





# **FCC Test Report**

Report No.: AGC06164250401FR01A

FCC ID : 2AP3Q-FG2431WB

**APPLICATION PURPOSE**: Class II Permissive Change

**PRODUCT DESIGNATION**: Smart Body Fat Scale

**BRAND NAME** : N/A

**MODEL NAME** : FG2431WB, FG2431WB-1, FI2431WB, FG2431WB-A,

FI2431WB-A, BG2431WB

**APPLICANT**: Guangdong Welland Technology Co., Ltd.

**DATE OF ISSUE** : Jul. 15, 2025

**STANDARD(S)** : FCC Part 15 Subpart C §15.247

**REPORT VERSION**: V1.0

Attestation Of Global Compliance (Shenzhen) Co., Ltd



Page 2 of 24

## **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul. 15, 2025	Valid	Initial Release

 $Note: The\ original\ test\ report\ AGC06164250401FR01\ (dated\ Apr.\ 28,\ 2025\ and\ tested\ from\ Apr.\ 08,\ 2025\sim Apr.$ 

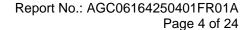
28, 2025) was modified on Jul. 15, 2025, including the following changes and additions:

-Added series model: FG2431WB-1(The difference between FG2431WB-1 and FG2431WB lies in the chip packaging of the MCU, which does not affect the radio frequency function)
Based on the above changes, additional tests for Radiated Emission are required.



## **Table of Contents**

1. General Information	4
2. Product Information	<u>5</u>
2.1 Product Technical Description	<u>5</u>
2.2 Test Frequency List	5
2.3 Related Submittal(S) / Grant (S)	6
2.4 Test Methodology	6
2.5 Special Accessories	6
2.6 Equipment Modifications	6
2.7 Antenna Requirement	6
3. Test Environment	7
3.1 Address of the Test Laboratory	7
3.2 Test Facility	7
3.3 Environmental Conditions	
3.4 Measurement Uncertainty	8
3.5 List of Equipment Use	9
4.System Test Configuration	11
4.1 EUT Configuration	11
4.2 EUT Exercise	11
4.3 Configuration of Tested System	11
4.4 Equipment Used In Tested System	11
4.5 Summary of Test Results	12
5. Description of Test Modes	13
6. Radiated Spurious Emission	14
6.1 Measurement Limit	14
11.2 Measurement Procedure	14
6.3 Measurement Setup (Block Diagram of Configuration)	17
6.4 Measurement Result	18
Appendix I: Photographs of Test Setup	23
Appendix II: Photographs of Test EUT	23





## 1. General Information

Applicant	Guangdong Welland Technology Co., Ltd.
Address	No.85 MinKe East Road, MinYing Science and Technology Park, ShiQi District, Zhongshan, 528400, China
Manufacturer	Guangdong Welland Technology Co., Ltd.
Address	No.85 MinKe East Road, MinYing Science and Technology Park, ShiQi District, Zhongshan, 528400, China
Factory	Guangdong Welland Technology Co., Ltd.
Address	No.85 MinKe East Road, MinYing Science and Technology Park, ShiQi District, Zhongshan, 528400, China
Product Designation	Smart Body Fat Scale
Brand Name	N/A
Test Model	FG2431WB
Series Model(s)	FG2431WB-1, FI2431WB, FG2431WB-A, FI2431WB-A, BG2431WB
Difference Description	All the same except for the model names and appearance colors.
Date of receipt of test item	Jul. 10, 2025
Date of Test	Jul. 10, 2025~Jul. 15, 2025
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-FCC-BLE-V1

Note: The test results of this report relate only to the tested sample identified in this report.

Prepared By	Cocili	
	Cici Li (Project Engineer)	Jul. 15, 2025
Reviewed By	Bibo zhang	
	Bibo Zhang (Reviewer)	Jul. 15, 2025
Approved By	Angole li	
	Angela Li (Authorized Officer)	Jul. 15, 2025



Page 5 of 24

## 2. Product Information

## 2.1 Product Technical Description

Technology Type	Bluetooth Low Energy
Frequency Band	2400MHz-2483.5MHz
Operation Frequency Range	2402MHz-2480MHz
Bluetooth Version	V5.3
Modulation Type	BLE ⊠GFSK 1Mbps □GFSK 2Mbps
Number of channels	40
Carrier Frequency of Each Channel	40 Channels (37 Data channels + 3 Advertising channels)
Channel Separation	2 MHz
Maximum Transmitter Power	-2.287dBm
Hardware Version	V1.0
Software Version	0002
Antenna Designation	PCB Antenna
Antenna Gain	0.89dBi
Power Supply	DC 4.5V by battery

## 2.2 Test Frequency List

Channel Number	Test Frequency	
0	2402 MHz	
1	2404 MHz	
:	:	
19	2440MHz	
:	:	
38	2478 MHz	
39	2480 MHz	
	0 1 : 19 : 38	



Page 6 of 24

#### 2.3 Related Submittal(S) / Grant (S)

This submittal(s) (test report) is intended for FCC ID: **2AP3Q-FG2431WB**, filing to comply with Part 2, Part 15 of the Federal Communication Commission rules.

