

FCC Test Report

Report No.: AGC01082200801FE03A

FCC ID : 2AJRDIT-22

APPLICATION PURPOSE: Class II Permissive Change

PRODUCT DESIGNATION: XTRA 2.0

BRAND NAME : ISOtunes

MODEL NAME : IT-22B, IT-25B, IT-27B, IT-25COTR

APPLICANT: Haven Technologies, Inc.

DATE OF ISSUE : Dec. 22, 2023

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

REPORT VERSION: V1.0

Attestation of Global Conclusion (Shenzhen) Co., Ltd



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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Dec. 22, 2023	Valid	Initial Release

Note: The original test report AGC01082200801FE03 (dated Sep. 25, 2020 and tested from Sep. 08, 2020 to Sep. 24, 2020) was modified on Dec. 22, 2023, including the following changes and additions for:

- -Change the product designation;
- -Changed the main testing model and series model;
- -Changed the addresses of applicant, manufacturer, and factory;
- -Revised hardware and software versions (It changes due to the change of the product model, and does not affect the test results.);
- -Changed the Micro-B port to the Type-C port;
- -Replaced the battery;
- -Updated FCC Part 15.247 standard to FCC Part 15 Subpart C §15.247 standard;

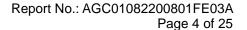
For the above described change(s) the following tests was considered to be necessary:

Clause	Testing
Chapter 10	Radiated emission



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1. VERIFICATION OF CONFORMITY

Applicant	Haven Technologies, Inc.	
Address	873 West Carmel Drive, Carmel, IN 46032, USA	
Manufacturer	GuangZhou U&I Technology Company Limited	
Address 4th Floor, 15th Building, Vtrek Innovation Industrial Park, No. 644, Shi Panyu District, Guangzhou, China		
Factory	GuangZhou U&I Technology Company Limited	
Address	4th Floor, 15th Building, Vtrek Innovation Industrial Park, No. 644, Shibei Road, Panyu District, Guangzhou, China	
Product Designation XTRA 2.0		
Brand Name	ISOtunes	
Test Model IT-22B		
Series Model IT-25B, IT-27B, IT-25COTR		
Difference Description All the same except for the model name and color.		
Date of receipt of test item	Dec. 12, 2023	
Date of test Dec. 12, 2023 to Dec. 22, 2023		
Deviation	No any deviation from the test method	
Condition of Test Sample Normal		
Test Result	Pass	
Report Template AGCRT-US-BR/RF		

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

Thea Huang
(Project Engineer)

Reviewed By

Calvin Liu
(Reviewer)

Approved By

Max Zhang
(Authorized Officer)

Dec. 22, 2023

Dec. 22, 2023



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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as "XTRA 2.0". It is designed by way of utilizing the GFSK, π /4-DQPSK and 8DPSK technology to achieve the system operation.

A major technical description of EUT is described as following

A triagor teerminear description of Ee T is described as following		
Operation Frequency 2.402 GHz to 2.480 GHz		
RF Output Power	2.063dBm (Max)	
Bluetooth Version V5.1		
Mark Lade	BR ⊠GFSK, EDR ⊠π /4-DQPSK, ⊠8DPSK	
Modulation	BLE GFSK 1Mbps GFSK 2Mbps	
Number of channels 79		
Hardware Version	V1.01	
Software Version	v1.2.9	
Antenna Designation	Ceramic Antenna (Comply with requirements of the FCC part 15.203)	
Antenna Gain 1.69dBi		
Power Supply DC 3.7V by battery and DC 5V by adapter		

Note: The EUT doesn't support BLE.

2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency	
	0	2402 MHz	
	1	2403 MHz	
	:	:	
	38	2440 MHz	
2402~2480MHz	39	2441 MHz	
	40	2442 MHz	
	:	:	
	77	2479 MHz	
	78	2480 MHz	



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2.3. RECEIVER INPUT BANDWIDTH

The input bandwidth of the receiver is 1.3MHz, in every connection one Bluetooth device is the master and the other one is slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master. Additionally, the type of connection (e.g. single of multi slot packet) is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also, the slave of the connection will use these settings. Repeating of a packet has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means, a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

2.4. EXAMPLE OF A HOPPING SEQUENCY IN DATA MODE

Example of a hopping sequence in data mode: 40,21,44,23,42,53,46,55,48,33,52,35,50,65,54,67 56,37,60,39,58,69,62,71,64,25,68,27,66,57,70,59 72,29,76,31,74,61,78,63,01,41,05,43,03,73,07,75 09,45,13,47,11,77,15,00,64,49,66,53,68,02,70,06 01, 51, 03, 55, 05, 04

2.5. EQUALLY AVERAGE USE OF FREQUENCIES AND BEHAVIOUR

The generation of the hopping sequence in connection mode depends essentially on two input values:

- 1. LAP/UAP of the master of the connection.
- 2. Internal master clock.

