

# TEST REPORT

**Application No.:** GZCR2411001351AT  
**Applicant:** Comba Telecom Network Systems Limited  
**Address of Applicant:** Flat/Rm 10, 3/F, Bio-Informatics Ctr, 2 Science Park West Avenue, HK Science Park, Pak Shek Kok, N.T. Hong Kong  
**Manufacturer:** Comba Network Systems Company Limited  
**Address of Manufacturer:** No. 10 Shenzhou Road, Guangzhou Science City, Guangzhou 510663, Guangdong, P.R. China  
**Factory:** Comba Telecom Technology (Guangzhou) Ltd.  
**Address of Factory:** No. 6 Jinbi Road, Economics and Technology Development District, Guangzhou, Guangdong, China  
**Product Name:** Comflex NG  
**Model No.:** MRU-78517192537-AC, MRU-78517192537-DC ♣  
♣ Please refer to section 2 of this report which indicates which item was actually tested and which were electrically identical.  
**Trade Mark:** Comba  
**Standard(s) :** 47 CFR Part 2  
47 CFR Part 20  
47 CFR Part 90  
**Date of Receipt:** 2024-11-13  
**Date of Test:** 2024-11-14 to 2024-12-13  
**Date of Issue:** 2024-12-20

<b>Test Result:</b>	<b>Pass*</b>
---------------------	--------------

\* In the configuration tested, the EUT complied with the standards specified above.



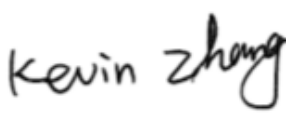

Jerry Chan  
Manager



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

Revision Record			
Version	Report No.	Date	Remark
01	GZCR241100135103	2024-12-20	Original

Authorized for issue by:			
			
		Kevin Zhang/Project Engineer	
			
		Ricky Liu/Reviewer	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

## 2 Test Summary

Item	Standard	Method	Requirement	Result
Out-of-band rejection	KDB935210 D05 v01r04	KDB935210 D05 v01r04 clause 4.3	KDB935210 D05 v01r04 clause 4.3	Pass
Input-versus-output signal comparison	47 CFR Part 2	ANSI C63.26-2015 Clause 5.4	Part 2.1049	Pass
Emission Mask	47 CFR Part 90	KDB935210 D05 v01r04 clause 4.4	Part 90.210(b)	Pass
Input/output power and amplifier/booster gain		KDB935210 D05 v01r04 clause 4.5	Part 90.542 Part 90.219(e)(1)	Pass
Noise figure		KDB935210 D05 v01r04 clause 4.6	Part 90.219(e)(2)	Pass
Intermodulation emissions		KDB935210 D05 v01r04 clause 4.7	Part 90.219(d)(6) Part 90.219(e)(3)	Pass
Conducted spurious emissions		KDB935210 D05 v01r04 clause 4.7	Part 90.219(e)(3) Part 90.543(e)	Pass
Noise		KDB935210 D05 v01r04 clause 4.7	Part 90.219(d)(6)	Pass
Frequency stability		47 CFR Part 2.1055 KDB935210 D05 v01r04 clause 4.8 ANSI C63.26-2015 Clause 5.6	Part 90.213	Pass
Radiated spurious emissions		KDB935210 D05 v01r04 clause 4.9 ANSI C63.26-2015 Clause 5.5	Part 90.219(e)(3) Part 90.543(f)	Pass

The EUT is a remote unit of DAS which can be capable of multi-band operation (details refer to clause 4.1 of this report). It receives base-station downlink via fiber-optic or coaxial cable from host unit, transmits via antenna to handset, and returns handset uplink via fiber-optic or coaxial cable to host unit.

**Only test for FirstNet band downlink in this report.**

### Note:

E.U.T./ EUT means Equipment Under Test

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

### \* Declaration of EUT Family Grouping:

**Model No.:** MRU-78517192537-AC, MRU-78517192537-DC

According to the declaration from the applicant, the electrical circuit design, layout, components used and internal wiring were identical for all models, with only difference on power supply module.

