

Report No.: FYCR220400013406

Page: 1 of 30

TEST REPORT

Application No.: FYCR2204000134AT

Applicant: Hytera Communications Corporation Limited

Address of Applicant: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road,

Nanshan District, Shenzhen, P.R.C., P 518057

Manufacturer: Hytera Communications Corporation Limited

Address of Manufacturer: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road,

Nanshan District, Shenzhen, P.R.C., P 518057

Factory: Sunrise Simcom (Tong cheng) Limited

Address of Factory: No.188-1, Nanshan Road, Tongcheng Economic Development Zone,

Anqing, Anhui

Equipment Under Test (EUT):

EUT Name: 5G XSecure Rugged Device
Model No.: PNC560, PNC560 SCAN

Please refer to section 2 of this report which indicates which model was

actually tested and which were electrically identical.

Trade Mark: Hytera

FCC ID: YAMPNC560

Standard(s): 47 CFR Part 15, Subpart C 15.225

Date of Receipt: 2022-04-29

Date of Test: 2022-05-16 to 2022-06-21

Date of Issue: 2022-07-02

Test Result: Pass*

Winkey Wang
Winkey Wang
EMC Technical 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 http://www.sgs.com/en/Terms-and-Conditions.appx and, for electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Condit

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



Report No.: FYCR220400013406

Page: 2 of 30

	Revision Record						
Version	Chapter	Date	Modifier	Remark			
01		2022-07-02		Original			

Authorized for issue by:		
	Tree Zhan	
	Tree Zhan/Project Engineer	
	WinkeyWang	
	Winkey Wang/Reviewer	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and 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, Gregory 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, **Certificate**).



Report No.: FYCR220400013406

Page: 3 of 30

2 Test Summary

Radio Spectrum Technical Requirement						
Item	Standard	Method	Requirement	Result		
Antenna Requirement	47 CFR Part 15, Subpart C 15.225	N/A	47 CFR Part 15, Subpart C 15.203	Pass		

Radio Spectrum Matter Part					
Item	Standard	Method	Requirement	Result	
20dB Bandwidth		ANSI C63.10 (2013) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass	
Conducted Emissions at Mains Terminals (150kHz-30MHz)		ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass	
Emission Mask	47 CFR Part 15,	ANSI C63.10 (2013) Section 6.4	47 CFR Part 15, Subpart C 15.225(a)&(b)&(C)	Pass	
Frequency tolerance	Subpart C 15.225	ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart C 15.225(e)	Pass	
Radiated Emissions (30MHz-1GHz)		ANSI C63.10 (2013) Section 6.5	47 CFR Part 15, Subpart C 15.225(d) & 15.209	Pass	
Radiated Emissions (9kHz-30MHz)		ANSI C63.10 (2013) Section 6.4	47 CFR Part 15, Subpart C 15.225(d) & 15.209	Pass	

Declaration of EUT Family Grouping:

Model No.: PNC560, PNC560 SCAN

Only the model PNC560 SCAN was fully tested, since according to the declaration from the applicant, the electrical circuit design, PCB layout, components used, internal wiring and functions were identical for all the above models, with only difference on SCAN camera for PNC560 SCAN and emergency call button for PNC560.



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, remails: CARD Descheck@ass.com.



Report No.: FYCR220400013406

Page: 4 of 30

3 Contents

_	OOVED DAGE	Page
1	COVER PAGE	1
2	TEST SUMMARY	3
3	CONTENTS	4
4	GENERAL INFORMATION	6
4		
	4.1 DETAILS OF E.U.T. 4.2 DESCRIPTION OF SUPPORT UNITS	
	4.2 DESCRIPTION OF SUPPORT UNITS	
	4.4 TEST LOCATION	
	4.5 TEST FACILITY	
	4.6 DEVIATION FROM STANDARDS	
	4.7 ABNORMALITIES FROM STANDARD CONDITIONS	
5		
6		
	6.1 ANTENNA REQUIREMENT	10
	6.1.1 Test Requirement:	
	6.1.2 Conclusion	10
7	RADIO SPECTRUM MATTER TEST RESULTS	11
	7.1 20DB BANDWIDTH	11
	7.1.1 E.U.T. Operation	11
	7.1.2 Test Mode Description	
	7.1.3 Test Setup Diagram	
	7.1.4 Measurement Procedure and Data	
	7.2 CONDUCTED EMISSIONS AT MAINS TERMINALS (150kHz-30MHz)	
	7.2.1 E.U.T. Operation	
	7.2.2 Test Mode Description	
	7.2.3 Test Setup Diagram7.2.4 Measurement Procedure and Data	
	7.2.4 Measurement Procedure and Data	
	7.3.1 E.U.T. Operation	
	7.3.2 Test Mode Description	
	7.3.3 Test Setup Diagram	
	7.3.4 Measurement Procedure and Data	
	7.4 FREQUENCY TOLERANCE	20
	7.4.1 E.U.T. Operation	20
	7.4.2 Test Mode Description	20
	7.4.3 Test Setup Diagram	
	7.4.4 Measurement Procedure and Data	
	7.5 RADIATED EMISSIONS (30MHz-1GHz)	
	7.5.1 E.U.T. Operation	22



