

TEST REPORT

Application No.:	GZCR2406000645HS
Applicant:	Echelon Fitness Multimedia, LLC
Address of Applicant:	605 Chestnut Street, Suite 700, Chattanooga, TN 37450
Manufacturer:	Echelon Fitness Multimedia, LLC
Address of Manufacturer:	605 Chestnut Street, Suite 700, Chattanooga, TN 37450
Factory:	Oma Fitness Equipment Co., Ltd
Address of Factory:	93 Tai An Road South, Yang'e Village, Lunjiao Town, Shunde, Foshan, 528000, Guangdong, China
Product Name:	Motorized Treadmill, Stride-50-RCX-22
Model No.:	STRIDE-RCXs-22, STRIDE-RCXs-XX (X=0~9, X=A~Z) *
*	Please refer to section 2 of this report which indicates which item was actually tested and which were electrically identical.
Trade Mark:	Echelon
Standard(s) :	47 CFR Part 15, Subpart E 15.407
Date of Receipt:	2024-06-06
Date of Test:	2024-06-18 to 2024-08-06
Date of Issue:	2024-09-12
Test Result:	Pass*

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



Ricky Liu
Manager

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

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



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

Revision Record			
Version	Report No.	Date	Remark
01	GZCR240600064504	2024-09-12	Original

Authorized for issue by			
		Luke Lin _____ Luke Lin/Project Engineer	
		Vico Cui _____ Vico Cui/Reviewer	

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

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

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data		N/A	47 CFR Part 15, Subpart E 15.407 (c)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(9)	Pass
Maximum Conducted output power		KDB 789033 D02 II E	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Radiated Emissions (Below 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions (Above 1GHz)		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands		KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Duty Cycle		KDB 789033 II B 1	KDB 789033 D02 II B 1	Pass
99% Bandwidth		KDB 789033 II D	N/A	Pass
26dB Emission bandwidth		KDB 789033 D02 II C 1	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Minimum 6 dB bandwidth (5.725-5.85 GHz band)		KDB 789033 D02 II C 2	47 CFR Part 15, Subpart E 15.407 (e)	Pass
Peak Power spectrum density		KDB 789033 D02 II F	47 CFR Part 15, Subpart E 15.407 (a)	Pass
Frequency Stability		ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart E 15.407 (g)	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.

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

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



♣ Declaration of EUT Family Grouping:

Model No.: STRIDE-RCXs-22, STRIDE-RCXs-XX (X=0~9, X=A~Z)

STRIDE-RCXs-XX (X=0~9, X=A~Z) are same as STRIDE-RCXs-22, except for the model's name.

Therefore only one model STRIDE-RCXs-22 were tested in this report.



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

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

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

3 Contents

	Page
1 Cover Page	1
2 Test Summary.....	3
3 Contents	5
4 General Information.....	7
4.1 Details of E.U.T.....	7
4.2 Description of Support Units.....	7
4.3 Measurement Uncertainty	8
4.4 Test Location	8
4.5 Test Facility.....	9
4.6 Deviation from Standards.....	9
4.7 Abnormalities from Standard Conditions.....	9
5 Equipment List	10
6 Radio Spectrum Technical Requirement.....	13
6.1 Antenna Requirement	13
6.1.1 Test Requirement:.....	13
6.1.2 Conclusion	13
6.2 Transmission in the Absence of Data	14
6.2.1 Test Requirement:.....	14
6.2.2 Conclusion	14
7 Radio Spectrum Matter Test Results.....	15
7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)	15
7.1.1 E.U.T. Operation.....	15
7.1.2 Test Mode Description	15
7.1.3 Test Setup Diagram	16
7.1.4 Measurement Procedure and Data.....	16
7.2 Maximum Conducted output power	19
7.2.1 E.U.T. Operation.....	19
7.2.2 Test Mode Description	19
7.2.3 Test Setup Diagram	20
7.2.4 Measurement Procedure and Data.....	20
7.3 Radiated Emissions (Below 1GHz).....	21
7.3.1 E.U.T. Operation.....	21
7.3.2 Test Mode Description	21
7.3.3 Test Setup Diagram	22
7.3.4 Measurement Procedure and Data.....	22
7.4 Radiated Emissions (Above 1GHz).....	25
7.4.1 E.U.T. Operation.....	25
7.4.2 Test Mode Description	26
7.4.3 Test Setup Diagram	26
7.4.4 Measurement Procedure and Data.....	27
7.5 Radiated Emissions which fall in the restricted bands	80

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

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



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Body EEC Laboratory

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

7.5.1	E.U.T. Operation	81
7.5.2	Test Mode Description	81
7.5.3	Test Setup Diagram	81
7.5.4	Measurement Procedure and Data.....	82
7.6	Duty Cycle	125
7.6.1	E.U.T. Operation.....	125
7.6.2	Test Mode Description	125
7.6.3	Test Setup Diagram	126
7.6.4	Measurement Procedure and Data.....	126
7.7	99% Bandwidth	127
7.7.1	E.U.T. Operation.....	127
7.7.2	Test Mode Description	127
7.7.3	Test Setup Diagram	128
7.7.4	Measurement Procedure and Data.....	128
7.8	26dB Emission bandwidth	129
7.8.1	E.U.T. Operation.....	129
7.8.2	Test Mode Description	129
7.8.3	Test Setup Diagram	130
7.8.4	Measurement Procedure and Data.....	130
7.9	Minimum 6 dB bandwidth (5.725-5.85 GHz band).....	131
7.9.1	E.U.T. Operation.....	131
7.9.2	Test Mode Description	131
7.9.3	Test Setup Diagram	131
7.9.4	Measurement Procedure and Data.....	131
7.10	Peak Power spectrum density	132
7.10.1	E.U.T. Operation.....	132
7.10.2	Test Mode Description	132
7.10.3	Test Setup Diagram	133
7.10.4	Measurement Procedure and Data.....	133
7.11	Frequency Stability.....	134
7.11.1	E.U.T. Operation.....	134
7.11.2	Test Mode Description	134
7.11.3	Test Setup Diagram	135
7.11.4	Measurement Procedure and Data.....	135
8	Test Setup Photo	136
9	EUT Constructional Details (EUT Photos).....	137
10	Appendix.....	138

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

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



4 General Information

4.1 Details of E.U.T.

Power supply:	AC 120V 60Hz
Test voltage:	AC 120V 60Hz
Operation	U-NII-1: 5180-5240MHz (4 Channels)
Frequency/Number of channels (20MHz):	U-NII-2A: 5260-5320MHz (4 Channels) U-NII-2C: 5500-5700MHz (11 Channels) U-NII-3: 5745-5825MHz (5 Channels)
Operation	U-NII-1: 5190-5230MHz (2 Channels)
Frequency/Number of channels/(40MHz):	U-NII-2A: 5270-5310MHz (2 Channels) U-NII-2C: 5510-5670MHz (5 Channels) U-NII-3: 5755-5795MHz (2 Channels)
Modulation Type:	802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Channel Spacing:	802.11a/n/ac 20: 20MHz 802.11n/ac 40: 40MHz 802.11ac 80: 80MHz
DFS Function:	Without DFS function
TPC Function:	Without TPC function
Antenna Type:	PIFA Antenna
Cable(s):	AC mains, 3 wires, 2.0m, unshielded.
Antenna Number:	2
Antenna Gain:	3.35dBi for antenna 1 according to antenna specification 3.08dBi for antenna 2 according to antenna specification
Remark:	Two antennas can simultaneous transmission

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

The EUT has been tested as an independent unit.



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

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

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at AC Power Line (150kHz-30MHz)	± 2.76dB
Maximum Conducted output power	± 0.75dB
Radiated Emissions (Below 1GHz)	±5.00dB (3m); ±4.38dB (10m)
Radiated Emissions (Above 1GHz)	±5.12 dB (1GHz-6 GHz); ±5.38 dB (6GHz-18GHz); ±5.61dB(18GHz-40GHz)
Radiated Emissions which fall in the restricted bands	±5.00dB (30MHz-1GHz; 3m);±4.38dB (30MHz-1GHz; 10m);± 5.12dB (1GHz-6GHz);± 5.38dB (6GHz-18GHz);± 5.61dB (18GHz-40GHz)
Duty Cycle	± 0.37%
99% Bandwidth	± 3%
26dB Emission bandwidth	± 3%
Minimum 6 dB bandwidth (5.725-5.85 GHz band)	± 3%
Peak Power spectrum density	± 2.84dB
Frequency Stability	± 7.25 × 10 ⁻⁸
Remark:	The U_{lab} (lab Uncertainty) is less than U_{cisp} (CISPR Uncertainty) or U_{ETSI} (ETSI Uncertainty).
Emission decision rule:	
– Compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit, marked as Pass in the report.	
– Non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit, marked as Fail in the report.	

4.4 Test Location

All tests were performed at:

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

Tel: +86 20 82155555

No tests were sub-contracted.

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

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



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号

4.5 Test Facility

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

- **ACMA**

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

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

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

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

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

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

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

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

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

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

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

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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

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

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

5 Equipment List

Conducted Emissions at AC Power Line (150kHz-30MHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Coaxial Cable	HangTianXing	2m	EMC0107	2023-08-24	2025-08-23
Shielding Room	ChangZhou ZhongYu	8m x 3m x 3.8m	EMC0306	2022-10-16	2025-10-15
Two-Line V-Network-GZ	Rohde & Schwarz	ENV216	EMC2135	2023-09-08	2024-09-07
EMI Test Receiver (9kHz-3.6GHz)	Rohde & Schwarz	ESR3	EMC2221	2024-05-13	2025-05-12
Test Software E3r	Audix	Ver.6.11812	GZE100-77	N/A	N/A

Maximum Conducted output power					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
MI CABLE	SGS-EMC	0.8M	EMC2137	2023-11-02	2025-11-01
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2023-08-23	2024-08-22
4X4 Power sensor Unit	TST	TSPS2023R	EMC2226	2023-08-23	2024-08-22
Test Software	TST	V2.0	GZE100-78	N/A	N/A

Radiated Emissions (Below 1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2022-10-16	2025-10-15
Coaxial cable	Mirco-COAX UTIFLEX	311A	EMC0540	2023-06-14	2025-06-13
Amplifier (9kHz-1.3GHz)	HP	8447F	EMC2065	2024-06-17	2025-06-16
Active Loop Antenna-RED	ETS-Lindgren	6502	EMC2190	2024-04-08	2026-04-07
EMI Test Receiver (9kHz-7GHz)	Rohde & Schwarz	ESR7	EMC2220	2024-05-13	2025-05-12
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A
Trilog Broadband Antenna (25MHz-1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB 9168	EMC2174	2022-06-19	2025-06-18



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

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

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

Radiated Emissions (Above 1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2023-11-10	2024-11-09
EMI Test Receiver (10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2023-12-15	2024-12-14
Chamber cable (Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2022-08-24	2024-08-23
Horn Antenna (1GHz-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2022-09-23	2025-09-22
Horn Antenna (14-40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2023-06-18	2026-06-17
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2023-08-23	2024-08-22
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2023-12-20	2026-12-19
Notch Filter (5150-5880)	Mico-Tronics	BRM50716	EMC2168	2024-07-17	2025-07-16
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2023-08-21	2024-08-20
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

Radiated Emissions which fall in the restricted bands					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2023-11-10	2024-11-09
EMI Test Receiver (10Hz-26.5GHz)	Rohde & Schwarz	ESIB26	EMC0522	2023-12-15	2024-12-14
Chamber cable (Above 1GHz)	Scoflex	KMKM-8.0m	EMC0545	2022-08-24	2024-08-23
Horn Antenna (1GHz-18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2022-09-23	2025-09-22
Horn Antenna (14-40GHz)	SCHWARZBECK	BBHA 9170	EMC2041	2023-06-18	2026-06-17
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2023-08-23	2024-08-22
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2023-12-20	2026-12-19
Microwave Broadband Preamplifier (18-40GHz)	SCHWARZBECK	BBV 9721	EMC2172	2023-08-21	2024-08-20
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

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

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



RF Conducted Test

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
MI CABLE	SGS-EMC	0.8M	EMC2137	2023-11-02	2025-11-01
EXA Signal Analyzer (10Hz-44GHz)	Keysight	N9010A	EMC2138	2023-08-23	2024-08-22
4X4 Power sensor Unit	TST	TSPS2023R	EMC2226	2023-08-23	2024-08-22
Test Software	TST	V2.0	GZE100-78	N/A	N/A
Temperature Chamber	GZ GongWen Co.Ltd.	GDJW-100	EMC0039	2024-06-17	2025-06-16
MXG Vector Signal Generator	Keysight	N5182B	EMC2216	2023-11-10	2024-11-09

General used equipment

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2024-06-13	2025-06-12

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

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



6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement.

The best case gain of the antenna is 3.35dBi for antenna 1; 3.08dBi for antenna 2; the directional gain is 6.36dBi.

$$\text{Directional gain} = 10 \log \left[\left(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20} \right)^2 / N_{\text{ANT}} \right] \text{dBi}$$

Antenna location: Refer to internal photo.



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

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

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

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart E 15.407 (c)

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detects absence of information to transmit or operational failure, it will be automatically shut off.



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

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

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

7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(9)

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 23.0 °C Humidity: 55.8 % RH Atmospheric Pressure: 1004 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Pre-scan	01	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Pre-scan	02	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Pre-scan	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

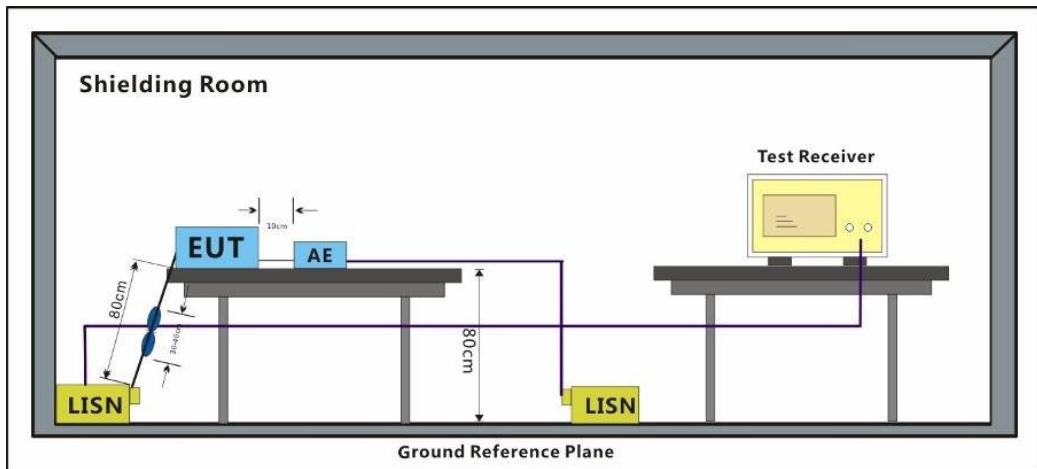
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50µH + 50hm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

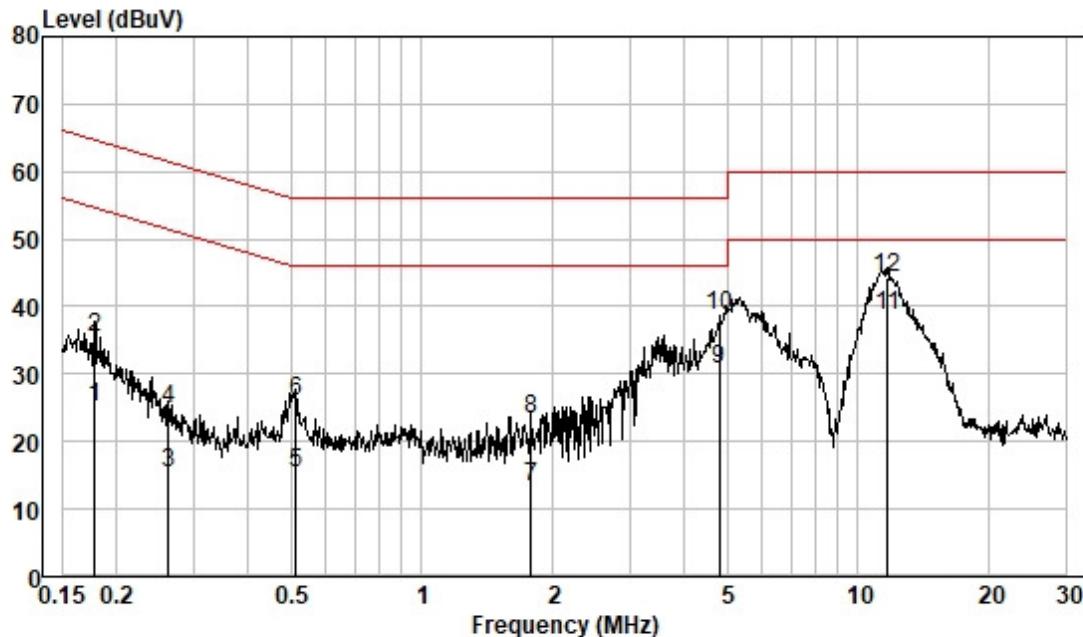
Remark: Level=Read Level+ Cable Loss+ LISN Factor



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443

Test Mode: 00; Line: Live line



Pol :LINE

Mode :RT

Model :7747TA

Power :

	Read	Cable	LISN	Measured	Limit	Over	
Frequenc	Level	Loss	Factor	Level	Line	Limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.178	15.43	0.04	9.55	25.02	54.59	-29.57
2	0.178	25.88	0.04	9.55	35.47	64.59	-29.12
3	0.263	5.66	0.04	9.56	15.26	51.34	-36.08
4	0.263	15.06	0.04	9.56	24.66	61.34	-36.68
5	0.516	5.80	0.05	9.56	15.41	46.00	-30.59
6	0.516	16.27	0.05	9.56	25.88	56.00	-30.12
7	1.781	3.49	0.12	9.57	13.18	46.00	-32.82
8	1.781	13.62	0.12	9.57	23.31	56.00	-32.69
9	4.797	20.92	0.19	9.62	30.73	46.00	-15.27
10	4.797	28.75	0.19	9.62	38.56	56.00	-17.44
11	11.683	28.60	0.28	9.79	38.67	50.00	-11.33
12	11.683	34.22	0.28	9.79	44.29	60.00	-15.71

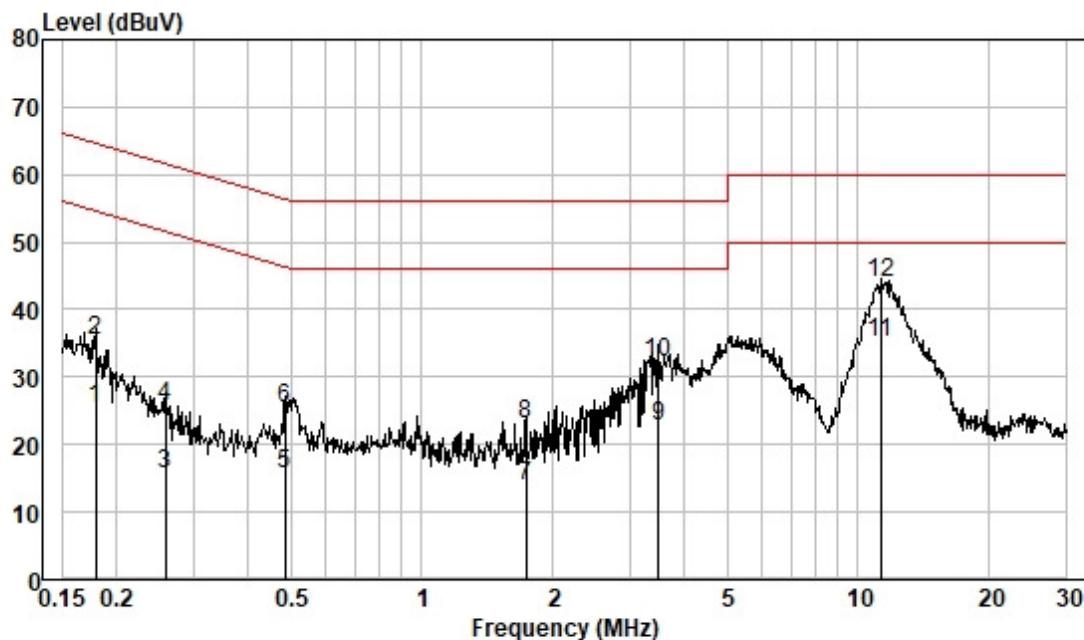


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 www.sgsgroup.com.cn
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

Test Mode: 00; Line: Neutral Line



Pol : NEUTRAL

Mode : RT

Model : 7747TA

Power :

	Frequency	Read Level	Cable Loss	LISN Factor	Measured Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.179	15.68	0.04	9.52	25.24	54.55	-29.31	Average
2	0.179	25.81	0.04	9.52	35.37	64.55	-29.18	QP
3	0.259	6.17	0.04	9.53	15.74	51.47	-35.73	Average
4	0.259	16.01	0.04	9.53	25.58	61.47	-35.89	QP
5	0.486	6.11	0.05	9.54	15.70	46.23	-30.53	Average
6	0.486	15.92	0.05	9.54	25.51	56.23	-30.72	QP
7	1.734	4.26	0.11	9.55	13.92	46.00	-32.08	Average
8	1.734	13.49	0.11	9.55	23.15	56.00	-32.85	QP
9	3.491	12.84	0.17	9.58	22.59	46.00	-23.41	Average
10	3.491	22.44	0.17	9.58	32.19	56.00	-23.81	QP
11	11.257	25.06	0.27	9.78	35.11	50.00	-14.89	Average
12	11.257	33.87	0.27	9.78	43.92	60.00	-16.08	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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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



