



MPE Test Report

Report No.: OKA-ESH-P21050486B-4

FCC ID: 2AYF8-YBEA10A

Product: Electric Scooter

Model: EA10A

Received Date: May.25, 2021

Test Date: May.25 to Jul.11.2021

Issued Date: Jul.12.2021

Applicant: Zhejiang Okai Vehicle Co., Ltd.

Address: No. 9, Xinxing Road, Xinbi Town, Jinyun County, Zhejiang, China

Manufacturer: Zhejiang Okai Vehicle Co., Ltd.

Address: No. 9, Xinxing Road, Xinbi Town, Jinyun County, Zhejiang, China

Issued By: BUREAU VERITAS ADT (Shanghai) Corporation

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Test Lab
Cert 2343.01

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Release Control Record

Issue No.	Description	Date Issued
OKA-ESH-P21050486B-4	Original release	Jul.12, 2021

1 Certificate of Conformity

Product: Electric Scooter

Brand: OKAI

Model: EA10A

Applicant: Zhejiang Okai Vehicle Co., Ltd.

Test Date: May.25 to Jul.11.2021

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **BUREAU VERITAS ADT (Shanghai) Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :



, **Date:**

Jul.12.2021

Yuan ZHANG

Project Engineer

Approved by :



, **Date:**

Jul.12.2021

Daniel SUN

EMC Lab Manager



2 General Information

2.1 General Description of EUT

BLE

Product	Electric Scooter
Brand	OKAI
Test Model	EA10A
Power Rating	Powered by battery; AC Adaptor for battery: INPUT: 100-240Vac,50/60Hz 2A OUTPUT: 42Vdc,2A
Modulation Type	GFSK
Modulation Technology	Bluetooth Low Energy 4.2&5.0
Operating Frequency	2402MHz ~ 2480MHz
Number of Channel	40
Antenna Type	PCB Antenna
Antenna Connector	--
Antenna Gain	Ant:3.32dBi

Note:

1. For more details, please refer to the User's manual of the EUT.

NFC

Product	Electric Scooter
Brand	OKAI
Test Model	EA10A
Power Rating	Powered by battery; AC Adaptor for battery: INPUT: 100-240Vac,50/60Hz 2A OUTPUT: 42Vdc,2A
Modulation Type	ASK
Modulation Technology	NFC
Operating Frequency	13.56MHz
Number of Channel	1
Antenna Type	Coil Antenna
Antenna Connector	--

Note:

1. For more details, please refer to the User's manual of the EUT.

3 RF Exposure

3.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1,500	-	-	F/1500	30
1,500-100,000	-	-	1.0	30

F = Frequency in MHz

3.2 MPE Calculation Formula

Power density (S) is calculated according to the formula:

$$S = PG / (4\pi R^2)$$

Where S = power density in mW/cm²

P = transmit power in mW

G = numeric gain of transmit antenna (numeric gain=Log-1(dB antenna gain/10))

R = distance (cm)

3.3 MPE Calculation Formula

The antenna of this product, under normal use condition, is at least 20cm from the body of the user. So the device is classified as Mobile Device.

3.4 Calculation Result of Maximum Permissible Exposure

Frequency Band (MHz)	Max. Conducted output power(dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2402-2480	2.68	3.32	20	0.000792411	1

Conclusion:

The calculation result of MPE is less than the limit.

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