

# **FCC Test Report**

Report No.: AGC09494191102FE02

FCC ID : 2AIKSCXR-ITW

**APPLICATION PURPOSE**: Original Equipment

**PRODUCT DESIGNATION**: CXR-I

**BRAND NAME** : MARES

**MODEL NAME** : CXR-I

**APPLICANT** : MARES SPA

**DATE OF ISSUE** : Dec. 20, 2019

**STANDARD(S)** : FCC Part 15.247

**REPORT VERSION** : V1.0

## Attestation of Global Compliance (Shenzhen) Co., Ltd

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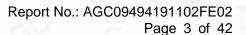


Page 2 of 42

## REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0		Dec. 20, 2019	Valid	Initial Release







## **TABLE OF CONTENTS**

1. VERIFICATION OF COMPLIANCE	4
2.GENERAL INFORMATION	5
2.1PRODUCT DESCRIPTION 2.2. TABLE OF CARRIER FREQUENCYS 2.3 RELATED SUBMITTAL(S)/GRANT(S) 2.4TEST METHODOLOGY 2.5 SPECIAL ACCESSORIES 2.6 EQUIPMENT MODIFICATIONS	
3. MEASUREMENT UNCERTAINTY	
4. DESCRIPTION OF TEST MODES	
5. SYSTEM TEST CONFIGURATION	
5.1 CONFIGURATION OF TESTED SYSTEM	
6. TEST FACILITY	10
7. PEAK OUTPUT POWER	11
7.1. MEASUREMENT PROCEDURE	11
8. 6 DB BANDWIDTH	
8.1. MEASUREMENT PROCEDURE	14
9. CONDUCTED SPURIOUS EMISSION	16
9.1. MEASUREMENT PROCEDURE	
10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY	21
10.1 MEASUREMENT PROCEDURE	21 21
11. RADIATED EMISSION	23
11.1. MEASUREMENT PROCEDURE	
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	35
APPENDIX B: PHOTOGRAPHS OF THE EUT	36





Page 4 of 42

## 1. VERIFICATION OF COMPLIANCE

Applicant	MARIE CRA
Applicant	MARES SPA
Address	SALITA BONSEN, 4 16035 RAPALLO (GE) ITALY
Manufacturer	MARES SPA
Address	SALITA BONSEN, 4 16035 RAPALLO (GE) ITALY
Factory	MARES SPA
Address	SALITA BONSEN, 4 16035 RAPALLO (GE) ITALY
Product Designation	CXR-I
Brand Name	MARES
Test Model	CXR-I
Date of test	Nov. 15, 2019 to Dec. 18, 2019
Deviation	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Report Template	AGCRT-US-BLE/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC part 15.247.

Prepared By	NINi. Guo	
	Nini Guo (Project Engineer)	Dec. 20, 2019
Reviewed By	Max Zhang	
	Max Zhang (Reviewer)	Dec. 20, 2019
Approved By	Formerces	
	Forrest Lei (Authorized Officer)	Dec. 20, 2019



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Page 5 of 42

## 2.GENERAL INFORMATION

## 2.1PRODUCT DESCRIPTION

The EUT is designed as a "CXR-I". It is designed by way of utilizing the GFSK technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	2.402 GHz to 2.480GHz	
RF Output Power	0.843dBm(Max)	
Bluetooth Version	V 4.0	
BR □GFSK, EDR □π /4-DQPSK, □8DPSK BLE □GFSK 1Mbps □GFSK 2Mbps		
Number of channels	40 Channel	
Antenna Designation Integral Antenna (Comply with requirements of the FCC part 15.20		
Antenna Gain	0dBi	
Hardware Version	MARES20737S	
Software Version	BLE 20737S ROM	
Power Supply	DC 3.635V by battery	

## 2.2. TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
- GO - C	0	2402MHZ
No.	ر کا کا	2404MHZ
2400~2483.5MHZ	10° CO	
NO CO	38	2478 MHZ
	39	2480 MHZ





Page 6 of 42

## 2.3 RELATED SUBMITTAL(S)/GRANT(S)

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

#### 2.4TEST 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.

#### 2.5 SPECIAL ACCESSORIES

Refer to section 2.2.

#### 2.6 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.





Page 7 of 42

### 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,  $Uc = \pm 0.8dB$
- Uncertainty of RF power density, conducted, Uc = ±2.6dB
- Uncertainty of spurious emissions, conducted, Uc = ±2.7dB
- Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %



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Page 8 of 42

## 4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX
2	Middle channel TX
3	High channel TX

#### 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. The test software is the MBT tool which can set the EUT into the individual test modes.





