

Report No.: KSCR220600106804

Page: 1 of 60

TEST REPORT

Application No.: KSCR2206001068AT

FCC ID: 2AXLB-EA30X

Applicant: SUZHOU EAVISION ROBOTIC TECHNOLOGIES CO., LTD

Address of Applicant: Unit 1-A, No.3 Workshop, 28 Xiasheng Road, SIP, Suzhou, China

Manufacturer: SUZHOU EAVISION ROBOTIC TECHNOLOGIES CO., LTD

Address of Manufacturer: Unit 1-A, No.3 Workshop, 28 Xiasheng Road, SIP, Suzhou, China

Factory: SUZHOU EAVISION ROBOTIC TECHNOLOGIES CO., LTD

Address of Factory: Unit 1-A, No.3 Workshop, 28 Xiasheng Road, SIP, Suzhou, China

Equipment Under Test (EUT):

EUT Name: EA-30X All-terrain Sensing Intelligent Drone

Model No.: EA-30X

Standard(s): 47 CFR Part 15, Subpart E 15.407

Date of Receipt: 2022-07-04

Date of Test: 2022-08-23 to 2022-09-14

Date of Issue: 2022-09-28

Test Result: Pass*

Eric Lin Laboratory Manager

Esia fin



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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 (186-512)57355888 (186-512)57370818 www.sgsgroup.com.cn 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300 (186-512)57355888 (186-512)57370818 sgs.china@sgs.com

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



Report No.: KSCR220600106804

Page: 2 of 60

Revision Record					
Version	Version Description Date				
00	Original	2022-09-28	/		

Authorized for issue by:		
	Paun. Liu	
	Pawn.Liu/Project Engineer	
	Eni fri	
	Eric Lin /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/Terms



Report No.: KSCR220600106804

Page: 3 of 60

2 Test Summary

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

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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 4 of 60

3 Contents

		Page
1	1 COVER PAGE	1
2	2 TEST SUMMARY	
		,
3	3 CONTENTS	4
4	4 GENERAL INFORMATION	6
	4.1 DETAILS OF E.U.T.	6
	4.2 POWER LEVEL SETTING USING IN TEST:	6
	4.3 ENVIRONMENT PARAMETER	
	4.4 DESCRIPTION OF SUPPORT UNITS	
	4.5 MEASUREMENT UNCERTAINTY	
	4.6 TEST LOCATION	
	4.7 Test Facility	
	4.8 DEVIATION FROM STANDARDS	
	4.9 ABNORMALITIES FROM STANDARD CONDITIONS	
5	5 EQUIPMENT LIST	g
6	6 RADIO SPECTRUM TECHNICAL REQUIREMENT	10
U		
	6.1 ANTENNA REQUIREMENT	
	6.1.1 Test Requirement:	
	6.1.2 Conclusion	
	6.2.1 Test Requirement:	
	6.2.2 Conclusion	
7		
	7.1 DUTY CYCLE	
	7.1.1 E.U.T. Operation	
	7.1.2 Test Mode Description	
	7.1.3 Test Setup Diagram	
	7.1.4 Measurement Procedure and Data	
	7.2 99% BANDWIDTH	
	7.2.1 E.U.T. Operation	
	7.2.2 Test Mode Description	
	7.2.3 Test Setup Diagram7.2.4 Measurement Procedure and Data	
	7.2.4 Measurement Procedure and Data	
	7.3.1 E.U.T. Operation	
	7.3.2 Test Mode Description	
	7.3.3 Test Setup Diagram	
	7.3.4 Measurement Procedure and Data	
	7.4 MINIMUM 6 DB BANDWIDTH (5.725-5.85 GHz BAND)	
	, /	



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



Report No.: KSCR220600106804

5 of 60 Page:

7.4.1	E.U.T. Operation	
7.4.2	Test Mode Description	
7.4.3	Test Setup Diagram	
7.4.4	Measurement Procedure and Data	
	MAXIMUM CONDUCTED OUTPUT POWER	
7.5.1	E.U.T. Operation	
7.5.2	Test Mode Description	
7.5.3	Test Setup Diagram	17
7.5.4	Measurement Procedure and Data	
	PEAK POWER SPECTRUM DENSITY	
7.6.1	E.U.T. Operation	
7.6.2	Test Mode Description	
7.6.3	Test Setup Diagram	
7.6.4	Measurement Procedure and Data	
7.7 F	RADIATED EMISSIONS (ABOVE 1GHz)	
7.7.1	E.U.T. Operation	
7.7.2	Test Mode Description	
7.7.3	Test Setup Diagram	
7.7.4	Measurement Procedure and Data	
7.8 F	RADIATED 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 F	REQUENCY STABILITY	36
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	
7.10 F	RADIATED EMISSIONS (BELOW 1GHz)	37
7.10.1	•	
7.10.2	Test Mode Description	37
7.10.3	3	
7.10.4	Measurement Procedure and Data	39
8 TEST	SETUP PHOTO	42
9 EUT C	ONSTRUCTIONAL DETAILS (EUT PHOTOS)	42
10 APPE	NDIX	43



8

9

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



Report No.: KSCR220600106804

Page: 6 of 60

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 48.75V by Battery		
	Battery model:JM2-29000mAh-51.8V		
	Max Charge Voltage:58.8V		
	Nominal Voltage:51.8V		
	Rated Capacity:29000mAh,1502Wh		
Operation Frequency (20MHz):	U-NII-3: 5745-5825MHz		
Moudulation Type:	802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK)		
Channel Spacing:	802.11a:20MHz		
TPC Function:	Without TPC function		
Antonno Tunos	Antenna 1:Dipole Antenna with RP-SMA connector,		
Antenna Type.	Antenna 2:Dipole Antenna with RP-SMA connector		
	Antenna 1:4.91dBi(Provided by the manufacturer)		
Antenna Gain:	Antenna 2:4.91dBi(Provided by the manufacturer)		
	Not support MIMO mode.		
Test Voltage:	DC 48.75V		
(20MHz): Moudulation Type: Channel Spacing: TPC Function: Antenna Type: Antenna Gain:	Rated Capacity:29000mAh,1502Wh U-NII-3: 5745-5825MHz 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11a:20MHz Without TPC function Antenna 1:Dipole Antenna with RP-SMA connector, Antenna 2:Dipole Antenna with RP-SMA connector Antenna 1:4.91dBi(Provided by the manufacturer) Antenna 2:4.91dBi(Provided by the manufacturer) Not support MIMO mode.		