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

7.2 Maximum Conducted output power

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	$\leq 1W(30dBm)$ for master device
	$\leq 250mW(24dBm)$ for client device
5250-5350	$\leq 250mW(24dBm)$ or $11dBm+10\log B^*$
5470-5725	$\leq 250mW(24dBm)$ or $11dBm+10\log B^*$
5725-5850	$\leq 1W(30dBm)$
Remark:	<p>* Where B is the 26dB emission bandwidth in MHz.</p> <p>The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.</p>

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 21.1 °C Humidity: 53.0 % RH Atmospheric Pressure: 1003 mbar

7.2.2 Test Mode Description

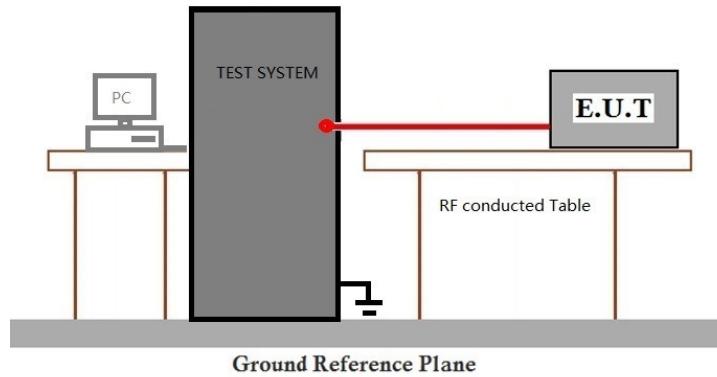
Pre-scan / Final test	Mode / Code	Description
Final test	00	TX mode (U-NII-1) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

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

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



7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

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

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



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing & EEC Laboratory

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

7.3 Radiated Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: KDB 789033 D02 II G

Test Distance: 3 m for 30MHz to 1GHz; 10 m for 9kHz to 30 MHz

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

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 24.5 °C Humidity: 57.4 % RH Atmospheric Pressure: 1003 mbar

7.3.2 Test Mode Description

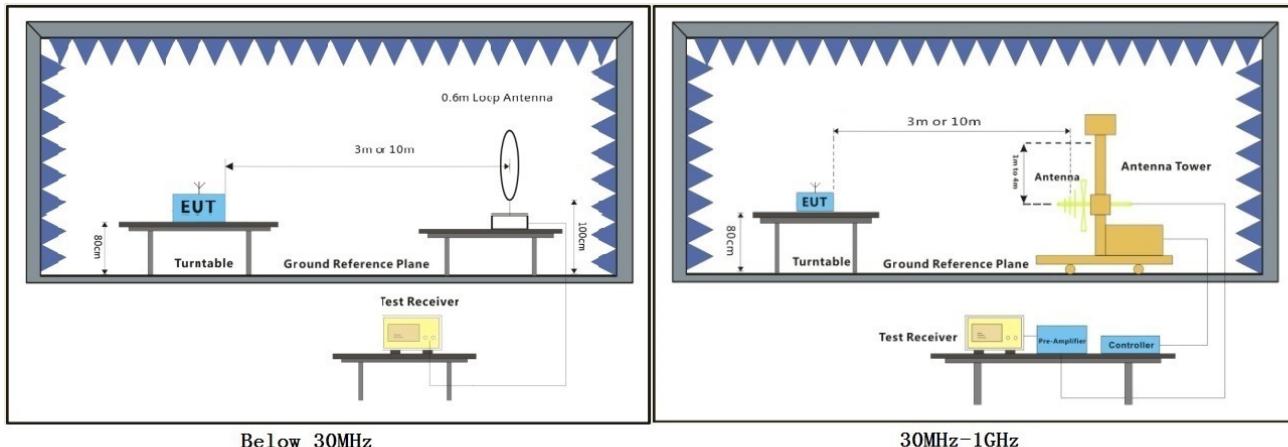
Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Pre-scan	01	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Pre-scan	02	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Pre-scan	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

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

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



7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 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.
- 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.
- 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.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 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 quasi-peak method as specified and then reported in a data sheet.
- Test the EUT in the lowest channel, the middle channel, the Highest channel.
- 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.
- Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of 802.11a. Only the worst case is recorded in the report.
3. Scan from 9kHz to 30MHz, 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.
4. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

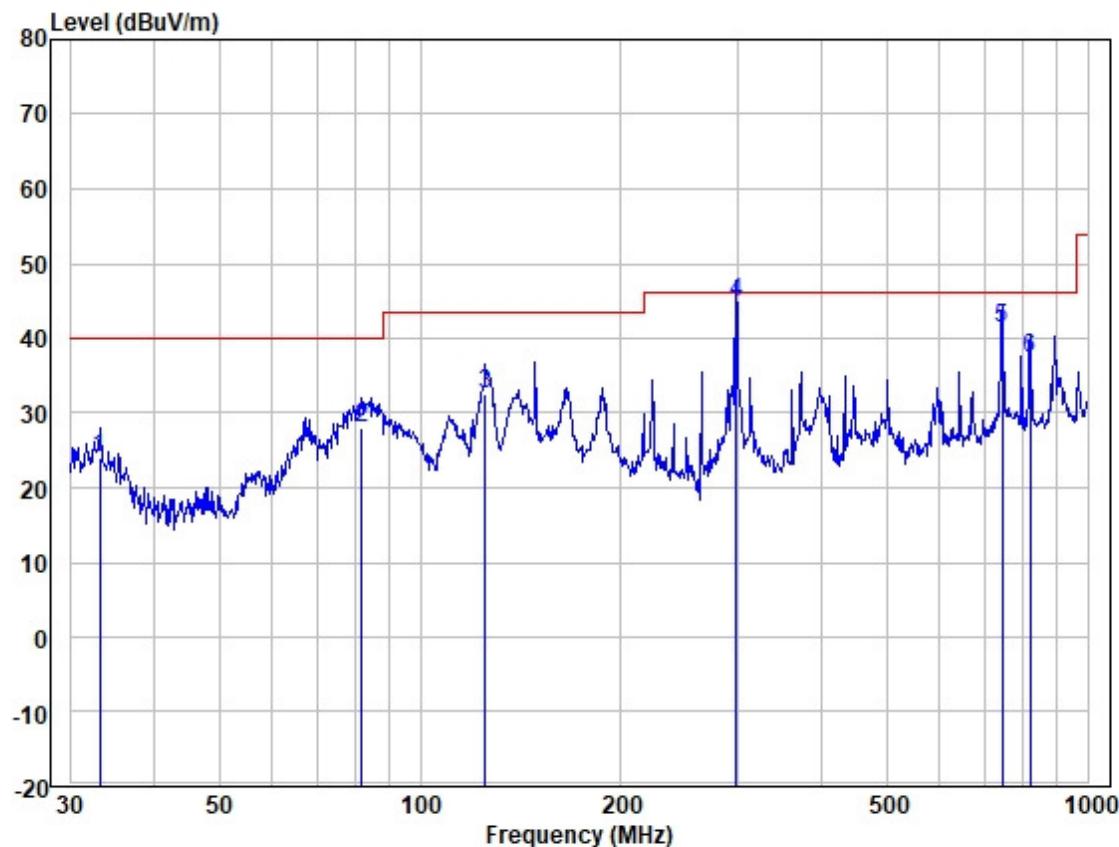
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Body EEC Laboratory

Test Mode: 00; Polarity: Horizontal



Site : 966 Chamber
Job :
Model : 7747TA
Power :
Test Mode : 5G

Freq	Read	Antena	Cable	Preamp	Measured	Limit	Over	Pol/	Remark
	Level	Factor	Loss	Factor	Level	Line	Limit	Phase	
1 33.095	38.65	17.79	0.31	32.85	23.90	40.00	-16.10	HORIZONTAL	QP
2 81.783	45.36	14.98	0.50	32.82	28.02	40.00	-11.98	HORIZONTAL	QP
3 125.007	47.05	17.69	0.61	32.81	32.54	43.52	-10.98	HORIZONTAL	QP
4 297.224	57.38	19.19	0.98	32.88	44.67	46.02	-1.35	HORIZONTAL	QP
5 744.866	44.20	27.97	1.59	32.47	41.29	46.02	-4.73	HORIZONTAL	QP
6 818.834	39.75	28.19	1.67	32.40	37.21	46.02	-8.81	HORIZONTAL	QP

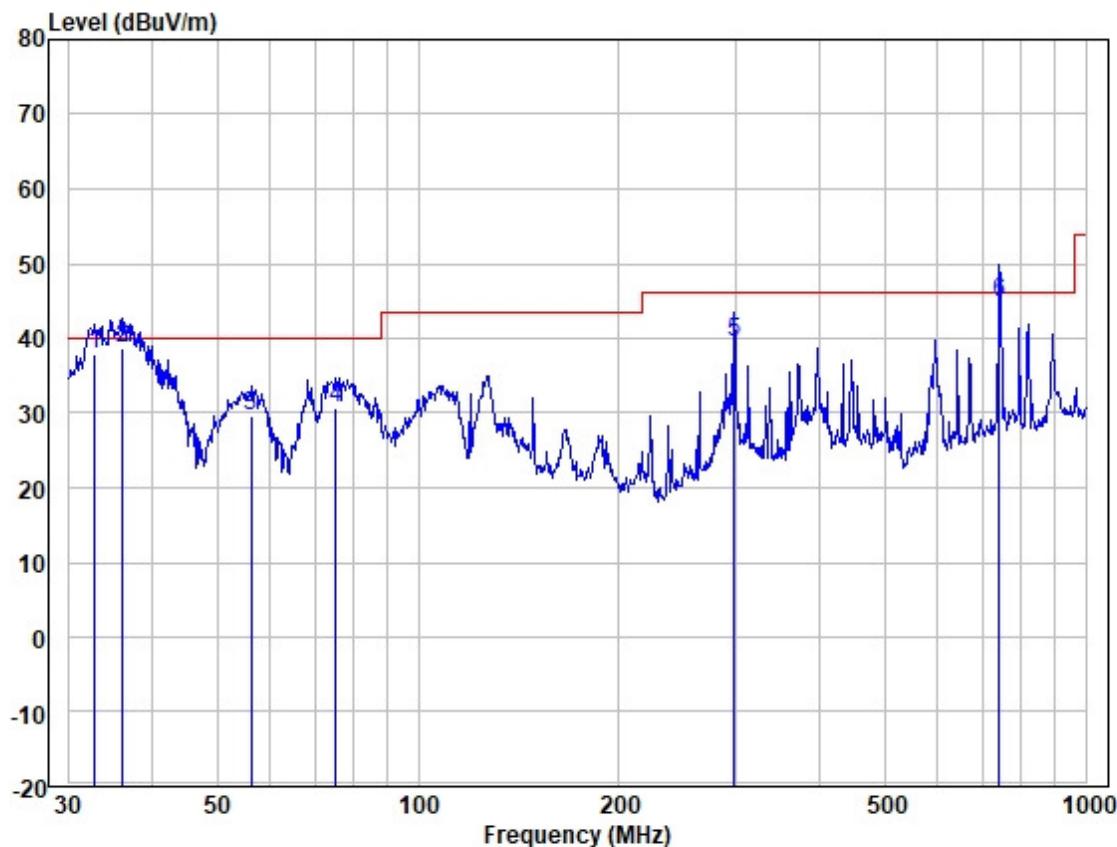


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 www.sgsgroup.com.cn
SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

Test Mode: 00; Polarity: Vertical



Site : 966 Chamber
Job :
Model : 7747TA
Power :
Test Mode : 5G

Freq	Read	Antena	Cable	Preamp	Measured	Limit	Over	Pol/	Remark
	Level	Factor	Loss	Factor	Level	Line	Limit	Phase	
1	32.864	52.64	17.79	0.31	32.85	37.89	40.00	-2.11	VERTICAL QP
2	36.127	52.78	18.39	0.33	32.86	38.64	40.00	-1.36	VERTICAL QP
3	56.197	42.91	19.18	0.40	32.87	29.62	40.00	-10.38	VERTICAL QP
4	75.446	47.03	16.07	0.48	32.84	30.74	40.00	-9.26	VERTICAL QP
5	297.224	52.24	19.19	0.98	32.88	39.53	46.02	-6.49	VERTICAL QP
6	742.259	47.89	27.81	1.58	32.48	44.80	46.02	-1.22	VERTICAL 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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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



SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 www.sgsgroup.com.cn
SGS-CSTC Standards Technical Services Co., Ltd. EEC Laboratory
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

7.4 Radiated Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: KDB 789033 D02 II G

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
Above 1GHz	500	3

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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.

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 25.2 °C

Humidity: 59.8 % RH

Atmospheric Pressure: 1003 mbar



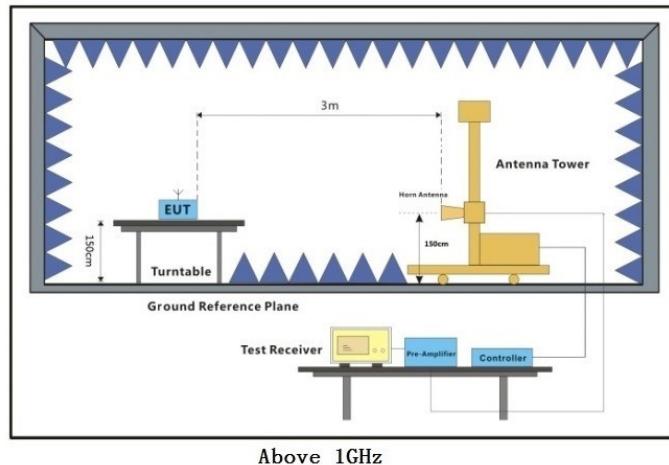
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

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

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode (U-NII-1) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	01	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

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

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



7.4.4 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 (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 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:

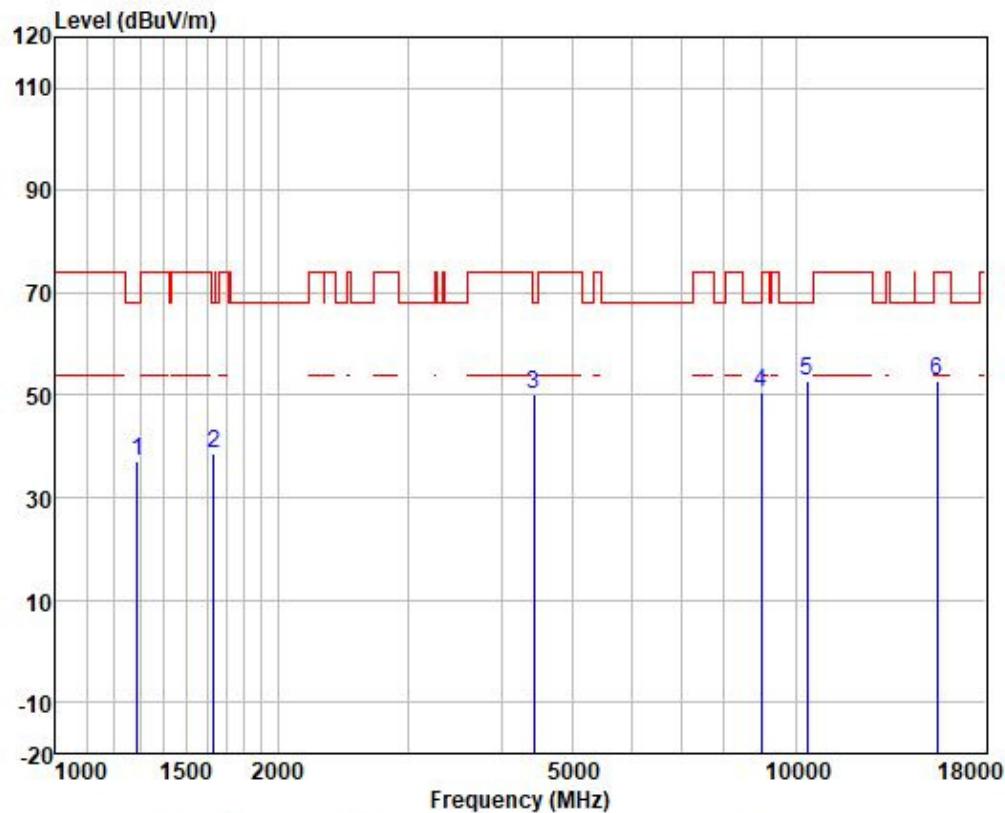
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, 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.
4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
5. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.



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

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

Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Freq	Read	Antenna	Cable	Preamp	Limit	Over	Over	Pol/Phase	Remark
	Level	Factor	Loss	Factor					
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1289.627	48.02	23.92	2.62	37.62	36.94	68.20	-31.26	VERTICAL peak
2	1634.543	47.99	24.81	3.14	37.42	38.52	68.20	-29.68	VERTICAL peak
3	4430.628	47.05	33.87	5.79	36.63	50.08	68.20	-18.12	VERTICAL peak
4	8995.123	41.98	37.59	7.77	36.90	50.44	68.20	-17.76	VERTICAL peak
5	10360.000	41.58	39.64	8.35	36.78	52.79	68.20	-15.41	VERTICAL peak
6	15540.000	40.69	38.33	10.16	36.51	52.67	74.00	-21.33	VERTICAL peak

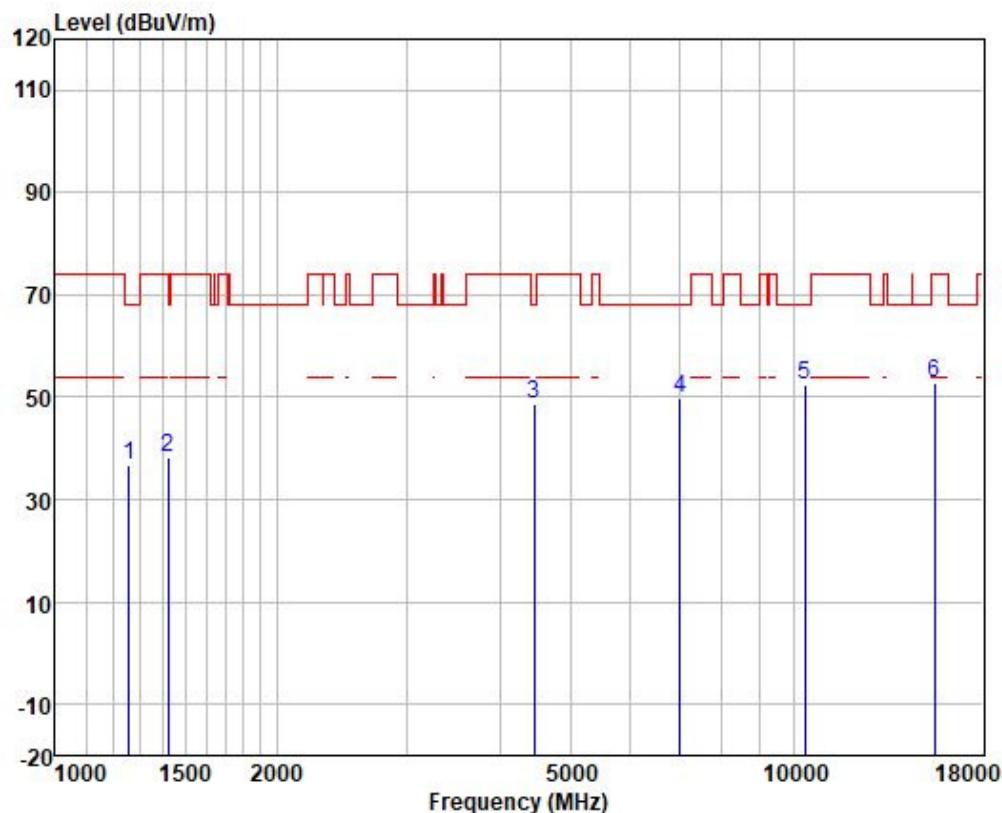
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Freq	Read	Antenna	Cable	Preamp	Limit	Over	Limit	Over	Pol/Phase	Remark
	MHz	Level	Factor	Loss						
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1260.149	48.18	23.76	2.59	37.63	36.90	68.20	-31.30	HORIZONTAL	peak
2	1422.798	48.52	24.31	2.88	37.55	38.16	74.00	-35.84	HORIZONTAL	peak
3	4456.315	45.69	34.00	5.80	36.63	48.86	68.20	-19.34	HORIZONTAL	peak
4	7015.420	44.03	35.15	7.51	36.90	49.79	68.20	-18.41	HORIZONTAL	peak
5	10360.000	41.30	39.64	8.35	36.78	52.51	68.20	-15.69	HORIZONTAL	peak
6	15540.000	40.96	38.33	10.16	36.51	52.94	74.00	-21.06	HORIZONTAL	peak