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

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Barian, Sherazhen, Chira 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 5 of 30

	Test Setup Diagram Measurement Procedure and Data	
7.6 F	RADIATED EMISSIONS (9KHz-30MHz)	26
7.6.1	E.U.T. Operation	27
7.6.2	Test Mode Description	27
7.6.3	Test Setup Diagram	27
7.6.4	Measurement Procedure and Data	27
8 TEST	SETUP PHOTO	30
9 EUT C	CONSTRUCTIONAL DETAILS (EUT PHOTOS)	30



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and 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, Gregory 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, **Certificate**).



Report No.: FYCR220400013406

Page: 6 of 30

4 General Information

4.1 Details of E.U.T.

Power supply:	DC3.85V by Li-ion battery
	Recharged by AC/DC power adapter
	Adapter M/N: TPA-10R120150UU01
	Adapter input: AC100-240V, 50/60Hz, 0.6A
	Adapter output: DC3.6-6V/3A, 6-9V/2A, 9-12V/1.5A
Cable(s):	USB Type C cable: 1m shielded cable without ferrite core
Operation Frequency:	13.56MHz
Modulation Type:	ASK
Antenna type:	Loop antenna

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.			
The EUT has been tested as an independent unit.						

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
20dB Bandwidth	± 0.3%
Conducted Emissions at Mains Terminals (150kHz-30MHz)	± 2.1 dB (9kHz to 30MHz)
Emission Mask	± 0.3%
Frequency tolerance	± 5.4 x 10-8
Radiated Emissions (30MHz-1GHz)	± 5.6 dB (30MHz-1GHz)
Radiated Emissions (9kHz-30MHz)	± 2.7 dB (9kHz-30MHz)



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



Report No.: FYCR220400013406

Page: 7 of 30

4.4 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc. Shenzhen branch.

Fuyong lab. Xinlong TechnoPark,Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

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

• A2LA (Certificate No. 6606.01)

Compliance Certification Services (Kunshan) Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6606.01.

• FCC -Designation Number: CN1322

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

• Innovation, Science and Economic Development Canada

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.

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 http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of 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 unlawfull and offenders may be prosecuted to the fullest extend 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 finspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Attention: To check the authenticity of testing finspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Termina and the company a



Report No.: FYCR220400013406

Page: 8 of 30

5 Equipment List

20dB Bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver(9kHz-3GHz)	Rohde & Schwarz	ESCI	SEM004-01	2021/7/13	2022/7/12

Conducted Emissions at Mains Terminals (150kHz-30MHz)						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
Shielding Room	CRT	N/A	SEM001-14	2021/7/13	2024/7/12	
EMI Test Receiver(9kHz-3GHz)	Rohde & Schwarz	ESCI	SEM004-01	2021/7/13	2022/7/12	
Two-Line V- Network(9kHz-30MHz)	Rohde & Schwarz	ENV216	SEM007-16	2021/7/13	2022/7/12	
Two-Line V- Network(9kHz-30MHz)	Rohde & Schwarz	ESH3-Z5	SEM007-22	2021/7/13	2022/7/12	

Emission Mask					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2022/7/12
Loop Antenna	ETS-LINDGREN	6502	SEM003-36	2021/9/26	2024/9/25
MXE EMI receiver	Agilent	N9038A	SEM004-05	2021/7/13	2022/7/12
Pre-amplifier	HP	8447D	SEM005-02	2021/7/13	2022/7/12
Low Noise Amplifier	CLAVIIO	BDLNA-0118- 352810	SEM005-05	2021/7/13	2022/7/12

Frequency tolerance								
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date			
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2021/7/13	2022/7/12			
EMI Test Receiver(9kHz-3GHz) Rohde & Schw		ESCI	SEM004-01	2021/7/13	2022/7/12			
Programmable DC Chroma		62024P-80-60	SEM011-09	2021/7/13	2022/7/12			
Electric and Magnetic Field Probe - Analyzer	Narda	EHP-200AC	SEM022-20	2022/4/2	2023/4/1			



