

RF Exposure Evaluation Report

FCC ID : 2AY4J-TK20
Contain FCC ID : XMR2020BG95M2
Equipment : Tack GPS Location Tracker
Brand Name : TACK
Model Name : TK20
Applicant : Tack One Private Limited
22 SIN MING LANE #06-76, MIDVIEW CITY
SINGAPORE 573969
Manufacturer : Tack One Private Limited
22 SIN MING LANE #06-76, MIDVIEW CITY
SINGAPORE 573969
Standard : 47 CFR FCC Part 2 Subpart J, section 2.1093

The product was received on Dec. 28, 2020, and testing was started from Apr. 26, 2021 and completed on Apr. 26, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in KDB447498 D01 General RF Exposure Guidance v06 and shown 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. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



Table of Contents

1. General Description.....	4
1.1. Information.....	4
1.2. EUT General Information	4
1.3. Testing Location Information	4
2. RF Exposure Evaluation	5
2.1. Applicable Standard.....	5
2.2. SAR evaluation	5

Photographs of EUT V01

1. General Description

1.1. Information

1.2. EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
Bluetooth	2400-2483.5	2402-2480	LE: DSSS (GFSK)
LTE Band 2	1850-1910	1850.7-1909.3	QPSK, 16QAM
LTE Band 4	1710-1755	1710.7-1754.3	QPSK, 16QAM
LTE Band 5	824-849	824.7-848.3	QPSK, 16QAM
LTE Band 12	699-716	699.7-715.3	QPSK, 16QAM
LTE Band 13	777-787	779.5-784.5	QPSK, 16QAM
LTE Band 25	1850-1915	1850.7-1914.3	QPSK, 16QAM
LTE Band 26	814-849	814.7-848.3	QPSK, 16QAM
LTE Band 66	1710-1780	1710.7-1779.3	QPSK, 16QAM
LTE Band 85	698-716	699.7-715.3	QPSK, 16QAM

1.3. Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory			
<input checked="" type="checkbox"/>	Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)	
		TEL: 886-3-327-3456	FAX: 886-3-327-0973
Test site Designation No. TW3785 with FCC.			
<input type="checkbox"/>	Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)	
		TEL: 886-3-318-0787	FAX: 886-3-318-0287
Test site Designation No. TW0008 with FCC.			

2. RF Exposure Evaluation

2.1. Applicable Standard

In accordance with FCC 47 CFR part 2 (2.1093) this device has been defined as a portable device which is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

Portable devices must be evaluated using the specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2003.

2.2. SAR evaluation

- Per FCC KDB 447498 D01 v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 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 ≤ 7.5 for 10-g extremity SAR

- ♦ $f_{(\text{GHz})}$ 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)	Gain (dBi)	Tolerance (dB)	Tune-up Max. Power (dBm)	Tune-up Max. Power (mW)	Test Distance (mm)	Frequency (GHz)	Exclusion Thresholds
11	-7.02	0.5	4.48	2.81	5	2.402	0.87

Per FCC KDB 447498 D01 v06 exclusion thresholds is $0.87 < 3$, RF exposure evaluation is not required.

LTE

Max. Power		Duty Cycle (Note)	Tune-up Max. Power		Test Distance (mm)	Frequency (GHz)	Exclusion Thresholds
(dBm)	(mW)	(%)	(dBm)	(mW)			
22	158.5	4.17	8.8	7.6	5	1.9143	2.10

Note: During the emergency operating mode with the most frequent transmission cycle, this device connects to the LTE network once every 2 mins to send data, Each data transmission takes about 5 secs.

Per FCC KDB 447498 D01 v06 exclusion thresholds is $2.10 < 3$, RF exposure evaluation is not required.

—————THE END—————