Page 9 of 42

## 5. SYSTEM TEST CONFIGURATION

## **5.1 CONFIGURATION OF TESTED SYSTEM**

EUT		AE
LUI	GC	AL

#### **5.2 EQUIPMENT USED IN TESTED SYSTEM**

Item	Equipment	Model No.	ID or Specification	Remark
1	CXR-I	CXR-I	2AIKSCXR-ITW	EUT
2	USB control Cable	N/A	N/A	AE

#### **5.3. SUMMARY OF TEST RESULTS**

FCC RULES	FCC RULES DESCRIPTION OF TEST	
15.247 (b)(3)	Peak Output Power	Compliant
15.247 (a)(2)	6 dB Bandwidth	Compliant
15.247 (d)	Conducted Spurious Emission	Compliant
15.247 (e)	Maximum Conducted Output Power Density	Compliant
15.209	Radiated Emission	Compliant
15.207 Conducted Emission		N/A

Note: The EUT cannot operate in Bluetooth mode with charging.



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## 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			
<b>Designation Number</b>	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	Jun. 12, 2019	Jun. 11, 2020
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 20, 2018	Dec. 19, 2019
2.4GHz Fliter	EM Electronics	2400-2500MHz	N/A	Feb. 27, 2019	Feb. 26, 2020
Attenuator	ZHINAN	E-002	N/A	Sep. 09, 2019	Sep. 08, 2020
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep.21, 2019	Sep. 20, 2021
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Jun. 13, 2018	Jun. 12, 2020
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May. 17, 2018	May. 16, 2020
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Oct. 15, 2019	Oct. 16, 2020
ANTENNA	SCHWARZBECK	VULB9168	494	Sep. 20, 2019	Sep. 19, 2021
Test software	FARA	EZ-EMC (Ver RA-03A)	N/A	N/A	N/A





Page 11 of 42

## 7. PEAK OUTPUT POWER

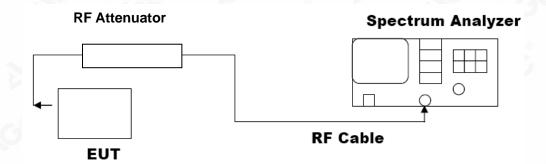
#### 7.1. MEASUREMENT PROCEDURE

For peak power test:

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. RBW≥DTS bandwidth
- 3. VBW≥3\*RBW.
- 4. SPAN≥VBW.
- 5. Sweep: Auto.
- 6. Detector function: Peak.
- 7. Trace: Max hold.

Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

## 7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION) PEAK POWER TEST SETUP







Page 12 of 42

## 7.3. LIMITS AND MEASUREMENT RESULT

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MOUDULATION								
2.402	-0.304	30	Pass					
2.440	-0.698	30	Pass					
2.480	0.843	30	Pass					

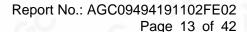
#### CH<sub>0</sub>





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## **CH19**



#### **CH39**





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Page 14 of 42

#### 8. 6 DB BANDWIDTH

#### **8.1. MEASUREMENT PROCEDURE**

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 KHz, VBW ≥ 3×RBW.
- 4. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

## 8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

#### 8.3. LIMITS AND MEASUREMENT RESULTS

LIMITS AND MEASUREMENT RESULT							
A P I I . I ! ! .	Applicable Limits						
Applicable Limits	Test Data	Criteria					
CC C	Low Channel	683.9	PASS				
>500KHZ	Middle Channel	689.9	PASS				
	High Channel	686.8	PASS				

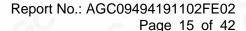
## TEST PLOT OF BANDWIDTH FOR LOW CHANNEL





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#### TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



#### TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL





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Page 16 of 42

## 9. CONDUCTED SPURIOUS EMISSION

#### 9.1. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

## 9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

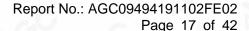
#### 9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

#### 9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT					
Annii alda Limii a	Measurement Result				
Applicable Limits	Test Data	Criteria			
In any 100 KHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power.	At least -20dBc than the reference level	PASS PASS			