Therefore, only one model MRU-78517192537-AC was test in this report.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

### 3 Contents

	Page
1 Covers Page .....	1
2 Test Summary .....	3
3 Contents .....	4
4 General Information .....	6
4.1 Details of EUT .....	6
4.2 Test Environment .....	8
4.3 Measurement Uncertainty .....	8
4.4 Test Signals and Test Channels .....	9
4.5 Test Location .....	9
4.6 Test Facility .....	10
4.7 Deviation from Standards .....	10
4.8 Abnormalities from Standard Conditions .....	10
5 Equipment List .....	11
6 Radio Spectrum Matter Test Results .....	12
6.1 Out-of-band rejection .....	12
6.1.1 E.U.T. Operation .....	12
6.1.2 Test Setup .....	12
6.1.3 Measurement Record .....	12
6.2 Input versus output comparison .....	13
6.2.1 E.U.T. Operation .....	13
6.2.2 Test Setup .....	13
6.2.3 Measurement Record .....	13
6.3 Emission Mask .....	14
6.3.1 E.U.T. Operation .....	14
6.3.2 Test Setup .....	14
6.3.3 Measurement Record .....	14
6.4 Input/output power and amplifier/booster gain .....	15
6.4.1 E.U.T. Operation .....	15
6.4.2 Test Setup .....	15
6.4.3 Measurement Record .....	15
6.5 Noise figure .....	16
6.5.1 E.U.T. Operation .....	16
6.5.2 Test Setup .....	16
6.5.3 Measurement Record .....	16
6.6 Intermodulation emissions .....	17
6.6.1 E.U.T. Operation .....	17
6.6.2 Test Setup .....	17
6.6.3 Measurement Record .....	17
6.7 Conducted Spurious emissions .....	18
6.7.1 E.U.T. Operation .....	18
6.7.2 Test Setup .....	18
6.7.3 Measurement Record .....	18



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)



<b>6.8</b>	<b>Noise</b>	19
6.8.1	E.U.T. Operation	19
6.8.2	Test Setup	19
6.8.3	Measurement Record	19
<b>6.9</b>	<b>Frequency Stability</b>	20
6.9.1	E.U.T. Operation	20
6.9.2	Test Setup	20
6.9.3	Measurement Record	20
<b>6.10</b>	<b>Radiated Spurious emission</b>	21
6.10.1	E.U.T. Operation	21
6.10.2	Test Setup	21
6.10.3	Test procedure	22
6.10.4	Measurement Record	22
<b>7</b>	<b>Test Setup Photographs</b>	<b>23</b>
<b>8</b>	<b>EUT Constructional Details (EUT Photos)</b>	<b>23</b>



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

## 4 General Information

### 4.1 Details of EUT

Power Supply:	AC 100-240V, 50-60Hz	
Test Voltage:	AC 120V, 60Hz	
Cable:	AC mains (4m, unshielded)	
Operating Temperature:	-20 to +55 °C	
Operating Humidity:	≤95%	
Frequency Range:	Lower & Upper 700MHz	Uplink: 710-788MHz Downlink: 728-758MHz
	FirstNet	Uplink: 788-798MHz Downlink: 758-768MHz
	ESMR	Uplink: 817-824MHz Downlink: 862-869MHz
	Cellular	Uplink: 824-849MHz Downlink: 869-894MHz
	Broadband PCS	Uplink: 1850-1915MHz Downlink: 1930-1995MHz
	AWS-2	Uplink: 1915-1920MHz Downlink: 1995-2000MHz
	EAWS	Uplink: 1695-1780MHz Downlink: 2110-2200MHz
	BRS/EBS	Uplink: 2496-2690MHz Downlink: 2496-2690MHz
	3.45GHz Service band	Uplink: 3450-3550MHz Downlink: 3450-3550MHz
	3.7GHz Service band	Uplink: 3700-3980MHz Downlink: 3700-3980MHz
Support Technology:	LTE	
	5G NR	
Interface:	Antenna Port	1 (4.3-10 Female)
	Optical Port	1 (SC-APC)
	OMT Port	1 (RJ-45)



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

Normal Output Power: (per antenna port, only downlink)	Lower & Upper 700MHz	30dBm
	FirstNet	30dBm
	ESMR	30dBm
	Cellular	30dBm
	Broadband PCS	33dBm
	AWS-2	33dBm
	EAWS	33dBm
	BRS/EBS	37dBm
	3.45GHz Service band	37dBm
	3.7GHz Service band	37dBm
Normal System Gain: (only downlink)	Lower & Upper 700MHz	15dB
	FirstNet	15dB
	ESMR	15dB
	Cellular	15dB
	Broadband PCS	18dB
	AWS-2	18dB
	EAWS	18dB
	BRS/EBS	22dB
	3.45GHz Service band	22dB
	3.7GHz Service band	22dB
Antenna Type:	External Dedicated Antenna	
Permission Antenna Gain:	5dBi or less	
Software Version:	V01.00.00.04	
Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.		



