

Report No.: GZCR220800109504

Page: 1 of 66 FCC ID: SS3-L2P2104

TEST REPORT

Application No.: GZCR2208001095AT

Applicant: SZ DJI TECHNOLOGY CO., LTD.

Address of Applicant: 14th floor, West Wing, Skyworth Semiconductor Design Building NO.18

Gaoxin South 4th Ave, Nanshan District, Shenzhen, Guangdong, China

Manufacturer: SZ DJI TECHNOLOGY CO., LTD.

Address of Manufacturer: 14th floor, West Wing, Skyworth Semiconductor Design Building NO.18

Gaoxin South 4th Ave, Nanshan District, Shenzhen, Guangdong, China

Equipment Under Test (EUT):

EUT Name: DJI Mavic 3 Classic

Model No.: L2C Trade Mark: DJI

Standard(s): 47 CFR Part 15, Subpart C 15.247

Date of Receipt: 2022-08-29

Date of Test: 2022-08-30 to 2022-09-05

Date of Issue: 2022-09-07

Test Result: Pass*

Kobe Jian EMC Laboratory Manager

Union over sub-day and sub-da

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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. 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 its 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.

**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443.

Mon 189 Kazhu Road, Golentech Park, Gaungzhou Economic & Technology Development District, Gaungzhou, Chira. 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学域科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com

^{*} In the configuration tested, the EUT complied with the standards specified above.



Report No.: GZCR220800109504

Page: 2 of 66

	Revision Record						
Version	Report No.	Date	Remark				
01		2022-09-07	Original				

Authorized for issue by		
	Cof Vlu	
	Curry Wu/Project Engineer	
	Ridge Liu	
	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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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@ags.com

SCO.,Ltd. No.188Kezhu Road, Sciented Park, Guargzhou Economic & Technology Development District, Guargzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn boratory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 3 of 66

2 Test Summary

Radio Spectrum Matter Part							
Item	Standard	Method	Requirement	Result			
Conducted Peak Output Power		ANSI C63.10 (2013) Section 11.9.1.3	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass			
Radiated Spurious Emissions (Below 1GHz)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass			
Radiated Spurious Emissions (Above 1GHz)		ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass			

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.

Remark:

This test report (Ref. No.: GZCR220800109504) is only valid with the original test report (Ref. No.: GZCR210802082904).

According to the declaration from the applicant, L2C have the same technical construction including electrical construction and mechanical construction with L2A. The difference lies only the model number and some minor circuit and component, as follows:

- 1. The two cameras have been reduced to one, and the corresponding lens versions have also been changed.
- 2. The filter of 2.4G SDR is changed from qorvo885136 to RSFP2421E, which is a pin to pin replacement, but the RF parameters remain unchanged, and other RF circuits and RF chips remain unchanged.
- 3. In order to optimize the PCB size, the circuit diagram and the PCB layout have been adjusted to deleted some unused H-bridge drive ICs, peripheral circuits and unused interfaces.
- 4. L2C enables SRD (5170-5250) MHz through software, but this frequency band is not enabled on L2A.
- 5. Enabled Galileo receiver function through software

Therefore in this report test items of section 2 were fully retested on model and shown the data in this report, other tests please refer to original test report GZCR210802082904.



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue 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, pages contacts us at telephone (86-755) 8397 1443.

of email: C.N.Doccheck@sgs_com Mo.18Ke/zml food, Sciented) Park, Gangribu Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 4 of 66

3 Contents

		Page	
1	Cove	r Page	. 1
2	Test S	Summary	. 3
3	Conte	ents	. 4
4	Gene	ral Information	. 5
	4.1	Details of E.U.T	5
		Description of Support Units	
		Measurement Uncertainty	
		Test Location	
	4.5	Test Facility	. 7
		Deviation from Standards	
	4.7	Abnormalities from Standard Conditions	. 8
5	Equip	oment List	. 9
6	Padia	Spectrum Matter Test Results	11
O			
		Conducted Peak Output Power	
	6.1.1	E.U.T. Operation	
	6.1.2	Test Mode Description	
	6.1.3	Test Setup Diagram	
	6.1.4	Measurement Procedure and Data	
		Radiated Spurious Emissions (Below 1GHz)	
	6.2.1	E.U.T. Operation	
	6.2.2	Test Mode Description	
	6.2.3	Test Setup Diagram	
	6.2.4 6.3	Measurement Procedure and Data	
	6.3.1	Radiated Spurious Emissions (Above 1GHz) E.U.T. Operation	
	6.3.1	Test Mode Description	
	6.3.3	Test Setup Diagram	
	6.3.4	Measurement Procedure and Data	
7	Test S	Setup Photo	64
8	EUT (Constructional Details (EUT Photos)	64
9	Appe	ndix	.65



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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 ine 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 fulleest 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) 83071443,

CO.,Lid. No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn boratory: 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 5 of 66

4 General Information

4.1 Details of E.U.T.

=		
Power s	upply:	Input: DC 15.4V
		DC 15.4V 5000mAh, 77Wh Lithium-ion rechargeable battery(to be charged from Type C port),
		Model: BWX260-5000-15.4
		1.4MHz BW:2403.5MHz-2469.5MHz;
		1.4MHz BW CA:2405.12MHz-2471.12MHz;
		3MHz BW:2405.5MHz-2468.5MHz;
Operation	on Frequency:	3MHz BW CA:2408.2MHz-2471.2MHz;
		10MHz BW:2407.5MHz-2467.5MHz;
		20MHz BW:2412.5MHz-2462.5MHz;
		40MHz BW:2422.5MHz-2452.5MHz
Modulat	ion Type:	OFDM
		1.4MHz BW:34;
		1.4MHz BW CA:34;
		3MHz BW:22;
Number	of Channels:	3MHz BW CA:22;
		10MHz BW:61;
		20MHz BW:51;
		40MHz BW:31
		1.4MHz BW:2MHz;
		1.4MHz BW CA:2MHz;
		3MHz BW:3MHz;
Channel	Spacing:	3MHz BW CA:3MHz;
		10MHz BW:1MHz;
		20MHz BW:1MHz;
		40MHz BW:1MHz
Antenna	Туре:	FPC Antenna
Antenna	Gain:	Antenna 0&3: 1.5dBi, Antenna 1&2: 2.0dBi
Antenna	Combination:	Antenna 0+Antenna 1, Antenna 0+Antenna 3, Antenna 1+Antenna 2, Antenna 2+Antenna 3

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
AC/DC Adapter	DJI	PD-65US	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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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 ine 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 fulleest 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) 83071443,

Co.,Lid. Mo.198 Kathu Road, Soatierh Park, Guarghou Economic & Technology Development District, Guargahou, China 510663 tt (86-20) 82155555 ft (86-20) 82075058 www.sgsgroup.com.cn oration. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 tt (86-20) 82155555 ft (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 6 of 66

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Peak Output Power	± 0.75dB
Radiated Spurious Emissions (Below 1GHz)	±5.00dB (30MHz-1GHz; 3m); ±4.38dB (30MHz-1GHz; 10m);
Radiated Spurious Emissions (Above 1GHz)	± 5.12dB (1GHz-6GHz); ± 5.38dB (6GHz-18GHz); ± 5.61dB (18GHz- 40GHz)

Remark:

The U_{lab} (lab Uncertainty) is less than U_{cispr} (CISPR Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

or email: CN.Doccheck@sgs.com
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 7 of 66

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory, 198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

4.5 Test Facility

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

• NVLAP (Lab Code: 200611-0)

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

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.

CNAS (Lab Code: L0167)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

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.



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

CO.LLid. No.198 Kazhu Road, Soeniech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
orgloy, 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 8 of 66

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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 ine 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 fulleest 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) 83071443,

Co., Ltd., No. 198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 9 of 66

5 Equipment List

Conducted Peak Output Power						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
Power Meter (U2021XA_Ch2)	Agilent Technologies	U2021XA_Ch2	SEM009-02	2022-05-16	2023-05-15	
EXA Signal Analzer(10Hz-44GHz)	Agilent Technologies	N9010A	EMC2138	2021-09-16	2022-09-15	
6dB Attenuator	HP	8491A	EMC2062	2022-03-29	2023-03-28	
MI CABLE	SGS-EMC	M8.0	EMC2136	2021-11-01	2023-11-01	
Test Software	TST	V2.0	GZE100-78	N/A	N/A	

Radiated Spurious Emissions (Below 1GHz)						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
EMI Test Receiver(10Hz- 26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2021-12-17	2022-12-16	
Chamber cable	HangTianXing	N/A	EMC0542	2020-09-09	2022-09-08	
Trilog Broadband Antenna(25MHz-1GHz)- Lab	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	SEM003-18	2022-02-22	2025-02-21	
Amplifier(9kHz-1.3GHz)	HP	8447F	EMC2065	2022-06-21	2023-06-20	
Active Loop Antenna- RED	ETS-Lindgren	6502	EMC2190	2022-04-06	2024-04-05	
High Pass Filter (915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2021-12-17	2022-12-16	
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2019-10-20	2022-10-19	
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A	
EMI Test Receiver(1Hz- 8GHz)	Rohde & Schwarz	ESW8	EMC2220	2022-05-20	2023-05-19	

Radiated Spurious Emissions (Above 1GHz)						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
EMI Test Receiver(20Hz- 26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2021-12-17	2022-12-16	
Chamber cable(Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2020-09-09	2022-09-08	
Horn Antenna(1GHz- 18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2019-09-25	2022-09-24	
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2021-12-17	2022-12-16	
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2021-12-17	2022-12-16	



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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 ine 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 fulleest 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) 83071443,

CO.,Lid. Wo.199 Kezhu Road, Szientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Rev 1.0

EMC-TRF-01

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

Report No.: GZCR220800109504

Page: 10 of 66

966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2020-12-20	2023-12-19
MXE EMI Receiver(10Hz-8.4GHz)	Keysight	N9038A	EMC2139	2021-11-01	2022-10-31
EXA Signal Analyzer(10Hz-44GHz)	Keysight	N9010A	EMC2138	2021-09-16	2022-09-15
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Notch Filter (5150-5880)	Mico-Tronics	BRM50716	EMC2168	2022-07-28	2023-07-27
Horn Antenna(14- 40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2020-06-28	2023-06-27
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2022-08-29	2023-08-28

General used equipment							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
DMM	Fluke	73	EMC0006	2022-06-24	2023-06-23		
DMM	Fluke	73	EMC0007	2022-06-24	2023-06-23		



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

CO.,Lid. Wo.199 Kezhu Road, Szientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 11 of 66

6 Radio Spectrum Matter Test Results

6.1 Conducted Peak Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)
Test Method: ANSI C63.10 (2013) Section 11.9.1.3

Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
	1 for ≥50 hopping channels
902-928	0.25 for 25≤ hopping channels <50
	1 for digital modulation
	1 for ≥75 non-overlapping hopping channels
2400-2483.5	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21.8 °C Humidity: 52.3 % RH Atmospheric Pressure: 1003 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1.4MHz)_Keep the EUT in continuously transmitting mode with modulation
Final test	01	TX mode(1.4MHz,CA)_Keep the EUT in continuously transmitting mode with modulation
Final test	02	TX mode(3MHz)_Keep the EUT in continuously transmitting mode with modulation
Final test	03	TX mode(3MH,CA)_Keep the EUT in continuously transmitting mode with modulation
Final test	08	TX mode(10MHz)_Keep the EUT in continuously transmitting mode with modulation
Final test	09	TX mode(20MHz)_Keep the EUT in continuously transmitting mode with modulation
Final test	10	TX mode(40MHz)_Keep the EUT in continuously transmitting mode with modulation