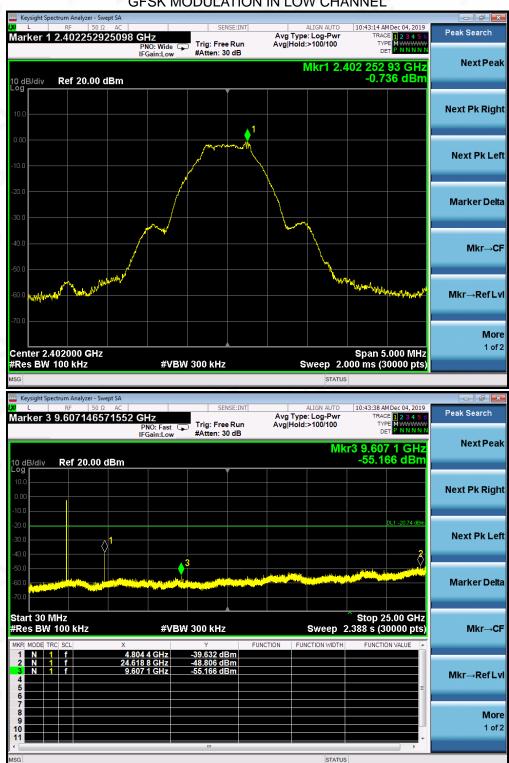






## TEST RESULT FOR ENTIRE FREQUENCY RANGE

GFSK MODULATION IN LOW CHANNEL

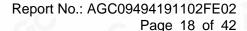




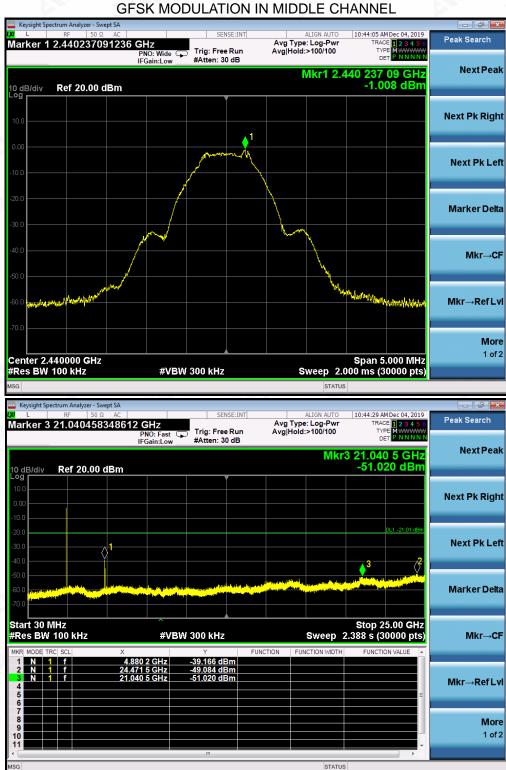
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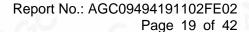




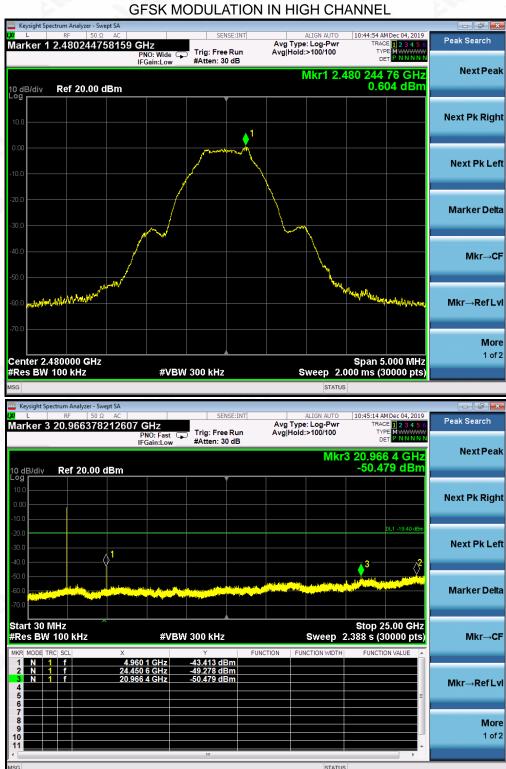
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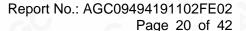
Note: The peak emissions without marker on the above plots are fundamental wave and need not to compare with the limit.