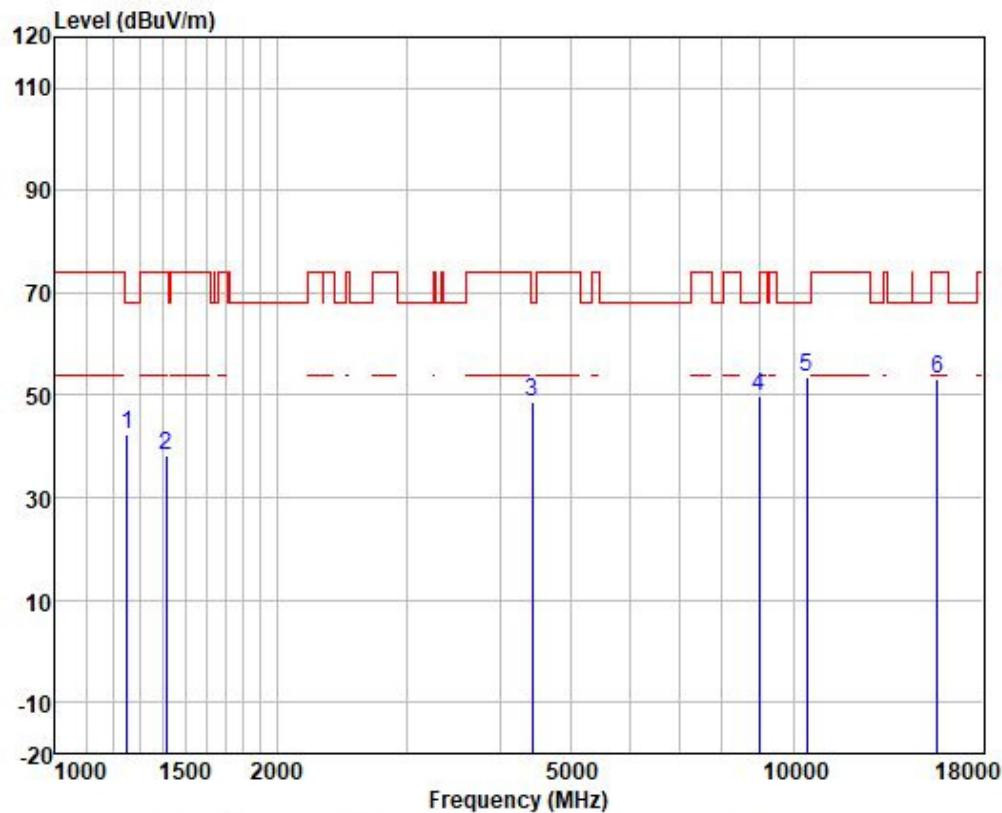
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1252.885	53.63	23.71	2.59	37.63	42.30	68.20	-25.90 VERTICAL peak
2 1414.597	48.81	24.29	2.86	37.56	38.40	74.00	-35.60 VERTICAL peak
3 4430.628	45.64	33.87	5.79	36.63	48.67	68.20	-19.53 VERTICAL peak
4 8995.123	41.44	37.59	7.77	36.90	49.90	68.20	-18.30 VERTICAL peak
5 10440.000	42.18	39.79	8.39	36.77	53.59	68.20	-14.61 VERTICAL peak
6 15660.000	41.69	38.01	10.22	36.57	53.35	74.00	-20.65 VERTICAL peak

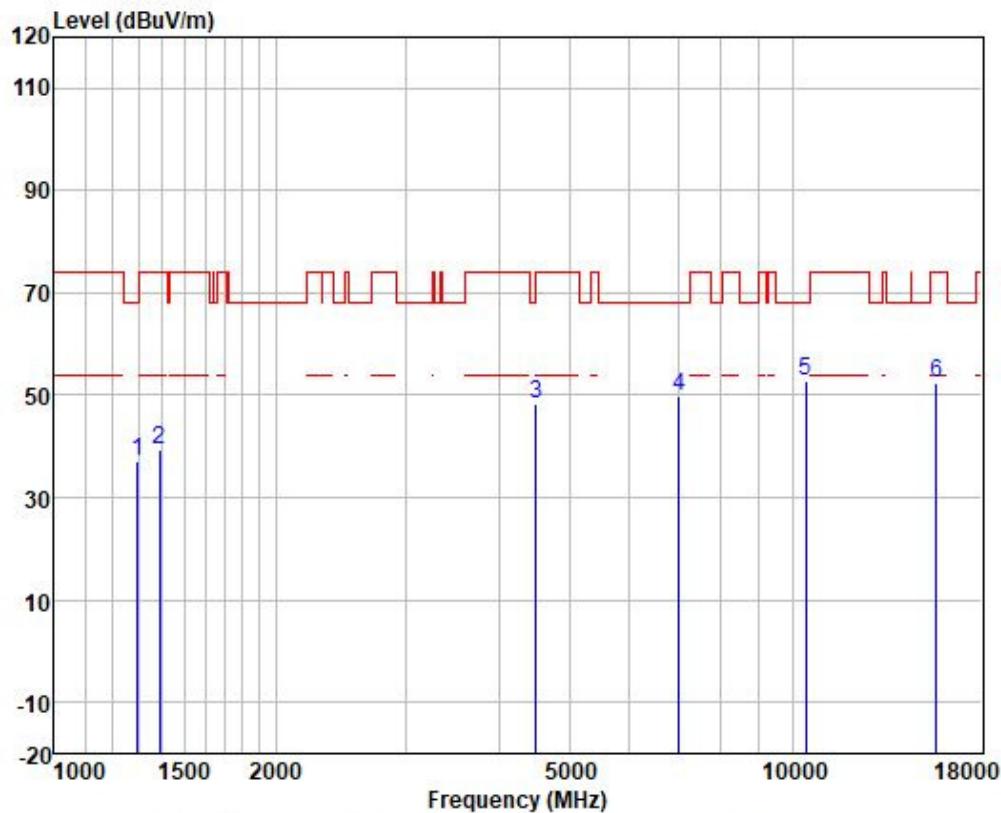


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

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

Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Freq MHz	Level Factor	Loss Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dB	
1 1297.103	48.15	23.96	2.63	37.61	37.13	68.20	-31.07 HORIZONTAL peak
2 1390.276	49.77	24.24	2.78	37.57	39.22	74.00	-34.78 HORIZONTAL peak
3 4495.125	45.09	34.17	5.81	36.63	48.44	68.20	-19.76 HORIZONTAL peak
4 7015.420	44.17	35.15	7.51	36.90	49.93	68.20	-18.27 HORIZONTAL peak
5 10440.000	41.51	39.79	8.39	36.77	52.92	68.20	-15.28 HORIZONTAL peak
6 15660.000	40.70	38.01	10.22	36.57	52.36	74.00	-21.64 HORIZONTAL peak

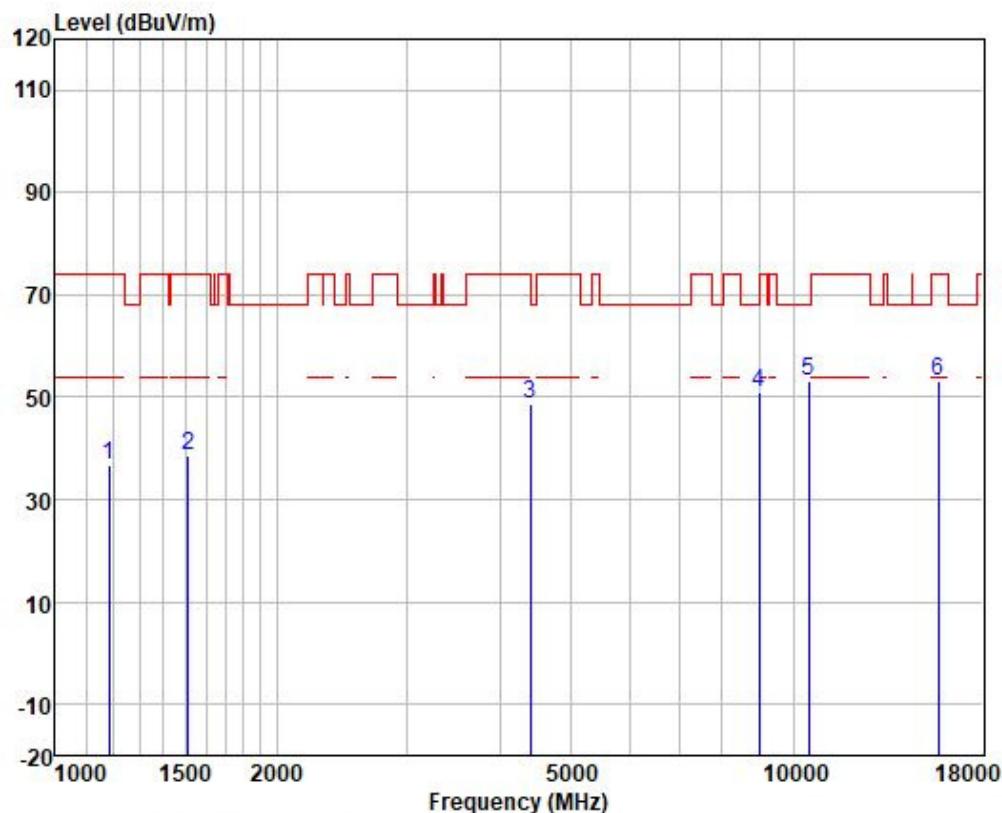
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Freq MHz	Level Factor	Loss Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m
1	1182.513	48.82	23.04	2.54	37.65	36.75	74.00 -37.25 VERTICAL peak
2	1516.210	48.48	24.47	3.05	37.50	38.50	74.00 -35.50 VERTICAL peak
3	4405.090	45.76	33.74	5.78	36.62	48.66	68.20 -19.54 VERTICAL peak
4	8995.123	42.45	37.59	7.77	36.90	50.91	68.20 -17.29 VERTICAL peak
5	10480.000	41.75	39.84	8.41	36.77	53.23	68.20 -14.97 VERTICAL peak
6	15720.000	41.51	37.89	10.24	36.60	53.04	74.00 -20.96 VERTICAL peak

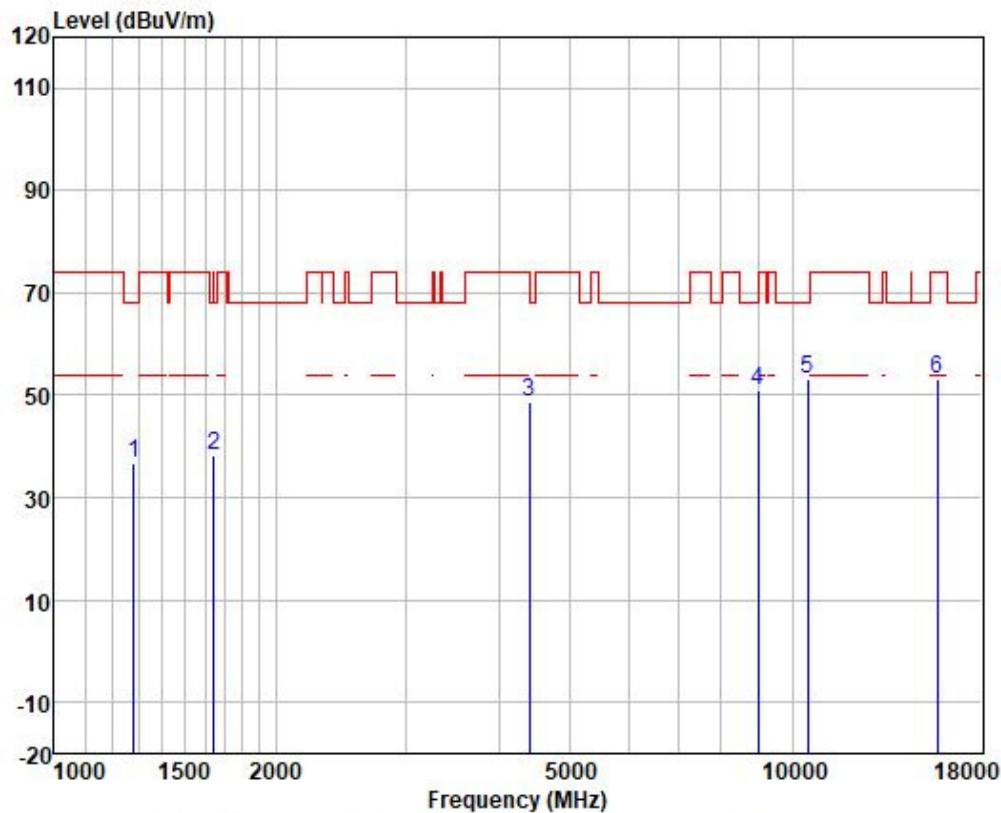
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line dBuV/m	Over Limit dB	Over Limit Pol/Phase	Remark
	Level Factor	Loss Factor	Level dB				
MHz	dBuV	dB/m	dB	dBuV/m	dB		
1 1282.193	47.73	23.89	2.62	37.62	36.62	68.20	-31.58 HORIZONTAL peak
2 1644.019	47.83	24.84	3.15	37.42	38.40	68.20	-29.80 HORIZONTAL peak
3 4405.090	45.74	33.74	5.78	36.62	48.64	68.20	-19.56 HORIZONTAL peak
4 8995.123	42.64	37.59	7.77	36.90	51.10	68.20	-17.10 HORIZONTAL peak
5 10480.000	41.54	39.84	8.41	36.77	53.02	68.20	-15.18 HORIZONTAL peak
6 15720.000	41.49	37.89	10.24	36.60	53.02	74.00	-20.98 HORIZONTAL peak

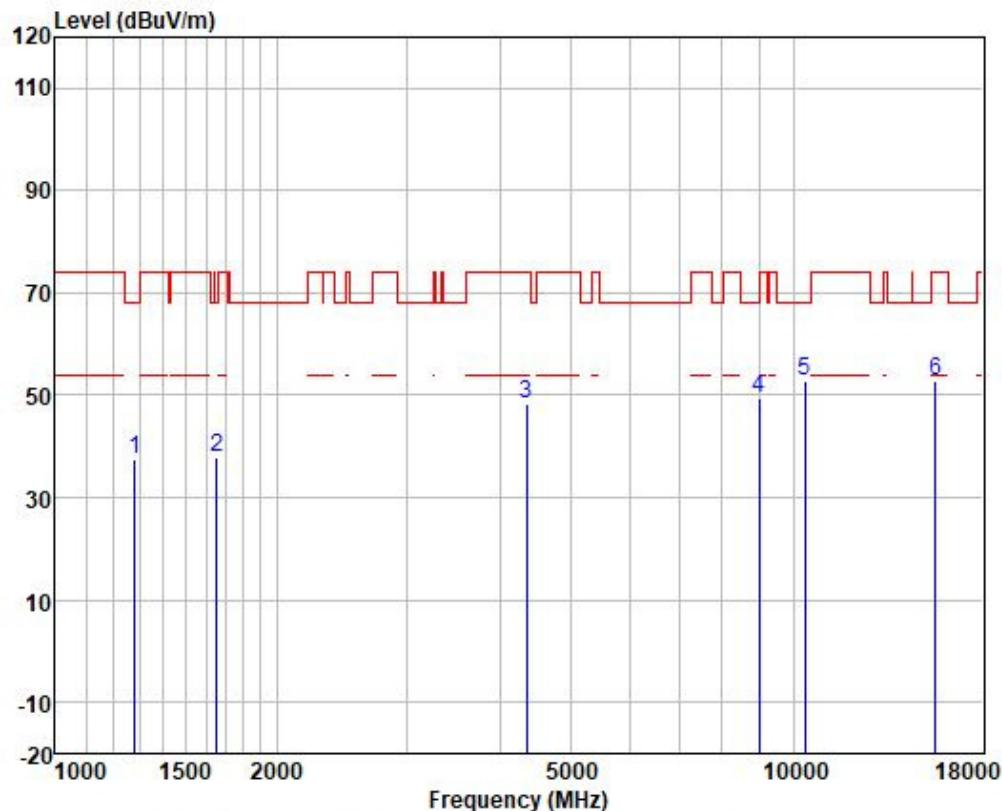
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1282.193	48.42	23.89	2.62	37.62	37.31	68.20	-30.89 VERTICAL peak
2 1653.550	47.08	24.89	3.16	37.41	37.72	68.20	-30.48 VERTICAL peak
3 4354.454	45.87	33.43	5.78	36.62	48.46	74.00	-25.54 VERTICAL peak
4 8995.123	41.13	37.59	7.77	36.90	49.59	68.20	-18.61 VERTICAL peak
5 10380.000	41.69	39.69	8.37	36.78	52.97	68.20	-15.23 VERTICAL peak
6 15570.000	41.01	38.23	10.18	36.53	52.89	74.00	-21.11 VERTICAL peak

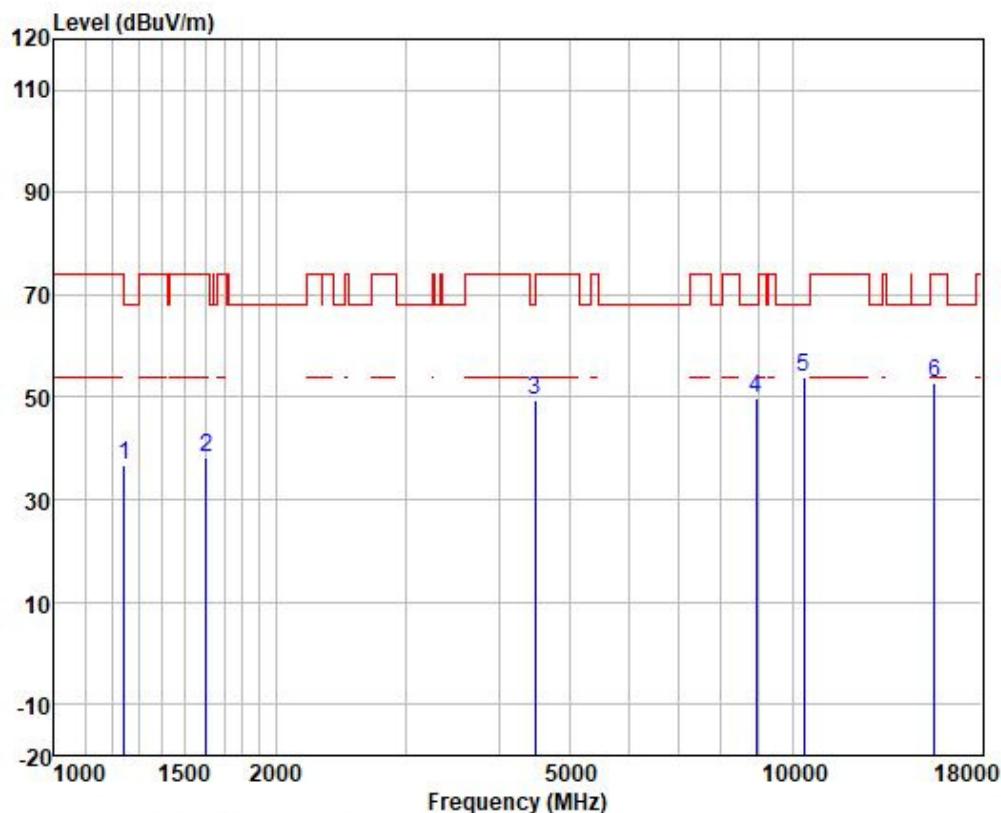
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Freq MHz	Read Antenna Level dBuV	Antenna Factor	Cable Loss dB	Preamp Factor	Line Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Over Limit Pol/Phase	Remark
	MHz	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1 1245.663	47.97	23.65	2.58	37.63	36.57	68.20	-31.63	HORIZONTAL	peak
2 1606.441	48.02	24.71	3.13	37.44	38.42	74.00	-35.58	HORIZONTAL	peak
3 4482.150	46.14	34.12	5.80	36.63	49.43	68.20	-18.77	HORIZONTAL	peak
4 8943.274	41.34	37.50	7.77	36.91	49.70	68.20	-18.50	HORIZONTAL	peak
5 10380.000	42.57	39.69	8.37	36.78	53.85	68.20	-14.35	HORIZONTAL	peak
6 15570.000	40.85	38.23	10.18	36.53	52.73	74.00	-21.27	HORIZONTAL	peak

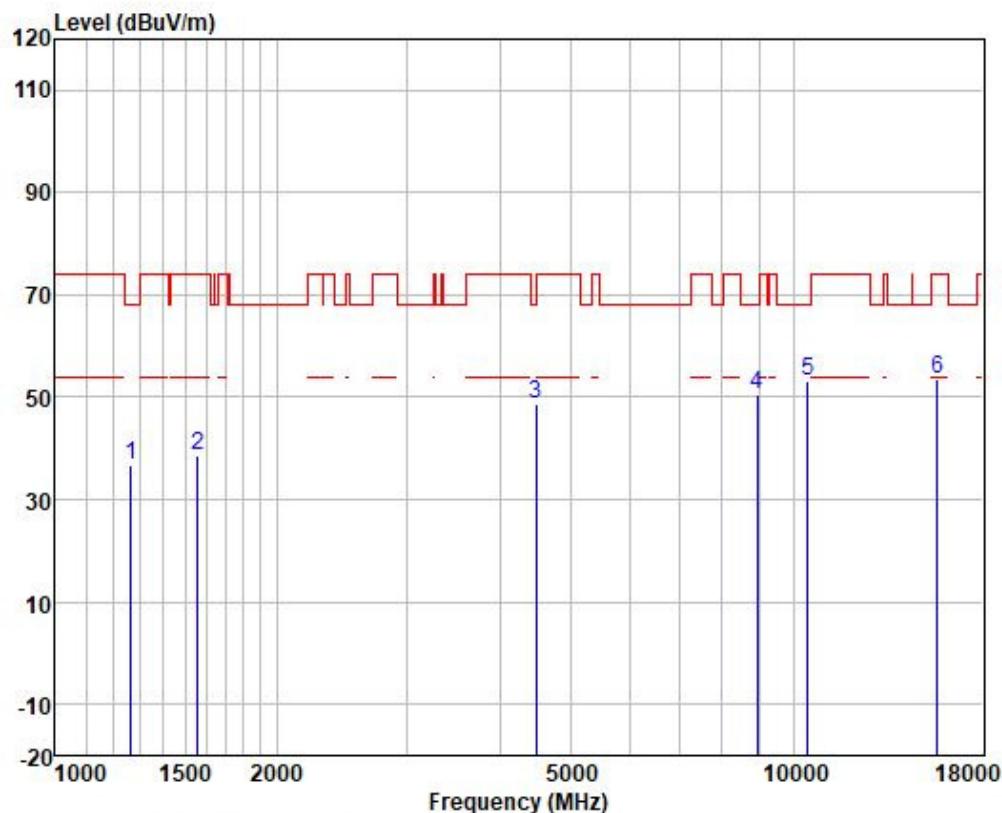
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Freq MHz	Level Factor	Loss Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB
1	1267.454	47.89	23.81	2.60	37.63	36.67	68.20 -31.53 VERTICAL peak
2	1560.673	48.37	24.57	3.09	37.47	38.56	74.00 -35.44 VERTICAL peak
3	4482.150	45.25	34.12	5.80	36.63	48.54	68.20 -19.66 VERTICAL peak
4	8943.274	42.19	37.50	7.77	36.91	50.55	68.20 -17.65 VERTICAL peak
5	10460.000	41.94	39.79	8.39	36.77	53.35	68.20 -14.85 VERTICAL peak
6	15690.000	41.83	38.01	10.22	36.59	53.47	74.00 -20.53 VERTICAL peak