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

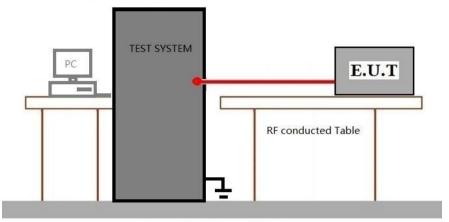
of email: CN_00ccheck@sgs.com Mo.198/kgml Road, Soentech Park, (Quanghou Comonic & Technology Development District, Quanghou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 12 of 66

6.1.3 Test Setup Diagram



Ground Reference Plane

6.1.4 Measurement Procedure and Data

cable loss=0.9dB

Please Refer to Appendix for Details



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 http://www.sgs.com/en/Terms-and-Conditions/Terms

|No.198 Kearlu Road, Scientech Park, Quangarhou Economic & Technology Development District, Quangarhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 13 of 66

6.2 Radiated Spurious Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2013) Section 6.4,6.5,6.6

Measurement Distance: 10m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
960-1000	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22.4 °C Humidity: 51.9 % RH Atmospheric Pressure: 1003 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	TX mode(1.4MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	01	TX mode(1.4MHz,CA)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	02	TX mode(3MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	03	TX mode(3MH,CA)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	04	Charge + TX mode(1.4MHz)_Keep the EUT in charging and continuously transmitting mode with modulation
Pre-scan	05	Charge + TX mode(1.4MHz,CA)_Keep the EUT in charging and continuously transmitting mode with modulation
Pre-scan	06	Charge + TX mode(3MHz)_Keep the EUT in charging and continuously transmitting mode with modulation
Pre-scan	07	Charge + TX mode(3MHz,CA)_Keep the EUT in charging and continuously transmitting mode with modulation



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

|No.198 Kearlu Road, Scientech Park, Quangarhou Economic & Technology Development District, Quangarhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com

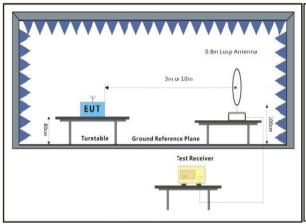


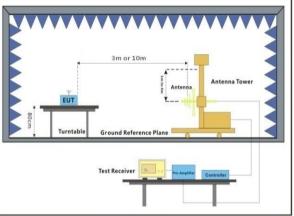
Report No.: GZCR220800109504

Page: 14 of 66

Pre-scan	08	TX mode(10MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	09	TX mode(20MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	10	TX mode(40MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	11	Charge + TX mode(10MHz)_Keep the EUT in charging and continuously transmitting mode with modulation
Final test	12	Charge + TX mode(20MHz)_Keep the EUT in charging and continuously transmitting mode with modulation
Pre-scan	13	Charge + TX mode(40MHz)_Keep the EUT in charging and continuously transmitting mode with modulation

6.2.3 Test Setup Diagram





Below 30MHz

30MHz-1GHz



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 http://www.sgs.com/en/Terms-and-Conditions/Terms

of email: CN_00ccheck@sgs_com Mo.198/karuh Rad, Soentech Park, Guanghow Loromoic & Technology Development District, Guanghow, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 15 of 66

6.2.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

- 1) Through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

3) Scan from 9kHz to 1 GHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue 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.

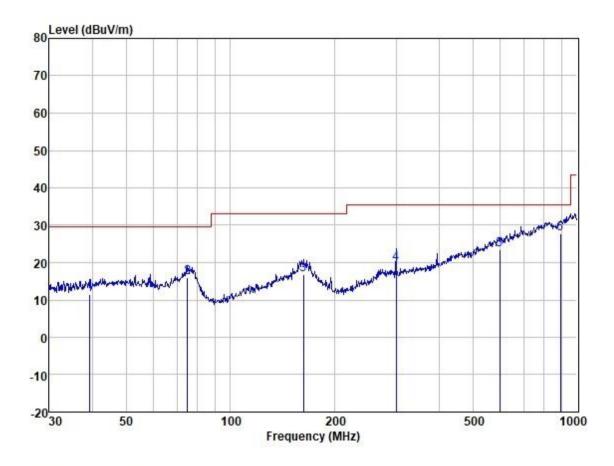
**Attention: To check the authenticity of testing inspection report & certificate, pages contacts us at telephone (86-755) 8397 1443.



Report No.: GZCR220800109504

Page: 16 of 66

Test Mode: 12; Polarity: Horizontal; Modulation: OFDM; Channel: middle



Site : SGS
Job :
Model :
Power :
Test Mode :

	Freq				THE STATE OF THE S	Measured Level				Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		8
1	39.299	24.40	13.50	1.09	27.61	11.38	29.50	-18.12	HORIZONTAL	QP
2	75.182	31.93	10.16	1.45	27.60	15.94	29.50	-13.56	HORIZONTAL	QP
3	162.611	28.35	13.52	2.35	27.35	16.87	33.10	-16.23	HORIZONTAL	QP
4	300.367	30.46	13.43	3.16	27.21	19.84	35.60	-15.76	HORIZONTAL	QP
5	597.223	27.11	20.11	5.14	28.80	23.56	35.60	-12.04	HORIZONTAL	QP
6	893.857	26.24	22.96	6.86	28.22	27.84	35.60	-7.76	HORIZONTAL	QP



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

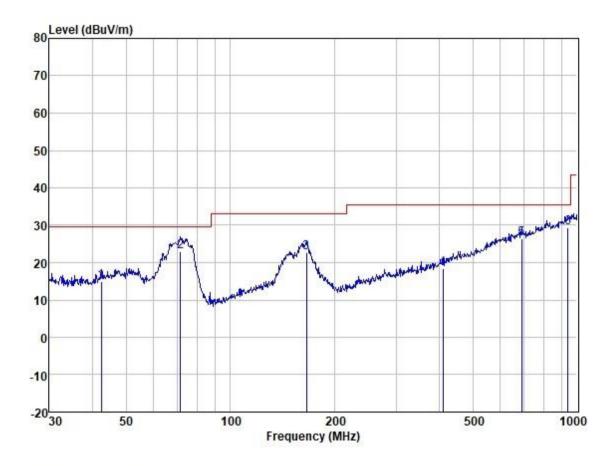
or email: CN.Doccheck@sgs.com
No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn
中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 17 of 66

Test Mode: 12; Polarity: Vertical; Modulation: OFDM; Channel: middle



Site : SGS
Job :
Model :
Power :
Test Mode :

	Freq				TO THE RESIDENCE PROPERTY.	Measured Level		Over Limit	Pol/ Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		8
1	42.451	27.78	13.75	1.11	27.61	15.03	29.50	-14.47	VERTICAL	Peak
2	71.832	37.90	11.22	1.42	27.60	22.94	29.50	-6.56	VERTICAL	Peak
3	165.487	34.18	13.41	2.37	27.34	22.62	33.10	-10.48	VERTICAL	Peak
4	410.383	26.75	15.74	3.97	28.04	18.42	35.60	-17.18	VERTICAL	Peak
5	691.987	28.07	21.34	5.73	28.70	26.44	35.60	-9.16	VERTICAL	Peak
6	942.131	26.38	23.99	7.12	28.11	29.38	35.60	-6.22	VERTICAL	Peak



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

or email: CN.Doccheck@sgs.com No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 18 of 66

The test was performed at a 10m test site. According to below formulate and the test data at 10m test distance,

 $L_3 / L_{10} = D_{10} / D_3$

Note:

L₃: Level @ 3m distance. Unit: uV/m; L₁₀: Level @ 10m distance. Unit: uV/m;

D₃: 3m distance. Unit: m D₁₀: 10m distance. Unit: m

The level at 3m test distance is below:

Frequency (MHz)	Level @ 10m (dBuV/m)	Level @ 10m (uV/m)	Level @ 3m (uV/m)	Level @ 3m (dBuV/m)	Limit @ 3m (dBuV/m)	Margin (dB)	Ant. Polarization
39.299	11.38	3.71	12.36	21.84	40	-18.16	Н
75.182	15.94	6.27	20.89	26.40	40	-13.60	Н
162.611	16.87	6.97	23.25	27.33	43.5	-16.17	Н
300.367	19.84	9.82	32.72	30.30	46	-15.70	Н
597.223	23.56	15.07	50.22	34.02	46	-11.98	Н
893.857	27.84	24.66	82.20	38.30	46	-7.70	Н
42.451	15.03	5.64	18.81	25.49	40	-14.51	V
71.832	22.94	14.03	46.76	33.40	40	-6.60	V
165.487	22.62	13.52	45.07	33.08	43.5	-10.42	V
410.383	18.42	8.34	27.79	28.88	46	-17.12	V
691.987	26.44	20.99	69.96	36.90	46	-9.10	V
942.131	29.38	29.44	98.15	39.84	46	-6.16	V



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

or email: CN. <u>Doccheck@sas.com</u> Mo.(198/Kant Road, Soentech Park, Guangtonu Comonic & Technology Development District, Guangtonu, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国 · 广州 · 经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 19 of 66

6.3 Radiated Spurious Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2013) Section 6.4,6.5,6.6

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 21.5 °C Humidity: 52.2 % RH Atmospheric Pressure: 1003 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	TX mode(1.4MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	01	TX mode(1.4MHz,CA)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	02	TX mode(3MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	03	TX mode(3MH,CA)_Keep the EUT in continuously transmitting mode with modulation
Final test	04	Charge + TX mode(1.4MHz)_Keep the EUT in charging and continuously transmitting mode with modulation
Final test	05	Charge + TX mode(1.4MHz,CA)_Keep the EUT in charging and continuously transmitting mode with modulation
Final test	06	Charge + TX mode(3MHz)_Keep the EUT in charging and continuously transmitting mode with modulation
Final test	07	Charge + TX mode(3MHz,CA)_Keep the EUT in charging and continuously transmitting mode with modulation



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

of email: CN_00ccheck@sgs.com Mo.198/kgml Road, Soentech Park, (Quanghou Comonic & Technology Development District, Quanghou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com

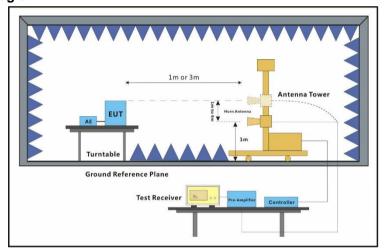


Report No.: GZCR220800109504

Page: 20 of 66

Pre-scan	08	TX mode(10MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	09	TX mode(20MHz)_Keep the EUT in continuously transmitting mode with modulation
Pre-scan	10	TX mode(40MHz)_Keep the EUT in continuously transmitting mode with modulation
Final test	11	Charge + TX mode(10MHz)_Keep the EUT in charging and continuously transmitting mode with modulation
Final test	12	Charge + TX mode(20MHz)_Keep the EUT in charging and continuously transmitting mode with modulation
Final test	13	Charge + TX mode(40MHz)_Keep the EUT in charging and continuously transmitting mode with modulation

6.3.3 Test Setup Diagram





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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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 ine 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 fulleest 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) 83071443,

of email: CN_00ccheck@sgs_com Mo.198/karuh Rad, Soentech Park, Guanghow Loromoic & Technology Development District, Guanghow, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 21 of 66

6.3.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

- 2) Scan from 1GHz to 25GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3) The field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown 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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue 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.

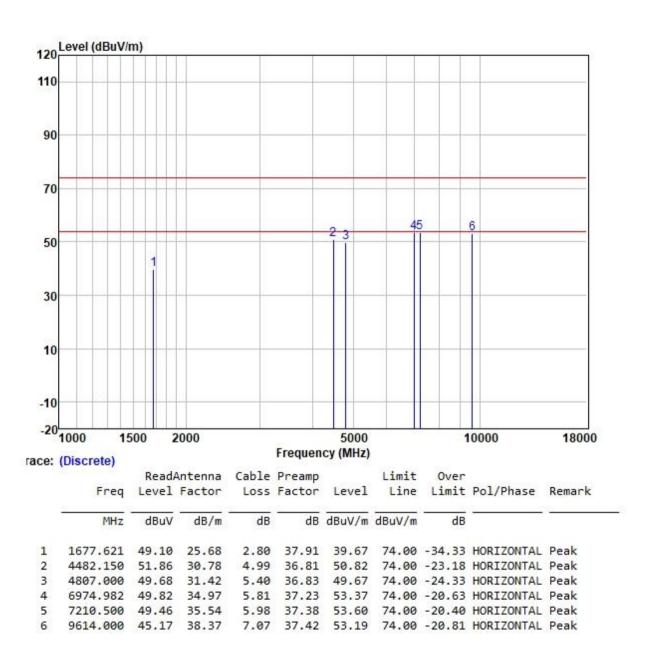
**Attention: To check the authenticity of testing inspection report & certificate, pages contacts us at telephone (86-755) 8397 1443.