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. Attention is drawn to the limitation of liability, indemnification insues defined therein. Any holder of his 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, remail: CARD Roccheck/Ress.com

Fuyong lab. Xiniong TechnoPark, Fenglang Road, Fuyong Subdishird, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国·深圳·宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 9 of 30

Radiated Emissions (30MHz-1GHz)								
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date			
Trilog-Broadband Antenna	Schwarzbeck	VULB9168	SEM003-33	2021/9/25	2024/9/24			
Loop Antenna ETS-LINDGREN		6502	SEM003-36	2021/9/26	2024/9/25			
MXE EMI receiver Agilent		N9038A	SEM004-05	2021/7/13	2022/7/12			
Pre-amplifier	HP	8447D	SEM005-02	2021/7/13	2022/7/12			
Spectrum Analyzer	Rohde & Schwarz	101288	SEM004-08	2021/7/13	2022/7/12			
Low Noise Amplifier	CLAVIIO	BDLNA-0118- 352810	SEM005-05	2021/7/13	2022/7/12			

Radiated Emissions (9kHz-30MHz)								
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date			
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2022/7/12			
Loop Antenna	ETS-LINDGREN	6502	SEM003-36	2021/9/26	2024/9/25			
MXE EMI receiver	Agilent	N9038A	SEM004-05	2021/7/13	2022/7/12			
Pre-amplifier	HP	8447D	SEM005-02	2021/7/13	2022/7/12			
Low Noise Amplifier	CLAVIIO	BDLNA-0118- 352810	SEM005-05	2021/7/13	2022/7/12			

General used equipment								
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date			
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-22	2021-07-13	2022-07-12			
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-23	2021-07-13	2022-07-12			
Barometer	DUMAI	DYM3	SEM002-24	2021-07-13	2022-07-12			



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and 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, Gregory 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) 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: CND Docebeck@es.com

| Fuyorg lab. Xinlong TechnoPark, Fargiang Road, Fuyong Subdistrid, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 10 of 30

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

15.203 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 a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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.

Antenna location: Refer to Internal photos



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.for Electronic Documents a thut://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. 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 unlawfull 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 finspection report & certificate, please contact us at telephone: (86-755) 8307 1443.



Report No.: FYCR220400013406

Page: 11 of 30

7 Radio Spectrum Matter Test Results

7.1 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215 Test Method: ANSI C63.10 (2013) Section 6.9

7.1.1 E.U.T. Operation

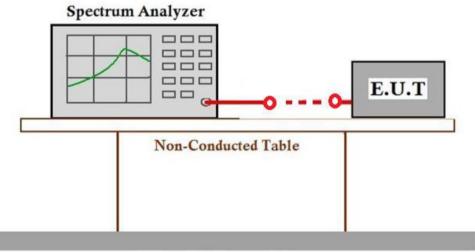
Operating Environment:

Temperature: 24.4 °C Humidity: 57.0 % RH Atmospheric Pressure: 1020 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	16	TX mode_Keep the EUT in transmitting mode

7.1.3 Test Setup Diagram



Ground Reference Plane

7.1.4 Measurement Procedure and Data

The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.for Electronic Documents a thut://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. 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 unlawfull 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.

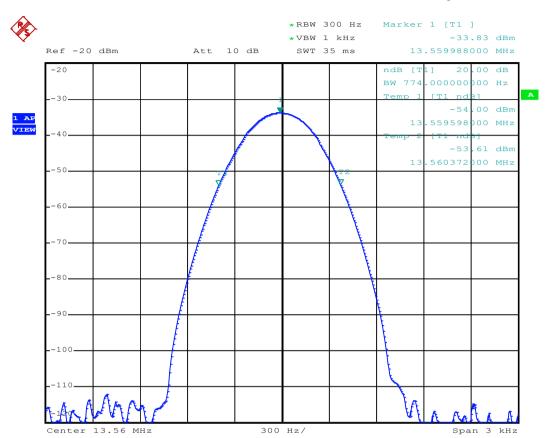
Attention: To check the authenticity of testing finspection report & certificate, please contact us at telephone: (86-755) 8307 1443.

| Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrid, Bao'an, Shenzhen, Chira 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 12 of 30





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. Attention is drawn to the limitation of liability, indemplification 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 fullent 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 related for 30 days only.

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



Report No.: FYCR220400013406

Page: 13 of 30

7.2 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207 Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Francisco (MIII)	Limit (dBuV)		
Frequency range (MHz)	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.

