

SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 1 of 93

TEST REPORT

Application No.:	FYCR2211000468AT			
Applicant:	Voxx Accessories Corp.			
Address of Applicant:	3502 Woodview Trace Suite 220, Indianapolis, Indiana 46268 United States			
Manufacturer:	Voxx Accessories Corp.			
Address of Manufacturer:	3502 Woodview Trace Suite 220, Indianapolis, Indiana 46268 United States			
Factory:	Smart Glory Electronics (ShenZhen) Co., Ltd			
Address of Factory:	Building Four, No.63, Zhangqi Road, Qiping Village, Daping Community, Guanlan Street, Longhua New District, Shenzhen			
Equipment Under Test (EUT):			
EUT Name:	Duo Wireless Speaker I Earbuds All-in-One			
Model No.:	ARTWS35			
Trade Mark	AR (Acoustic Research)			
FCC ID:	VIXARTWS35EB			
Standard(s) :	47 CFR Part 15, Subpart C 15.247			
Date of Receipt:	2022-11-18			
Date of Test:	2022-11-23 to 2022-12-02			
Date of Issue:	2022-12-09			
Test Result:	Pass*			

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

WinkeyWang

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.aspx and for electronic format documents, subject to Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms-and-Conditions.aspx and for electronic format documents, statention 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 cannot be reproduced except in full, without prior written approval of the Company, any unauthorized alteration, forgery or faisification 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 referonity 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: CM.Doccheck@s.gs.com").

Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdishid, Bac/an, Shenzhen, China 518103 tt (86-755) 88663988 ft (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 tt (86-755) 88663988 ft (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 2 of 93

	Revision Record					
Version	Chapter	Date	Modifier	Remark		
01		2022-12-09		Original		

Authorized for issue by:			
	Gree 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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 for 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 report roly to the sample(s) tested and such sample(s) are retained for 30 days only. Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN Doccheck@ass.com").

Fuyong lab. Xiniong TechmoPark, Fenglang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 tt (86-755) 88663988 ft (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 tt (86-755) 88663988 ft (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 3 of 93

2 Test Summary

Radio Spectrum Technical Requirement					
Item	Standard	Method	Requirement	Result	
Antenna Requirement		N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)	Pass	
Other requirements Frequency Hopping Spread Spectrum System Hopping Sequence	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.247(a)(1),(g),(h)	Pass	

Radio Spectrum Matter Part					
ltem	Standard	Method	Requirement	Result	
Conducted Peak Output Power		ANSI C63.10 (2013) Section 7.8.5	47 CFR Part 15, Subpart C 15.247(b)(1)	Pass	
20dB Bandwidth		ANSI C63.10 (2013) Section 7.8.7	47 CFR Part 15, Subpart C 15.247(a)(1)	Pass	
Carrier Frequencies Separation		ANSI C63.10 (2013) Section 7.8.2	47 CFR Part 15, Subpart C 15.247a(1)	Pass	
Hopping Channel Number		ANSI C63.10 (2013) Section 7.8.3	47 CFR Part 15, Subpart C 15.247a(1)(iii)	Pass	
Dwell Time		ANSI C63.10 (2013) Section 7.8.4	47 CFR Part 15, Subpart C 15.247a(1)(iii)	Pass	
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.6	47 CFR Part 15, Subpart C 15.247(d)	Pass	
Conducted Spurious Emissions		ANSI C63.10 (2013) Section 7.8.8	47 CFR Part 15, Subpart C 15.247(d)	Pass	
Radiated Emissions which fall in the restricted bands		ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass	
Radiated Spurious Emissions Below 1GHz		ANSI C63.10 (2013) Section 6.4,6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass	
Radiated Spurious Emissions Above 1GHz		ANSI C63.10 (2013) Section 6.6	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass	

Remark:

Only the left earbuds was tested, the electrical circuit design, PCB layout, components used, internal wiring and functions were identical for left earbuds and right earbuds.



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-enc-Comment.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 cannot be reproduced except in full, without prior written approval of the Company hay no unathorized alteration, forger or faisification 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 referonly to the sample(s) testing and such asple(s) presented to 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: CM Doccheck@ses.com

Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdistind, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 4 of 93

3 Contents

		Page
1	COVER PAGE	1
2	TEST SUMMARY	3
2	CONTENTS	
3	CONTENTS	4
4	GENERAL INFORMATION	6
	4.1 DETAILS OF E.U.T.	
	4.2 DESCRIPTION OF SUPPORT UNITS	
	4.3 MEASUREMENT UNCERTAINTY	
	4.4 TEST LOCATION	
	4.5 TEST FACILITY	
	4.6 DEVIATION FROM STANDARDS	
	4.7 ABNORMALITIES FROM STANDARD CONDITIONS	1
5	EQUIPMENT LIST	8
6	RADIO SPECTRUM TECHNICAL REQUIREMENT	12
	6.1 ANTENNA REQUIREMENT	12
	6.1.1 Test Requirement:	
	6.1.2 Conclusion	
	6.2 OTHER REQUIREMENTS FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM HOPPING SEQUENCE	13
	6.2.1 Test Requirement:	
	6.2.2 Conclusion	13
7	RADIO SPECTRUM MATTER TEST RESULTS	15
	7.1 CONDUCTED PEAK OUTPUT POWER	15
	7.1.1 E.U.T. Operation	
	7.1.2 Test Mode Description	15
	7.1.3 Test Setup Diagram	
	7.1.4 Measurement Procedure and Data	
	7.2 20DB BANDWIDTH	
	7.2.1 E.U.T. Operation	
	7.2.2 Test Mode Description	
	7.2.3 Test Setup Diagram	
	7.2.4 Measurement Procedure and Data	
	7.3 CARRIER FREQUENCIES SEPARATION	
	I contraction of the second	
	7.3.2 Test Mode Description7.3.3 Test Setup Diagram	
	7.3.4 Measurement Procedure and Data	
	7.4 HOPPING CHANNEL NUMBER	
	7.4.1 E.U.T. Operation	
	7.4.2 Test Mode Description	
	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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdishid, Barlan, Shenzhen, China 518103 tt (86-755) 88663988 ft (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 tt (86-755) 88663988 ft (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 5 of 93

	7.4.4	Measurement Procedure and Data	.19
7.5	5 D	WELL TIME	20
	7.5.1	E.U.T. Operation	.20
	7.5.2	Test Mode Description	.20
	7.5.3	Test Setup Diagram	
	7.5.4	Measurement Procedure and Data	
7.6	6 Co	ONDUCTED BAND EDGES MEASUREMENT	
	7.6.1	E.U.T. Operation	.22
	7.6.2	Test Mode Description	.22
	7.6.3	Test Setup Diagram	.23
	7.6.4	Measurement Procedure and Data	.23
7.7	7 Co	ONDUCTED SPURIOUS EMISSIONS	24
	7.7.1	E.U.T. Operation	24
	7.7.2	Test Mode Description	24
	7.7.3	Test Setup Diagram	24
	7.7.4	Measurement Procedure and Data	
7.8		ADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS	
	7.8.1	E.U.T. Operation	
	7.8.2	Test Mode Description	
	7.8.3	Test Setup Diagram	
	7.8.4	Measurement Procedure and Data	
7.9		ADIATED SPURIOUS EMISSIONS BELOW 1GHZ	
	7.9.1	E.U.T. Operation	
	7.9.2	Test Mode Description	
	7.9.3	Test Setup Diagram	
	7.9.4	Measurement Procedure and Data	
7.1		ADIATED SPURIOUS EMISSIONS ABOVE 1GHZ	
	7.10.1	E.U.T. Operation	
	7.10.2	Test Mode Description	
	7.10.3	Test Setup Diagram	
	7.10.4	Measurement Procedure and Data	39
8	TEST S	СЕТИР РНОТО	46
9	EUT CO	ONSTRUCTIONAL DETAILS (EUT PHOTOS)	46
10	APPEN	IDIX	47



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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 for 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 report roly to the sample(s) tested and such sample(s) are retained for 30 days only. Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN-Doccheck@ass.com").

Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdistict, Baolan, Shenzhen, China 518103 tt (86–755) 88663988 ft (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 tt (86–755) 88663988 ft (86–755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 6 of 93

4 General Information

4.1 Details of E.U.T.

Power Supply:	Left earbuds: Li-Ion Polymer Battery 3.7V 25mAh (Charge by speaker) Right earbuds: Li-Ion Polymer Battery 3.7V 25mAh (Charge by speaker)
Operation Frequency:	2402MHz to 2480MHz
Bluetooth Version:	V5.3 Classic
Modulation Type:	GFSK, pi/4DQPSK, 8DPSK
Number of Channels:	79
Channel Spacing:	1MHz
Spectrum Spread Technology:	Frequency Hopping Spread Spectrum(FHSS)
Antenna Type:	Chip Antenna
Antenna Gain:	5.12dBi

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

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Adapter	Apple	A1357	REF. No.SEA05A01A

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Peak Output Power	± 0.8dB
20dB Bandwidth	± 0.3%
Carrier Frequencies Separation	± 0.3%
Hopping Channel Number	± 0.3%
Dwell Time	± 0.3%
Conducted Band Edges Measurement	± 2.7dB
Conducted Spurious Emissions	± 2.7dB
Radiated Emissions which fall in the restricted bands	± 4.4dB (Above 1GHz)
Radiated Spurious Emissions Below 1GHz	± 3.1dB (Below 1GHz)
Radiated Spurious Emissions Above 1GHz	± 4.4dB (Above 1GHz)



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

Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdistind, Bao'an, Shenzhen, China 518103 t (86–755) 88663988 f (86–755) 26710594 www.sgs.group.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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 7 of 93

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.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 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 extend for 30 days only. Attention: To entex the authenticity of testing fungection period acertificate, please contact us at telephone: (86-755) 8307 1443, Attention: To entex the authenticity of testing fungection period acertificate, please contact us at telephone:

Fuyong kab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 tt (86-755) 88663988 ft (86-755) 28710594 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 tt (86-755) 88663988 ft (86-755) 28710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 8 of 93

5 Equipment List

Conducted Peak Output Power						
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date	
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2022/5/30	2023/5/29	
Power Sensor	Erika Fiedler	U2021XA	SEM009-15	2022/7/12	2023/7/11	
Power Sensor	Erika Fiedler	U2021XA	SEM009-16	2022/7/12	2023/7/11	
Programmable DC Source	Chroma	62024P-80-60	SEM011-09	2022/7/12	2023/7/11	
Attenuator	Huber+Suhner	6620_SMA-50- 1	SEM021-09	2022/7/12	2023/7/11	
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A	

20dB Bandwidth						
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date	
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2022/5/30	2023/5/29	
Programmable DC Source	Chroma	62024P-80-60	SEM011-09	2022/7/12	2023/7/11	
Attenuator	Huber+Suhner	6620_SMA-50- 1	SEM021-09	2022/7/12	2023/7/11	
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A	

Carrier Frequencies Separation							
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date		
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2022/5/30	2023/5/29		
Attenuator	Huber+Suhner	6620_SMA-50- 1	SEM021-09	2022/7/12	2023/7/11		
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A		

Hopping Channel Numb	er				
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2022/5/30	2023/5/29
Attenuator	Huber+Suhner	6620_SMA-50- 1	SEM021-09	2022/7/12	2023/7/11
Measurement Software	TST PASS	TST PASS V2.0	N/A	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 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-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 hereion 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 cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or faisification 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 report only to the sample(s) tested and such sample(s) are retained for 30 days only. Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN.Doccheck@ass.com

Fuyong lab. Xiniong TechnoPark, Fenglang Road, Fuyong Subdishid, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 9 of 93

Dwell Time					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2022/5/30	2023/5/29
Attenuator	Huber+Suhner	6620_SMA-50- 1	SEM021-09	2022/7/12	2023/7/11
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A

Conducted Band Edges Measurement								
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date			
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2022/5/30	2023/5/29			
Attenuator	Huber+Suhner	6620_SMA-50- 1	SEM021-09	2022/7/12	2023/7/11			
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A			

Conducted Spurious Emissions							
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date		
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2022/5/30	2023/5/29		
Attenuator	Huber+Suhner	6620_SMA-50- 1	SEM021-09	2022/7/12	2023/7/11		
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A		

Radiated Emissions which fall in the restricted bands							
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date		
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2024/7/12		
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2021/7/11	2024/7/10		
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	SEM003-32	2021/9/26	2024/9/25		
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-23	2022/4/24	2023/4/23		



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

Fuyong lab. Xinlong TechnoPark, Fergtang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgs.group.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.cohina@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 10 of 93

Pre-amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2022/7/12	2023/7/11
Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2022/7/12	2023/7/11
Coaxial Cable	CCS	N/A	SEM035-02	2022/5/16	2023/5/15
Coaxial Cable	CCS	N/A	SEM035-03	2022/5/16	2023/5/15
Pre-amplifier	TST PASS	LNA04080G30	SEM005-27	2022/4/15	2023/4/14
Pre-amplifier	TST PASS	LNA10180G45	SEM005-28	2022/4/15	2023/4/14
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A

Radiated Spurious Emissions Below 1GHz							
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date		
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2024/7/12		
Trilog-Broadband Antenna	Schwarzbeck	VULB9168	SEM003-33	2021/9/25	2024/9/24		
MXE EMI receiver	Agilent	N9038A	SEM004-05	2022/7/12	2023/7/11		
Pre-amplifier	HP	8447D	SEM005-02	2022/7/12	2023/7/11		
Coaxial Cable	CCS	N/A	SEM035-01	2022/5/16	2023/5/15		
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A		
Loop Antenna	ETS-LINDGREN	6502	SEM003-36	2021/9/26	2024/9/25		

Radiated Spurious Emissions Above 1GHz						
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date	
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2024/7/12	
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	SEM003-32	2021/9/26	2024/9/25	
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-23	2022/4/24	2023/4/23	
Coaxial Cable	CCS	N/A	SEM035-03	2022/5/16	2023/5/15	
Pre-amplifier	TST PASS	LNA04080G30	SEM005-27	2022/4/15	2023/4/14	
Pre-amplifier	TST PASS	LNA10180G45	SEM005-28	2022/4/15	2023/4/14	
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond

Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdistict, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 11 of 93

General used equipment							
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date		
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-22	2022-07-12	2023-07-11		
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-23	2022-07-12	2023-07-11		
Barometer	DUMAI	DYM3	SEM002-24	2022-07-12	2023-07-11		



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

Fuyong lab. Xining TechnoPark, Fengtang Road, Fuyong Subdishid, Bavian, Shenzhen, China 518103 tt (86-755) 88663988 ft (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 tt (86-755) 88663988 ft (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 12 of 93

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 & 15.247(b)(4)

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 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.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 5.12dBi.

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 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.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 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 itset 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: (86-75) 83071443, or avail.

Fuyong lab. Xiniong TechnoPark, Fengtang Read, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 28710594 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 13 of 93

6.2 Other requirements Frequency Hopping Spread Spectrum System Hopping Sequence

6.2.1 Test Requirement:

47 CFR Part 15, Subpart C 15.247(a)(1),(g),(h)

6.2.2 Conclusion

Standard Requirement:

The system shall hop to channel frequencies that are selected at the system hopping rate from a Pseudorandom ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

Compliance for section 15.247(a)(1):

According to Technical Specification, the pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with nine ones.

- > Number of shift register stages: 9
- > Length of pseudo-random sequence: 29 -1 = 511 bits
- > Longest sequence of zeros: 8 (non-inverted signal)

Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:

Each frequency used equally on the average by each transmitter.

According to Technical Specification, the receivers are designed to have input and IF bandwidths that match the hopping channel bandwidths of any transmitters and shift frequencies in synchronization with the transmitted signals.

Compliance for section 15.247(g):

According to Technical Specification, the system transmits the packet with the pseudorandom hopping frequency with a continuous data and the short burst transmission from the Bluetooth system is also transmitted under the frequency hopping system with the pseudorandom hopping



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overlear, 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.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-eDocument.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 Cliens's instructions, if any. The Company's sole responsibility is to its Client and 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: Ch.Doccheck@sgs.com

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 tt (86-755) 88663988 ft (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 tt (86-755) 88663988 ft (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 14 of 93

frequency system.

Compliance for section 15.247(h):

According to Technical specification, the system incorporates with an adaptive system to detect other user within the spectrum band so that it individually and independently to avoid hopping on the occupied channels.

The system is designed not have the ability to coordinated with other FHSS System in an effort to avoid the simultaneous occupancy of individual hopping frequencies by multiple transmitter.