Report No.: GZCR220800109504

Page: 22 of 66

Test Mode: 04; Polarity: Horizontal; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

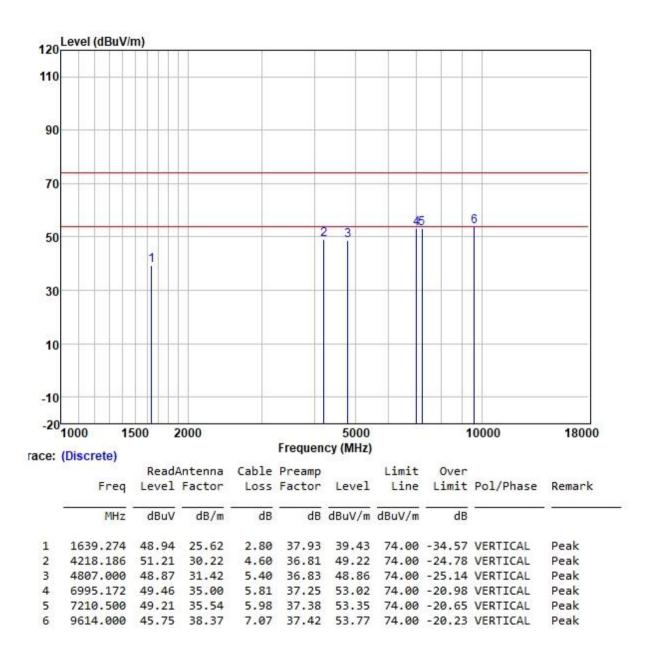
CO.L.Lid. Wo.199 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 23 of 66

Test Mode: 04; Polarity: Vertical; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

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

CO_Ltd. No.188 Kezhu Road, Soeniech Park, Quarghou Exonomick Technology Development District, Guargahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn

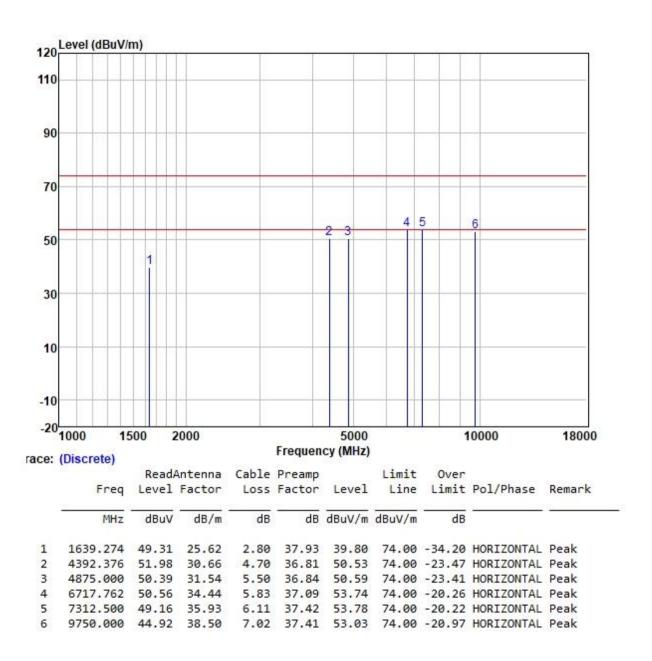
邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 24 of 66

Test Mode: 04; Polarity: Horizontal; Modulation: OFDM; Channel: middle





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

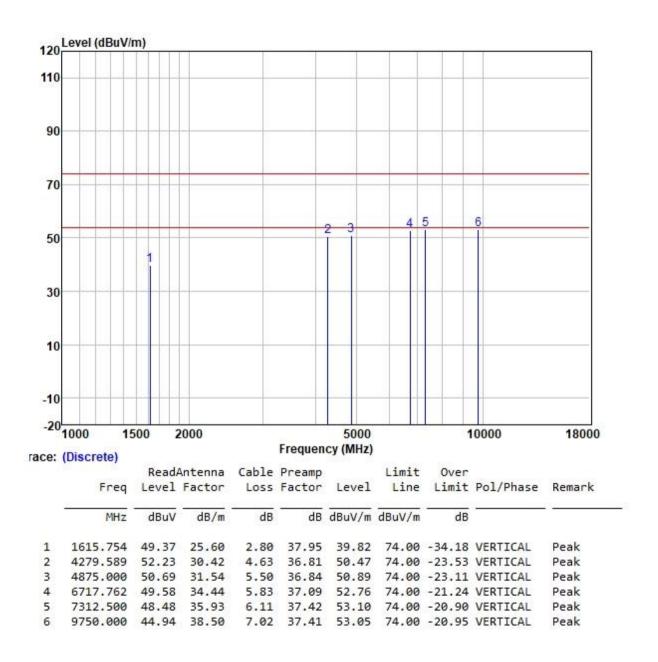
CO.Litd. Wo.199 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 25 of 66

Test Mode: 04; Polarity: Vertical; Modulation: OFDM; Channel: middle





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

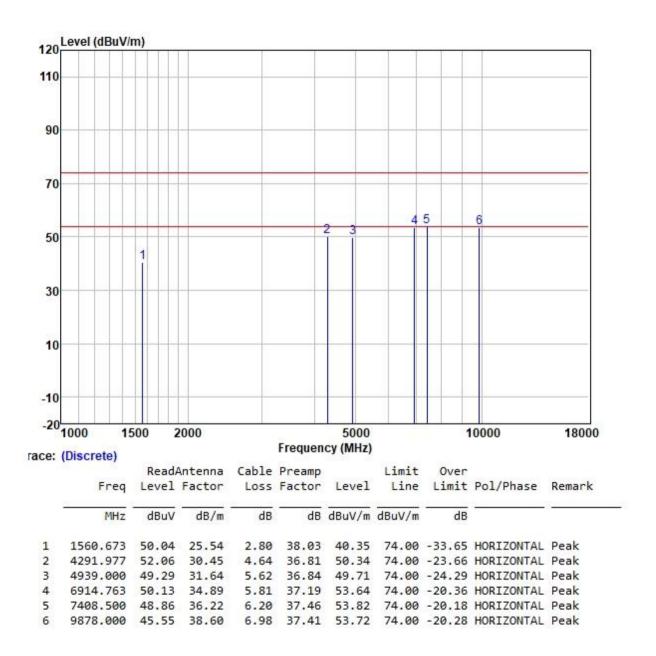
CO_LLIU. No.198 Kabu Road, Soangahu Coronnic & Technology Development District, Guangahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
orglory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 26 of 66

Test Mode: 04; Polarity: Horizontal; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

Attention: To check the authenticity of testing /in/spection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com (80-,Lld_No.198 Kezhu Road, Soeniech Park, Quarghou Exonomick Technology Development District, Guargahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn

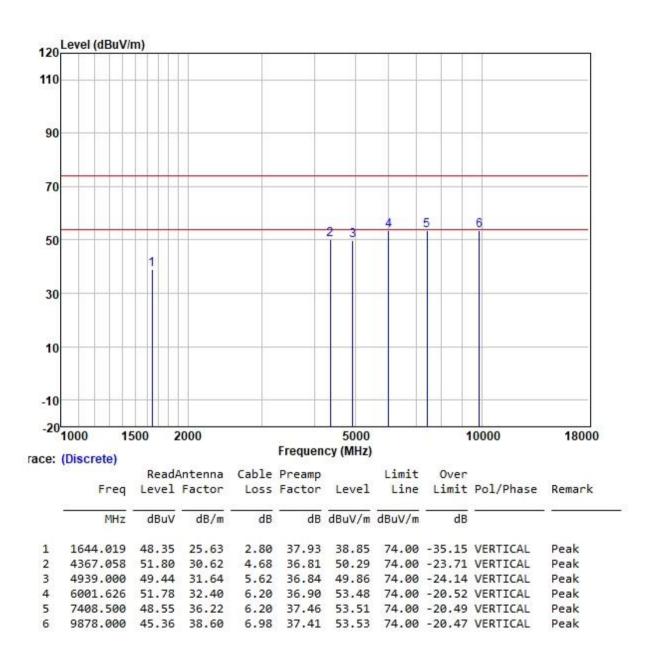
邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 27 of 66

Test Mode: 04; Polarity: Vertical; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

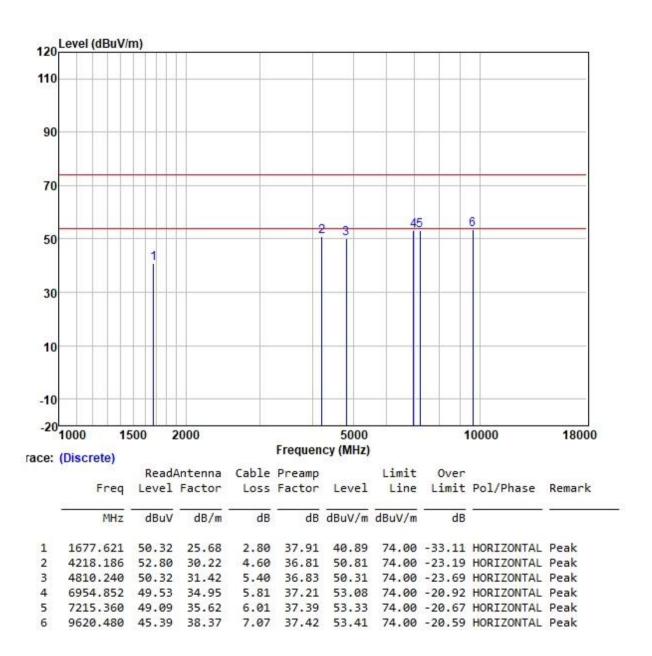
CO_LLIU. No.198 Kabu Road, Soangahu Coronnic & Technology Development District, Guangahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
orglory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 28 of 66

Test Mode: 05; Polarity: Horizontal; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

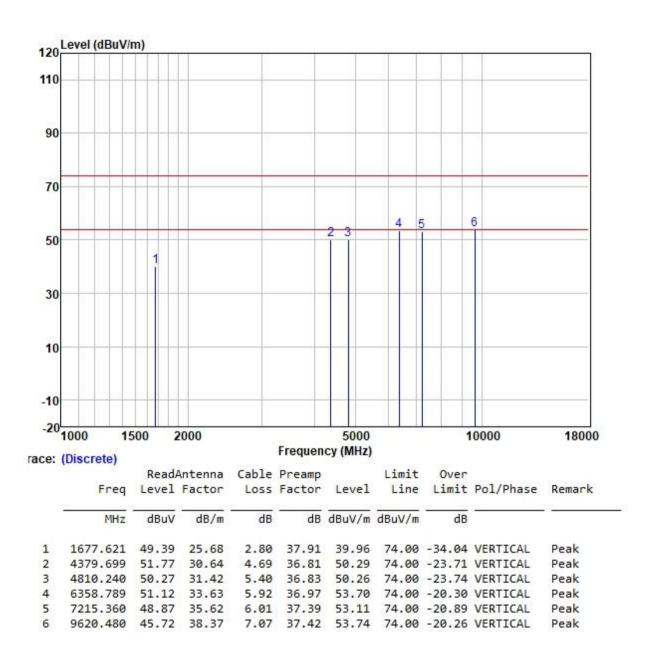
Co_Liti_N.08 Kezhu Road, Soleneth Park, Guarghou Economic & Technology Development District, Guargarbou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
oralon/ 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 29 of 66