7.2.1 E.U.T. Operation

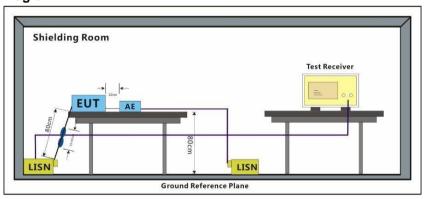
Operating Environment:

Temperature: 20.4 °C Humidity: 51.9 % RH Atmospheric Pressure: 1020 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	16	TX mode_Keep the EUT in transmitting mode

7.2.3 Test Setup Diagram





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. 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 unlawfull 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 finspection report & certificate, please contact us at telephone: (86-755) 8307 1443.



Report No.: FYCR220400013406

Page: 14 of 30

7.2.4 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 $50 \text{ohm}/50 \mu\text{H} + 5 \text{ohm}$ 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

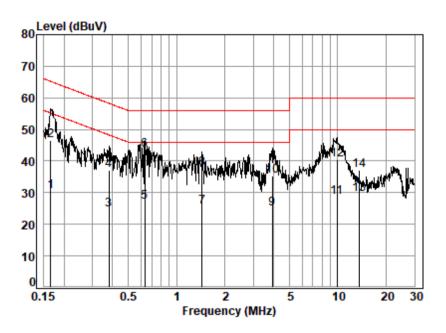




Report No.: FYCR220400013406

Page: 15 of 30

Test Mode: 16; Line: Live line



Site : Shielding Room

Condition: Line Job No. : 00134AT

Test mode: 16

		Cable	LISN	Read		Limit	0ver	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1650	0.09	0.17	30.09	30.35	55.21	-24.86	Average
2	0.1650	0.09	0.17	46.15	46.41	65.21	-18.80	QP
3	0.3791	0.06	0.16	24.37	24.59	48.30	-23.71	Average
4	0.3791	0.06	0.16	36.98	37.20	58.30	-21.10	QP
5	0.6338	0.10	0.17	26.67	26.94	46.00	-19.06	Average
6	0.6338	0.10	0.17	43.23	43.50	56.00	-12.50	QP
7	1.4409	0.05	0.18	25.19	25.42	46.00	-20.58	Average
8	1.4409	0.05	0.18	37.41	37.64	56.00	-18.36	QP
9	3.9222	0.08	0.17	24.70	24.95	46.00	-21.05	Average
10	3.9222	0.08	0.17	35.12	35.37	56.00	-20.63	QP
11	9.9130	0.08	0.15	28.26	28.49	50.00	-21.51	Average
12	9.9130	0.08	0.15	40.26	40.49	60.00	-19.51	QP
13	13.5600	0.10	0.29	29.10	29.49	50.00	-20.51	Average
14	13.5600	0.10	0.29	36.60	36.99	60.00	-23.01	QP



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

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

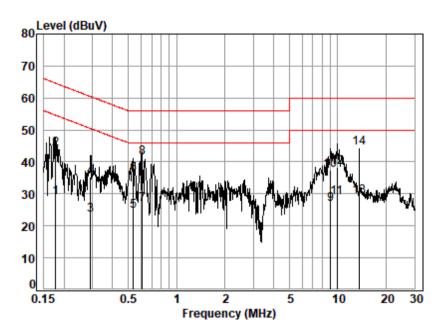
Fuyong lab. Xiniong TechnoPark, Fenglang Road, Fuyong Subdistriat, Bad'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国·深圳·宝安区福永街道风塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 16 of 30

Test Mode: 16; Line: Neutral Line



Site : Shielding Room

Condition: Neutral Job No. : 00134AT

Test mode: 16

		Cable	LISN	Read		Limit	0ver	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1777	0.10	0.19	28.55	28.84	54.59	-25.75	Average
2	0.1777	0.10	0.19	43.94	44.23	64.59	-20.36	QP
3	0.2924	0.08	0.18	23.13	23.39	50.46	-27.07	Average
4	0.2924	0.08	0.18	34.90	35.16	60.46	-25.30	QP
5	0.5378	0.09	0.16	24.52	24.77	46.00	-21.23	Average
6	0.5378	0.09	0.16	35.96	36.21	56.00	-19.79	QP
7	0.6108	0.09	0.10	26.65	26.84	46.00	-19.16	Average
8	0.6108	0.09	0.10	41.26	41.45	56.00	-14.55	QP
9	9.0592	0.06	0.12	26.71	26.89	50.00	-23.11	Average
10	9.0592	0.06	0.12	37.22	37.40	60.00	-22.60	QP
11	9.9130	0.08	0.13	28.54	28.75	50.00	-21.25	Average
12	9.9130	0.08	0.13	38.24	38.45	60.00	-21.55	QP
13	13.5600	0.10	0.21	28.99	29.30	50.00	-20.70	Average
14	13.5600	0.10	0.21	44.09	44.40	60.00	-15.60	QP



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, remails: CARD Descheck@ass.com.

