

RF Exposure Evaluation Report

Report Reference No...... : **MTEB23050309-H**

FCC ID..... : **2BA66-DC-ERP011**

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..... : **May 29, 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 Beifengyuntong Technology Co., LTD.**

Address..... : Room 318 Building E, LiHao industrial Zone, No. 78 AiNan Road,
Longgang 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.

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Test item description..... : **IC Card Reader Props**

Trade Mark..... : BearHoHo

Manufacturer..... : Shenzhen Beifengyuntong Technology Co., LTD.

Model/Type reference..... : DC-ERP011(10A)

Listed Models : DC-ERP011(1A), DC-ERP011(2A), DC-ERP011(3A),
DC-ERP011(4A), DC-ERP011(5A), DC-ERP011(6A),
DC-ERP011(7A), DC-ERP011(8A), DC-ERP011(9A),
DC-ERP011(1N), DC-ERP011(2N), DC-ERP011(3N),
DC-ERP011(4N), DC-ERP011(5N), DC-ERP011(6N),
DC-ERP011(7N), DC-ERP011(8N), DC-ERP011(9N),
DC-ERP011(10N)

Modulation Type..... : ASK

Operation Frequency..... : 13.56MHz

Hardware Version..... : V2.2

Software Version..... : V2.1

Rating..... : DC 12V by Adapter

Result..... : **PASS**

TEST REPORT

Equipment under Test : **IC Card Reader Props**

Model /Type : DC-ERP011(10A)

Listed Models : DC-ERP011(1A), DC-ERP011(2A), DC-ERP011(3A),
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DC-ERP011(7A), DC-ERP011(8A), DC-ERP011(9A),
DC-ERP011(1N),DC-ERP011(2N), DC-ERP011(3N),
DC-ERP011(4N), DC-ERP011(5N), DC-ERP011(6N),
DC-ERP011(7N), DC-ERP011(8N), DC-ERP011(9N),
DC-ERP011(10N)

Remark : Only the model name and the number of connected card readers differ

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Address : Room 318 Building E,LiHao industrial Zone,No. 78 AiNan Road,
Longgang District, ShenZhen, GuangDong,China

Test Result:	PASS
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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	2023-05-29	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 $[1 + \log(100/f(\text{MHz}))]$
- 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 $\frac{1}{2}$
- 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

The worst case (refer to report **MTEB22120201-R**) is below:

Antenna polarization: Horizontal		
Frequency (MHz)	Level (dBuV/m)	Polarization
13.56	77.4	Peak

$$E = \text{EIRP} - 20 \log d + 104.8$$

E: is the electric field strength in dBuV/m

EIRP: is the equivalent isotropically radiated power in dBm

d: is the specified measurement distance in m

$$d = 3\text{m}$$

$$\text{EIRP} = 77.4 + 20 \log 3 - 104.8 = -17.3\text{dBm}$$

13.56MHz < 30MHz, Add a 6DB maximum ground factor.

$$\text{EIRP} = -17.3\text{dBm} + 6 = -11.3\text{dBm}$$

The EIPR of the product is small enough, RF Exposure meets the requirements.

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