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

### Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	Lenovo Xiaoxinchao 5000	PF0TNMG8
MU supplied by the client	Comba	Comflex NG MU	/
Matched load and attenuator supplied by the client	/	/	/

### 4.2 Test Environment

Environment Parameter	Selected Values During Test	
Ralative Humidity	Ambient	
Value	Temperature (°C)	Voltage (V)
TNVN	Asmbient	AC 120
TLVL	-30	AC 102
TLVH	-30	AC 138
THVL	+50	AC 102
THVH	+50	AC 138

VN: Normal Voltage, TN: Normal Teperature

VL: Lower Extreme Voltege, VH: Higher Extreme Voltage

TL: Lower Extreme Teperature, TH: Higher Extreme Teperature

### 4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	RF Output Power	±0.75dB
2	Transmitter unwanted emissions	±0.75dB
3	Radiated Spurious Emission	±5.06dB (30MHz-1GHz; 3m); ±4.46dB (30MHz-1GHz; 10m); ±5.08dB (1GHz-6GHz); ±5.14dB (6GHz-18GHz)
4	Occupied Channel Bandwidth	± 0.274%

Remark:

The  $U_{lab}$  (lab Uncertainty) is less than  $U_{CISPR}$  (CISPR Uncertainty) or  $U_{ETSI}$  (ETSI Uncertainty).

Emission decision rule:

- Compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit, marked as Pass in the report.
- Non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit, marked as Fail in the report.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com



## 4.4 Test Signals and Test Channels

DL 758-768MHz			
Test Channel	Test Frequency (MHz)	Test Signal	Stimulus Condition
LCH	760.5	4.1MHz AWGN	a single test signal
MCH	763		
HCH	765.5		
LCH	808	100MHz AWGN	a single test signal
MCH	763		
HCH	718		

LCH: Lowest Channel

MCH: Middle Channel

HCH: Highest Channel

DL: Downlink Path

UL: Uplink Path

## 4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,  
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou,  
Guangdong, China 510663

Tel: +86 20 82155555

No tests were sub-contracted.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn  
t (86-20) 82155555 sgs.china@sgs.com

## 4.6 Test Facility

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

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

- **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

- **VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

## 4.7 Deviation from Standards

None

## 4.8 Abnormalities from Standard Conditions

None



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn  
t (86-20) 82155555 sgs.china@sgs.com

## 5 Equipment List

### Conducted test equipment

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Temperature Chamber	GZ GongWen Co.Ltd.	GDJW-100	EMC0039	2024-06-17	2025-06-16
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2024-08-19	2025-08-18
MXA Signal Analyzer (10Hz-50GHz)	KEYSIGHT	N9020B	SEM004-24	2024-03-16	2025-03-15
Spectrum Analyzer(9kHz-30GHz)	Rohde & Schwarz	FSP30	SEM004-06	2024-09-21	2025-09-20
MI CABLE	SGS-EMC	0.8M	EMC2137	2023-11-02	2025-11-01
MI CABLE	SGS-EMC	0.8M	EMC2136	2023-11-02	2025-11-01
4X4 Power Sensor Unit	TST	TSPS2023R	EMC2257	2024-08-19	2025-08-18
Temperature Chamber	GZ GongWen Co.Ltd.	GDJW-100	EMC0039	2024-06-17	2025-06-16
ESG vector signal generator (250kHz-6GHz)	Agilent Technologies	E4438C	SEM006-03	2024-02-19	2025-02-18

### Radiated test equipment

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
1GHz-26.5 GHz Pre- Amplifier	Agilent	8449B	EMC0521	2024-10-14	2025-10-13
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2024-08-19	2025-08-18
EMI Test Receiver (10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2023-12-15	2024-12-14
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2024-08-19	2025-08-18
Chamber cable (Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2024-08-19	2026-08-18
Chamber Cable (Below 1GHz)	Scoflex	KMKM-8.0m	EMC0546	2024-08-19	2026-08-18
Trilog Broadband Antenna (25MHz-1GHz)	SCHWARZBECK	VULB 9160	EMC2025	2022-09-07	2025-09-06
Horn Antenna (1GHz- 18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2022-09-21	2025-09-20
Horn Antenna 1-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2251	2022-02-02	2025-08-01
Horn Antenna (14- 40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2023-06-18	2026-06-17
Broad-Band Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2024-07-09	2026-07-08
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2023-12-23	2026-12-22
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd. No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn  
Guangzhou Branch of SGS-CSTC EMC Laboratory. 中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