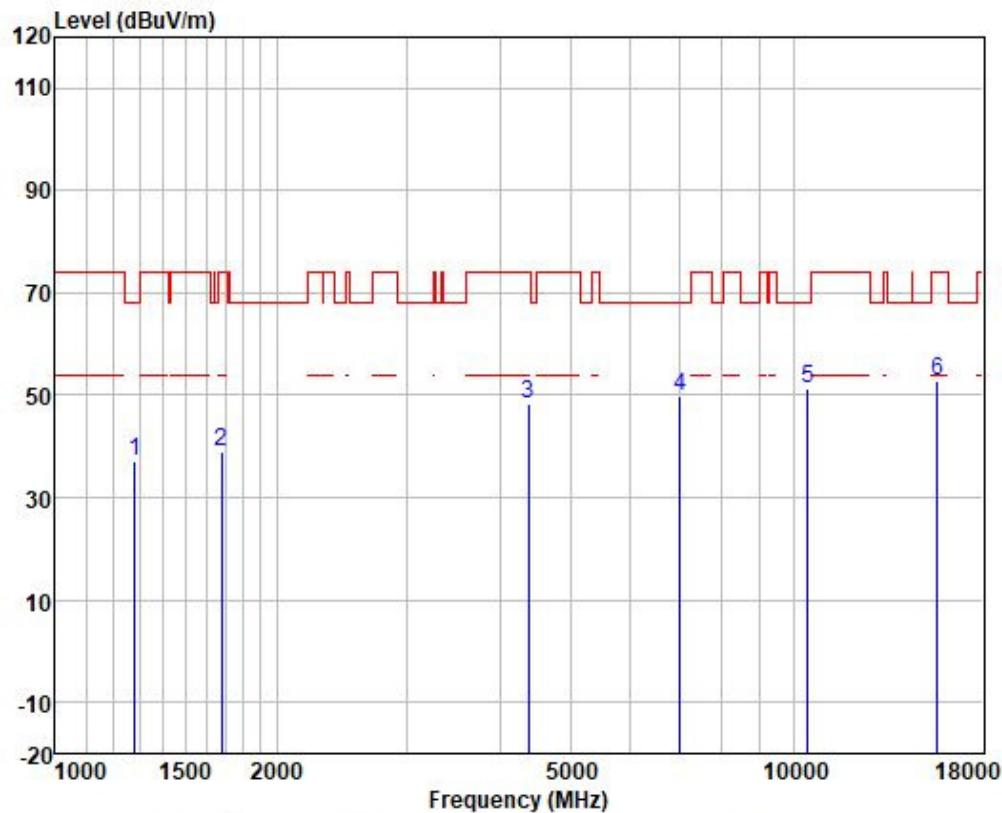
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line dBuV/m	Over Limit dB	Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1282.193	48.17	23.89	2.62	37.62	37.06	68.20	-31.14 HORIZONTAL peak
2 1682.477	48.19	25.03	3.17	37.40	38.99	74.00	-35.01 HORIZONTAL peak
3 4379.699	45.64	33.59	5.78	36.62	48.39	74.00	-25.61 HORIZONTAL peak
4 7015.420	44.13	35.15	7.51	36.90	49.89	68.20	-18.31 HORIZONTAL peak
5 10460.000	39.97	39.79	8.39	36.77	51.38	68.20	-16.82 HORIZONTAL peak
6 15690.000	41.19	38.01	10.22	36.59	52.83	74.00	-21.17 HORIZONTAL peak

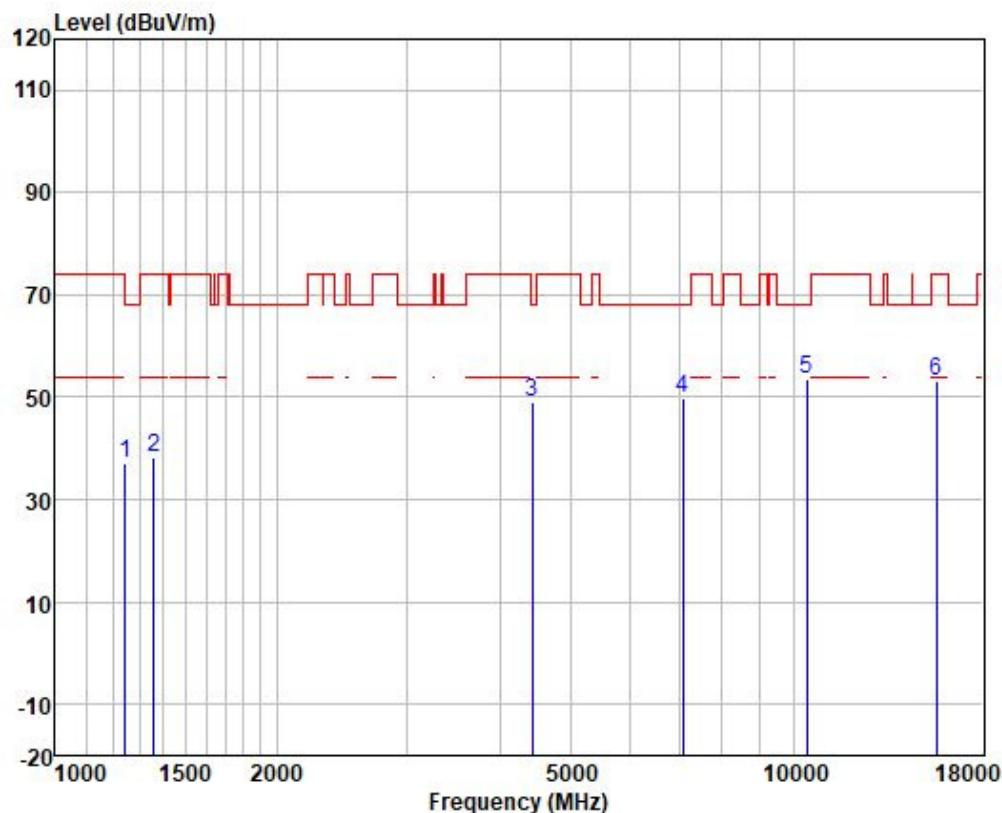
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1245.663	48.41	23.65	2.58	37.63	37.01	68.20	-31.19 VERTICAL peak
2 1358.498	48.87	24.16	2.71	37.59	38.15	74.00	-35.85 VERTICAL peak
3 4430.628	46.03	33.87	5.79	36.63	49.06	68.20	-19.14 VERTICAL peak
4 7076.516	43.97	35.28	7.52	36.91	49.86	68.20	-18.34 VERTICAL peak
5 10420.000	42.15	39.74	8.38	36.78	53.49	68.20	-14.71 VERTICAL peak
6 15630.000	41.39	38.13	10.20	36.56	53.16	74.00	-20.84 VERTICAL peak

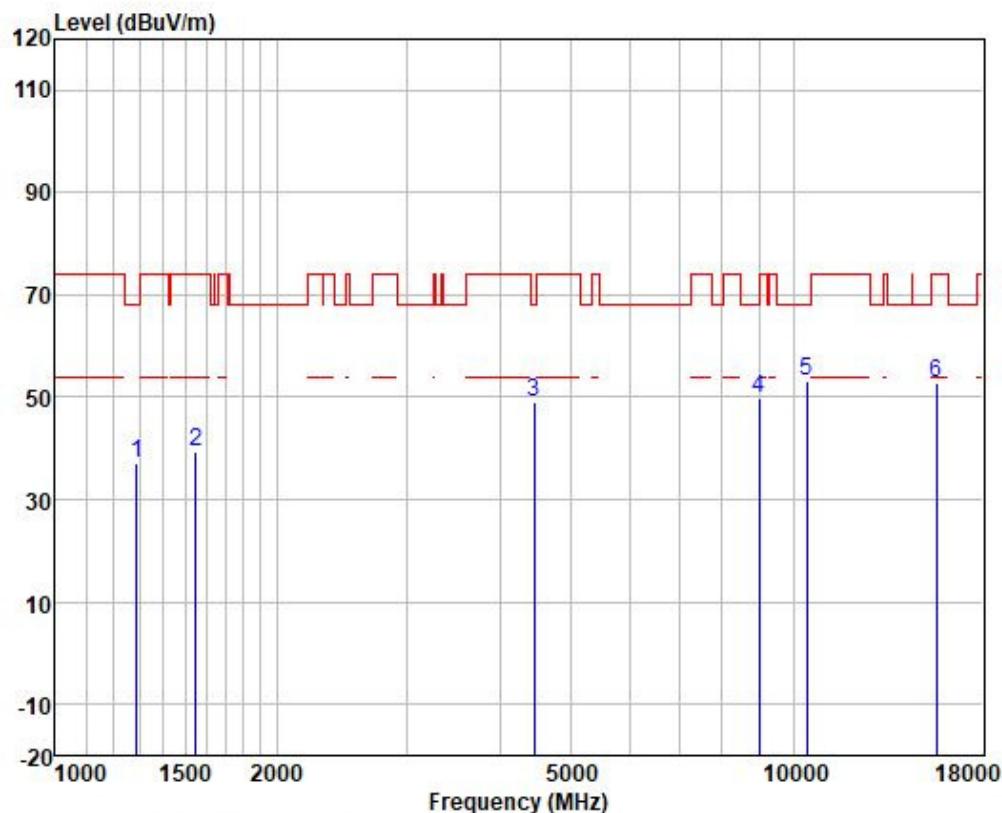
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 00; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Freq MHz	Level Factor	Loss Factor				
	MHz	dBuV	dB/m	dB	dBuV/m	dBuV/m	dB
1	1289.627	48.33	23.92	2.62	37.62	37.25	68.20 -30.95 HORIZONTAL peak
2	1551.677	49.14	24.55	3.09	37.47	39.31	74.00 -34.69 HORIZONTAL peak
3	4456.315	45.76	34.00	5.80	36.63	48.93	68.20 -19.27 HORIZONTAL peak
4	8995.123	41.40	37.59	7.77	36.90	49.86	68.20 -18.34 HORIZONTAL peak
5	10420.000	41.70	39.74	8.38	36.78	53.04	68.20 -15.16 HORIZONTAL peak
6	15630.000	41.14	38.13	10.20	36.56	52.91	74.00 -21.09 HORIZONTAL peak

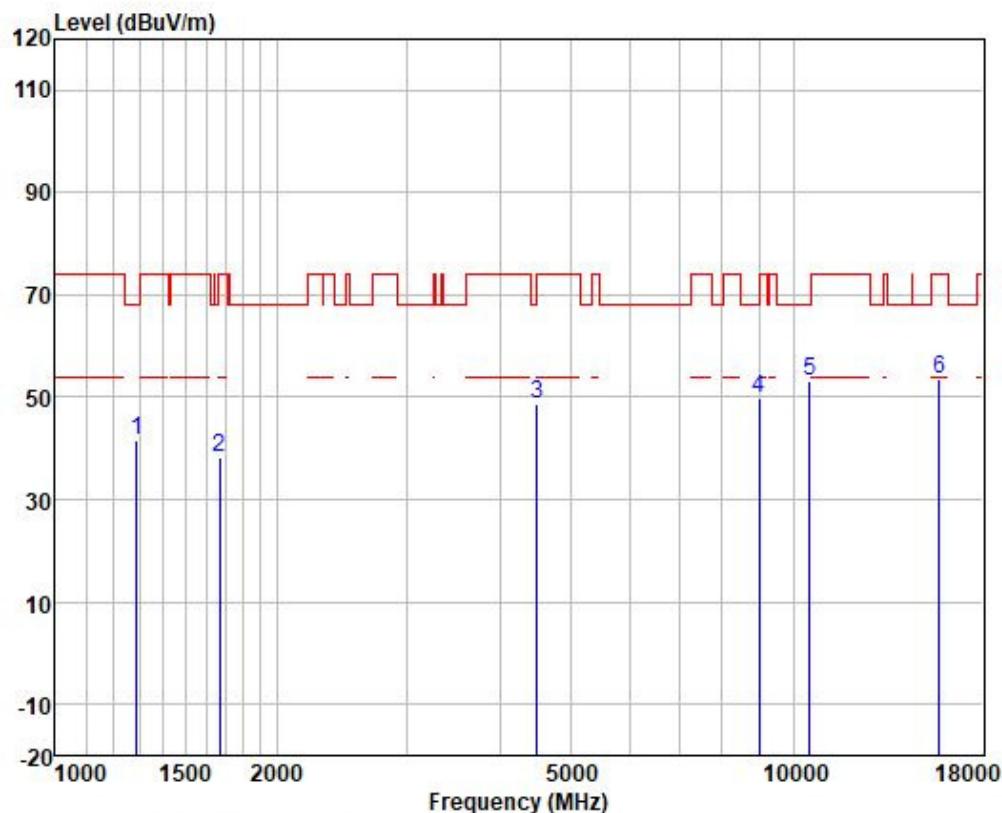
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level Factor	Loss Factor	Level dB	dBuV/m	dBuV/m	dB	
1 1289.627	52.55	23.92	2.62	37.62	41.47	68.20	-26.73 VERTICAL peak
2 1672.779	47.43	24.98	3.17	37.41	38.17	74.00	-35.83 VERTICAL peak
3 4495.125	45.37	34.17	5.81	36.63	48.72	68.20	-19.48 VERTICAL peak
4 8995.123	41.32	37.59	7.77	36.90	49.78	68.20	-18.42 VERTICAL peak
5 10520.000	41.66	39.88	8.43	36.77	53.20	68.20	-15.00 VERTICAL peak
6 15780.000	42.11	37.75	10.26	36.63	53.49	74.00	-20.51 VERTICAL peak

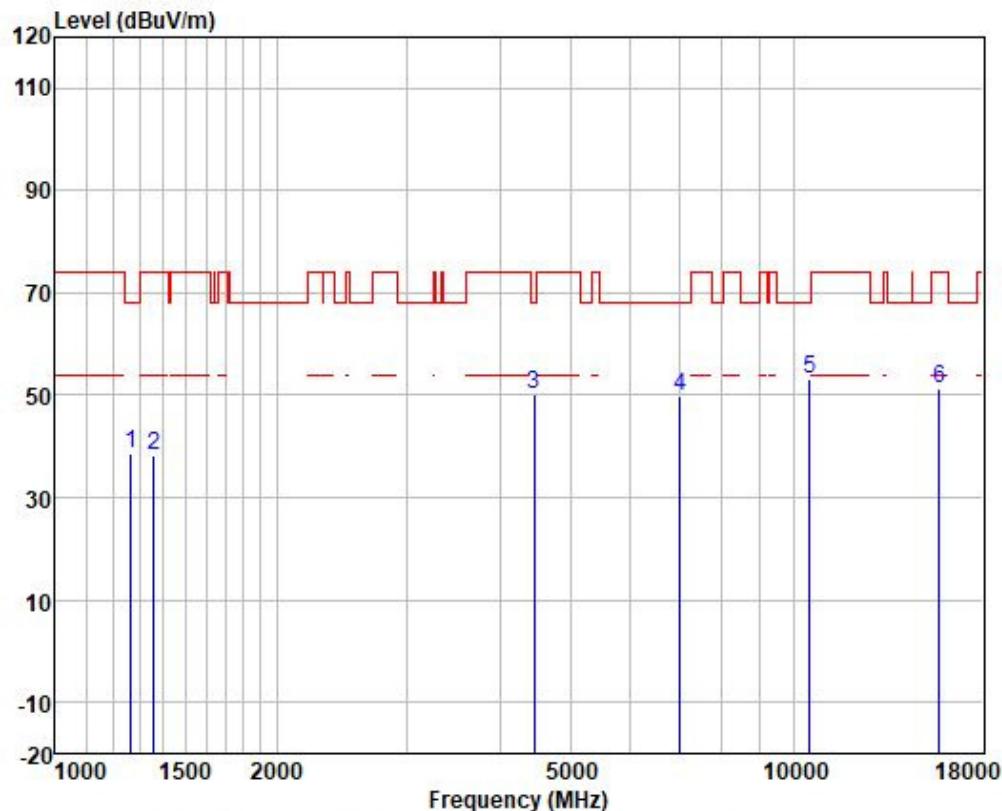
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Freq MHz	Read Freq MHz	Antenna Level dBuV	Cable Loss dB	Preamp Factor	Limit Level dBuV/m	Over Line dB	Over Limit dB	Pol/Phase	Remark
		dB/m		dB	dBuV/m				
1 1267.454	1267.454	49.78	23.81	2.60	37.63	38.56	68.20	-29.64	HORIZONTAL peak
2 1358.498	1358.498	49.03	24.16	2.71	37.59	38.31	74.00	-35.69	HORIZONTAL peak
3 4456.315	4456.315	47.02	34.00	5.80	36.63	50.19	68.20	-18.01	HORIZONTAL peak
4 7015.420	7015.420	44.22	35.15	7.51	36.90	49.98	68.20	-18.22	HORIZONTAL peak
5 10520.000	10520.000	41.50	39.88	8.43	36.77	53.04	68.20	-15.16	HORIZONTAL peak
6 15780.000	15780.000	39.78	37.75	10.26	36.63	51.16	74.00	-22.84	HORIZONTAL peak

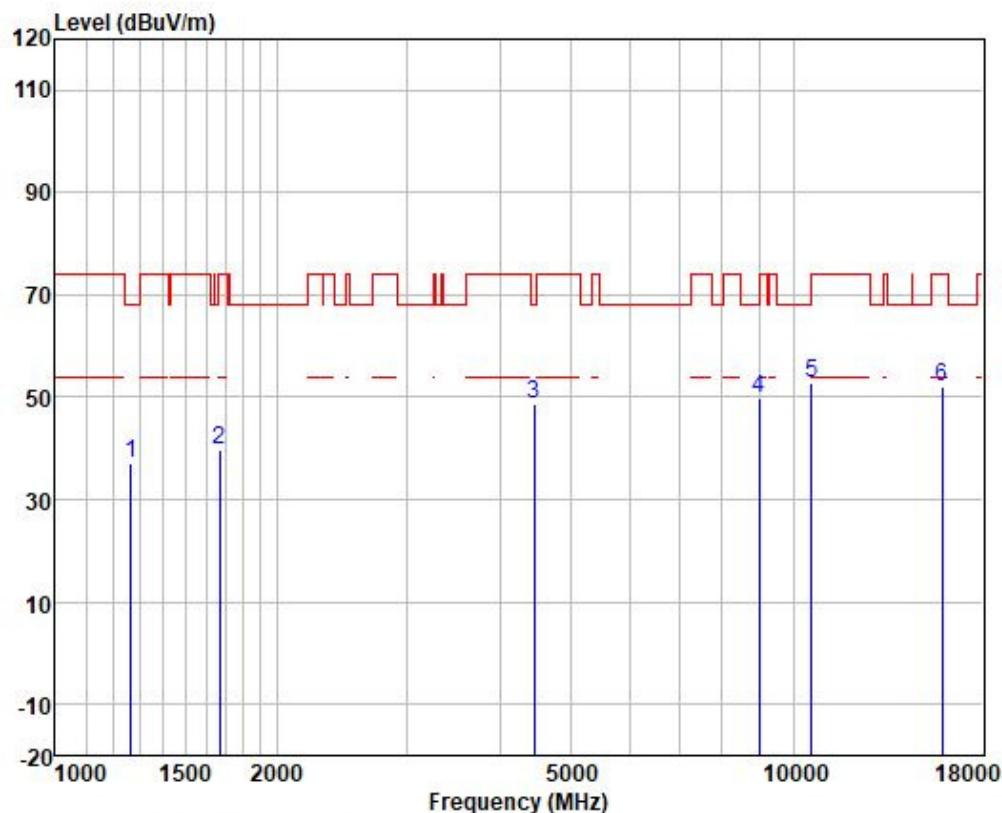
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