Test Mode: 05; Polarity: Vertical; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

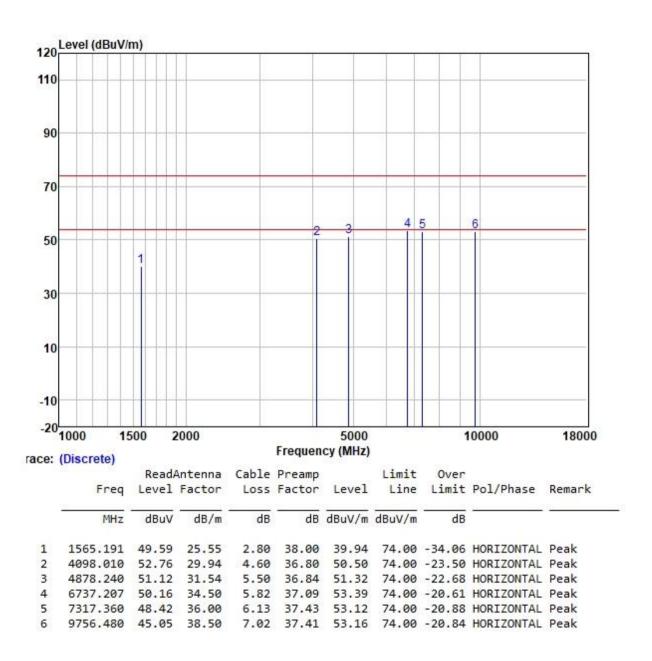
or email: CN.Doccheck@sgs.com CO.Lid. No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgs.group.com.cn oratory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 30 of 66

Test Mode: 05; Polarity: Horizontal; Modulation: OFDM; Channel: middle





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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

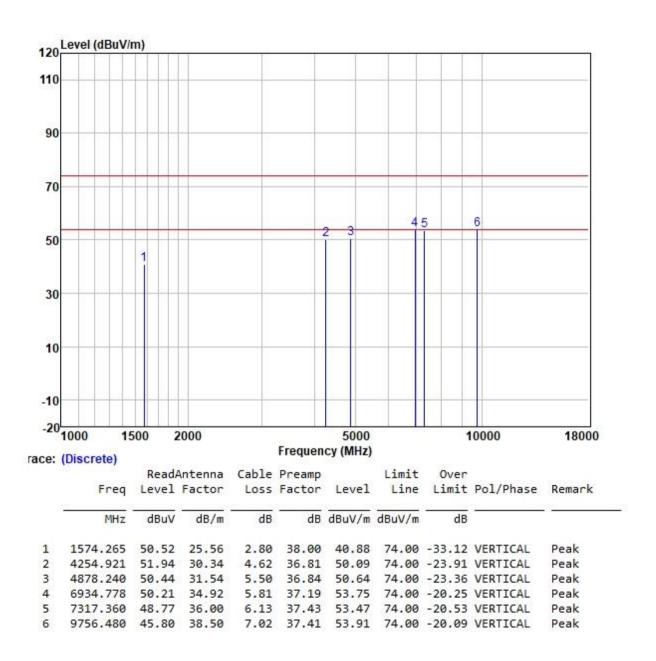
or email: CN_Doccheck@sgs.com Co_Lid_No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgs.group.com.cn oratory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 31 of 66

Test Mode: 05; Polarity: Vertical; Modulation: OFDM; Channel: middle





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

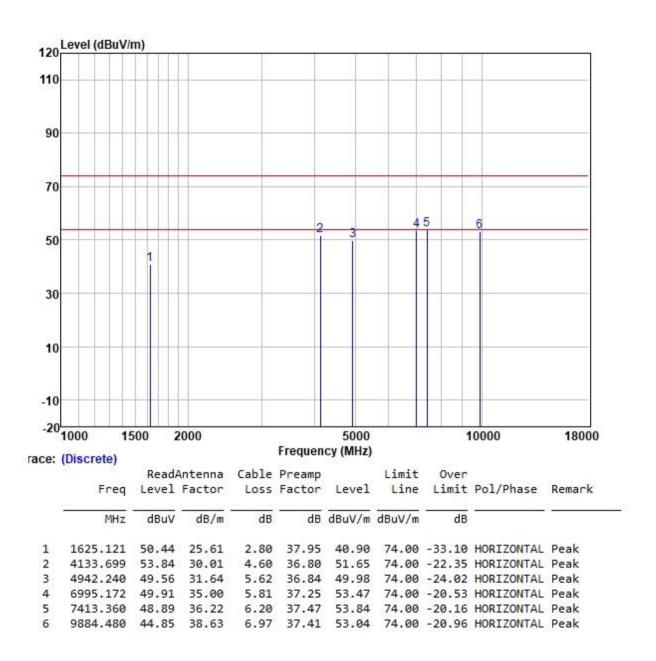
or email: CN.Doccheck@sgs.com CO.Lid. No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgs.group.com.cn oratory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 32 of 66

Test Mode: 05; Polarity: Horizontal; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

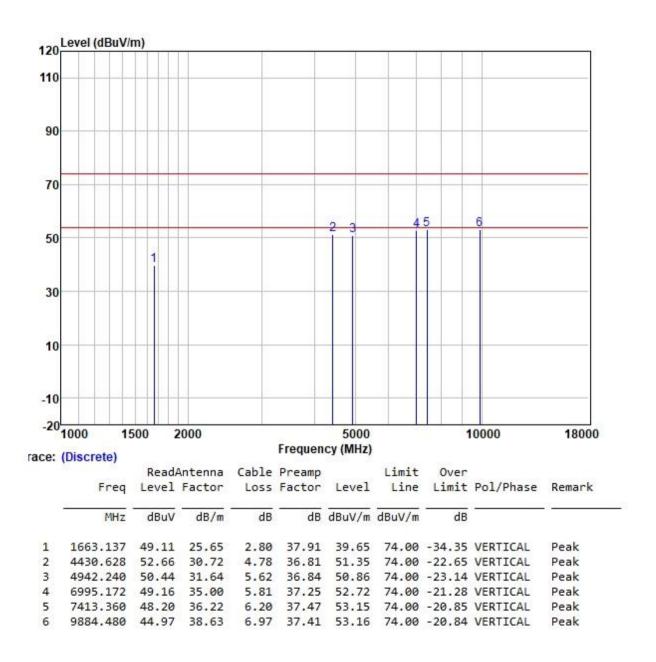
or email: CN.Doccheck@sgs.com CO.,Lid. No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn oralory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 33 of 66

Test Mode: 05; Polarity: Vertical; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

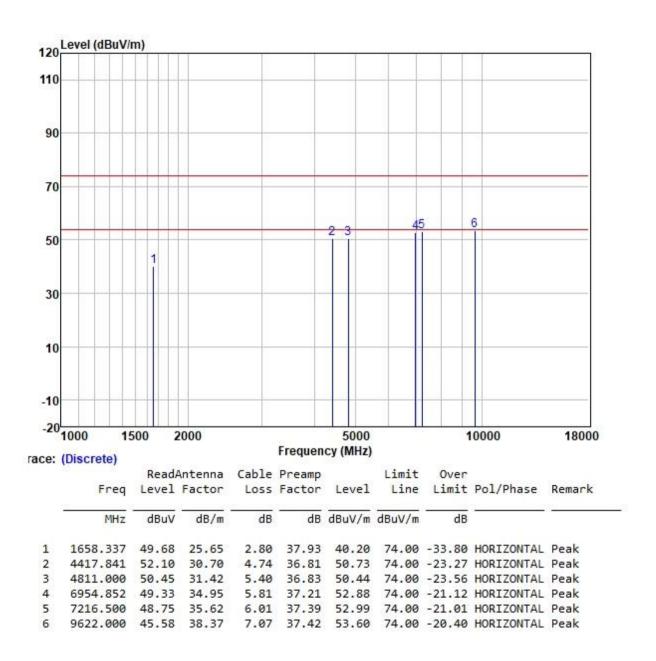
or email: N. Doccheck@sgs.com



Report No.: GZCR220800109504

Page: 34 of 66

Test Mode: 06; Polarity: Horizontal; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

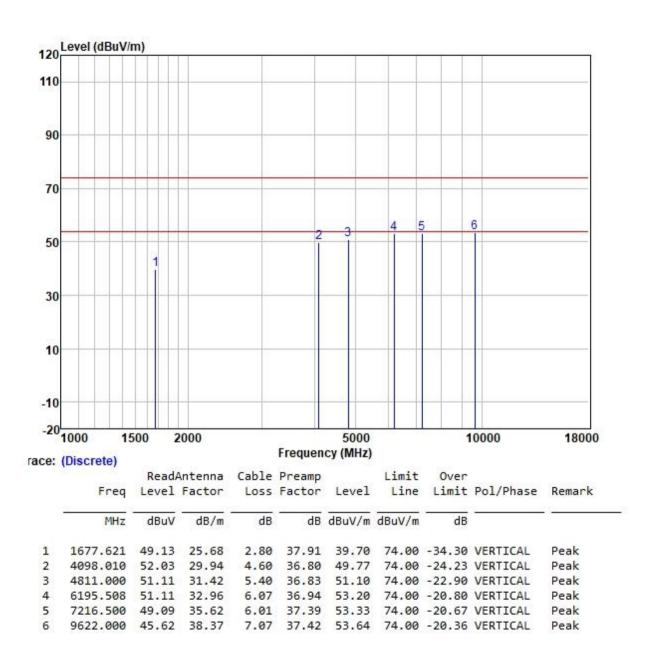
CO.L.Lid. Wo.199 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 35 of 66

Test Mode: 06; Polarity: Vertical; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

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

CO_Ltd. No.188 Kezhu Road, Scientech Park, Guargahu Economic & Technology Development District, Guargahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn

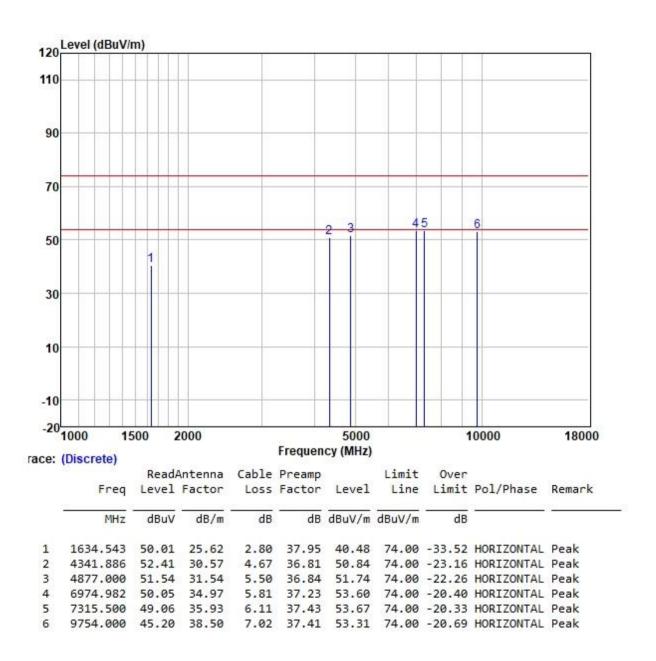
邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 36 of 66

Test Mode: 06; Polarity: Horizontal; Modulation: OFDM; Channel: middle





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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.

