

Article 2 Paragraph 1, item 8

TEST REPORT

For

RFID READER

MODEL NUMBER: ZR0E27162-A16, ZR0E2716X

REPORT NUMBER: E04A26010174J00201

ISSUE DATE: March 23, 2026

Prepared for

**Guangzhou Wavehex Intelligent Technology Co.,Ltd
Unit 18, 3rd Floor, Unit 2, Building 2 Yunsheng Science Park, 11 Guangpu Zhong
Road Huangpu District, Guangzhou,China**

Prepared by

Guangdong Global Testing Technology Co., Ltd.

**Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park,
Dongguan city, Guangdong, People's Republic of China, 523808**

**This report is based on a single evaluation of the submitted sample(s) of the above
mentioned Product, it does not imply an assessment of the production of the products.**

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Guangdong Global Testing Technology Co., Ltd.**

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	March 23, 2026	Initial Issue	

Summary of Test Results

Test Item	Clause	Result
Frequency tolerance	Article 2 Paragraph 1, item 8	Pass
Antenna power	Article 2 Paragraph 1, item 8	Pass
Unwanted Emission Strength	Article 2 Paragraph 1, item 8	Pass
Occupied bandwidth	Article 2 Paragraph 1, item 8	Pass
Secondary Radiated Emission Strength	Article 2 Paragraph 1, item 8	Pass
Transmission Time Restriction	Article 2 Paragraph 1, item 8	Pass
Adjacent Channel Leakage Power	Article 2 Paragraph 1, item 8	Pass
Carrier Sensing Function	Article 2 Paragraph 1, item 8	Pass

*N/A: In this whole report not applicable.

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

*The measurement result for the sample received is <Pass> according to < Article 2 Paragraph 1, item 8 > when <Accuracy Method> decision rule is applied.

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Guangzhou Wavehex Intelligent Technology Co.,Ltd
Address: Unit 18, 3rd Floor, Unit 2, Building 2 Yunsheng Science Park, 11 Guangpu Zhong Road Huangpu District, Guangzhou,China

Manufacturer Information

Company Name: Guangzhou Wavehex Intelligent Technology Co.,Ltd
Address: Unit 18, 3rd Floor, Unit 2, Building 2 Yunsheng Science Park, 11 Guangpu Zhong Road Huangpu District, Guangzhou,China

Factory Information

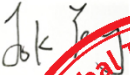
Company Name: Dongguan Zhongjie Axen Electronics Co., Ltd
Address: 1st Floor, Building 2, Daji Industrial Park, Hengshan Village, Shipai Town, Dongguan City

EUT Information

Product Description: RFID READER
Model: ZR0E27162-A16
Series Model: ZR0E2716X
Brand:  WVEHEX
Sample Received Date: January 9, 2026
Sample Status: Normal
Sample ID: A26010174 002
Date of Tested: January 9, 2026 to March 9, 2026

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
Article 2 Paragraph 1, item 8	Pass

Prepared By:



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Shawn Wen
Laboratory Manager

Checked By:



Alan He
Laboratory Leader

2. TEST METHODOLOGY

All tests were performed in accordance with the standard Article 2 Paragraph 1, item 8

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 6947.01) Guangdong Global Testing Technology Co., Ltd. has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1343) Guangdong Global Testing Technology Co., Ltd. has been recognized to perform compliance testing on equipment subject to Supplier's Declaration of Conformity (SDoC) and Certification rules ISED (Company No.: 30714) Guangdong Global Testing Technology Co., Ltd. has been registered and fully described in a report filed with ISED. The Company Number is 30714 and the test lab Conformity Assessment Body Identifier (CABID) is CN0148.
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Note: All tests measurement facilities use to collect the measurement data are located at Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People's Republic of China, 523808

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Items	k	Uncertainty
Occupied bandwidth	1.96	±9.2 PPM
Frequency tolerance	1.96	±9.0 PPM
Antenna power	1.96	±1.5 dB
Conducted Spurious Emission	1.96	9 kHz-30 MHz: ± 0.95 dB 30 MHz-1 GHz: ± 1.5 dB 1GHz-12.75GHz: ± 1.8 dB 12.75 GHz-26.5 GHz: ± 2.1dB
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.		

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name		RFID READER
Model		ZR0E27162-A16
Series Model		ZR0E2716X
Model difference		The difference of the models are model name, others are the same.
Ratings		DC 5V
Power Supply	Battery	5V

Frequency Band:	916.8 MHz to 923.2MHz
Frequency Range:	916.8 MHz to 923.2MHz
Type of Modulation:	ASK
Antenna Type:	Please refer to antenna list.
Antenna Gain:	3 dBi (Max antenna gain)
EUT Test software:	ReaderDemo
Note:	The Antenna Gain was provided by customer, and this information may affect the validity of the results, customer should be responsible for this.

5.2. CHANNEL LIST

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
5	916.8	25	920.8	30	921.8	35	922.8
11	918.0	26	921.0	31	922.0	36	923.0
17	919.2	27	921.2	32	922.2	37	923.2
23	920.4	28	921.4	33	922.4	/	/
24	920.6	29	921.6	34	922.6	/	/

5.3. TEST POWER SUPPLY

Test Voltage: 5V DC
The EUT is supplied with 5V DC The fluctuation of input voltage to the circuit of RF unit of test equipment is under $\pm 1\%$, when input voltage from 5V DC to the test equipment is fluctuated by $\pm 10\%$, So all measurement was conducted on the rated voltage (5V DC).

5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
ASK	CH 5(Low Channel), CH 28(MID Channel), CH 37(High Channel)	916.8 MHz, 921.4 MHz, 923.2 MHz

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worst Case Power Setting Parameter under 916.8 ~ 923.2MHz Band				
Test Software Version		ReaderDemo		
Modulation Type	Transmit Antenna Number	Test Software setting value		
		CH 5	CH 28	CH 37
ASK	1	19	19	19