4.2 Power level setting using in test:

Channel	5.8	8G			
	Ant 1	Ant 1			
149	Default	Default			
157	Default	Default			
165	Default	Default			

4.3 Environment Parameter

Environment Parameter		Selected Values During Tests		sts
Relative Humidity		Ambient		
Value		Temperature(°C)		Voltage(V)
NTNV		25		DC 48.75V
Note:				
NV:Normal Voltage	LV:Low Extreme Test Vo	ltage	HV:High Extren	ne Test Voltage
NT:Normal Temperature LT:Low Extreme Test Te		mperature HT:High Extreme Test Temperatur		ne Test Temperature



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

| No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China | 215300 | 1(86-512)57305888 | 1(86-512)57370818 | www.sgsgroup.com.cn | 中国・江苏・昆山市留学生创业园伟业路10号 | 邮编 215300 | 1(86-512)5735888 | 1(86-512)57370818 | sgs.china@sgs.com



Report No.: KSCR220600106804

Page: 7 of 60

4.4 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	LENOVO	K27	EB24537645
SecureCRT	VanDyke	V 6.2.0	/
Serial port adapter plate	/	Test Plate 3	/

4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4 x 10 ⁻⁸
2	Timeout 2s	
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	DE Dadiated Dawer	5.2dB (Below 1GHz)
0	RF Radiated Power	5.9dB (Above 1GHz)
		4.2dB (Below 30MHz)
9	Radiated Spurious Emission Test	4.5dB (30MHz-1GHz)
9		5.1dB (1GHz-18GHz)
		5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 8 of 60

4.6 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

- 1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
- 2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

4.7 Test Facility

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

CNAS

Compliance Certification Services (Kunshan) Inc. is accredited by the China National Accreditation Service for Conformity Assessment (CNAS). Registration No. CNAS L4354

A2LA

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

ISED

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

VCCI

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.8 Deviation from Standards

None

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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN Doccheck-6093cs.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 9 of 60

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
Conducted Emission at Mains Terminals (150kHz-30MHz)						
1	EMI Test Receive	R&S	ESCI	KS301101	01/22/2022	01/21/2023
2	LISN	R&S	ENV216	KS301197	01/22/2022	01/21/2023
3	LISN	Schwarzbeck	NNLK 8129	KS301091	01/22/2022	01/21/2023
4	Pulse Limiter	R&S	ESH3-Z2	KUS1902E001	01/22/2022	01/21/2023
5	CE test Cable	Thermax	/	CZ301102	11/14/2021	11/13/2022
6	Test Software	Farad	EZ-EMC	/	N.C.R	N.C.R
RF Co	nducted Test					
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	08/22/2022	08/21/2023
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	08/22/2022	08/21/2023
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	01/22/2022	01/21/2023
4	Signal Generator	R&S	SMW200A	KSEM020-1	08/22/2022	08/21/2023
5	Signal Generator	Agilent	N5182A	KUS2001M001-1	08/22/2022	08/21/2023
6	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	08/22/2022	08/21/2023
7	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	04/01/2022	03/31/2023
8	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	08/22/2022	08/21/2023
9	Switcher	CCSRF	FY562	KUS2001M001-3	08/22/2022	08/21/2023
10	AC Power Source	EXTECH	6605	KS301178	N.C.R	N.C.R
11	DC Power Supply	Aglient	E3632A	KS301180	N.C.R	N.C.R
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111- CZ301120	01/16/2022	01/15/2023
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	04/01/2021	03/31/2023
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	04/14/2022	04/13/2023
15	Software	BST	TST-PASS	/	N/A	N/A
RF Ra	diated Test					
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	08/22/2022	08/21/2023
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	04/01/2022	03/31/2023
3	Signal Generator	Agilent	E8257C	KS301066	08/22/2022	08/21/2023
4	Loop Antenna	COM-POWER	AL-130R	KUS1806E001	04/13/2021	04/12/2023
5	Bilog Antenna	TESEQ	CBL 6112D	KUS1806E005	06/29/2021	06/28/2023
6	Bilog Antenna	SCHWARZBECK	VULB9160	CZ301016	04/13/2021	04/12/2024
7	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	04/02/2022	04/01/2024
8	Horn-antenna(1-18GHz)	ETS-LINDGREN	3117	KS301186	02/22/2021	02/21/2023
9	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	03/17/2022	03/16/2023
10	Amplifier(30MHz~18GHz)	PANSHAN TECHNOLOGY	LNA:1~18G	KSEM010-1	01/22/2022	01/21/2023
11	Amplifier(18~40GHz)	COM-POWER	PAM-840A	KUS1710E001	01/22/2022	01/21/2023
12	RE Test Cable	REBES MICROWAVE	1	CZ301097	11/14/2021	11/13/2022
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	01/04/2022	31/03/2023
14	Software	Faratronic	EZ_EMC-v 3A1	/	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/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 10 of 60

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

Standard Requirement:

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

EUT Antenna:

The antenna is Dipole Antenna and no consideration of replacement. The best case gain of the Antenna 1: 4.91dBi, Antenna 2: 4.91dBi

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/Terms



Report No.: KSCR220600106804

Page: 11 of 60

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart C 15.407 (c)

6.2.2 Conclusion

Standard Requirement:

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

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

EUT Details:

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



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 12 of 60

7 Radio Spectrum Matter Test Results

7.1 Duty Cycle

Test Requirement KDB 789033 D02 II B 1
Test Method: KDB 789033 II B 1

7.1.1 E.U.T. Operation

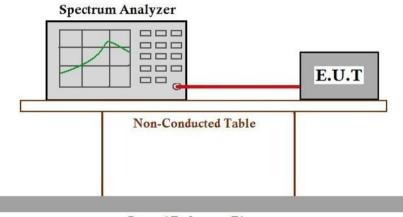
Operating Environment:

Temperature: 23.2 °C Humidity: 51.4 % RH Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.

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/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 13 of 60

7.2 99% Bandwidth

Test Requirement N/A

Test Method: KDB 789033 II D

7.2.1 E.U.T. Operation

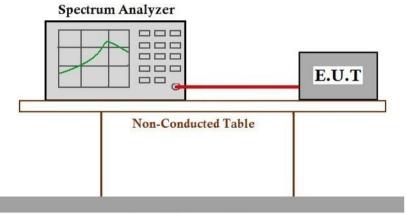
Operating Environment:

Temperature: 23.2 °C Humidity: 51.4 % RH Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.

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/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 14 of 60

7.3 26dB Emission bandwidth

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

Test Method: KDB 789033 D02 II C 1

7.3.1 E.U.T. Operation

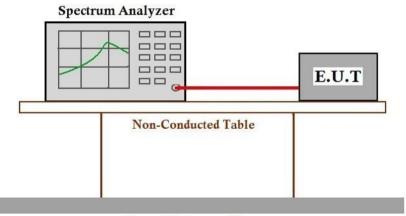
Operating Environment:

Temperature: 23.2 °C Humidity: 51.4 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.

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 overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 15 of 60

7.4 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart C 15.407 (e)

Test Method: KDB 789033 D02 II C 2

Limit:

Frequency band(MHz)	Limit		
5725-5850	≥500 kHz		

7.4.1 E.U.T. Operation

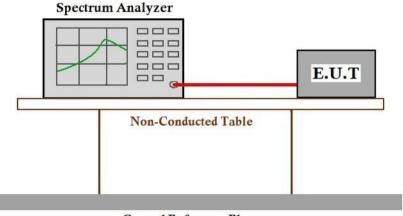
Operating Environment:

Temperature: 23.2 °C Humidity: 51.3 % RH Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.

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/Terms

or email: CN_Doccheck@sgs.com | No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn

中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300 ((86-512)57355888 f(86-512)57370818 sgs.china@sgs.com



Report No.: KSCR220600106804

Page: 16 of 60

7.5 Maximum Conducted output power

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

Test Method: KDB 789033 D02 II E

Limit:

Frequency	band(MHz)	Limit		
F1F0	E2E0	≤1W(30dBm) for master device		
5150-	-5250	≤250mW(24dBm) for client device		
5250-	-5350	≤250mW(24dBm) for client device or 11dBm+10logB*		
5470-	-5725	≤250mW(24dBm) for client device or 11dBm+10logB*		
5725-	-5850	≤1W(30dBm)		
Remark:	* Where B is the	26dB emission bandwidth in MHz.		
		onducted output power must be measured over any interval of smission using instrumentation calibrated in terms of an rms-ie.		