The LAP (lower address part) are the 24 LSB's of the 48 BD_ADDRESS. The BD_ADDRESS is an unambiguous number of every Bluetooth unit. The UAP (upper address part) are the 24MSB's of the 48BD_ADDRESS

The internal clock of a Bluetooth unit is derived from a free running clock which is never adjusted and is never turned off. For behavior action with other units only offset is used. It has no relation to the time of the day. Its resolution is at least half the RX/TX slot length of 312.5us. The clock has a cycle of about one day(23h30). In most case it is implemented as 28 bits counter. For the deriving of the hopping sequence the entire. LAP (24 bits),4LSB's(4bits) (Input 1) and the 27MSB's of the clock (Input 2) are used. With this input values different mathematical procedures (permutations, additions, XOR-operations) are performed to generate the Sequence. This will be done at the beginning of every new transmission.

Regarding short transmissions the Bluetooth system has the following behavior:

The first connection between the two devices is established, a hopping sequence was generated. For Transmitting the wanted data the complete hopping sequence was not used. The connection ended. The second connection will be established. A new hopping sequence is generated. Due to the fact the



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Bluetooth clock has a different value, because the period between the two transmission is longer (and it Cannot be shorter) than the minimum resolution of the clock(312.5us). The hopping sequence will always differ from the first one.

2.6. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID**: **2AJRDIT-22** filing to comply with the FCC PART 15.247 requirements.

2.7. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

2.8. SPECIAL ACCESSORIES

Refer to section 5.2.

2.9. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.10. ANTENNA REQUIREMENT

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.



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3. 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%.

- Uncertainty of Conducted Emission, Uc = ±3.2 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±3.9 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB
- Uncertainty of total RF power, conducted, Uc = ±0.8dB
- Uncertainty of spurious emissions, conducted, Uc = ±2.7dB
- Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %
- Uncertainty of Dwell Time: Uc = ±2 %
- Uncertainty of Frequency: Uc = ±2 %

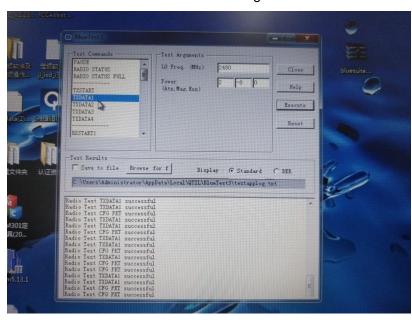


4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION		
1	Low channel GFSK		
2	Middle channel GFSK		
3	High channel GFSK		
4	Low channel π/4-DQPSK		
5	Middle channel π/4-DQPSK		
6	High channel π/4-DQPSK		
7	Low channel 8DPSK		
8	Middle channel 8DPSK		
9	High channel 8DPSK		
10	Hopping mode GFSK		
11	Hopping mode π/4-DQPSK		
12	Hopping mode 8DPSK		

Note:

- 1. Only the result of the worst case was recorded in the report, if no other cases.
- 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 3. For Conducted Test method, a temporary antenna connector is provided by the manufacture.



Software Setting



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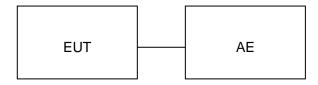
5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Radiated Emission Configure:



Conducted Emission Configure:



5.2. EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	XTRA 2.0	IT-22B	2AJRDIT-22	EUT
2	control board		TRBI200	AE

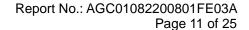
5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
15.209	Radiated Emission	Compliant

Note: The BT function cannot transmit when charging.

6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd		
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China		
Designation Number	CN1259		
FCC Test Firm Registration Number	975832		
A2LA Cert. No.	5054.02		
Description	Attestation of Global Compliance (Shenzhen) Co., Ltd is accredited by A2LA		





TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Feb. 18, 2023	Feb. 17, 2024
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Jun. 01, 2023	May 31, 2024
2.4GHz Filter	EM Electronics	2400-2500	N/A	Mar. 22, 2022	Mar. 21, 2024
Attenuator	ZHINAN	E-002	N/A	N/A	N/A
Horn Antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 24, 2023	Sep. 23, 2025
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Mar. 12, 2022	Mar. 11, 2024
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Mar. 23, 2023	Mar. 22, 2024
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 02, 2022	Sep. 01, 2024
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 05, 2023	Jan. 04, 2025
Test Software	FARA	EZ-EMC(Ver.RA-0 3A)	N/A	N/A	N/A



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7. RADIATED EMISSION

7.1. MEASUREMENT PROCEDURE

- 1. 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. 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.
- 8.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.
- 9. 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.
- 10. 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.