5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna list

アンテナリスト

No	Name	Model	Maximum Gain	Manufacturer
1	スリープアンテナ	GWX-467XRSXX-891	<2dBi	マスプロ電工株式会社
2	ホイップアンテナ	NWX-282XSAXX-781	1dBi	マスプロ電工株式会社
3	RFID シートアンテナ	RAS2031	<3dBi	マスプロ電工株式会社
4	RFID シート型アンテナ (薄型)	RDS2CX080-20	<3dBi	マスプロ電工株式会社
5	RFID シートアンテナ	RAS9035S	<3dBi	マスプロ電工株式会社
6	RFID ポータブルシステム用アンテナ	RDP3-ANT	<3dBi	マスプロ電工株式会社
7	RFID マットアンテナ	RAM3031X	<3dBi	マスプロ電工株式会社
8	RFID 狭指向性平面アンテナ	RAF5031	<3.0dBi	マスプロ電工株式会社
9	RFID 狭指向性平面アンテナ	RAF4031	<3dBi	マスプロ電工株式会社
10	RFID 狭指向性平面アンテナ	RAF7031	<3.0dBi	マスプロ電工株式会社
11	小型平面アンテナ	RASF2035LX	<3dBi	マスプロ電工株式会社
12	RFID 小型平面アンテナ	RASF4035X	<3dBi	マスプロ電工株式会社
13	RFID 平面アンテナ	RAF2031	<3dBi	マスプロ電工株式会社
14	RFID 平面アンテナ	RAF2031LX	<3dBi	マスプロ電工株式会社
15	Circularly Polarized Antenna	ACR120120-G	3dBi	Shanghai ReadFind IoT
16	Dual-element Antenna	ACR21185	3dBi	Shanghai ReadFind IoT
17	Multi-Purpose antenna	A6031	3dBic	Times-7
18	Multi-Purpose antenna	A4030L	3dBi	Times-7
19	Door-frame antenna	A8060	3dBi	Times-7
20	Ground antenna	A6590C	3dBic	Times-7
21	Airport antenna	A6015	3dBic	Times-7
22	Circularly Polarized Antenna	ACR190190-M	3dBi	Shanghai ReadFind IoT
23	ANT2310-FMV25/SP-W-300	ANT2310-FMV25/SP-W-300	3dBic	日星電気株式会社
24	ANT2310-FMV25/SP-W-1000	ANT2310-FMV25/SP-W-1000	3dBic	日星電気株式会社
25	P4_array-A	P4_array-A	3dBic	パナソニック株式会社
26	Circularly Polarized Antenna	ACR260260-M	3dBi	Shanghai ReadFind IoT
27	SUOA-0132	SUOA-0132	-19dBi	株式会社エスケーエレクトロニクス
28	SUOA-0232	SUOA-0232	-18dBi	株式会社エスケーエレクトロニクス
29	SUOA-0332	SUOA-0332	-18dBi	株式会社エスケーエレクトロニクス
30	SWORD01	SWORD01	-23.34dBi	株式会社エスケーエレクトロニクス
31	RFID用フェーズドアレイアンテナ	HTQS0840	3dBic	パナソニックライフソリューションズ池田電機株式会社
32	5dBi ISM Band 915MHz Embedded Ceramic Patch Antenna with Cable and Connector	ISPC.91A.09.0092E	3DBi	TAOGLAS
33	A7030C Circularly Polarized UHF Multi-purpose Antenna	A7030C	3dBic	Times-7

アンテナリスト

No	Name	Model	Maximum Gain	Manufacturer
34	棚アンテナ 800R	Yometel Shelf Antenna 800R	3dBi	ヨメテル株式会社
35	ダイヤアンテナ 400	Yometel Cable-loop Antenna 400	3dBi	ヨメテル株式会社
36	ダイヤアンテナ 600R	Yometel Cable-loop Antenna 600R	3dBi	ヨメテル株式会社
37	RFID 平面アンテナ	BRA-01DL	3dBi	Shenzhen Broadradio RFID Technology Co.,LTD
38	RFID 平面アンテナ	BRA-01CR	3dBiC	Shenzhen Broadradio RFID Technology Co.,LTD
39	RFID 狭指向性平面アンテナ	BRA-01L	3dBi	Shenzhen Broadradio RFID Technology Co.,LTD
40	RFID 平面アンテナ	D915H09C	3dBi	Foshan Kreet Communication CO.,LTD
41	RFID 平面アンテナ	D915C09C	3dBi	Foshan Kreet Communication CO.,LTD
42	RFID 平面アンテナ	D915H095C	3dBi	Foshan Kreet Communication CO.,LTD
43	RFID 平面アンテナ	D915C095C	3dBi	Foshan Kreet Communication CO.,LTD
44	RFID 平面アンテナ	CC-CP9208A	3dBi	Shanghai U-Card Technologies Co.,Ltd
45	RFID 平面アンテナ	CC-CP9208A	3dBi	Shanghai U-Card Technologies Co.,Ltd
46	RFID 狭指向性平面アンテナ	CC-CP9208T2	3dBi	Shanghai U-Card Technologies Co.,Ltd
47	RFID 平面アンテナ	GXP-036XNFY9-999	3dBi	JOYMAX ELECTRONICS Co.,Ltd
48	同軸先端加工型アンテナ	CXPA1.5D-9-SMAJ ASSY-05	-0.48dBi	株式会社フジクラ・ダイヤケーブル
49	同軸先端加工型アンテナ	CXPA1.5D-9-SMAJ ASSY-10	-0.48dBi	株式会社フジクラ・ダイヤケーブル
50	同軸先端加工型アンテナ	CXPA1.5D-9-SMAJ ASSY-15	-0.48dBi	株式会社フジクラ・ダイヤケーブル
51	同軸先端加工型アンテナ	CXPA1.5D-9-SMAJ ASSY-20	-0.48dBi	株式会社フジクラ・ダイヤケーブル
52	同軸先端加工型アンテナ	CXPA1.5D-9-SMAP ASSY-05	-0.48dBi	株式会社フジクラ・ダイヤケーブル
53	同軸先端加工型アンテナ	CXPA1.5D-9-SMAP ASSY-10	-0.48dBi	株式会社フジクラ・ダイヤケーブル
54	同軸先端加工型アンテナ	CXPA1.5D-9-SMAP ASSY-15	-0.48dBi	株式会社フジクラ・ダイヤケーブル
55	同軸先端加工型アンテナ	CXPA1.5D-9-SMAP ASSY-20	-0.48dBi	株式会社フジクラ・ダイヤケーブル
56	920MHz帯用ケーブル型アンテナ	LXASD-9-ASSY-08	3.0dBi	株式会社フジクラ・ダイヤケーブル
57	920MHz帯60相当高出力型漏洩同軸ケーブル	ZLXSD-9/4	3.0dBi	株式会社フジクラ・ダイヤケーブル
58	RFID 外付けアンテナ	ANT2240-FWMV25/SP-L-1000	-2.88dBi	日星電気株式会社
59	RFID 外付けアンテナ	ANTP0450-C0534-STD(SMA-P)	-0.11dBi	日星電気株式会社
60	RFID 外付けアンテナ	ANTP0450-C0535-STD(SMA-RP)	-0.11dBi	日星電気株式会社
61	RFID 外付けアンテナ	ANTP2523-FWMV25/SP-L-2500	-0.52dBi	日星電気株式会社
62	RFID 内蔵アンテナ	ANT2005-1618/U-W	0.53dBi	日星電気株式会社
63	RFID 内蔵アンテナ	ANT2013-1618/U-W	0.46dBi	日星電気株式会社
64	RFID 内蔵アンテナ	ANTP0417-P1035-PCB	2.03dBi	日星電気株式会社
65	RFID 内蔵アンテナ	ANT2309-2318/U-W-L-50	0.35dBi	日星電気株式会社
66	RFID 外付けアンテナ	ANTP0451-C0532-STD(SMA-P)	1.52dBi	日星電気株式会社
67	RFID 外付けアンテナ	ANTP0451-C0533-STD(SMA-RP)	1.52dBi	日星電気株式会社
68	ANT2310-FMV25SP-W-2000	ANT2310-FMV25SP-W-2000	2.60dBi	日星電気株式会社
69	ANT2310-FMV25SP-W-3000	ANT2310-FMV25SP-W-3000	1.76dBi	日星電気株式会社
70	ANT2310-FMV25SP-W-4000	ANT2310-FMV25SP-W-4000	0.78dBi	日星電気株式会社
71	ANT2310-FMV25SP-W-5000	ANT2310-FMV25SP-W-5000	-0.09dBi	日星電気株式会社
72	RFID 平面アンテナ	RAF2131	3dBi	マスプロ電工株式会社
73	RFID ラケットアンテナ	RAR2031	3.0dBi	マスプロ電工株式会社
74	RFID 平面アンテナ	RAF2135L	3dBi	マスプロ電工株式会社
75	棚アンテナ 800R (反射板付き)	Yometel Shelf Antenna 800R	0.03dBi	ヨメテル株式会社
76	棚アンテナ 400R	Yometel Shelf Antenna 400R	-1.43dBi	ヨメテル株式会社
77	棚アンテナ (反射板なし)	Yometel Shelf Antenna 400	3.0dBi	ヨメテル株式会社
78	ゲートアンテナ (反射板あり)	Yometel Gate Antenna 600R	3.0dBi	ヨメテル株式会社
79	ケーブルアンテナ	Yometel Cable-loop Antenna 600R	0.61dBi	ヨメテル株式会社
80	RFID 内蔵アンテナ	ANT2309-2318/U-W-L-100	-0.56dBi	日星電気株式会社
81	RFID 外付けアンテナ	ANT2240-FWMV25SP-L-1000	1.53dBi	日星電気株式会社
82	RFID 外付けアンテナ	ANT2523-FWMV25_SP-L-2500	-1.22dBi	日星電気株式会社
83	RFID 外付けアンテナ	ANTP0450-C0534-STD(SMA-P)	-0.19dBi	日星電気株式会社
84	RFID 外付けアンテナ	ANTP0450-C0534-STD(SMA-RP)	-0.19dBi	日星電気株式会社