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

Fuyong lab. Xinlong TechmoPark, Fengtang Road, Fuyong Subdistict, Baolan, Shenzhen, China 518103 tt (86–755) 88663988 ft (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 tt (86–755) 88663988 ft (86–755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 15 of 93

7 Radio Spectrum Matter Test Results

7.1 Conducted Peak Output Power

Test Requirement47 CFR Part 15, Subpart C 15.247(b)(1)Test Method:ANSI C63.10 (2013) Section 7.8.5

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

7.1.1 E.U.T. Operation

Operating Environ	ment:					
Temperature:	25.0 °C	Humidity:	40.7 % RH	Atmospheric Pressure:	1020	mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX_non-Hop mode(left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and 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 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-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 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 breek the authenticity of lesting / Impection report a certificate, please contact us at telephone: (86-755) 8307 1443,

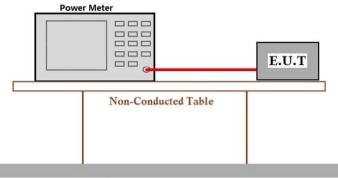
Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdistict, Baolan, Shenzhen, China 518103 tt (86–755) 88663988 ft (86–755) 26710594 www.sgsgroup.com.cn 中国 • 深圳 • 宝安区福永街道凤樵大道鑫龙科技园福永实验室 邮编: 518103 tt (86–755) 88663988 ft (86–755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 16 of 93

7.1.3 Test Setup Diagram



Ground Reference Plane

7.1.4 Measurement Procedure and Data

Please Refer to Appendix for Details



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://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 reptit refer only to the sample(s) tested and such sample(s) are retained for 30 days only. or email: CN Doccheck@ss.com

Fuyong lab. Xiniong TechnoPark, Fenglang Road, Fuyong Subdistict, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 17 of 93

7.2 20dB Bandwidth

Test Requirement	47 CFR Part 15, Subpart C 15.247(a)(1)
Test Method:	ANSI C63.10 (2013) Section 7.8.7

7.2.1 E.U.T. Operation

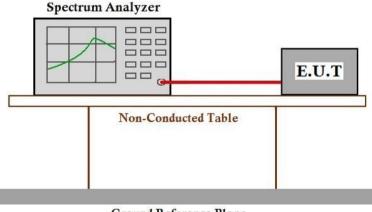
Operating Environment:

Temperature: 25.0 °C Humidity: 40.7 % RH Atmospheric Pressure: 1020 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX_non-Hop mode(left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



Ground Reference Plane

7.2.4 Measurement Procedure and Data

Please Refer to Appendix for Details



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents 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, indermification 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 cannot be reproduced except in full, without prior written approval of the Company, any unauthorized alteration, forgery or faisification 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: Ch.Doccheck@sgs.com

Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdistict, Bavlan, Shenzhen, China 518103 tt (86–755) 88663988 ft (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 tt (86–755) 88663988 ft (86–755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 18 of 93

7.3 Carrier Frequencies Separation

Test Requirement	47 CFR Part 15, Subpart C 15.247a(1)
Test Method:	ANSI C63.10 (2013) Section 7.8.2

Limit:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

7.3.1 E.U.T. Operation

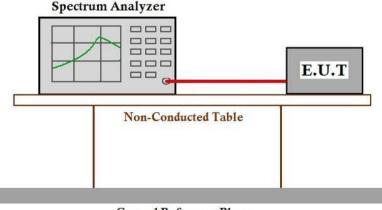
Operating Environment:

	0						
Tempe	rature:	25.0 °C	Humidity:	40.7 % RH	Atmospheric Pressure:	1020	mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_Hop mode(left earbuds)_Keep the EUT in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



Ground Reference Plane

7.3.4 Measurement Procedure and Data

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 overlear, 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-eDocument.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 cannot be reproduced except in full, without prior written approval of the Company hav, unauthorized alteration, forger 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) testing linspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CA Doccheck@ses.com

Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdishid, Bardan, Shenzhen, China 518103 tt (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 tt (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 19 of 93

7.4 Hopping Channel Number

Test Requirement	47 CFR Part 15, Subpart C 15.247a(1)(iii)
Test Method:	ANSI C63.10 (2013) Section 7.8.3

Limit:

Frequency range(MHz)	Number of hopping channels (minimum)
002.029	50 for 20dB bandwidth <250kHz
902-928	25 for 20dB bandwidth ≥250kHz
2400-2483.5	15
5725-5850	75

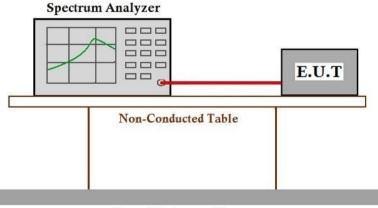
7.4.1 E.U.T. Operation

Operating Enviror	nment:					
Temperature:	25.0 °C	Humidity:	40.7 % RH	Atmospheric Pressure:	1020	mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_Hop mode(left earbuds)_Keep the EUT in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



Ground Reference Plane

7.4.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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

Fuyong lab. Xinlong TechmoPark, Fengtang Road, Fuyong Subdishid, Baolan, Shenzhen, China 518103 tt (86–755) 88663988 ft (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 tt (86–755) 88663988 ft (86–755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 20 of 93

7.5 Dwell Time

Test Requirement	47 CFR Part 15, Subpart C 15.247a(1)(iii)
Test Method:	ANSI C63.10 (2013) Section 7.8.4

Limit:

Frequency(MHz)	Limit
902-928	0.4S within a 20S period(20dB bandwidth<250kHz)
902-928	0.4S within a 10S period(20dB bandwidth≥250kHz)
2400 2492 5	0.4S within a period of 0.4S multiplied by the number
2400-2483.5	of hopping channels
5725-5850	0.4S within a 30S period

7.5.1 E.U.T. Operation

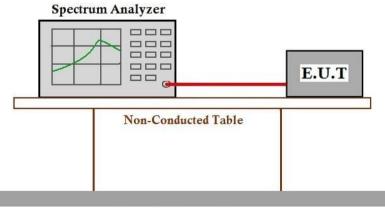
Operating Environment:

Temperature:	25.0 °C	Humidity:	40.7 % RH	Atmospheric Pressure:	1020	mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX_Hop mode(left earbuds)_Keep the EUT in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



Ground Reference Plane



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-enccument.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 cannot be reproduced except in full, without prior written approval of the Company hay no unathorized alteration, forger or faisification 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 referonly to the sample(s) testing and such aspnt(s) to result, please contact us at telephone: (86-755) 8307 1443, or email: CN Doccheck&sgs.com

Fuyong lab. Xining TechnoPark, Fengtang Road, Fuyong Subdishid, Bavian, Shenzhen, China 518103 tt (86-755) 88663988 ft (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 tt (86-755) 88663988 ft (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 21 of 93

7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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

Fuyong lab. Xiniong TechmoPark, Fengtang Road, Fuyong Subdistict, Baolan, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 22 of 93

7.6 Conducted Band Edges Measurement

Test Requirement	47 CFR Part 15, Subpart C 15.247(d)
Test Method:	ANSI C63.10 (2013) Section 7.8.6

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c).

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 40.7 % RH Atmospheric Pressure: 1020 mbar

Pre-scan / Final test	Mode Code	Description
Final test	03	TX_non-Hop mode(left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.
Final test	04	TX_Hop mode(left earbuds)_Keep the EUT in frequency hopping mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.6.2 Test Mode Description



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 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 extend for 30 days only. Attention: To entex the authenticity of testing fungection period acertificate, please contact us at telephone: (86-755) 8307 1443, Attention: To entex the authenticity of testing fungection period acertificate, please contact us at telephone:

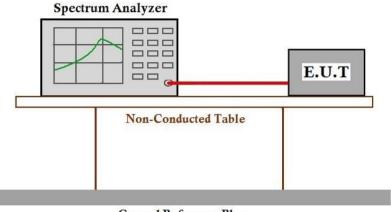
Fuyong kai. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 23 of 93

7.6.3 Test Setup Diagram



Ground Reference Plane

7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/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 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 breek the authenricity of lesting / Impection report a certificate, please contact us at lelephone: (86-755) 8307 1443,

Fuyong lab. Xiniong TechnoPark, Fenglang Road, Fuyong Subdistict, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 24 of 93

7.7 Conducted Spurious Emissions

Test Requirement	47 CFR Part 15, Subpart C 15.247(d)
Test Method:	ANSI C63.10 (2013) Section 7.8.8

Limit:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c).

7.7.1 E.U.T. Operation

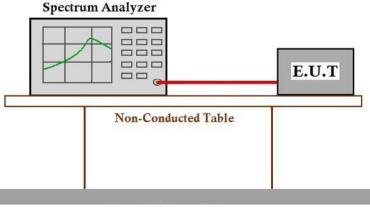
Operating Environment:

	Temperature:	25.0 °C	Humidity: 40.	.7 % RH	Atmospheric Pressure:	1020	mbar	
--	--------------	---------	---------------	---------	-----------------------	------	------	--

111.2 10301		
Pre-scan / Final test	Mode Code	Description
Final test	03	TX_non-Hop mode(left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.7.2 Test Mode Description

7.7.3 Test Setup Diagram



Ground Reference Plane



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-eDocument.aspx. Attention is drawn to the limitation of liability, indermification 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 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) testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN Doccheck@ses.com

 Fuyong lab, Xiniong TechnoPark, Fengtang Road, Fuyong Subdishid, 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.cohina@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 25 of 93

7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details



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

Fuyong lab. Xiniong TechmoPark, Fengtang Road, Fuyong Subdistict, Baolan, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 26 of 93

7.8 Radiated Emissions which fall in the restricted bands

Test Requirement	47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method:	ANSI C63.10 (2013) Section 6.10.5
Measurement Distance:	3m

Limit:

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

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

7.8.1 E.U.T. Operation

Operating Enviro	nment:				
Temperature:	22.2 °C	Humidity:	51.3 % RH	Atmospheric Pressure: 1020 mba	ar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX_non-Hop mode(left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and 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 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-eDocument.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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent and this document cannot be reproduced except in full, without prior written approval of the Company have 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: (86-75) 83071443, or arealite.

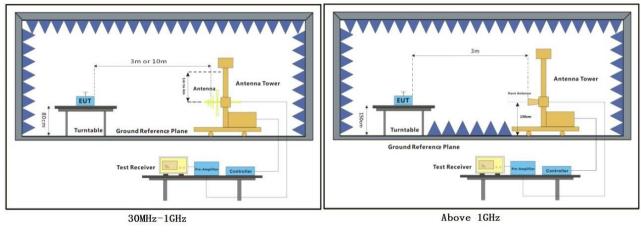
Fuyong lab. Xiniong TechnoPark, Fengtang Road, Fuyong Subdishid, Bao'an, Shenzhen, China 518103 tt (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 tt (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 27 of 93

7.8.3 Test Setup Diagram





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 sated the resource in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or espulse shown in this test report report report 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@ass.com").

Fuyong lab. Xinlong TechnoPark, Fenglang Read, Fuyong Subdistict, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 28 of 93

7.8.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. 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.

c. 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.

d. 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.

e. 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.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. 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.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

i. 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.

j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: 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.



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-Comtions/Terms-en-Comments, the subject to Terms and Conditions of the subject on the subject of the subject

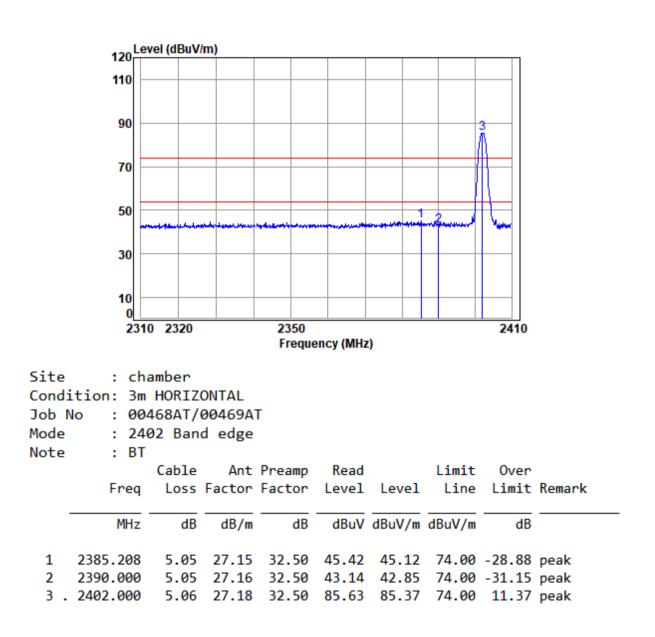
Fuyong kab. Xinlong TechnoPark, Fengtang Read, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 28710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 28710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 29 of 93

Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; Channel:Low





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

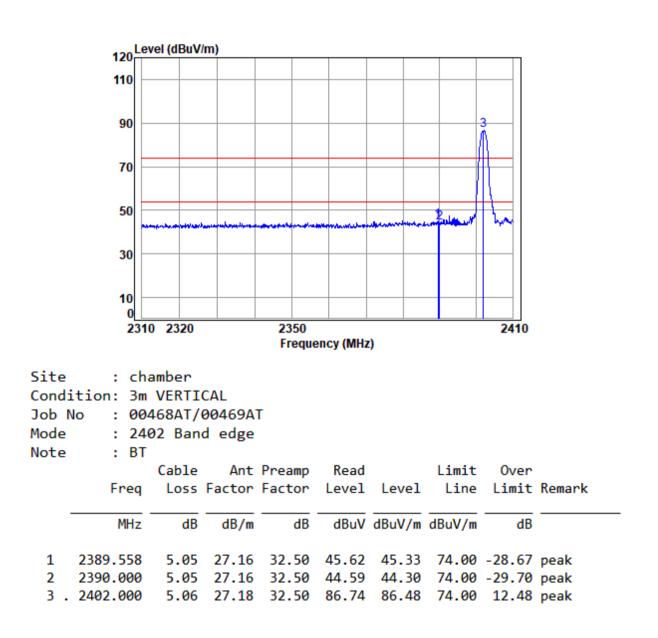
Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 tt (86-755) 88663988 ft (86-755) 26710594 www.sgsgroup.com.cn 中国·深圳·宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 tt (86-755) 88663988 ft (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 30 of 93

Test Mode: 03; Polarity: Vertical; Modulation:GFSK; Channel:Low





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

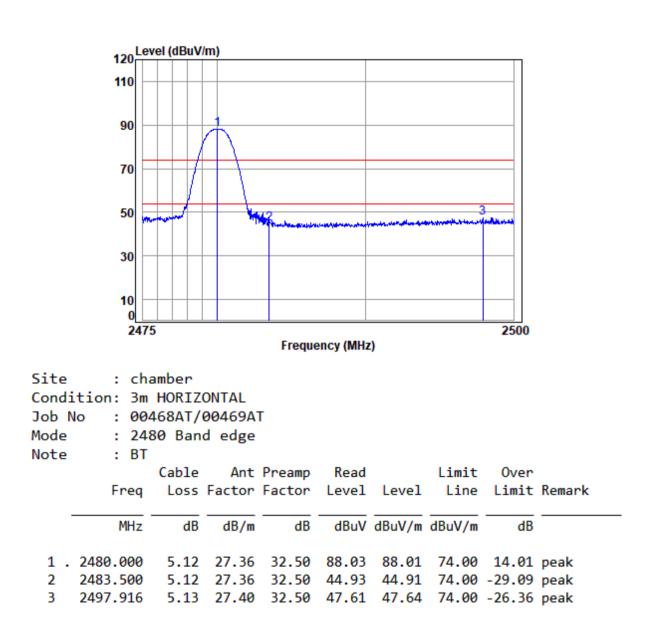
Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 tt (86-755) 88663988 ft (86-755) 26710594 www.sgsgroup.com.cn 中国·深圳·宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 tt (86-755) 88663988 ft (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 31 of 93

Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; Channel:High





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

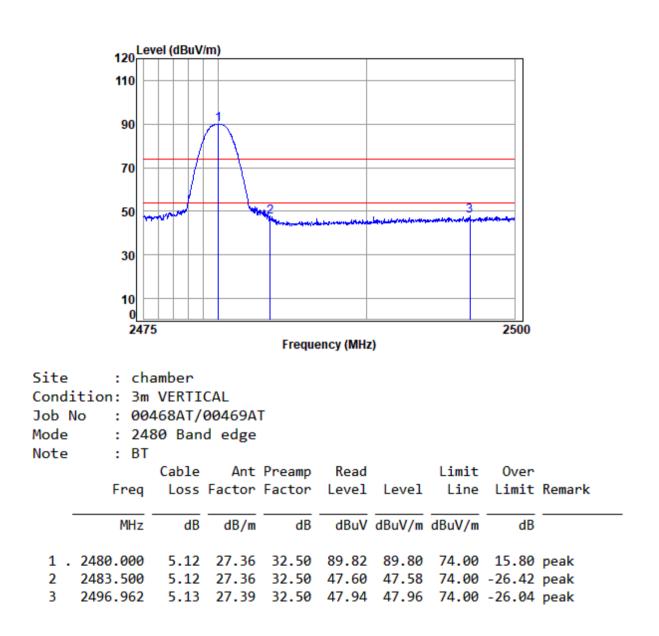
Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 tt (86–755) 88663988 ft (86–755) 26710594 www.sgsgroup.com.cn 中国·深圳·宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 tt (86–755) 88663988 ft (86–755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 32 of 93

Test Mode: 03; Polarity: Vertical; Modulation:GFSK; Channel:High





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

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 tt (86–755) 88663988 ft (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 tt (86–755) 88663988 ft (86–755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 33 of 93

7.9 Radiated Spurious Emissions Below 1GHz

Test Requirement	47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method:	ANSI C63.10 (2013) Section 6.4,6.5
Measurement Distance:	3m

Limit:

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

7.9.1 E.U.T. Operation

Operating Environment:

Temperature:	23.2 °C	Humidity:	52.6 % RH	Atmospheric Pressure:	1020	mbar
--------------	---------	-----------	-----------	-----------------------	------	------

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX_non-Hop mode(left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and 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 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

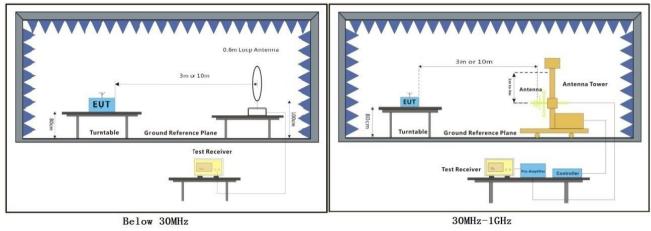
Fuyong lab. Xiniong TechnoPark, Fenglang Road, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 26710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 26710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 34 of 93

7.9.3 Test Setup Diagram





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 sated the resource in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or espulse shown in this test report report report 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@ass.com").