## 6 Radio Spectrum Matter Test Results

### 6.1 Out-of-band rejection

Test Requirement: KDB 935210 D05 clause 4.3

Test Method: KDB 935210 D05 clause 4.3

Limit: Within the passband

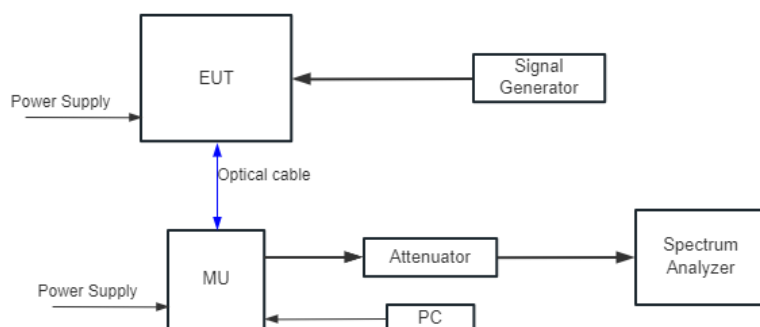
#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22~26 °C Humidity: 45~60 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Drive the EUT to the maximum output power at maximum gain.

#### 6.1.2 Test Setup



#### 6.1.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



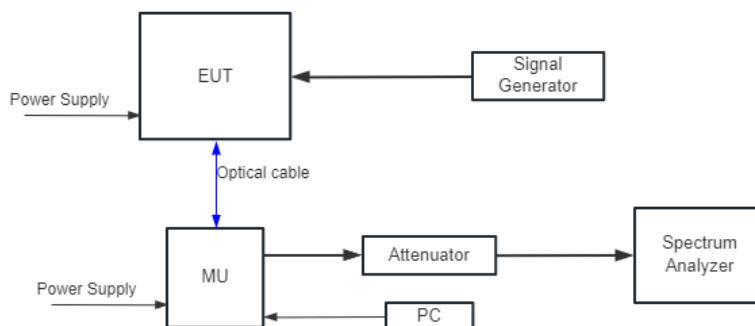
### 6.2 Input versus output comparison

Test Requirement: 47 CFR Part 2.1049  
 Test Method: KDB 935210 D05 clause 4.4  
 Limit: The spectral plots of the output signal and the input signal are similar (in passband and rolloff characteristic features and relative spectral locations).

#### 6.2.1 E.U.T. Operation

Operating Environment:  
 Temperature: 22~26 °C Humidity: 45~60 % RH Atmospheric Pressure: 1010 mbar  
 EUT Operation: Drive the EUT to the maximum output power at maximum gain.

#### 6.2.2 Test Setup



#### 6.2.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
 Guangzhou Branch, EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
 中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn  
 t (86-20) 82155555 sgs.china@sgs.com

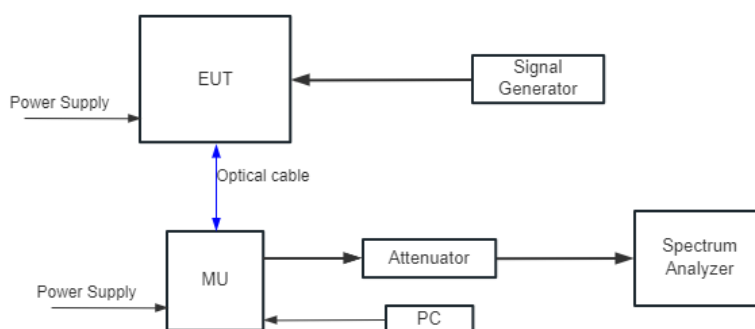
### 6.3 Emission Mask

Test Requirement:	47 CFR Part 90.210(b)
Test Method:	KDB 935210 D05 clause 4.4
Limit:	Emission Mask B. For transmitters that are equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows: <ol style="list-style-type: none"> <li>(1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB.</li> <li>(2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB.</li> <li>(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 + 10 log (P) dB.</li> </ol>
Remark:	The EUT is equipped with an audio low-pass filter according to the declaration from the manufacturer.