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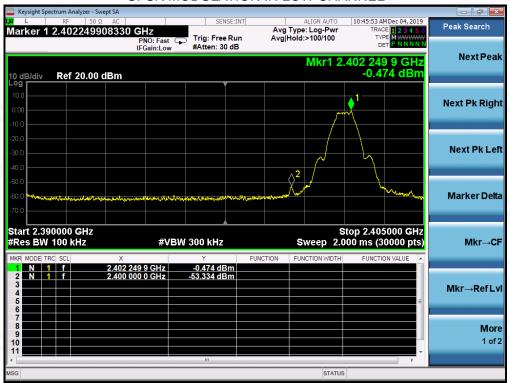
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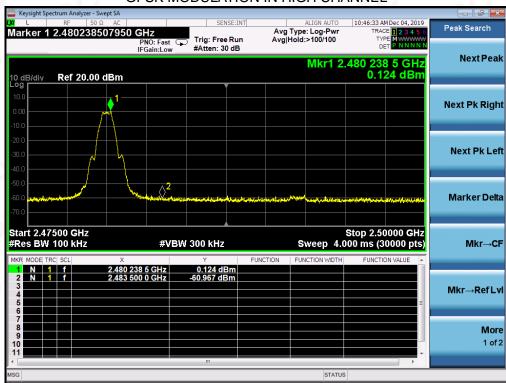


## **TEST RESULT FOR BAND EDGE**

## GFSK MODULATION IN LOW CHANNEL



#### GFSK MODULATION IN HIGH CHANNEL



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Page 21 of 42

### 10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

#### **10.1 MEASUREMENT PROCEDURE**

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set SPA Trace 1 Max hold, then View.

Note: The method of PKPSD in the KDB 558074 item 10.2 was used in this testing.

## 10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer To Section 7.2.

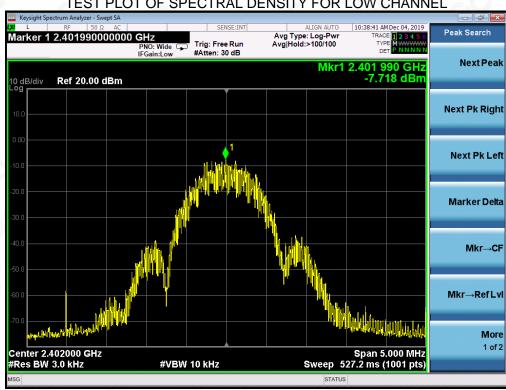
#### **10.3 MEASUREMENT EQUIPMENT USED**

Refer To Section 6.

#### **10.4 LIMITS AND MEASUREMENT RESULT**

Channel No.	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-7.718	8	Pass
Middle Channel	-7.576	8	Pass
High Channel	-6.095	8	Pass



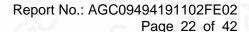




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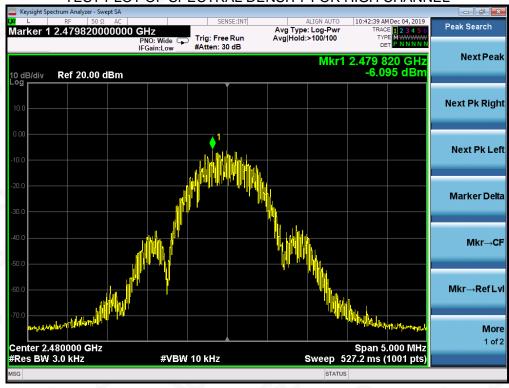




TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



## TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



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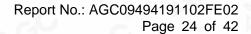
Page 23 of 42

### 11. RADIATED EMISSION

#### 11.1. 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 emissions, 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.

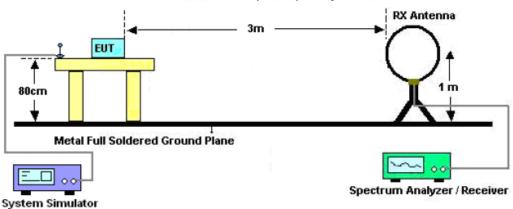




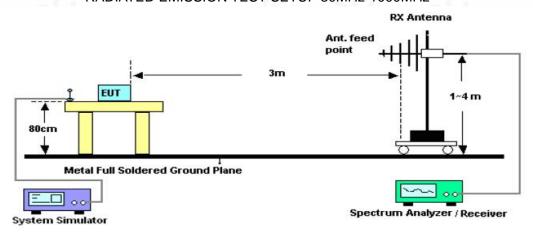


## 11.2. TEST SETUP

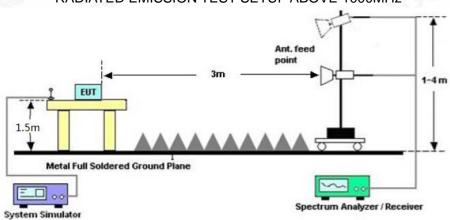
## Radiated Emission Test-Setup Frequency Below 30MHz



## RADIATED EMISSION TEST SETUP 30MHz-1000MHz



### RADIATED EMISSION TEST SETUP ABOVE 1000MHz





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Page 25 of 42

## 11.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/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.

## 11.4. TEST RESULT

## **RADIATED EMISSION BELOW 30MHZ**

No emission found between lowest internal used/generated frequencies to 30MHz.