Fuyong lab. Xinlong TechnoPark, Fenglang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国·深圳·宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 17 of 30

7.3 Emission Mask

Test Requirement 47 CFR Part 15, Subpart C 15.225(a)&(b)&(C)

Test Method: ANSI C63.10 (2013) Section 6.4

Limit:

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

Below 30MHz

The limit at 30m test distance is below:

$$FS_{\text{limit}} = FS_{\text{max}} - 40 \log \left(\frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

where

 FS_{limit} is the calculation of field strength at the limit distance, expressed in dB μ V/m

FS_{max} is the measured field strength, expressed in dBμV/m d_{measure} is the distance of the measurement point from the EUT is the reference distance or the distance of the $\lambda/2\pi$ point

The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 84dBuV/m at 30 meters.

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 24.4 °C Humidity: 57.0 % RH Atmospheric Pressure: 1020 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	16	TX mode_Keep the EUT in transmitting mode



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Documents, subject to Terms and Conditions for Electronic Documents at http://www.sgc.com/en/Terms-and-Conditions/Terms-en-Document.aspx.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and 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 unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

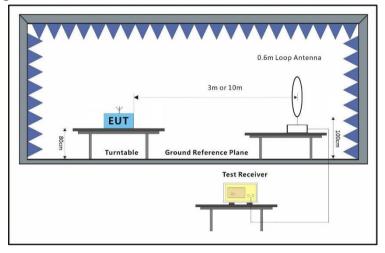
| Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrid, Bao'an, Shenzhen, Chira 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 18 of 30

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction 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.

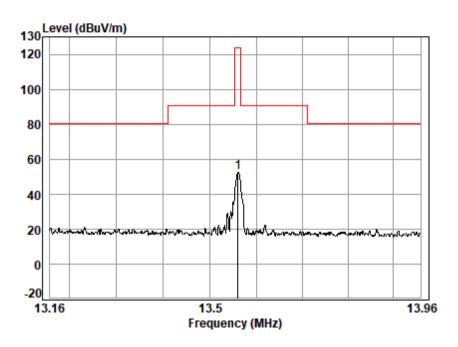
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, remails: CARD Descheck@ass.com.



Report No.: FYCR220400013406

Page: 19 of 30

Test Mode: 16



Condition: 3m

Job No. : 00134AT

Test Mode: 16

Cable Ant Preamp Read Limit 0ver Freq Loss Factor Factor Level Level Line Limit Remark MHz dΒ dB/m dΒ dBuV dBuV/m dBuV/m dB 8.65 32.06 75.17 52.36 124.00 -71.64 QP 1 p 13.56 0.60



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.for Electronic Documents a thittp://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. 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 unlawfull 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.

| Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrid, Bao'an, Shenzhen, Chira 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 20 of 30

7.4 Frequency tolerance

Test Requirement 47 CFR Part 15, Subpart C 15.225(e)
Test Method: ANSI C63.10 (2013) Section 6.8

Limit:

+0.01%

7.4.1 E.U.T. Operation

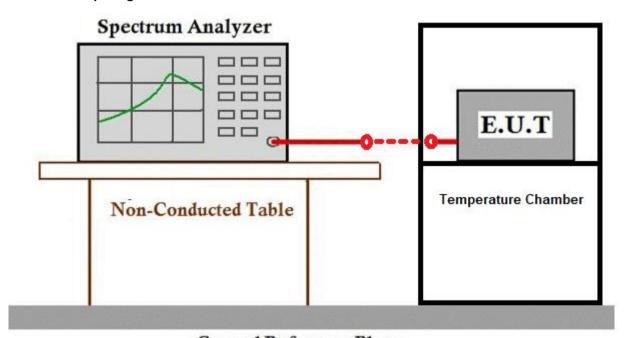
Operating Environment:

Temperature: 24.4 °C Humidity: 57.0 % RH Atmospheric Pressure: 1020 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	16	TX mode_Keep the EUT in transmitting mode

7.4.3 Test Setup Diagram



Ground Reference Plane

7.4.4 Measurement Procedure and Data

The EUT was placed in an environmental test chamber and powered such that control element received normal voltage and the transmitter provided maximum RF output.