Fuyong lab. Xiniong TechnoPark, Fenglang Road, Fuyong Subdistict, 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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 35 of 93

7.9.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak 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 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.

3. 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 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.aspx and, for electronic format documents, 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 retained for 30 days only. Attention: To encek the authenticity of testing finamection report & certificate, please contact us at telephone: (86-75) 8307 1443,

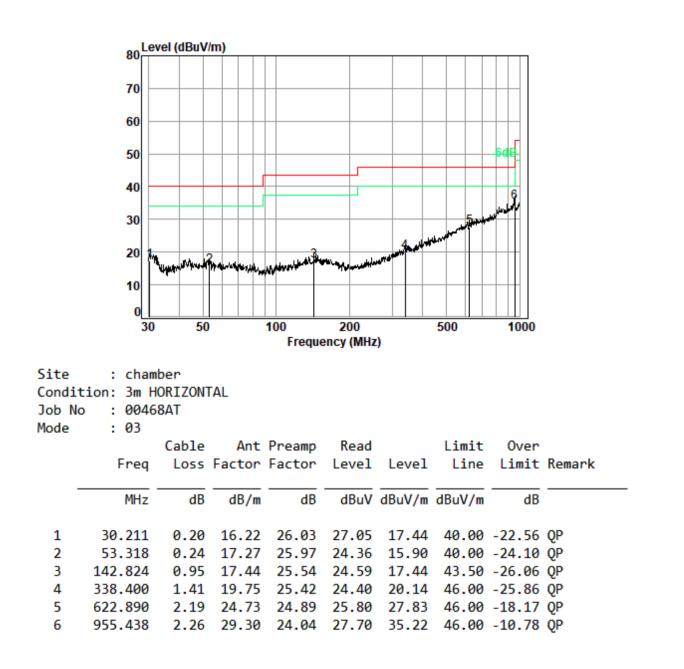
Fuyong kab. Xinlong TechnoPark, Fengtang Read, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 28710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 28710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 36 of 93

Test Mode: 03; Polarity: Horizontal





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-eDocument.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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent and this document cannot be reproduced except in full, without prior written approval of the Company have 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: (86-75) 83071443, or arealite.

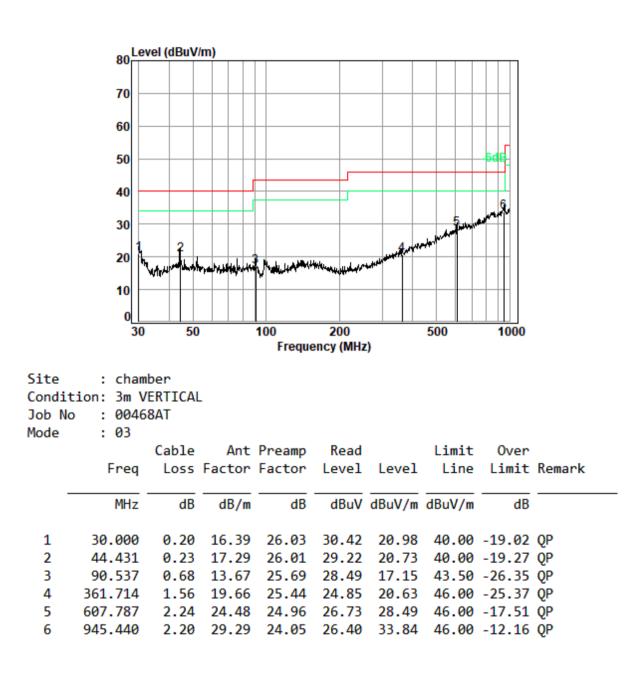
Fuyong lab. Xinlong TechnoPark, Fengtang Read, Fuyong Subdistict, Bao'an, Shenzhen, China 518103 t (86-755) 88663988 f (86-755) 28710594 www.sgsgroup.com.cn 中国・深圳・宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86-755) 88663988 f (86-755) 28710594 sgs.china@sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 37 of 93

Test Mode: 03; Polarity: Vertical





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-end-Conditions.Terms-end-Conditions/T



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 38 of 93

7.10 Radiated Spurious Emissions Above 1GHz

Test Requirement	47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method:	ANSI C63.10 (2013) Section 6.6
Measurement Distance:	3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)		
Above 1000	500	3		

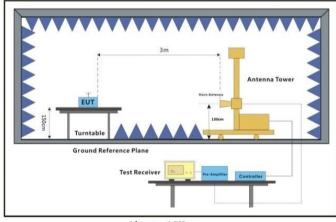
7.10.1 E.U.T. Operation

Operating Enviro	nment:					
Temperature:	23.0 °C	Humidity:	52.4 % RH	Atmospheric Pressure:	1020	mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX_non-Hop mode(left earbuds)_Keep the EUT in continuously transmitting mode with GFSK modulation, Pi/4DQPSK modulation, 8DPSK modulation. All modes have been tested and only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram



Above 1GHz



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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 39 of 93

7.10.4 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 1GHz to 25GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

3. 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.



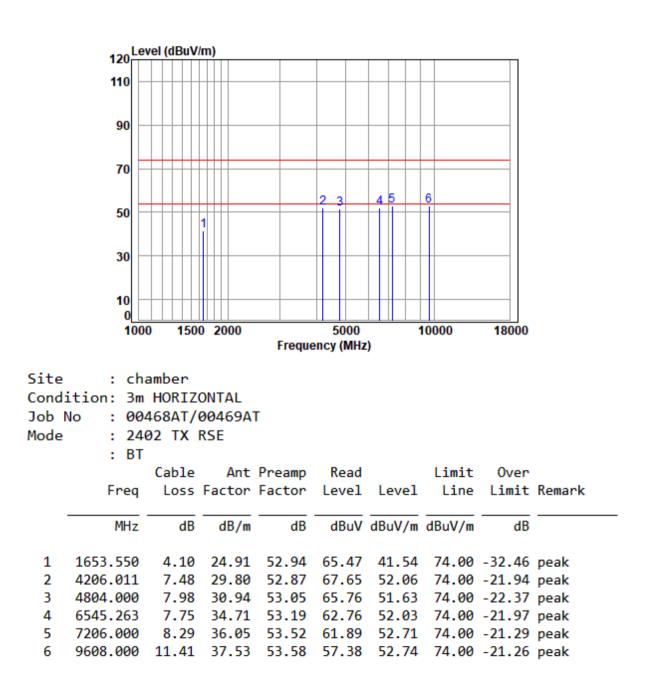
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, 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 extend for 30 days only. Attention: To entex the authenticity of testing finspection report a certificate, please contact us at telephone: (86-755) 8307 1443, Attention: To entex the authenticity of testing finspection report a certificate, please contact us at telephone: (86-755) 8307 1443,



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 40 of 93

Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; Channel:Low





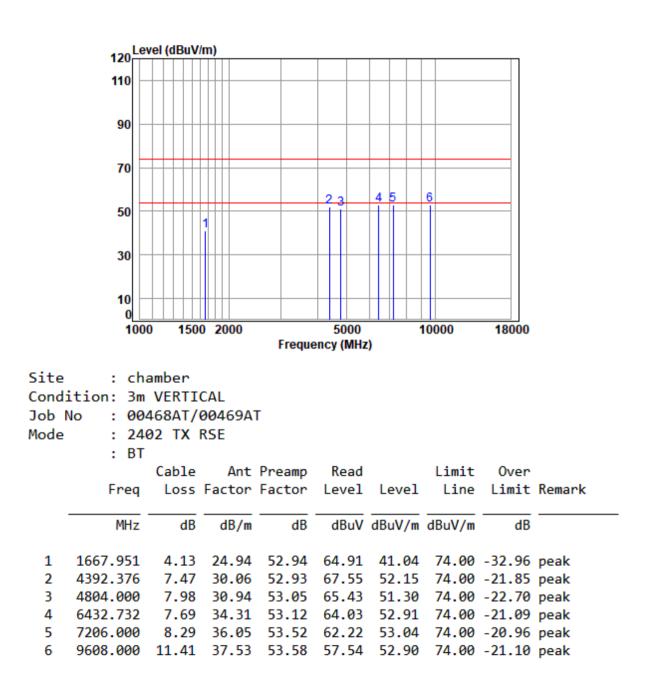
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-eDocument.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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent and this document cannot be reproduced except in full, without prior written approval of the Company have 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: (86-75) 83071443, or arealite.



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 41 of 93

Test Mode: 03; Polarity: Vertical; Modulation:GFSK; Channel:Low





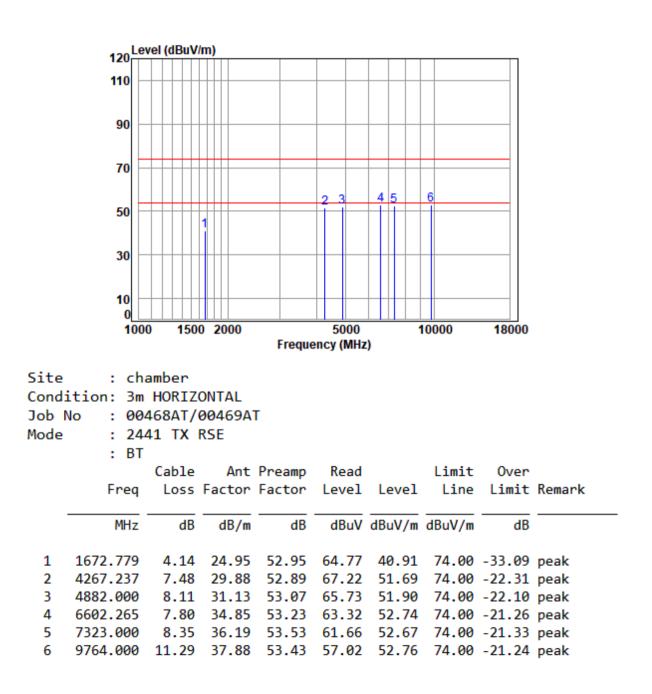
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-eDocument.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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent and this document cannot be reproduced except in full, without prior written approval of the Company have 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: (86-75) 83071443, or arealite.



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 42 of 93

Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; Channel:middle





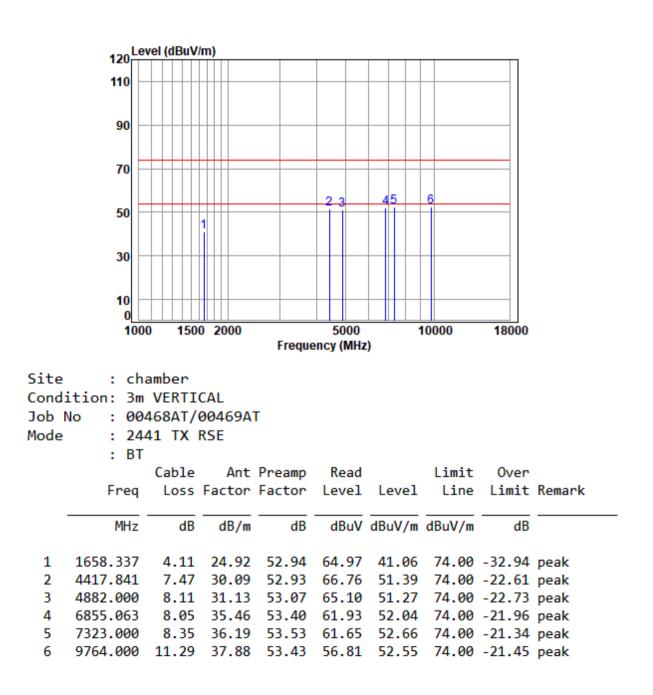
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 43 of 93

Test Mode: 03; Polarity: Vertical; Modulation:GFSK; Channel:middle





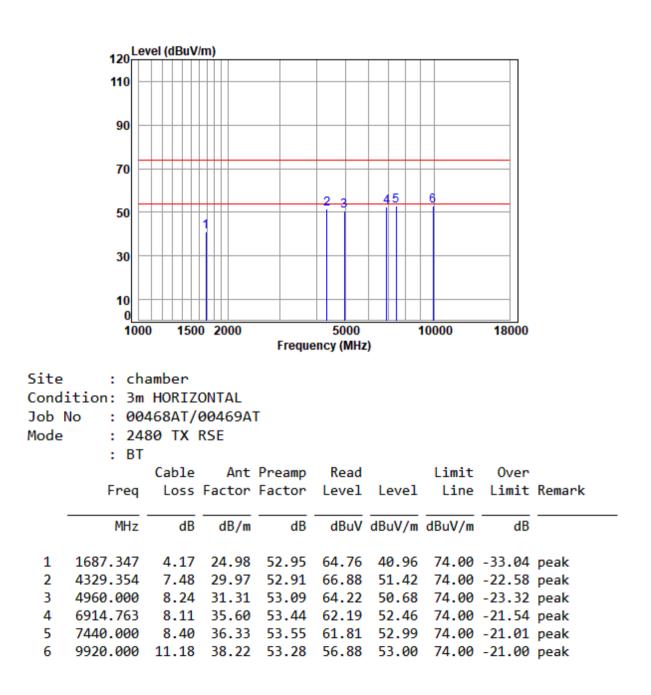
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-eDocument.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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent and this document cannot be reproduced except in full, without prior written approval of the Company have 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: (86-75) 83071443, or arealite.



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 44 of 93

Test Mode: 03; Polarity: Horizontal; Modulation:GFSK; Channel:High





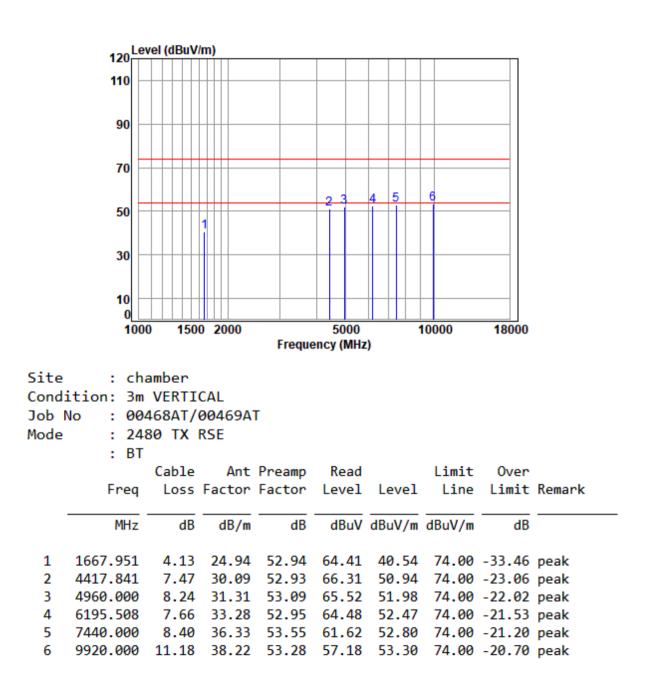
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-eDocument.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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent and this document cannot be reproduced except in full, without prior written approval of the Company have 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: (86-75) 83071443, or arealite.



