

Report No.: SEWM2311000456RG07
 Rev.: 01
 Page: 1 of 32

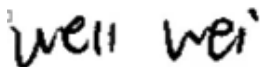
TEST REPORT

Application No.: SEWM2311000456RG
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
EUT Description: Mobile Phone
Model No.: 23124RN87G
Trade Mark: Redmi
FCC ID: 2AFZZN87G
Standards: FCC 47 CFR Part 15, Subpart C
Date of Receipt: 2023/11/13
Date of Test: 2023/11/14 to 2023/12/01
Date of Issue: 2023/12/15

Test Result :	PASS *
----------------------	---------------

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

Authorized Signature:



Well Wei
 Wireless Laboratory Manager



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

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 www.sgsgroup.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com


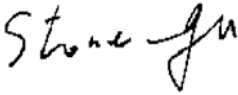
Report No.: SEWM2311000456RG07

Rev.: 01

Page: 2 of 32

1 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2023/12/15		Original

Prepared By		 <hr/> (Ives Cheng) / Test Engineer
Checked By		 <hr/> (Stone Gu) / Reviewer



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

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 www.sgs.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

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 C63.10-2013 Section 6.2	Clause 4.2	PASS
20dB Spectrum Bandwidth	15.215(c)	ANSI C63.10-2013 Section 6.9.2	Clause 4.3	PASS
Frequency Stability	15.225(e)	ANSI C63.10-2013 Section 6.8	Clause 4.4	PASS
Field Strength of Fundamental Emissions	15.225(a)(b)(c)	ANSI C63.10-2013 Section 6.4.7	Clause 4.5	PASS
Radiated Spurious Emissions	15.225(d)/15.209	ANSI C63.10-2013 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.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

Contents

1	Version	2
2	Test Summary	3
3	General Information	5
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 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	Measurement Uncertainty (95% confidence levels, k=2)	19
6	Equipment List	20
7	Photographs - 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.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

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-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@sgs.com

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 www.sgs.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

3.4 General Description of EUT

EUT Description:	Mobile Phone
Model No.:	23124RN87G
Trade Mark:	Redmi
Hardware Version:	13510C3V
Software Version:	MIUI 14
Power Supply:	DC 3.84V from internal rechargeable battery which can be charged by AC/DC adapter.
IMEI:	IMEI1:865408060041505 IMEI2:865408060041513
Operation Frequency:	13.56MHz
Modulation Type:	ASK
NFC Type:	Type A, B, F and V
	Remark: the EUT has been pre-scanned in NFC Type A, B, F and V. the worst type(Type B) was recorded in this report if no others remark in the test items.
Antenna Type:	FPC Antenna
<p>Remark: As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.</p>	



Unless otherwise agreed 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-Documents.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@sgs.com

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	3.84
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/Terms-e-Documents.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

4 Test results and Measurement Data

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 orientations X, Y, and Z. The X orientation was determined to be the worst-case orientation.

In addition, Type A, B, F, and V 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 B, 106Kbps without tag was determined to be the worst case and therefore Type B, 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 414788.



Unless otherwise agreed 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-Documents.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

4.3 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207		
Test Method:	ANSI C63.10-2013 Section 6.2		
Test Frequency Range:	150kHz to 30MHz		
Limit:	Frequency range(MHz)	Limit (dBuV)	
		Quasi-peak	Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
* Decreases with the logarithm of the frequency.			
Test Procedure:	<ol style="list-style-type: none"> 1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane. 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10-2013 on conducted measurement. 		



Unless otherwise agreed 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-Documents.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

<p>Test Setup:</p>	
<p>Test Mode:</p>	<p>Transmitting with modulation. Charge + Transmitting mode.</p>
<p>Instruments Used:</p>	<p>Refer to section 6 for details.</p>
<p>Test Results:</p>	<p>Pass</p>