アンテナリスト

No	Name	Model	Maximum Gain	Manufacturer
85	Circularly Polarized Antenna	A6034S	3dBiC	Times-7
86	CIRCULAR POLARISED UHF ANTENNA	A4030C	3dBiC	Times-7
87	CIRCULAR POLARISED UHF ANTENNA	A6031	3dBiC	Times-7
88	CIRCULAR POLARISED UHF ANTENNA	A6032	3dBiC	Times-7
89	CIRCULAR POLARISED UHF ANTENNA	A6034	3dBiC	Times-7
90	CIRCULAR POLARISED GROUND ANTENNA	A6590C	3dBiC	Times-7
91	CIRCULAR POLARISED UHF SHELF ANTENNA	A7030C	3dBiC	Times-7
92	LINEAR POLARISED UHF SHELF ANTENNA	A7040	3dBiC	Times-7
93	LINEAR POLARISED UHF SHELF ANTENNA	A7060	3dBi	Times-7
94	LINEAR POLARISED DOOR FRAME ANTENNA	A8060	3dBi	Times-7
95	DUAL LINEAR POLARISED ANTENNA	A8065 Dual Linear	3dBi	Times-7
96	DUAL LINEAR POLARISED ANTENNA	A8065 Horizontal	3dBi	Times-7
97	DUAL LINEAR POLARISED ANTENNA	A8065 Vertical	3dBi	Times-7
98	RUGGEDLINE IP67 ANTENNA	A3010	3dBiC	Times-7
99	RUGGEDLINE IP67 ANTENNA	A3030	3dBiC	Times-7
100	RUGGEDLINE IP67 ANTENNA	A3050	3dBiC	Times-7
101	CIRCULAR POLARISED ANTENNA	A5010	3dBiC	Times-7
102	CIRCULAR POLARISED UHF ANTENNA	B6031	3dBiC	Times-7
103	CIRCULAR POLARISED UHF ANTENNA	A5020CP	3dBiC	Times-7
104	THIN ANTENNA	FMM800W-4T-5M-R	2.96dBi	日精株式会社
105	THIN ANTENNA	FMM800W-4T-10M-R	-0.46dBi	日精株式会社
106	THIN ANTENNA	FMM800W-4T-15M-R	-0.46dBi	日精株式会社

アンテナリスト

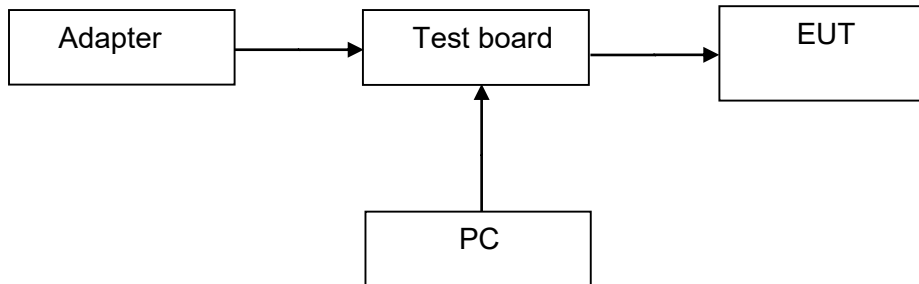
No	Name	Model	Maximum Gain	Manufacturer
107	circular plarization UHF Antenna	ZA0E30385	3dBi	WAVEHEX
108	circular plarization UHF Antenna	ZA0E31313-21	3dBi	WAVEHEX
109	circular plarization UHF Antenna	ZA0E31313-18	3dBi	WAVEHEX
110	circular plarization UHF Antenna	ZA0E31312	3dBi	WAVEHEX
111	circular plarization UHF Antenna	ZA0E1919-27	3dBi	WAVEHEX
112	circular plarization UHF Antenna	ZA0E32525	3dBi	WAVEHEX
113	circular plarization UHF Antenna	ZA0E34444	3dBi	WAVEHEX
114	circular plarization UHF Antenna	ZA0E33313	3dBi	WAVEHEX
115	Linear polarization UHF Antenna	ZC9A0410	2.5dBi	WAVEHEX
116	circular plarization UHF Antenna	ZA0B7C10L	3dBi	WAVEHEX
117	circular plarization UHF Antenna	ZA0E39510	3dBi	WAVEHEX
118	circular plarization UHF Antenna	ZA0E37710	3dBi	WAVEHEX
119	circular plarization UHF Antenna	ZA0E31919	3dBi	WAVEHEX
120	circular plarization UHF Antenna	ZA0E34609	3dBi	WAVEHEX

Test Mode	Transmit and Receive Mode	Description
ASK	☒ 16TX, 16RX	Antenna 1, Antenna 2, Antenna 3, Antenna 4, Antenna 5, Antenna 6, Antenna 7, Antenna 8, Antenna 9, Antenna 10, Antenna 11, Antenna 12, Antenna 13, Antenna 14, Antenna 15 and Antenna 16 can be used as transmitting/receiving antenna.
Note: No simultaneous transmission is supported among the various antennas.		

5.7. SUPPORT UNITS FOR SYSTEM TEST

Equipment	Manufacturer	Model No.
PC	Lenovo	T14
Test board	/	/
Adapter	Shenzhen Juyuanhai Electronic Co.,Ltd	JYH36-1202000-BD

5.8. SETUP DIAGRAM



6. MEASURING EQUIPMENT AND SOFTWARE USED

Test Equipment of Conducted RF					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40	102257	2025/08/25	2026/08/24
Spectrum Analyzer	KEYSIGHT	N9020A	MY51285127	2025/08/25	2026/08/24
EXG Analog Signal Generator	KEYSIGHT	N5173B	MY61253075	2025/08/25	2026/08/24
Vector Signal Generator	Rohde & Schwarz	SMM100A	101899	2025/08/25	2026/08/24
RF Control box	MWRF-test	MW100-RFCB	MW220926GTG	2025/08/25	2026/08/24
Wideband Radio Communication Tester	Rohde & Schwarz	CMW270	102792	2025/08/25	2026/08/24
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	103235	2025/08/25	2026/08/24
temperature humidity chamber	Espec	SH-241	SH-241-2014	2025/08/25	2026/08/24
RF Test Software	MWRF-test	MTS8310E (Ver. V2/0)	N/A	N/A	N/A

Note: The instruments and equipment listed in the table are calibrated by CCIC, and the calibration method is referred to item ii c) of Article 24-2 paragraph 4.