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 45 of 93

Test Mode: 03; Polarity: Vertical; Modulation:GFSK; Channel:High





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overlear, available on request or accessible at http://www.gg.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.gg.com/en/Terms-and-Conditions/Terms-eDocument.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 cannot be reproduced except in full, without prior written approval of the Company have 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: (86-75) 83071443, or email: CN Doccheck the sustenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 830714443, or email:



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 46 of 93

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for FYCR2211000468AT

9 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for FYCR2211000468AT



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-Comments, 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 faisification of the content or appearance of this document is unlawilui 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. Are mail. Choocherking as of lesting inspection report a certificate, please contact us at telephoner. (86-75) 83071443, remail. Choocherking as comments and the sample(s) interview of the compent as certificate, please contact us at telephoner.



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 47 of 93

10 Appendix

1. Bandwidth

1.1 OBW

1.1.1 Test Result

Mode	Mode _TX		Packet	ANT	99% Occupied Bandwidth (MHz)	Verdict	
Туре		(MHz)	Туре	,	Result	. c. alot	
		2402	DH5	1	0.911	Pass	
GFSK	SISO	2441	DH5	1	0.927	Pass	
		2480	DH5	1	0.937	Pass	
	SISO	2402	2DH5	1	1.192	Pass	
Pi/4DQPSK		2441	2DH5	1	1.203	Pass	
		2480	2DH5	1	1.207	Pass	
		2402	3DH5	1	1.178	Pass	
8DPSK	SISO	2441	3DH5	1	1.189	Pass	
		2480	3DH5	1	1.200	Pass	



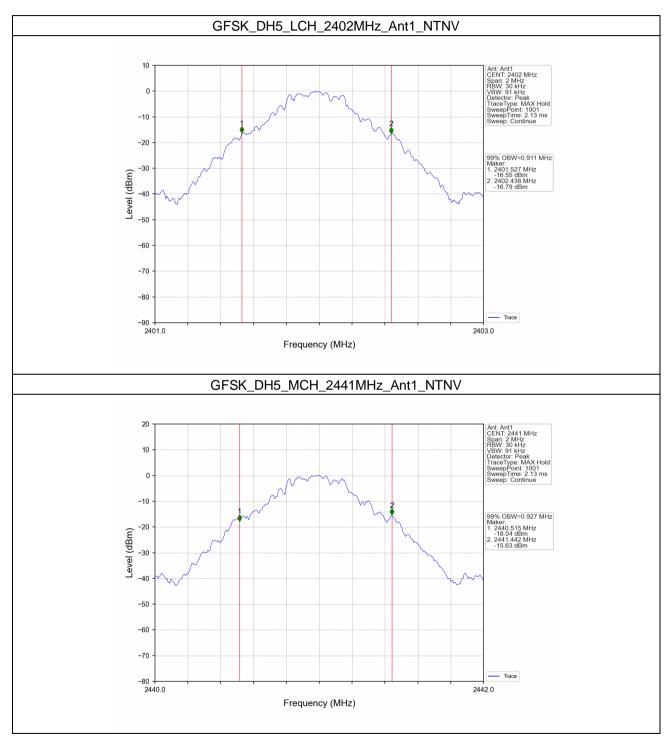
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 48 of 93

1.1.2 Test Graph



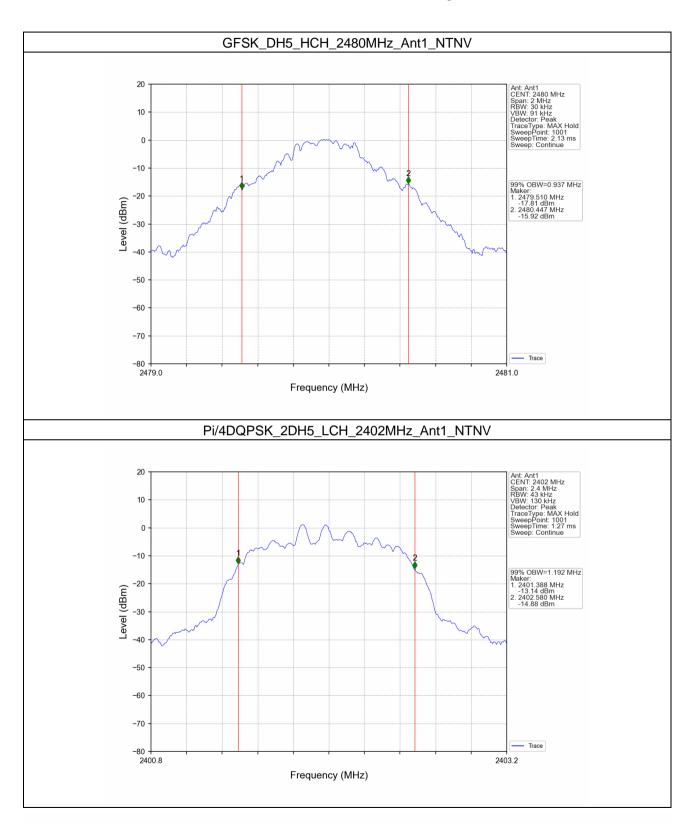


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.Terms-enocument.aspx. Attention is drawn to the limitation of liability, indermification 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 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) testing limite(s) testing limite(s) ease contact us at telephone: (86-755) 8307 1443, or email: CN Doccheck@ses.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 49 of 93



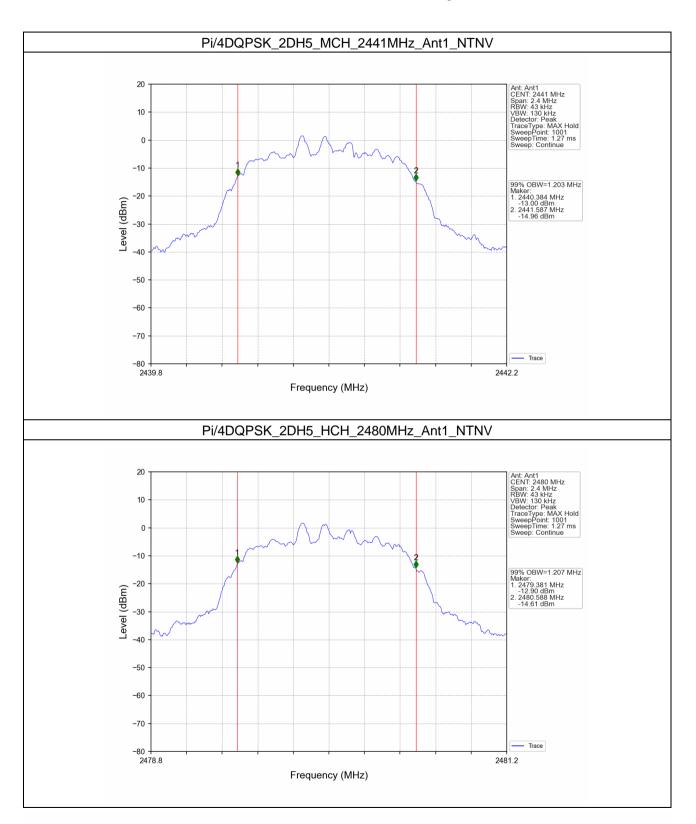


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic 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 herein 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 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 report prior by tothe 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@ass.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 50 of 93





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 herein 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 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 report prior by tothe 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@ass.com

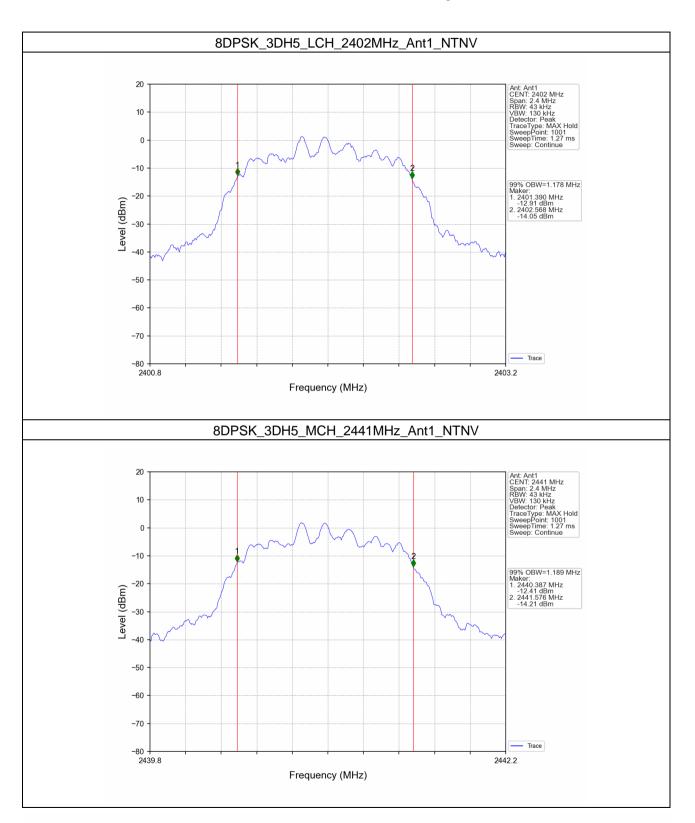
 Fuyong lab, Xiniong TechnoPark, Fergtang Roat, Fuyong Subdistict, Bao'an, Shenzhen, China
 518103
 t
 (86-755)
 8663988
 f
 (86-755)
 26710594
 www.sgsgroup.com.cn

 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)
 8663988
 f
 (86-755)
 26710594
 sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 51 of 93



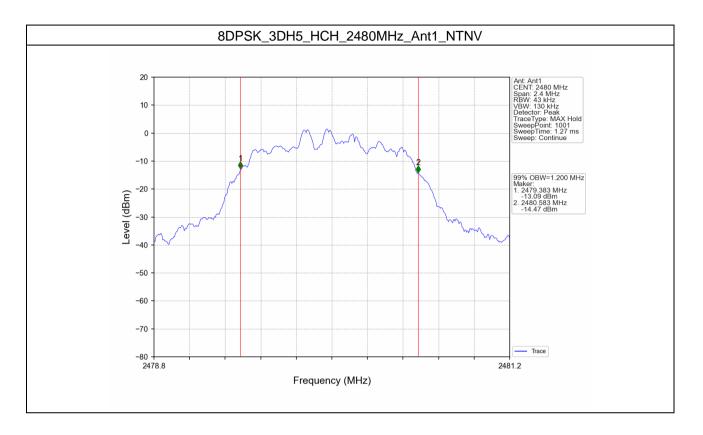


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic 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 herein 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 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 report prior by tothe 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@ass.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 52 of 93





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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 53 of 93

1.2 20dB BW

1.2.1 Test Result

Mode	Mode TX		Packet	ANT	20dB Bandwidth (MHz)	Verdict
	Туре	(MHz)	Туре		Result	
		2402	DH5	1	1.033	Pass
GFSK	SISO	2441	DH5	1	1.042	Pass
		2480	DH5	1	1.049	Pass
	SISO	2402	2DH5	1	1.335	Pass
Pi/4DQPSK		2441	2DH5	1	1.343	Pass
		2480	2DH5	1	1.343	Pass
	SISO	2402	3DH5	1	1.311	Pass
8DPSK		2441	3DH5	1	1.324	Pass
		2480	3DH5	1	1.344	Pass



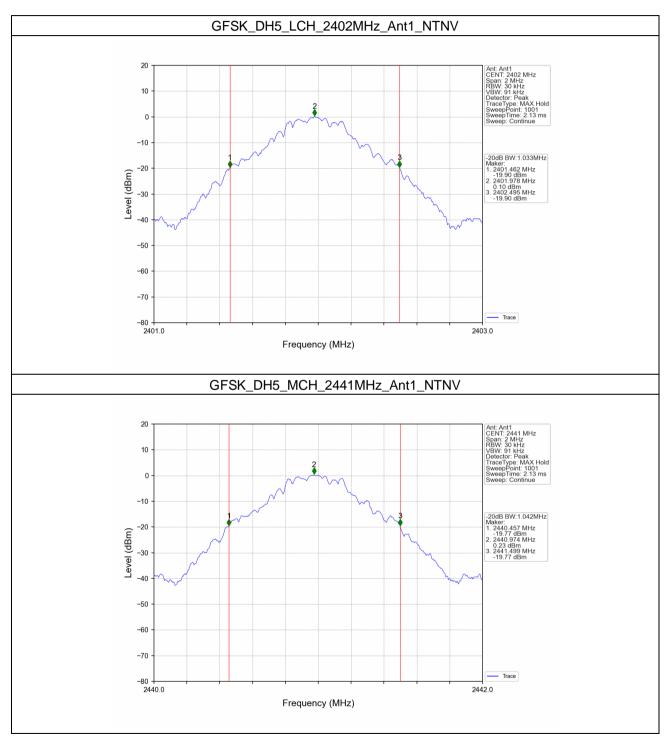
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 54 of 93

1.2.2 Test Graph



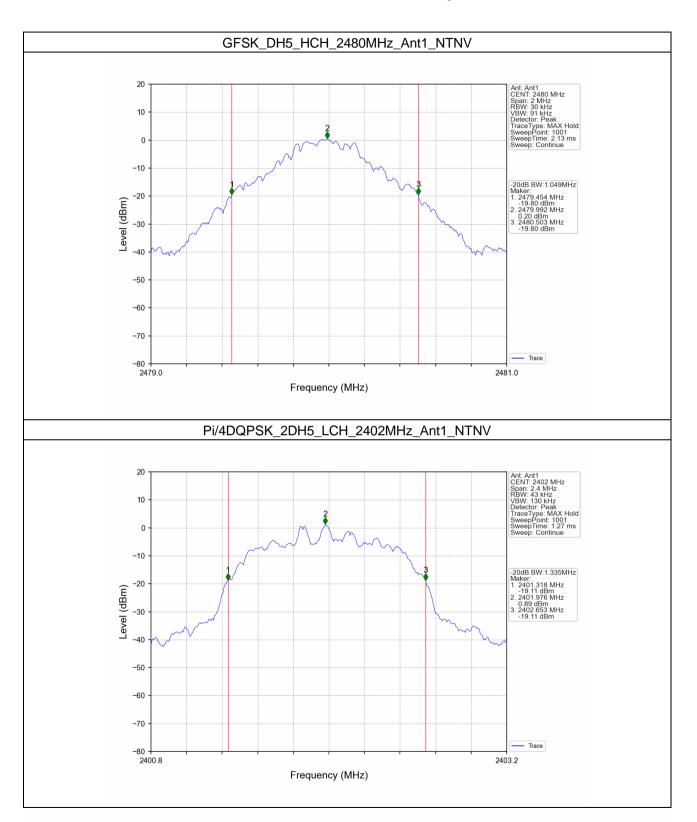


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-eDocument.aspx. Attention is drawn to the limitation of liability, indermification 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 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) testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CN Doccheck@ses.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 55 of 93



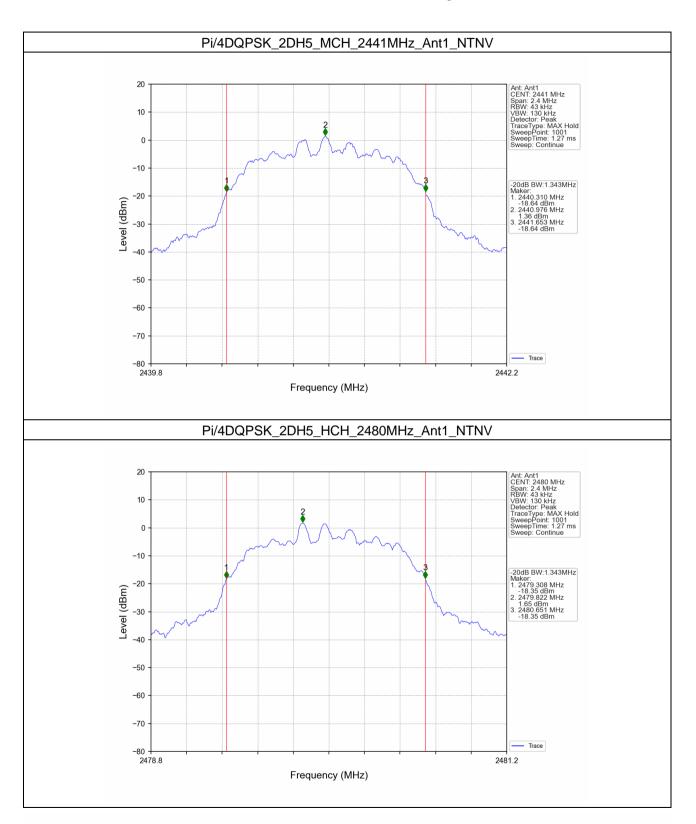


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic 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 herein 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 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 report prior by tothe 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@ass.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 56 of 93



