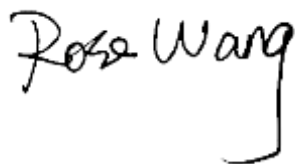


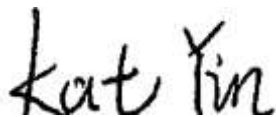
RF Exposure Evaluation Report

APPLICANT : Tangerine Innovation Holding, Inc.
EQUIPMENT : Jido Sense
BRAND NAME : Tangerine
MODEL NAME : TNGJSV06
FCC ID : 2AXZETNGJSV06
STANDARD : 47 CFR Part 2.1091
FCC KDB 447498 D01 v06

We, Sporton International (Kunshan) Inc., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091 and FCC KDB 447498 D01 v06, and pass the limit. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.



Reviewed by: Rose Wang / Supervisor



Approved by: Kat Yin / Manager



Sporton International (Kunshan) Inc.

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China



Table of Contents

1. ADMINISTRATION DATA	4
1.1. Testing Laboratory	4
2. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	5
3. MAXIMUM RF TUNE UP POWER AMONG PRODUCTION UNITS	6
4. RF EXPOSURE LIMIT INTRODUCTION	7
5. RADIO FREQUENCY RADIATION EXPOSURE EVALUATION	8
5.1. Standalone Power Density Calculation	8
5.2. Collocated Power Density Calculation.....	9

**Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA091201	Rev. 01	Initial issue of report.	Nov. 24, 2020

**1. Administration Data****1.1. Testing Laboratory**

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Testing Laboratory		
Test Firm	Sporton International (Kunshan) Inc.	
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958	
Test Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CN1257	314309

Applicant	
Company Name	Tangerine Innovation Holding, Inc.
Address	325 Sharon Park Dr 116, Menlo Park CA 94025, United States

Manufacturer	
Company Name	Tangerine Innovation Holding, Inc.
Address	325 Sharon Park Dr 116, Menlo Park CA 94025, United States



2. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Jido Sense
Brand Name	Tangerine
Model Name	TNGJSV06
FCC ID	2AXZETNGJSV06
Wireless Technology and Frequency Range	WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Mode	AMR 12.2Kbps HSDPA/HSUPA DC-HSDPA HSPA+ (16QAM uplink is not supported) LTE: QPSK, 16QAM WLAN 2.4GHz 802.11b/g/n HT20/ HT40 Bluetooth LE
HW Version	V6.2
SW Version	2.86
Antenna Type/ Gain	WWAN antenna: Quad Band Flex Antenna WCDMA Band V: 1.6 dBi WCDMA Band II: 3.4 dBi LTE Band 2 : 3.4 dBi LTE Band 4 : 3.4 dBi LTE Band 5 : 1.6 dBi WLAN2.4GHz antenna: <2412 MHz ~ 2462 MHz > Dipole Antenna with gain 2.2 dBi Bluetooth antenna: <2402 MHz ~ 2480 MHz > Dipole Antenna with gain 2.2 dBi
EUT Stage	Production Unit
Remark: 1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.	

Comments and Explanations:

1. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.
2. The maximum RF output tune up power, antenna gain also the safe distance used for evaluate RF exposure were declared by manufacturer.

**3. Maximum RF Tune Up power among production units****<WCDMA/LTE >**

Mode		Maximum Average power(dBm)
WCDMA	Band II	24.50
	Band V	24.50
LTE	Band 2	24.50
	Band 4	24.50
	Band 5	24.50

<WLAN 2.4GHz>

Mode		Maximum Average Power (dBm)
2.4GHz	802.11b	16.50
	802.11g	14.50
	802.11n-HT20	14.00
	802.11n-HT40	15.00

<Bluetooth > For Bluetooth Module

Band / Mode	Average Power (dBm)
	LE
	GFSK
Bluetooth	3.00



4. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



5. Radio Frequency Radiation Exposure Evaluation

5.1. Standalone Power Density Calculation

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit
WCDMA Band 2	1852.4	3.40	24.50	27.90	0.617	616.60	0.123	1.000	0.123
WCDMA Band 5	826.4	1.60	24.50	26.10	0.407	407.38	0.081	0.551	0.147
LTE Band 2	1850.7	3.40	24.50	27.90	0.617	616.60	0.123	1.000	0.123
LTE Band 4	1710.7	3.40	24.50	27.90	0.617	616.60	0.123	1.000	0.123
LTE Band 5	824.7	1.60	24.50	26.10	0.407	407.38	0.081	0.550	0.147
Bluetooth	2402.0	2.20	3.00	5.20	0.003	3.31	0.001	1.000	0.001
2.4GHz WLAN	2412.0	2.20	16.50	18.70	0.074	74.13	0.015	1.000	0.015

Note:

1. For conservativeness, the lowest frequency of each band is used to determine the MPE limit of that band
2. Chose the maximum power density to do MPE analysis.

**5.2. Collocated Power Density Calculation**

WWAN Power Density / Limit	WLAN 2.4GHz Power Density / Limit	Bluetooth Power Density / Limit	Σ (Power Density / Limit) of WWAN+ WLAN 2.4GHz	Σ (Power Density / Limit) of WWAN+ Bluetooth
0.147	0.015	0.001	0.162	0.148

Note:

1. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for WWAN + WLAN2.4GHz/Bluetooth.
2. Considering the WWAN module collocation with the WLAN/Bluetooth transmitter of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of 2 collocated transmitters is compliant
3. WLAN2.4GHz and Bluetooth share the same antenna, and they cannot transmit simultaneously each other.

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.