#### 6.3.1 E.U.T. Operation

Operating Environment:	
Temperature:	22~26 °C
Humidity:	45~60 % RH
Atmospheric Pressure:	1010 mbar
EUT Operation:	Drive the EUT to the maximum output power at maximum gain.

#### 6.3.2 Test Setup



#### 6.3.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch, EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgs.com.cn  
t (86-20) 82155555 sgs.china@sgs.com

### 6.4 Input/output power and amplifier/booster gain

Test Requirement: 47 CFR Part 90.542,90.219 (e)(1).

Test Method: KDB 935210 D05 clause 4.5

Limit: Fixed and base stations transmitting a signal in the 758–768 MHz band with an emission bandwidth greater than 1 MHz must not exceed an ERP of 1000 watts/MHz and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts/MHz ERP accordance with Table 3 of this section..

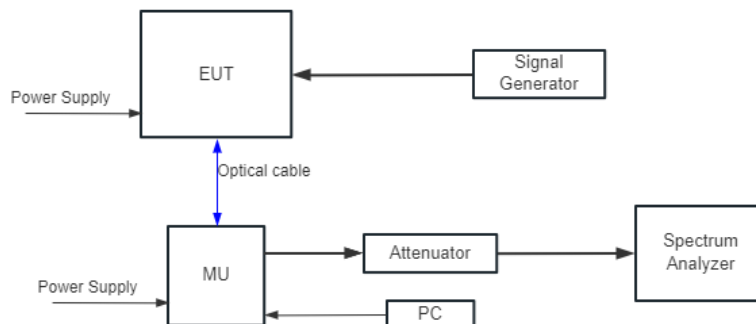
#### 6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22~26 °C Humidity: 45~60 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Drive the EUT to the maximum output power at maximum gain.

#### 6.4.2 Test Setup



#### 6.4.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

### 6.5 Noise figure

Test Requirement: 47 CFR Part 90.219(e)(2)  
 Test Method: KDB 935210 D05 clause 4.6  
 Limit: The noise figure of a signal booster must not exceed 9 dB in either direction.

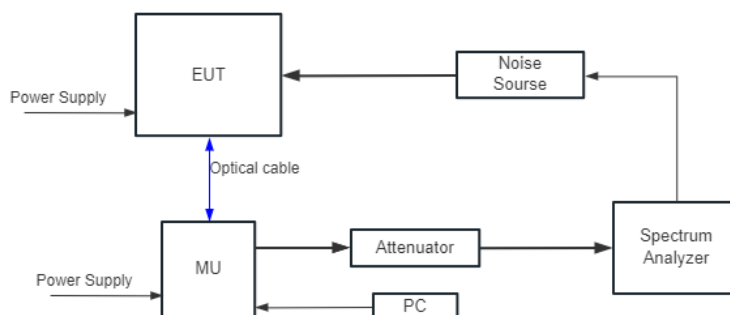
#### 6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22~26 °C Humidity: 45~60 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Drive the EUT to the maximum output power at maximum gain.

#### 6.5.2 Test Setup



#### 6.5.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



### 6.6 Intermodulation emissions

Test Requirement: 47 CFR Part 90.219(d)(6);

Test Method: KDB 935210 D05 clause 4.7

Limit: 90.219(d)(6):  
Good engineering practice must be used in regard to the radiation of intermodulation products and noise, such that interference to licensed communications systems is avoided. In the event of harmful interference caused by any given deployment, the FCC may require additional attenuation or filtering of the emissions and/or noise from signal boosters or signal booster systems, as necessary to eliminate the interference.  
(i) In general, the ERP of intermodulation products should not exceed -30 dBm in 10 kHz measurement bandwidth.

