

Report No.: SEWM2304000137RG07

Rev.: 01 Page: 1 of 32

### **TEST REPORT**

SEWM2304000137RG **Application No.:** 

Applicant: Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, **Address of Applicant:** 

China, 100085

Manufacturer: Xiaomi Communications Co., Ltd.

Address of Manufacturer: #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing,

China, 100085

**EUT Description:** Mobile Phone Model No.: 23076RN8DY

Trade Mark: Redmi

FCC ID: 2AFZZRN8DY

Standards: FCC 47 CFR Part 15, Subpart C 15.225

**Date of Receipt:** 2023/04/26

**Date of Test:** 2023/04/30 to 2023/05/13

Date of Issue: 2023/05/29

Test Result: PASS \*

In the configuration tested, the EUT detailed in this report complied with the standards specified

Authorized Signature:

Panta Sun Wireless Laboratory Manager





Report No.: SEWM2304000137RG07

Rev.: 01 Page: 2 of 32

### **Version**

Revision Record							
Version Chapter Date Modifier Remark							
01		2023/05/29		Original			

Prepared By	(Ives Cheng) / Test Engineer
Checked By	(Well Wei) / 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.sps.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Felectronic Documents at http://www.sps.com/en/Terms-and-Conditions.frems-b-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document sadvised that information contained hereon reflects the Company's findings at the time of its intermiton 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. For one of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the Attention. To check the authenticity of testing /inspection report & certificate, please contact us at telephone; (86-755) 8307 1443, or email: CND Doccheck@sas.com

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国・苏州・中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn t (86-512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 3 of 32

### 2 Test Summary

Test Item	FCC Rules No.	Test Method	Test Result	Result
Antenna Requirement	15.203		Clause 4.1	PASS
AC Power Line Conducted Emission	15.207	ANSI C63.10-2020 Section 6.2	Clause 4.2	PASS
20dB Spectrum Bandwidth	15.215(c)	ANSI C63.10-2020 Section 6.9.2	Clause 4.3	PASS
Frequency Stability	15.225(e)	ANSI C63.10-2020 Section 6.8	Clause 4.4	PASS
Field Strength of Fundamental Emissions	15.225(a)(b)(c)	ANSI C63.10-2020 Section 6.4.7	Clause 4.5	PASS
Radiated Spurious Emissions	15.225(d)/15.209	ANSI C63.10-2020 Section 6.4/6.5	Clause 4.6	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.sps.com/ent/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sps.com/ent/Terms-and-Conditions.Ferms-bocument.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 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 Attention. To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CND\_Doccheck@sps.com

South of No. Fibrat, No. 1, Runsherg Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Pikol Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

Zone 215000 t (86-512) 62992980 F编: 215000 t (86-512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 4 of 32

### **Contents**

1	Versi	on	2
2		Summary	
3		eral Information	
	3.1	Details of Client	5
	3.2	Test Location	5
	3.3	Test Facility	5
	3.4	General Description of EUT	6
	3.5	Test Environment	7
	3.6	Description of Support Units	7
4	Test i	results and Measurement Data	8
	4.1	Antenna Requirement	8
	4.2	Worst-case configuration and mode	8
	4.3	AC Power Line Conducted Emissions	9
	4.4	20dB Spectrum Bandwidth	13
	4.5	Frequency Stability	14
	4.6	Field Strength of Fundamental Emissions	15
	4.7	Radiated Spurious Emissions	17
5	Meas	surement Uncertainty (95% confidence levels, k=2)	19
6	Equip	oment List	20
7	Photo	ographs - Setup Photos	22



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sps.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Felectronic Documents at http://www.sps.com/en/Terms-and-Conditions.frems-b-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document sadvised that information contained hereon reflects the Company's findings at the time of its intermiton 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. For one of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the Attention. To check the authenticity of testing /inspection report & certificate, please contact us at telephone; (86-755) 8307 1443, or email: CND Doccheck@sas.com

South of No. Florit, No. 1, Runsherg Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Pikol Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

215000 t (86–512) 62992980 215000 t (86–512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 5 of 32

#### 3 General Information

#### 3.1 Details of Client

Applicant:	Xiaomi Communications Co., Ltd.
Address of Applicant:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer:	Xiaomi Communications Co., Ltd.
Address of Manufacturer:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

#### 3.2 Test Location

Company:	SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.
Address:	South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone
Post code:	215000
Test engineer:	Ives Cheng, King-p Li

#### 3.3 Test Facility

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

#### A2LA (Certificate No. 6336.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

#### • Innovation, Science and Economic Development Canada

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

#### • FCC –Designation Number: CN1312

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an

accredited testing laboratory. Designation Number: CN1312.

Test Firm Registration Number: 717327



Unless otherwise agreed 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 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 full listed 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.