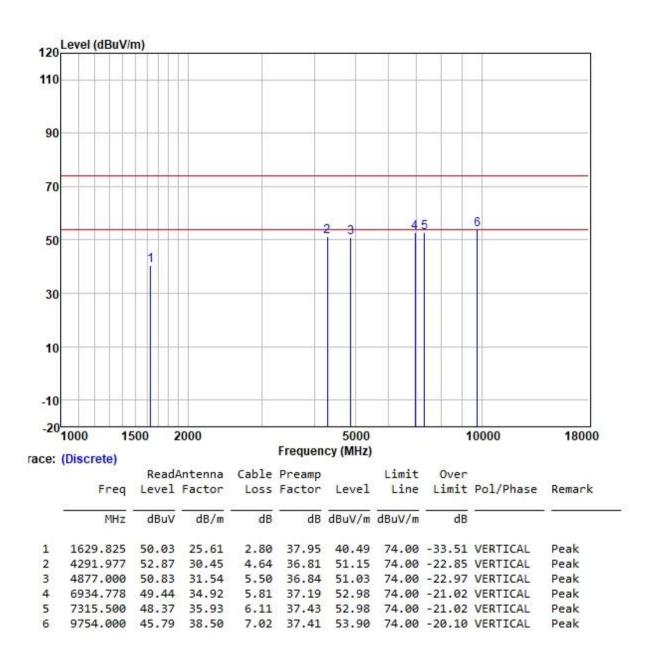
Co.,Ltd. No.199 Kezhu Road, Szientech Park, Guanguhou Economic & Technology Development District, Guanguhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 37 of 66

Test Mode: 06; Polarity: Vertical; Modulation: OFDM; Channel: middle





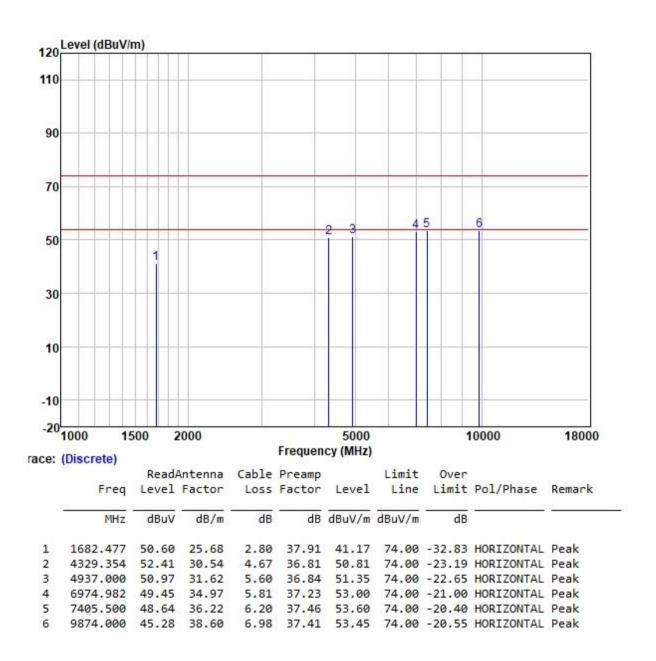
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 38 of 66

Test Mode: 06; Polarity: Horizontal; Modulation: OFDM; Channel: High





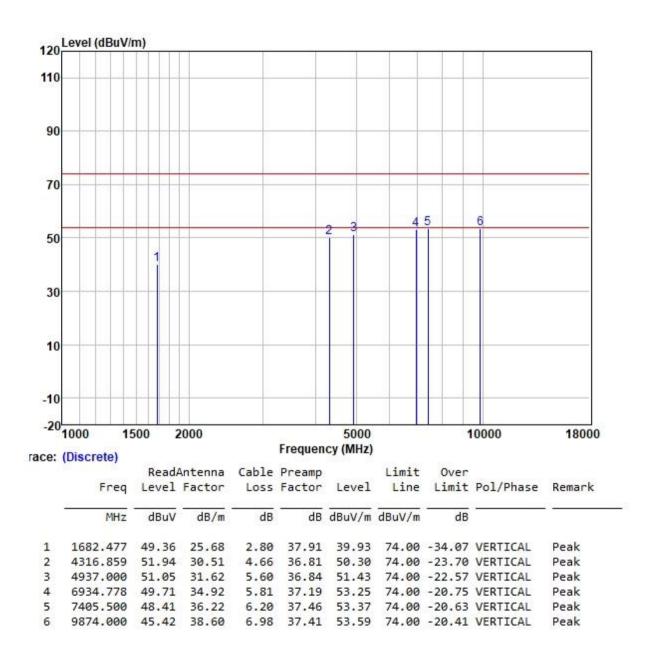
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 39 of 66

Test Mode: 06; Polarity: Vertical; Modulation: OFDM; Channel: High





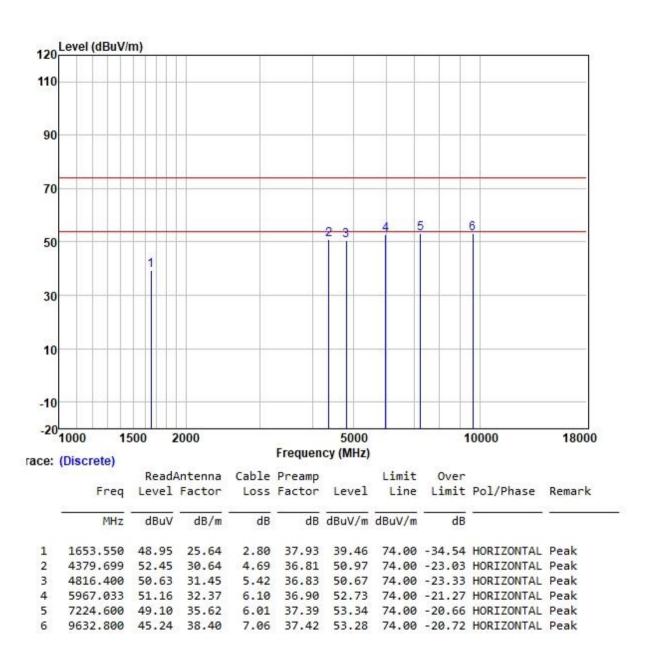
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 40 of 66

Test Mode: 07; Polarity: Horizontal; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

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

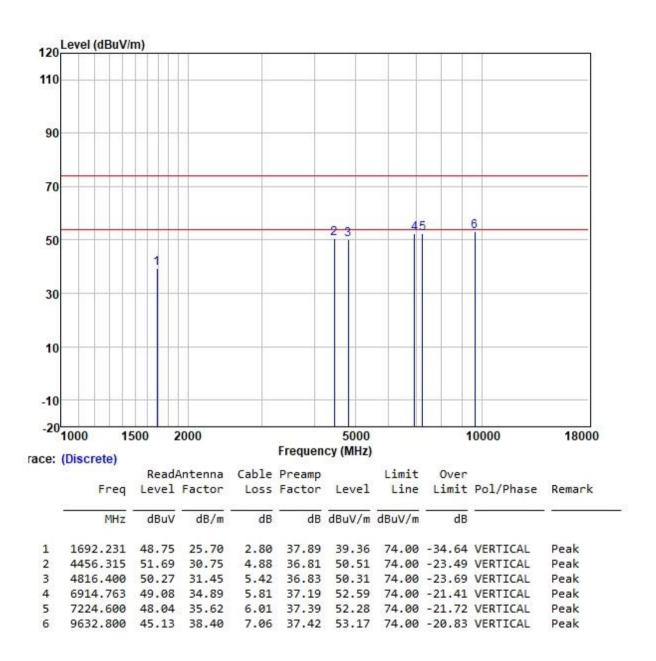
Co.,Ltd. No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 41 of 66

Test Mode: 07; Polarity: Vertical; Modulation: OFDM; Channel: Low





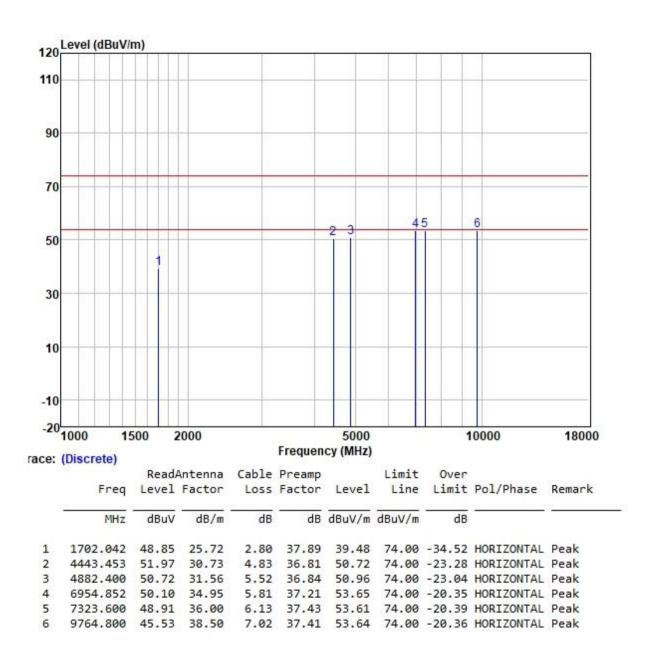
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 42 of 66

Test Mode: 07; Polarity: Horizontal; Modulation: OFDM; Channel: middle





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

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

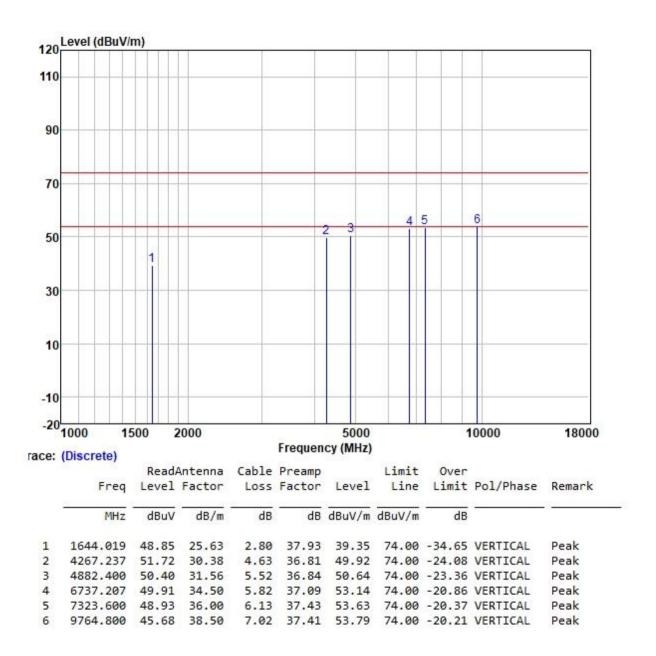
Co.,Ltd. No.198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 43 of 66

Test Mode: 07; Polarity: Vertical; Modulation: OFDM; Channel: middle





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

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

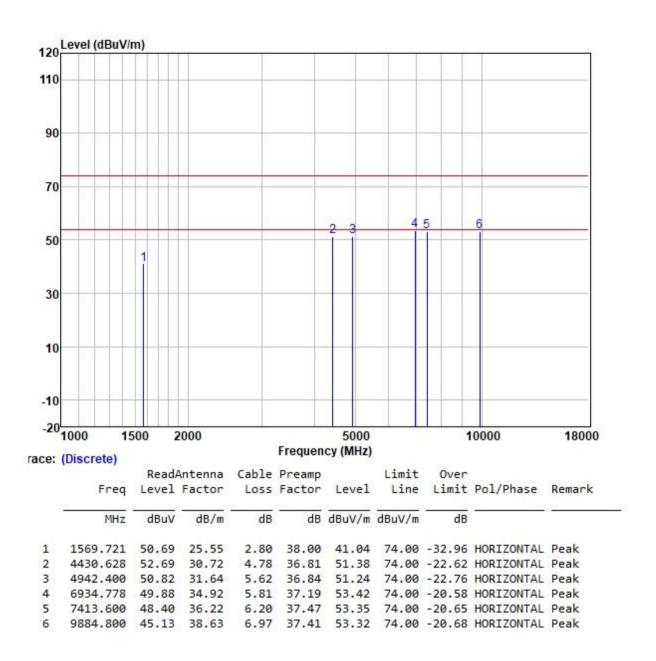
Co.,Ltd. No.198 Kezhu Road, Scantech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 44 of 66

