Shenzhen Most Technology Service Co., Ltd.
East A, 1 floor of New Aolin Factory buiding, Langshan Erlu, North District,
Hi-tech Industry Park, Nanshan,Shenzhen,Guangdong,China

RF Exposure Evaluation Report

Report Reference No...... :	**MTEB23110266-H**
FCC ID.. ..... :	**2A2OE-T6**
Compiled by (position+printed name+signature) . :	File administrators Alisa Luo
Supervised by (position+printed name+signature) . :	Test Engineer Sunny Deng
Approved by (position+printed name+signature) . :	Manager Yvette Zhou
Date of issue ..... :	**Nov. 27,2023**
Representative Laboratory Name. :	**Shenzhen Most Technology Service Co., Ltd.**
Address..... :	No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.
Applicant's name ..... :	**Shenzhen Samoon Technology Co., Ltd.**
Address..... :	Floor 6, Building 7, Zhongyuntai Science and Technology Industrial Factory, Songbai Road, Shiyan Street, Baoan District, Shenzhen, Guangdong,China.
Test specification/ Standard ..... :	**47 CFR Part 1.1307;47 CFR Part 1.1310** **KDB447498D01 General RF Exposure Guidance v06**
TRF Originator..... :	Shenzhen Most Technology Service Co., Ltd.

Test item description ..... :	Ride Recorder
Trade Mark..... :	Samoon
Model/Type reference ..... :	T6
Listed Models ..... :	N/A
Modulation Type ..... :	b: DSSS ,CCK g/n: BPSK,QPSK,QAM
Operation Frequency..... :	802.11b/802.11g/802.11n(H20): 2412MHz~2462MHz
Hardware Version	V1.6
Software Version	20230908V1.0
Rating ..... :	DC 5-12V
Result ..... :	**PASS**

TEST REPORT

Equipment under Test	:	Ride Recorder
Model /Type	:	T6
Listed Models	:	N/A
Remark		N/A.
Applicant	:	**Shenzhen Samoon Technology Co., Ltd.**
Address	:	Floor 6, Building 7, Zhongyuntai Science and Technology Industrial Factory, Songbai Road, Shiyan Street, Baoan District, Shenzhen, Guangdong,China.
Manufacturer	:	**Shenzhen Samoon Technology Co., Ltd.**
Address	:	Floor 6, Building 7, Zhongyuntai Science and Technology Industrial Factory, Songbai Road, Shiyan Street, Baoan District, Shenzhen, Guangdong,China.

Test Result:	**PASS**

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2023-11-27	Initial Issue	Alisa Luo

2. SAR Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
4.3.1. Standalone SAR test exclusion considerations
Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

2.1.2 Limits

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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

F= Frequency in MHz
Friis Formula
Friis transmission formula: Pd = (Pout*G)/(4* Pi * R 2) Where
Pd = power density in mW/cm2
Pout = 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
Pd id the limit of MPE, 1 mW/cm2 . If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

2.1.3 EUT RF Exposure

Antenna Gain: 3.59dBi

WIFI 2.4G

802.11b			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2412MHz)	11.44	11.44±1	12.44
Middle(2437MHz)	11.43	11.43±1	12.43
Highest(2462MHz)	11.32	11.32±1	12.32

802.11g			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2412MHz)	13.45	13.45±1	14.45
Middle(2437MHz)	13.47	13.47±1	14.47
Highest(2462MHz)	13.25	13.25±1	14.25

802.11n(H20)			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2412MHz)	12.79	12.79±1	13.79
Middle(2437MHz)	12.74	12.74±1	13.74
Highest(2462MHz)	12.63	12.63±1	13.63

WIFI 2.4G

Worst case: 802.11g						
Channel	Maximum tune-up Power (dBm)	Maximum tune-up Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Middle(2437MHz)	14.47	27.99	3.59	0.0128	1.0	Pass

Note: 1) Refer to report MTEB23110266-R for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R2)=(27.99*2.29)/(4*3.1416*20^2)=0.0128

……THE END OF REPORT……