South of No. 6 Pfart, No. 1, Runsteing Read, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编:215000 t (86-512) 62992980 t (86-512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 6 of 32

### 3.4 General Description of EUT

suitability, reliability or/and integrity of the information.

EUT Description:	Mobile Phone	Mobile Phone					
Model No.:	23076RN8DY	23076RN8DY					
Trade Mark:	Redmi						
Hardware Version:	P1.1						
Software Version:	MIUI 14						
INACI	RF Conducted	IMEI1: 866672060059267 IMEI2: 866672060059275					
IMEI:	RSE & AC power line	IMEI1: 866672060062360 IMEI2: 866672060062378					
Operation Frequency:	13.56MHz						
	Type A, B and F						
NFC Type:	NFC Type:  Remark: the EUT has been pre-scanned in NFC Type A, B and F. the worst type(Type A) was recorded in this report if no others remark in the test items.						
Modulation Type:	ASK						
Antenna Type:	Antenna Type: FPC+Ferrite						
Remark: As above information is p	rovided and confirmed by	the applicant. SGS is not liable to the accuracy,					



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service prints overleaf, available on request or accessible at <a href="https://www.sgs.com/en/lems-and-Conditions.agand,">https://www.sgs.com/en/lems-and-Conditions.agand,</a> for electronic format document subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/en/lems-and-Conditions/ferms-en-Document.agand-Conditions/ferm

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

215000 t (86–512) 62992980 t (86–512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 7 of 32

#### 3.5 Test Environment

Environment Parameter	101.0 kPa Selected Values During Tests						
Relative Humidity	44-46 % RH Ambient						
Value	Temperature(°C) Voltage(V)						
NTNV 22~23 3.85							
Remark: The extreme Voltage and extreme Temperature are refer to the test data of Frequency Stability.							

### 3.6 Description of Support Units

The EUT has been tested as an independent unit.



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



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 8 of 32

#### **Test results and Measurement Data** 4

#### 4.1 Antenna Requirement

Standard requirement: 47 CFR Part 15C Section 15.203

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. 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.

The antenna of the EUT are permanently attached.

### 4.2 Worst-case configuration and mode

The fundamental of the EUT was investigated under three orthogonal orlentations X, Y, and Z. The Z orientation was determined to be the worst-case orientation.

In addition, Type A, B and F at each supported data rate and with/without a tag were investigated to determine the worst case based on the highest power and spurious emissions. Type A, 106Kbps without tag was determined to be the worst case and therefore Type A, 106Kbps without tag was selected for all final tests.

Although these tests were performed ther than open area test site, adequate comparison measurements were confirmed against 30m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site prduces results that correlate with the ones of tests made in an ope field based on KDB



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



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 9 of 32

### 4.3 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207						
Test Method:	ANSI C63.10-2020 Section 6.2						
Test Frequency Range:	150kHz to 30MHz						
Limit:	Fraguency range/MHz)	Limit (d	BuV)				
	Frequency range(MHz)	Quasi-peak	Average				
	0.15-0.5	66 to 56*	56 to 46*				
	0.5-5	56	46				
	5-30	60	50				
	* Decreases with the log	arithm of the frequency.					
Test Procedure:	<ul> <li>5-30   60   50</li> <li>* Decreases with the logarithm of the frequency.</li> <li>1) The mains terminal disturbance voltage test was conducted in a shield room.</li> <li>2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω li impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground refer plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables single LISN provided the rating of the LISN was not exceeded.</li> <li>3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT placed on the horizontal ground reference plane.</li> <li>4) The test was performed with a vertical ground reference plane. The reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was bethe closest points of the LISN 1 and the EUT. All other units of the EU and associated equipment was at least 0.8 m from the LISN 2.</li> <li>5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to</li> </ul>						



Unless otherwise agreed 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 at http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditio

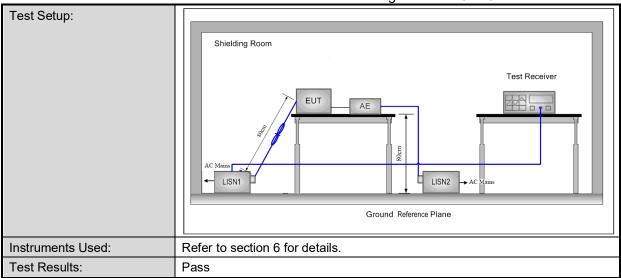
South of No. P Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, Chine (Jiangsu) Pilot Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

5000 t (86–512) 62992980 5000 t (86–512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 10 of 32





Unless otherwise agreed 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 at http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditio



Report No.: SEWM2304000137RG07

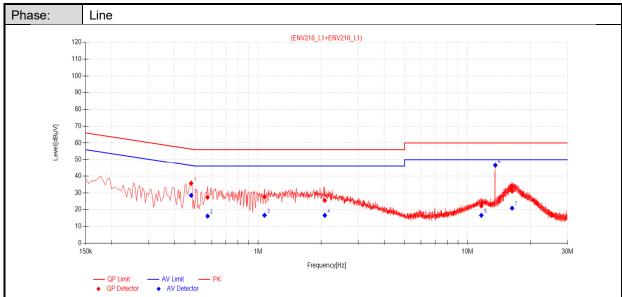
Rev.: 01 Page: 11 of 32

#### Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission

#### were detected.



Data List											
NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.4785	10.59	25.07	35.66	56.37	20.71	17.88	28.47	46.37	17.90	PASS
2	0.5730	10.53	16.83	27.36	56.00	28.64	5.61	16.14	46.00	29.86	PASS
3	1.0725	10.60	17.11	27.71	56.00	28.29	6.03	16.63	46.00	29.37	PASS
4	2.0805	10.68	14.78	25.46	56.00	30.54	5.89	16.57	46.00	29.43	PASS
5	11.6385	10.59	11.66	22.25	60.00	37.75	6.01	16.60	50.00	33.40	PASS
6	13.5735	10.55	35.94	46.49	60.00	13.51	35.94	46.49	50.00	3.51	PASS
7	16.3275	10.50	20.45	30.95	60.00	29.05	10.36	20.86	50.00	29.14	PASS

#### Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Value =Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
- 3. Margin = Limit[dB $\mu$ V] Value[dB $\mu$ V]



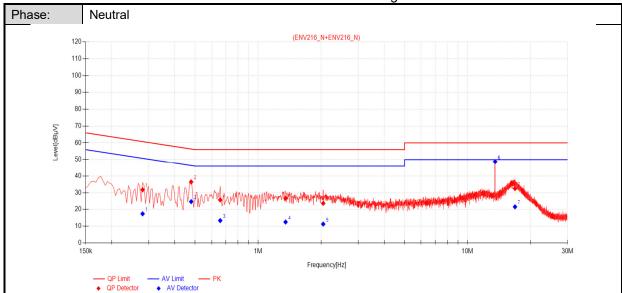
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is 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 floocument cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsisification 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; (85-75) 8307 1443.



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 12 of 32



Data	Data List										
NO	Frequency [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.2805	10.74	21.03	31.77	60.80	29.03	6.65	17.39	50.80	33.41	PASS
2	0.4785	10.81	25.64	36.45	56.37	19.92	13.86	24.67	46.37	21.70	PASS
3	0.6585	10.77	14.92	25.69	56.00	30.31	2.59	13.36	46.00	32.64	PASS
4	1.3515	10.78	15.88	26.66	56.00	29.34	1.70	12.48	46.00	33.52	PASS
5	2.0445	10.77	12.88	23.65	56.00	32.35	0.47	11.24	46.00	34.76	PASS
6	13.5465	10.62	38.12	48.74	60.00	11.26	38.12	48.74	50.00	1.26	PASS
7	16.8585	10.53	21.95	32.48	60.00	27.52	11.04	21.57	50.00	28.43	PASS

#### Remark

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Value =Reading[dBµV] + Factor(Lisn factor[dB] + cable loss[dB]).
- 3. Margin = Limit[dBµV] Value[dBµV]



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> 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-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. 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 nauthorized alteration, forgor of 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 3d yays only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CR.Doccheck@sgs.com

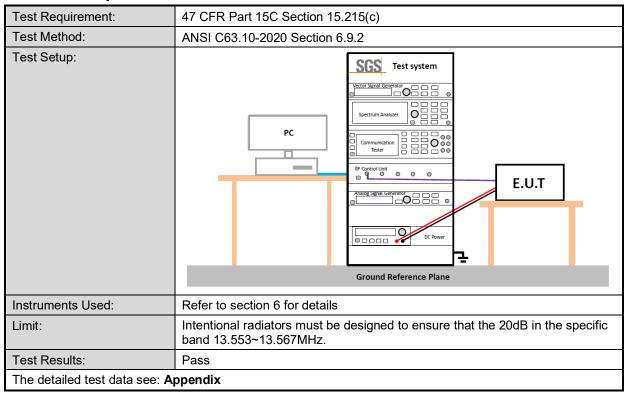
South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路(号的6号厂房南部 邮编: 215000