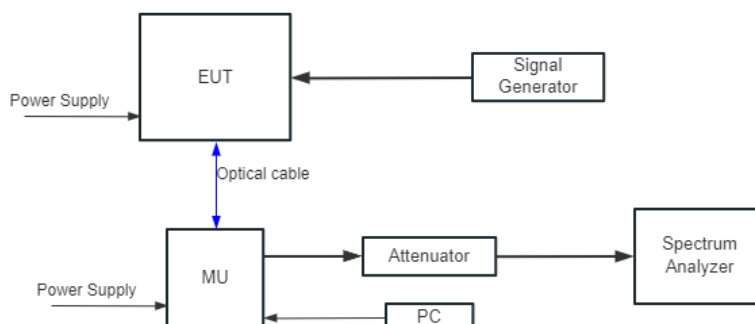
#### 6.6.1 E.U.T. Operation

Operating Environment:

Temperature: 22~26 °C Humidity: 45~60 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Drive the EUT to the maximum output power at maximum gain.

#### 6.6.2 Test Setup



#### 6.6.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch, EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn  
t (86-20) 82155555 sgs.china@sgs.com

### 6.7 Conducted Spurious emissions

Test Requirement: 47 CFR Part 90.219(e)(3), 90.543(e)  
 Test Method: KDB 935210 D05 clause 4.7  
 Limit: Spurious emissions from a signal booster must not exceed -13 dBm within any 100 kHz measurement bandwidth.

For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than  $76 + 10 \log(P)$  dB in a 6.25 kHz band segment, for base and fixed stations.
- (2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than  $65 + 10 \log(P)$  dB in a 6.25 kHz band segment, for mobile and portable stations.
- (3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least  $43 + 10 \log(P)$  dB.

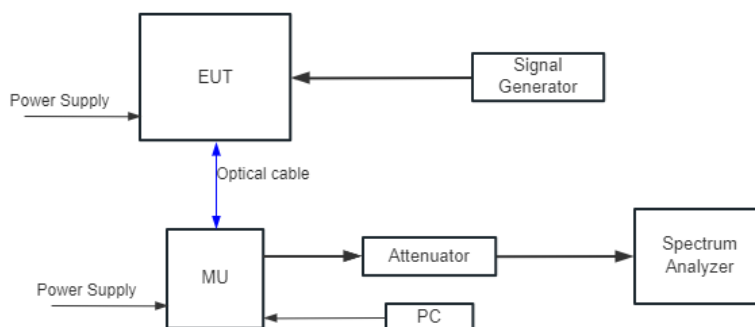
#### 6.7.1 E.U.T. Operation

Operating Environment:

Temperature: 22~26 °C Humidity: 45~60 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Drive the EUT to the maximum output power at maximum gain.

#### 6.7.2 Test Setup



#### 6.7.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
 Guangzhou Branch, EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
 中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn  
 t (86-20) 82155555 sgs.china@sgs.com

### 6.8 Noise

Test Requirement: 47 CFR Part 90.219(d)(6)

Test Method: KDB 935210 D05 clause 4.7

Limit: Good engineering practice must be used in regard to the radiation of intermodulation products and noise, such that interference to licensed communications systems is avoided. In the event of harmful interference caused by any given deployment, the FCC may require additional attenuation or filtering of the emissions and/or noise from signal boosters or signal booster systems, as necessary to eliminate the interference.

(ii) In general, the ERP of noise within the passband should not exceed -43 dBm in 10 kHz measurement bandwidth.

(iii) In general, the ERP of noise on spectrum more than 1 MHz outside of the passband should not exceed -70 dBm in a 10 kHz measurement bandwidth.

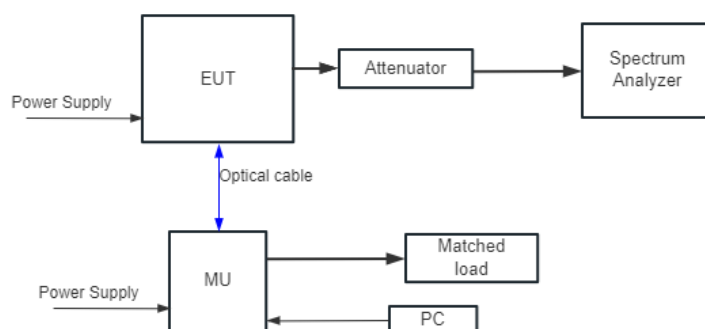
#### 6.8.1 E.U.T. Operation

Operating Environment:

Temperature: 22~26 °C Humidity: 45~60 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Set the EUT to the maximum gain.