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23.3 °C Humidity: 51.4 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.



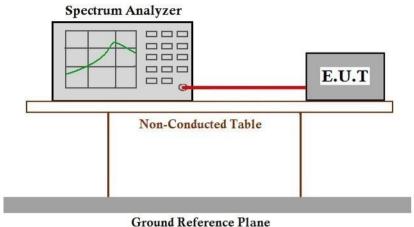
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: KSCR220600106804

Page: 17 of 60

7.5.3 Test Setup Diagram



Ground Reference Flan

7.5.4 Measurement Procedure and Data

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

Please Refer to Appendix for Details



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com



Report No.: KSCR220600106804

Page: 18 of 60

7.6 Peak Power spectrum density

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

Test Method: KDB 789033 D02 II F

Limit:

Frequency b	and(MHz)	Limit		
5150-5	250	≤17dBm in 1MHz for master device		
5150-5	250	≤11dBm in 1MHz for client device		
5250-5	350	≤11dBm in 1MHz for client device		
5470-5	725	≤11dBm in 1MHz for client device		
5725-5	850	≤30dBm in 500 kHz		
		power spectral density is measured as a conducted emission by on of a calibrated test instrument to the equipment under test.		

7.6.1 E.U.T. Operation

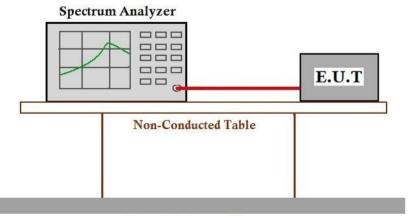
Operating Environment:

Temperature: 23.3 °C Humidity: 51.4 % RH Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.

7.6.3 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/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 19 of 60

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/Terms



Report No.: KSCR220600106804

Page: 20 of 60

7.7 Radiated Emissions (Above 1GHz)

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

Test Method: KDB 789033 D02 II G

Limit:

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

- *(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
- (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 20.1 °C Humidity: 56.6 % RH Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

1112 100t mede 2000 pto.						
Pre-scan / Final test	Mode Code	Description				
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.				



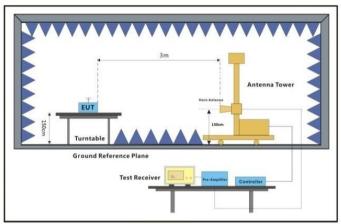
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: KSCR220600106804

Page: 21 of 60

7.7.3 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/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 22 of 60

7.7.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete. Remark:
- 1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
- 2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
- 4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 5. Both Antenna 1 and Antenna 2 are evaluated, and only the worst data of antenna 1 is shown in the report.



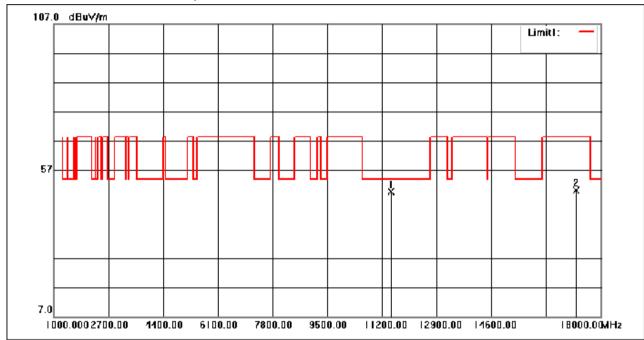
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms



Report No.: KSCR220600106804

Page: 23 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11490.000	48.58	0.94	49.52	54.00	-4.48	peak
2	17235.000	41.15	9.05	50.20	68.30	-18.10	peak



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

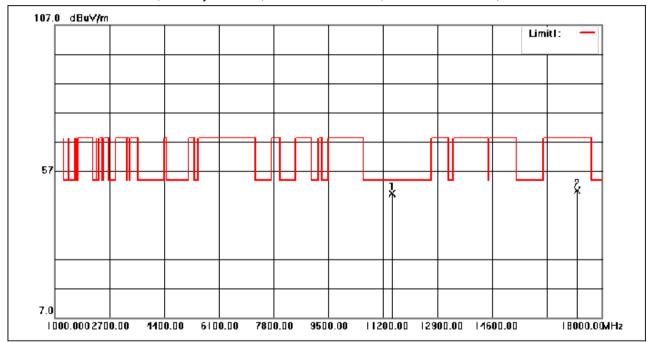
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 24 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11490.000	48.45	0.94	49.39	54.00	-4.61	peak
2	17235.000	41.29	9.05	50.34	68.30	-17.96	peak



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

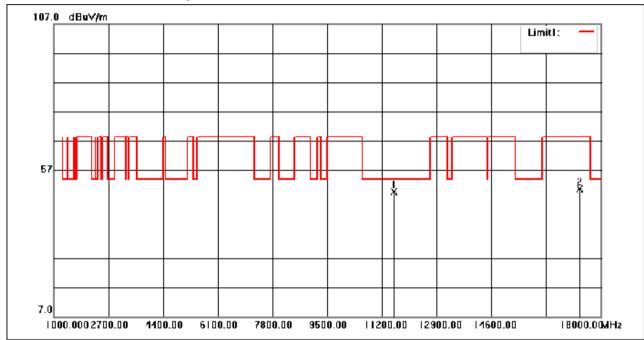
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 25 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11570.000	48.45	1.18	49.63	54.00	-4.37	peak
2	17355.000	41.66	8.98	50.64	68.30	-17.66	peak



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

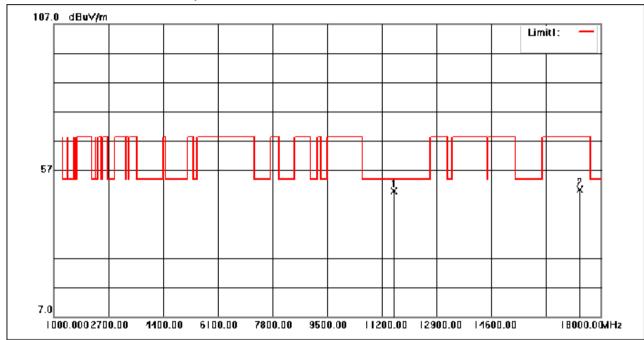
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 26 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11570.000	48.81	1.18	49.99	54.00	-4.01	peak
2	17355.000	41.49	8.98	50.47	68.30	-17.83	peak



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

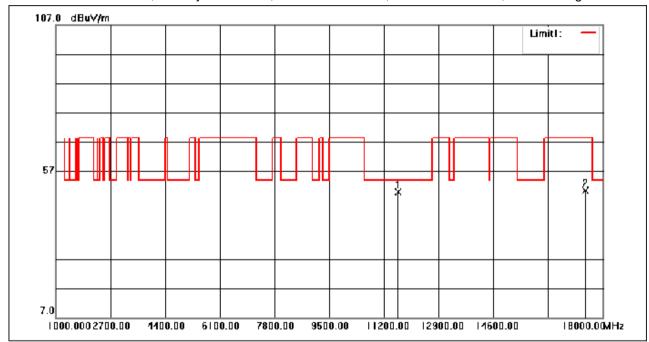
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 27 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11650.000	48.31	1.45	49.76	54.00	-4.24	peak
2	17475.000	41.51	8.90	50.41	68.30	-17.89	peak