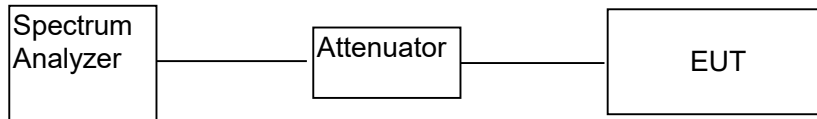
7. TEST RESULTS

7.1. FREQUENCY TOLERANCE

LIMIT

20 x 10⁻⁶ or less.

TEST CONFIGURATION



TEST PROCEDURE

1. Frequency accuracy of SA shall be less than 10% of limits tolerance (5ppm).
2. Setting of SA is following as: RBW:3 kHz / VBW:3 kHz.
3. Center Frequency: The center frequency of testing for EUT.
4. Sweep time: Auto.
5. Sweep mode: Continuous sweep.
6. Detect mode: Positive peak.
7. EUT have transmitted absence of modulation signal and fixed channelize. f is using the mark cursor to mark the peak frequency value, fc is declaring of channel frequency. Then the frequency error formula is $(f-f_c)/f_c \times 10^6$ ppm and the limit is less than ± 20 ppm.

TEST ENVIRONMENT

Temperature	22.8°C	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to "Test Data"-Appendix A

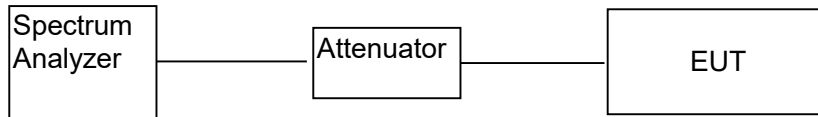
Note: All the antennas were tested, and only the worst antenna was recorded in the report (Antenna 6).

7.2. OCCUPIED BANDWIDTH

LIMIT

200KHz for Occupied frequency bandwidth.

TEST CONFIGURATION



TEST PROCEDURE

1. Setting of SA is following as: RBW:<3%_{OBW} / VBW: =VBW / Span:=2_{OBW} ~ 3.5_{OBW} / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold.
2. EUT have transmitted the maximum modulation signal and fixed channelize. SA set to 99% of occupied bandwidth to measure occupied bandwidth.
3. When the trace was stable, captures the plots and saved. Compare with the limits above.
4. Repeat above steps for all bandwidths.

TEST ENVIRONMENT

Temperature	22.8°C	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to "Test Data"-Appendix A

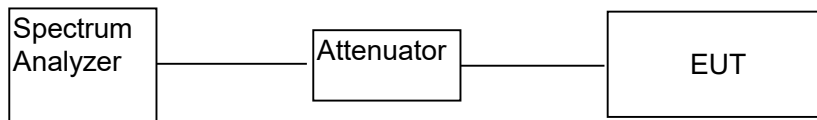
Note: All the antennas were tested, and only the worst antenna was recorded in the report (Antenna 6).

7.3. SECONDARY RADIATED EMISSION STRENGTH

LIMIT

Frequency (MHz)	Limit (dBm)
$F \leq 710 \text{ MHz}$	-54 dBm/100 kHz
$710 \text{ MHz} < f \leq 900 \text{ MHz}$	-55 dBm/1 MHz
$900 \text{ MHz} < f \leq 915 \text{ MHz}$	-55 dBm/100 kHz
$915 \text{ MHz} < f \leq 930 \text{ MHz}$	-54 dBm/100 kHz
$930 \text{ MHz} < f \leq 1000 \text{ MHz}$	-55 dBm/100 kHz
$1000 \text{ MHz} < f$	-47 dBm/1 MHz

TEST CONFIGURATION



TEST PROCEDURE

1. EUT have the continuous reception mode and fixed only one channelize.
2. Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold.
3. Using the Spurious Emissions function of SA, setting the limit line and frequency as the limit table.
4. When the trace completed, compared with limit, and saved the plots.
5. Repeat above steps for applicable test frequencies, channel bandwidths.

TEST ENVIRONMENT

Temperature	22.8°C	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to "Test Data"-Appendix A

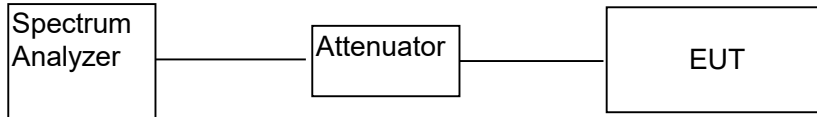
Note: All the antennas were tested, and only the worst antenna was recorded in the report (Antenna 6).

7.4. ANTENNA POWER

LIMIT

Antenna Power: 250 mW, Deviation: + 20%≥ and ≥ -80%.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the UUT to the spectrum analyzer and use the following settings: Centre Frequency: The centre frequency of the channel under test. RBW: 1MHz/VBW: 1MHz/ Span: Wide enough to cover the complete power envelope of the signal of the EUT. / Detector: Peak. / Trace Mode: Max Hold.
2. When the trace is complete, find the peak value of the power envelope and record the frequency.
3. Calculated the Maximum deviation and recorded the results.
$$\text{Deviation} = (\text{Antenna Power} - \text{Rated Output Power}) / \text{Rated Output Power} * 100\%$$

TEST ENVIRONMENT

Temperature	22.8°C	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to “Test Data”-Appendix A

Note: All the antennas were tested, and only the worst antenna was recorded in the report (Antenna 6).

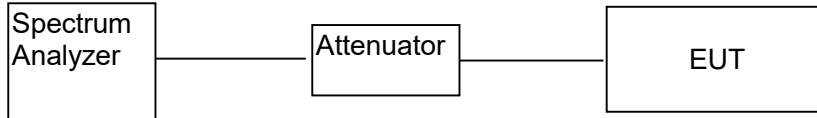
7.5. ADJACENT CHANNEL LEAKAGE POWER

LIMIT

Adjacent unit channels: -5dBm or less

Radio channel both ends: 4dBm or less

TEST CONFIGURATION



TEST PROCEDURE

1. EUT have transmitted the maximum modulation signal and fixed channelize.
2. Setting of SA is following as: RBW:1kHz / VBW:3kHz/ Sweep time: Auto / Sweep Mode: Continuous //Detect mode: RMS / Trace mode: Max.
3. Using the channel power function of SA, setting the Tx channel bandwidth, Adjacent channel bandwidth and Alternate channel bandwidth as limit table.
4. Setting the limit line as the limit table, and turn on the limit function.
5. When the trace completed, compared with limits, and saved the plot.
6. Repeat above steps for applicable test frequencies, channel bandwidths.

TEST ENVIRONMENT

Temperature	22.8°C	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to “Test Data”-Appendix A

Note: 1. All the antennas were tested, and only the worst antenna was recorded in the report (Antenna 6).