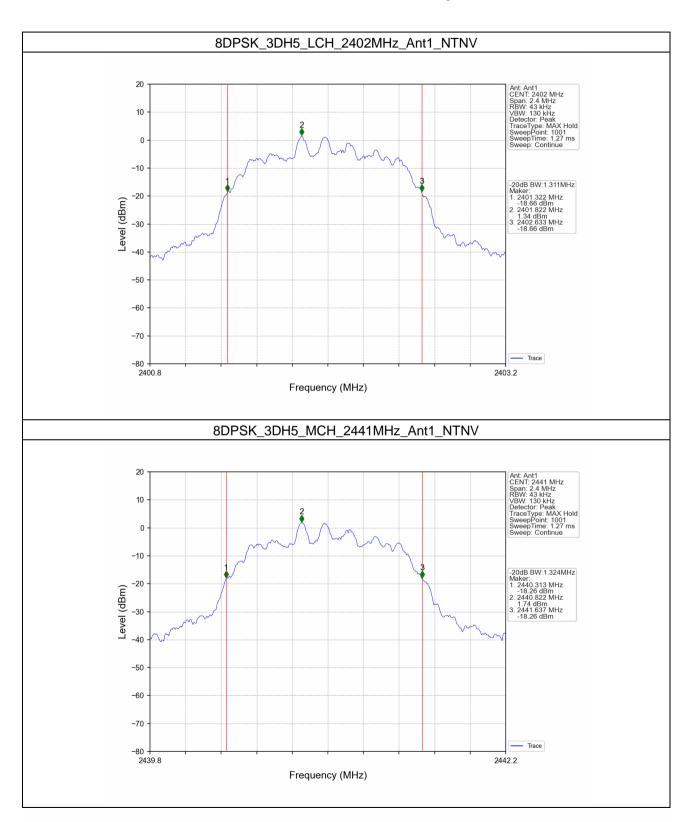


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic 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 herein 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 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 report prior by tothe 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@ass.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 57 of 93



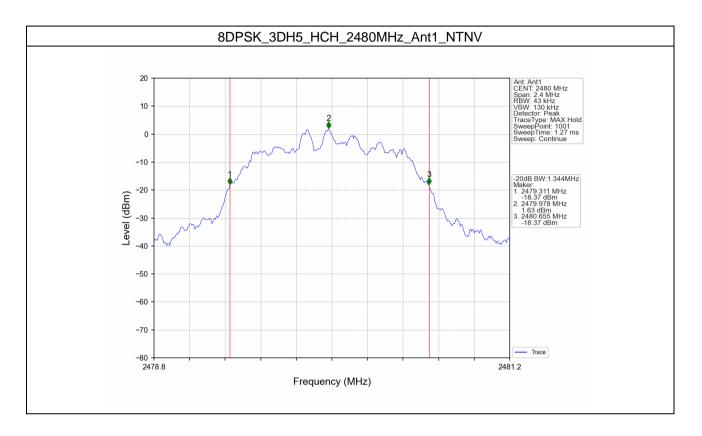


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic 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 herein 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 cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or faisification of the content or appearance of this document is only to field enders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report report only to the sample(s) tested and such sample(s) are retained for 30 days only. Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN.Doccheck@ags.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 58 of 93





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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 59 of 93

2. Maximum Conducted Output Power

2.1 Power

2.1.1 Test Result

Mode	ΤХ	Frequency	Packet	Maximum Peak Conduc	Vordiot		
Туре		(MHz)	Туре	ANT1	Limit	Verdict	
GFSK		2402	DH5	-0.37	<=20.97	Pass	
	SISO	2441	DH5	0.04	<=20.97	Pass	
		2480	DH5	0.10	<=20.97	Pass	
	SISO	2402	2DH5	0.55	<=20.97	Pass	
Pi/4DQPSK		SISO	2441	2DH5	0.93	<=20.97	Pass
		2480	2DH5	0.98	<=20.97	Pass	
		2402	3DH5	0.64	<=20.97	Pass	
8DPSK	SISO	2441	3DH5	1.09	<=20.97	Pass	
		2480	3DH5	1.19	<=20.97	Pass	

2.2 EIRP

2.2.1 Test Result

Mode	ТΧ	TX Frequency		E.I.R.F	P (dBm)	Verdict		
	Туре	(MHz)	Туре	ANT1	Limit	verdict		
		2402	DH5	4.75	<=36.02	Pass		
GFSK	SISO	2441	DH5	5.16	<=36.02	Pass		
		2480	DH5	5.22	<=36.02	Pass		
	SISO	2402	2DH5	5.67	<=36.02	Pass		
Pi/4DQPSK		2441	2DH5	6.05	<=36.02	Pass		
		2480	2DH5	6.1	<=36.02	Pass		
		2402	3DH5	5.76	<=36.02	Pass		
8DPSK	SISO	2441	3DH5	6.21	<=36.02	Pass		
	-	2480	3DH5	6.31	<=36.02	Pass		
Note1: Antenna Gain: Ant1: 5.12dBi; Note2: E.I.R.P = Measured Power + Antenna Gain								



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-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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 sated the resource in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or expelsions under the taws. Unless otherwise stated the results shown in this test report report report spreade 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@ass.com").



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 60 of 93

3. Carrier Frequency Separation

3.1 Ant1

3.1.1 Test Result

	Ant1										
Mode	ТХ Туре	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict				
GFSK	SISO	HOPP	DH5	1.008	1.049	>=0.699	Pass				
Pi/4DQPSK	SISO	HOPP	2DH5	0.979	1.343	>=0.895	Pass				
8DPSK	SISO	HOPP	3DH5	0.972	1.344	>=0.896	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 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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 for 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 report roly to the sample(s) tested and such sample(s) are retained for 30 days only. Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN Doccheck@ass.com").

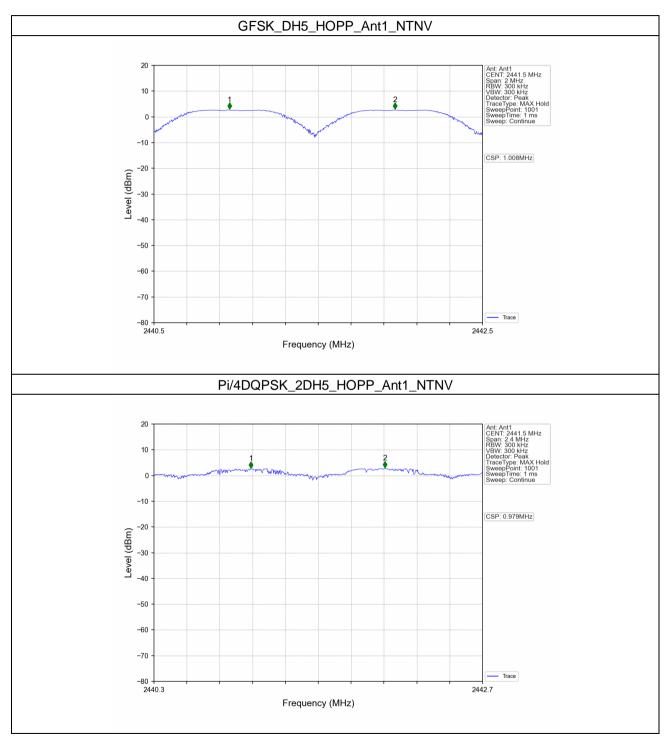


SZCCS-TRF-01 Rev. A/0 Aug01,2022

专用章

检验 ction & Testing Service Report No.: FYCR221100046803 Page: 61 of 93

3.1.2 Test Graph

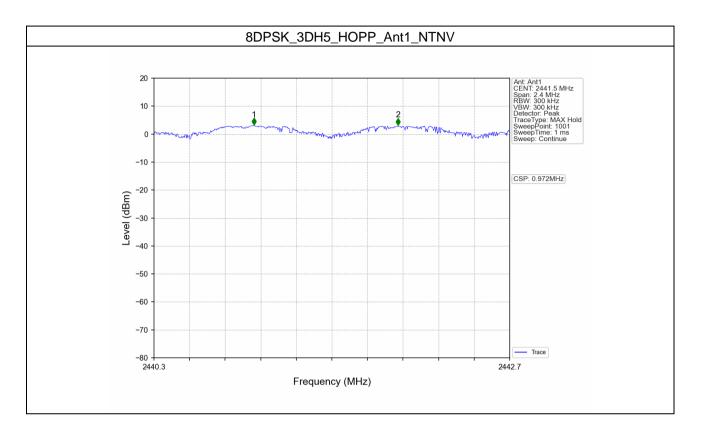






SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 62 of 93





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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 63 of 93

4. Number of Hopping Frequencies

4.1 HoppNum

4.1.1 Test Result

Mode _	TX Frequency Type (MHz)		Packet	Num of Hoppir	Vordiat	
			Туре	ANT1	Limit	Verdict
GFSK	SISO	HOPP	DH5	79	>=15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass



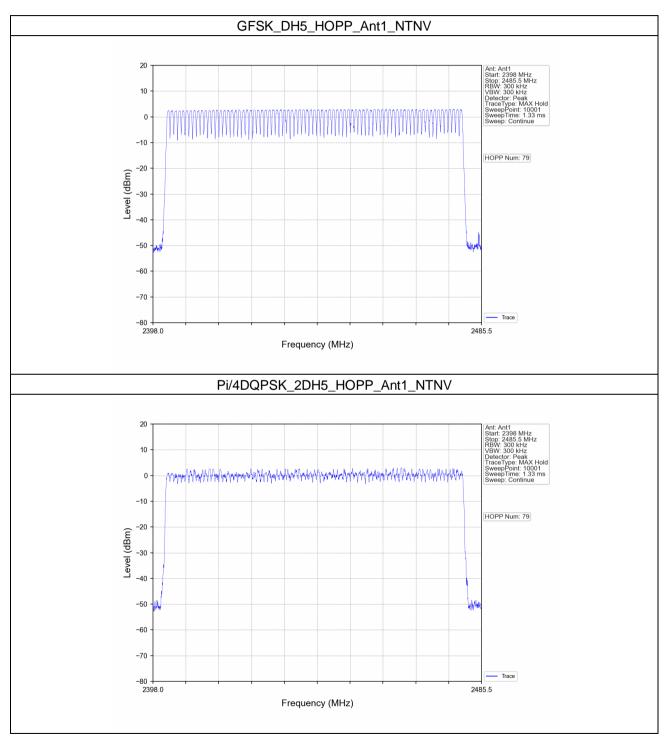
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 64 of 93

4.1.2 Test Graph



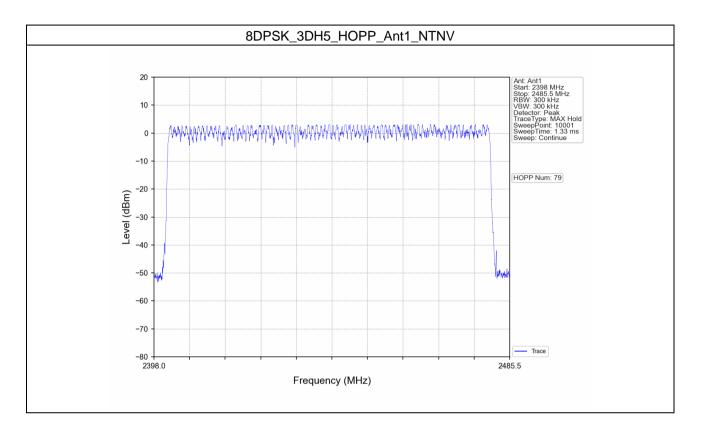


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-eDocument.aspx. Attention is drawn to the limitation of liability, indermification 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 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) testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CN Doccheck@ses.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 65 of 93





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-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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 sated the resource in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or esputise to atterport report report report 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@ass.com").



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 66 of 93

5. Time of Occupancy (Dwell Time)

5.1 Ant1

5.1.1 Test Result

	Ant1														
Mode	ТХ Туре	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict						
		DH1	0.390	31.600	319	124.410	<=400	Pass							
GFSK	GFSK SISO HOPP	HOPP	DH3	1.648	31.600	151	248.848	<=400	Pass						
			DH5	2.898	31.600	110	318.780	<=400	Pass						
		SO HOPP	2DH1	0.404	31.600	320	129.280	<=400	Pass						
Pi/4DQPSK	SISO		2DH3	1.652	31.600	157	259.364	<=400	Pass						
									2DH5	2.894	31.600	102	295.188	<=400	Pass
		SISO HOPP	3DH1	0.402	31.600	320	128.640	<=400	Pass						
8DPSK	SISO		3DH3	1.652	31.600	159	262.668	<=400	Pass						
			3DH5	2.902	31.600	92	266.984	<=400	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 <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Cond



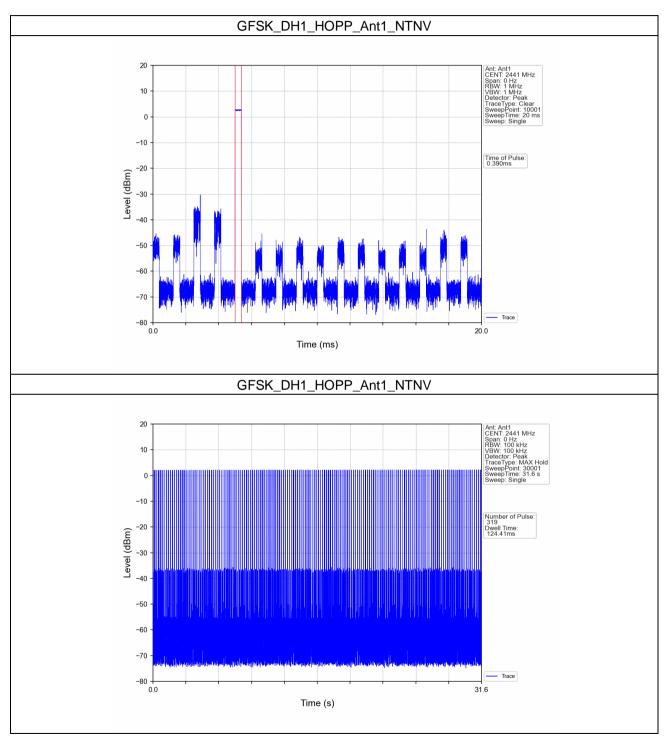
SZCCS-TRF-01 Rev. A/0 Aug01,2022

检验

Shenzh

检检测专用章 ion & Testing Servic Report No.: FYCR221100046803 Page: 67 of 93

5.1.2 Test Graph







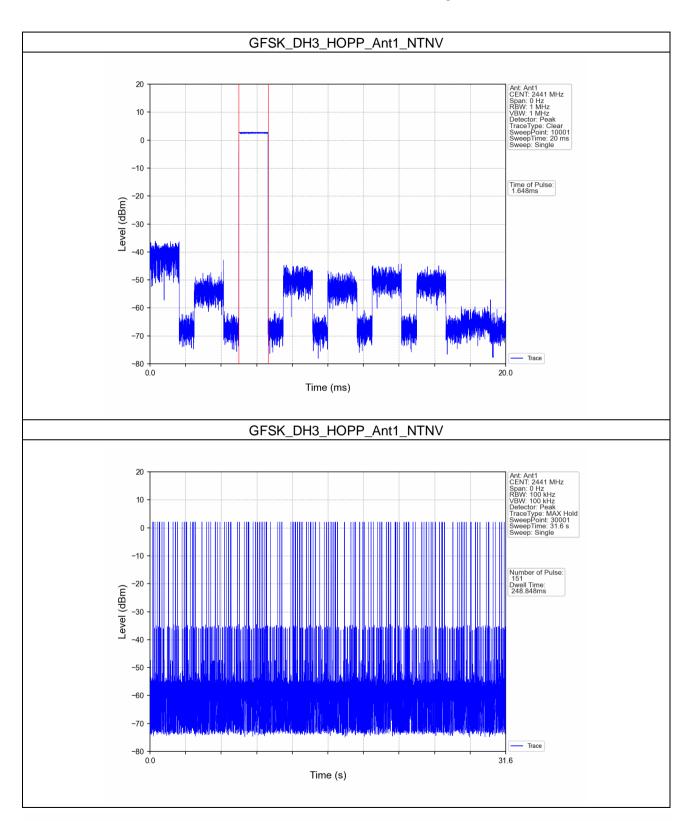
SZCCS-TRF-01 Rev. A/0 Aug01,2022

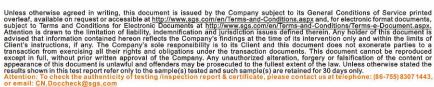
专用章

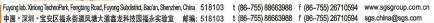
检验 tion & Testing Se

Shenzh

Report No.: FYCR221100046803 Page: 68 of 93







Member of the SGS Group (SGS SA)