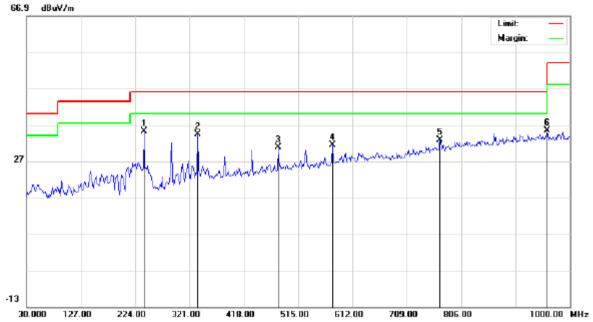




Page 26 of 42

## **RADIATED EMISSION BELOW 1GHZ**

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal



No	). N	Иk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	'	•	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1			240.1667	16.48	18.66	35.14	46.00	-10.86	peak			
2			335.5500	13.67	20.72	34.39	46.00	-11.61	peak			
3			479.4333	6.20	24.58	30.78	46.00	-15.22	peak			
4			576.4333	4.96	26.49	31.45	46.00	-14.55	peak			
5			767.2000	3.08	29.67	32.75	46.00	-13.25	peak			
6		*	959.5833	3.14	32.21	35.35	46.00	-10.65	peak			

**RESULT: PASS** 



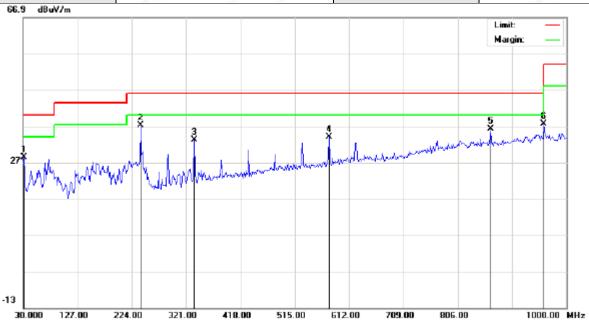
Attestation of Global Compliance(Shenzhen)Co.,Ltd.

Add: 2/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China
Tel: +86-755 2523 4088 E-mail:agc@agc-cert.com Service Hotline:400 089 2118



Page 27 of 42

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	•	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		31.6167	10.17	18.22	28.39	40.00	-11.61	peak			
2		240.1667	18.61	18.66	37.27	46.00	-8.73	peak			
3		335.5500	12.55	20.72	33.27	46.00	-12.73	peak			
4		576.4333	7.47	26.49	33.96	46.00	-12.04	peak			
5		864.2000	5.00	31.24	36.24	46.00	-9.76	peak			
6	*	959.5833	5.36	32.21	37.57	46.00	-8.43	peak			

## RESULT: PASS Note:

- 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
- 2. All test modes had been tested. The mode 1 is the worst case and recorded in the report.



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**Test Mode** 

Mode 1

Report No.: AGC09494191102FE02

Vertical

Page 28 of 42

## **RADIATED EMISSION ABOVE 1GHZ**

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

				Margin	Value Trees
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
41.74	0.08	41.82	74	-32.18	peak
38.63	0.08	38.71	54	-15.29	AVG
40.52	2.21	42.73	74	-31.27	peak
37.11	2.21	39.32	54	-14.68	AVG
(8)				@	
					(8)
	41.74 38.63 40.52	41.74     0.08       38.63     0.08       40.52     2.21	41.74     0.08     41.82       38.63     0.08     38.71       40.52     2.21     42.73	41.74     0.08     41.82     74       38.63     0.08     38.71     54       40.52     2.21     42.73     74	41.74     0.08     41.82     74     -32.18       38.63     0.08     38.71     54     -15.29       40.52     2.21     42.73     74     -31.27

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage

**Antenna** 

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/aliia Tima
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4804.000	40.63	0.08	40.71	74	-33.29	peak
4804.000	37.54	0.08	37.62	54	-16.38	AVG
7206.000	39.74	2.21	41.95	74	-32.05	peak
7206.000	36.83	2.21	39.04	54	-14.96	AVG
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Page 29 of 42

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4880.000	41.85	0.14	41.99	74	-32.01	peak
4880.000	37.62	0.14	37.76	54	-16.24	AVG
7320.000	40.24	2.36	42.6	74	-31.4	peak
7320.000	36.36	2.36	38.72	54	-15.28	AVG
	(8)				@	
						@
emark:		C	0			- 0
actor = Anter	nna Factor + Cable	e Loss – Pre-	amplifier.			

