FCC RF Test Report

APPLICANT	:	Shenzhen Zolon Technology Co.,Ltd.
EQUIPMENT	:	Smart Computer
BRAND NAME	:	ZOLON
MODEL NAME	:	M11
FCC ID	:	2AV5BM11
STANDARD	:	47 CFR Part 22(H), 27(M)
CLASSIFICATION	:	PCS Licensed Transmitter (PCB)
TEST DATE(S)	:	Jul. 10, 2025

We, Sporton International Inc. (ShenZhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (ShenZhen), the test report shall not be reproduced except in full.

Fly Liang

Approved by: Fly Liang

ACCREDITED Cert #5145.01

Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG552610F	Rev. 01	Initial issue of report	Sep. 08, 2025

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1053 §22.917(a)	Radiated Spurious Emission (Band 5)	< 43+10log10(P[Watts])	PASS	Under limit 22.62 dB at 7653.00 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7)	< 55+10log10(P[Watts])		

Remark : The conducted test items of inter band CA were cover by LTE single carrier due to the CA power is reduced according to 3GPP MPR.

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Shenzhen Zolon Technology Co.,Ltd.
401, Building 3, Shenzhen Software Park, Maling Community, Yuehai Sub-district, Nanshan District, Shenzhen City, Guangdong Province, P.R.C

1.2 Manufacturer

Shenzhen Zolon Technology Co.,Ltd.
401, Building 3, Shenzhen Software Park, Maling Community, Yuehai Sub-district, Nanshan District, Shenzhen City, Guangdong Province, P.R.C

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Computer
Brand Name	ZOLON
Model Name	M11
FCC ID	2AV5BM11
IMEI Code	Radiation: 869153080002196
HW Version	V02
SW Version	0.00.00.20250521
EUT Stage	Production Unit

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 7 : 2500 MHz ~ 2570 MHz
Rx Frequency	LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 7 : 2620 MHz ~ 2690 MHz
Uplink CA Band	5A-7A
Type of Modulation	QPSK / 16QAM / 64QAM

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH02-SZ	CN1256	421272

1.7 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 22(H), 27(M)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

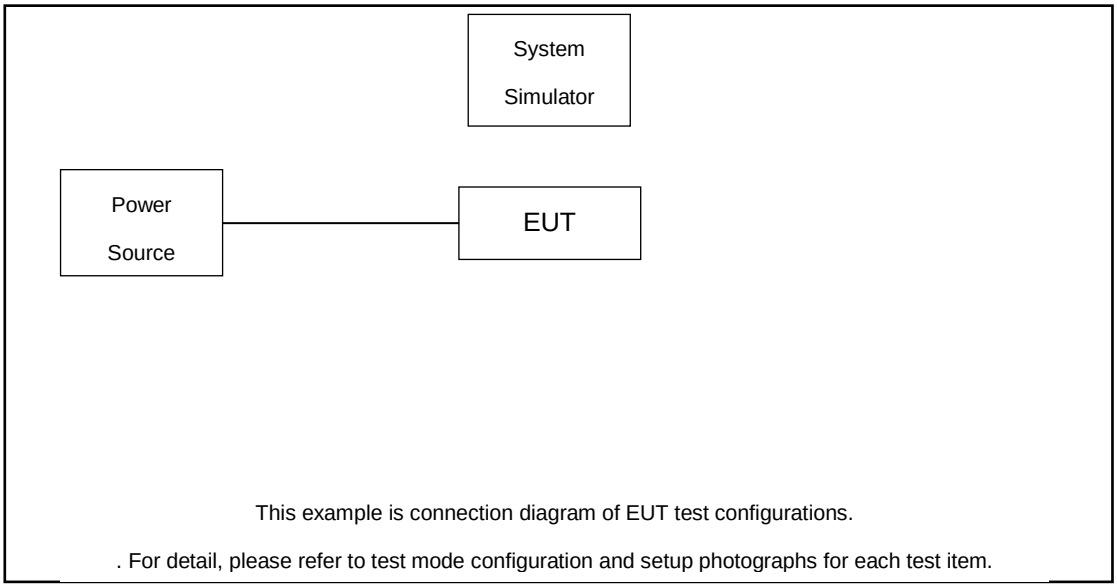
2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (Z-Plane)

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Radiated Spurious Emission	5A-7A	Worst Case												v	v	v
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.															