Test Mode: 07; Polarity: Horizontal; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

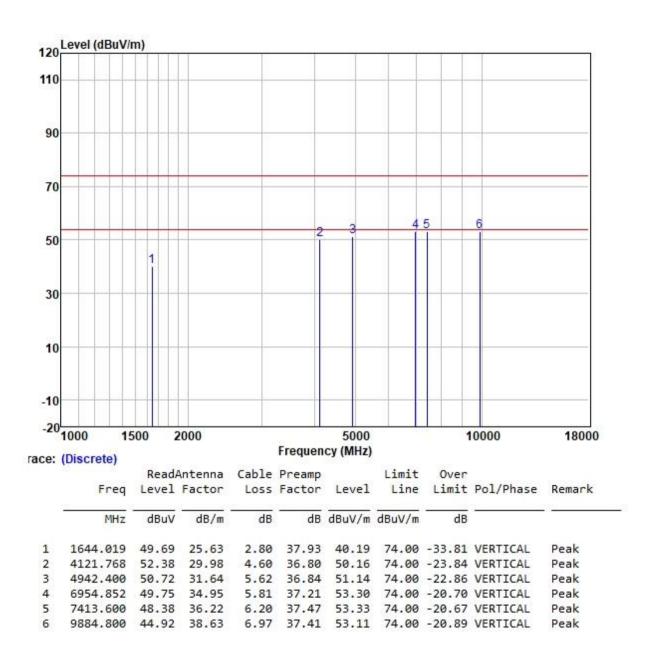
Co_Liti_N.08 Kezhu Road, Soleneth Park, Guarghou Economic & Technology Development District, Guargarbou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
oralon/ 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 45 of 66

Test Mode: 07; Polarity: Vertical; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

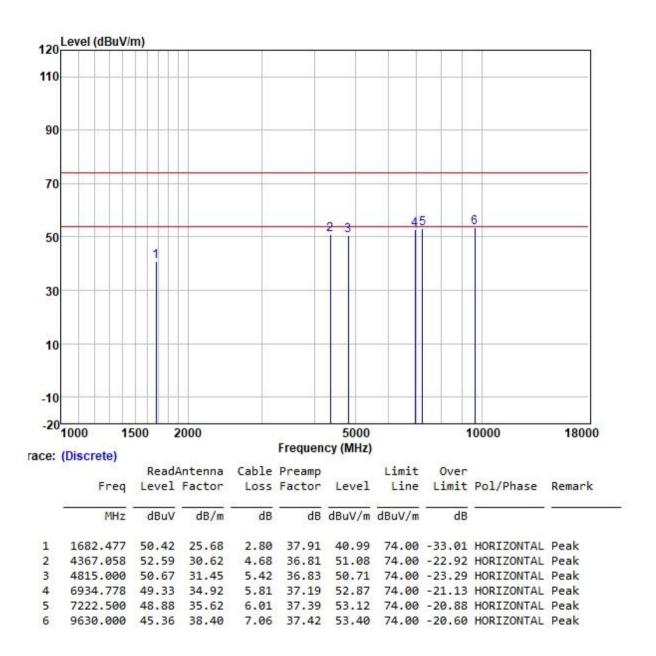
CO_LLIU. No.198 Kabu Road, Soangahu Coronnic & Technology Development District, Guangahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
orglory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 46 of 66

Test Mode: 11; Polarity: Horizontal; Modulation: OFDM; Channel: Low





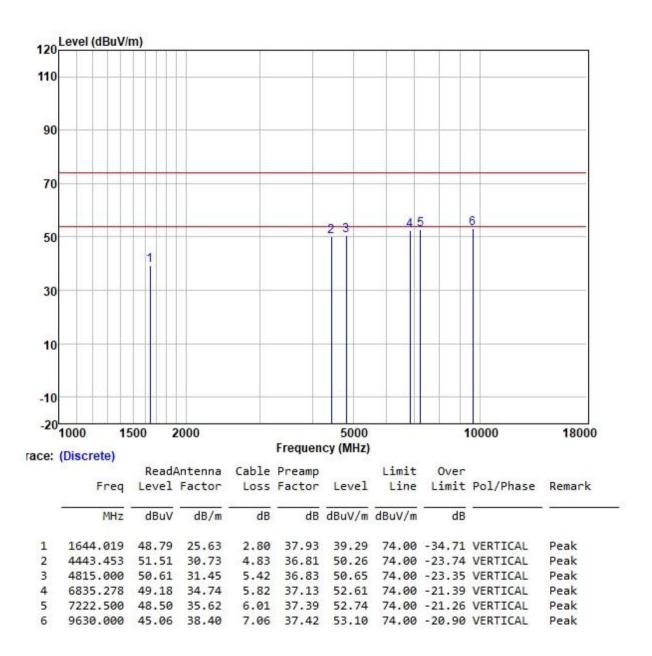
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 47 of 66

Test Mode: 11; Polarity: Vertical; Modulation: OFDM; Channel: Low





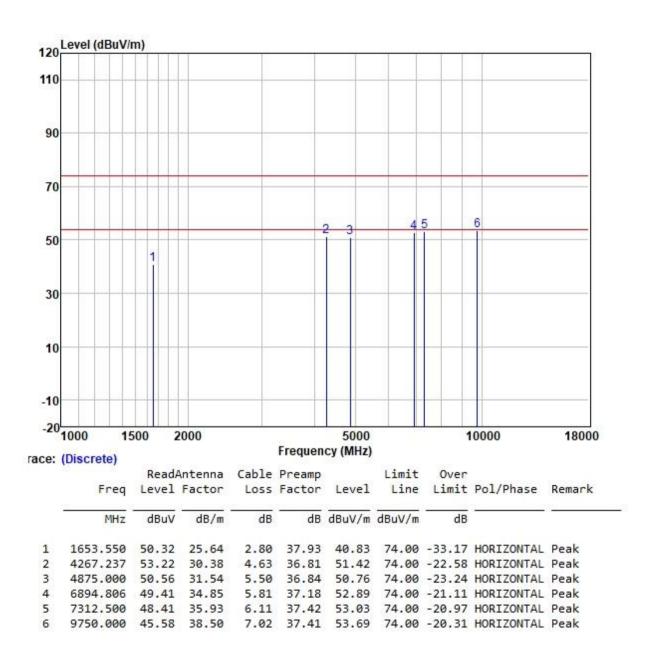
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 48 of 66

Test Mode: 11; Polarity: Horizontal; Modulation: OFDM; Channel: middle





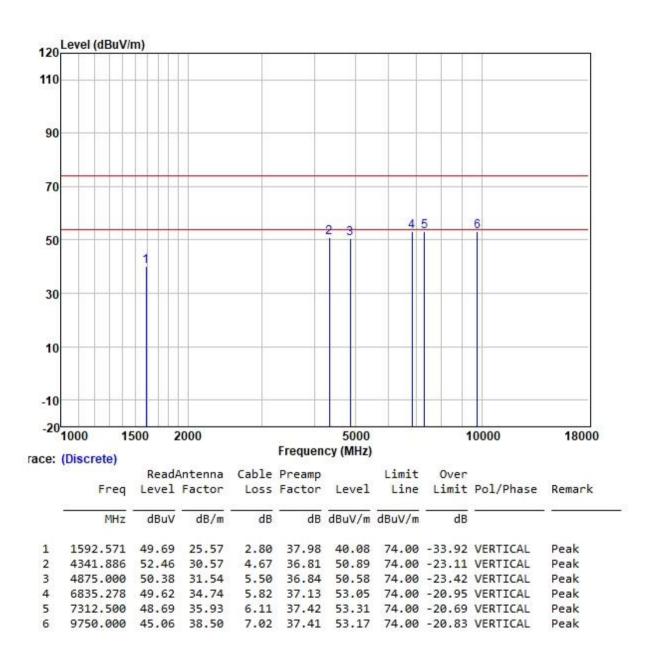
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 49 of 66

Test Mode: 11; Polarity: Vertical; Modulation: OFDM; Channel: middle





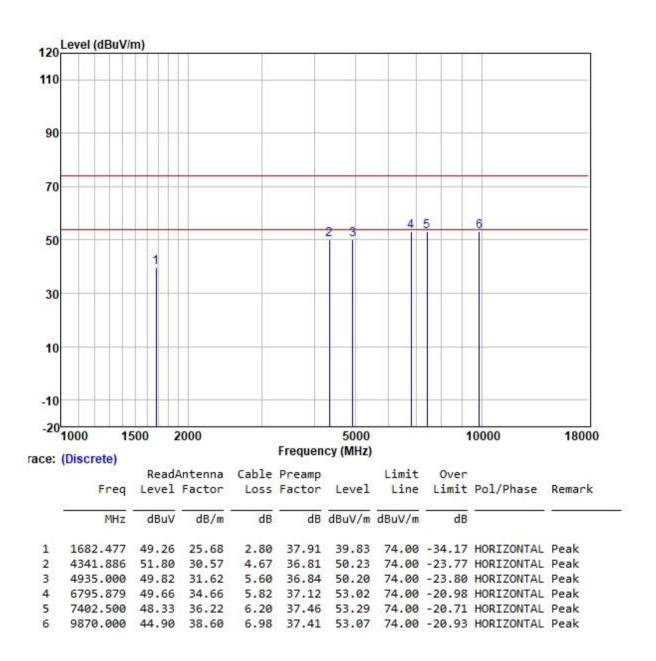
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 50 of 66

Test Mode: 11; Polarity: Horizontal; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

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

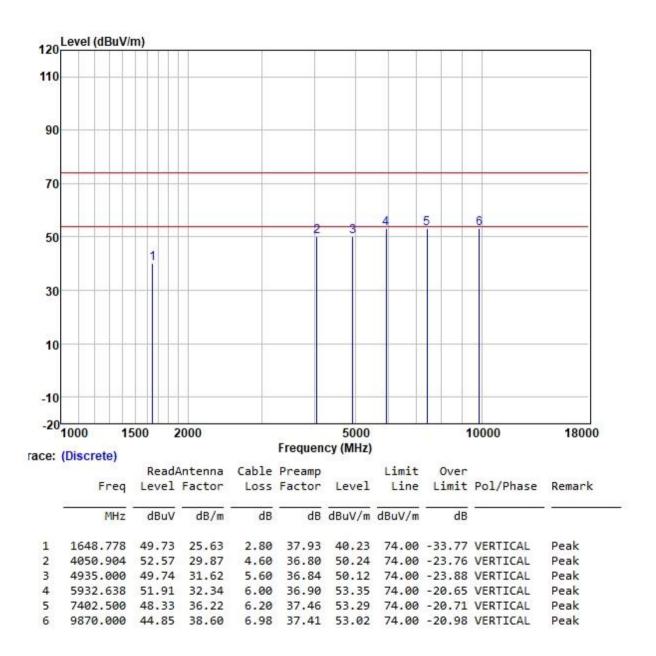
CO_Ltd. No.188 Kezhu Road, Scientech Park, Guargahu Economic & Technology Development District, Guargahuu, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 51 of 66

Test Mode: 11; Polarity: Vertical; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