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Vertical

Meter Reading	Factor	Emission Level	Limits	Margin	\/alica Time
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
39.74	0.14	39.88	74	-34.12	peak
36.26	0.14	36.4	54	-17.6	AVG
40.53	2.36	42.89	74	-31.11	peak
37.03	2.36	39.39	54	-14.61	AVG
	10	C			
				(8)	
	(dBμV) 39.74 36.26 40.53	(dBµV) (dB) 39.74 0.14 36.26 0.14 40.53 2.36	(dBμV)     (dB)     (dBμV/m)       39.74     0.14     39.88       36.26     0.14     36.4       40.53     2.36     42.89	(dBμV)     (dB)     (dBμV/m)     (dBμV/m)       39.74     0.14     39.88     74       36.26     0.14     36.4     54       40.53     2.36     42.89     74	(dBμV)     (dB)     (dBμV/m)     (dBμV/m)     (dBμV/m)       39.74     0.14     39.88     74     -34.12       36.26     0.14     36.4     54     -17.6       40.53     2.36     42.89     74     -31.11





Page 30 of 42

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4960.000	41.24	0.22	41.46	74	-32.54	peak
4960.000	36.02	0.22	36.24	54	-17.76	AVG
7440.000	41.69	2.64	44.33	74	-29.67	peak
7440.000	36.41	2.64	39.05	54	-14.95	AVG
	®				@	

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/ali.a Tima
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4960.000	38.85	0.22	39.07	74	-34.93	peak
4960.000	34.27	0.22	34.49	54	-19.51	AVG
7440.000	38.65	2.64	41.29	74	-32.71	peak
7440.000	34.54	2.64	37.18	54	-16.82	AVG
®		< GO				
emark:	<u>(i)</u>		- 60		®	
actor = Anter	nna Factor + Cable	Loss – Pre-	-amplifier.			

## **RESULT: PASS**

## Note:

Other emissions from 1G to 25 GHz are considered as ambient noise. No recording in the test report.

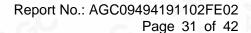
Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

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



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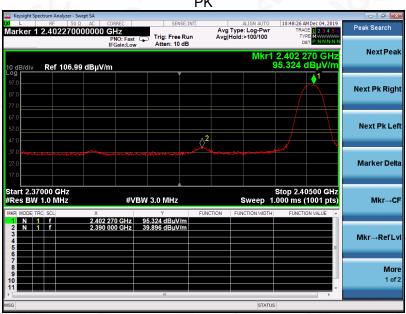


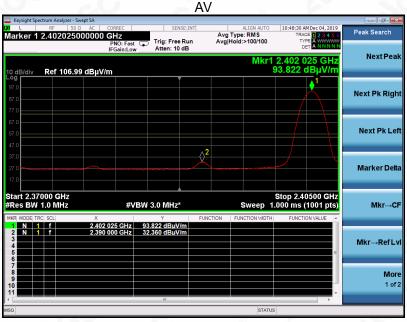


TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal







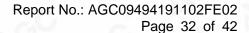
**RESULT: PASS** 



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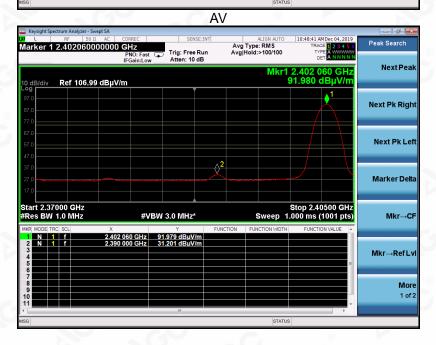
Service Hotline: 400 089 2118





EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical



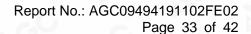


**RESULT: PASS** 



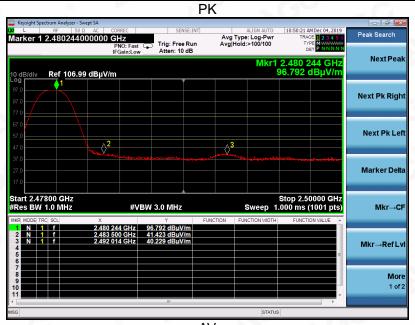
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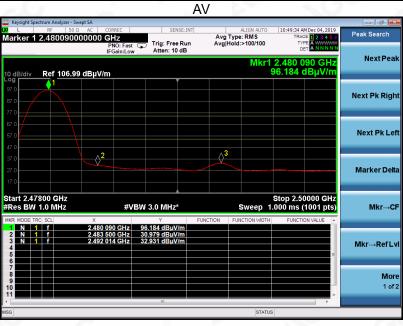
Add: 2/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,





EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal





**RESULT: PASS** 



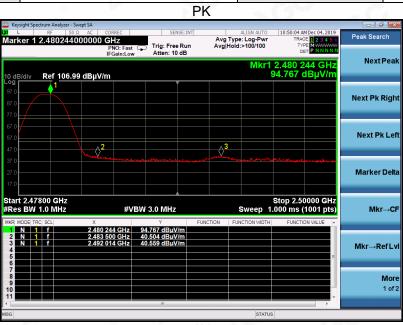
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Page 34 of 42

EUT	CXR-I	Model Name	CXR-I
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical





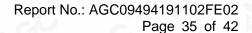
## **RESULT: PASS**

**Note**: The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB( $\mu$ V) to represent the Amplitude. Use the F dB( $\mu$ V/m) to represent the Field Strength. So A=F.



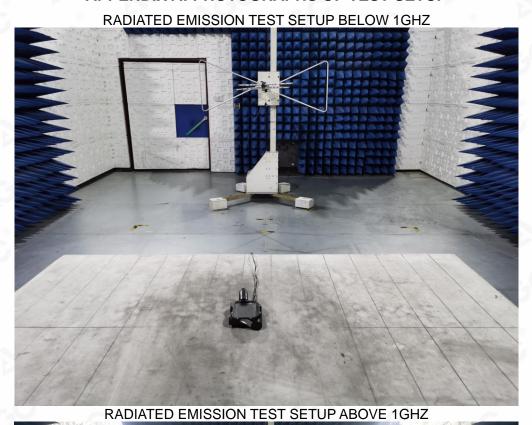
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APPENDIX A: PHOTOGRAPHS OF TEST SETUP

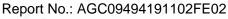






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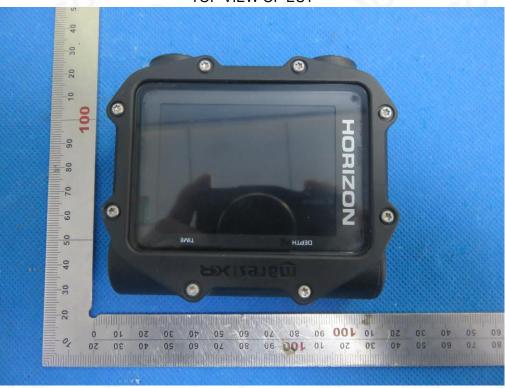
Page 36 of 42

## APPENDIX B: PHOTOGRAPHS OF THE EUT

ALL VIEW OF EUT



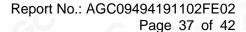
TOP VIEW OF EUT





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## **BOTTOM VIEW OF EUT**



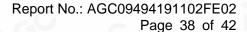
FRONT VIEW OF EUT





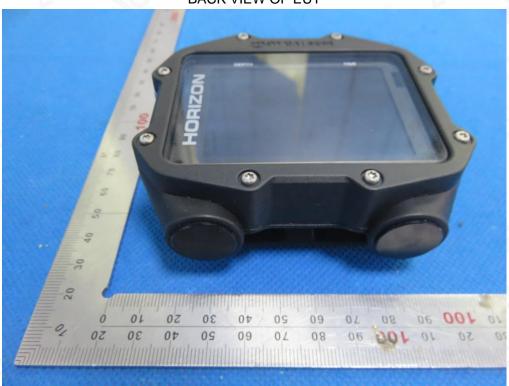
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Add: 2/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,

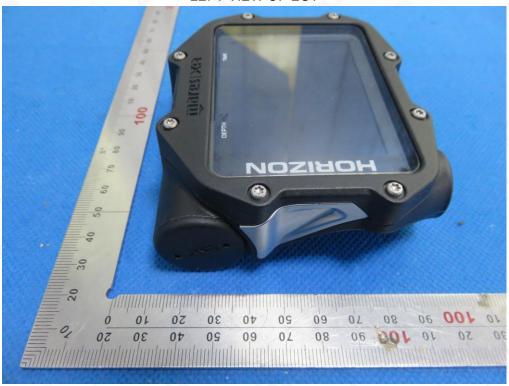




**BACK VIEW OF EUT** 



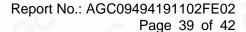
LEFT VIEW OF EUT





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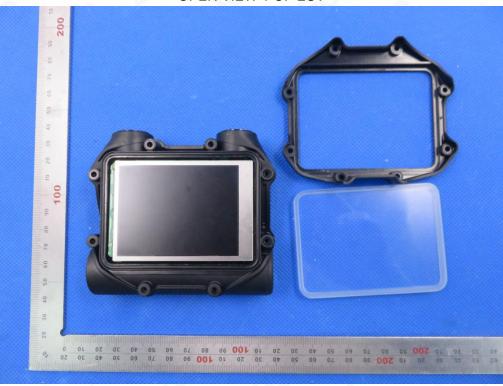