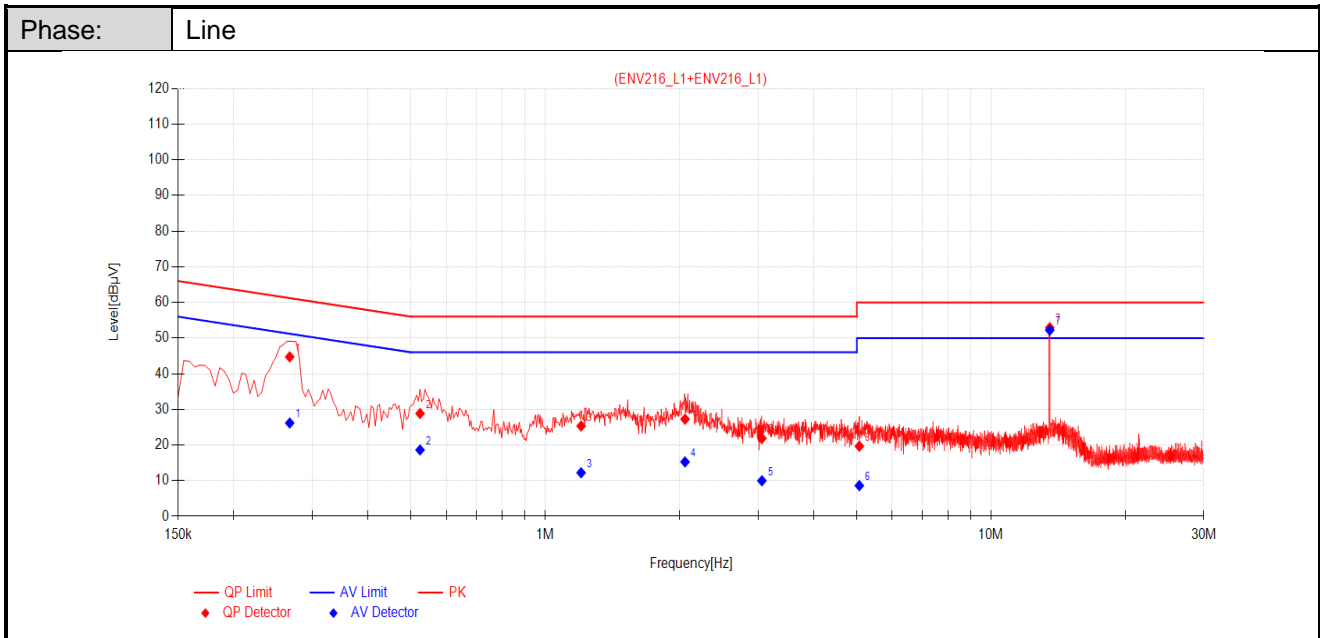
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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 www.sgs.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

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.