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 13 of 32

### 4.4 20dB Spectrum Bandwidth





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

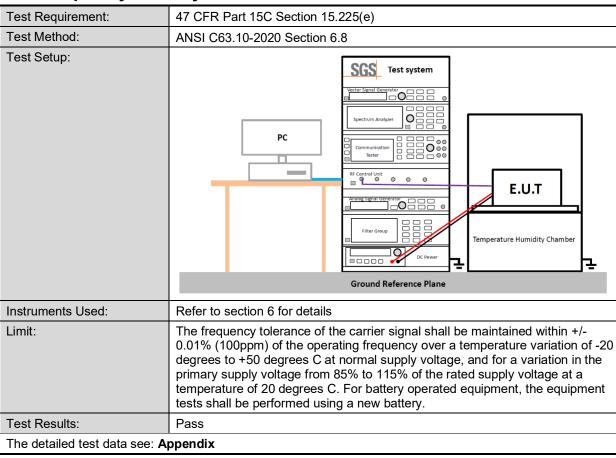
South of No. 6 Plant, No. 1, Runshang Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000 t (86-512) 62992980 t (86-512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 14 of 32

### 4.5 Frequency Stability





Unless otherwise agreed 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 at http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditio

South of No. 6 Plant, No. 1, Runshang Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000 t (86-512) 62992980 t (86-512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 15 of 32

### 4.6 Field Strength of Fundamental Emissions

Test Requirement:	47 CFR Part 15C Section 15.225									
Test Method:	ANSI C63.10-2020 Section 6.4.7									
Test Site:	Measurement Distance:	3m (Semi-Anecho	ic Chamber)	ı						
Limit:	Frequency	Field Strength (μV/m) at 30m	Field Strength (dBµV/m) at 30m	Field Strength (dBµV/m) at 10m	Field Strength (dBµV/m) at 3m					
	1.705~13.110 MHz	30	29.5	48.58	69.5					
	13.110-13.410 MHz	106	40.5	59.58	80.5					
	13.410-13.553 MHz	334	50.5	69.58	90.5					
	13.553-13.567 MHz	15,848	84.0	103.08	124.0					
	13.567-13.710 MHz	334	50.5	69.58	90.5					
	13.710-14.010 MHz 106 40.5 59.58 80									
	14.010~30.000 MHz	30	29.5	48.58	69.5					

#### Test Setup:

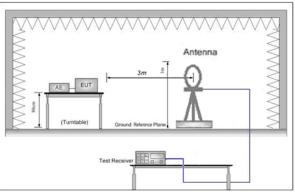


Figure 1. Below 30MHz

#### Test Procedure:

- a. 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 camber. 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.



Unless otherwise agreed 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 Fleetornic 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 intervition 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. Government of the company, any unauthorized alteration, forgery or fatsification of the content or 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: CMD.Doccheck@sas.com

South of No. 6 Plant, No. 1, Runshang Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000 t (86-512) 62992980 t (86-512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 16 of 32

	<u> </u>				
	f. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the Z axis positioning which it is worse case.				
	g. Repeat above procedures until all frequencies measured was complete.				
	h. RBW set to 9kHz.				
Exploratory Test Mode:	Transmitting with modulation. Charge + Transmitting mode.				
Final Test Mode:	Transmitting with modulation.  Pretest the EUT at Charge + Transmitting mode.Only the worst case is recorded in the report.				
Instruments Used:	Refer to section 6 for details				
Test Results:	Pass				
The detailed test data see: Appendix					



Unless otherwise agreed 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.sps.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Felectronic Documents at http://www.sps.com/en/Terms-and-Conditions.frems-b-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document sadvised that information contained hereon reflects the Company's findings at the time of its intermiton 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. For one of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the Attention. To check the authenticity of testing /inspection report & certificate, please contact us at telephone; (86-755) 8307 1443, or email: CND Doccheck@sas.com

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国・苏州・中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn t (86-512) 62992980



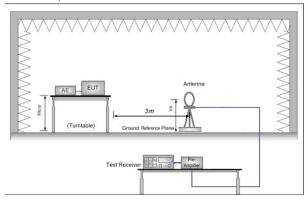
Report No.: SEWM2304000137RG07

Rev.: 01 Page: 17 of 32

### 4.7 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.225									
Test Method:	ANSI C63.10-2020 Section 6.4&6.5									
Test Site:	Measurement Distance:	Measurement Distance: 3m (Semi-Anechoic Chamber)								
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)					
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300					
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30					
	1.705MHz-30MHz	30	-	1	30					
	30MHz-88MHz	100	40.0	Quasi-peak	3					
	88MHz-216MHz	150	43.5	Quasi-peak	3					
	216MHz-960MHz	200	46.0	Quasi-peak	3					
	Above 960MHz	500	54.0	Quasi-peak	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.									