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 <a href="http://www.sgs.com/en/Terms-and-Conditions.forElectronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions.forElectronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions.forE

Fulyong lab. Xiniong TechnoPark, Fenglang Road, Fulyong Subdistriat, Bad'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道风塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 21 of 30

Declared Frequency (MHz)	13.56MHz	@10 minutes
--------------------------	----------	-------------

Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result
50		13.559989	-0.00008		Pass
40	3.85	13.559984	-0.00012		Pass
30		13.559986	-0.00010		Pass
20		13.559984	-0.00012		Pass
10		13.559981	-0.00014	±0.01	Pass
0		13.559988	-0.00009	±0.01	Pass
-10		13.559987	-0.00010		Pass
-20		13.559988	-0.00009		Pass
20	3.5	13.559987	-0.00010		Pass
20	4.4	13.559986	-0.00010		Pass



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. Attention is drawn to the limitation of liability, indemnification insues defined therein. Any holder of his 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, remail: CARD Roccheck/Ress.com



Report No.: FYCR220400013406

Page: 22 of 30

7.5 Radiated Emissions (30MHz-1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.225(d) & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4&6.5

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 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.

7.5.1 E.U.T. Operation

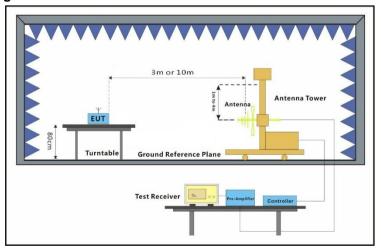
Operating Environment:

Temperature: 23.6 °C Humidity: 52.9 % RH Atmospheric Pressure: 1020 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	16	TX mode_Keep the EUT in transmitting mode

7.5.3 Test Setup Diagram





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. 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 unlawfull 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 finspection report & certificate, please contact us at telephone: (86-755) 8307 1443.

Fuyong lab. Xinlong TechnoPark, Fenglang Road, Fuyong Subdishrid, Bad'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国·深圳·宝安区福永街道风塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 23 of 30

7.5.4 Measurement Procedure and Data

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 meter semi-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, quasi-peak or average method as specified and then reported in a data sheet. g. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp 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 http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of 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 unlawfull and offenders may be prosecuted to the fullest extend 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.

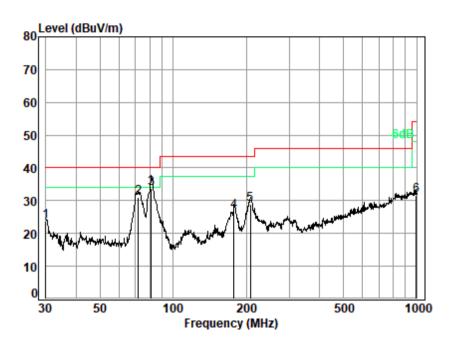
**Attention: To check the authenticity of testing finspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Attention: To check the authenticity of testing finspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Termina and the company a



Report No.: FYCR220400013406

Page: 24 of 30

Test Mode: 16; Polarity: Horizontal



Site : chamber

Condition: 3m HORIZONTAL

Job No : 00134AT

Mode : 16

	Freq			Preamp Factor					Remark
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.00	0.18	16.39	25.00	32.21	23.78	40.00	-16.22	QP
2	71.83	0.32	15.42	24.82	40.10	31.02	40.00	-8.98	QP
3 p	81.50	0.48	14.29	24.86	43.76	33.67	40.00	-6.33	QP
4	178.13	0.67	16.29	25.55	35.39	26.80	43.50	-16.70	QP
5	207.85	0.72	15.44	25.57	38.46	29.05	43.50	-14.45	QP
6	996.50	2.60	29.30	25.40	24.99	31.49	54.00	-22.51	OP .