#### 2.4 Test Methodology

The tests were performed according to following standards:

No.	Identity	Document Title
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations
2	FCC 47 CFR Part 15	Radio Frequency Devices
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices
4	KDB 558074 D01 15.247 Meas Guidance v05r02	Guidance for compliance measurements on Digital Transmission Systems, Frequency Hopping Spread Spectrum system, and Hybrid system devices operating under Section 15.247 of the FCC rules

#### 2.5 Special Accessories

Not available for this EUT intended for grant.

#### 2.6 Equipment Modifications

Not available for this EUT intended for grant.

#### 2.7 Antenna Requirement

## Standard Requirement

#### 15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

# 15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi

#### **EUT Antenna**

The non-detachable antenna inside the device cannot be replaced by the user at will. The gain of the antenna is 0.89 dBi.



Page 7 of 24

#### 3. Test Environment

#### 3.1 Address of the Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

#### 3.2 Test Facility

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

#### CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories).

## A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

#### FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

#### IC-Registration No.: 24842 (CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.



Page 8 of 24

#### 3.3 Environmental Conditions

	Normal Conditions
Temperature range (°C)	15 - 35
Relative humidity range	20 % - 75 %
Pressure range (kPa)	86 - 106
Power supply	DC 4.5V by battery

## 3.4 Measurement Uncertainty

The reported uncertainty of measurement y ±U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Item	Measurement Uncertainty
Uncertainty of Conducted Emission for AC Port	$U_c = \pm 2.9 \text{ dB}$
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 3.9 \text{ dB}$
Uncertainty of Radiated Emission above 1GHz	$U_c = \pm 4.9 \text{ dB}$
Uncertainty of total RF Power, Conducted	$U_c = \pm 0.8 \text{ dB}$
Uncertainty of RF Power Density, Conducted	$U_c = \pm 2.6 \text{ dB}$
Uncertainty of Spurious Emissions, Conducted	$U_c = \pm 2 \%$
Uncertainty of Occupied Channel Bandwidth	U <sub>c</sub> = ±2 %
Uncertainty of Dwell Time	U <sub>c</sub> = ±2 %



Page 9 of 24

## 3.5 List of Equipment Use

• F	Radiated Spurious Emission							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)	
$\boxtimes$	AGC-EM-E046	EMI Test Receiver	R&S	ESCI	100096	2025-01-14	2026-01-13	
	AGC-EM-E116	EMI Test Receiver	R&S	ESCI	100034	2025-05-08	2026-05-07	
$\boxtimes$	AGC-EM-E061	Spectrum Analyzer	Agilent	N9010A	MY53470504	2025-05-08	2026-05-07	
$\boxtimes$	AGC-EM-E086	Loop Antenna	ZHINAN	ZN30900C	18051	2024-03-05	2026-03-04	
$\boxtimes$	AGC-EM-E001	Wideband Antenna	SCHWARZBECK	VULB9168	D69250	2025-03-14	2027-03-13	
	AGC-EM-E029	Broadband Ridged Horn Antenna	ETS	3117	00034609	2025-03-27	2026-03-26	
	AGC-EM-E082	Horn Antenna	SCHWARZBECK	BBHA 9170	#768	2023-09-24	2025-09-23	
$\boxtimes$	AGC-EM-E146	Pre-amplifier	ETS	3117-PA	00246148	2024-07-24	2026-07-23	
$\boxtimes$	AGC-EM-E102	Antenna	ETS	3117	00154520	2025-05-18	2026-05-17	
$\boxtimes$	AGC-EM-A119	2.4G Filter	SongYi	N/A	N/A	2025-05-16	2026-05-15	
$\boxtimes$	AGC-EM-A138	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2025-05-16	2027-05-15	



Page 10 of 24

● Test Software					
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Version Information
$\boxtimes$	AGC-EM-S003	RE Test System	FARA	EZ-EMC	VRA-03A
	AGC-EM-S004	RE Test System	Tonscend	TS <sup>+</sup> Ver2.1(JS32-RE)	4.0.0.0
	AGC-ER-S012	BT/WIFI Test System	Tonscend	JS1120-2	2.6
$\boxtimes$	AGC-EM-S011	RSE Test System	Tonscend	TS+-Ver2.1(JS36-RSE)	4.0.0.0