#### Test Setup:



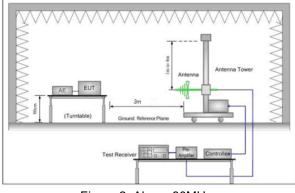


Figure 1. Below 30MHz

Figure 2. Above 30MHz

#### Test Procedure:

- i. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- j. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- k. 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.
- I. For each suspected emission, the EUT was arranged to its worst case and then



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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000

t (86-512) 62992980 t (86-512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 18 of 32 Page:

	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.  m. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.  n. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the Z axis positioning which it is worse case.				
	o. Repeat above procedures until all frequencies measured was complete.				
Exploratory Test Mode:	Transmitting with modulation. Charge + Transmitting mode.				
Final Test Mode:	Transmitting with modulation.  Pretest the EUT at Charge + Transmitting mode.Only the worst case is recorded in the report.				
Instruments Used:	Refer to section 6 for details				
Test Results:	Pass				
The detailed test data see: Appendix					



Unless otherwise agreed 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.sps.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Felectronic Documents at http://www.sps.com/en/Terms-and-Conditions.frems-b-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document sadvised that information contained hereon reflects the Company's findings at the time of its intermiton 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. For one of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the Attention. To check the authenticity of testing /inspection report & certificate, please contact us at telephone; (86-755) 8307 1443, or email: CND Doccheck@sas.com

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国・苏州・中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 www.sgsgroup.com.cn t (86-512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 19 of 32

#### Measurement Uncertainty (95% confidence levels, k=2) 5

No.	ltem	Measurement Uncertainty				
1	Radio Frequency	±1.0 %				
2	Occupied Bandwidth	±1.0 %				
3	Conduction Emission	± 2.90dB (150kHz to 30MHz)				
4	Dedicted Emission	± 3.13dB (9k to 30MHz)				
4	Radiated Emission	± 4.8dB (30M to 1GHz)				

The Ulab (lab Uncertainty) is less than Ucispr/ETSI (CISPR/ETSI Uncertainty), so the test results

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

- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.



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



Report No.: SEWM2304000137RG07

Rev.: 01 20 of 32 Page:

**Equipment List** 6

RF Test Equipment										
Test Equipment	Manufacturer	Model No.	Model No. Inventory No.		Cal.Due date (yyyy/mm/dd)					
Shielding Room	Brilliant-emc	N/A	SUWI-04-01-06	2021/05/08	2024/05/07					
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-07	2023/02/06	2024/02/05					
Signal Analyzer	ROHDE& SCHWARZ	FSV3030	SUWI-01-02-02	2022/05/17	2023/05/16					
Measurement Software	Tonscend	JS1120-3 Test System V3.1.55	SUWI-02-09-09	NCR	NCR					
Signal Analyzer	Signal Analyzer ROHDE& SCHWARZ FSW43		SUWI-01-02-04	2022/05/28	2023/05/27					
Wideband Radio Communication Tester	ROHDE& SCHWARZ	CMW500	SUWI-01-16-05	2023/02/06	2024/02/05					
DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	2023/02/06	2024/02/05					
Power meter	Anritsu	ML2495A	SUWI-01-31-01	2022/11/23	2023/11/22					
Pulse power sensor	Anritsu	MA2411B	SUWI-01-32-01	2022/11/23	2023/11/22					
MXG Vector signal genitor	KEYSIGHT	N5182B	SUWI-01-38-01	2023/02/06	2024/02/05					
Temperature Chamber	ESPEC	SU-242	SUWI-01-13-01	2023/02/06	2024/02/05					
Signal Generator	ROHDE&SCHWARZ	SMM100A	SN:101716	2023/02/22	2024/02/21					

Conduction Test Equipment										
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)					
Test receiver ROHDE&SCHWA		ESR7	SUWI-01-10-01	2023/02/08	2024/02/07					
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-06	2023/02/07	2024/02/06					
Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-03	2023/02/08	2024/02/07					
Artificial network	ROHDE&SCHWARZ	ENV216	SUWI-01-19-04	2023/02/08	2024/02/07					
Measurement Software	Tonscend	JS32-CE V4.0.0.2	SUWI-02-09-05	NCR	NCR					



Unless otherwise agreed 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.sps.com/ent/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sps.com/ent/Terms-and-Conditions.Ferms-bocument.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 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 Attention. To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CND\_Doccheck@sps.com

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国・苏州・中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980

t (86-512) 62992980 www.sgsgroup.com.cn



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 21 of 32

	DSE Toot System										
RSE Test System											
Test Equipment	Manufacturer	Model No. Inventory No.		Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)						
Semi- Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-01	2021/05/08	2024/05/07						
Temperature and humidity meter	ind humidity MingGao	TH101B	SUWI-01-01-05	2023/02/07	2024/02/06						
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2023/02/08	2024/02/07						
Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9163	SUWI-01-11-01	2021/05/16	2023/05/15						
Active Loop SCHWRZBECK Antenna MESS-ELEKTRONIK		FMZB 1519B	SUWI-01-21-01	2021/06/10	2023/06/09						
Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	2023/02/06	2024/02/05						
Measurement Software	Tonscend	JS32-RE V4.0.0.0	SUWI-02-09-04	NCR	NCR						



Unless otherwise agreed 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.sps.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Felectronic Documents at http://www.sps.com/en/Terms-and-Conditions.frems-b-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document sadvised that information contained hereon reflects the Company's findings at the time of its intermiton 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. For one of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the Attention. To check the authenticity of testing /inspection report & certificate, please contact us at telephone; (86-755) 8307 1443, or email: CND Doccheck@sas.com

South of No. P Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, Chine (Jiangsu) Pilot Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

215000 t (86–512) 62992980 215000 t (86–512) 62992980



Report No.: SEWM2304000137RG07

Rev.: 01 22 of 32 Page:

#### 7 **Photographs - Setup Photos**

Refer to Appendix A.4 NFC Setup Photos.