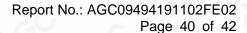
**OPEN VIEW-1 OF EUT** 





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Add: 2/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,

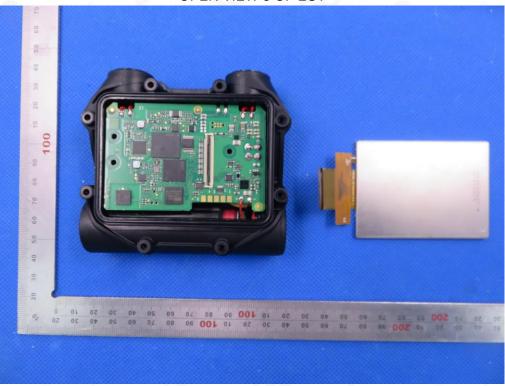




**OPEN VIEW-2 OF EUT** 



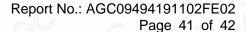
**OPEN VIEW-3 OF EUT** 





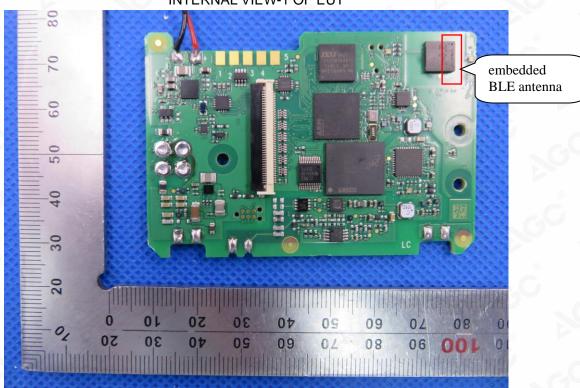
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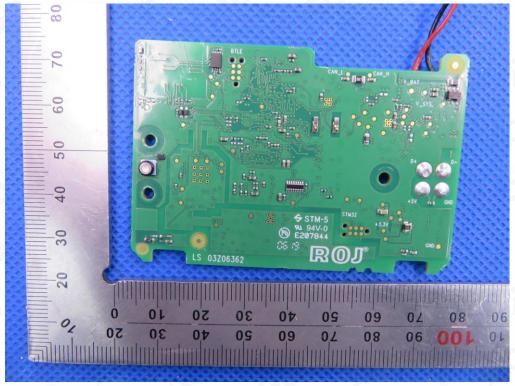




INTERNAL VIEW-1 OF EUT



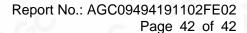






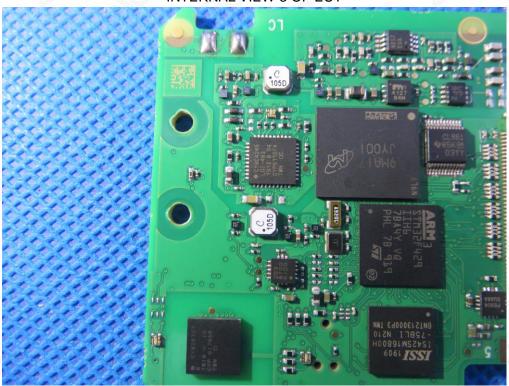
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Add: 2/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,

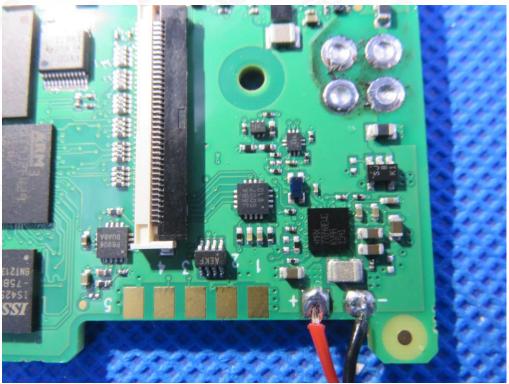




**INTERNAL VIEW-3 OF EUT** 



**INTERNAL VIEW-4 OF EUT** 



----END OF REPORT----



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