

TEST REPORT						
FCC ID::	2BPFF-G01					
Test Report No::	TCT250522E041					
Date of issue::	Jun. 09, 2025					
Testing laboratory::	SHENZHEN TONGCE TESTIN	IG LAB				
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China					
Applicant's name:	Shenzhen Xinwang Optoelectr	onic Display Technology Co., Ltd.				
Address::	Room 502, Jintian Building, Kaitian Science Park, Pinghu Community, Pinghu Subdistrict, Longgang District, Shenzhen City, China					
Manufacturer's name:	Shenzhen Xinwang Optoelectronic Display Technology Co., Ltd.					
Address::	Room 502, Jintian Building, Kaitian Science Park, Pinghu Community, Pinghu Subdistrict, Longgang District, Shenzhen City, China					
Standard(s):	FCC CFR Title 47 Part 1.1307					
Product Name::	Carplay					
Trade Mark:	N/A (C)					
Model/Type reference:	G01, G02, G03, G04, G05, G0	6, G07, G08, G09, G10, G11				
Rating(s):	DC 5V					
Date of receipt of test item ::	May 22, 2025					
Date (s) of performance of test:	May 22, 2025 ~ Jun. 09, 2025					
Tested by (+signature):	Yannie ZHONG	Yannie Zoktece				
Check by (+signature):	Beryl ZHAO	Boyl 72 TCT				
Approved by (+signature):	Tomsin	Toms it's				

General disclaimer:

This report shall not be reproduced except in full, without the written approval of SHENZHEN TONGCE TESTING LAB. This document may be altered or revised by SHENZHEN TONGCE TESTING LAB personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com





Table of Contents

1 2. 0 2 2 3. F	General Production 1.1. EUT descions 1.2. Model(s) General Info. 2.1. Test enviolation 2.2. Description 3.1. Facilities and 3.1. Facilities	cription listormation ironment a on of Sup nd Accre	and mode. port Units			
3	3.2. Location Limit			 	 	
	Test Result					7



1. General Product Information

1.1. EUT description

Product Name:	Carplay	(c)
Model/Type reference:	G01	
Sample Number:	TCT250522E034-0101	
Operation Frequency:	For BT: 2402MHz~2480MHz For 5G WIFI: Band 3: 5745 MHz ~ 5825 MHz	
Modulation Type:	For BT: GFSK, π/4-DQPSK, 8DPSK For 5G WIFI: 256QAM, 64QAM, 16QAM, BPSK, QPSK	
Antenna Type:	PCB Antenna	
Antenna Gain:	For BT: 4.29dBi For 5G WIFI: 2.61dBi	
Rating(s)::	DC 5V	

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

No.	Model No.	Tested with
1	G01	
Other models	G02, G03, G04, G05, G06, G07, G08, G09, G10, G11	

Note: G01 is tested model, other models are derivative models. The models are identical in circuit and PCB layout, only different on the model names. So the test data of G01 can represent the remaining models.





2. General Information

2.1. Test environment and mode

Item	Normal condition			
Temperature	+25°C			
Voltage	DC 5V			
Humidity	56%			
Atmospheric Pressure:	1008 mbar			
Test Mode:				
Transmitting Mode:	Keep the EUT in continuous transmitting by select channel			

2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
1		1	1	1

Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
- 3. For conducted measurements (Output Power, 20dB Occupied Bandwidth, Carrier Frequencies Separation, Hopping Channel Number, Dwell Time, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

Page 4 of 7



3. Facilities and Accreditations

3.1. Facilities

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

• FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

•A2LA-No.: 4320.01

SHENZHEN TONGCE TESTING LAB

The testing lab has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.

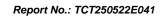
3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339







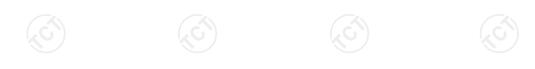
4. Limit

According to §1.1310, the limit is as follow,

TABLE 1 TO § 1.1310(E)(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)	Averaging time (minutes)	
	(i) Limits for Oc	cupational/Controlled Expos	URE		
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	
300-1,500			f/300	<6	
1,500-100,000			5	<6	
	(II) 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	
300-1,500			f/1500	<30	
1,500-100,000			1.0	<30	

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







5. Test Results and Measurement Data

According to §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Remark: 1) For BT: The maximum output power for antenna is 7.84dBm (6.08mW) at 2402MHz, 4.29dBi antenna gain(with 2.69 numeric antenna gain.)

For 5G WIFI: The maximum output power for antenna is 15.88dBm (38.73mW) at 5795MHz, 2.61dBi antenna gain(with 1.82 numeric antenna gain.)

2) For mobile or fixed location transmitters, no SAR consideration applied. The minimum separation generally be used is at least 20cm, even if the calculation indicate that the MPE distance would be lesser.

Calculation

Given

$$E = \sqrt{\frac{30 \times P \times G}{d}} \quad \& \quad S = \frac{E^2}{3770}$$

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

Substituting the MPE safe distance using d=20cm into above equation.

Yields: S=0.000199*P*G

Mode	Power(mW)	numeric antenna gain	Power density (mW/cm²)	Limit (mW/cm²)	Result
BLE	6.08	2.69	0.003255	1.0	PASS
5G WIFI	38.73	1.82	0.014027	1.0	PASS

*****END OF REPORT****

Page 7 of 7

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com