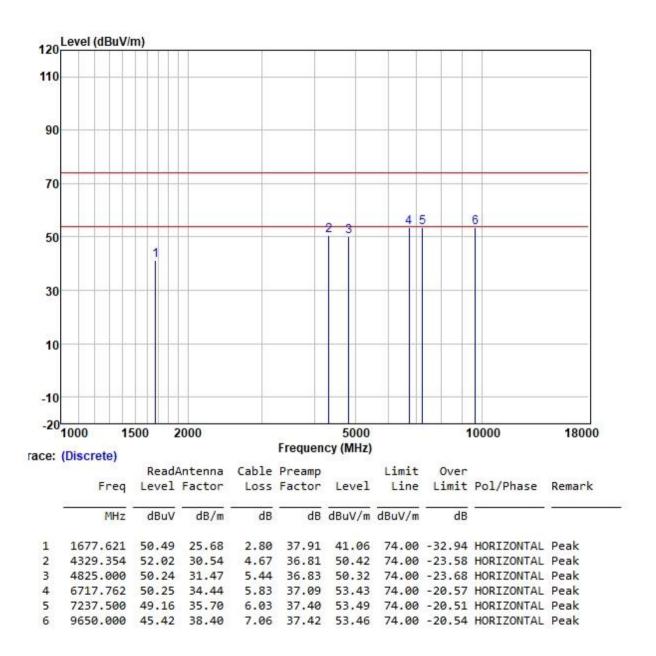
CO_LLIU. No.198 Kabu Road, Soangahu Coronnic & Technology Development District, Guangahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
orglory. 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 52 of 66

Test Mode: 12; Polarity: Horizontal; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

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

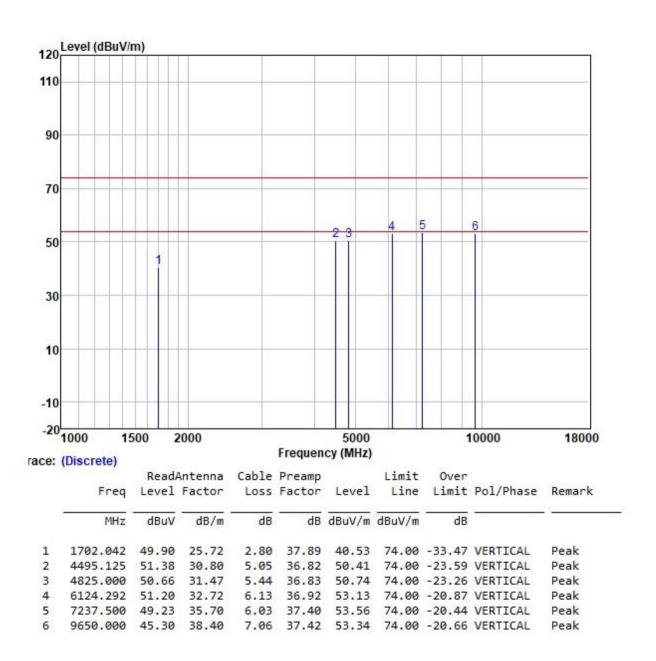
Co.,Ltd. No.198 Kezhu Road, Scantech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 53 of 66

Test Mode: 12; Polarity: Vertical; Modulation: OFDM; Channel: Low





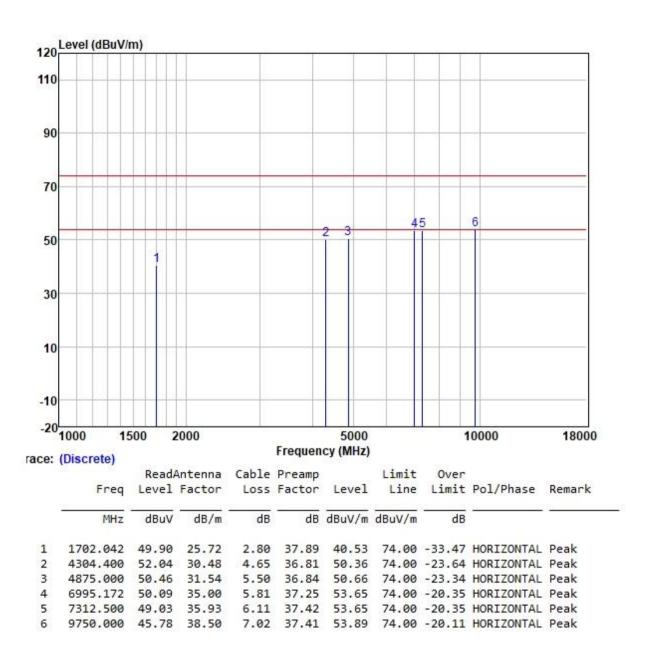
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 54 of 66

Test Mode: 12; Polarity: Horizontal; Modulation: OFDM; Channel: middle





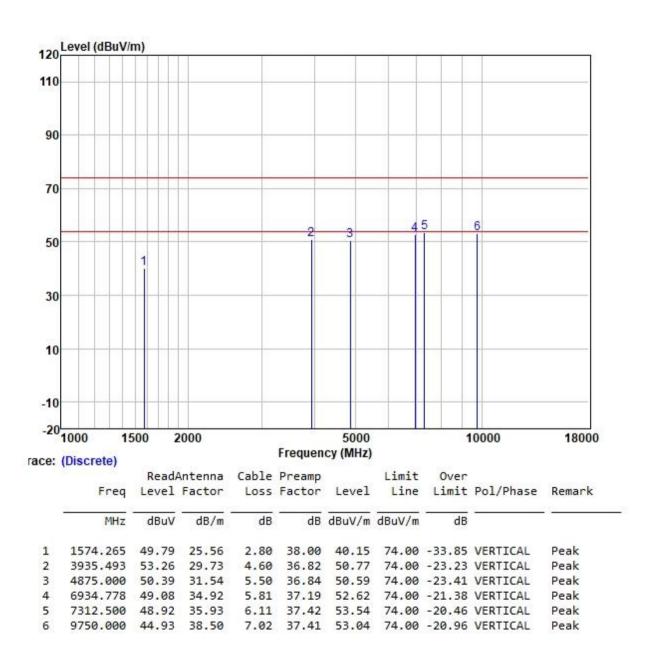
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 55 of 66

Test Mode: 12; Polarity: Vertical; Modulation: OFDM; Channel: middle





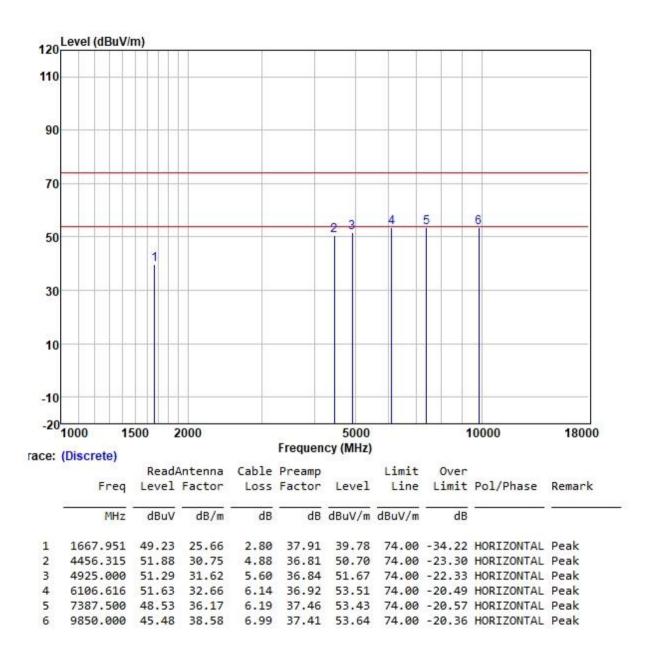
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 56 of 66

Test Mode: 12; Polarity: Horizontal; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

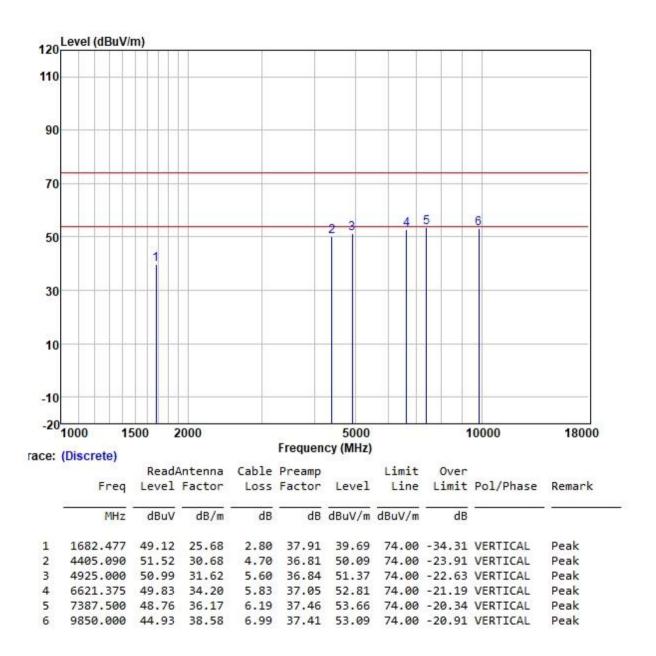
Co_Liti_N.08 Kezhu Road, Soleneth Park, Guarghou Economic & Technology Development District, Guargarbou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
oralon/ 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 57 of 66

Test Mode: 12; Polarity: Vertical; Modulation: OFDM; Channel: High





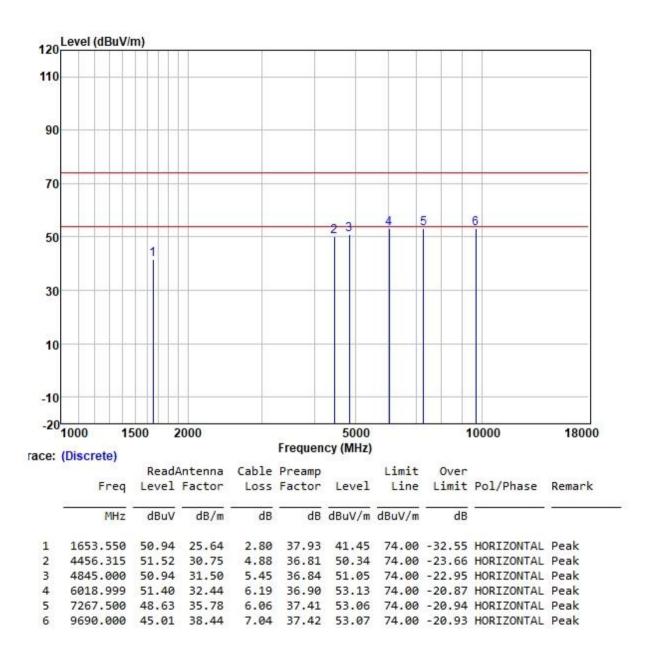
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 58 of 66

Test Mode: 13; Polarity: Horizontal; Modulation: OFDM; Channel: Low





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

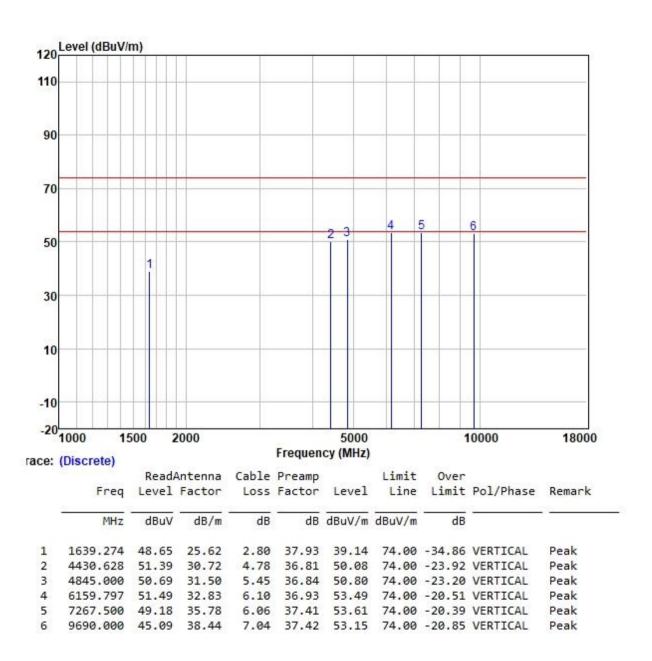
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com (80-,Lld_No.198 Kezhu Road, Soeniech Park, Quarghou Exonomick Technology Development District, Guargahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 59 of 66