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

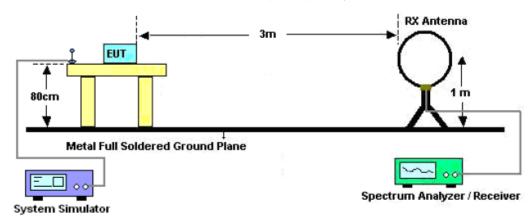
Spectrum Parameter	Setting	
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP	
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP	
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP	
Start ~Stop Frequency	1GHz~26.5GHz	
Start ~Stop Frequency	1MHz/3MHz for Peak, 1MHz/3MHz for Average	

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

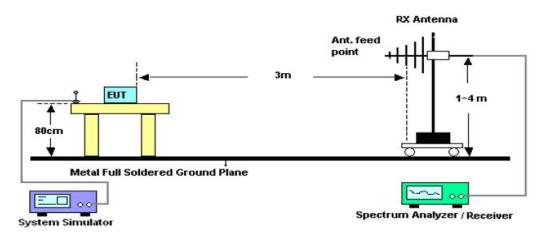


7.2. TEST SETUP

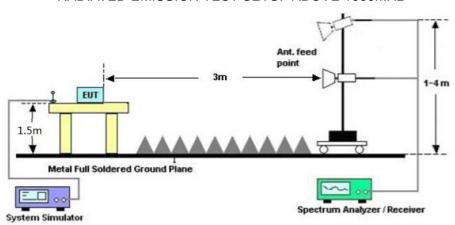
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



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7.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has 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.

7.4. TEST RESULT

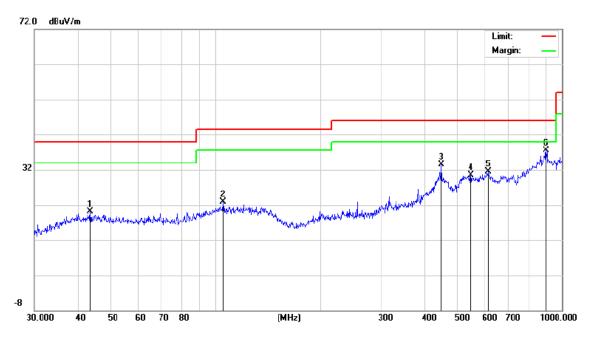
RADIATED EMISSION BELOW 30MHz

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 BELOW 1GHz

EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 7	Antenna	Horizontal

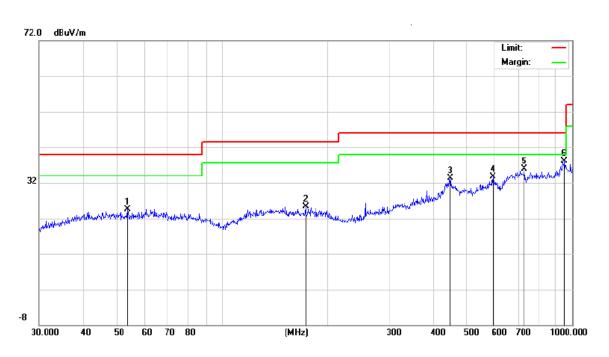


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		43.5056	6.48	13.65	20.13	40.00	-19.87	peak
2	1	05.2717	6.58	16.25	22.83	43.50	-20.67	peak
3	4	47.9821	8.64	24.82	33.46	46.00	-12.54	peak
4	5	45.1825	6.62	23.98	30.60	46.00	-15.40	peak
5	6	12.0642	6.38	25.16	31.54	46.00	-14.46	peak
6	* 9	000.1473	5.77	31.78	37.55	46.00	-8.45	peak

RESULT: PASS



EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 7	Antenna	Vertical

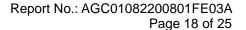


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		53.6932	7.49	17.04	24.53	40.00	-15.47	peak
2	1	73.2051	6.85	18.40	25.25	43.50	-18.25	peak
3	4	47.9822	7.60	25.74	33.34	46.00	-12.66	peak
4	5	93.0497	7.80	25.93	33.73	46.00	-12.27	peak
5	7	29.3583	7.95	27.91	35.86	46.00	-10.14	peak
6	* 9	48.7610	7.47	30.65	38.12	46.00	-7.88	peak

RESULT: PASS

Note: 1. Factor=Antenna Factor + Cable loss, Over=Measurement-Limit.