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

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国•苏州•中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980 t (86-512) 62992980

www.sgsgroup.com.cn



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 23 of 32

# **Appendix**



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

or email: CN.Doccheck@sgs.com
South of No. 6 Plant, No. 1, Rursheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000

中国·苏州·中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

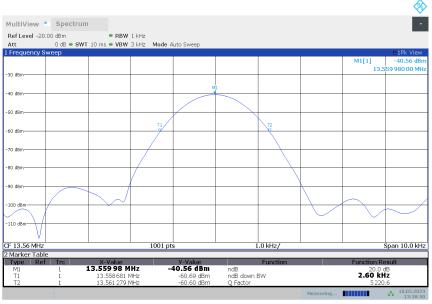
邮编: 215000 t



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 24 of 32

#### 20dB Bandwidth



13:38:50 10.05.2023

#### Note:

Because the measured signal is CW or CW-like adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.



Unless otherwise agreed 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.gas.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.gas.com/en/Terms-and-Conditions/Terms-bocument.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 intermiton 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. Thorrows the 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. Since the company have a company and the company. Any unauthorized alteration, forgery or fastisitation of the content or results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CM\_Doccheck@sas.com



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 25 of 32

### Frequency tolerance

Declared Fre	equency (MHz)		13.56MHz					
		)						
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result			
50		13.55996	0.0003		Pass			
40		13.55998	0.0001		Pass			
30		13.55996	0.0003	.0.04	Pass			
20	2 95	13.55998	0.0001		Pass			
10	3.85	13.55998	0.0001		Pass			
0		13.55997	0.0002	±0.01	Pass			
-10		13.55998	0.0001		Pass			
-20		13.55996	0.0003		Pass			
20	4.45	13.55997	0.0002		Pass			
20	3.60	13.55996	0.0003		Pass			

Declared Fre	quency (MHz)		13.56MHz				
			2mins				
Temperature (°C)	Voltage(VDC)		easurement quency(MHz)	Frequency Tolerance (%		Limit (%)	Result
50		•	13.55998	0.0001			Pass
40		,	13.55998	0.0001			Pass
30		,	13.55996	0.0003			Pass
20	2.05	,	13.55998	0.0001			Pass
10	3.85	,	13.55998	0.0001		±0.01	Pass
0		•	13.55997	0.0002		±0.01	Pass
-10		,	13.55998	0.0001			Pass
-20		•	13.55997	0.0002			Pass
20	4.45	,	13.55997	0.0002			Pass
20	3.60	,	13.55996	0.0003			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.aspx and, for electronic format documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditio

South of No. Florit, No. 1, Runsherg Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Pikol Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 26 of 32

Declared Fre	equency (MHz)		13.56MHz					
		5mins						
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result			
50		13.55996	0.0003		Pass			
40		13.55997	0.0002		Pass			
30		13.55996	0.0003		Pass			
20	2.05	13.55997	0.0002		Pass			
10	3.85	13.55998	0.0001	+0.01	Pass			
0		13.55997	0.0002	±0.01	Pass			
-10		13.55996	0.0003		Pass			
-20		13.55998	0.0001		Pass			
20	4.45	13.55996	0.0003		Pass			
20	3.60	13.55996	0.0003		Pass			

Declared Fre	equency (MHz)		13.56MHz				
		10mins					
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result		
50		13.55998	0.0001		Pass		
40		13.55997	0.0002		Pass		
30		13.55997	0.0002		Pass		
20	2.05	13.55998	0.0001		Pass		
10	3.85	13.55998	0.0001	±0.01	Pass		
0		13.55997	0.0002	±0.01	Pass		
-10		13.55996	0.0003		Pass		
-20		13.55996	0.0003		Pass		
20	4.45	13.55997	0.0002		Pass		
20	3.60	13.55997	0.0002		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.sps.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Felectronic Documents at http://www.sps.com/en/Terms-and-Conditions.frems-b-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document sadvised that information contained hereon reflects the Company's findings at the time of its intermiton 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. For one of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the Attention. To check the authenticity of testing /inspection report & certificate, please contact us at telephone; (86-755) 8307 1443, or email: CND Doccheck@sas.com

