

	TEST REPOR	T			
FCC ID:	2BN8F-VDG50				
Test Report No::	TCT250314E061				
Date of issue::	Mar. 19, 2025				
Testing laboratory:	SHENZHEN TONGCE TESTING	G LAB			
Testing location/ address:	2101 & 2201, Zhenchang Factor Fuhai Subdistrict, Bao'an District 518103, People's Republic of Ch	t, Shenzhen, Guang			
Applicant's name::	NUMLAKE TECH LIMITED				
Address::	UNIT 1505, 15/F WORKINGPOR HAU FOOK STREET TSIM SHA				
Manufacturer's name:	NUMLAKE TECH LIMITED				
Address:	UNIT 1505, 15/F WORKINGPOR HAU FOOK STREET TSIM SHA				
Standard(s)::	FCC CFR Title 47 Part 1.1307				
Product Name::	Doorbell Camera				
Trade Mark:	N/A				
Model/Type reference:	G50, G20, G30, G60, G70, G80, T70, T80, T90, P60, P70, P90	, G90, M60, M70, M	180, M90, T60,		
Rating(s)::	Rechargeable Li-ion Battery DC	3.7V			
Date of receipt of test item:	Mar. 14, 2025				
Date (s) of performance of test:	Mar. 14, 2025 ~ Mar. 19, 2025	Ĉ			
Tested by (+signature) :	Onnado YE	Onnao Jagor			
Check by (+signature):	Beryl ZHAO Boyl 2 TCT				
Approved by (+signature):): Tomsin				

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

1.1. 1.2. 2. Ge 2.1. 2.2. 3. Fac 3.1. 3.2.	EUT desc Model(s) neral Info Test envi Descripti cilities au Facilities Location	cription list ormation ironment a ion of Sup nd Accre	and mode. port Units ditations	ent Data .		34445



1. General Product Information

1.1. EUT description

Product Name:	Doorbell Camera
Model/Type reference:	G50
Sample Number:	TCT250314E007-0101
Operation Frequency:	For BLE: 2402MHz~2480MHz For WIFI: 2412MHz~2462MHz (802.11b/802.11g/802.11n(HT20)) For SRD: 433.92MHz
Modulation Type:	For BLE: GFSK For WIFI: 802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n: Orthogonal Frequency Division Multiplexing (OFDM) For SRD: FSK
Antenna Type:	For BLE/WIFI: Internal Antenna For SRD: Spring Antenna
Antenna Gain:	For BLE/WIFI: 2.99dBi For SRD: 0.84dBi
Rating(s):	Rechargeable Li-ion Battery DC 3.7V

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	G50	\boxtimes		
Other models	G20, G30, G60, G70, G80, G90, M60, M70, M80, M90, T60, T70, T80, T90, P60, P70, P90			
Note: G50 is tested model, other models are derivative models. The models are identical in circuit and PCB layout.				

Note: G50 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 G50 can represent the remaining models.



Page 3 of 6

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



2. General Information

2.1. Test environment and mode

Item	Normal condition				
Temperature	+25°C				
Voltage	DC 3.7V				
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	

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.



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.

IC - Registration No.: 10668A

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Innovation, Science and Economic Development Canada for radio equipment testing.

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. 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 BLE**: The maximum output power for antenna is 1.83dBm (1.52mW) at 2402MHz, 2.99dBi antenna gain(with 1.99 numeric antenna gain.)

For WIFI: The maximum output power for antenna is 14.98dBm (31.48mW) at 2437MHz, 2.99dBi antenna gain(with 1.99 numeric antenna gain.)

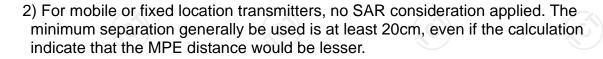
For SRD: The maximum output power for antenna is -28.07dBm (0.002mW) at 433.92MHz, 0.84dBi antenna gain(with 1.21 numeric antenna gain.)

Note: E[dBµV/m]= 71.86 computational formula

 $EIRP[dBm] = E[dB\mu V/m] + 20 log (d[m]) - 104.77;$

Conducted Power = EIRP-4.7;

Where E is the electric field strength in V/m; d is the measurement distance in meters (m)



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 (dBm)	Power (mW)	numeric antenna gain	Power density (mW/cm²)	Limit (mW/cm²)	Result
BLE	1.83	1.52	1.99	0.000602	1.00	
WIFI	14.98	31.48	1.99	0.012466	1.00	PASS
SRD	-28.07	0.002	1.21	0.0000005	0.29	

Note: BLE /SRD Can be transmitted simultaneously, MPE calculate is as follow, MPE=0.000602/1.0+0.0000005/0.29=0.000604<1.

WIFI/SRD Can be transmitted simultaneously, MPE calculate is as follow, MPE=0.012466/1.0+0.0000005/0.29=0.012468<1.

****END OF REPORT****