

# TEST REPORT

**Applicant:** Shenzhen Huafurui Technology Co., Ltd.  
**Address of Applicant:** Unit 1401 & 1402, 14/F, Jinqi zhigu mansion (No. 4 building of Chongwen Garden), Crossing of the Liuxian street and Tangling road, Taoyuan street, Nanshan district, Shenzhen, P. R. China

## Equipment Under Test (EUT)

**Product Name:** Smart phone  
**Model No.:** GT20  
**Trade mark:** HAFURY

**Applicable standards:** EN 62479:2010  
**Date of sample receipt:** 22 May, 2020  
**Date of Test:** 23 May, to 15 Jun., 2020  
**Date of report issue:** 13 Jul., 2020  
**Test Result:** PASS\*

\* In the configuration tested, the EUT complied with the standards specified above.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives. The protection requirements with respect to health contained in Directive 2014/35/EU are considered.



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 CCIS 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.

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## 2 Version

Version No.	Date	Description
00	13 Jul., 2020	Original

Remark:  
This report was revised by CCISE200507412 report, which was released and tested by Shenzhen Zhongjian Nanfang Testing Co., Ltd. The differences between them as below: Update model, trademark and software version. So no needs to be retested.

Tested by: Yao Wu  
Test Engineer

Date: 13 Jul., 2020

Reviewed by: Winner Zhang  
Project Engineer

Date: 13 Jul., 2020

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## 4 General Information

### 4.1 Client Information

Applicant:	Shenzhen Huafurui Technology Co., Ltd.
Address:	Unit 1401 &1402, 14/F, Jinqi zhigu mansion (No. 4 building of Chongwen Garden), Crossing of the Liuxian street and Tangling road, Taoyuan street, Nanshan district, Shenzhen, P. R. China
Manufacturer/ Factory:	Shenzhen Huafurui Technology Co., Ltd.
Address:	Unit 1401 &1402, 14/F, Jinqi zhigu mansion (No. 4 building of Chongwen Garden), Crossing of the Liuxian street and Tangling road, Taoyuan street, Nanshan district, Shenzhen, P. R. China

### 4.2 General Description of E.U.T.

Product Name:	Smart phone
Model No.:	GT20
Hardware version:	V965_MB_V2.0_20200415
Software version:	HAFURY_GT20_A031CH_V01_20200715
BLE Specification	
Operation Frequency:	2402MHz-2480MHz
Channel number:	40
Channel separation:	2MHz
Modulation	GFSK
Antenna Type:	Internal Antenna
Antenna gain:	-1.7 dBi (declare by Applicant)
Bluetooth Specification	
Operation Frequency:	2402MHz-2480MHz
Channel number:	79
Channel separation:	1MHz
Modulation	GFSK, Pi/4DQPSK, 8DPSK
Antenna Type:	Internal Antenna
Antenna gain:	-1.7 dBi (declare by Applicant)

### 4.3 Test Mode

Operating mode	Detail description
BLE mode	Keep the EUT in continuously transmitting in BLE mode
BT mode	Keep the EUT in continuously transmitting in BT mode

### 4.4 Description of Support Units

The EUT has been tested as an independent unit.

### 4.5 Laboratory Facility

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

● **FCC - Designation No.: CN1211**

Shenzhen Zhongjian Nanfang Testing 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 of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

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

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 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

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No.110~116, Building B, Jinyuan Business Building, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China

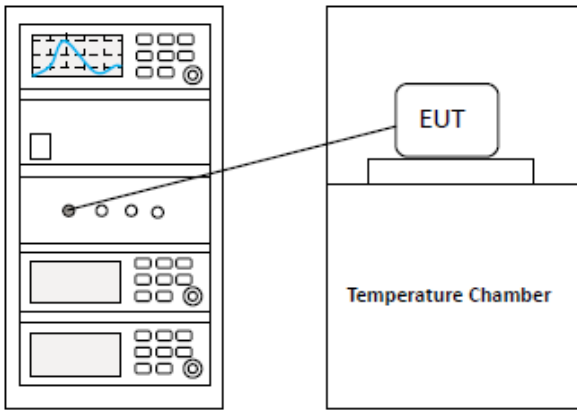
Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info@ccis-cb.com, Website: <http://www.ccis-cb.com>

### 4.7 Test Instruments list

Conducted method:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Spectrum Analyzer	Agilent	N9020A	MY50510123	11-18-2019	11-17-2020
Vector Signal Generator	Agilent	N5182A	MY49060014	11-18-2019	11-17-2020
Signal Generator	R&S	SMR20	1008100050	03-05-2020	03-04-2021
Power Sensor	D.A.R.E	RPR3006W	17I00015SNO27	11-25-2019	11-24-2020
Power Sensor	D.A.R.E	RPR3006W	17I00015SNO28	11-25-2019	11-24-2020
RF Switch Unit	Ascentest	AT890-RFB	N/A	N/A	N/A
Test Software	MWRFTTEST	MTS 8310	Version: 2.0.0.0		

## 5 Technical Requirements Specification

Test standard:	EN 62479
Limit:	20mW
Test setup:	 <p>The diagram illustrates the test setup. On the left is a power sensor unit with a display showing a blue waveform. A line connects the sensor to a Temperature Chamber on the right. Inside the chamber, an EUT (Equipment Under Test) is shown on a platform.</p>
Test procedure:	<ol style="list-style-type: none"> <li>1. Use a fast power sensor suitable for 2,4 GHz and capable of 1 MS/s.</li> <li>2. Connect the power sensor to the transmit port, sample the transmit signal and store the raw data, every channel 25 bursts. Use these stored samples in all following steps.</li> <li>3. Find the start and stop times of each burst in the stored measurement samples.</li> <li>4. Between the start and stop times of each individual burst calculate the RMS power over the burst. Save these <math>P_{burst}</math> values, as well as the start and stop times for each burst.</li> <li>5. The highest of all <math>P_{burst}</math> values (value "A" in dBm) will be used for maximum e.i.r.p. calculations.</li> <li>6. Add the (stated) antenna assembly gain "G" in dBi of the individual antenna. The RF Output Power (P) shall be calculated using the formula below: <math>P = A + G</math></li> </ol>
Test Instruments:	Refer to section 4.7 for details
Test mode:	Refer to section 4.3 for details
Test Result:	Pass

## Measurement Data

Modulation	EIRP Level (dBm)	EIRP Level (mW)	Limit (mW)	Result
Maximum Emissions Level of Bluetooth				
GFSK Mode	4.23	2.65	20	Pass
Pi/4DQPSK Mode	2.18	1.65	20	Pass
8DPSK Mode	2.15	1.64	20	Pass
Maximum Emissions Level of BLE				
2402	4.33	2.71	20	Pass
2442	4.04	2.54	20	Pass
2480	4.45	2.79	20	Pass

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