Freq MHz	Read	Antenna	Cable	Preamp	Limit Line	Over Limit	Pol/Phase	Remark
	Level dBuV	Factor	Loss dB	Factor dB				
1 1267.454	48.27	23.81	2.60	37.63	37.05	68.20	-31.15	VERTICAL peak
2 1672.779	48.85	24.98	3.17	37.41	39.59	74.00	-34.41	VERTICAL peak
3 4456.315	45.60	34.00	5.80	36.63	48.77	68.20	-19.43	VERTICAL peak
4 8995.123	41.35	37.59	7.77	36.90	49.81	68.20	-18.39	VERTICAL peak
5 10600.000	41.10	39.96	8.47	36.76	52.77	68.20	-15.43	VERTICAL peak
6 15900.000	41.28	37.32	10.30	36.67	52.23	74.00	-21.77	VERTICAL peak

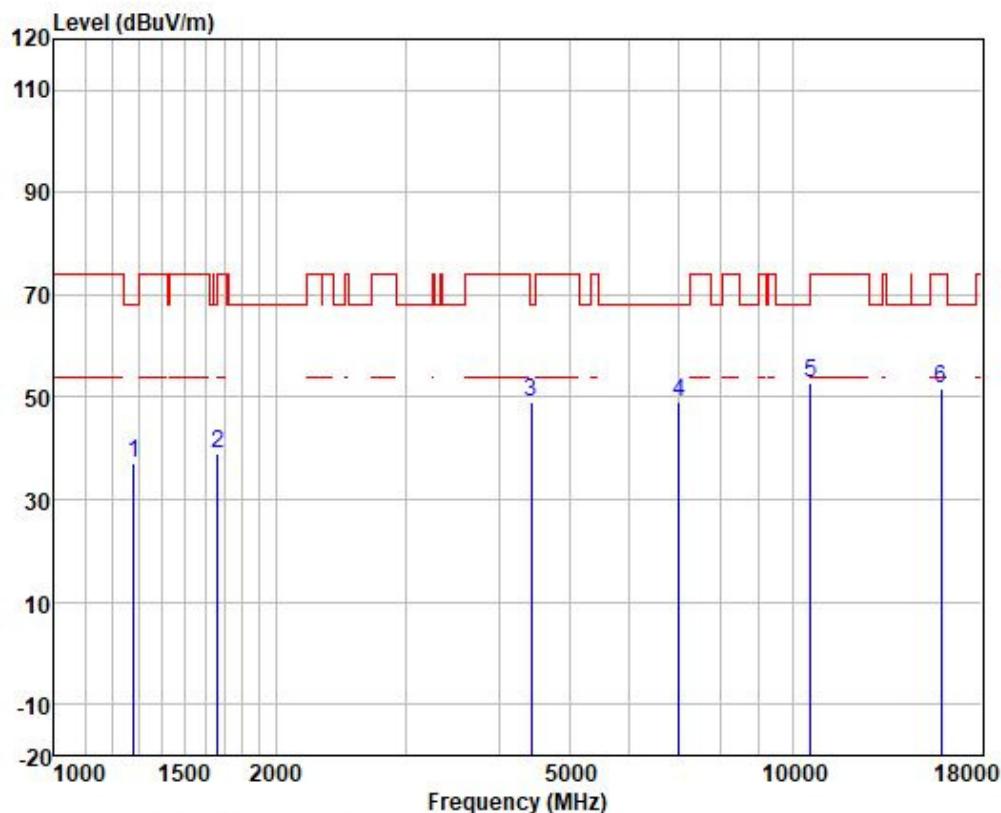
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line dBuV/m	Over Limit dB	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1282.193	48.28	23.89	2.62	37.62	37.17	68.20	-31.03 HORIZONTAL peak
2 1663.137	48.20	24.93	3.16	37.41	38.88	74.00	-35.12 HORIZONTAL peak
3 4430.628	45.98	33.87	5.79	36.63	49.01	68.20	-19.19 HORIZONTAL peak
4 7015.420	43.32	35.15	7.51	36.90	49.08	68.20	-19.12 HORIZONTAL peak
5 10600.000	41.16	39.96	8.47	36.76	52.83	68.20	-15.37 HORIZONTAL peak
6 15900.000	40.85	37.32	10.30	36.67	51.80	74.00	-22.20 HORIZONTAL peak

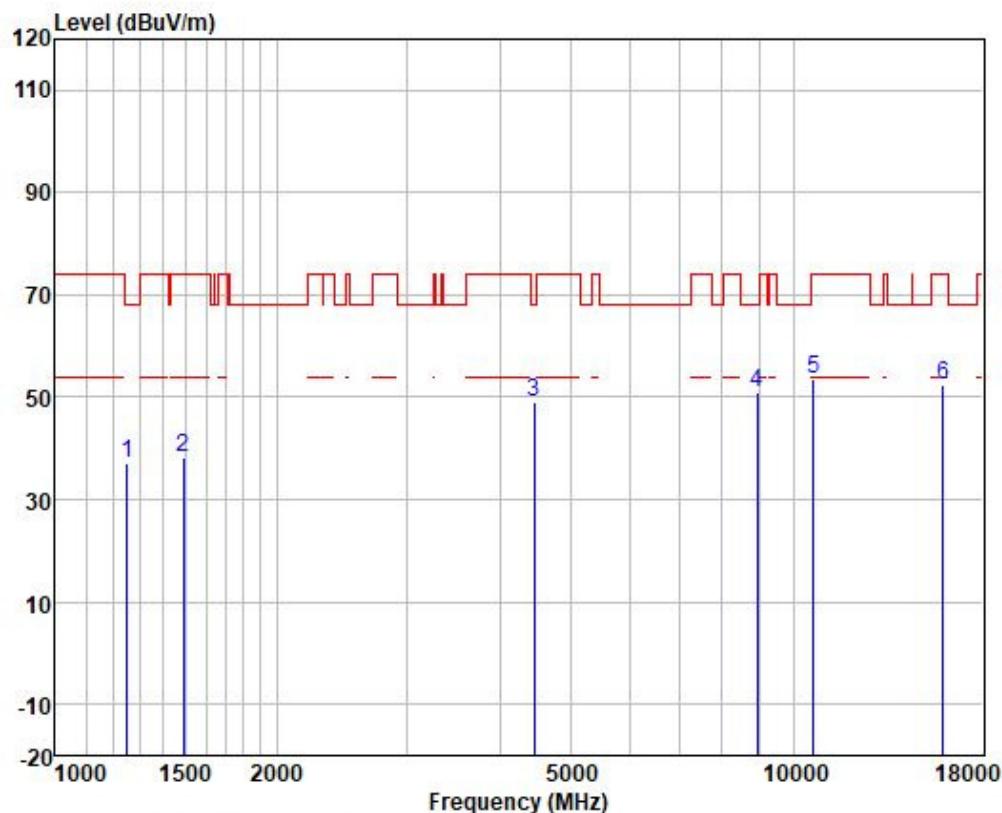
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1252.885	48.32	23.71	2.59	37.63	36.99	68.20	-31.21 VERTICAL peak
2 1490.142	48.45	24.42	3.02	37.52	38.37	74.00	-35.63 VERTICAL peak
3 4456.315	45.98	34.00	5.80	36.63	49.15	68.20	-19.05 VERTICAL peak
4 8943.274	42.55	37.50	7.77	36.91	50.91	68.20	-17.29 VERTICAL peak
5 10640.000	41.95	40.00	8.49	36.76	53.68	74.00	-20.32 VERTICAL peak
6 15960.000	41.74	37.20	10.32	36.69	52.57	74.00	-21.43 VERTICAL peak

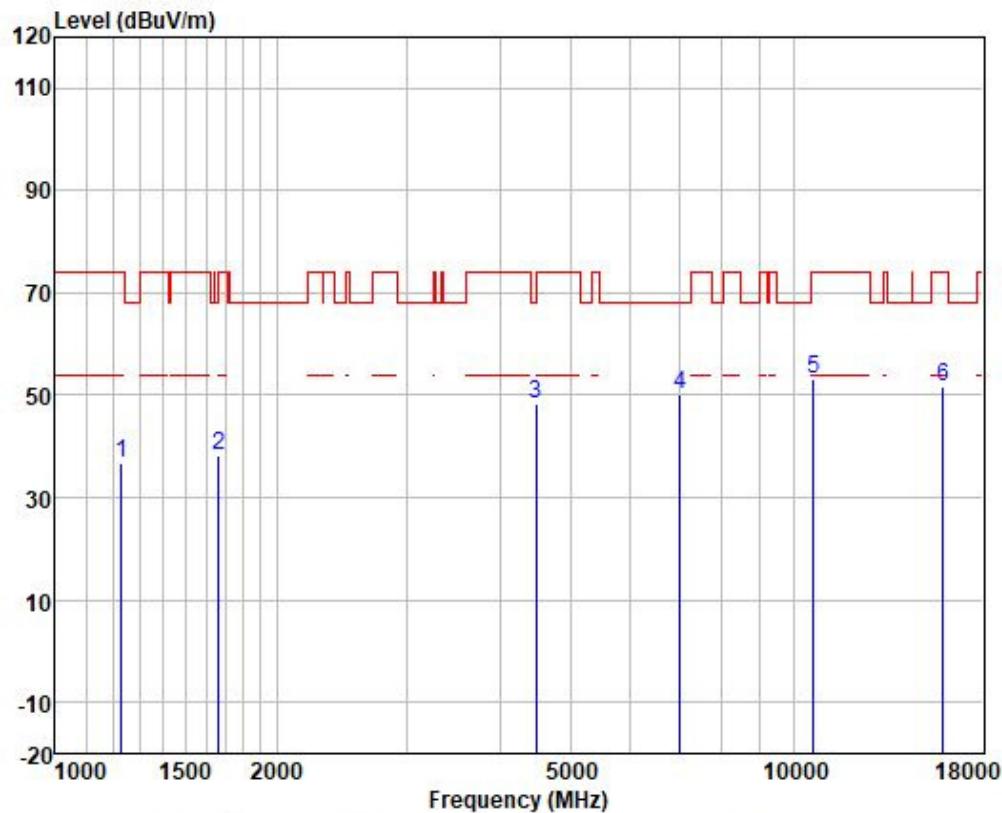
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 www.sgsgroup.com.cn
Guangzhou Branch Testing Body, EEC Laboratory t (86-20) 82155555 sgs.china@sgs.com

Test Mode: 01; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB	Factor	dB	dBuV/m	
1 1231.345	48.29	23.51	2.57	37.64	36.73	74.00	-37.27 HORIZONTAL peak
2 1663.137	47.58	24.93	3.16	37.41	38.26	74.00	-35.74 HORIZONTAL peak
3 4482.150	45.20	34.12	5.80	36.63	48.49	68.20	-19.71 HORIZONTAL peak
4 7015.420	44.32	35.15	7.51	36.90	50.08	68.20	-18.12 HORIZONTAL peak
5 10640.000	41.27	40.00	8.49	36.76	53.00	74.00	-21.00 HORIZONTAL peak
6 15960.000	40.88	37.20	10.32	36.69	51.71	74.00	-22.29 HORIZONTAL peak

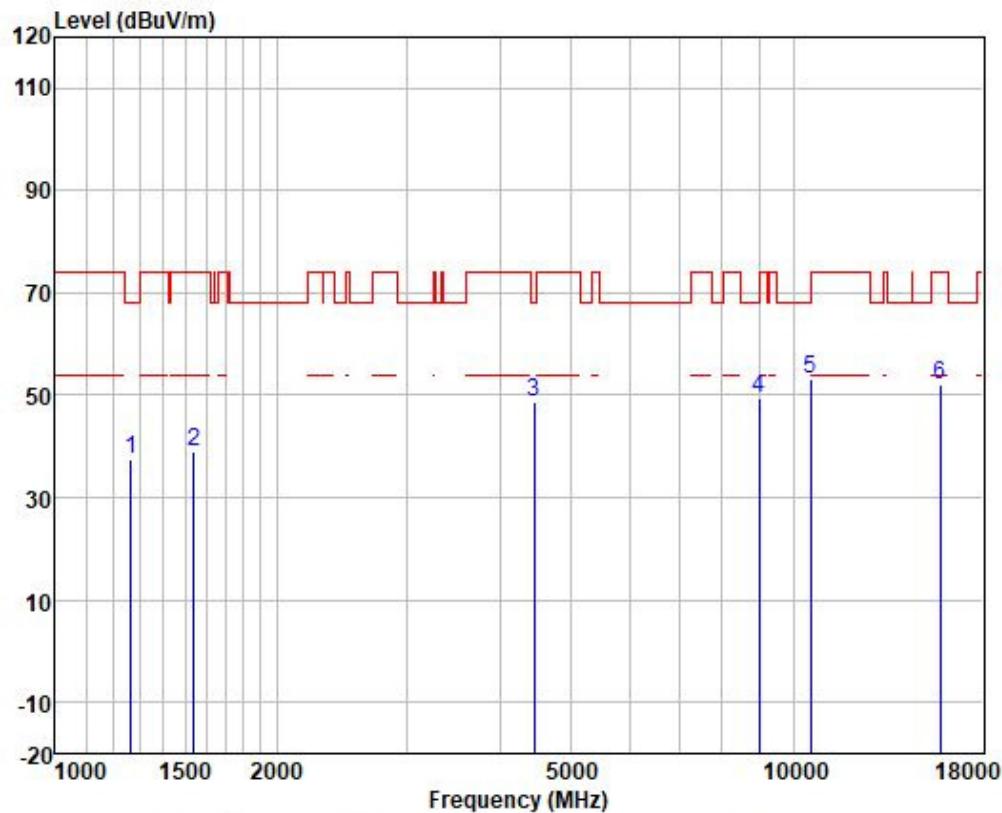


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

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

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Freq MHz	Read	Antenna	Cable	Preamp	Limit Line dBuV/m	Over Limit dB	Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB	Factor dB				
1 1267.454	48.64	23.81	2.60	37.63	37.42	68.20	-30.78	VERTICAL peak
2 1542.733	48.83	24.53	3.08	37.48	38.96	74.00	-35.04	VERTICAL peak
3 4456.315	45.68	34.00	5.80	36.63	48.85	68.20	-19.35	VERTICAL peak
4 8995.123	41.15	37.59	7.77	36.90	49.61	68.20	-18.59	VERTICAL peak
5 10540.000	41.54	39.91	8.44	36.76	53.13	68.20	-15.07	VERTICAL peak
6 15810.000	40.98	37.60	10.27	36.64	52.21	74.00	-21.79	VERTICAL peak

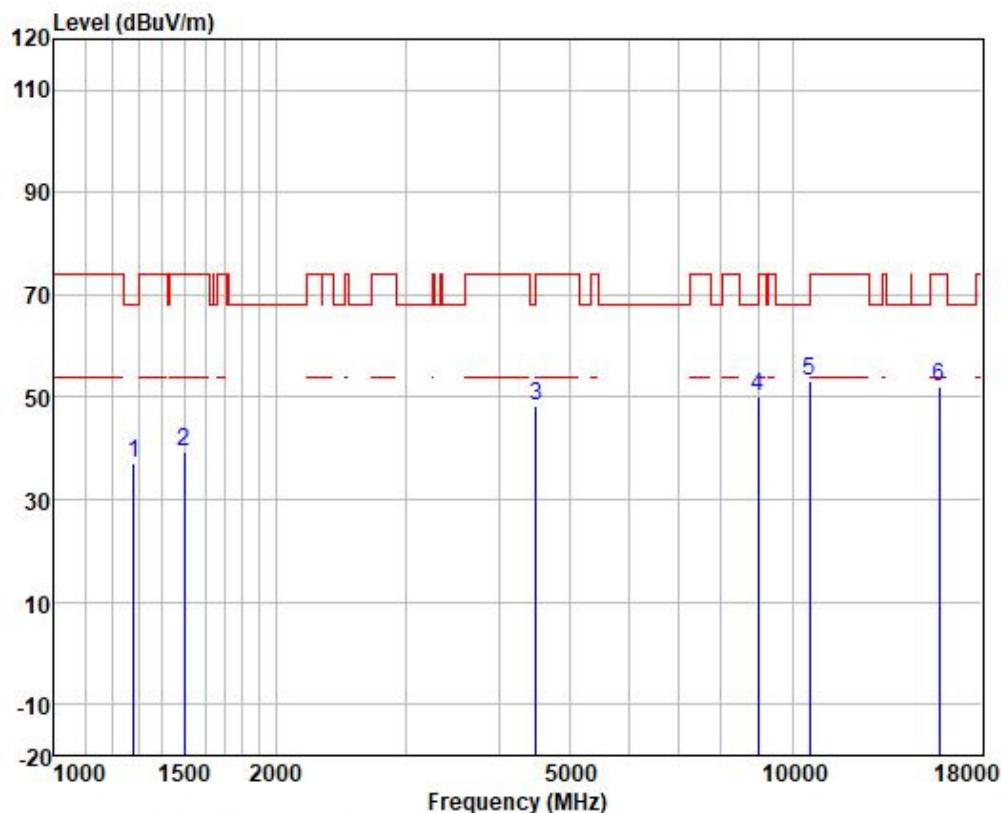
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1282.193	48.13	23.89	2.62	37.62	37.02	68.20	-31.18 HORIZONTAL peak
2 1498.781	49.34	24.43	3.03	37.50	39.30	74.00	-34.70 HORIZONTAL peak
3 4495.125	44.85	34.17	5.81	36.63	48.20	68.20	-20.00 HORIZONTAL peak
4 8995.123	41.55	37.59	7.77	36.90	50.01	68.20	-18.19 HORIZONTAL peak
5 10540.000	41.60	39.91	8.44	36.76	53.19	68.20	-15.01 HORIZONTAL peak
6 15810.000	40.97	37.60	10.27	36.64	52.20	74.00	-21.80 HORIZONTAL peak

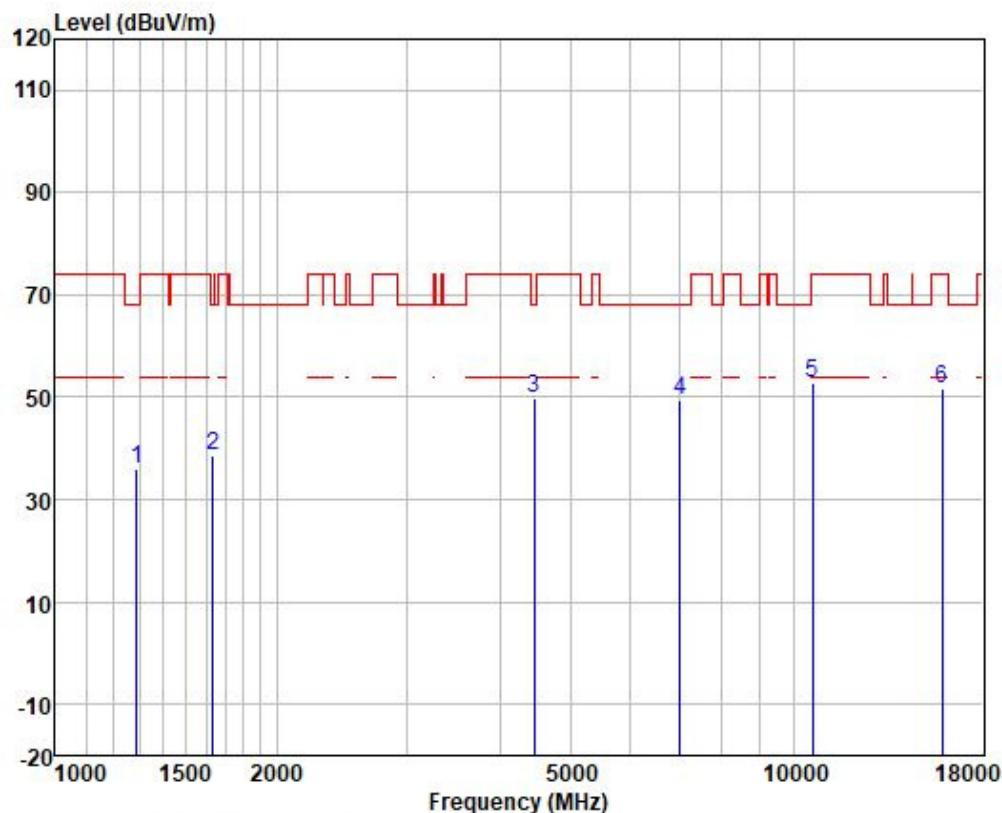
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1289.627	47.17	23.92	2.62	37.62	36.09	68.20	-32.11 VERTICAL peak
2 1634.543	48.27	24.81	3.14	37.42	38.80	68.20	-29.40 VERTICAL peak
3 4456.315	46.51	34.00	5.80	36.63	49.68	68.20	-18.52 VERTICAL peak
4 7015.420	43.79	35.15	7.51	36.90	49.55	68.20	-18.65 VERTICAL peak
5 10620.000	41.31	39.96	8.47	36.76	52.98	74.00	-21.02 VERTICAL peak
6 15930.000	40.97	37.20	10.32	36.67	51.82	74.00	-22.18 VERTICAL peak