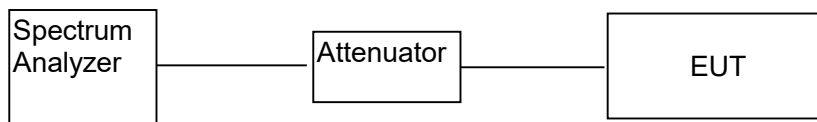
2. $\text{dBm}/100\text{kHz} = \text{dBm}/\text{kHz} + 10\log(100/1)$

7.6. UNWANTED EMISSION STRENGTH

LIMIT

Frequency (MHz)	Limit (dBm)
$F \leq 710 \text{ MHz}$	-36 dBm/100 kHz
$710 \text{ MHz} < f \leq 900 \text{ MHz}$	-55 dBm/1 MHz
$900 \text{ MHz} < f \leq 915 \text{ MHz}$	-55 dBm/100 kHz
$915 \text{ MHz} < f \leq 915.7 \text{ MHz}$ and $923.5 \text{ MHz} < f \leq 930 \text{ MHz}$	-36 dBm/100 kHz
$915.7 \text{ MHz} < f \leq 923.5 \text{ MHz}$ (except for $f_{c \pm 200 \text{ kHz}}$)	-29 dBm/100 kHz
$930 \text{ MHz} < f \leq 1000 \text{ MHz}$	-55 dBm/100 kHz
$1000 \text{ MHz} < f \leq 1215 \text{ MHz}$	-45 dBm/1 MHz
$1215 \text{ MHz} < f$	-30 dBm/1 MHz

TEST CONFIGURATION



TEST PROCEDURE

1. EUT have the continuous reception mode and fixed only one channelize.
2. Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) / AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold.
3. Using the Spurious Emissions function of SA, setting the limit line and frequency as the limit table.
4. When the trace completed, compared with limit, and saved the plots.
5. Repeat above steps for applicable test frequencies, channel bandwidths.

TEST ENVIRONMENT

Temperature	22.8°C	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to "Test Data"-Appendix A

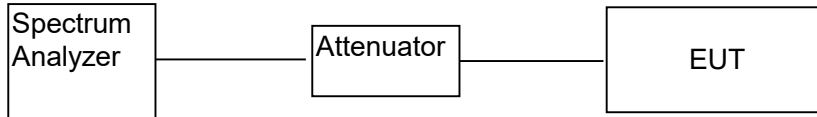
Note: All the antennas were tested, and only the worst antenna was recorded in the report (Antenna 6).

7.7. TRANSMISSION TIME RESTRICTION

LIMIT

Transmission ON: within 4 sec Transmission OFF: over 0.05 sec.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect EUT antenna terminal to the spectrum analyzer with a low loss cable.
Equipment mode: spectrum analyzer, detector function: Peak RBW=1MHz, VBW=1MHz, Span=zero.
2. Adjust the center frequency of spectrum analyzer on any frequency be measured.
3. Press the Sweep Button, and captured at least on burst by SA.
4. Use the delta function to marker the burst length.
5. When the trace completed, saved the plots.
6. Repeat above steps for applicable test frequencies and channel bandwidths.

TEST ENVIRONMENT

Temperature	22.8°C	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to "Test Data"-Appendix A

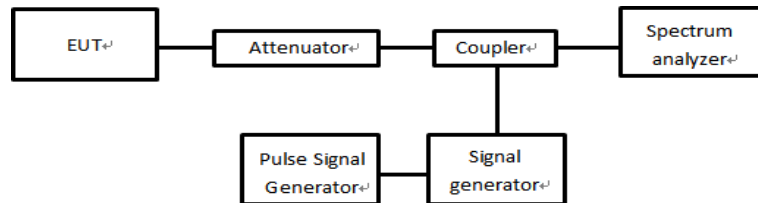
Note: All the antennas were tested, and only the worst antenna was recorded in the report (Antenna 6).

7.8. CARRIER SENSING FUNCTION

LIMIT

Feeder input point: -74dBm
Receive bandwidth: 200kHz
Judgment time: 5ms or more

TEST CONFIGURATION



TEST PROCEDURE

1. Set the output level of the standard signal generator to the level of the technical standard at the antenna connection terminal of the test equipment.
2. With the output of the standard signal generator turned off, turn on the test equipment for transmission operation, and confirm that the spectrum analyzer emits radio waves.
3. Put the test equipment into the receiving state.
4. With the output of the standard signal generator turned on, turn on the test equipment for transmission operation and confirm that the spectrum analyzer does not emit radio waves.

TEST ENVIRONMENT

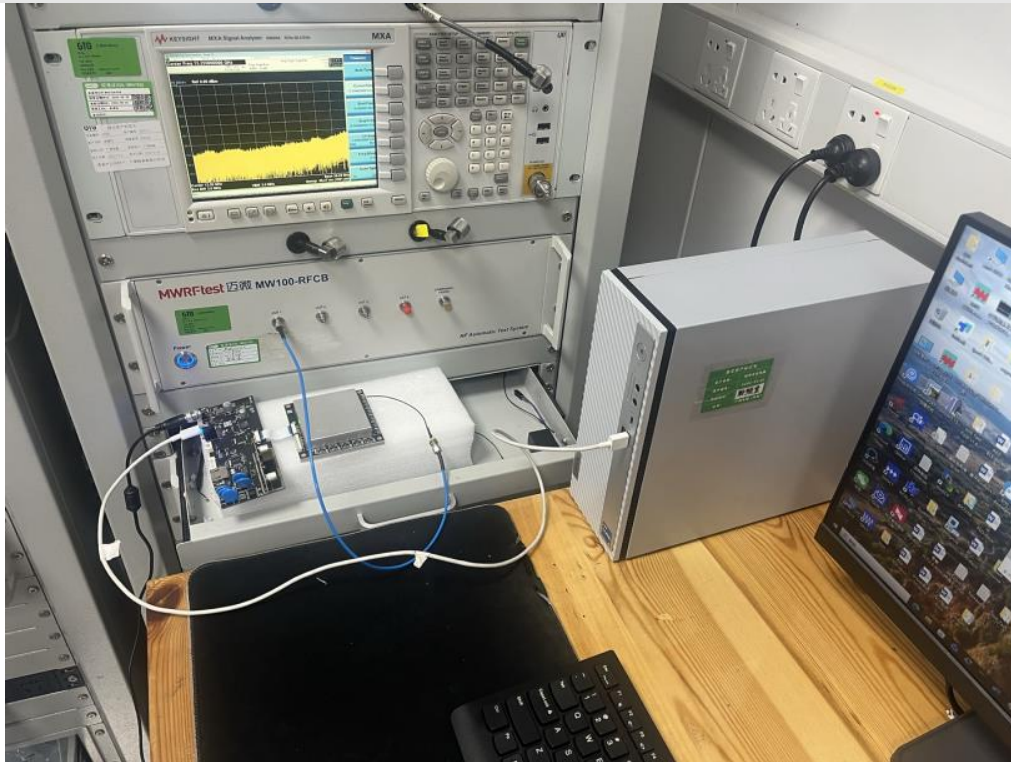
Temperature	22.8°C	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to "Test Data"-Appendix A