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

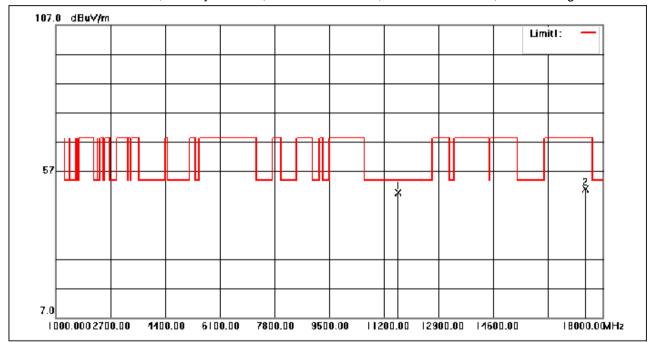
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 28 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	11650.000	48.09	1.45	49.54	54.00	-4.46	peak
2	17475.000	41.92	8.90	50.82	68.30	-17.48	peak



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 29 of 60

7.8 Radiated Emissions which fall in the restricted bands

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

Test Method: KDB 789033 D02 II G

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

- *(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
- (i) All emissions shall be limited to a level of –27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 30 of 60

7.8.1 E.U.T. Operation

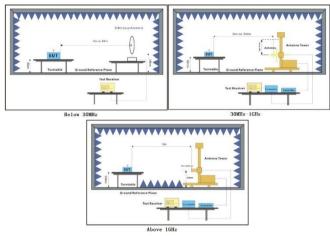
Operating Environment:

Temperature: 20.1 °C Humidity: 56.6 % RH Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.

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/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 31 of 60

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

i. Both Antenna 1 and Antenna 2 are evaluated, and only the worst data 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/Terms

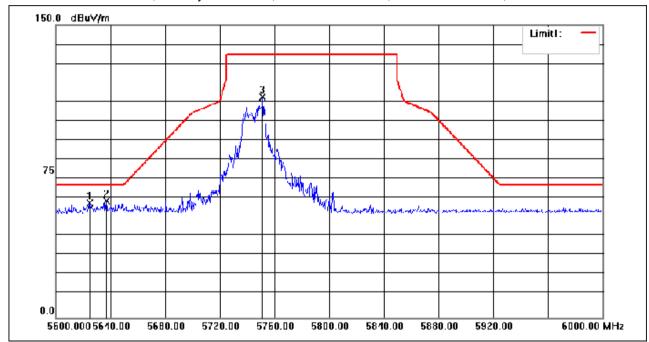
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 32 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5624.800	65.41	-6.90	58.51	68.20	-9.69	peak
2	5637.200	66.51	-6.87	59.64	68.20	-8.56	peak
3	5751.200	119.72	-6.58	113.14	135.00	-21.86	peak



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

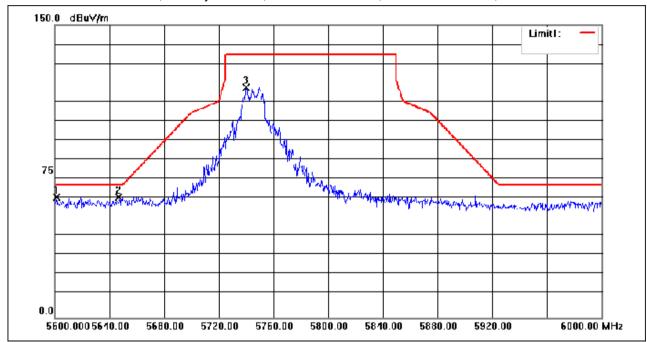
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 33 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5601.200	68.49	-6.97	61.52	68.20	-6.68	peak
2	5646.800	68.42	-6.85	61.57	68.20	-6.63	peak
3	5740.000	124.48	-6.61	117.87	135.00	-17.13	peak



Test Report Form Version: Rev01

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

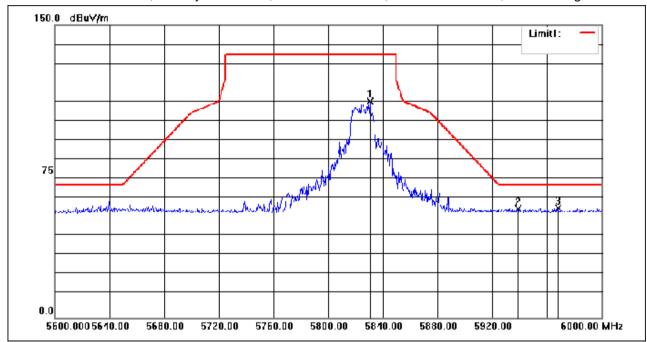
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 34 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5830.400	117.10	-6.30	110.80	135.00	-24.20	peak
2	5938.800	61.54	-5.70	55.84	68.20	-12.36	peak
3	5968.000	61.42	-5.54	55.88	68.20	-12.32	peak



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

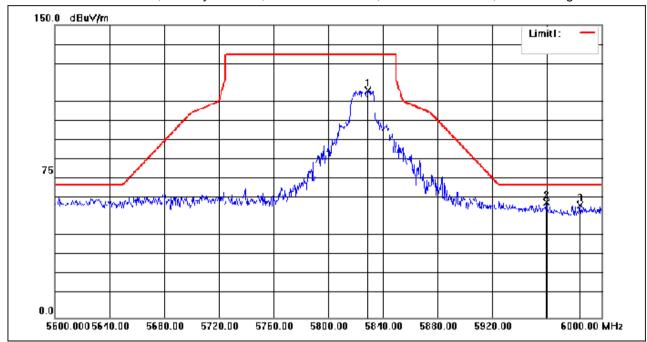
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 35 of 60

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



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5828.800	122.83	-6.30	116.53	135.00	-18.47	peak
2	5959.600	64.53	-5.59	58.94	68.20	-9.26	peak
3	5984.000	63.02	-5.45	57.57	68.20	-10.63	peak



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 36 of 60

7.9 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)
Test Method: ANSI C63.10 (2013) Section 6.8

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 23.3 °C Humidity: 51.5 % RH Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.

7.9.3 Test Setup Diagram

7.9.4 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/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 37 of 60

7.10 Radiated Emissions (Below 1GHz)

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

Test Method: KDB 789033 D02 II G

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

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 20.1 °C Humidity: 56.5 % RH Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with modulation OFDM.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

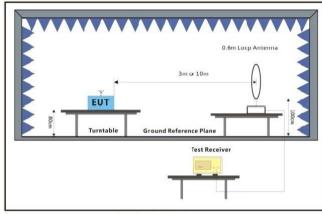
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300

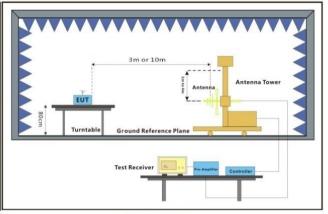


Report No.: KSCR220600106804

Page: 38 of 60

7.10.3 Test Setup Diagram





Below 30MHz 30MHz-1GHz



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 39 of 60

7.10.4 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 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. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of OFDM. Only the worst case is recorded in the report.
- 3. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 4. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 5. Both Antenna 1 and Antenna 2 are evaluated, and only the worst data 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/Terms