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

LTE Band 5 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 7 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

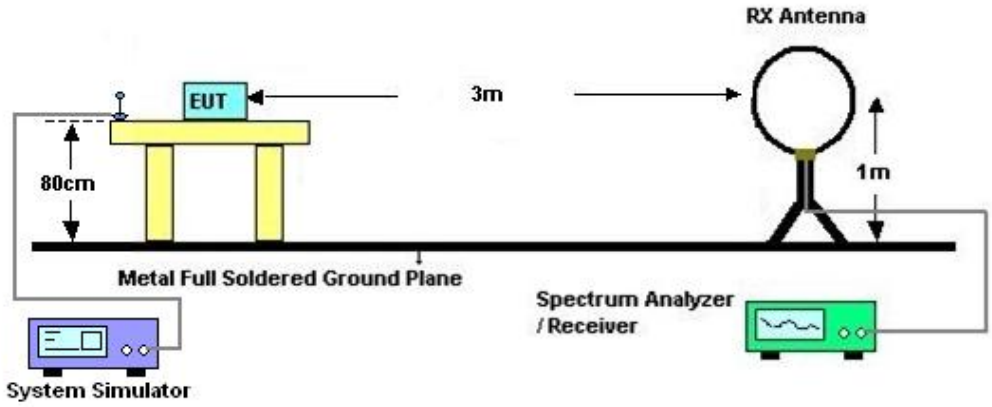
3 Radiated Test Items

3.1 Measuring Instruments

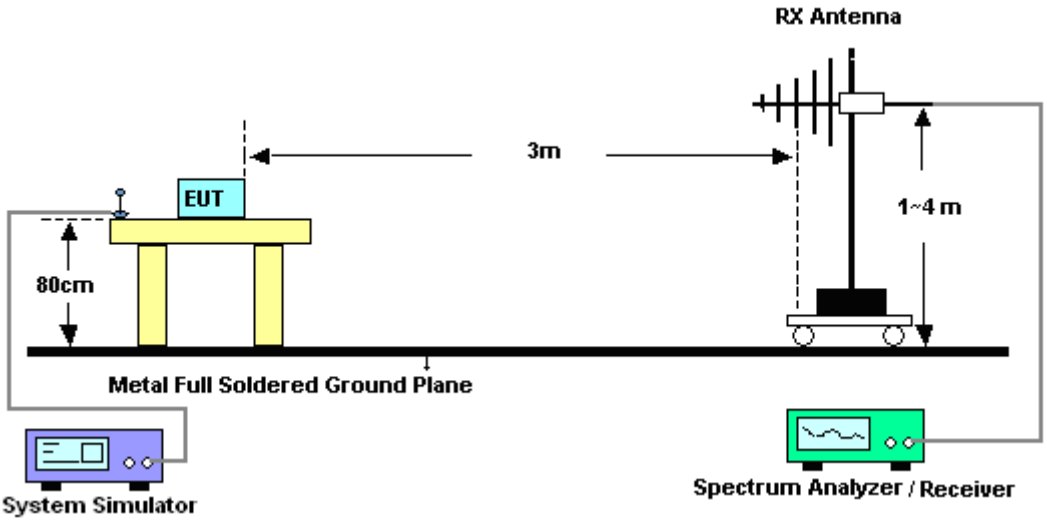
See list of measuring instruments of this test report.

3.2 Test Setup

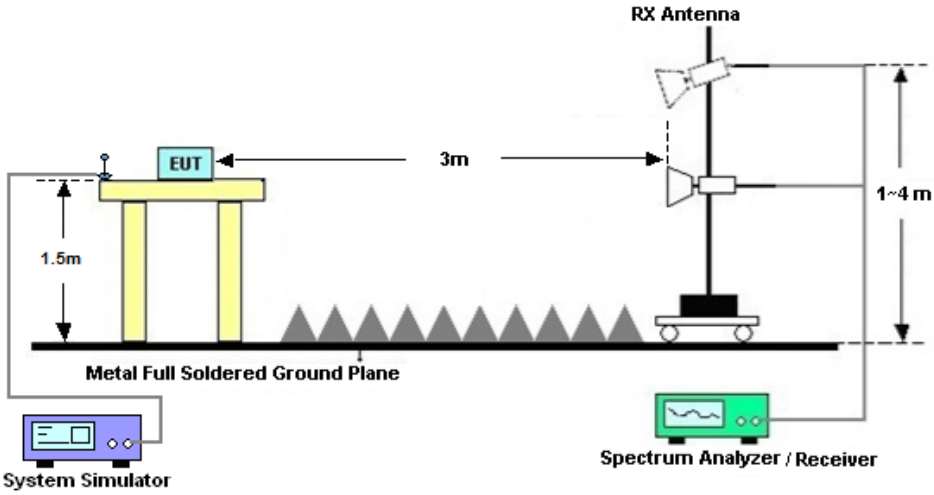
3.2.1 For radiated test below 30MHz



3.2.2 For radiated test from 30MHz to 1GHz



3.2.3 For radiated test above 1GHz



3.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix A.

3.4 Radiated Spurious Emission

3.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26.