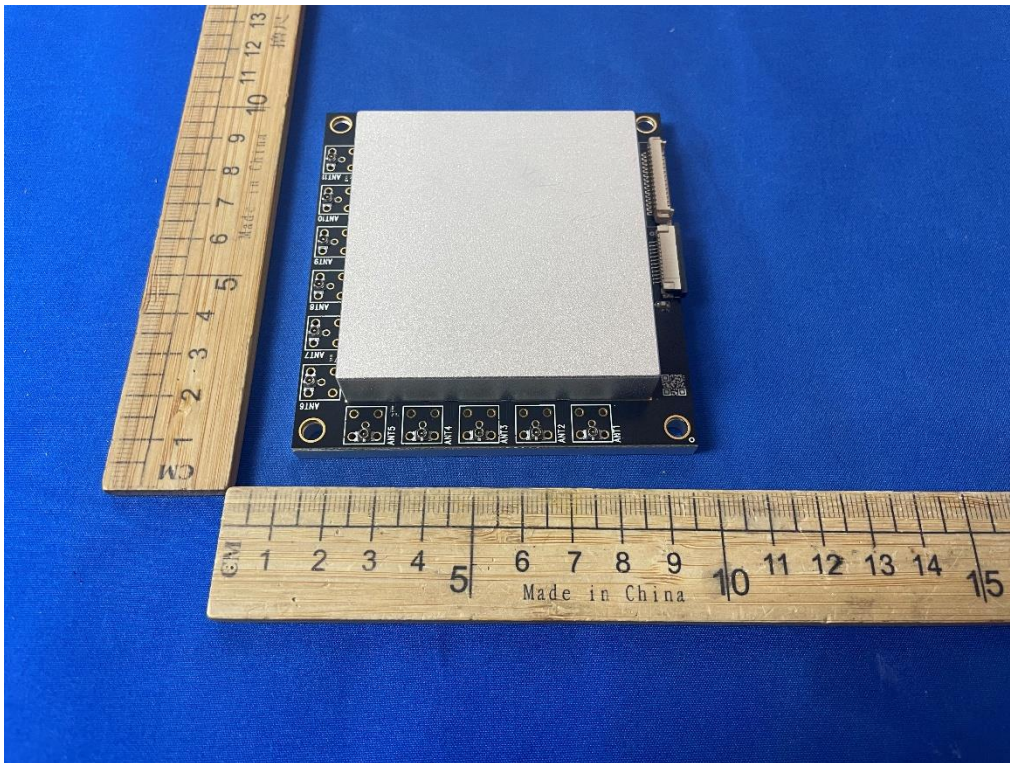
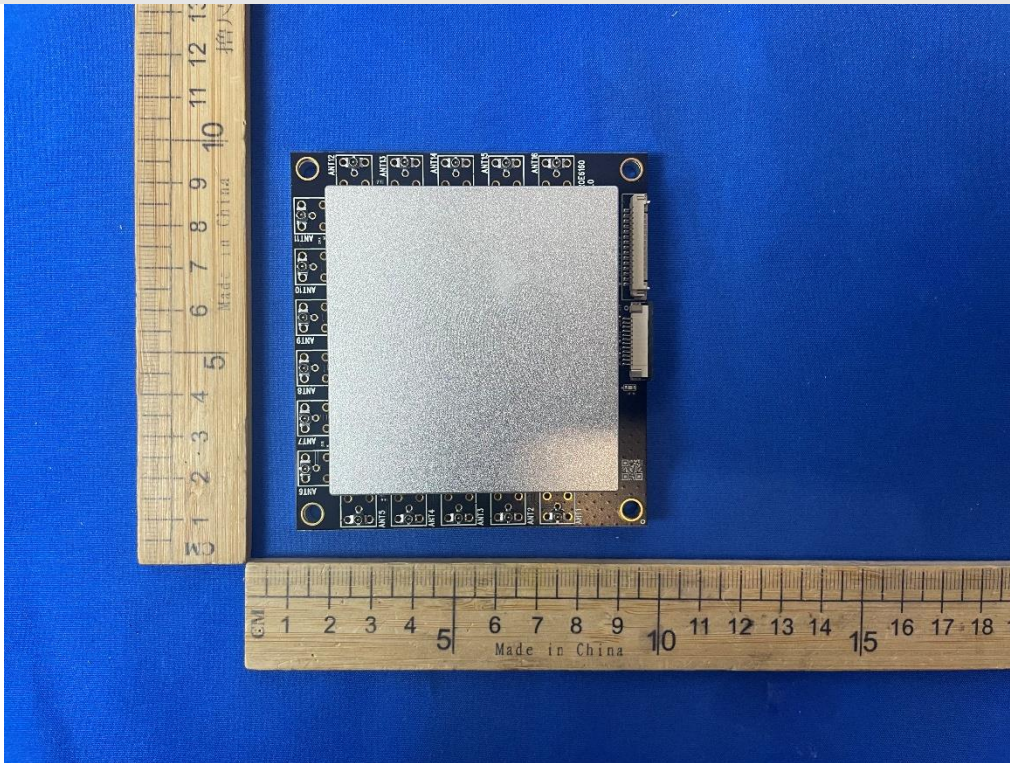
Note: All the antennas were tested, and only the worst antenna was recorded in the report (Antenna 6).

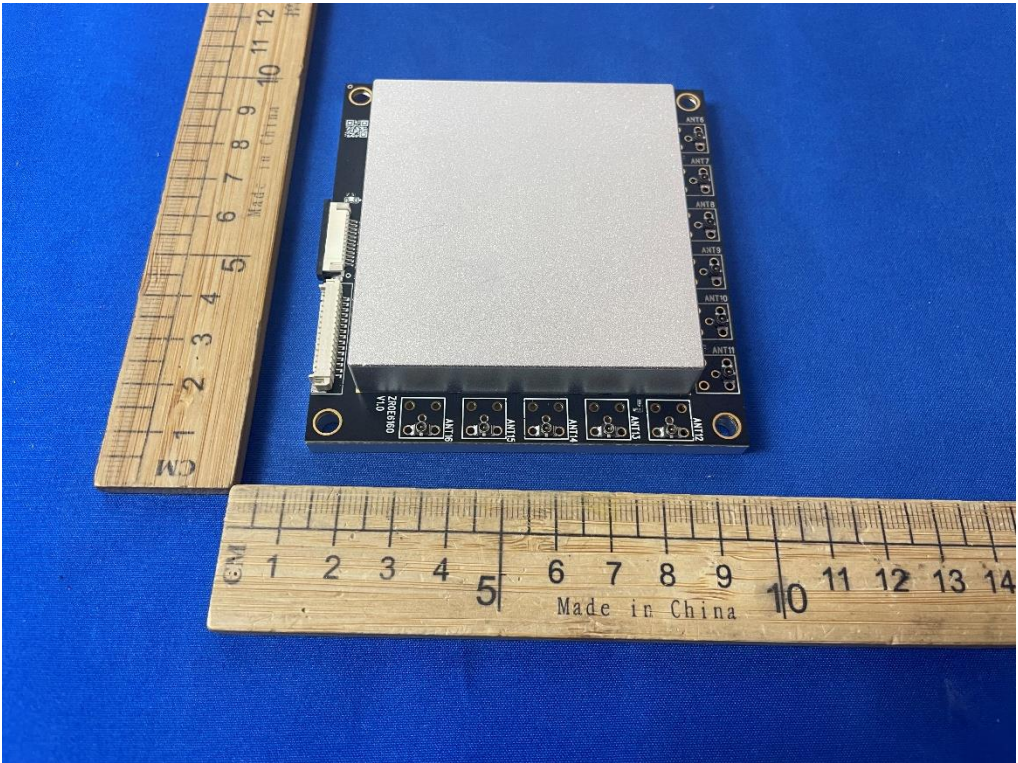
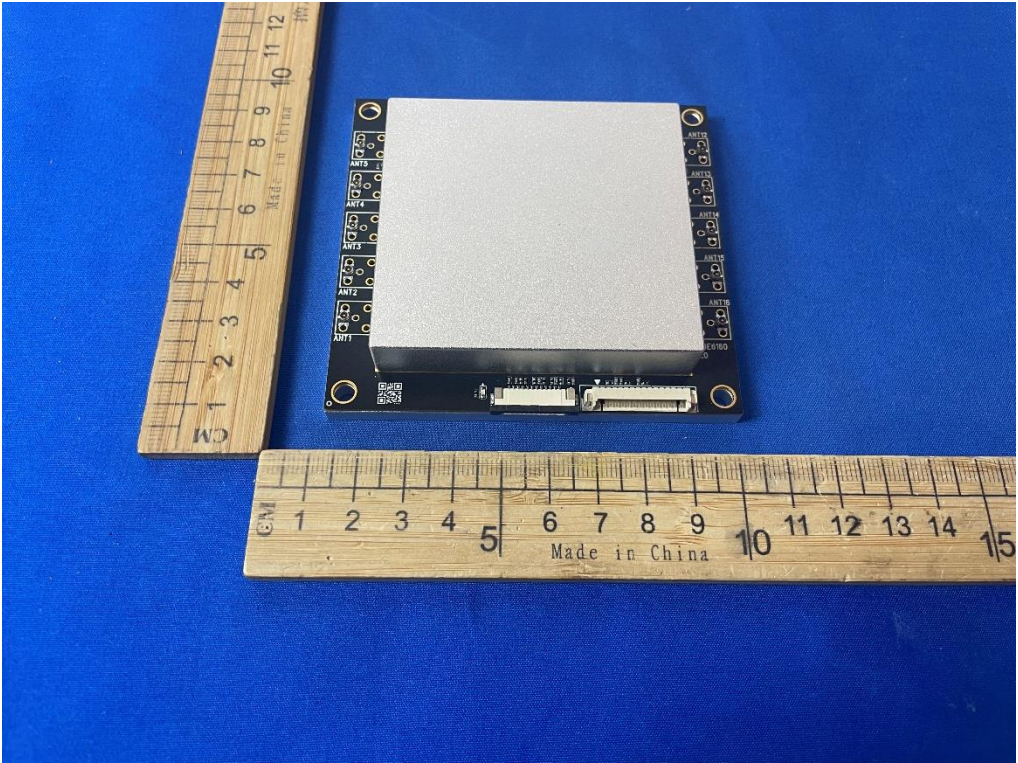
APPENDIX: PHOTOGRAPHS OF TEST CONFIGURATION