Test Mode: 13; Polarity: Vertical; Modulation: OFDM; Channel: Low





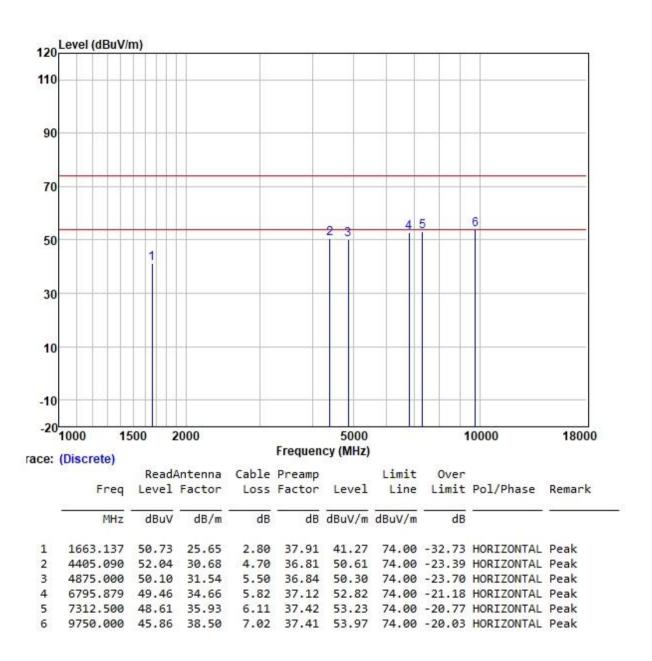
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 60 of 66

Test Mode: 13; Polarity: Horizontal; Modulation: OFDM; Channel: middle





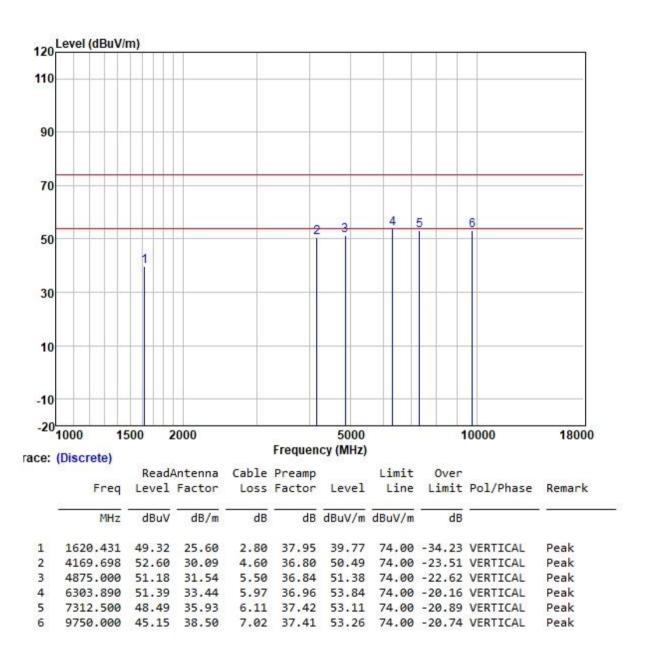
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 61 of 66

Test Mode: 13; Polarity: Vertical; Modulation: OFDM; Channel: middle





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

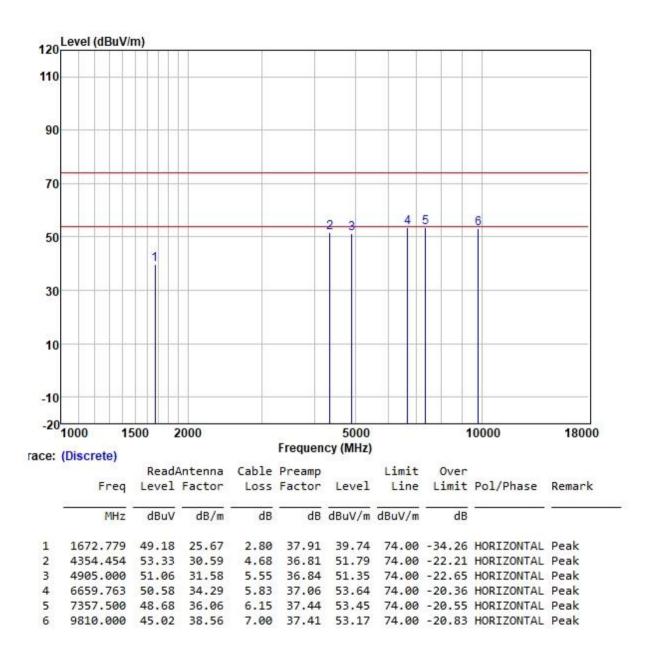
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com (80-,Lld_No.198 Kezhu Road, Soeniech Park, Quarghou Exonomick Technology Development District, Guargahou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 62 of 66

Test Mode: 13; Polarity: Horizontal; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms

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

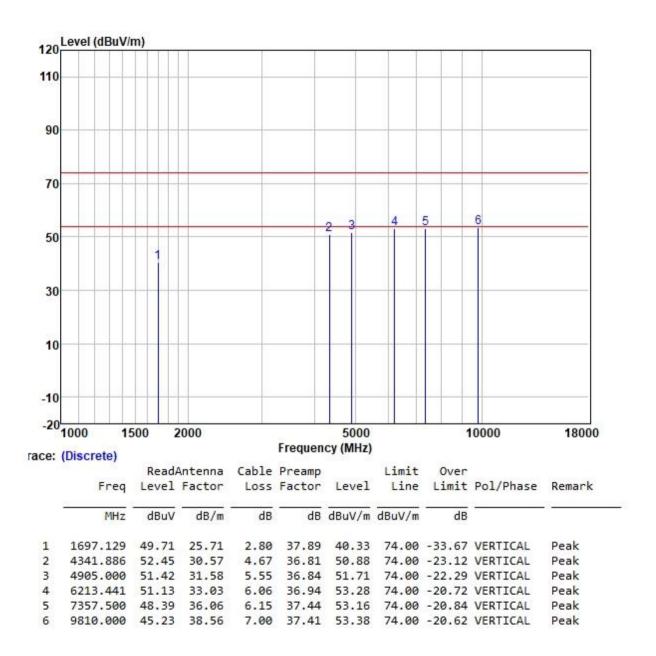
Co.,Ltd. No.198 Kezhu Road, Scantech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn



Report No.: GZCR220800109504

Page: 63 of 66

Test Mode: 13; Polarity: Vertical; Modulation: OFDM; Channel: High





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 http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: GZCR220800109504

Page: 64 of 66

7 Test Setup Photo

Refer to Appendix - Test Setup Photo for GZCR2208001095AT

8 EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for GZCR2208001095AT



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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, pease contact us at telephone: (86-755) 8307 1443.

**Attention:*To check the authenticity of testing inspection report & certificate, pease contact us at telephone: (86-755) 8307 1443.



Report No.: GZCR220800109504

Page: 65 of 66

9 Appendix

1. Maximum Conducted Output Power

1.1 Power

1.1.1 Test Result

Mode	TX Type	Frequency (MHz)	Measured AV Output Power (dBm)					\
Mode			Ant0	Ant1	Ant2	Ant3	Limit	Verdict
	SISO	2403.5	16.71	16.10	15.84	15.97	<=30	Pass
1.4MHz BW		2437.5	17.05	16.18	16.04	16.17	<=30	Pass
		2469.5	17.35	15.77	16.02	16.11	<=30	Pass
1.4MHz CA BW	SISO	2405.12	16.73	16.19	16.06	15.99	<=30	Pass
		2439.12	17.15	16.29	16.07	16.20	<=30	Pass
		2471.12	17.13	15.40	15.33	15.28	<=30	Pass
3MHz BW	SISO	2405.5	15.68	15.73	15.81	16.04	<=30	Pass
		2438.5	16.33	16.32	16.37	16.38	<=30	Pass
		2468.5	16.69	16.39	16.19	16.06	<=30	Pass
3MHz CA BW	SISO	2408.2	16.37	16.42	16.57	16.68	<=30	Pass
		2441.2	16.59	16.65	16.55	16.53	<=30	Pass
		2471.2	16.38	15.53	15.71	15.70	<=30	Pass
10MHz BW	SISO	2407.5	25.87	25.79	25.67	25.71	<=30	Pass
		2437.5	26.31	26.29	26.02	26.20	<=30	Pass
		2467.5	24.97	25.56	25.68	25.30	<=30	Pass
20MHz BW	SISO	2412.5	26.55	26.21	26.26	26.23	<=30	Pass
		2437.5	26.33	26.28	26.30	26.49	<=30	Pass
		2462.5	21.52	20.88	20.98	21.07	<=30	Pass
40MHz BW	SISO	2422.5	20.31	20.40	20.42	20.37	<=30	Pass
		2437.5	23.97	24.12	23.85	24.09	<=30	Pass
		2452.5	18.69	18.62	18.44	18.40	<=30	Pass
Note1: Antenna Gain: Ant0: 1.50dBi; Ant1: 2.00dBi; Ant2: 2.00dBi; Ant3: 1.50dBi;								

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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. 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 ine 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 fulleest 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) 83071443,

Co_Liti_N.08 Kezhu Road, Soleneth Park, Guarghou Economic & Technology Development District, Guargarbou, China 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn
oralon/ 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



Report No.: GZCR220800109504

Page: 66 of 66

ENV	Mode	TX Type	Frequency (MHz)	Measured AV Output Power (dBm)				
	iviode			Ant1	Ant2	Sum	Limit	Verdict
NTNV		МІМО	2403.5	16.46	16.19	19.34	<=30	Pass
	1.4MHz BW		2437.5	16.72	16.93	19.84	<=30	Pass
			2469.5	17.73	17.48	20.62	<=30	Pass
	1.4MHz CA BW	MIMO	2405.12	17.10	16.68	19.91	<=30	Pass
			2439.12	17.00	16.81	19.92	<=30	Pass
			2471.12	17.57	17.63	20.61	<=30	Pass
	3MHz BW	MIMO	2405.5	16.59	16.06	19.34	<=30	Pass
			2438.5	16.36	16.78	19.59	<=30	Pass
			2468.5	17.56	16.81	20.21	<=30	Pass
	3MHz CA BW	MIMO	2408.2	16.84	16.45	19.66	<=30	Pass
			2441.2	16.63	17.06	19.86	<=30	Pass
			2471.2	17.24	17.04	20.15	<=30	Pass
	10MHz BW	MIMO	2407.5	23.68	23.86	26.78	<=30	Pass
			2437.5	25.38	25.60	28.50	<=30	Pass
			2467.5	24.75	24.94	27.86	<=30	Pass
	20MHz BW	МІМО	2412.5	23.97	23.83	26.91	<=30	Pass
			2437.5	25.60	25.94	28.78	<=30	Pass
			2462.5	22.46	22.67	25.58	<=30	Pass
		МІМО	2422.5	21.71	21.53	24.63	<=30	Pass
	40MHz BW		2437.5	24.27	24.30	27.30	<=30	Pass
			2452.5	19.70	19.72	22.72	<=30	Pass

Note1: Antenna Gain: Ant1: 2.00dBi; Ant2: 2.00dBi

Note2: Directional Gain=10log [$(10^{G1/20} + 10^{G2/20})^2/N_{ANT}$] = 10log [$(10^{2.00/20} + 10^{.2.00/20})^2/2$] = 5.01dBi.

Note3: Antennas 0+1,0+3,1+2 and 2+3 were tested. Only the worst case (Antenna 1+2) was recorded in the

report.

- End of 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 http://www.sgs.com/en/Terms-and-Conditions/Terms