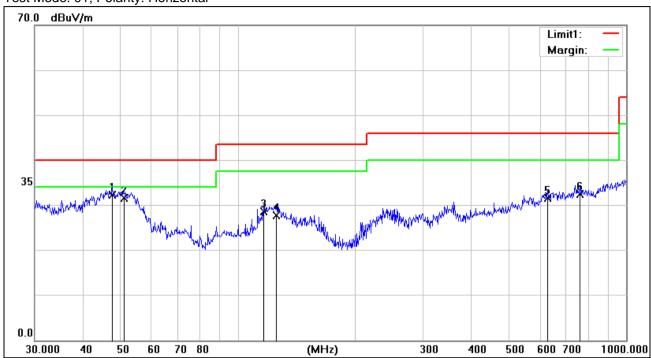
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 40 of 60

Test Mode: 01; Polarity: Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	47.4918	13.46	18.79	32.25	40.00	-7.75	100	12	QP
2	50.9420	14.10	17.42	31.52	40.00	-8.48	100	337	QP
3	116.5401	9.48	19.16	28.64	43.50	-14.86	100	50	QP
4	125.4457	8.20	19.46	27.66	43.50	-15.84	100	358	QP
5	627.2738	4.12	27.42	31.54	46.00	-14.46	100	358	QP
6	760.7036	4.40	28.08	32.48	46.00	-13.52	100	299	QP



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

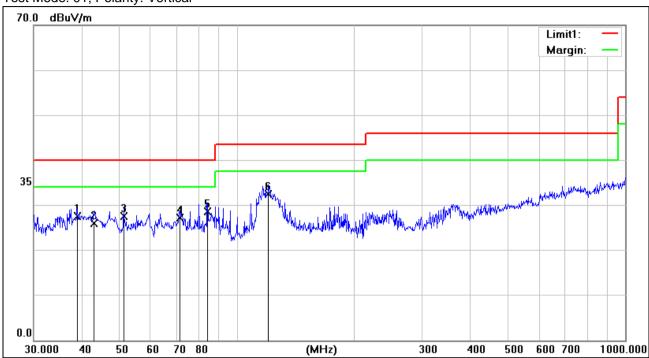
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 41 of 60

Test Mode: 01; Polarity: Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	38.8879	4.90	22.72	27.62	40.00	-12.38	100	301	QP
2	42.8998	5.29	20.76	26.05	40.00	-13.95	100	293	QP
3	51.1209	10.26	17.36	27.62	40.00	-12.38	100	283	QP
4	71.3300	11.47	15.68	27.15	40.00	-12.85	200	0	QP
5	84.1100	14.60	14.06	28.66	40.00	-11.34	100	289	QP
6	120.6991	13.03	19.38	32.41	43.50	-11.09	100	350	QP



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 42 of 60

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2206001068AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2206001068AT



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300

Member of the SGS Group (SGS SA)



Report No.: KSCR220600106804

Page: 43 of 60

10 Appendix

Appendix for KSCR2206001068AT_FCC 5G

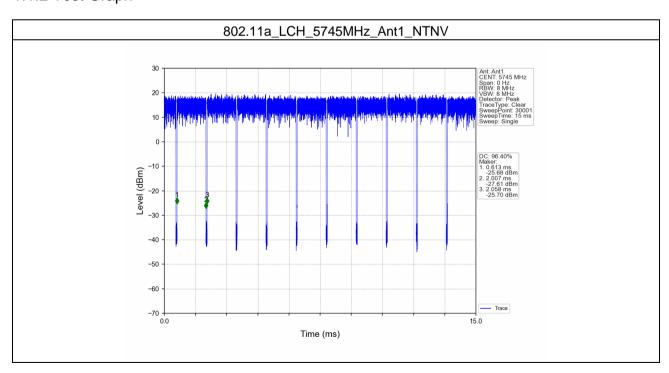
1. Duty Cycle

1.1 Ant1

1.1.1 Test Result

	Ant1									
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)			
		5745	1.394	1.446	96.40	0.16	0.03			
802.11a	SISO	5785	1.395	1.447	96.41	0.16	0.07			
		5825	1.392	1.445	96.33	0.16	0.07			

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/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

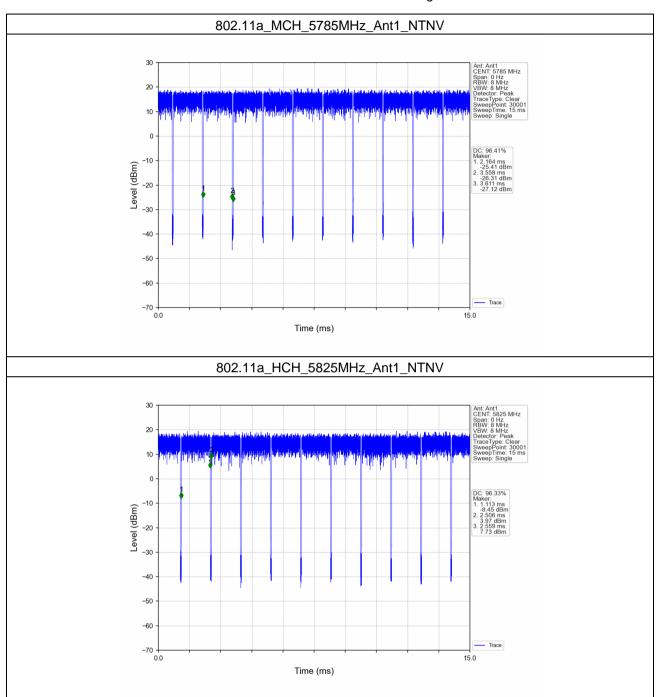
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 44 of 60





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

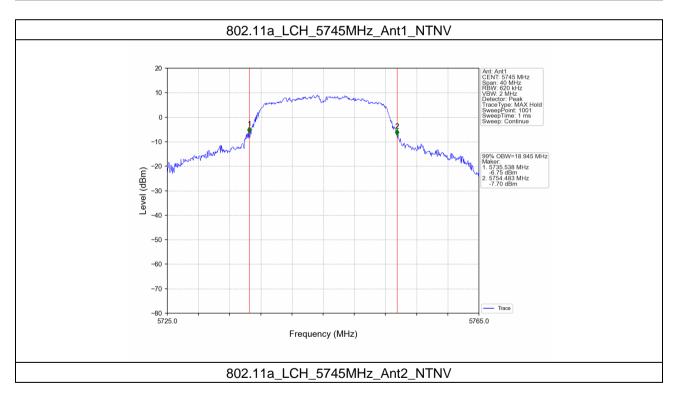
Page: 45 of 60

2. Bandwidth

2.1 OBW

2.1.1 Test Result

Mode	TX	Frequency	ANIT	99% Occupied Bandwidth (MHz)	\/a = d: a t	
Mode	Type	(MHz)	ANT	Result	Verdict	
		E74E	1	18.945	Pass	
		5745	2	18.313	Pass	
902 110	CICO	5785	1	18.458	Pass	
802.11a	SISO		2	17.798	Pass	
		E92E	1	18.035	Pass	
		5825	2	17.439	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/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