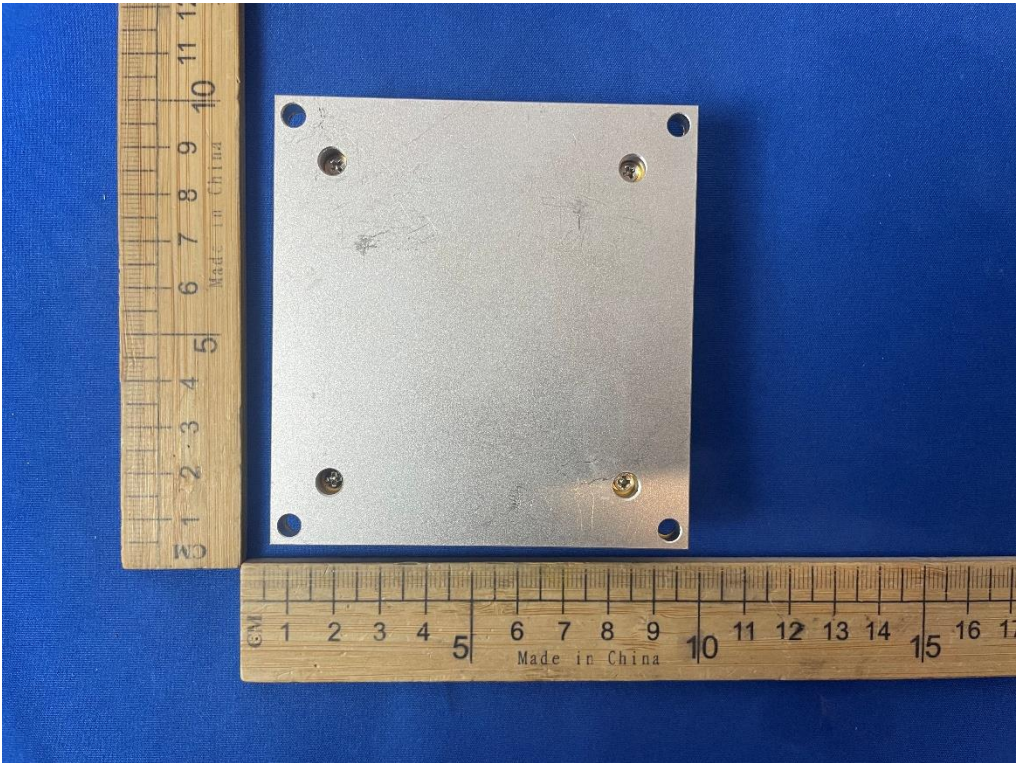
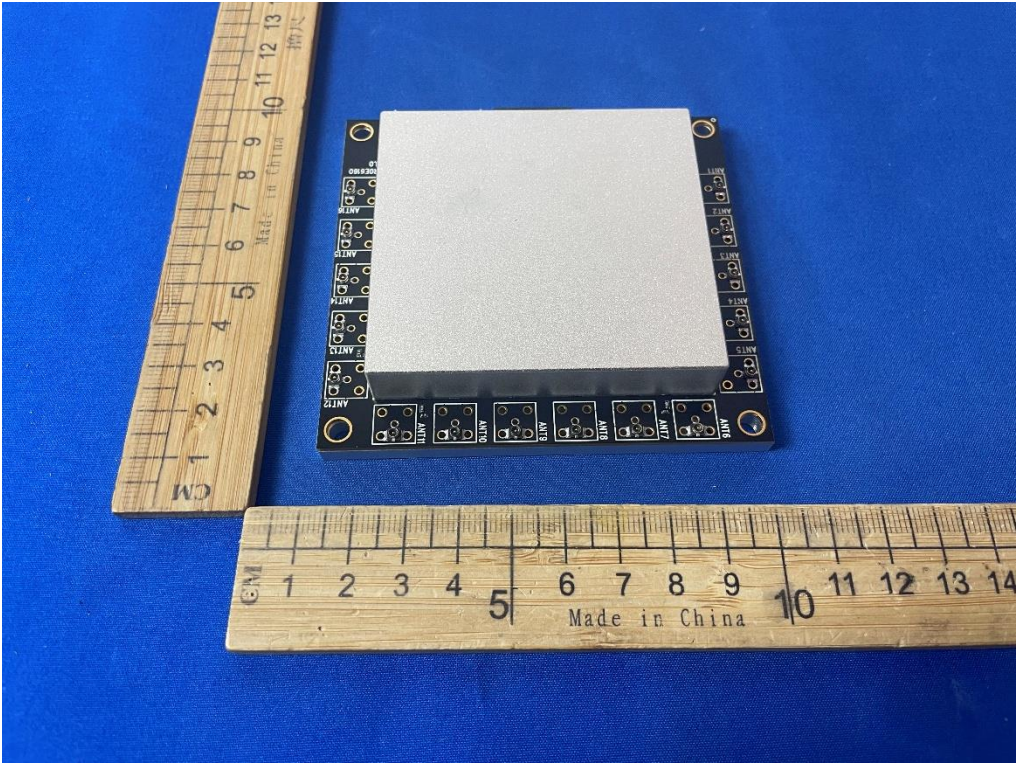