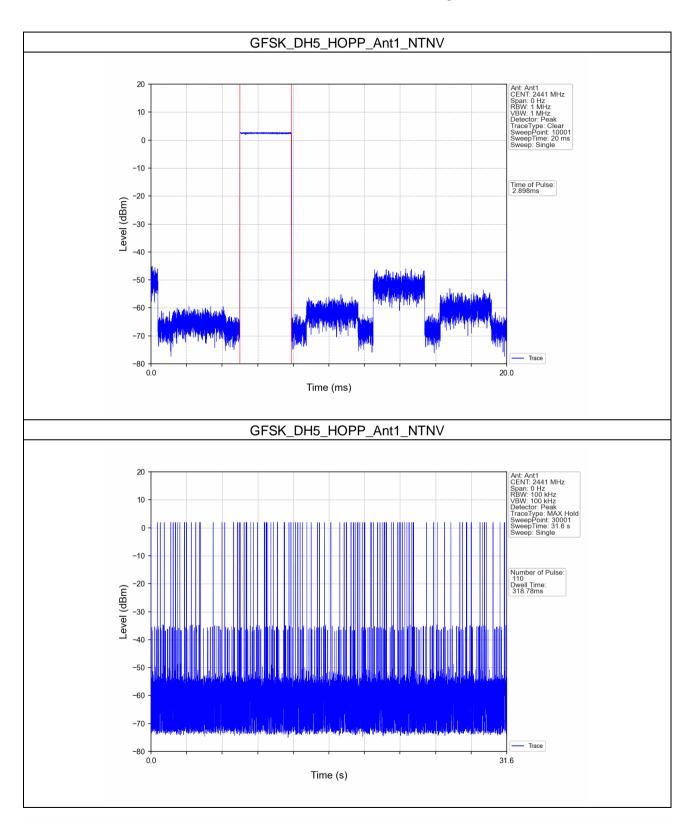
SZCCS-TRF-01 Rev. A/0 Aug01,2022

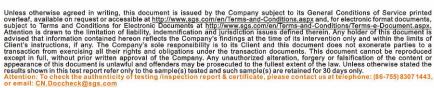
专用章

检验 ction & Testing Ser

Shenzh

Report No.: FYCR221100046803 Page: 69 of 93



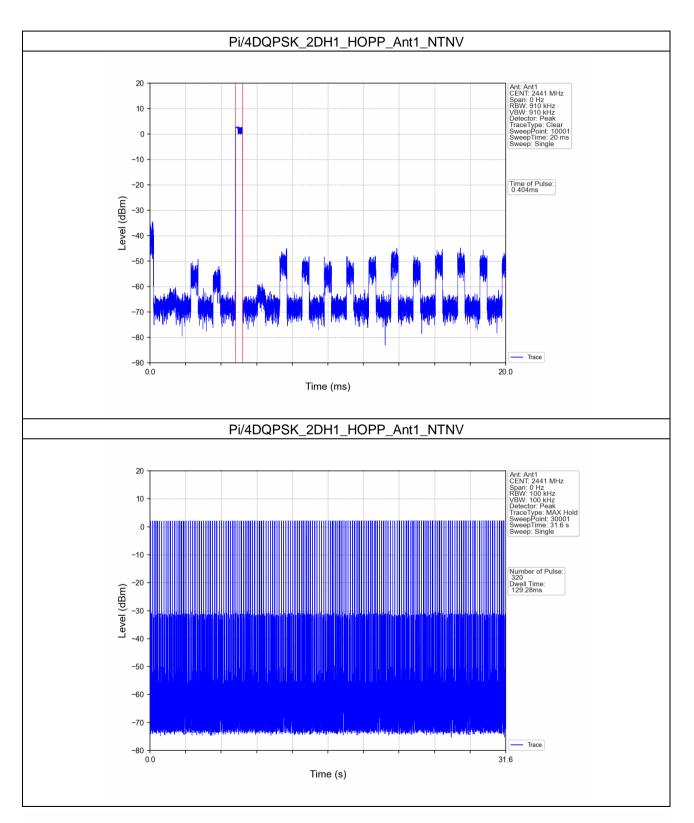




SZCCS-TRF-01 Rev. A/0 Aug01,2022

专用章

检验 tion & Testing Se Report No.: FYCR221100046803 Page: 70 of 93



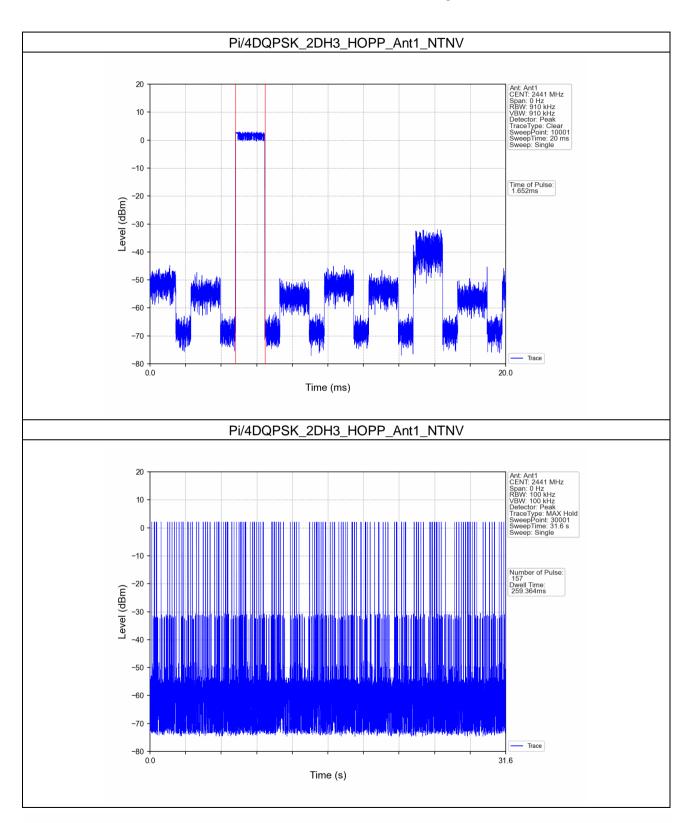


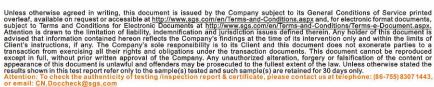


SZCCS-TRF-01 Rev. A/0 Aug01,2022

专用章

检验 tion & Testing Se Report No.: FYCR221100046803 Page: 71 of 93







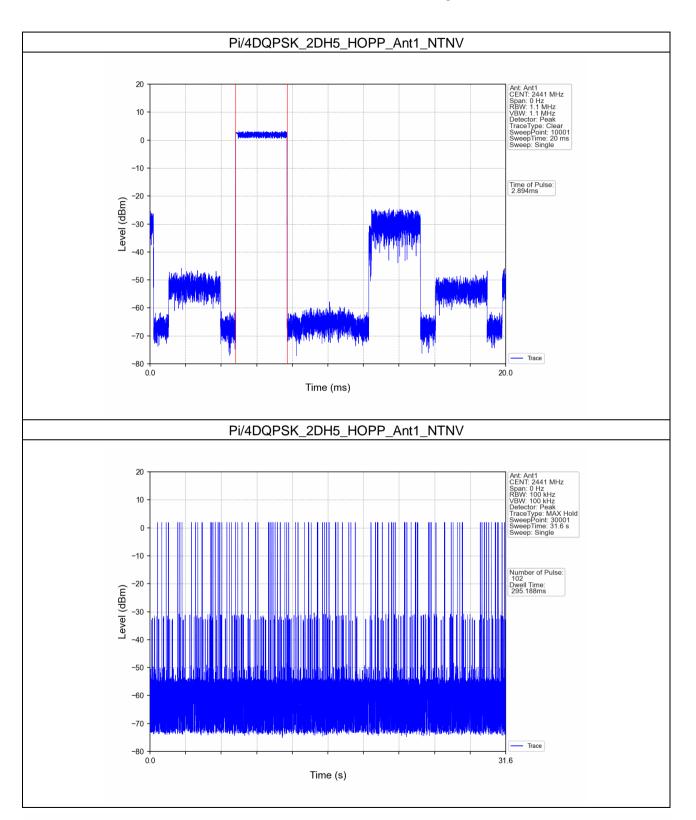
SZCCS-TRF-01 Rev. A/0 Aug01,2022

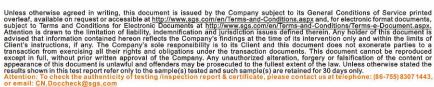
专用章

检验 ction & Testing Service

Shenzh

Report No.: FYCR221100046803 Page: 72 of 93







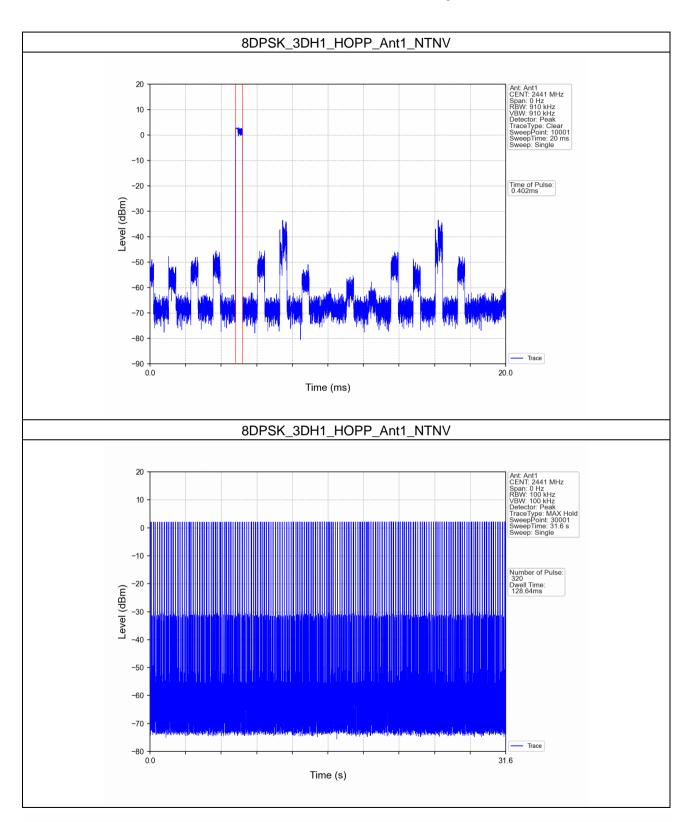
SZCCS-TRF-01 Rev. A/0 Aug01,2022

专用章

检验 ction & Testing Service

Shenzh

Report No.: FYCR221100046803 Page: 73 of 93







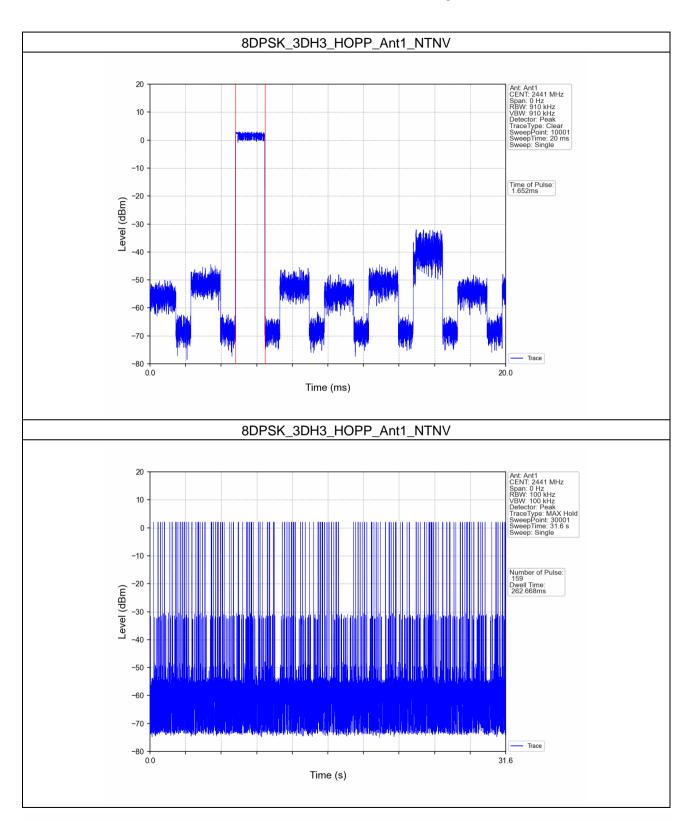
SZCCS-TRF-01 Rev. A/0 Aug01,2022

专用章

检验 ction & Testing Service

Shenzh

Report No.: FYCR221100046803 Page: 74 of 93



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-eDocument.aspx. Attention is drawn to the limitation of liability, indermification 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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent and 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) testing linspection report & certificate, of the Sub-Gray only.



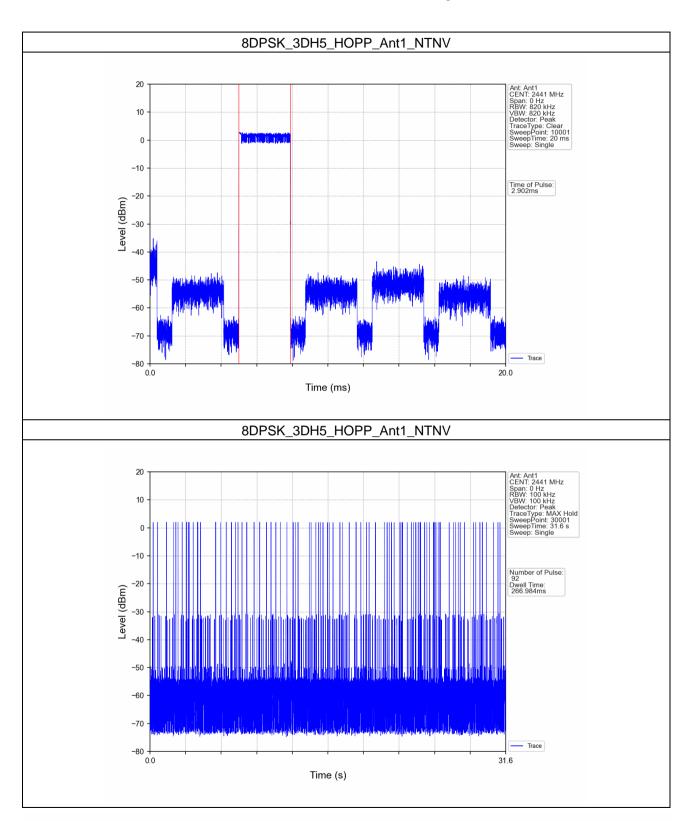
SZCCS-TRF-01 Rev. A/0 Aug01,2022

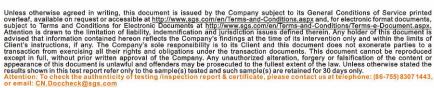
专用章

检验 ction & Testing Service

Shenzh

Report No.: FYCR221100046803 Page: 75 of 93







SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 76 of 93

6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Ref

6.1.1 Test Result

Mode	ТХ Туре	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)					
GFSK		2402	DH5	1	2.14					
	SISO	2441	DH5	1	2.55					
		2480	DH5	1	2.60					
Pi/4DQPSK	SISO	2402	2DH5	1	2.11					
		2441	2DH5	1	2.58					
		2480	2DH5	1	2.65					
8DPSK	SISO	2402	3DH5	1	2.37					
		2441	3DH5	1	2.83					
		2480	3DH5	1	2.94					
Note1: Refer to RSS-247 Issue 2 section 5.5 and ANSI C63.10-2013, the channel contains the maximum										
PSD level was used to establish the reference level.										



