

RF Exposure Evaluation Report

Product : Magnetic truck
Trade mark : N/A
Model/Type reference : U501,U360,U361,U362,U363,U364,U365,U366,U367,
U368,U369,U160,U161,U162,U163,U164,U165,U166,
U167,U168,169
Test Model No. : U501
Serial Number : N/A
Report Number : EED32N80454302
FCC ID : 2A2H9DBLU501
Date of Issue : Jul. 29, 2021
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF Exposure Guidance v06
Test result : PASS

Prepared for:

SHANTOU DANBAOLE TECHNOLOGY CO.,LTD
Daping Industrial Zone, Huainan Village,Lianxia Town,
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Jul. 29, 2021

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2 Version

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4 General Information

4.1 Client Information

Applicant:	SHANTOU DANBAOLE TECHNOLOGY CO.,LTD
Address of Applicant:	Daping Industrial Zone, Huainan Village, Lianxia Town, Chenghai District, Shantou City, Guangdong
Manufacturer:	SHANTOU DANBAOLE TECHNOLOGY CO.,LTD
Address of Manufacturer:	Daping Industrial Zone, Huainan Village, Lianxia Town, Chenghai District, Shantou City, Guangdong
Factory:	SHANTOU DANBAOLE TECHNOLOGY CO.,LTD
Address of Factory:	Daping Industrial Zone, Huainan Village, Lianxia Town, Chenghai District, Shantou City, Guangdong

4.2 General Description of EUT

Product Name:	Magnetic truck
Model No.:	U501,U360,U361,U362,U363,U364,U365,U366,U367,U368,U369,U160,U161,U162,U163,U164,U165,U166,U167,U168,169
Test model:	U501
Trade Mark:	N/A
EUT Supports Radios application:	BT: 2402MHz~2480MHz

4.3 Product Specification subjective to this standard

Frequency Range:	BT: 2402MHz~2480MHz
Modulation Type:	GFSK, $\pi/4$ DQPSK
Test Power Grade:	Default
Test Software of EUT:	FCC Assist.exe
Antenna Type:	Wire antenna
Antenna Gain:	0dBi
Power Supply:	DC6V 4*AAA Battery
Max Conducted Peak Output Power:	2.93dBm The Max Conducted Peak Output Power data refer to the report EED32N80454301
Sample Received Date:	Jun. 11, 2021
Sample tested Date:	Jun. 11, 2021 to Jul. 07, 2021
Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified. N/A¹⁾ The Product is powered battery. Model No.: U501,U360,U361,U362,U363,U364,U365,U366,U367,U368,U369,U160,U161,U162,U163,U164,U165,U166,U167,U168,169 Only the model U501 was tested, due to the same electrical parameters, PCB board and function of the above models, only the number and appearance of building blocks are different. They share building blocks with each other.	

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 RF Exposure Evaluation

5.1 RF Exposure Compliance Requirement

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{377}$

Where E = Field strength in Volts / meter

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{377 d^2}$$

Changing to units of mW and cm, using:

$$P \text{ (mW)} = P \text{ (W)} / 1000 \text{ and}$$

$$d \text{ (cm)} = d \text{ (m)} / 100$$

Yields

$$S = \frac{30 \times (P/1000) \times G}{377 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2} \quad \text{Equation 1}$$

Where d = Distance in cm

P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

5.2 Maximum Permissible Exposure

Substituting the MPE safe distance using $d = 20$ cm into Equation 1:

$$S = 0.000199 \times P \times G$$

Where P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

BT:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm ²)
1	2441	1.9634	1	20	0.0004	1

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32N80454301 for EUT external and internal photos.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***