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

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

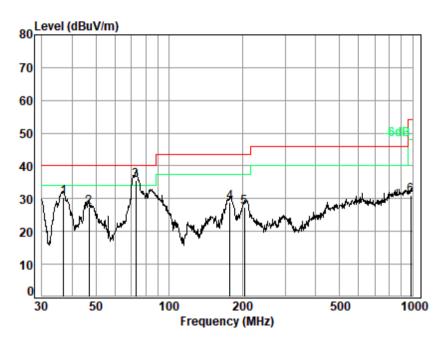
Fulyong lab. Xiniong TechnoPark, Fenglang Road, Fulyong Subdistriat, Bad'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道风塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 25 of 30

Test Mode: 16; Polarity: Vertical



Site : chamber Condition: 3m VERTICAL

Job No : 00134AT

Mode : 16

	Cable	Ant	Preamp	Read		Limit	0ver	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
36.90	0.19	16.05	24.96	39.00	30.28	40.00	-9.72	QP
46.83	0.21	17.27	24.91	34.86	27.43	40.00	-12.57	QP
73.10	0.34	15.10	24.82	44.88	35.50	40.00	-4.50	QP
178.13	0.67	16.29	25.55	37.35	28.76	43.50	-14.74	QP
204.24	0.71	15.28	25.57	36.95	27.37	43.50	-16.13	QP
982.62	2.45	29.20	25.42	24.84	31.07	54.00	-22.93	QP
	MHz 36.90 46.83 73.10 178.13 204.24	Freq Loss MHz dB 36.90 0.19 46.83 0.21 73.10 0.34 178.13 0.67 204.24 0.71	MHz dB dB/m 36.90 0.19 16.05 46.83 0.21 17.27 73.10 0.34 15.10 178.13 0.67 16.29 204.24 0.71 15.28	Freq Loss Factor Factor MHz dB dB/m dB 36.90 0.19 16.05 24.96 46.83 0.21 17.27 24.91 73.10 0.34 15.10 24.82 178.13 0.67 16.29 25.55 204.24 0.71 15.28 25.57	MHz dB dB/m dB dBuV 36.90 0.19 16.05 24.96 39.00 46.83 0.21 17.27 24.91 34.86 73.10 0.34 15.10 24.82 44.88 178.13 0.67 16.29 25.55 37.35 204.24 0.71 15.28 25.57 36.95	Freq Loss Factor Factor Level Level MHz dB dB/m dB dBuV dBuV/m 36.90 0.19 16.05 24.96 39.00 30.28 46.83 0.21 17.27 24.91 34.86 27.43 73.10 0.34 15.10 24.82 44.88 35.50 178.13 0.67 16.29 25.55 37.35 28.76 204.24 0.71 15.28 25.57 36.95 27.37	Freq Loss Factor Factor Level Level Level Line MHz dB dB/m dB dBuV dBuV/m dBuV/m dBuV/m 36.90 0.19 16.05 24.96 39.00 30.28 40.00 46.83 0.21 17.27 24.91 34.86 27.43 40.00 73.10 0.34 15.10 24.82 44.88 35.50 40.00 178.13 0.67 16.29 25.55 37.35 28.76 43.50 204.24 0.71 15.28 25.57 36.95 27.37 43.50	36.90 0.19 16.05 24.96 39.00 30.28 40.00 -9.72 46.83 0.21 17.27 24.91 34.86 27.43 40.00 -12.57 73.10 0.34 15.10 24.82 44.88 35.50 40.00 -4.50 178.13 0.67 16.29 25.55 37.35 28.76 43.50 -14.74



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, frogery 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 small CPU Doccheck@ss.com

Fulyong lab. Xiniong TechnoPark, Fenglang Road, Fulyong Subdistriat, Bad'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道风塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 26 of 30

7.6 Radiated Emissions (9kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.225(d) & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4&6.5

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength (microvolts/meter)	Limit (dBuV/m)	Detector	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	-	-	300
0.490-1.705	24000/F(kHz)	-	-	30
1.705-30	30	-	-	30

Below 30MHz

If field strength is measured at only a single point, then that point shall be at the radial from the EUT that produces the maximum emission at the frequency being measured, as described in 5.4. If that point is closer to the EUT than $\lambda/2\pi$ and the limit distance is greater than $\lambda/2\pi$, the measurement shall be extrapolated to the limit distance by conservatively presuming that the field strength decreases at a 40 dB/decade of distance rate to the $\lambda/2\pi$ distance, and at a 20 dB/decade of distance rate beyond $\lambda/2\pi$. This shall be accomplished using Equation (2):

$$FS_{(10m)} = FS_{(30/300m)} + 40log\{d_{(near field)}/d_{(10m)}\} + 20log\{d_{(30/300m)}/d_{(near field)}\}$$
(2)

If the single point measured is at a distance greater than $\lambda/2\pi$, then extrapolation to the limit distance shall be calculated using Equation (3):

$$FS_{(10m)} = FS_{(30/300m)} + 20log\{d_{(30/300m)}/d_{(10m)}\}$$
(3)

If both the single point and the limit distance are equal to or closer to the EUT than $\lambda/2\pi$, then extrapolation to the limit distance shall be calculated using Equation (4):

$$FS_{(10m)} = FS_{(30/300m)} + 40log\{d_{(30/300m)}/d_{(10m)}\}$$
(4)

Remark:

 $d_{near field} = 47.77 / f_{MHz}$

where f_{MHz} is the frequency of the emission being measured in MHz.