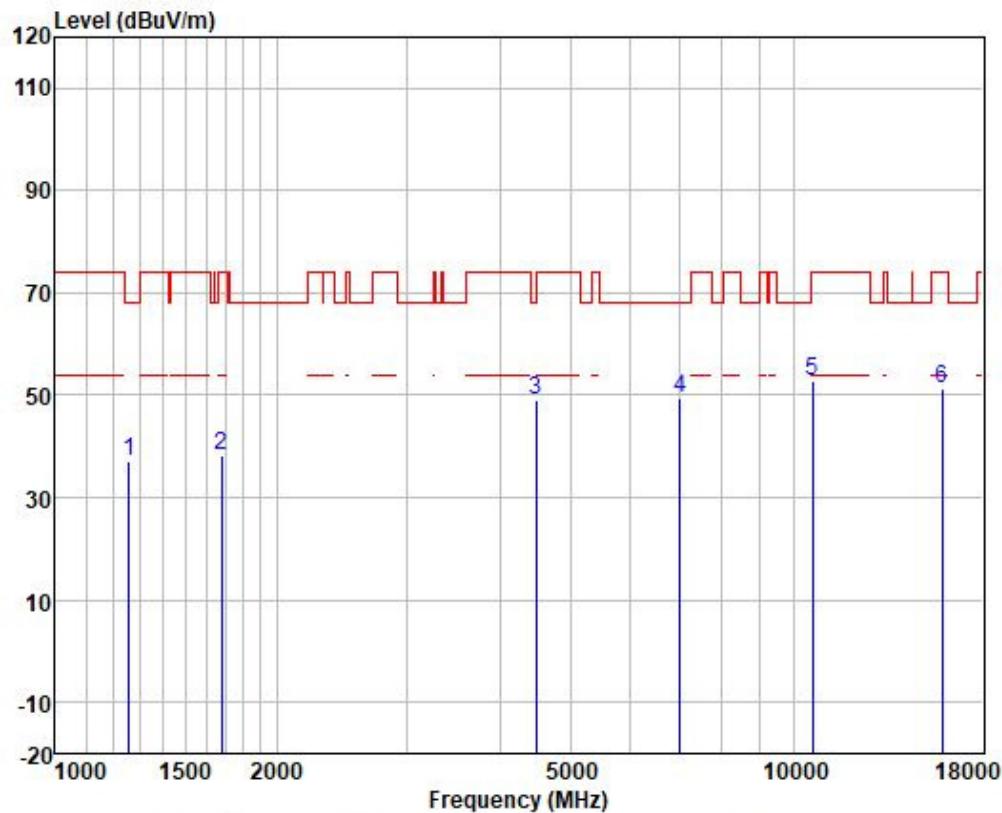
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Freq MHz	Read	Antenna	Cable	Preamp	Limit Line dBuV/m	Over Limit dB	Pol/Phase	Remark
	Level dBuV	Level Factor	Loss dB	Factor dB				
1 1260.149	48.23	23.76	2.59	37.63	36.95	68.20	-31.25	HORIZONTAL peak
2 1682.477	47.31	25.03	3.17	37.40	38.11	74.00	-35.89	HORIZONTAL peak
3 4482.150	45.65	34.12	5.80	36.63	48.94	68.20	-19.26	HORIZONTAL peak
4 7015.420	43.72	35.15	7.51	36.90	49.48	68.20	-18.72	HORIZONTAL peak
5 10620.000	41.25	39.96	8.47	36.76	52.92	74.00	-21.08	HORIZONTAL peak
6 15930.000	40.41	37.20	10.32	36.67	51.26	74.00	-22.74	HORIZONTAL peak

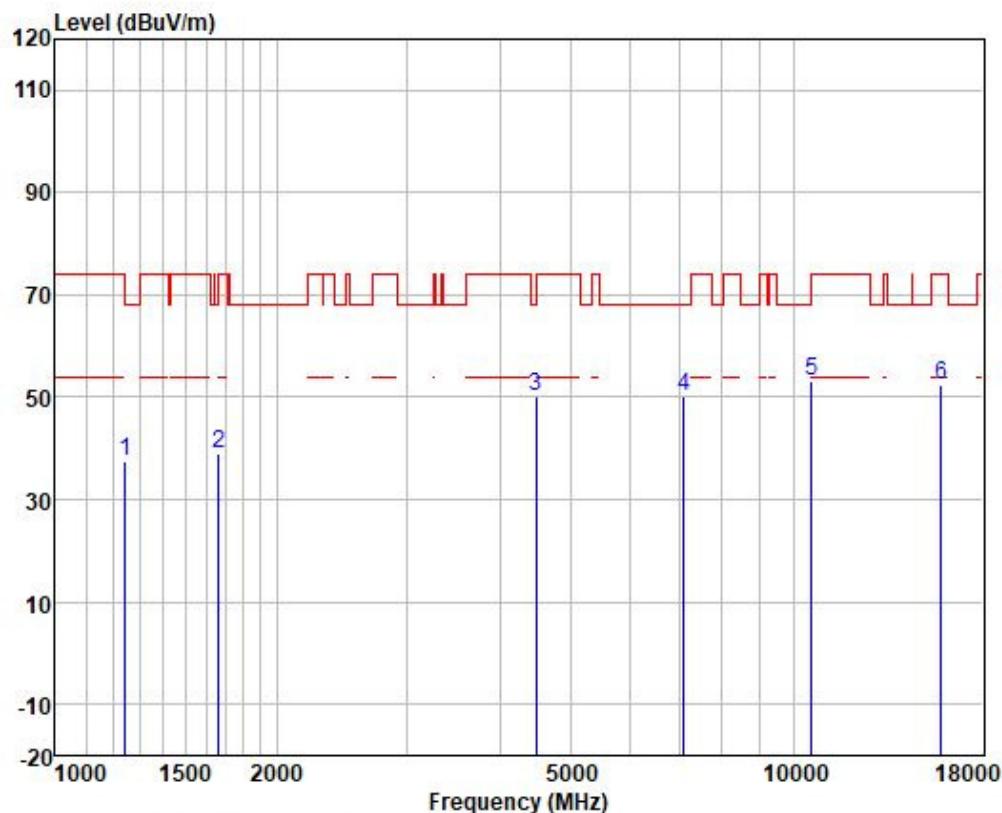
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 01; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark		
	Freq MHz	Level dBuV	Level dB/m	Loss dB	Factor	dB	dBuV/m	dBuV/m	dB
1 1245.663	48.74	23.65	2.58	37.63	37.34	68.20	-30.86	VERTICAL	peak
2 1663.137	48.22	24.93	3.16	37.41	38.90	74.00	-35.10	VERTICAL	peak
3 4482.150	47.03	34.12	5.80	36.63	50.32	68.20	-17.88	VERTICAL	peak
4 7117.542	44.18	35.38	7.52	36.92	50.16	68.20	-18.04	VERTICAL	peak
5 10580.000	41.43	39.93	8.46	36.76	53.06	68.20	-15.14	VERTICAL	peak
6 15870.000	41.34	37.46	10.29	36.66	52.43	74.00	-21.57	VERTICAL	peak

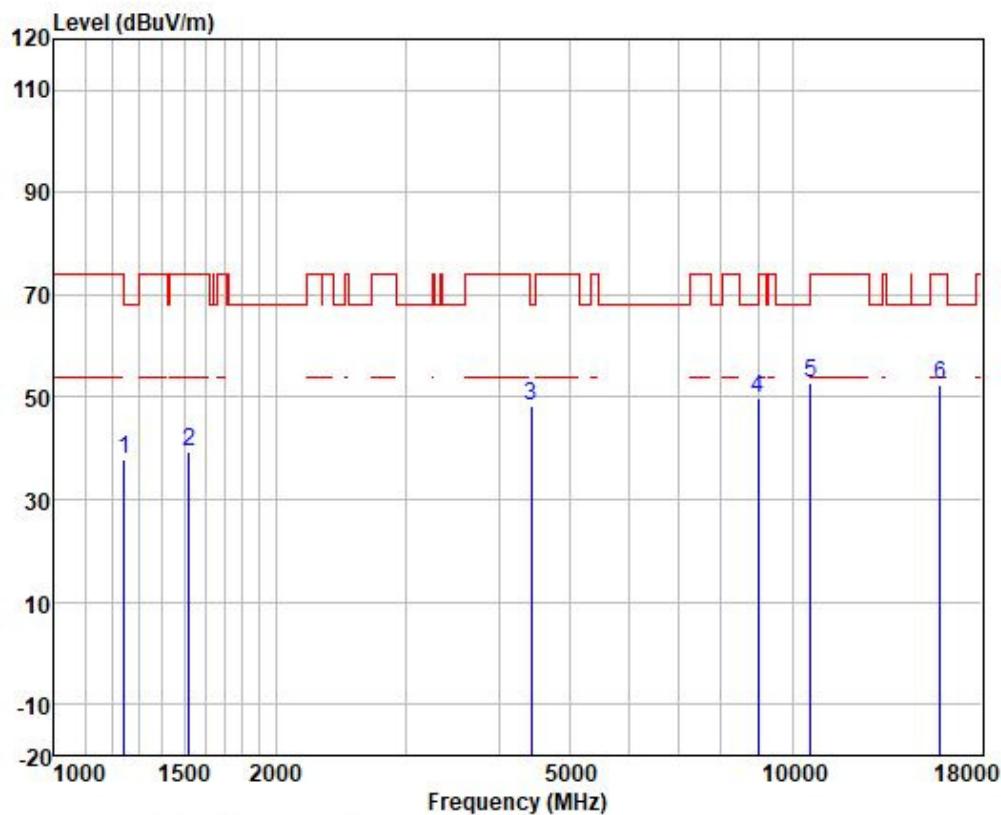
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 www.sgsgroup.com.cn
Guangzhou Branch Testing Body, EEC Laboratory t (86-20) 82155555 sgs.china@sgs.com

Test Mode: 01; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1245.663	49.12	23.65	2.58	37.63	37.72	68.20	-30.48 HORIZONTAL peak
2 1525.000	49.26	24.49	3.06	37.48	39.33	74.00	-34.67 HORIZONTAL peak
3 4430.628	45.36	33.87	5.79	36.63	48.39	68.20	-19.81 HORIZONTAL peak
4 8995.123	41.17	37.59	7.77	36.90	49.63	68.20	-18.57 HORIZONTAL peak
5 10580.000	41.27	39.93	8.46	36.76	52.90	68.20	-15.30 HORIZONTAL peak
6 15870.000	41.18	37.46	10.29	36.66	52.27	74.00	-21.73 HORIZONTAL peak

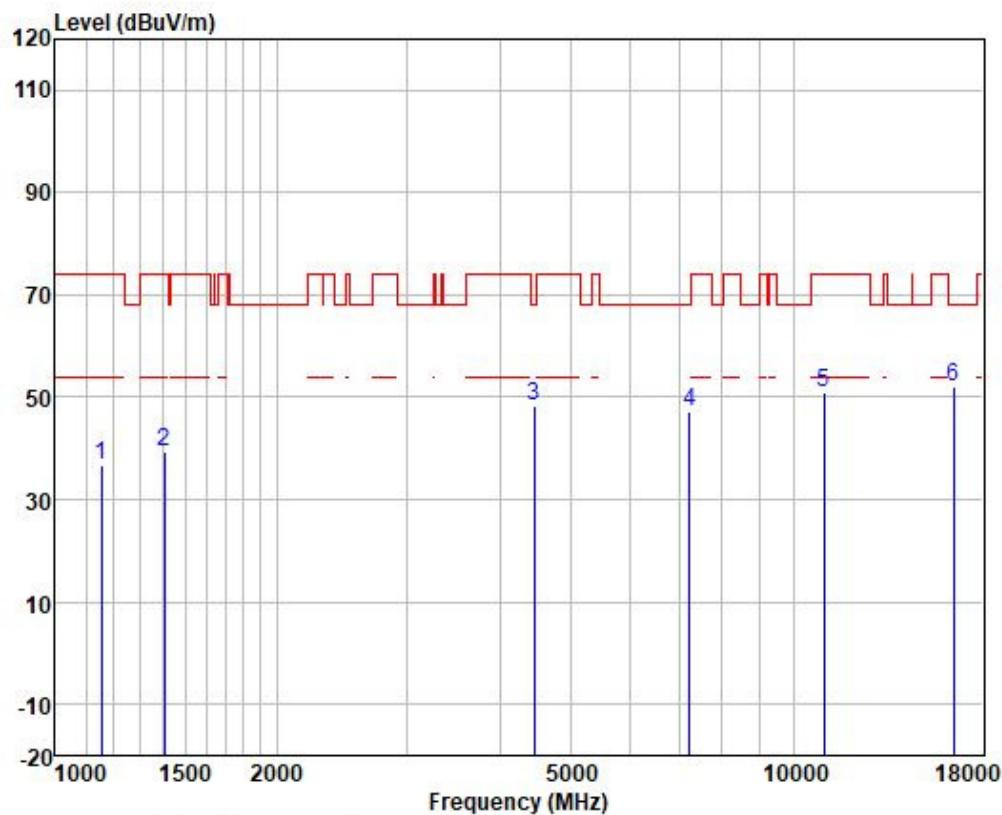
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1155.483	48.89	22.89	2.52	37.66	36.64	74.00	-37.36 VERTICAL peak
2 1406.443	49.70	24.27	2.83	37.56	39.24	74.00	-34.76 VERTICAL peak
3 4456.315	45.00	34.00	5.80	36.63	48.17	68.20	-20.03 VERTICAL peak
4 7242.052	40.92	35.78	7.54	36.94	47.30	68.20	-20.90 VERTICAL peak
5 11000.000	38.55	40.42	8.60	36.70	50.87	74.00	-23.13 VERTICAL peak
6 16500.000	39.33	38.70	10.77	36.56	52.24	68.20	-15.96 VERTICAL peak

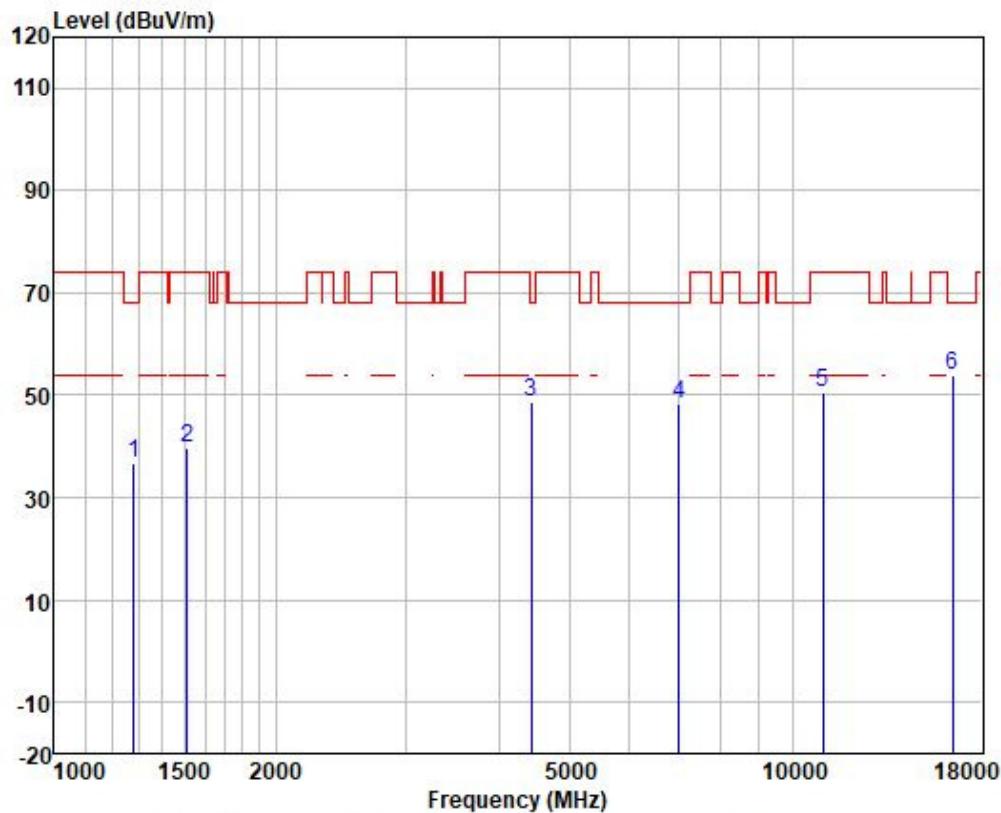
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 www.sgsgroup.com.cn
SGS-CSTC Standards Technical Services Co., Ltd. EEC Laboratory t (86-20) 82155555 sgs.china@sgs.com

Test Mode: 02; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Freq MHz	Level Factor	Loss Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dB	
1 1282.193	47.90	23.89	2.62	37.62	36.79	68.20	-31.41 HORIZONTAL peak
2 1516.210	49.82	24.47	3.05	37.50	39.84	74.00	-34.16 HORIZONTAL peak
3 4430.628	45.61	33.87	5.79	36.63	48.64	68.20	-19.56 HORIZONTAL peak
4 7015.420	42.48	35.15	7.51	36.90	48.24	68.20	-19.96 HORIZONTAL peak
5 11000.000	38.14	40.42	8.60	36.70	50.46	74.00	-23.54 HORIZONTAL peak
6 16500.000	41.05	38.70	10.77	36.56	53.96	68.20	-14.24 HORIZONTAL peak

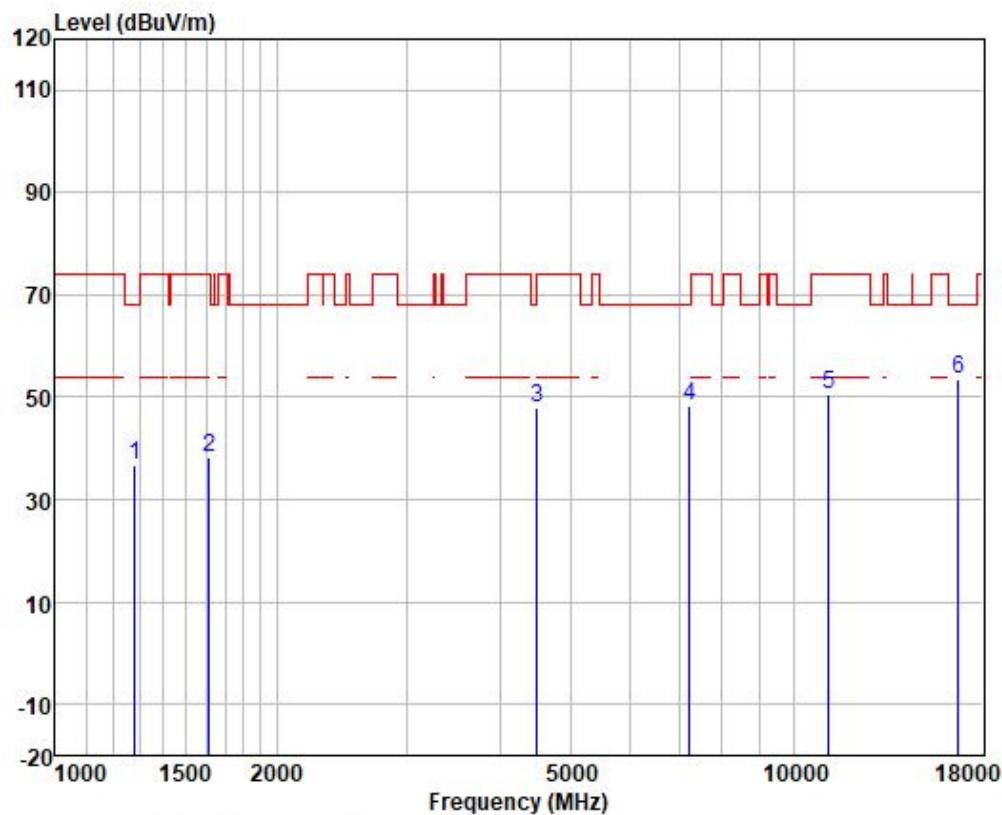


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

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

Test Mode: 02; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB	Factor	Level dBuV/m		
1 1282.193	47.94	23.89	2.62	37.62	36.83	68.20	-31.37 VERTICAL peak
2 1615.754	47.83	24.74	3.13	37.44	38.26	74.00	-35.74 VERTICAL peak
3 4495.125	44.66	34.17	5.81	36.63	48.01	68.20	-20.19 VERTICAL peak
4 7242.052	41.80	35.78	7.54	36.94	48.18	68.20	-20.02 VERTICAL peak
5 11160.000	38.28	40.37	8.64	36.67	50.62	74.00	-23.38 VERTICAL peak
6 16740.000	38.99	40.14	11.04	36.46	53.71	68.20	-14.49 VERTICAL peak

