

TEST REPORT

Reference No. : WTS17S0169285-2E
FCC ID..... : 2AKHBFT134
Applicant : Fantem Technologies (Shenzhen) Co., Ltd
Address : 5th Floor,Yingtang Building,South 5th Road,HI-tech Park,Nanshan
District,Shenzhen,Guangdong,China
Manufacturer : Fantem Technologies (Shenzhen) Co., Ltd.
North, 3/F, Yitao Technology Industrial Park,Baihua Yuan Rd.,The
Address : Second Industrial Area,Guangming Sub-districtOffice,Guangming New
District,Shenzhen, Guangdong, China
Product Name : RemoteLink
Model No. : FT134-X
Standards..... : FCC CFR47 Part 15.247:2016
Date of Receipt sample..... : Jan. 10, 2017
Date of Test..... : Jan. 11 – Feb. 21, 2017
Date of Issue : Mar. 10, 2017
Test Result : **Pass**
Note..... : This report is for SAR Evaluation

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company.
The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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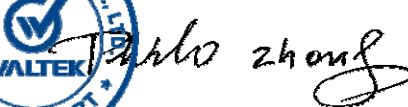
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3 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTS17S0169285-2E	Jan. 10, 2017	Jan. 11 – Feb. 21, 2017	Mar. 02, 2017	-	-	Replaced
WTS17S0169285-2E	Jan. 10, 2017	Jan. 11 – Feb. 21, 2017	Mar. 10, 2017	Revision1	Updated Test Report	Valid

4 **General Information**

4.1 **General Description of E.U.T.**

Product Name	: RemoteLink
Model No.	: FT134-X
Model Description	: N/A
Bluetooth Version	: Bluetooth V4.0 Bluetooth LE mode only
NFC	: Support, working on passive mode.
Hardware Version	: AA
Software Version	: V1.00

4.2 **Details of E.U.T.**

Operation Frequency	Bluetooth: 2402~2480MHz
Max. RF output power	Bluetooth: 4.19dBm
Type of Modulation	Bluetooth: GFSK NFC: ASK/2ASK
Antenna installation	Bluetooth: internal permanent antenna NFC: Frame antenna
Antenna Gain	Bluetooth: 1.5dBi
Technical Data	: DC 5V by USB from PC

4.3 **Channel List**

Bluetooth LE

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2402	1	2404	2	2406	3	2408
4	2410	5	2412	6	2414	7	2416
8	2418	9	2420	10	2422	11	2424
12	2426	13	2428	14	2430	15	2432
16	2434	17	2436	18	2438	19	2440
20	2442	21	2444	22	2446	23	2448
24	2450	25	2452	26	2454	27	2456
28	2458	29	2460	30	2462	31	2464
32	2466	33	2468	34	2470	35	2472
36	2474	37	2476	38	2478	39	2480

4.4 Test Facility

The test facility has a test site registered with the following organizations:

- **IC – Registration No.: 7760A-1**

Waltek Services(Shenzhen) Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files.

Registration number 7760A-1, October 15, 2015.

- **FCC Test Site 1#– Registration No.: 880581**

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 880581, April 29, 2014.

- **FCC Test Site 2#– Registration No.: 328995**

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 328995, December 3, 2014.

5 Equipment Used during Test

5.1 Equipments List

3m Semi-anechoic Chamber for Radiation Emissions Test site 1#						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Spectrum Analyzer	R&S	FSP	100091	Apr.29, 2016	Apr.28, 2017
2	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	Apr.09,2016	Apr.08,2017
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	Apr.09,2016	Apr.08,2017
4	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	Sep.12,2016	Sep.11,2017
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	Apr.09,2016	Apr.08,2017
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	Apr.09,2016	Apr.08,2017
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	Apr.13,2016	Apr.12,2017
8	Coaxial Cable (above 1GHz)	Top	1GHz-25GHz	EW02014-7	Apr.13,2016	Apr.12,2017
RF Conducted Testing						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1.	EMC Analyzer (9k~26.5GHz)	Agilent	E7405A	MY45114943	Sep.12, 2016	Sep.11, 2017
2.	Spectrum Analyzer (9k-6GHz)	R&S	FSL6	100959	Sep.12, 2016	Sep.11, 2017
3.	Signal Analyzer (9k~26.5GHz)	Agilent	N9010A	MY50520207	Sep.12, 2016	Sep.11, 2017

5.2 Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-6}$
RF Power	± 1.0 dB
RF Power Density	± 2.2 dB
Radiated Spurious Emissions test	± 5.03 dB (30M~1000MHz)
	± 5.47 dB (1000M~25000MHz)
Conducted Spurious Emissions test	± 3.64 dB (AC mains 150KHz~30MHz)

5.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R.China.

6 SAR Evaluation

Test Requirement: FCC Part 1.1307
 Evaluation Method: FCC Part 2.1093
 KDB 447498 D02 SAR Procedures for Dongle Xmtr v02r01
 KDB 447498 D01 General RF Exposure Guidance v06

6.1 Requirements

1) 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 where

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz
2. Power and distance are rounded to the nearest mW and mm before calculation
3. The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

6.2 The procedures / limit

Conducted Peak power(dBm)	Conducted Peak power(mW)	Source-based time-averaged maximum conducted output power(mW)	Minimum test separation distance required for the exposure conditions (mm)	SAR Test Exclusion Thresholds(mW)	Result
4.19	2.62	2.62	5	10	Compliance
Note: No SAR measurement is required.					

Remark: Max. duty factor is 100%

Calculation formula: Source-based time-averaged maximum conducted output power (mW)

=Conducted peak power (mW)*Duty factor

For frequency in 2.402GHz: SAR Test Exclusion Thresholds $\leq 3.0 / [\sqrt{f(\text{GHz})}] \cdot (\text{min. test separation distance, mm}) = 3.0 / (\sqrt{2.402}) \cdot 5 = 9.679 \text{ mW} \approx 10 \text{ mW}$

For frequency in 2.480GHz: SAR Test Exclusion Thresholds $\leq 3.0 / [\sqrt{f(\text{GHz})}] \cdot (\text{min. test separation distance, mm}) = 3.0 / (\sqrt{2.480}) \cdot 5 = 9.525 \text{ mW} \approx 10 \text{ mW}$

=====End of Report=====