Remark:

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

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.and, for electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of 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 unlawfull and offenders may be prosecuted to the fullest extend 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 finspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Attention: To check the authenticity of testing finspection report & certificate, please contact us at telephone: (86-755) 8307 1443, **Termina and the company a

Fuyong lab. Xinlong TechnoPark, Fenglang Road, Fuyong Subdishrid, Bad'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国·深圳·宝安区福永街道风塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 27 of 30

$$FS_{\text{limit}} = FS_{\text{max}} - 40 \log \left(\frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

where

 FS_{limit} is the calculation of field strength at the limit distance, expressed in dB μ V/m

FS_{max} is the measured field strength, expressed in dBμV/m d_{measure} is the distance of the measurement point from the EUT is the reference distance or the distance of the $\lambda/2\pi$ point

7.6.1 E.U.T. Operation

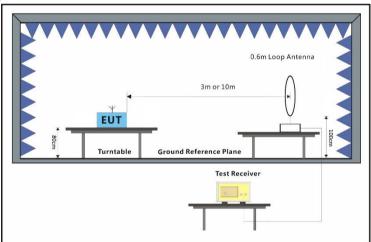
Operating Environment:

Temperature: 23.6 °C Humidity: 52.8 % RH Atmospheric Pressure: 1020 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	16	TX mode_Keep the EUT in transmitting mode

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.



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

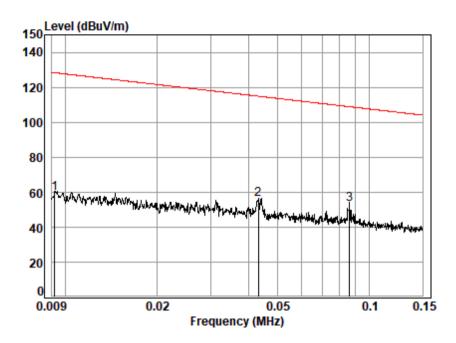
Attention: To check the authenticity of testing inspection report & certificate, please contact us at telephone: (86-755) 8307 1443,

| Fuyong lab. Xinlong TechnoPark, Fenglang Road, Fuyong Subdistrid, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 28 of 30



Condition: 3m

Job No. : 00134AT

Test Mode: 16

		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	0.01	0.29	18.83	30.89	71.18	59.41	128.32	-68.91	Average
2	0.04	0.31	11.24	31.73	75.90	55.72	114.91	-59.19	Average
3 p	0.09	0.32	10.57	31.79	73.84	52.94	108.90	-55.96	Average



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's Instructions, if any. The Company's sole responsibility is to its Client and 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) are retained for 30 days only.

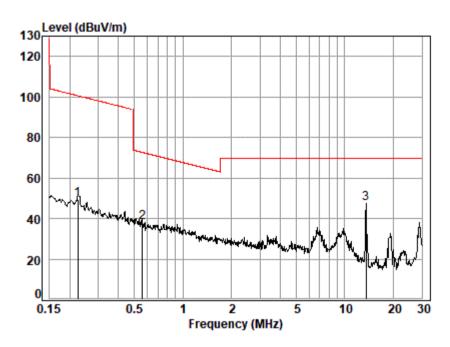
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, Accessing the content of the con

| Fuyorg lab. Xinlong TechnoPark, Fargiang Road, Fuyong Subdistrid, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 29 of 30



Site : chamber

Condition: 3m

Job No. : 00134AT

Test Mode: 16

	Freq			Preamp Factor					Remark	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		-
1 a	0.2244	0.30	10.36	31.76	70.69	49.59	100.58	-50.99	Average	
2	0.5611	0.29	10.30	31.73	59.35	38.21	72.62	-34.41	QP	
3 p	13.5509	0.60	8.65	32.06	70.09	47.28	69.54	-22.26	OP	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's Instructions, if any. The Company's sole responsibility is to its Client and 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) let estend for 30 days only.

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

| Fuyorg lab. Xinlong TechnoPark, Fargiang Road, Fuyong Subdistrid, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



Report No.: FYCR220400013406

Page: 30 of 30

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for FYCR2204000134AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for FYCR2204000134AT

- End of the Report -



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. 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 tested for 30 days only.

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