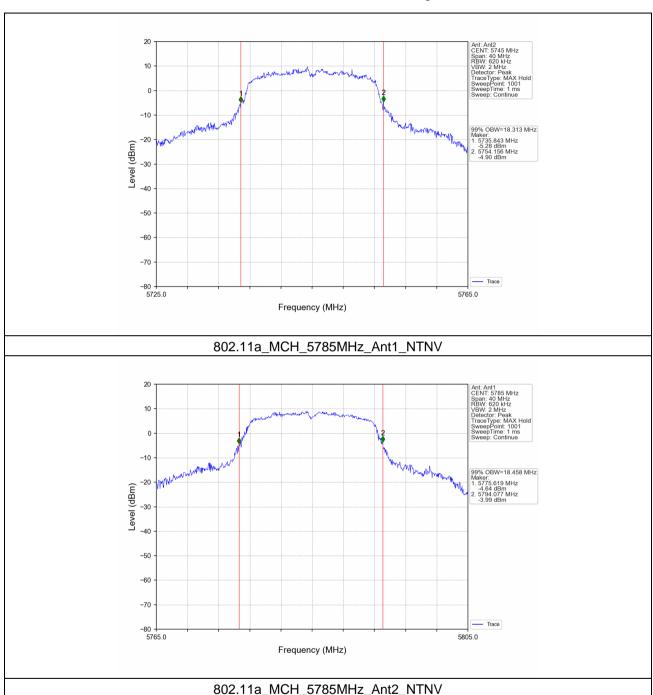
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 46 of 60





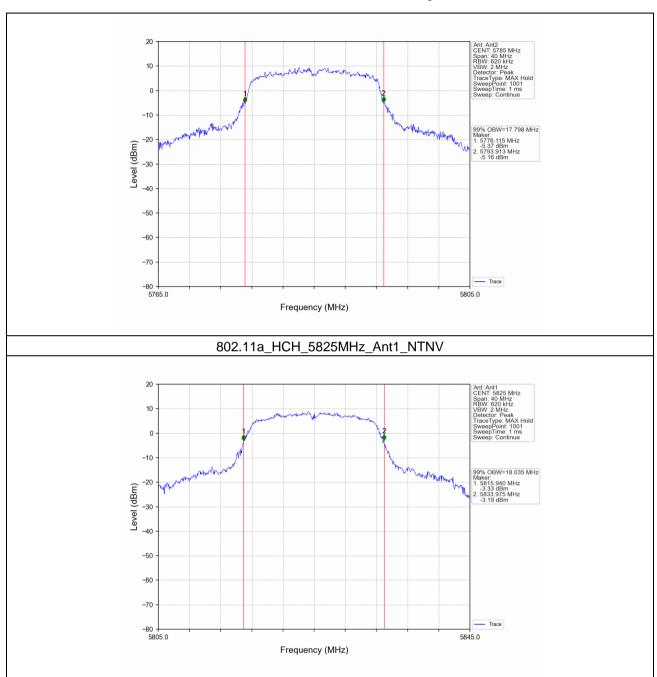
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 47 of 60



802.11a HCH 5825MHz Ant2 NTNV



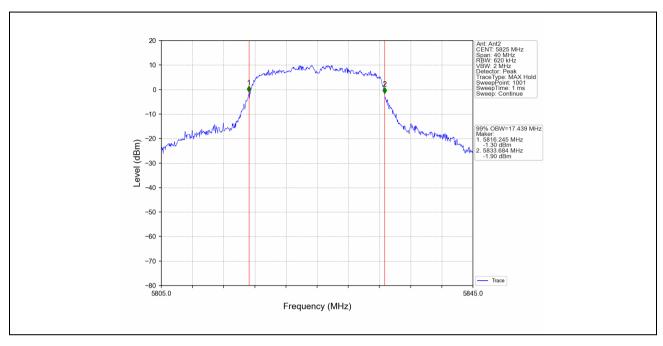
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 48 of 60





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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

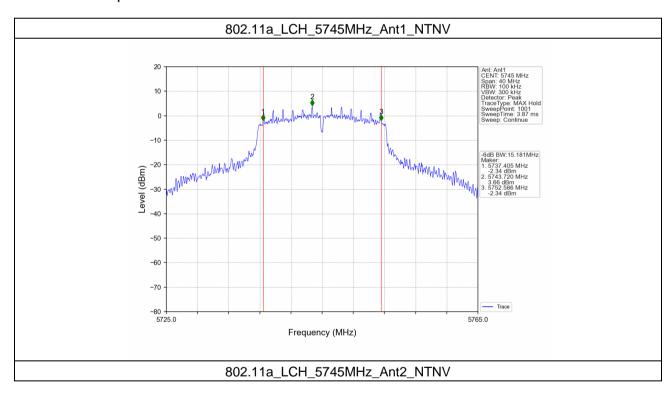
Page: 49 of 60

2.2 6dB BW

2.2.1 Test Result

Mode	TX	Frequency	ANIT	6dB Bandw	vidth (MHz)	Verdict	
Mode	Type	(MHz)	ANT	Result	Limit		
		5745	1	15.181	>=0.5	Pass	
			2	15.146	>=0.5	Pass	
902.446	CICO	5705	1	15.118	>=0.5	Pass	
802.11a	SISO	5785	2	15.146	>=0.5	Pass	
		5825	1	15.136	>=0.5	Pass	
			2	15.147	>=0.5	Pass	

2.2.2 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/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

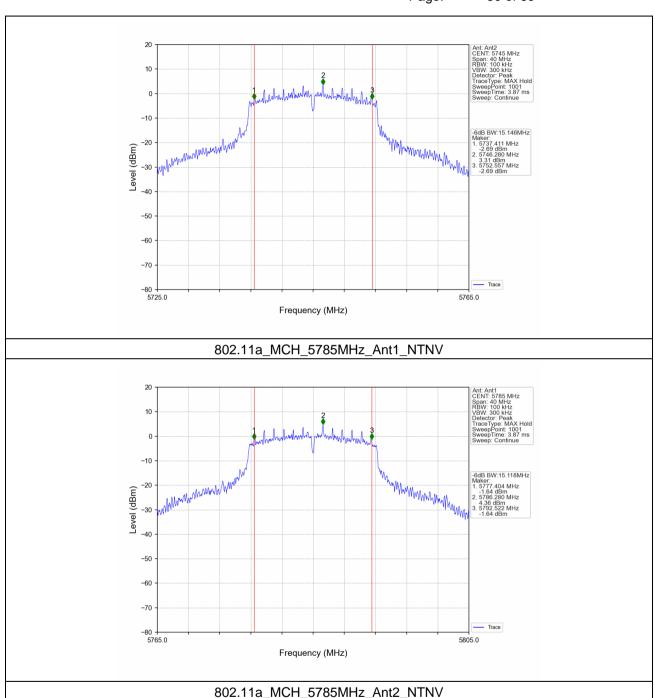
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 50 of 60





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

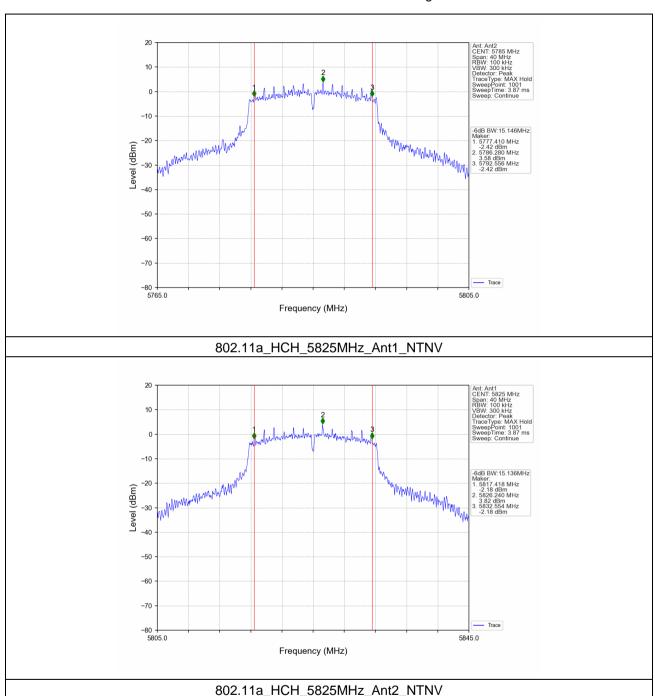
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 51 of 60