2. All test modes had been pre-tested. The mode 7 is the worst case and recorded in the report.





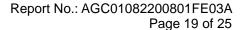
RADIATED EMISSION ABOVE 1GHz

EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 7	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
4804.000	46.85	0.08	46.93	74	-27.07	peak	
4804.000	35.44	0.08	35.52	54	-18.48	AVG	
7206.000	40.62	2.21	42.83	74	-31.17	peak	
7206.000	31.69	2.21	33.9	54	-20.1	AVG	
Remark:							
actor = Anter	na Factor + Cabl	e Loss – Pre-a	mplifier.				

EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 7	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- value Type	
4804.000	46.62	0.08	46.7	74	-27.3	peak	
4804.000	35.49	0.08	35.57	54	-18.43	AVG	
7206.000	40.55	2.21	42.76	74	-31.24	peak	
7206.000	31.13	2.21	33.34	54	-20.66	AVG	
emark:							



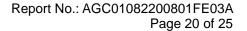


EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 8	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type		
4882.000	45.78	0.14	45.92	74	-28.08	peak		
4882.000	36.41	0.14	36.55	54	-17.45	AVG		
7323.000	41.59	2.36	43.95	74	-30.05	peak		
7323.000	32.32	2.36	34.68	54	-19.32	AVG		
Remark:								
Factor = Anten	na Factor + Cabl	e Loss – Pre-a	mplifier.					

EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 8	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4882.000	45.79	0.14	45.93	74	-28.07	peak
4882.000	36.48	0.14	36.62	54	-17.38	AVG
7323.000	41.62	2.36	43.98	74	-30.02	peak
7323.000	32.54	2.36	34.9	54	-19.1	AVG
Remark:	-				•	-1
actor = Anter	nna Factor + Cabl	e Loss – Pre-	amplifier.			





EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 9	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4960.000	46.45	0.22	46.67	74	-27.33	peak
4960.000	35.26	0.22	35.48	54	-18.52	AVG
7440.000	41.68	2.64	44.32	74	-29.68	peak
7440.000	31.51	2.64	34.15	54	-19.85	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 9	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4960.000	46.47	0.22	46.69	74	-27.31	peak
4960.000	35.61	0.22	35.83	54	-18.17	AVG
7440.000	41.39	2.64	44.03	74	-29.97	peak
7440.000	31.85	2.64	34.49	54	-19.51	AVG
Remark:			1		•	•
actor = Anter	na Factor + Cabl	e Loss – Pre-	amplifier.			

RESULT: PASS

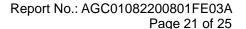
Noto:

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.

Factor = Antenna Factor + Cable loss - Amplifier gain, Margin=Level-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

All test modes had been tested. The 8DPSK modulation is the worst case and recorded in the report.





TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 7	Antenna	Horizontal

PΚ



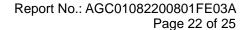
ΑV



RESULT: PASS

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EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 7	Antenna	Vertical

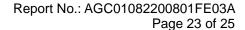
PΚ



ΑV



RESULT: PASS





EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 9	Antenna	Horizontal

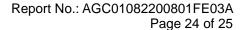
PΚ



ΑV



RESULT: PASS



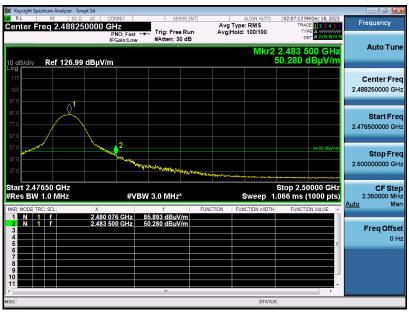


EUT	XTRA 2.0	Model Name	IT-22B
Temperature	22.8°C	Relative Humidity	58.6%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 9	Antenna	Vertical

PΚ



ΑV



RESULT: PASS

Note: The factor had been edited in the "Input Correction" of the Spectrum Analyzer. The 8DPSK modulation is the worst case and recorded in the report.



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APPENDIX A: PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC01082200801AP01A

APPENDIX B: PHOTOGRAPHS OF EUT

Refer to the Report No.: AGC01082200801AP02A

----END OF REPORT----



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.