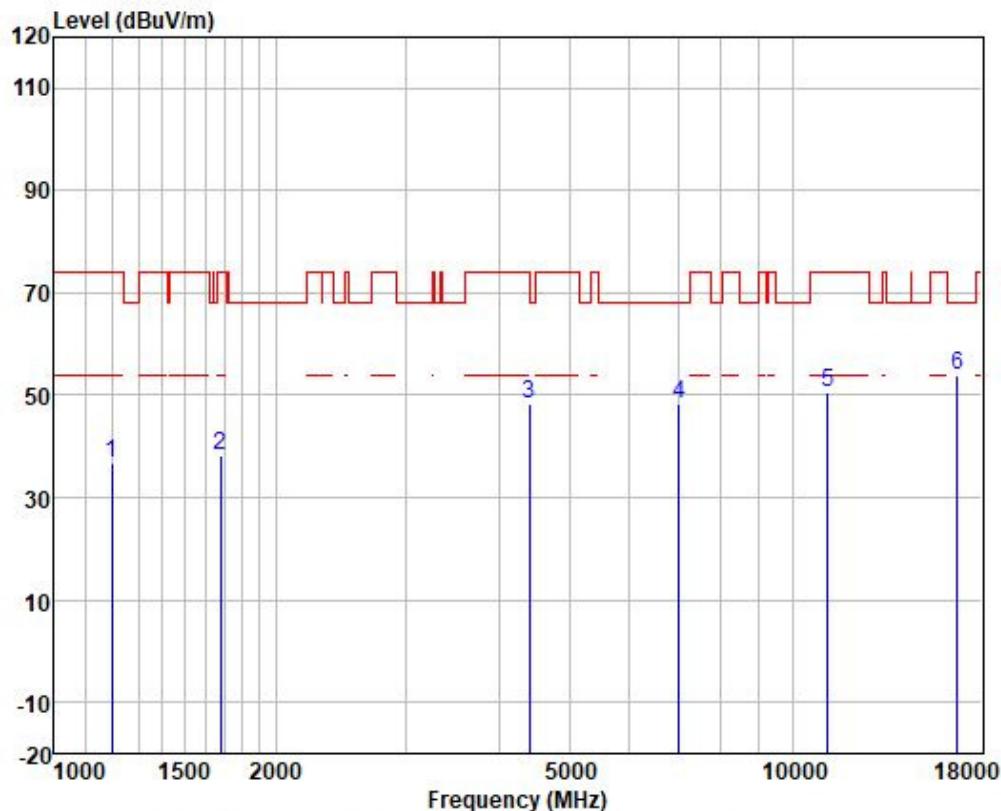
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line dBuV/m	Over Limit dB	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss Factor				
1 1196.264	48.76	23.14	2.54	37.64	36.80	74.00	-37.20 HORIZONTAL peak
2 1682.477	47.35	25.03	3.17	37.40	38.15	74.00	-35.85 HORIZONTAL peak
3 4405.090	45.27	33.74	5.78	36.62	48.17	68.20	-20.03 HORIZONTAL peak
4 7015.420	42.47	35.15	7.51	36.90	48.23	68.20	-19.97 HORIZONTAL peak
5 11160.000	38.36	40.37	8.64	36.67	50.70	74.00	-23.30 HORIZONTAL peak
6 16740.000	39.04	40.14	11.04	36.46	53.76	68.20	-14.44 HORIZONTAL peak

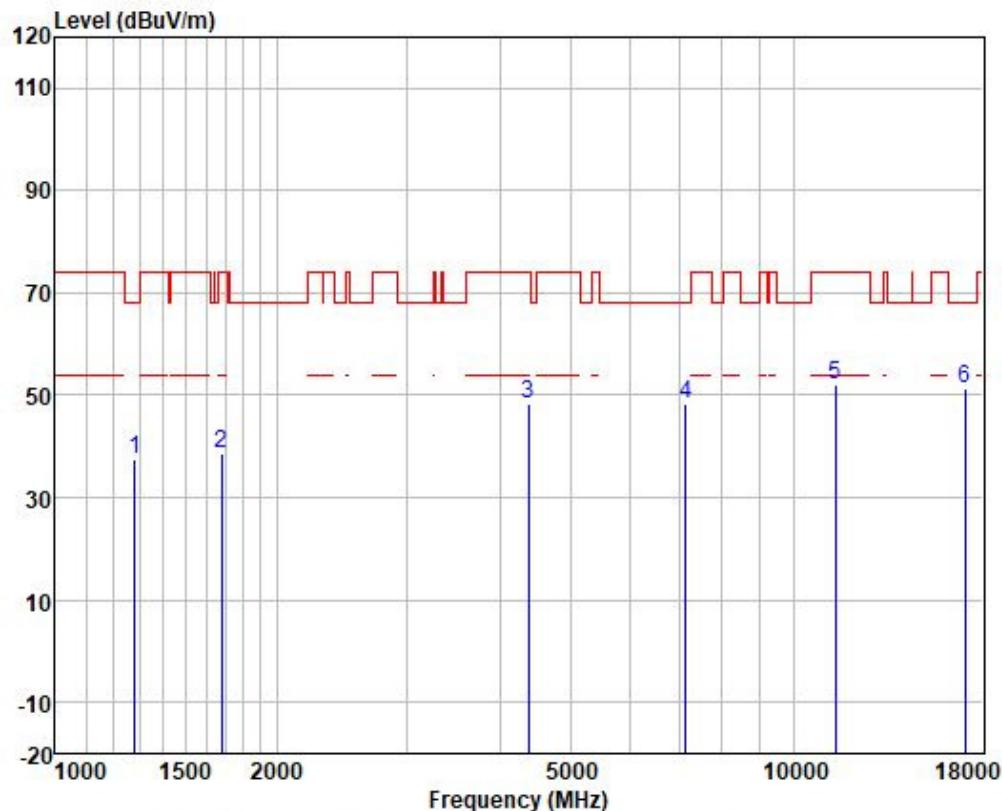
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 www.sgsgroup.com.cn
Guangzhou Branch Testing Body, EEC Laboratory t (86-20) 82155555 sgs.china@sgs.com

Test Mode: 02; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1282.193	48.55	23.89	2.62	37.62	37.44	68.20	-30.76 VERTICAL peak
2 1682.477	47.67	25.03	3.17	37.40	38.47	74.00	-35.53 VERTICAL peak
3 4379.699	45.45	33.59	5.78	36.62	48.20	74.00	-25.80 VERTICAL peak
4 7158.806	42.15	35.49	7.53	36.93	48.24	68.20	-19.96 VERTICAL peak
5 11400.000	39.69	40.28	8.73	36.64	52.06	74.00	-21.94 VERTICAL peak
6 17100.000	34.44	41.90	11.24	36.18	51.40	68.20	-16.80 VERTICAL peak

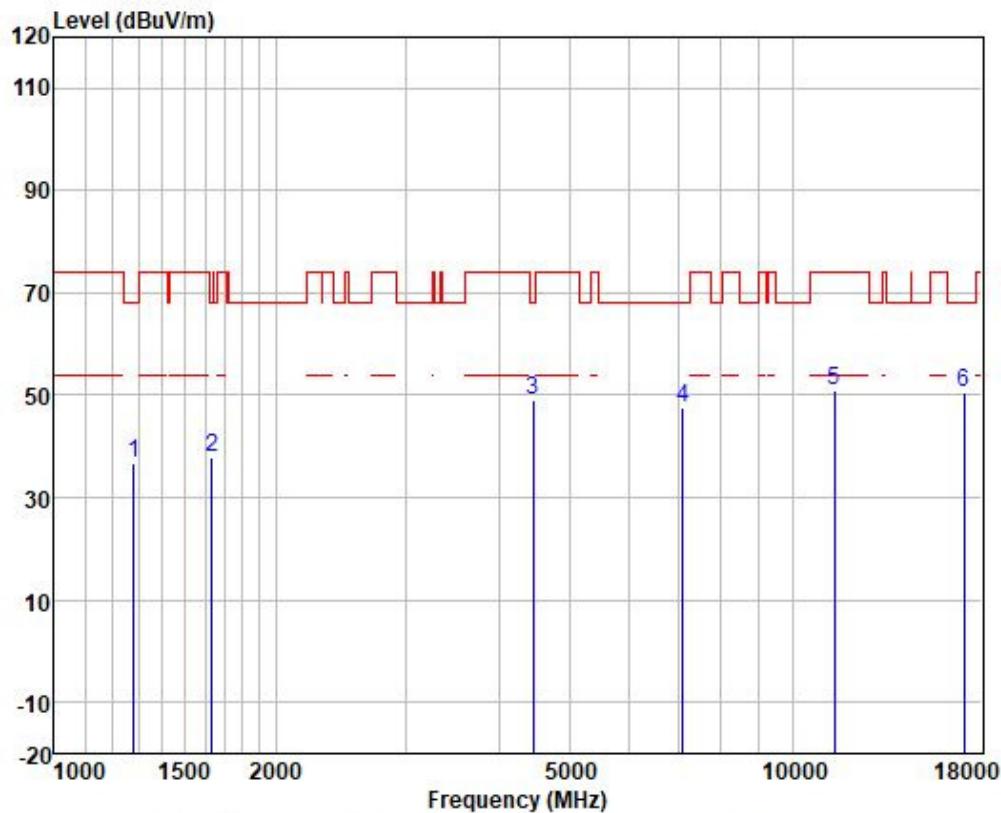


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

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

Test Mode: 02; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line dBuV/m	Over Limit dB	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1282.193	48.01	23.89	2.62	37.62	36.90	68.20	-31.30 HORIZONTAL peak
2 1634.543	47.25	24.81	3.14	37.42	37.78	68.20	-30.42 HORIZONTAL peak
3 4456.315	45.75	34.00	5.80	36.63	48.92	68.20	-19.28 HORIZONTAL peak
4 7117.542	41.52	35.38	7.52	36.92	47.50	68.20	-20.70 HORIZONTAL peak
5 11400.000	38.69	40.28	8.73	36.64	51.06	74.00	-22.94 HORIZONTAL peak
6 17100.000	33.55	41.90	11.24	36.18	50.51	68.20	-17.69 HORIZONTAL peak

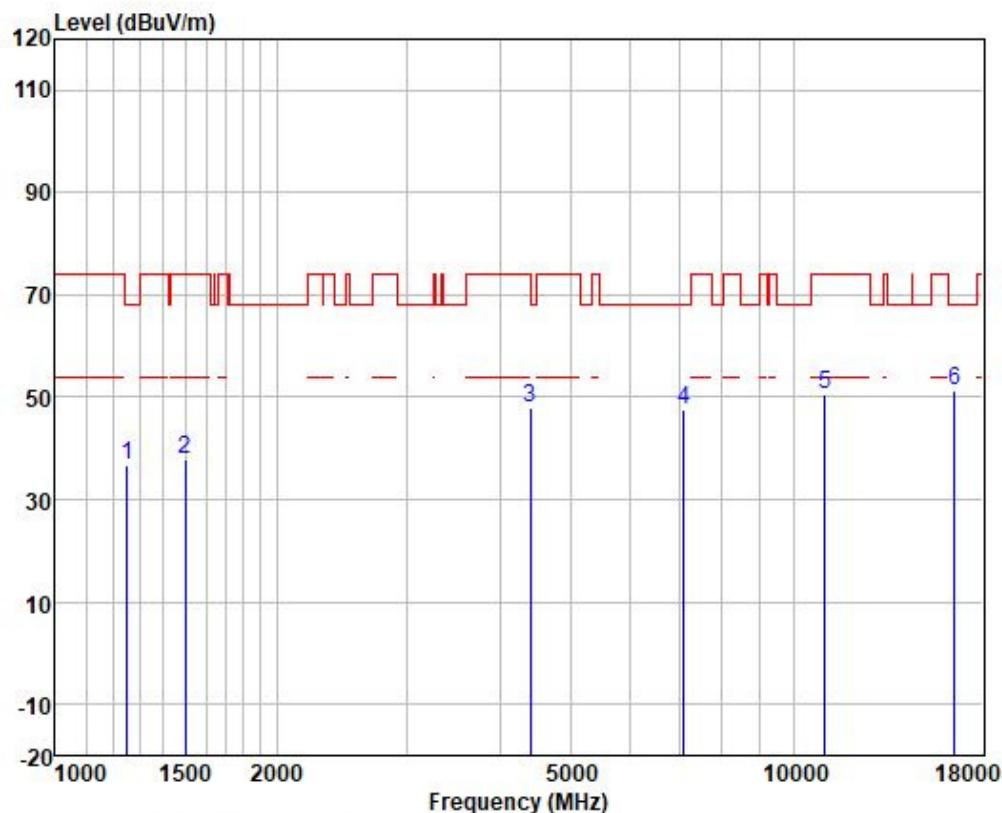
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level Factor	Loss Factor	Level dB				
1 1252.885	48.23	23.71	2.59	37.63	36.90	68.20	-31.30 VERTICAL peak
2 1498.781	47.88	24.43	3.03	37.50	37.84	74.00	-36.16 VERTICAL peak
3 4405.090	45.17	33.74	5.78	36.62	48.07	68.20	-20.13 VERTICAL peak
4 7117.542	41.55	35.38	7.52	36.92	47.53	68.20	-20.67 VERTICAL peak
5 11020.000	38.30	40.42	8.60	36.69	50.63	74.00	-23.37 VERTICAL peak
6 16530.000	38.26	38.94	10.84	36.55	51.49	68.20	-16.71 VERTICAL peak

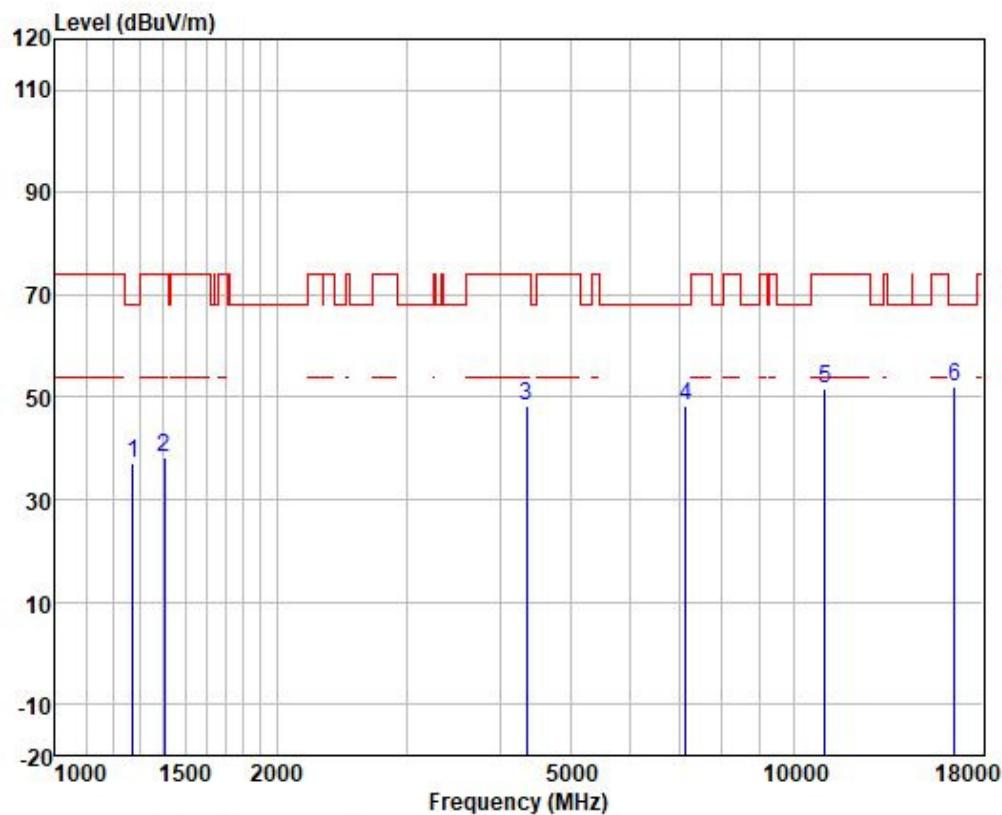
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



SGS-CSTC Standards Technical Services Co., Ltd. Inspection & Testing Services
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 www.sgsgroup.com.cn
SGS-CSTC Standards Technical Services Co., Ltd. Inspection & Testing Services
Guangzhou Branch, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Freq	ReadAntenna	Cable	Preamp	Limit	Over	Over	Pol/Phase	Remark
	Level	Factor	Loss					
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	1274.802	48.15	23.85	2.61	37.62	36.99	68.20	-31.21 HORIZONTAL peak
2	1406.443	48.72	24.27	2.83	37.56	38.26	74.00	-35.74 HORIZONTAL peak
3	4354.454	45.76	33.43	5.78	36.62	48.35	74.00	-25.65 HORIZONTAL peak
4	7158.806	42.28	35.49	7.53	36.93	48.37	68.20	-19.83 HORIZONTAL peak
5	11020.000	39.46	40.42	8.60	36.69	51.79	74.00	-22.21 HORIZONTAL peak
6	16530.000	38.93	38.94	10.84	36.55	52.16	68.20	-16.04 HORIZONTAL peak

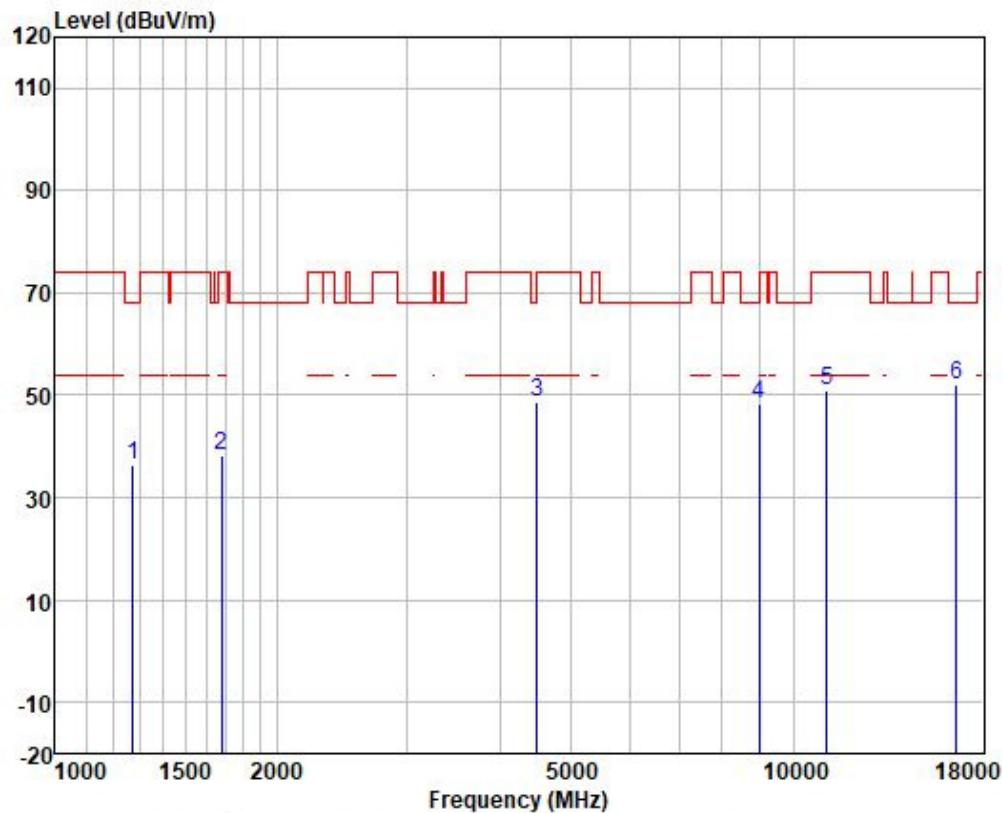
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:middle



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Freq MHz	Level Factor	Loss Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB
1	1274.802	47.50	23.85	2.61	37.62	36.34	68.20 -31.86 VERTICAL peak
2	1682.477	47.52	25.03	3.17	37.40	38.32	74.00 -35.68 VERTICAL peak
3	4495.125	45.30	34.17	5.81	36.63	48.65	68.20 -19.55 VERTICAL peak
4	8995.123	39.71	37.59	7.77	36.90	48.17	68.20 -20.03 VERTICAL peak
5	11100.000	38.50	40.39	8.63	36.68	50.84	74.00 -23.16 VERTICAL peak
6	16650.000	38.07	39.49	10.94	36.49	52.01	68.20 -16.19 VERTICAL peak

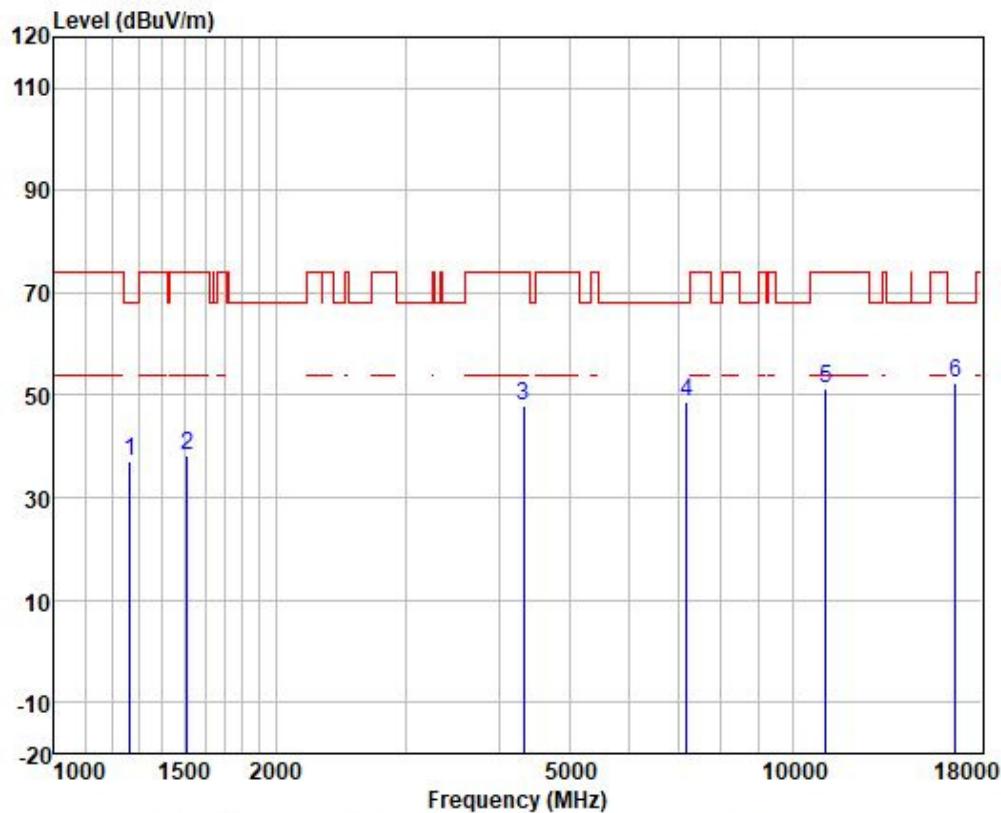
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:middle