Page 11 of 24

## 4. System Test Configuration

## 4.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

#### 4.2 EUT Exercise

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

## 4.3 Configuration of Tested System

Radiated Emission Configure:

EUT	
	١

## 4.4 Equipment Used In Tested System

The following peripheral devices and interface cables were connected during the measurement:

☐ Test Accessories Come From The Laboratory

No.	Equipment	Manufacturer	Model No.	Specification Information	Cable
1	Control Box	RISYM	USB-TTL	-	

☐ Test Accessories Come From The Manufacturer

No.	Equipment	Manufacturer	Model No.	Specification Information	Cable
1					



Page 12 of 24

## 4.5 Summary of Test Results

Item	FCC Rules	Description of Test	Result
1	§15.209	Radiated Emission	Pass

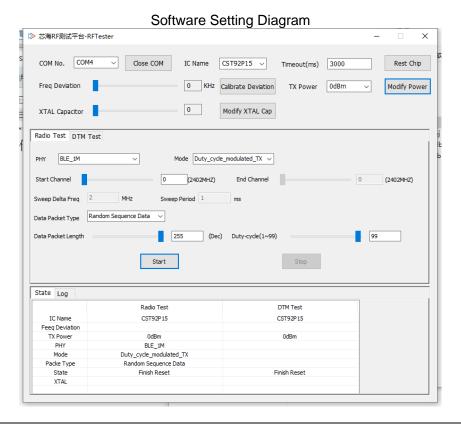


## 5. Description of Test Modes

Summary Table of Test Cases					
Test Item	Data Rate / Modulation				
rest item	Bluetooth–LE(1Mbps)/GFSK				
Radiated & Conducted Test Cases	Mode 1: Bluetooth Tx CH00_2402 MHz_1Mbps(Battery powered) Mode 2: Bluetooth Tx CH19_2440 MHz_1Mbps(Battery powered) Mode 3: Bluetooth Tx CH39_2480 MHz_1Mbps(Battery powered)				
AC Conducted Emission	N/A				

#### Note:

- 1. Only the result of the worst case was recorded in the report, if no other cases.
- 2. The battery is full-charged during the test.
- 3. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 4. For Conducted Test method, a temporary antenna connector is provided by the manufacture.
- The manufacturer of RF external cable claims that the cable loss is 0.5dB, and the cable loss and attenuator have been compensated into the Corrections Configuration of measuring equipment.
- 6. Input correction factor includes external cable loss and attenuator amplitude compensation. The formula is: Input compensation coefficient (dB) = Cable Loss (dB) + Attenuator attenuation value (dB)





Page 14 of 24

## 6. Radiated Spurious Emission

#### **6.1 Measurement Limit**

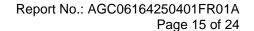
FCC Part 15.209 Limit in the below table to be followed

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note: All modes were tested for restricted band radiated emission, the test records reported below are the worst result compared to other modes.

#### **11.2 Measurement Procedure**

- The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds.





- 8. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 9. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 10. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 11. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting		
Start ~Stop Frequency	9kHz~150kHz/RB 200Hz for QP		
Start ~Stop Frequency	150kHz~30MHz/RB 9kHz for QP		
Start ~Stop Frequency	30MHz~1000MHz/RB 120kHz for QP		
Start ~Stop Frequency	1GHz~26.5GHz 1MHz/3MHz for Peak, 1MHz/3MHz for Average		

Receiver Parameter	Setting		
Start ~Stop Frequency	9kHz~150kHz/RB 200Hz for QP		
Start ~Stop Frequency	150kHz~30MHz/RB 9kHz for QP		
Start ~Stop Frequency	30MHz~1000MHz/RB 120kHz for QP		



Page 16 of 24

## Quasi-Peak Measurements below 1GHz

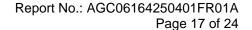
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. Span was set greater than 1MHz
- 3. RBW = as shown in the table above
- 4. Detector = CISPR quasi-peak
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

#### Peak Measurements above 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

#### Average Measurements above 1GHz

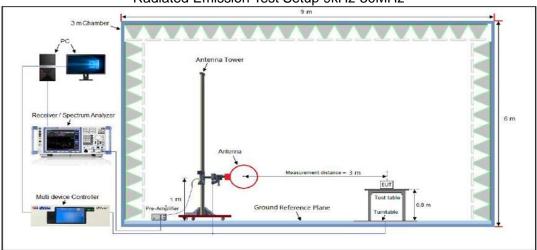
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3.  $VBW \ge [3 \times RBW]$
- 4. Detector = Power averaging (rms)
- 5. Averaging type = power (i.e., rms)
- 6. Sweep time = auto
- 7. Perform a trace average of at least 100 traces.
- 8. The applicable correction factor is [10\*log (1 / D)], where D is the duty cycle. The factor had been edited in the "Input Correction" of the Spectrum Analyzer.



