

RF Exposure Evaluation Report

Applicant: Shenzhen LINGDU Auto Electronics Co., Ltd.

Address of Applicant: 1801-1808 Haiyun Building, No. 468 Minzhi Avenue, Longhua, Shenzhen, China

Equipment Under Test (EUT)

Product Name: CAR DVR

Model No.: GS63H, GS63B, GS63D, GS63A, GS63I

FCC ID: 2ASWVGS63H

Applicable standards: FCC CFR Title 47 Part 2 Subpart J Section 2.1091

Date of sample receipt: 22 Feb., 2022

Date of Test: 23 Feb., to 10 Apr., 2022

Date of report issue: 11 Apr., 2022

Test Result: PASS*

Authorized Signature:



Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

2 Version

| Version No. | Date | Description |
|-------------|---------------|-------------|
| 00 | 11 Apr., 2022 | Original |
| | | |
| | | |
| | | |
| | | |

Tested by: Mike.ou
Test Engineer

Date: 11 Apr., 2022

Reviewed by: Winner Zhang
Project Engineer

Date: 11 Apr., 2022

3 Contents

| | Page |
|--|------|
| 1 COVER PAGE..... | 1 |
| 2 VERSION..... | 2 |
| 3 CONTENTS..... | 3 |
| 4 GENERAL INFORMATION..... | 4 |
| 4.1 CLIENT INFORMATION | 4 |
| 4.2 GENERAL DESCRIPTION OF E.U.T. | 4 |
| 4.3 OPERATING MODES | 4 |
| 4.4 ADDITIONS TO, DEVIATIONS, OR EXCLUSIONS FROM THE METHOD | 4 |
| 4.5 LABORATORY FACILITY | 5 |
| 4.6 LABORATORY LOCATION | 5 |
| 5 TECHNICAL REQUIREMENTS SPECIFICATION IN FCC CFR TITLE 47 PART 2.1091 | 6 |
| 5.1 LIMITS | 6 |
| 5.2 TEST PROCEDURE..... | 6 |
| 5.3 RESULT..... | 7 |
| 5.4 CONCLUSION | 7 |

4 General Information

4.1 Client Information

| | |
|-----------------------|--|
| Applicant: | Shenzhen LINGDU Auto Electronics Co.,Ltd. |
| Address: | 1801-1808 Haiyun Building, No. 468 Minzhi Avenue, Longhua, Shenzhen, China |
| Manufacturer/Factory: | Dongguan Lingdu Electronic Technology Co., Ltd |
| Address: | 1 Longcheng Street, Qingxi Town, Dongguan City, Guangdong Province, China |

4.2 General Description of E.U.T.

| | |
|------------------------|---|
| Product Name: | CAR DVR |
| Model No.: | GS63H, GS63B, GS63D, GS63A, GS63I |
| Operation Frequency: | 2.4G Wi-Fi: 2412MHz~2462MHz |
| Modulation technology: | 802.11b: DSSS, 802.11g/n: OFDM |
| Antenna Type: | Internal Antenna |
| Antenna gain: | Wi-Fi: 2 dBi |
| Test Sample Condition: | The test samples were provided in good working order with no visible defects. |

4.3 Operating Modes

| Operating mode | Detail description |
|----------------|---|
| 2.4G WIFI mode | Keep the EUT in continuously transmitting in 2.4G WIFI mode |

4.4 Additions to, deviations, or exclusions from the method

| |
|----|
| No |
|----|

4.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

● **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

● **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

4.6 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://jyt.lets.com>

5 Technical Requirements Specification in FCC CFR Title 47 Part 2.1091

5.1 Limits

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)

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm ²) | Averaging time (minutes) |
|---|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposures | | | | |
| 0.3–3.0 | 614 | 1.63 | *(100) | 6 |
| 3.0–30 | 1842/f | 4.89/f | *(900/f ²) | 6 |
| 30–300 | 61.4 | 0.163 | 1.0 | 6 |
| 300–1500 | | | f/300 | 6 |
| 1500–100,000 | | | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 0.3–1.34 | 614 | 1.63 | *(100) | 30 |
| 1.34–30 | 824/f | 2.19/f | *(180/f ²) | 30 |
| 30–300 | 27.5 | 0.073 | 0.2 | 30 |
| 300–1500 | | | f/1500 | 30 |
| 1500–100,000 | | | 1.0 | 30 |

5.2 Test Procedure

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

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

R = distance to the centre of radiation of the antenna

5.3 Result

| Frequency (MHz) | Maximum Output power (dBm) | Maximum Output power (mW) | Antenna Gain (dBi) | Antenna Gain (numeric) | Distance (cm) | Result (mW/cm ²) | Limits for General Population/ Uncontrolled Exposure (mW/cm ²) |
|-----------------|----------------------------|---------------------------|--------------------|------------------------|---------------|------------------------------|--|
| 2.4G Wi-Fi | | | | | | | |
| 2412 | 12.55 | 17.99 | 2 | 1.58 | 20.00 | 0.0057 | 1.0 |

Note: Just the worst case mode was shown in report.

5.4 Conclusion

The device is exempt from the test and satisfies RF exposure evaluation.

-----End of report-----