Shenzhen Most Technology Service Co., Ltd.
No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.

RF Exposure Evaluation Report

Report Reference No......:	**MTWG2209350-H**
FCC ID..... :	**2A397-HK578**
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.....:	**October 18, 2022**
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.....:	**QINGDAO HISTONE INTELLIGENT COMMERCIAL SYSTEM CO., LTD.**
Address .....:	Wisdom Valley, No.8 Shengshui Road, Laoshan District, Qingdao City, 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 .....:	POS COMPUTER
Trade Mark .....:	Histone
Manufacturer .....:	**QINGDAO HISTONE INTELLIGENT COMMERCIAL SYSTEM CO., LTD.**
Model/Type reference.....:	HK578
Listed Models .....:	HK578 J6412, HK650
Modulation Type.....:	ASK
Operation Frequency.....:	13.56MHz
Hardware Version.....	HS-J6412
Software Version	MEHL0401
Rating .....:	24V⎓,2.5A,60W (by Adapter 1: 100-240V~,50-60Hz,1.8A(FSP060-DAAN3)) 24V⎓,5A,120W (by Adapter 2: 100-240V~, 50-60Hz,1.8A(FSP120-AAAN3)) 24V⎓,3.75A,90W (by Adapter 3: 100-240V~, 50/60Hz,2.5A(GM95-240375-F))
Result.....:	**PASS**

TEST REPORT

Equipment under Test	:	POS COMPUTER
Model /Type	:	HK578
Listed Models	:	HK578 J6412, HK650
Remark		All models are identical to each other, except model name.
Applicant	:	**QINGDAO HISTONE INTELLIGENT COMMERCIAL SYSTEM CO., LTD.**
Address	:	Wisdom Valley, No.8 Shengshui Road, Laoshan District, Qingdao City, China
Manufacturer	:	**QINGDAO HISTONE INTELLIGENT COMMERCIAL SYSTEM CO., LTD.**
Address	:	Wisdom Valley, No.8 Shengshui Road, Laoshan District, Qingdao City, China

Test Result:	**PASS**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2022-10-18	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

For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C): 33
1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by [1 + log(100/f(MHz))]
2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by ½
3) SAR measurement procedures are not established below 100 MHz.
When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any SAR test results below 100 MHz to be acceptable.34

2.1.3 EUT RF Exposure

EIRP =PT*GT= $(E \times D)^2 /30$
where:
PT = transmitter output power in watts,
GT = numeric gain of the transmitting antenna (unitless),
E = electric field strength in V/m, ---$10^{(dB\mu V/m)/20)}/10^6$,
D = measurement distance in meters (m)---3m,
So PT = $(E \times D)^2 /30$ / GT

The worst case (refer to report MTWG2207207) is below:

Antenna polarization: Horizontal		
Frequency (MHz)	Level (dBuV/m)	Polarization
13.56	78.1	Peak

For 13.56MHz wireless:
Field strength=78.1 dBuV/m
Ant gain:3dBi;so Ant numeric gain=2

EIRP = PT*GT = $(E \times D)^2 /30=(10^{(dB\mu V/m)/20)}/10^6*3)^2/30=0.00000192$
So PT= EIRP/GT=0.0000108W=0.0108mW
So(0.0108mW/5mm)* √0.43392GHz=0.000096
exclusion=0.000096<3.0 for 1-g SAR

So the SAR report is not required.

.....THE END OF REPORT.....