



**Spectrum Research & Testing Lab., Inc.**

No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

# TEST REPORT

Reference No.: A20092502  
Report No.: MPEA20092502  
FCC ID : 2AXURX5003  
Page: 1 of 7  
Date: Jan. 02, 2021

Product Name: DASH CAM  
Model No.: X5003  
MASI AUTO Co., LTD.  
Applicant: 7F.-10, No.9, Sec. 2, Nankan Rd., Luzhu Dist., Taoyuan City  
338, Taiwan  
Date of Receipt: Sep. 15, 2020  
Finished date of Test: Oct. 13, 2020  
Applicable Standards: KDB 447498  
KDB 865664

We, **Spectrum Research & Testing Laboratory Inc.**, hereby certify that one sample of the above was tested in our laboratory with positive results according to the above-mentioned standards. The records in the report are an accurate account of the results. Details of the results are given in the subsequent pages of this report.

Tested By : David Hung , Date: 01/02/2021  
(David Hung)

Approved By : Johnson Ho , Date: 1/2/2021  
( Johnson Ho, Director )



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## 1. DOCUMENT POLICY AND TEST STATEMENT

### 1.1 DOCUMENT POLICY

- The report shall not be reproduced except in full, without the written approval of SRT Lab, Inc.
- FCC Registered Test Site Number : TW1016

### 1.2 TEST STATEMENT

- The test results in the report apply only to the unit tested by SRT Lab.
- There was no deviation from the requirements of test standards during the test.
- DC power source, DC 3V of button cell battery or DC 12V from car charger, was used during the test.

### 1.3 EUT MODIFICATION

- No modification in SRT Lab.

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**2. DESCRIPTION OF EUT AND TEST MODE****2.1 GENERAL DESCRIPTION OF EUT**

<b>PRODUCT</b>	DASH CAM
<b>MODEL NO.</b>	X5003
<b>POWER SUPPLY</b>	DC power source, DC 3V from battery of DC 12V from car charger
<b>FREQUENCY BAND</b>	2400 MHz ~ 2483.5 MHz
<b>CARRIER FREQUENCY</b>	2412 MHz
<b>NUMBER OF CHANNELS</b>	1
<b>RATED RF OUTPUT POWER</b>	-9.12 dBm (0.12 mW)
<b>MODULATION TYPE</b>	IEEE802.11g OFDM(BPSK/16-QAM/64-QAM)
<b>MODE of OPERATION</b>	Duplex
<b>ANTENNA TYPE</b>	Chip Antenna (Brand : RainSun Model : AN1003)
<b>ANTENNA GAIN</b>	1.5 dBi

**NOTE:** For more detailed information, please refer to the EUT's specification or user's manual provided by manufacturer.



### 3. RF POWER EXPOSURE EVALUATION TEST

#### 3.1 LIMIT

According to the requirements of Part 1.1310(e), KDB 447498 D01 General RF Exposure Guidance v06, Section7, and KDB 865664 D02 RF Exposure Reporting v01r02, section 2 .

#### Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength(E) (V/m)	Magnetic Field Strength(H) (A/m)	Power density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

#### Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength(E) (V/m)	Magnetic Field Strength(H) (A/m)	Power density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz \*Plane-wave equivalent power density

**NOTE 1:** Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

**NOTE 2:** General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.



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## 3.2 TEST PROCEDURE

1. The EUT was operating in Tx mode.
2. The EUT uses an Printed Antenna, the antenna gain of 3 dBi is declared by the manufacturer.

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

Where: S = power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

## 3.3 EUT OPERATING CONDITION

1. Setup the EUT and all peripheral devices .
2. Turn on the power of all equipment and EUT.
3. Set the EUT under continuous transmission condition mode.
4. The EUT was set to the highest available power level.



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### 3.4 CONNECT POWER AT THE ANTENNA CONNECTOR RESULT

Temperature: 24 °C Humidity: 79 % RH  
Spectrum Detector: PK. Tested Mode: 802.11g  
Tested By: David Hung Tested Date: Oct. 13, 2020

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	MPE DISTANCE (cm)	ANTENNA GAIN (dBi)	PEAK POWER OUTPUT		CALCULATED RF EXPOSURE (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
				dBm	mW		
CH01	2412	20	1.5	-9.12	0.12	0.000034	1

**NOTE:** Limits for Occupational/Controlled Exposure