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

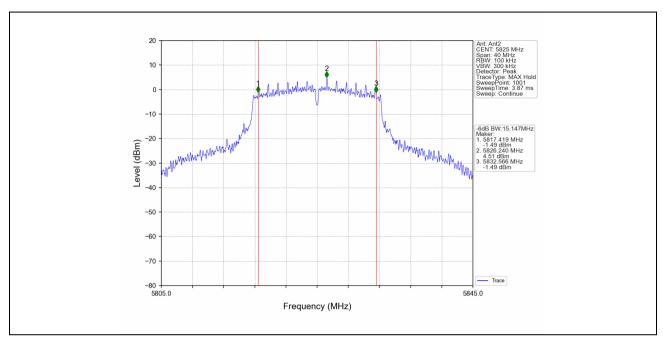
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 52 of 60



3. Maximum Conducted Output Power

3.1 Power

3.1.1 Test Result

Mada	TX	Frequency	Maximum	wer (dBm)	\/a rdiat		
Mode	Type	(MHz)	ANT1	ANT2	MIMO	Limit	Verdict
		5745	13.93	13.30	/	<=30	Pass
802.11a	SISO	5785	14.09	13.56	/	<=30	Pass
		5825	13.79	14.15	/	<=30	Pass

Note1: Antenna Gain: Ant1: 4.91dBi; Ant2: 4.91dBi;



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

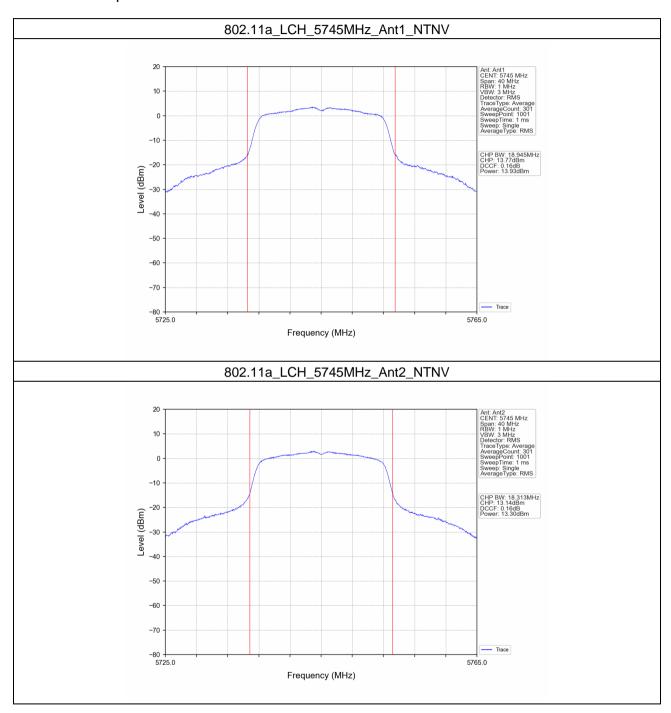
No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 53 of 60

3.1.2 Test Graph





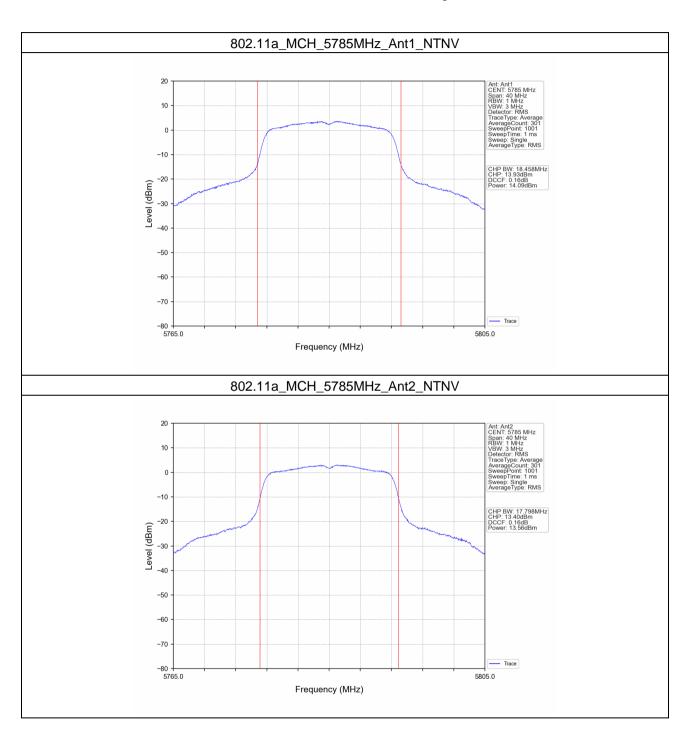
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 54 of 60





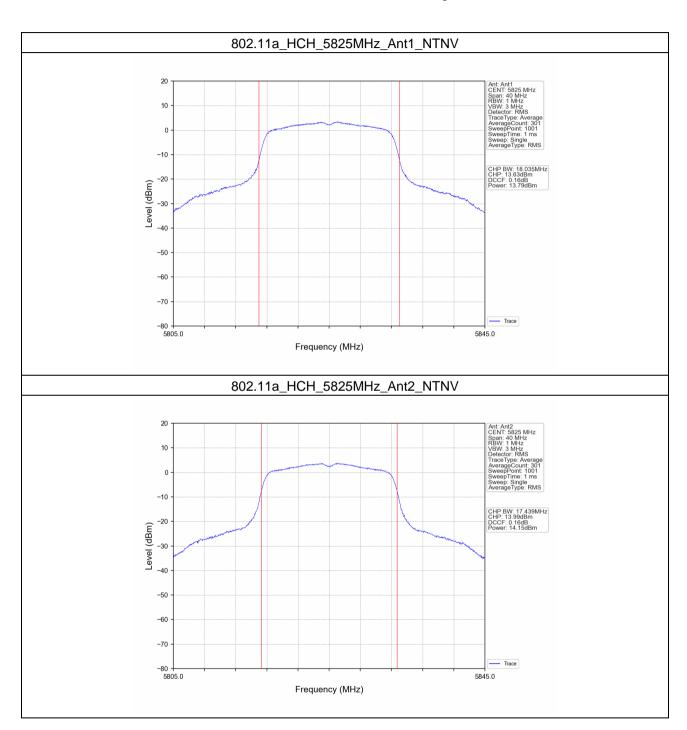
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮編 215300



Report No.: KSCR220600106804

Page: 55 of 60





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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮編 215300