For LTE Band 5

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For LTE Band 7

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    For Band 5:
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
    For Band 7:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2025	Jul. 10, 2025	Jul. 02, 2026	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Jul. 10, 2025	Dec. 27, 2025	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Jul. 10, 2025	Oct. 23, 2025	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2025	Jul. 10, 2025	Jul. 04, 2026	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2025	Jul. 10, 2025	Jul. 03, 2026	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 03, 2025	Jul. 10, 2025	Apr. 02, 2027	Radiation (03CH02-SZ)
LF Amplifier	EM Electronics	EM330	060788	20MHz-3GHz	Dec. 25, 2024	Jul. 10, 2025	Dec. 24, 2025	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 14, 2024	Jul. 10, 2025	Oct. 13, 2025	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 14, 2024	Jul. 10, 2025	Oct. 13, 2025	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010003043	N/A	Oct. 18, 2024	Jul. 10, 2025	Oct. 17, 2025	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jul. 10, 2025	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jul. 10, 2025	NCR	Radiation (03CH02-SZ)

NCR: No Calibration Required

5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.47dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.31dB**

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.72dB**

Appendix A. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jia Kuang	Temperature :	22~25℃
		Relative Humidity :	48~52%

ULCA_5A-7A (ANT0+3)									
Channel	Frequency (MHz)	ERP/EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B5 BW 10MHz Lowest 1RB0,QPSK	1649.18	-53.79	-13	-40.79	-63.30	-57.02	3.98	9.36	H
	2473.77	-61.50	-13	-48.50	-75.40	-65.05	4.85	10.55	H
	3298.36	-60.94	-13	-47.94	-77.00	-65.87	5.50	12.58	H
	1649.18	-63.83	-13	-50.83	-73.08	-67.06	3.98	9.36	V
	2473.77	-61.26	-13	-48.26	-75.13	-64.81	4.85	10.55	V
	3298.36	-61.42	-13	-48.42	-77.29	-66.35	5.50	12.58	V
LTE B7 BW 20MHz Lowest 1RB0,QPSK	5002.00	-59.08	-25	-34.08	-80.97	-64.64	7.12	12.68	H
	7503.00	-54.89	-25	-29.89	-80.75	-58.22	8.26	11.59	H
	10004.00	-51.44	-25	-26.44	-81.67	-52.97	10.45	11.98	H
	5002.00	-58.87	-25	-33.87	-80.81	-64.43	7.12	12.68	V
	7503.00	-53.12	-25	-28.12	-78.97	-56.45	8.26	11.59	V
	10004.00	-52.94	-25	-27.94	-81.54	-54.47	10.45	11.98	V
LTE B5 BW 10MHz Middle 1RB0,QPSK	1664	-48.90	-13	-35.90	-58.46	-52.15	4.00	9.40	H
	2496	-59.50	-13	-46.50	-73.35	-63.07	4.88	10.60	H
	3328	-61.89	-13	-48.89	-77.64	-66.82	5.52	12.60	H
	1664	-48.89	-13	-35.89	-58.05	-52.14	4.00	9.40	V
	2496	-60.92	-13	-47.92	-74.73	-64.49	4.88	10.60	V
	3328	-62.06	-13	-49.06	-77.57	-66.99	5.52	12.60	V
LTE B7 BW 20MHz Middle 1RB0,QPSK	5052.00	-58.82	-25	-33.82	-80.62	-64.38	7.14	12.70	H
	7578.00	-54.48	-25	-29.48	-80.20	-57.78	8.30	11.60	H
	10104.00	-51.42	-25	-26.42	-81.59	-52.94	10.48	12.00	H
	5052.00	-58.75	-25	-33.75	-80.67	-64.31	7.14	12.70	V
	7578.00	-54.87	-25	-29.87	-80.55	-58.17	8.30	11.60	V
	10104.00	-53.05	-25	-28.05	-81.82	-54.57	10.48	12.00	V
LTE B5 BW 10MHz Highest 1RB0,QPSK	1679.18	-45.80	-13	-32.80	-55.41	-48.97	4.10	9.42	H
	2518.77	-60.18	-13	-47.18	-73.98	-63.76	4.90	10.63	H
	3358.36	-61.39	-13	-48.39	-77.12	-66.31	5.55	12.62	H
	1679.18	-55.41	-13	-42.41	-64.47	-58.58	4.10	9.42	V
	2518.77	-59.18	-13	-46.18	-72.94	-62.76	4.90	10.63	V
	3358.36	-61.69	-13	-48.69	-77.28	-66.61	5.55	12.62	V
LTE B7 BW 20MHz Highest 1RB0,QPSK	5102.00	-58.45	-25	-33.45	-80.16	-64.01	7.16	12.72	H
	7653.00	-47.62	-25	-22.62	-73.40	-50.92	8.33	11.63	H
	10204.00	-50.81	-25	-25.81	-80.92	-52.41	10.50	12.10	H
	5102.00	-56.49	-25	-31.49	-78.38	-62.05	7.16	12.72	V
	7653.00	-48.38	-25	-23.38	-74.08	-51.68	8.33	11.63	V
	10204.00	-51.17	-25	-26.17	-80.07	-52.77	10.50	12.10	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.