

TEST REPORT

APPLICANT

HirschSecure Inc

MODEL NAME

8200MBT / 8200MBP

FCC ID

MBPTSKPMT

REPORT NUMBER

HA260330-IDE-005-R03

TEST REPORT

Date of Issue

July 14, 2026

Test Site

HCT America, Inc.

840 Yosemite Way, Milpitas, CA 95035, USA

Applicant

HirschSecure Inc

Applicant Address

1900B Carnegie Ave, 92705 Santa Ana, CA, USA

FCC ID

MBPTSKPMT

Model Name

8200MBT / 8200MBP

EUT Type

RFID Smartcard Reader

Modulation Type

ASK

FCC Rule Part(s)

Part 1 (§1.1310 / §1.1307), Part 2 (§2.1091)

Test Procedure

KDB 447498 D01 v06

The device bearing the trade name and model specified above, has been shown to comply with the applicable technical standards as indicated in the measurement report and was in accordance with the procedures specified in §2.947. The results in this report apply only to the product which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

HCT America, Inc. certifies that no party to application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C 862

Authorized & Released By:

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REVISION HISTORY

The revision history for this document is shown in table.

TEST REPORT NO.	REVISION	DATE	DESCRIPTION
HA260330-IDE-005-R03	0	July 14, 2026	Initial Issue

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1. EUT DESCRIPTION

Model	8200MBT / 8200MBP	
EUT Type	RFID Smartcard Reader	
Power Supply	12.0 V d.c.	
RF Specification	RFID (13.56 MHz)	
Transmitter Chain	1	
Exemption Analysis	☐	1-mW Test Exemptions
	☐	SAR-Based Test Exemptions
	☒	MPE-Based Test Exemptions
Antenna Specification ¹⁾	Loop antenna	
Operating Environment	Indoor & Outdoor	
Operating Temperature	-10 °C ~ +70 °C	

Note(s) :

1. Antenna information is based on the document provided.

2. INTRODUCTION

2.1. RF Exposure Exemptions for Single Source

(A) 1-mW Blanket Exemption

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz - 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

(B) SAR-Based Exemption

A more comprehensive exemption, considering a variable power threshold that depends on both the separation distance and power, is provided in § 1.1307(b)(3)(i)(B). This exemption is applicable to the frequency range between 300 MHz - 6 GHz, with test separation distances between 0.5 cm and 40 cm, and for all RF sources in fixed, mobile, and portable device exposure conditions. Accordingly, a RF source is considered an RF exempt device if its available maximum time-averaged (matched conducted) power or its effective radiated power (ERP), whichever is greater, are below a specified threshold (P_{th}).

$$P_{th}(mW) = ERP_{20cm} \left(\frac{d}{20} \right)^x, \text{ where } d \leq 20 \text{ cm}$$

$$P_{th}(mW) = ERP_{20cm}, \text{ where } 20 \text{ cm} < d \leq 40 \text{ cm}$$

$$x = -\log_{10} \left(\frac{60}{ERP_{20cm} \sqrt{f}} \right)$$

$$ERP_{20cm}(mW) = 2040 f, \text{ where } 0.3 \text{ GHz} \leq f(\text{GHz}) < 1.5 \text{ GHz}$$

$$ERP_{20cm}(mW) = 3060, \text{ where } 1.5 \text{ GHz} \leq f(\text{GHz}) \leq 6 \text{ GHz}$$

(C) MPE-Based Exemption

MPE-based exemption is provided in the table 1, § 1.1307(b)(3)(i)(C), for a much wider frequency range, from 300 kHz - 100 GHz. The table 1 applies to any RF source (i.e. single fixed, mobile, and portable transmitters) and specifies power and distance criteria for each of the five frequency ranges used for the MPE limits. These criteria apply at separation distances from any part of the radiating structure of at least $\lambda/2\pi$. The MPE-based test exemption condition is in terms of ERP, defined as the product of the maximum antenna gain and the delivered maximum time-averaged power.

RF Source Frequency f_L (MHz) – f_H (MHz)	Minimum Distance $\lambda/2\pi (f_L) - \lambda/2\pi (f_H)$	Threshold ERP (ERP_{th})
0.3 – 1.34	150 m – 35.6 m	1,920 R^2
1.34 – 30	35.6 m – 1.6 m	3,450 R^2 / f^2
30 – 300	1.6 m – 159 mm	3.83 R^2
300 – 1,500	159 mm – 31.8 mm	0.0128 $R^2 f$
1,500 – 100,000	31.8 mm – 0.5 mm	19.2 R^2

Table 1. § 1.1307(b)(3)(i)(C) – Single RF Source Subject to Routine Environmental Evaluation

2.2. RF Exposure Exemptions for Simultaneous Transmission

(A) 1-mW Blanket Exemption

Per § 1.1307(b)(3)(ii)(A), the 1-mW exemption may be also applied to simultaneous transmission conditions, within the same host device, according one of the following criteria:

- When maximum available power each individual transmitting antenna within the same time averaging period is ≤ 1 mW, and the nearest parts of the antenna structures of the simultaneously operating transmitters are separated by at least 2 cm.
- When the aggregate maximum available power of all transmitting antennas is ≤ 1 mW in the same time-averaging period.

This exemption cannot be combined with other options (B) or (C).

(B) SAR-Based Exemptions and MPE-Based Exemptions

As described in § 1.1307(b)(3)(ii)(B) and covers the situations where both SAR-based and MPE-based exemption may be considered for test exemption in fixed, mobile, or portable device exposure conditions. For these cases, a device with multiple RF sources transmitting simultaneously will be considered an RF exempt device if the condition of the following formula is satisfied :

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure\ Limit_k} \leq 1$$

3. RESULT

3.1. MPE-Based Exemptions Calculation

RFID (HF)				
Frequency	13.56	MHz		
Separation Distance	0.2	m		
Threshold ERP (ERP _{th})	0.751	W		
Max Conducted Output Power	-15.130	dBm	0.030690220	mW
Antenna Gain	0.000	dBi		-
EIRP	-17.000	dBm	0.000019953	W
ERP	-19.150	dBm	0.000012162	W
ERP / ERP _{th} Ratio	0.000016205			

Note :

1. Maximum conducted output power including tune-up tolerance
2. The minimum separation distance has been indicated in the user manual.

3.2. SUMMARY OF RESULTS

Mode	Frequency Range (MHz)	Threshold ERP (ERP _{th}) (W)	ERP (W)	ERP / ERP _{th} Ratio
RFID (HF)	13.56	0.751	0.000012162	0.000016205

Sample Calculation

RF Exposure at 20 cm distance = $P / ERP_{th} = 0.000012162 / 0.751 = \mathbf{0.000016205} < 1.0$

END OF TEST REPORT