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国•苏州•中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000

t (86-512) 62992980

t (86-512) 62992980 www.sgsgroup.com.cn

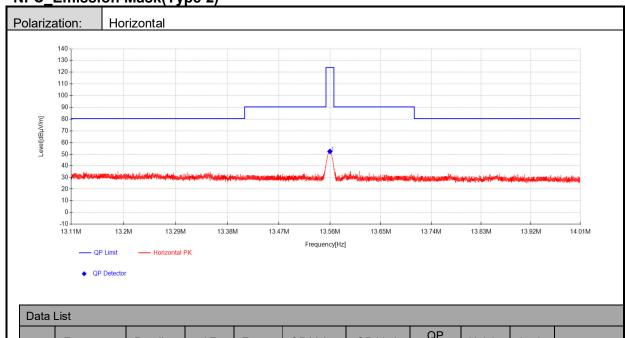


Report No.: SEWM2304000137RG07

Rev.: 01 Page: 27 of 32

### Field Strength of Fundamental Emissions

NFC\_Emission Mask(Type 2)



Data List											
	NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
	1	13.56	32.22	19.67	0.69	52.58	124.00	71.42	100	194	Horizontal

#### Remark:

- 1. The Quasi-Peak measurements were performed on the EUT.
- 2. Value = Reading + Antenna Factor + Factor.
- 3. Factor=Cable loss.



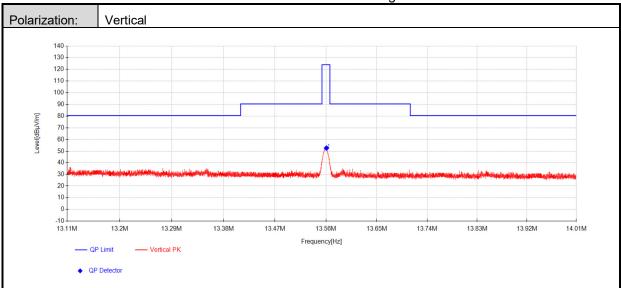
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 28 of 32



Data I	List									
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	13.5609	32.38	19.67	0.69	52.74	124.00	71.26	100	197	Vertical

#### Remark:

- 1. The Quasi-Peak measurements were performed on the EUT.
- 2. Value = Reading + Antenna Factor + Factor.
- 3. Factor=Cable loss.



Unless otherwise agreed 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 Fleetornic 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 intervition 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. Government of the company, any unauthorized alteration, forgery or fatsification of the content or 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: CMD.Doccheck@sas.com

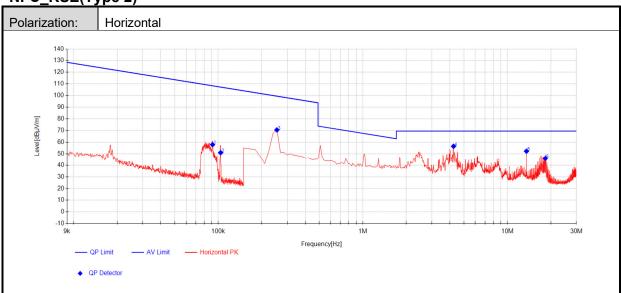


Report No.: SEWM2304000137RG07

Rev.: 01 Page: 29 of 32

### **Radiated Spurious Emissions**

NFC\_RSE(Type 2)



Data	Data List										
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	
1	0.0913	37.25	20.21	0.43	57.89	108.39	50.50	100	148	Horizontal	
2	0.1038	30.26	20.27	0.43	50.96	107.28	56.32	100	273	Horizontal	
3	0.2545	49.78	20.30	0.43	70.51	99.49	28.98	100	359	Horizontal	
4	4.2415	36.09	19.86	0.51	56.46	69.54	13.08	100	223	Horizontal	
5	13.5594	31.91	19.67	0.69	52.27	69.54	17.27	100	3	Horizontal	
6	18.3079	25.21	19.83	0.78	45.82	69.54	23.72	100	170	Horizontal	

#### Remark:

- 1. The Quasi-Peak measurements were performed on the EUT.
- 2. Value = Reading + Antenna Factor + Factor.
- 3. Factor=Cable loss.



Unless otherwise agreed 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.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and for electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document advised that information contained hereon reflects the Company's findings at the time of its intervition 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 lea. Wulless 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.

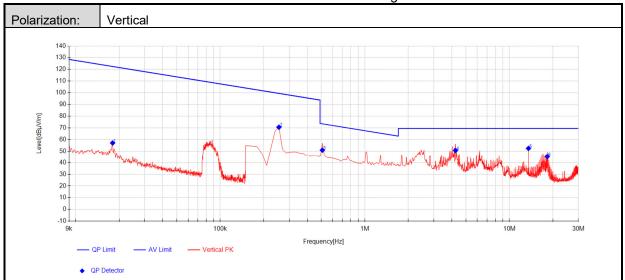
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) \$3071443.