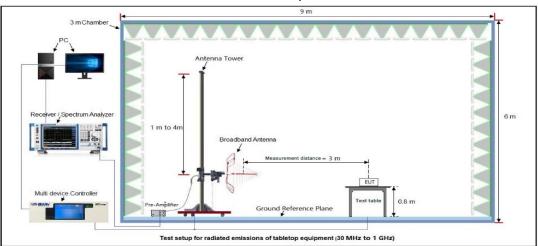


## 6.3 Measurement Setup (Block Diagram of Configuration)

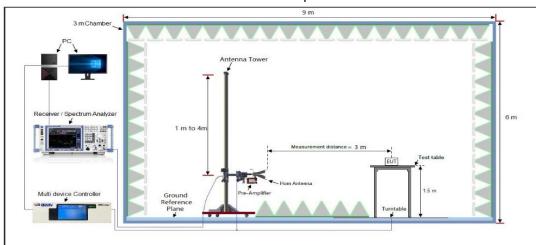
Radiated Emission Test Setup 9kHz-30MHz

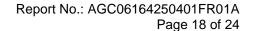


## Radiated Emission Test Setup 30MHz-1000MHz



#### Radiated Emission Test Setup Above 1000MHz





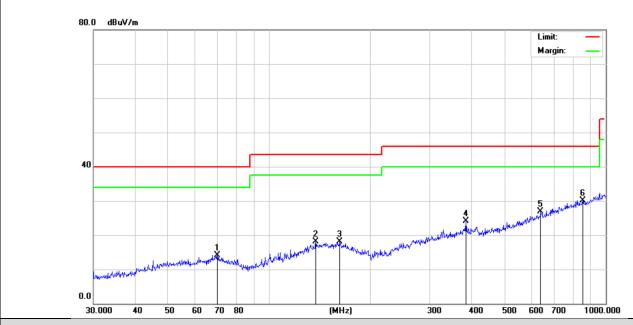


#### 6.4 Measurement Result

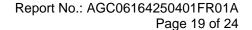
#### **Radiated Emission Below 30MHz**

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

Radiated Emission Test Results at 30MHz-1GHz							
EUT Name Smart Body Fat Scale Model Name FG2431WB-1							
Temperature	22.1℃	Relative Humidity	56.4%				
Pressure	Pressure   960hPa   Test Voltage   DC 4.5V by battery						
Test Mode	Mode 1	Antenna Polarity	Horizontal				

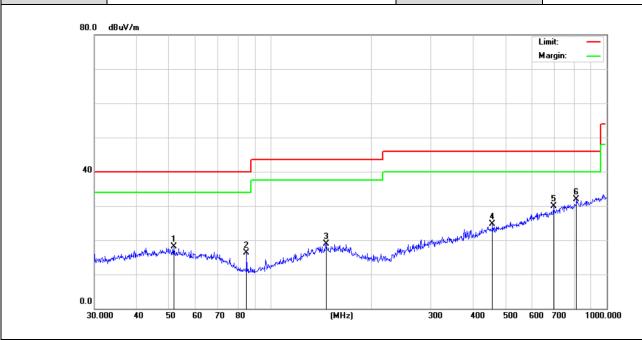


Final I	Final Data List							
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	70.0903	14.11	-25.28	40.00	25.89	100	100	Horizontal
2	137.4202	18.12	-21.40	43.50	25.38	100	150	Horizontal
3	162.0414	18.04	-20.72	43.50	25.46	100	130	Horizontal
4	383.9318	24.10	-17.70	46.00	21.9	100	180	Horizontal
5	640.6110	26.87	-12.95	46.00	19.13	100	200	Horizontal
6	854.0247	30.09	-9.33	46.00	15.91	100	100	Horizontal





Radiated Emission Test Results at 30MHz-1GHz						
EUT Name Smart Body Fat Scale Model Name FG2431WB-1						
Temperature	22.1℃	Relative Humidity	56.4%			
Pressure	960hPa	Test Voltage	DC 4.5V by battery			
Test Mode	Mode 1	Antenna Polarity	Vertical			



## **Final Data List**

NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	51.6615	18.03	-21.22	40.00	21.97	100	130	Vertical
2	84.9993	16.29	-26.45	40.00	23.71	100	160	Vertical
3	146.3735	18.87	-19.84	43.50	24.63	100	100	Vertical
4	457.5072	24.77	-14.89	46.00	21.23	100	120	Vertical
5	694.4174	29.86	-9.84	46.00	16.14	100	160	Vertical
6	813.1115	31.98	-7.47	46.00	14.02	100	140	Vertical

## **RESULT: PASS**

Note: 1. Factor=Antenna Factor + Cable loss - Pre-amplifier, Margin=Measurement-Limit.