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Freq MHz	Level Factor	Loss Factor				
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 1267.454	48.37	23.81	2.60	37.63	37.15	68.20	-31.05 HORIZONTAL peak
2 1516.210	48.20	24.47	3.05	37.50	38.22	74.00	-35.78 HORIZONTAL peak
3 4329.354	45.60	33.25	5.77	36.62	48.00	74.00	-26.00 HORIZONTAL peak
4 7200.309	42.28	35.63	7.53	36.93	48.51	68.20	-19.69 HORIZONTAL peak
5 11100.000	38.92	40.39	8.63	36.68	51.26	74.00	-22.74 HORIZONTAL peak
6 16650.000	38.54	39.49	10.94	36.49	52.48	68.20	-15.72 HORIZONTAL peak

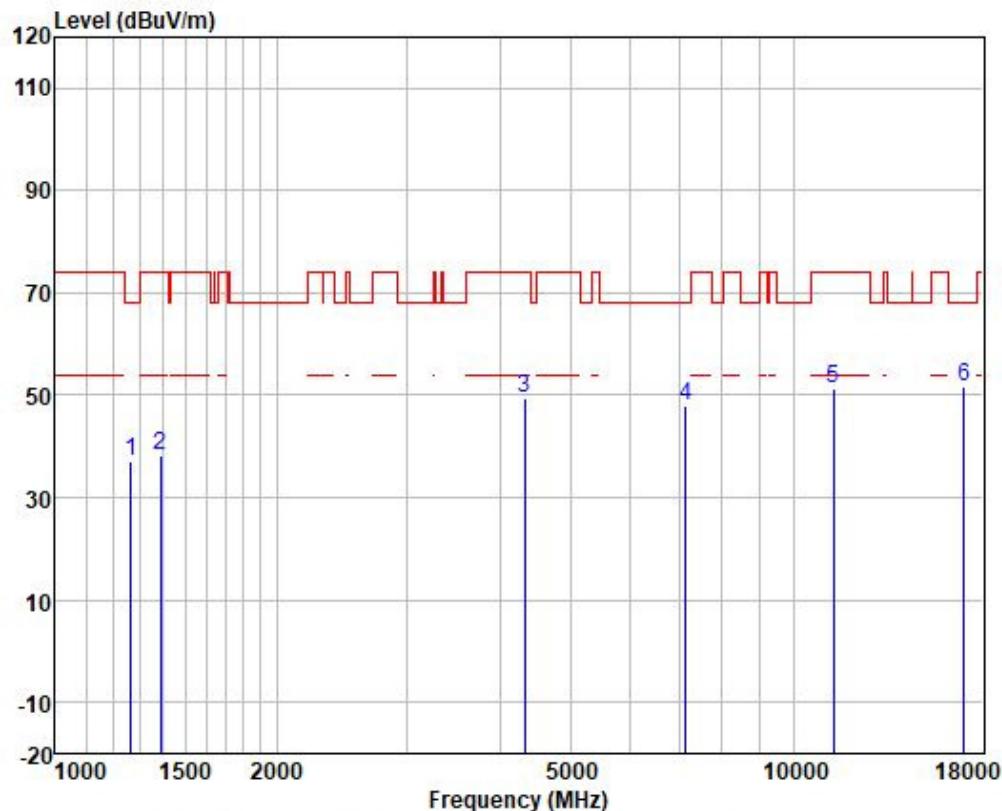
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1267.454	48.21	23.81	2.60	37.63	36.99	68.20	-31.21 VERTICAL peak
2 1390.276	48.96	24.24	2.78	37.57	38.41	74.00	-35.59 VERTICAL peak
3 4329.354	47.05	33.25	5.77	36.62	49.45	74.00	-24.55 VERTICAL peak
4 7158.806	42.01	35.49	7.53	36.93	48.10	68.20	-20.10 VERTICAL peak
5 11340.000	38.90	40.31	8.70	36.65	51.26	74.00	-22.74 VERTICAL peak
6 17010.000	35.01	41.57	11.22	36.25	51.55	68.20	-16.65 VERTICAL peak

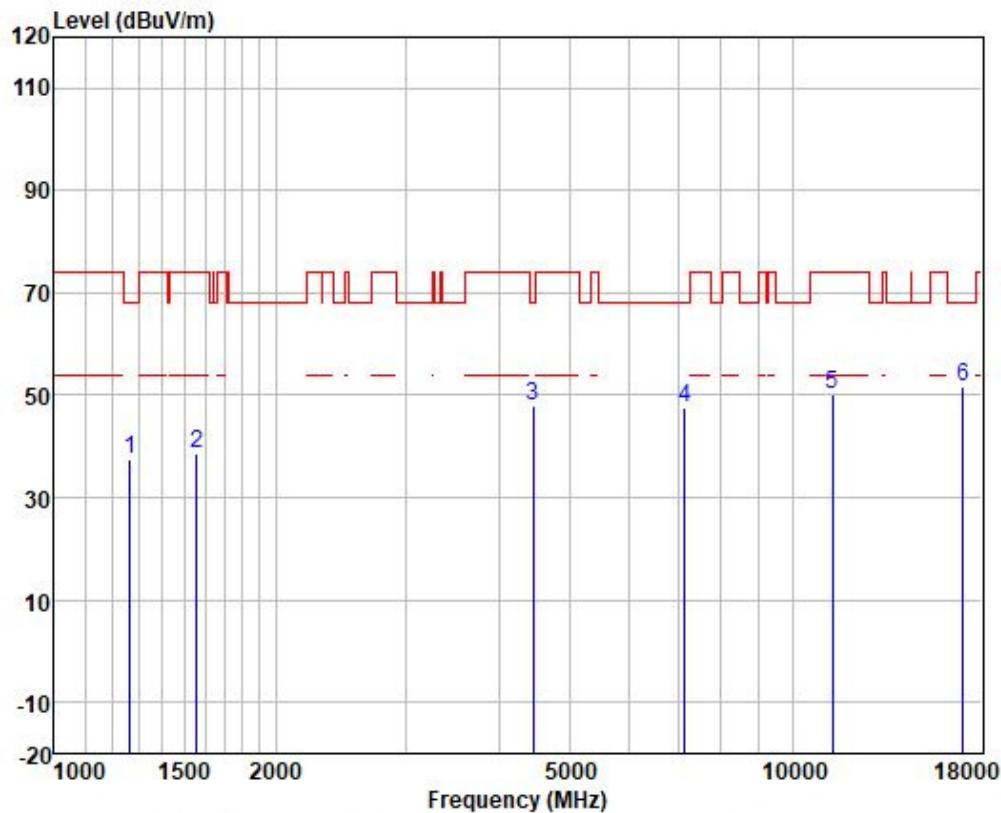
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1267.454	48.88	23.81	2.60	37.63	37.66	68.20	-30.54 HORIZONTAL peak
2 1560.673	48.59	24.57	3.09	37.47	38.78	74.00	-35.22 HORIZONTAL peak
3 4456.315	44.95	34.00	5.80	36.63	48.12	68.20	-20.08 HORIZONTAL peak
4 7158.806	41.67	35.49	7.53	36.93	47.76	68.20	-20.44 HORIZONTAL peak
5 11340.000	37.68	40.31	8.70	36.65	50.04	74.00	-23.96 HORIZONTAL peak
6 17010.000	34.99	41.57	11.22	36.25	51.53	68.20	-16.67 HORIZONTAL peak

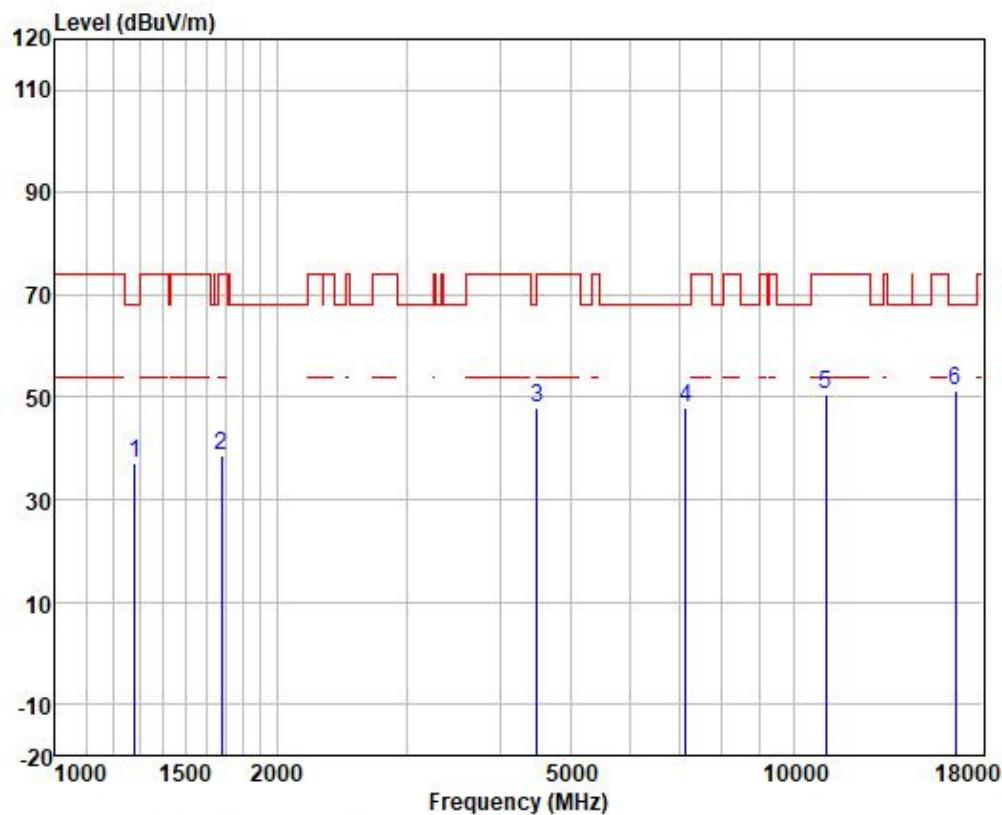
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Freq MHz	Level Factor	Loss Factor				
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dB
1	1282.193	48.24	23.89	2.62	37.62	37.13	68.20 -31.07 VERTICAL peak
2	1682.477	47.63	25.03	3.17	37.40	38.43	74.00 -35.57 VERTICAL peak
3	4495.125	44.50	34.17	5.81	36.63	47.85	68.20 -20.35 VERTICAL peak
4	7158.806	41.71	35.49	7.53	36.93	47.80	68.20 -20.40 VERTICAL peak
5	11060.000	38.07	40.41	8.61	36.68	50.41	74.00 -23.59 VERTICAL peak
6	16590.000	37.83	39.21	10.89	36.53	51.40	68.20 -16.80 VERTICAL peak

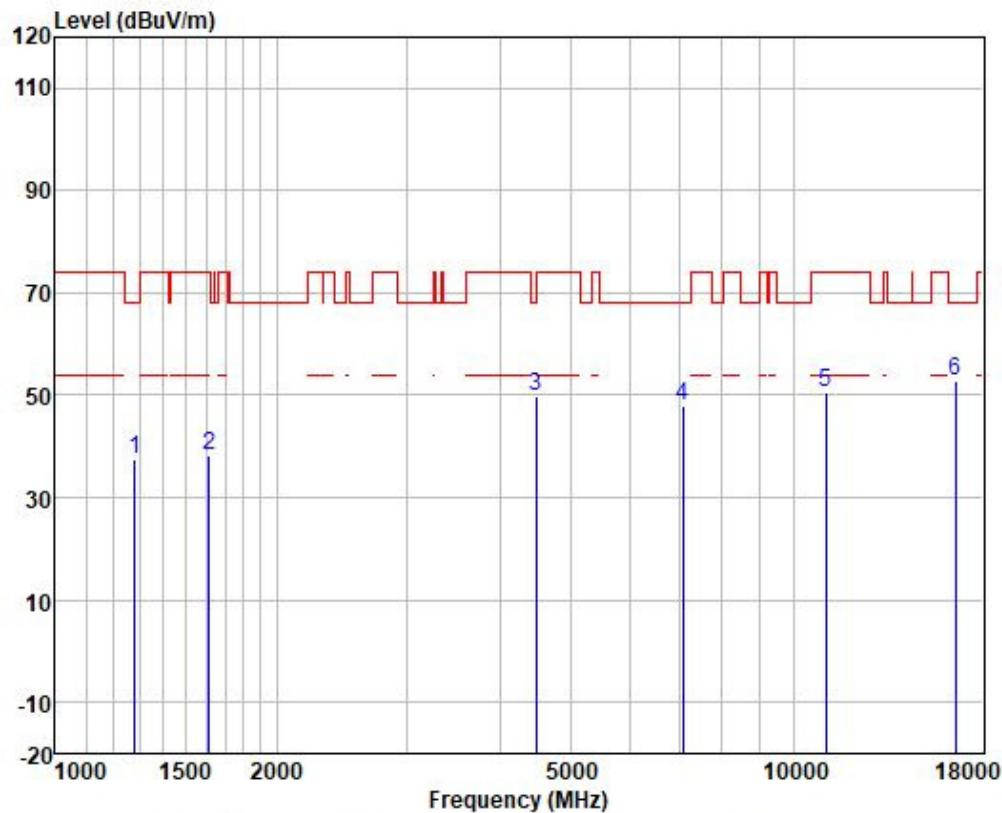
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:Low



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB	Factor	Level dB	dBuV/m	dBuV/m
1 1282.193	48.67	23.89	2.62	37.62	37.56	68.20	-30.64 HORIZONTAL peak
2 1615.754	47.86	24.74	3.13	37.44	38.29	74.00	-35.71 HORIZONTAL peak
3 4482.150	46.61	34.12	5.80	36.63	49.90	68.20	-18.30 HORIZONTAL peak
4 7076.516	42.05	35.28	7.52	36.91	47.94	68.20	-20.26 HORIZONTAL peak
5 11060.000	38.35	40.41	8.61	36.68	50.69	74.00	-23.31 HORIZONTAL peak
6 16590.000	39.25	39.21	10.89	36.53	52.82	68.20	-15.38 HORIZONTAL peak

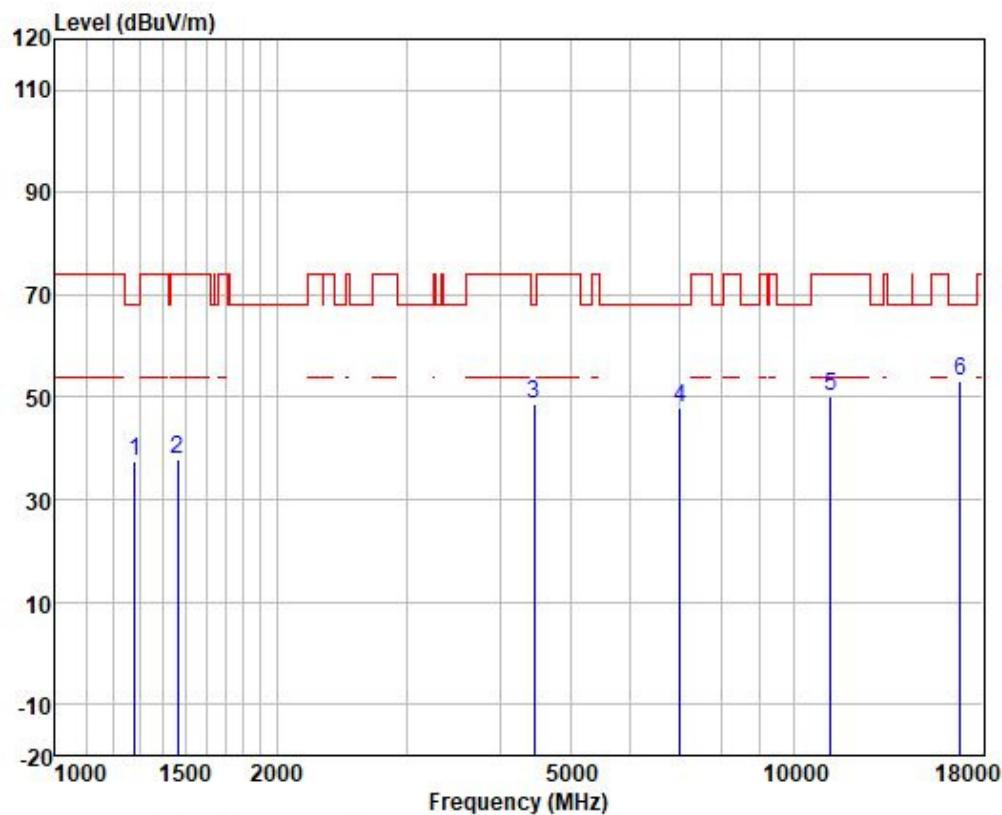
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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



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

Test Mode: 02; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line	Over Limit	Over Limit Pol/Phase	Remark
	Level dBuV	Level dB/m	Loss dB				
1 1282.193	48.49	23.89	2.62	37.62	37.38	68.20	-30.82 VERTICAL peak
2 1464.522	48.22	24.38	2.98	37.53	38.05	74.00	-35.95 VERTICAL peak
3 4456.315	45.58	34.00	5.80	36.63	48.75	68.20	-19.45 VERTICAL peak
4 7015.420	42.29	35.15	7.51	36.90	48.05	68.20	-20.15 VERTICAL peak
5 11220.000	37.82	40.36	8.65	36.66	50.17	74.00	-23.83 VERTICAL peak
6 16830.000	37.60	40.78	11.12	36.40	53.10	68.20	-15.10 VERTICAL peak

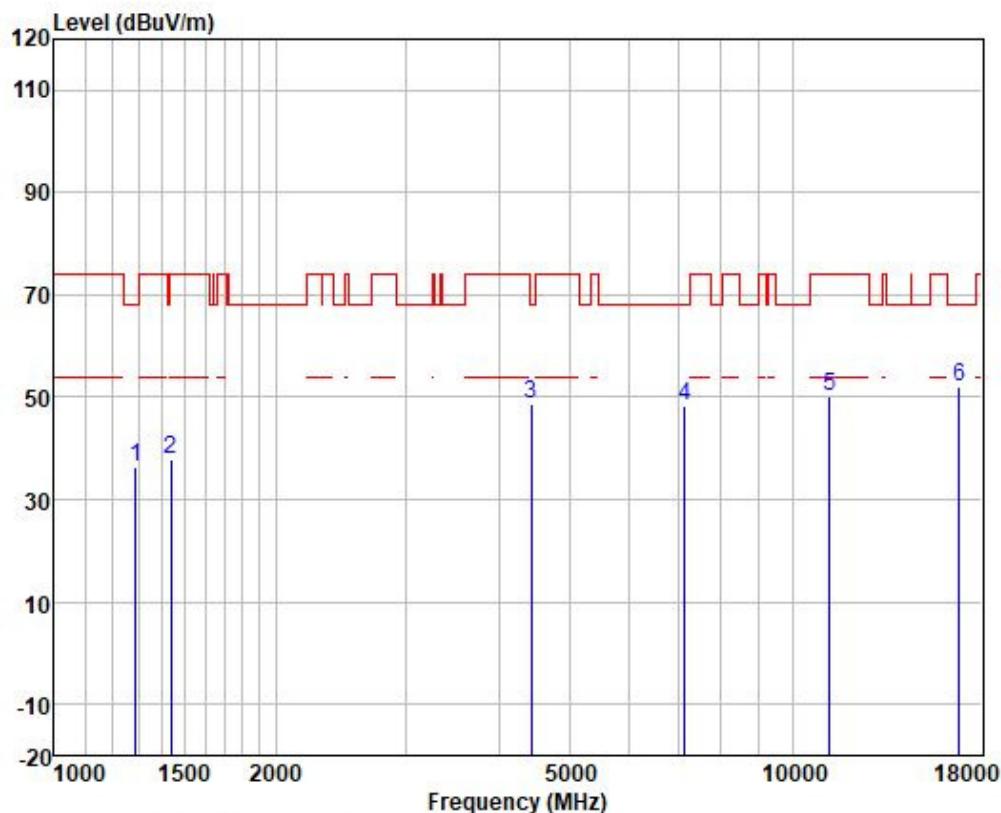


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction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

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

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

Test Mode: 02; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:High



Freq MHz	ReadAntenna	Cable	Preamp	Limit Line dBuV/m	Over Limit dB	Over Limit Pol/Phase	Remark
	Level dBuV	Level Factor	Loss dB				
1 1289.627	47.33	23.92	2.62	37.62	36.25	68.20	-31.95 HORIZONTAL peak
2 1439.343	48.16	24.34	2.93	37.55	37.88	74.00	-36.12 HORIZONTAL peak
3 4430.628	45.60	33.87	5.79	36.63	48.63	68.20	-19.57 HORIZONTAL peak
4 7158.806	42.08	35.49	7.53	36.93	48.17	68.20	-20.03 HORIZONTAL peak
5 11220.000	37.88	40.36	8.65	36.66	50.23	74.00	-23.77 HORIZONTAL peak
6 16830.000	36.43	40.78	11.12	36.40	51.93	68.20	-16.27 HORIZONTAL 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 <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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



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