#### 6.8.2 Test Setup



#### 6.8.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

### 6.9 Frequency Stability

Test Requirement: 47 CFR Part 90.213

Test Method: 47 CFR Part 2.1055  
KDB 935210 D05 clause 4.8  
ANSI C63.26-2015 clause 5.6

Limit: The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

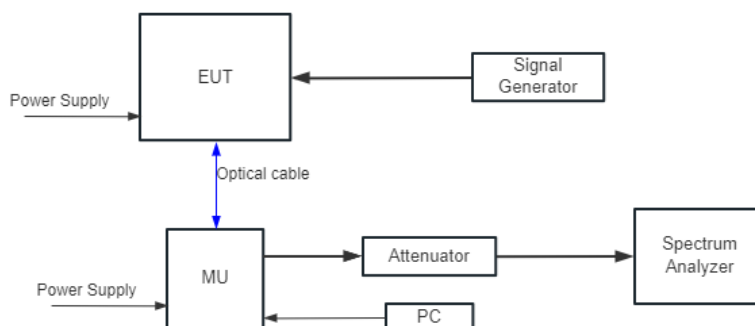
#### 6.9.1 E.U.T. Operation

Operating Environment:

Temperature: 22~26 °C Humidity: 45~60 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Drive the EUT to the maximum output power at maximum gain.

#### 6.9.2 Test Setup



#### 6.9.3 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch, EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn  
t (86-20) 82155555 sgs.china@sgs.com



### 6.10 Radiated Spurious emission

Test Requirement: 47 CFR Part 90.219(e)(3), 90.543(e).90.543(f)

Test Method: KDB 935210 D05 clause 4.9  
ANSI C63.26-2015 clause 5.5

Limit: Spurious emissions from a signal booster must not exceed -13 dBm within any 100 kHz measurement bandwidth.

For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than  $76 + 10 \log (P)$  dB in a 6.25 kHz band segment, for base and fixed stations.
- (2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations.
- (3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least  $43 + 10 \log (P)$  dB.

90.543(f): For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

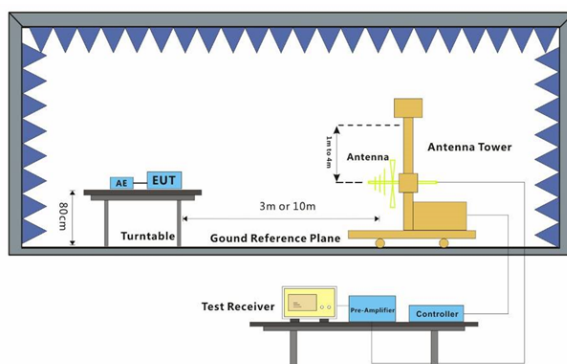
#### 6.10.1 E.U.T. Operation

Operating Environment:

Temperature: 24.6 °C Humidity: 55 % RH Atmospheric Pressure: 1020 mbar

EUT Operation: Drive the EUT to the maximum output power at maximum gain.

#### 6.10.2 Test Setup



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

### 6.10.3 Test procedure

1. Scan from 30MHz to 40GHz, find the maximum radiation frequency to measure.
2. The technique used to find the Spurious Emissions of the transmitter was the antenna substitution method. Substitution method was performed to determine the actual ERP/EIRP emission levels of the EUT.

Below 1GHz test procedure as below:

- 1) The EUT was powered on and placed on a table in the chamber. The antenna of the transmitter was extended to its maximum length. modulation mode and the measuring receiver shall be tuned to the frequency of the transmitter under test.
- 2) Rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made.
- 3) Steps 1) and 2) were performed with the EUT and the receive antenna in both vertical and horizontal polarization.
- 4) The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter.
- 5) A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 2) is obtained for this set of conditions.
- 6) The output power into the substitution antenna was then measured.
- 7) Steps 5) and 6) were repeated with both antennas vertically polarized.
- 8) Calculate power in dBm by the following formula:  
Level (dBm) = Read Level (dBm) + Correction Factor (dB)

Above 1GHz test procedure as below:

- 1) Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber.
- 2) Calculate power in dBm by the following formula:  
Level (dBm) = Read Level (dBm) + Correction Factor (dB)

### 6.10.4 Measurement Record

Please refer to Appendix - Test Data and Result for report GZCR241100135103.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

## 7 Test Setup Photographs

Refer to Appendix - Test Setup Photos for GZCR2411001351AT.

## 8 EUT Constructional Details (EUT Photos)

Refer to Appendix -External and Internal Photos for GZCR2411001351AT.

**- End of the Report -**