2. All test modes had been pre-tested. The mode 1 is the worst case and recorded in the report.



Page 20 of 24

## **Radiated Emissions Test Results for Above 1GHz**

EUT Name	Smart Body Fat Scale	Model Name	FG2431WB-1
Temperature	22.1℃	Relative Humidity	56.4%
Pressure	960hPa	Test Voltage	DC 4.5V by battery
Test Mode	Mode 1	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4804.000	46.72	0.08	46.80	74	-27.20	peak
4804.000	37.55	0.08	37.63	54	-16.37	AVG
7206.000	41.40	2.21	43.61	74	-30.39	peak
7206.000	32.40	2.21	34.61	54	-19.39	AVG

## Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Smart Body Fat Scale	Model Name	FG2431WB-1
Temperature	22.1℃	Relative Humidity	56.4%
Pressure	960hPa	Test Voltage	DC 4.5V by battery
Test Mode	Mode 1	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4804.000	46.48	0.08	46.56	74	-27.44	peak
4804.000	37.87	0.08	37.95	54	-16.05	AVG
7206.000	41.48	2.21	43.69	74	-30.31	peak
7206.000	32.71	2.21	34.92	54	-19.08	AVG

## Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

## **RESULT: PASS**



Page 21 of 24

## **Radiated Emissions Test Results for Above 1GHz**

EUT Name	Smart Body Fat Scale	Model Name	FG2431WB-1
Temperature	22.1℃	Relative Humidity	56.4%
Pressure	960hPa	Test Voltage	DC 4.5V by battery
Test Mode	Mode 2	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4880.000	46.60	0.08	46.68	74	-27.32	peak
4880.000	37.62	0.08	37.70	54	-16.30	AVG
7320.000	41.73	2.21	43.94	74	-30.06	peak
7320.000	32.83	2.21	35.04	54	-18.96	AVG
_		·	-			

## Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Smart Body Fat Scale	Model Name	FG2431WB-1
Temperature	22.1℃	Relative Humidity	56.4%
Pressure	960hPa	Test Voltage	DC 4.5V by battery
Test Mode	Mode 2	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4880.000	46.87	80.0	46.95	74	-27.05	peak
4880.000	37.99	0.08	38.07	54	-15.93	AVG
7320.000	41.37	2.21	43.58	74	-30.42	peak
7320.000	32.35	2.21	34.56	54	-19.44	AVG

## Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

## **RESULT: Pass**



Page 22 of 24

#### Radiated Emissions Test Results for Above 1GHz

EUT Name	Smart Body Fat Scale	Model Name	FG2431WB-1
Temperature	22.1℃	Relative Humidity	56.4%
Pressure	960hPa	Test Voltage	DC 4.5V by battery
Test Mode	Mode 3	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4960.000	46.33	0.08	46.41	74	-27.59	peak
4960.000	37.32	0.08	37.40	54	-16.60	AVG
7440.000	41.20	2.21	43.41	74	-30.59	peak
7440.000	32.69	2.21	34.90	54	-19.10	AVG
		_				
,						

#### Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Smart Body Fat Scale	Model Name	FG2431WB-1
Temperature	22.1℃	Relative Humidity	56.4%
Pressure	960hPa	Test Voltage	DC 4.5V by battery
Test Mode	Mode 3	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4960.000	46.19	0.08	46.27	74	-27.73	peak
4960.000	37.94	0.08	38.02	54	-15.98	AVG
7440.000	41.86	2.21	44.07	74	-29.93	peak
7440.000	32.97	2.21	35.18	54	-18.82	AVG

#### Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

## **RESULT: Pass**

#### Note:

- 1. The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.
- 2. Factor = Antenna Factor + Cable loss Pre-amplifier gain, Margin = Emission Level-Limit.
- 3. The "Factor" value can be calculated automatically by software of measurement system.



Page 23 of 24

# Appendix I: Photographs of Test Setup

Refer to the Report No.: AGC06164250401AP02A

Appendix II: Photographs of Test EUT

Refer to the Report No.: AGC06164250401AP03A



Page 24 of 24

# Conditions of Issuance of Test Reports

- 1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

----End of Report----