APPENDIX: PHOTOGRAPHS OF THE EUT

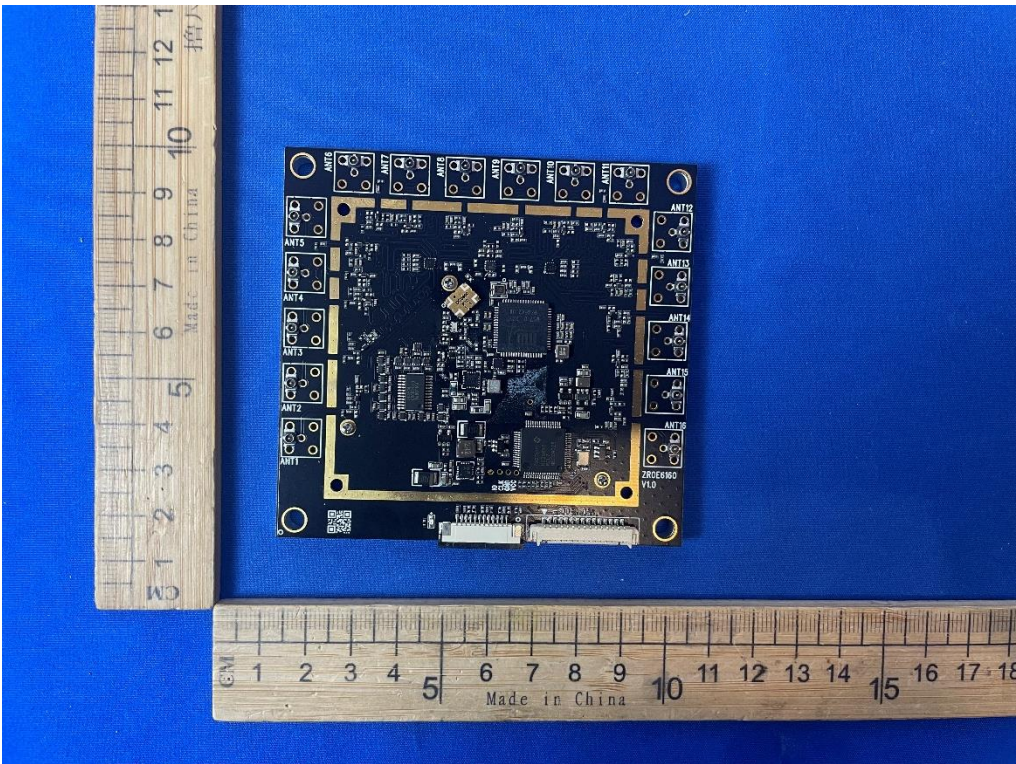
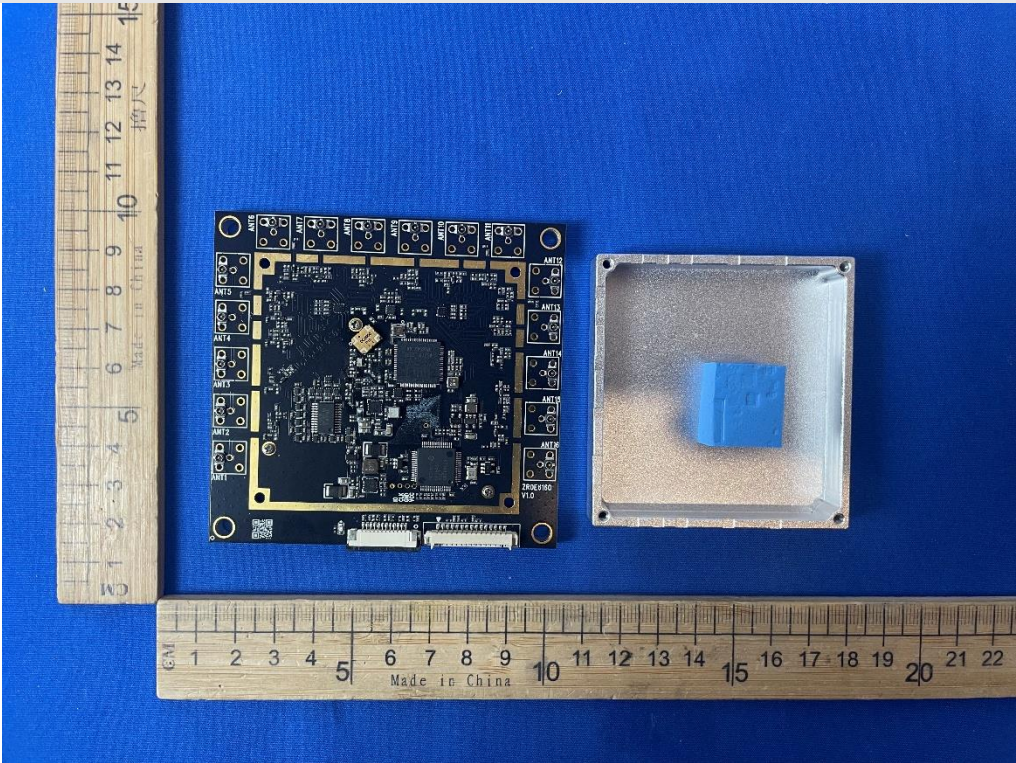
External

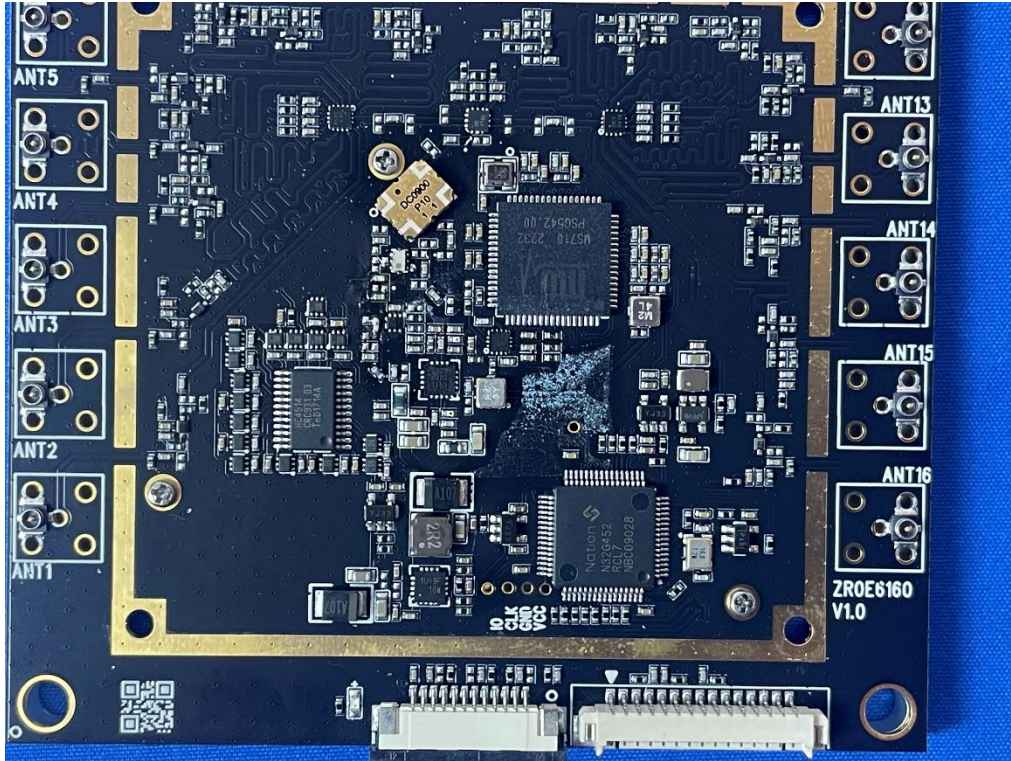






Internal





END OF REPORT