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路(号的6号厂房南部 邮编: 215000



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 30 of 32



Data	Data List										
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	
1	0.018	36.83	19.84	0.43	57.10	122.49	65.39	100	349	Vertical	
2	0.2545	49.85	20.30	0.43	70.58	99.49	28.91	100	127	Vertical	
3	0.5084	30.24	20.29	0.44	50.97	73.48	22.51	100	360	Vertical	
4	4.2415	30.29	19.86	0.51	50.66	69.54	18.88	100	360	Vertical	
5	13.5594	32.11	19.67	0.69	52.47	69.54	17.07	100	192	Vertical	
6	18.3079	24.59	19.83	0.78	45.20	69.54	24.34	100	339	Vertical	

#### Remark:

- 1. The Quasi-Peak measurements were performed on the EUT.
- 2. Value = Reading + Antenna Factor + Factor.
- 3. Factor=Cable loss.



Unless otherwise agreed 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.sos.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sos.com/en/Terms-and-Conditions.aspx and, for electronic format documents at http://www.sos.com/en/Terms-and-Conditions/Terms-and-Conditio

South of No. 6 Plant, No. 1, Runsheng Read, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 鄉編: 215000

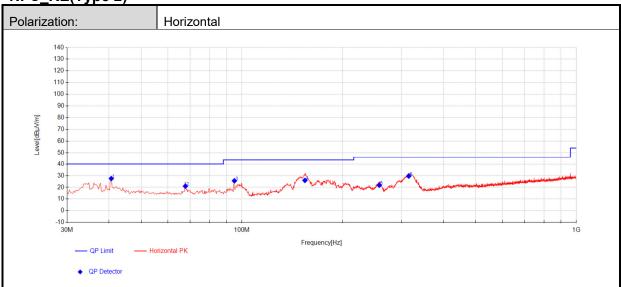
部 邮编: 215000



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 31 of 32

NFC\_RE(Type 2)



Data	Data List											
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	40.6724	41.61	14.01	-28.08	27.54	40.00	12.46	201	3	Horizontal		
2	67.7557	37.43	11.29	-27.71	21.01	40.00	18.99	220	360	Horizontal		
3	94.9395	43.33	9.78	-27.52	25.59	43.50	17.91	190	323	Horizontal		
4	154.2881	39.16	13.97	-27.17	25.96	43.50	17.54	180	3	Horizontal		
5	257.5153	36.35	11.75	-26.33	21.77	46.00	24.23	114	106	Horizontal		
6	315.3745	42.93	13.12	-26.46	29.59	46.00	16.41	120	88	Horizontal		

#### Remark:

- 1. The Quasi-Peak measurements were performed on the EUT.
- 2. Final Value Level = Reading + Antenna Factor + Factor.
- 3. Factor=Cable loss Preamplifier Factor.



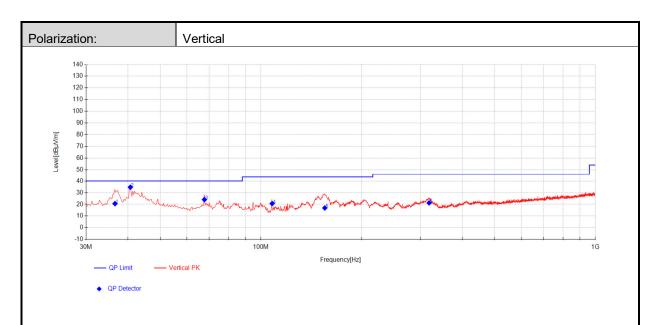
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000



Report No.: SEWM2304000137RG07

Rev.: 01 Page: 32 of 32



Data	Data List										
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	
1	36.6107	35.27	13.60	-28.25	20.62	40.00	19.38	109	357	Vertical	
2	40.6909	48.73	14.01	-28.08	34.66	40.00	5.34	107	334	Vertical	
3	67.7562	40.50	11.29	-27.71	24.08	40.00	15.92	100	56	Vertical	
4	108.0118	37.14	10.92	-27.41	20.65	43.50	22.85	105	356	Vertical	
5	155.2151	30.02	13.99	-27.11	16.90	43.50	26.60	120	264	Vertical	
6	318.3700	34.45	13.19	-26.40	21.24	46.00	24.76	254	155	Vertical	

#### Remark

- 1. The Quasi-Peak measurements were performed on the EUT.
- 2. Final Value Level = Reading + Antenna Factor + Factor.
- 3. Factor=Cable loss Preamplifier Factor.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Fee Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州片区苏州工业园区润胜路1号的6号厂房南部 邮编: 215000 t (86–512) 62992980 t (86–512) 62992980