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

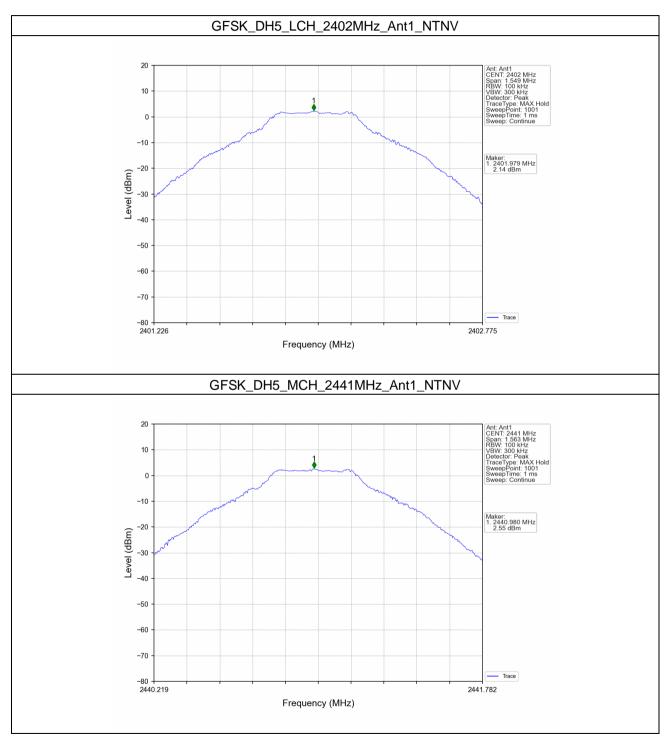


SZCCS-TRF-01 Rev. A/0 Aug01,2022

专用章

检验 ction & Testing Service Report No.: FYCR221100046803 Page: 77 of 93

6.1.2 Test Graph

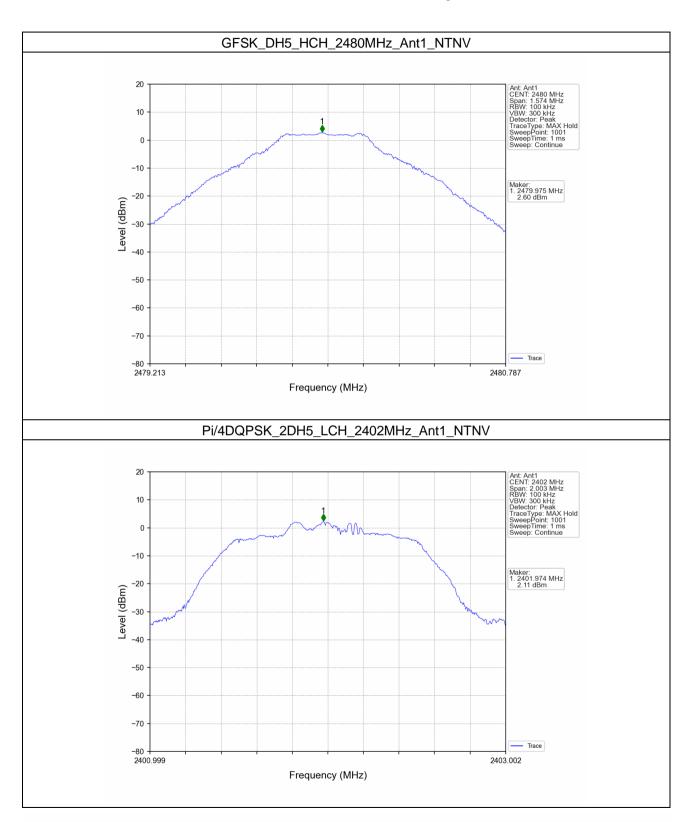






SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 78 of 93



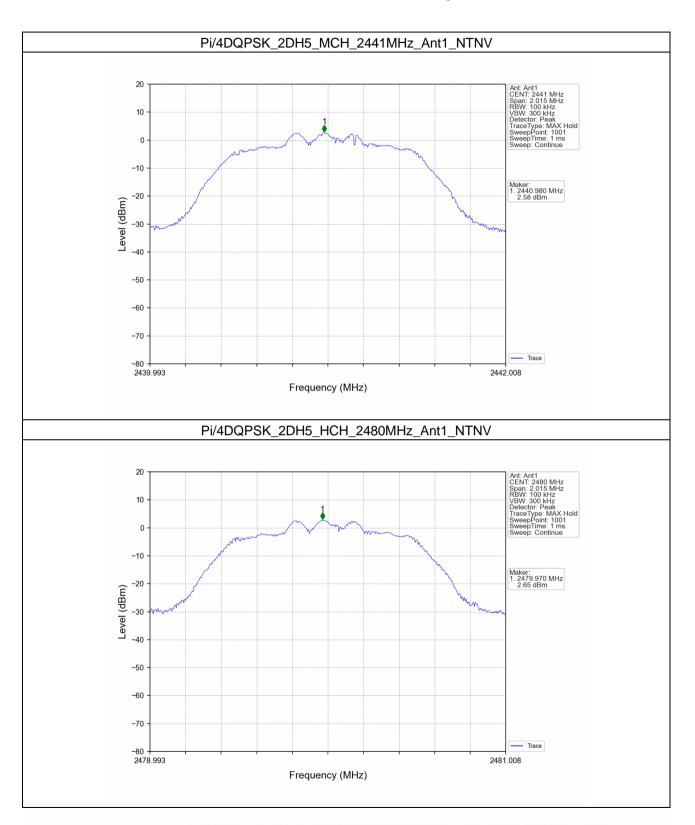


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 sated the report stated and such sample(s) are retained for 30 days only. Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)8307 1443, or email: CN.Doccheck@ags.com").



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 79 of 93





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-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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 sated the report stated and such sample(s) are retained for 30 days only. Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)8307 1443, or email: CN.Doccheck@ags.com").

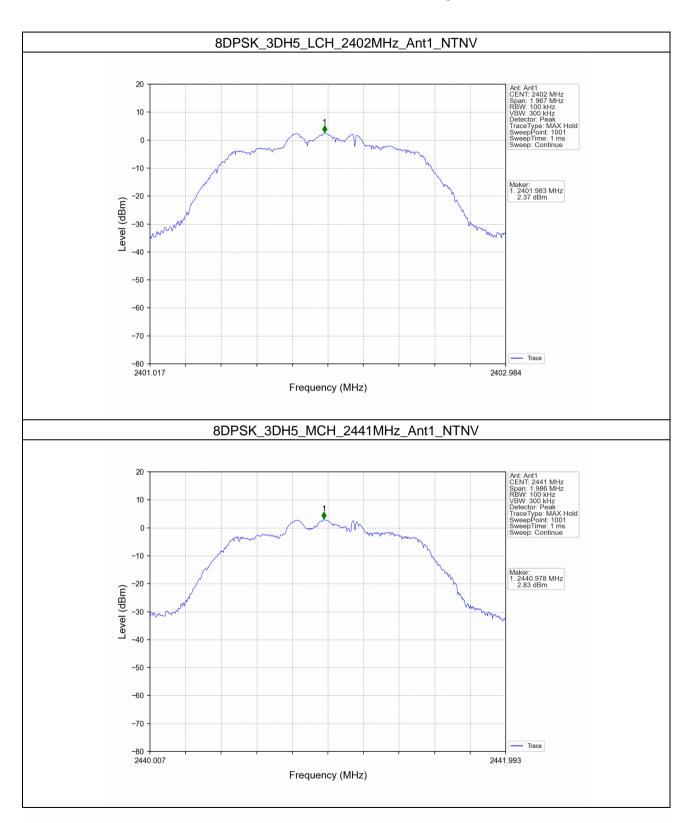
 Fuyong lab, Xiniong TechnoPark, Fergtang Roat, Fuyong Subdistict, Bao'an, Shenzhen, China
 518103
 t
 (86-755)
 8663988
 f
 (86-755)
 26710594
 www.sgsgroup.com.cn

 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)
 8663988
 f
 (86-755)
 26710594
 sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 80 of 93





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-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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 sated the report stated and such sample(s) are retained for 30 days only. Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)8307 1443, or email: CN.Doccheck@ags.com").

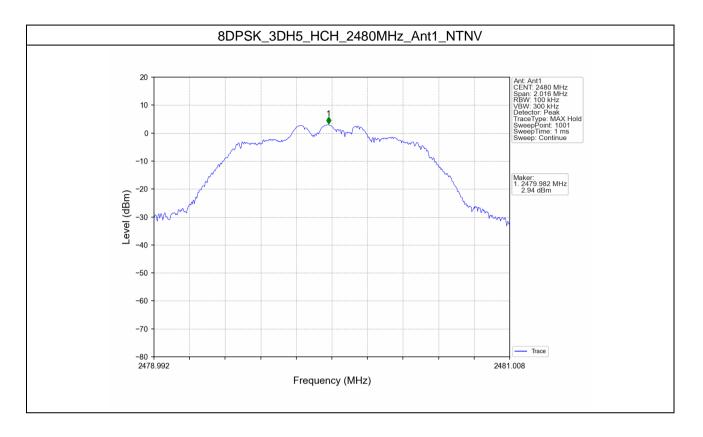
 Fuyong lab, Xiniong TechnoPark, Fergtang Roat, Fuyong Subdistict, Bao'an, Shenzhen, China
 518103
 t
 (86-755)
 8663988
 f
 (86-755)
 26710594
 www.sgsgroup.com.cn

 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)
 8663988
 f
 (86-755)
 26710594
 sgs.com



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 81 of 93





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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 82 of 93

6.2 CSE

6.2.1 Test Result

Mode	ТХ Туре	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict		
GFSK	SISO	2402	DH5	1	2.60	-17.40	Pass		
		2441	DH5	1	2.60	-17.40	Pass		
		2480	DH5	1	2.60	-17.40	Pass		
		HOPP	DH5	1	2.60	-17.40	Pass		
Pi/4DQPSK	SISO	2402	2DH5	1	2.65	-17.35	Pass		
		2441	2DH5	1	2.65	-17.35	Pass		
		2480	2DH5	1	2.65	-17.35	Pass		
		HOPP	2DH5	1	2.65	-17.35	Pass		
8DPSK	SISO	2402	3DH5	1	2.94	-17.06	Pass		
		2441	3DH5	1	2.94	-17.06	Pass		
		2480	3DH5	1	2.94	-17.06	Pass		
		HOPP	3DH5	1	2.94	-17.06	Pass		
Note1: Refer to RSS-247 Issue 2 section 5.5 and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.									



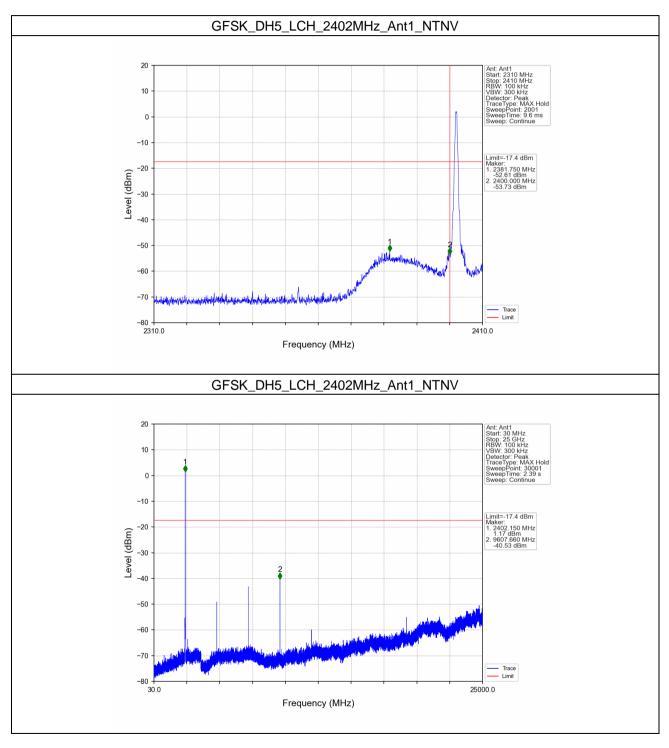
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic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



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 83 of 93

6.2.2 Test Graph





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-Comments, 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 certain or results shown in this test report refer only to the sample(s) lested and such sample(s) are relatined for 30 days only: or email: CN Doccheck@ss.com or email: CN Doccheck@ss.com descept at certained for S0 days only: descept acceleration and the sample(s) lested and such sample(s) are table of days only: descept acceleration and the results on the sample(s) lested and such sample(s) are table. The same cannot be results acceleration and the sample(s) lested and such sample(s) are table. The same cannot be results shown in this test report refer only to the sample(s) the sample(s) are table. The same cannot be results acceleration and the sample(s) lested and such sample(s) are table. The same cannot be results acceleration and the sample(s) lested and such sample(s) are table. The same cannot be results acceleration and the sample(s) lested and such sample(s) are table. The same cannot be results acceleration and the sample(s) lested and such sample(s) are ta



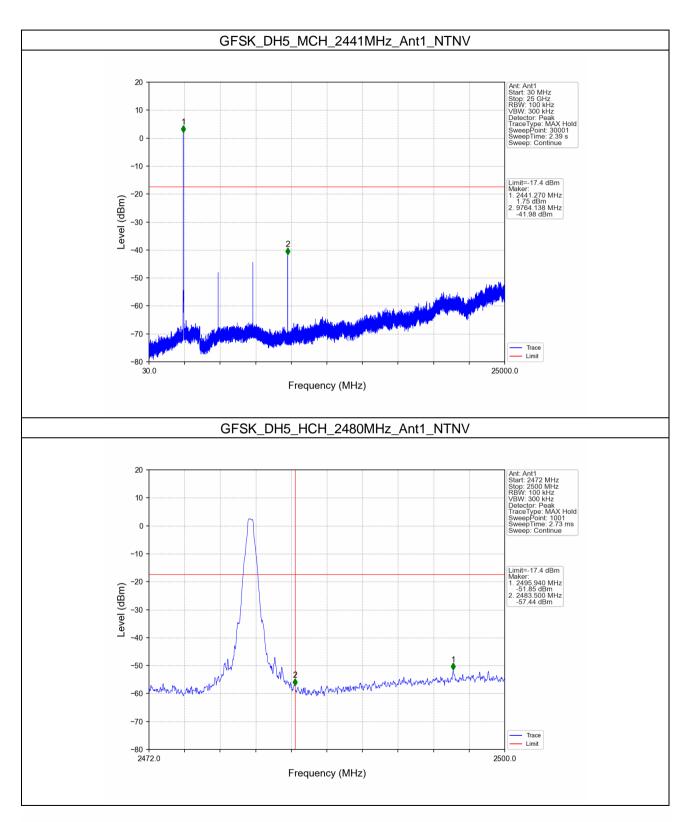
SZCCS-TRF-01 Rev. A/0 Aug01,2022

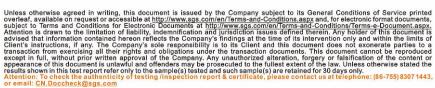
测专用章

检验 nspection & Testing Service

Shenzhe

Report No.: FYCR221100046803 Page: 84 of 93







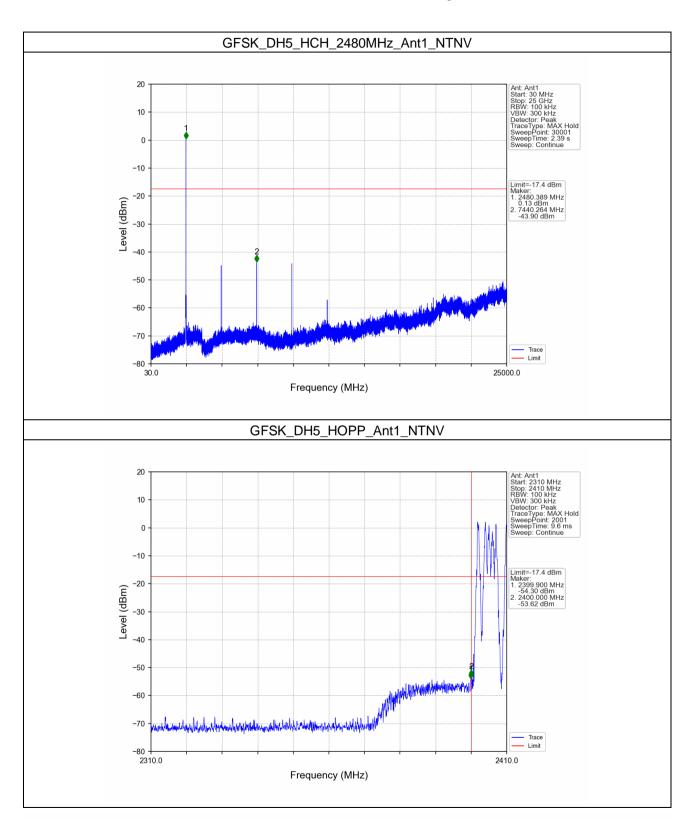
SZCCS-TRF-01 Rev. A/0 Aug01,2022

测专用章

检验 nspection & Testing Services

Shenzhe

Report No.: FYCR221100046803 Page: 85 of 93



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 herein 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 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 null-writing terport after 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, recentle (10 Document) for the site of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, recentle (10 Document).



