



# RF EXPOSURE Test Report

**Report No.:** MTi230413006-05E2  
**Date of issue:** 2023-05-26  
**Applicant:** Shenzhen Lingdu Auto Electronics Co., Ltd.  
**Product:** Dashcam  
**Model(s):** D100, A11, A12, A14, M330, D500, M350, M360,  
SAL-CDC100, DC100  
**FCC ID:** 2ASWV-M330

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>

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3. This report is invalid without the seal and signature of the laboratory;
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<b>Test Result Certification</b>	
<b>Applicant:</b>	<b>Shenzhen Lingdu Auto Electronics Co., Ltd.</b>
Address:	1807-1808 JinHua Building, No.468 Minzhi Avenue, Longhua District, Shenzhen
<b>Manufacturer:</b>	<b>Dongguan Lingdu Electronics Technology Co., Ltd.</b>
Address:	No.1, Longcheng Road, Xiekeng Village Committee, Qingxi Town, Dongguan, Guangdong, China
<b>Factory:</b>	<b>Dongguan Lingdu Electronics Technology Co., Ltd.</b>
Address:	No.1, Longcheng Road, Xiekeng Village Committee, Qingxi Town, Dongguan, Guangdong, China
<b>Product description</b>	
Product name:	Dashcam
Trademark:	N/A
Model name:	D100
Serial Model:	A11, A12, A14, M330, D500, M350, M360, SAL-CDC100, DC100
Standards:	N/A
Test procedure:	KDB 447498 D01 v06
<b>Date of Test</b>	
Date of test:	2023-05-19 ~ 2023-05-26
Test result:	Pass

**Test Engineer :**

*David. Lee*

(David Lee)

**Reviewed By: :**

*Leon Chen*

(Leon Chen)

**Approved By: :**

*Tom Xue*

(Tom Xue)

## RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
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
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
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
300-1,500			f/1500	30
1,500-100,000			1.0	30

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

### MPE Calculation Method

Friis transmission formula:  $P_d = (P_{out} * G) / (4 * \pi * R^2)$

Where

$P_d$  = Power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = Numeric gain of the antenna relative to isotropic antenna

$\pi$  = 3.1415926

R = distance between observation point and center of the radiator in cm (20cm)

$P_d$  the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

## Measurement Result

### 2.4GWiFi:

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz,

Power density limited: 1mW/ cm<sup>2</sup>

2.4GWiFi: ANT GAIN :1.52dBi

Channel Freq. (MHz)	modulation	conducted power (dBm)	Tune-up power (dBm)	Max		Antenna Gain	Evaluation result at 20cm Power density(mW/cm2)	Power density Limits (mW/cm2)
				tune-up power				
				(dBm)	(dBm)	(dBm)	(mW)	Numeric
2412	802.11b	13.58	13±1	14	25.119	1.42	0.00709	1
2437		14.57	14±1	15	31.623	1.42	0.00893	1
2462		13.86	13±1	14	25.119	1.42	0.00709	1
2412	802.11g	13.11	13±1	14	25.119	1.42	0.00709	1
2437		14.01	14±1	15	31.623	1.42	0.00893	1
2462		14.02	14±1	15	31.623	1.42	0.00893	1
2412	802.11n H20	13.72	13±1	14	25.119	1.42	0.00709	1
2437		14.05	14±1	15	31.623	1.42	0.00893	1
2462		13.50	13±1	14	25.119	1.42	0.00709	1

### Conclusion:

For the max result:  $0.00893 \leq 1.0$  SAR, No SAR is required.

----END OF REPORT----