Report No.: KSCR220600106804

Page: 56 of 60

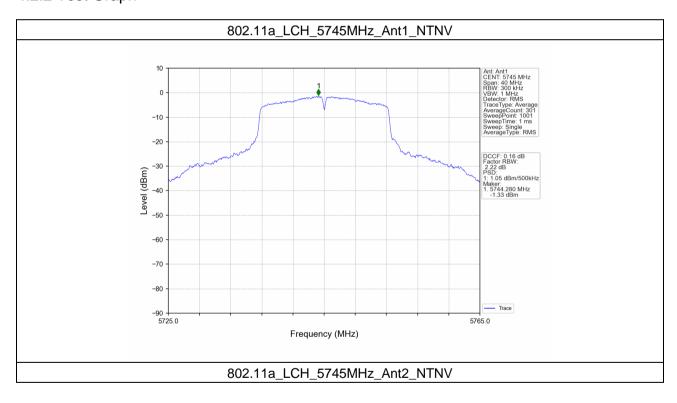
4.2 PSD-Band4

4.2.1 Test Result

Mode	TX	Frequency	М	z)	Verdict		
Mode	Type	(MHz)	ANT1	ANT2	MIMO	Limit	verdict
		5745	1.05	0.31	/	<=30	Pass
802.11a	SISO	5785	1.05	0.29	/	<=30	Pass
		5825	0.82	1.23	/	<=30	Pass

Note1: Antenna Gain: Ant1: 4.91dBi; Ant2: 4.91dBi;

4.2.2 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/Terms-a-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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

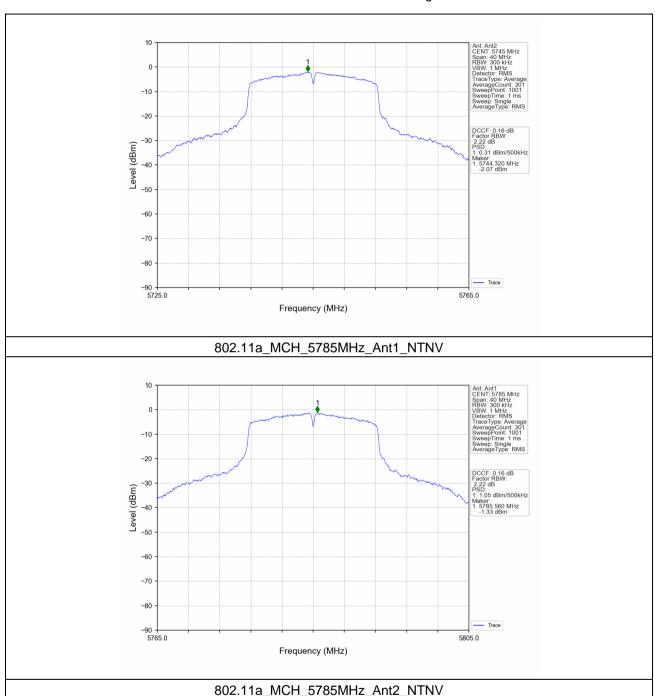
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 83071443, or email: CN.Doccheck@sas.com

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 57 of 60





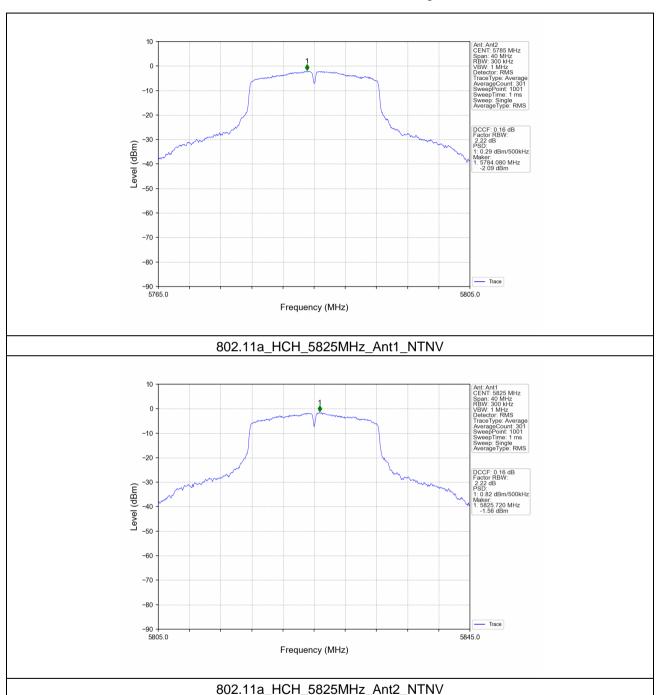
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮編 215300



Report No.: KSCR220600106804

Page: 58 of 60





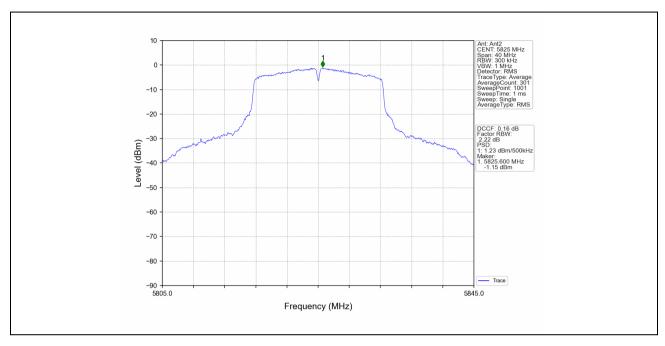
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 59 of 60



5. Frequency Stability

5.1 Ant1

5.1.1 Test Result

				Ant1														
Mode	TX Type	Frequency (MHz)	Temperature (°C)	Voltage (VDC)	Measured Frequency (MHz)	Limit (MHz)	Verdict											
				43.88	5744.940	5725 to 5850	Pass											
			20	48.75	5744.960	5725 to 5850	Pass											
				53.63	5744.940	5725 to 5850	Pass											
			-30	48.75	5744.960	5725 to 5850	Pass											
			-20	48.75	5744.940	5725 to 5850	Pass											
802.11a	SISO	5745	-10	48.75	5745.020	5725 to 5850	Pass											
				i										0	48.75	5745.000	5725 to 5850	Pass
			10	48.75	5744.920	5725 to 5850	Pass											
			30	48.75	5744.940	5725 to 5850	Pass											
			40	48.75	5744.980	5725 to 5850	Pass											
			50	48.75	5744.980	5725 to 5850	Pass											
				43.88	5784.900	5725 to 5850	Pass											
		5785	20	48.75	5784.920	5725 to 5850	Pass											
				53.63	5784.960	5725 to 5850	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/Terms

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国・江苏・昆山市留学生创业园伟业路10号 邮编 215300



Report No.: KSCR220600106804

Page: 60 of 60

	-30	48.75	5784.960	5725 to 5850	Pass
	-20	48.75	5784.960	5725 to 5850	Pass
	-10	48.75	5784.960	5725 to 5850	Pass
	0	48.75	5784.980	5725 to 5850	Pass
	10	48.75	5784.980	5725 to 5850	Pass
	30	48.75	5784.960	5725 to 5850	Pass
	40	48.75	5784.980	5725 to 5850	Pass
	50	48.75	5784.960	5725 to 5850	Pass
		43.88	5824.940	5725 to 5850	Pass
	20	48.75	5825.000	5725 to 5850	Pass
		53.63	5824.900	5725 to 5850	Pass
	-30	48.75	5825.000	5725 to 5850	Pass
	-20	48.75	5824.960	5725 to 5850	Pass
5825	-10	48.75	5824.960	5725 to 5850	Pass
	0	48.75	5824.940	5725 to 5850	Pass
	10	48.75	5824.980	5725 to 5850	Pass
	30	48.75	5824.960	5725 to 5850	Pass
	40	48.75	5824.960	5725 to 5850	Pass
	50	48.75	5824.940	5725 to 5850	Pass

- End of the Report -



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

No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300 中国•江苏•昆山市留学生创业园伟业路10号 邮编 215300