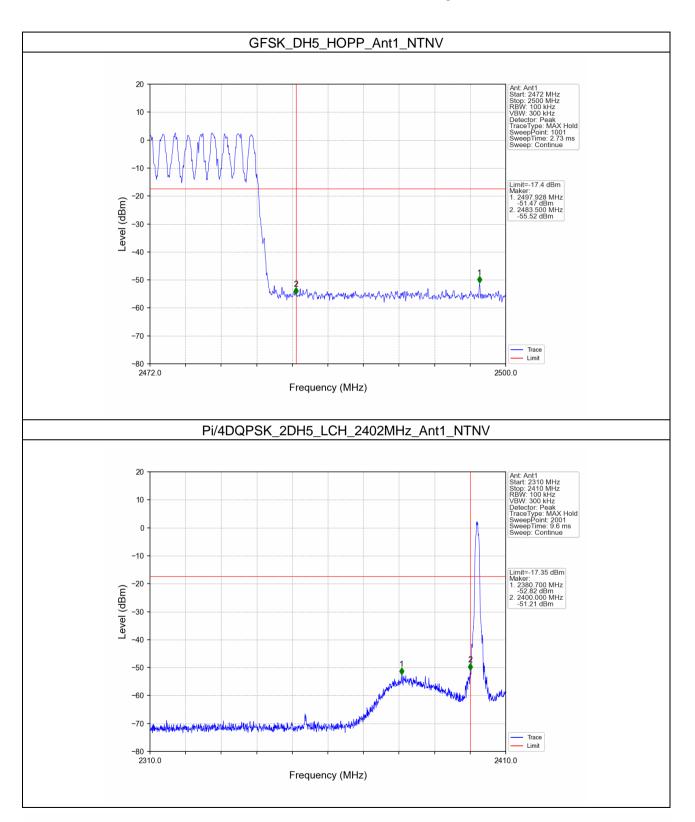
SZCCS-TRF-01 Rev. A/0 Aug01,2022

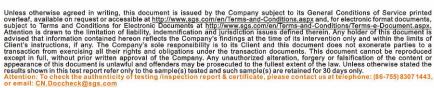
测专用章

检验 nspection & Testing Service

Shenzhe

Report No.: FYCR221100046803 Page: 86 of 93







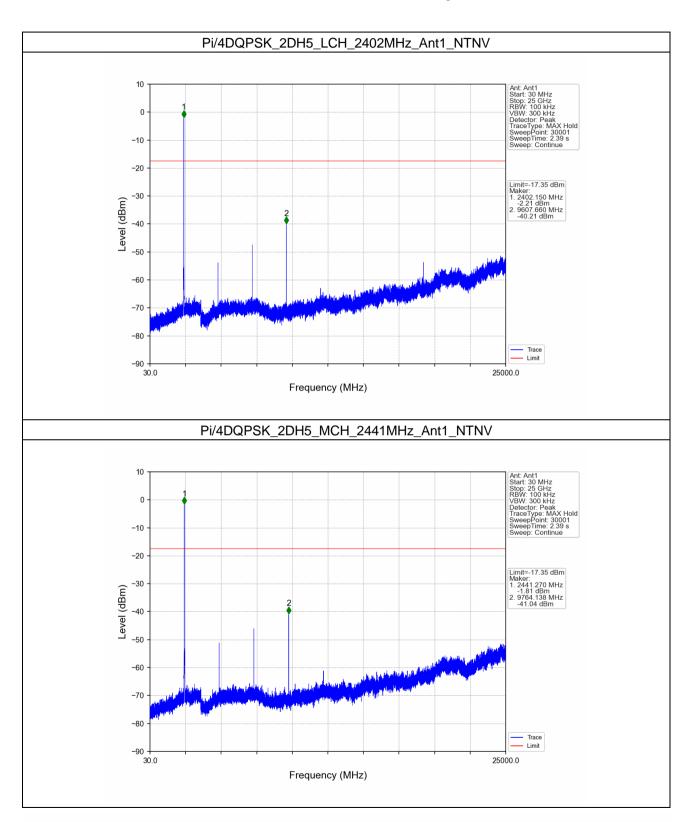
SZCCS-TRF-01 Rev. A/0 Aug01,2022

测专用章

检验 nspection & Testing Service

Shenzhe

Report No.: FYCR221100046803 Page: 87 of 93



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 herein 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 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 null-writing terport after 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, recentle (10 Document) for the site of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, recentle (10 Document).



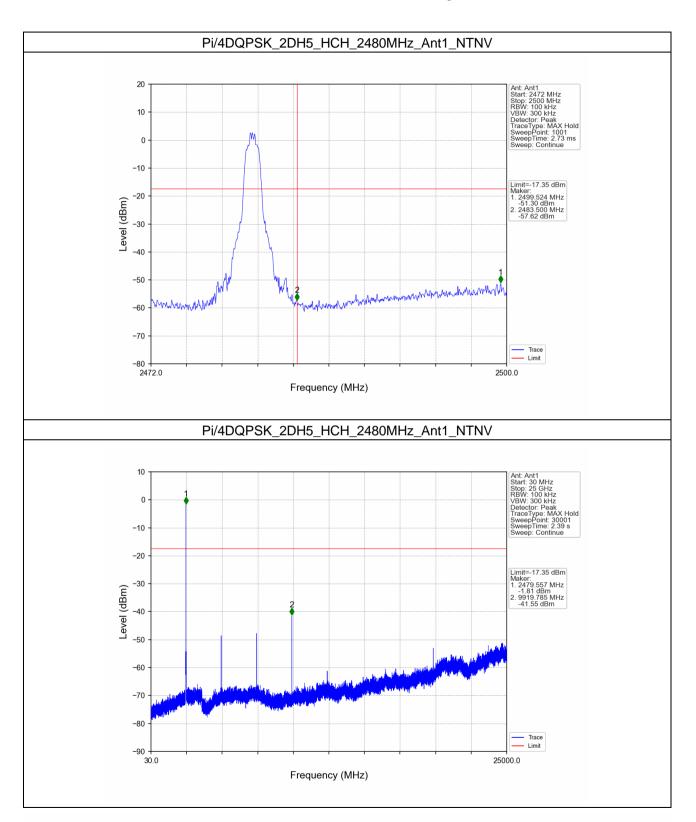
SZCCS-TRF-01 Rev. A/0 Aug01,2022

则专用章

检验 nspection & Testing Service

Shenzhe

Report No.: FYCR221100046803 Page: 88 of 93



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-eDocument.aspx. Attention is drawn to the limitation of liability, indermification 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 Cilent's instructions, if any. The Company's sole responsibility is to its Cilent and 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) testing linspection report & certificate, of the Sub-Gray only.



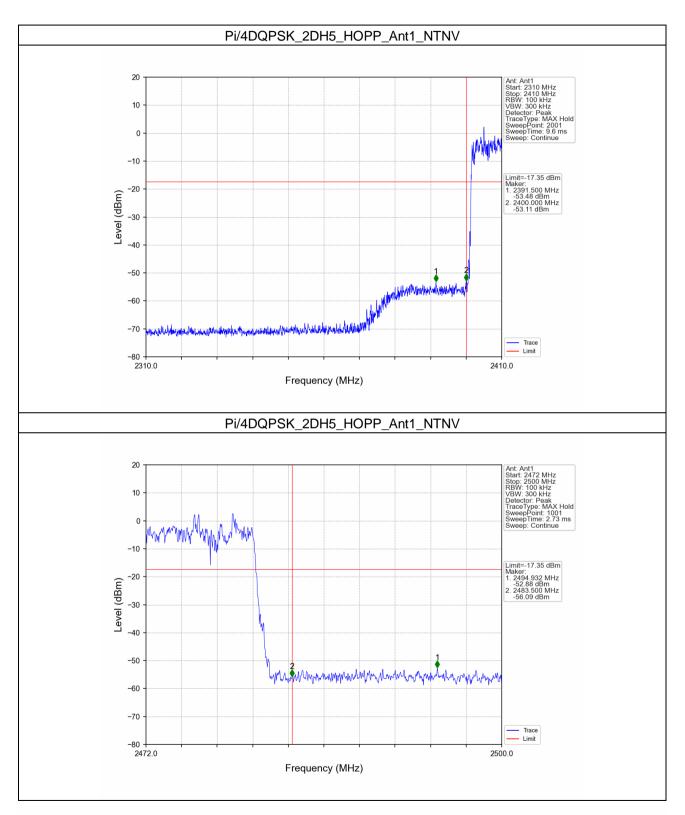
SZCCS-TRF-01 Rev. A/0 Aug01,2022

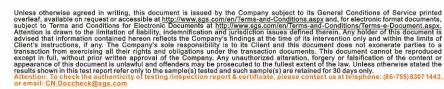
专用章

检验 ection & Testing Se

Shenzh

Report No.: FYCR221100046803 Page: 89 of 93









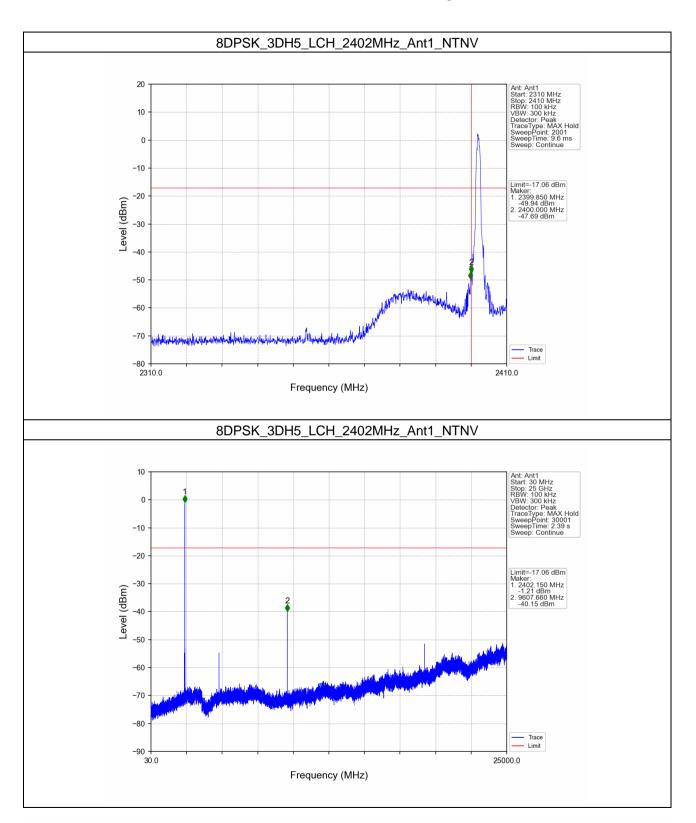
SZCCS-TRF-01 Rev. A/0 Aug01,2022

测专用章

检验 Inspection & Testing Services

Shenzhe

Report No.: FYCR221100046803 Page: 90 of 93



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 herein 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 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 null-writing terport after 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, recentle (10 Document) for the site of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, recentle (10 Document).



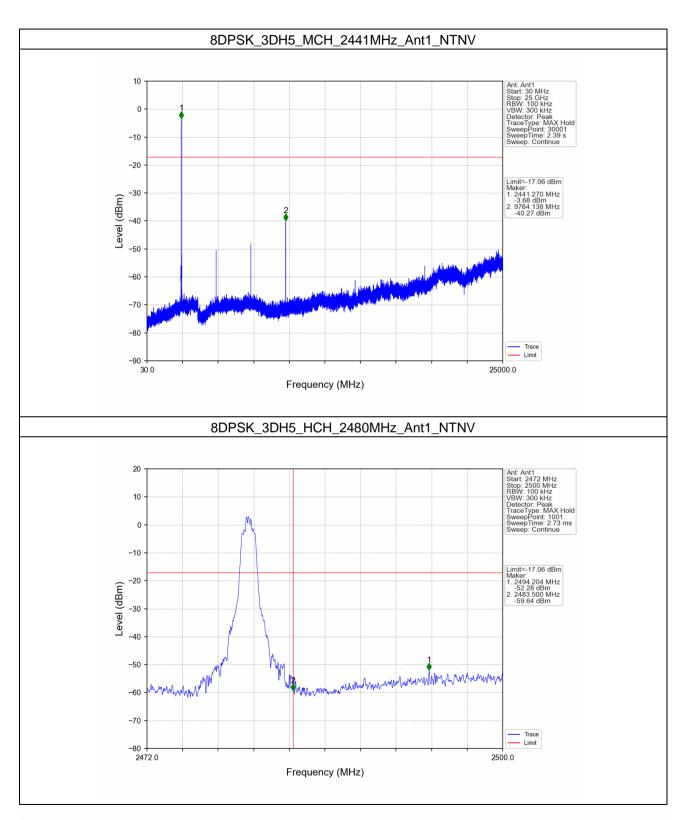
SZCCS-TRF-01 Rev. A/0 Aug01,2022

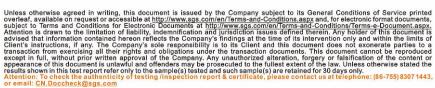
测专用章

检验 Inspection & Testing Services

Shenzhe

Report No.: FYCR221100046803 Page: 91 of 93







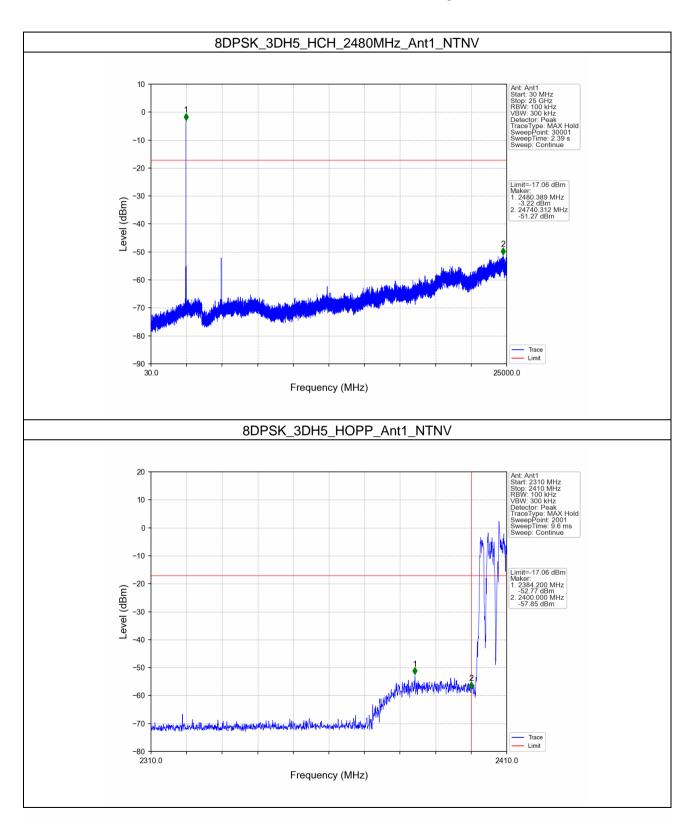
SZCCS-TRF-01 Rev. A/0 Aug01,2022

测专用章

检验 Inspection & Testing Services

Shenzhe

Report No.: FYCR221100046803 Page: 92 of 93

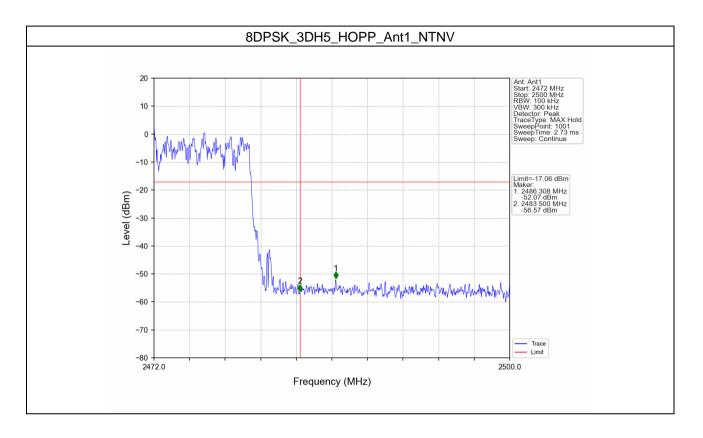


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic 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 herein 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 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 null-writing terport after 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, recentle (10 Document) for the site of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, recentle (10 Document).



SZCCS-TRF-01 Rev. A/0 Aug01,2022

Report No.: FYCR221100046803 Page: 93 of 93



- 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.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://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 Cilent's instructions, if any. The Company's solid responsibility is to its Cilent and 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 sated the resource in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or esputise to atterport report report report 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@ass.com").