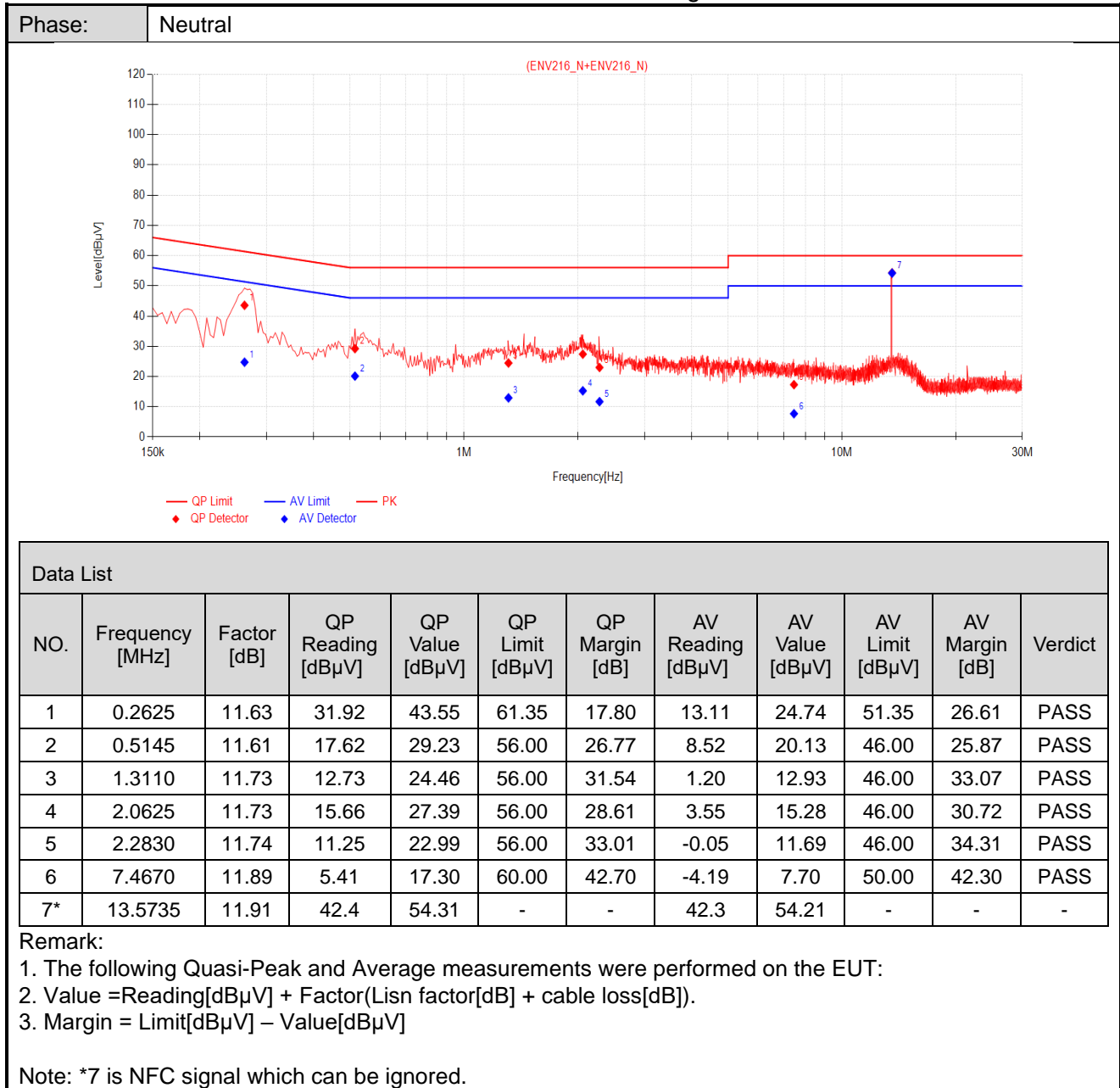
Data List											
NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.2670	11.64	33.08	44.72	61.21	16.49	14.53	26.17	51.21	25.04	PASS
2	0.5235	11.61	17.23	28.84	56.00	27.16	7.01	18.62	46.00	27.38	PASS
3	1.2030	11.73	13.60	25.33	56.00	30.67	0.49	12.22	46.00	33.78	PASS
4	2.0580	11.73	15.52	27.25	56.00	28.75	3.54	15.27	46.00	30.73	PASS
5	3.0615	11.73	10.13	21.86	56.00	34.14	-1.75	9.98	46.00	36.02	PASS
6	5.0640	11.81	7.84	19.65	60.00	40.35	-3.19	8.62	50.00	41.38	PASS
7*	13.5465	11.91	41	52.91	-	-	40.3	52.21	-	-	-

Remark:

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

Note: *7 is NFC signal which can be ignored.





4.4 20dB Spectrum Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.215(c)
Test Method:	ANSI C63.10-2013 Section 6.9.2
Test Setup:	
Instruments Used:	Refer to section 6 for details
Limit:	Intentional radiators must be designed to ensure that the 20dB in the specific band 13.553~13.567MHz.
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.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-Documents.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

4.5 Frequency Stability

Test Requirement:	47 CFR Part 15C Section 15.225(e)
Test Method:	ANSI C63.10-2013 Section 6.8
Test Setup:	
Instruments Used:	Refer to section 6 for details
Limit:	<p>The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% (100ppm) of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.</p> <p>While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.</p>
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.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-Documents.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@sgs.com

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 www.sgs.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

4.6 Field Strength of Fundamental Emissions

Test Requirement:	47 CFR Part 15C Section 15.225				
Test Method:	ANSI C63.10-2013 Section 6.4.7				
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
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	80.5
	14.010~30.000 MHz	30	29.5	48.58	69.5

Test Setup:

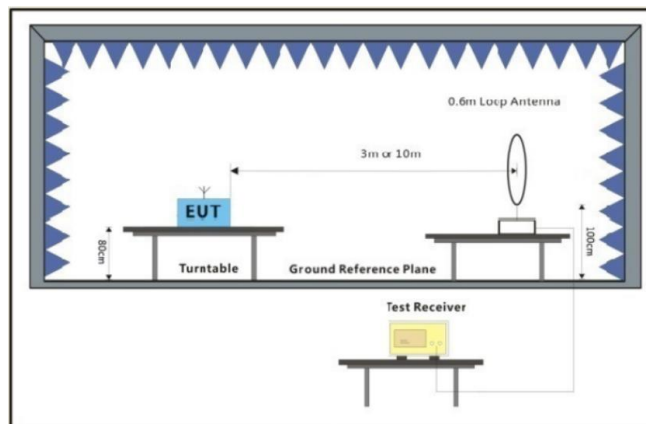


Figure 1. Below 30MHz

Test Procedure:

- 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.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified



Unless otherwise agreed 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-Documents.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@sgs.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工业园区润胜路1号的6号厂房南面 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2311000456RG07

Rev.: 01

Page: 16 of 32

	<p>Bandwidth with Maximum Hold Mode.</p> <p>f. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.</p> <p>g. Repeat above procedures until all frequencies measured was complete.</p> <p>h. RBW set to 9kHz.</p>
Exploratory Test Mode:	<p>Transmitting with modulation.</p> <p>Charge + Transmitting mode.</p>
Final Test Mode:	<p>Transmitting with modulation.</p> <p>Pretest the EUT at Charge + Transmitting mode.Only the worst case is recorded in the report.</p>
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.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-Documents.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

4.7 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.225				
Test Method:	ANSI C63.10-2013 Section 6.4&6.5				
Test Site:	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	-	-	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:

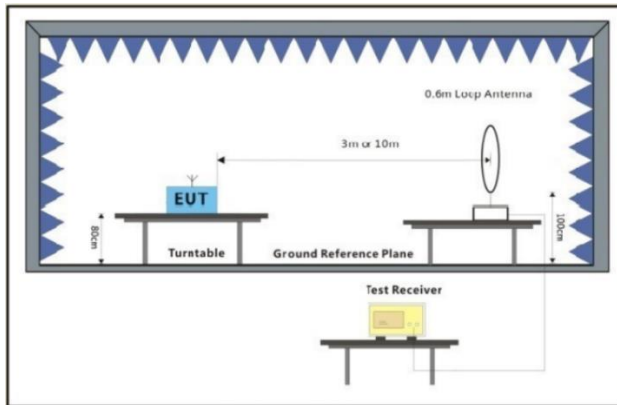


Figure 1. Below 30MHz

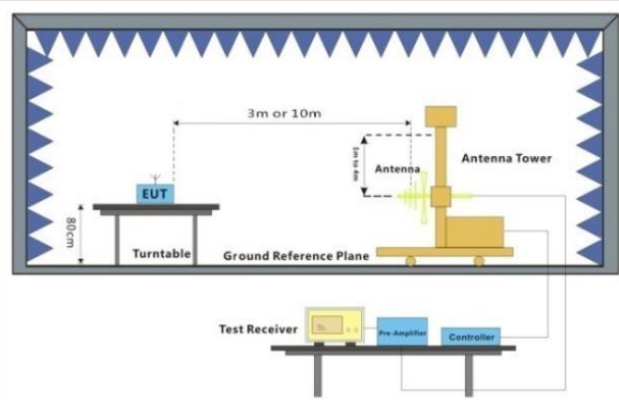


Figure 2. Above 30MHz

Test Procedure:	<ol style="list-style-type: none"> i. 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. 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. l. 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
-----------------	--



Unless otherwise agreed 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-Documents.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@sgs.com

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pkz Free Trade Zone 215000 t (86-512) 62992980 www.sgsgroup.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2311000456RG07

Rev.: 01

Page: 18 of 32

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



Unless otherwise agreed 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-Documents.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

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

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

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{CISPR/ETSI}$ (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 <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-Documents.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

6 Equipment List

RF Test Equipment					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	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	2023/05/11	2024/05/10
Measurement Software	Tonscend	JS1120-3 Test System V 3.3.20	SUWI-02-09-09	NCR	NCR
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2023/05/11	2024/05/10
Temperature Chamber	ESPEC	SU-242	SUWI-01-13-01	2023/02/06	2024/02/05
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
				2023/11/21	2024/11/20
Pulse power sensor	Anritsu	MA2411B	SUWI-01-32-01	2022/11/23	2023/11/22
				2023/11/21	2024/11/20
MXG Vector signal genitor	KEYSIGHT	N5182B	SUWI-01-38-01	2023/02/06	2024/02/05

CE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date (yyyy/mm/dd)	Cal Due Date (yyyy/mm/dd)
Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-06	2023/02/07	2024/02/06
Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	2023/02/08	2024/02/07
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.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-Documents.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@sgs.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号厂房南楼 邮编: 215000

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

RSE Test System					
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	MingGao	TH101B	SUWI-01-01-05	2023/02/07	2024/02/06
Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	2023/05/11	2024/05/10
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	2023/05/13	2024/05/12
Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	2023/05/13	2024/05/12
Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	2023/02/06	2024/02/05
Measurement Software	Tonscend	JS32-RE 4.0.0.0	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.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-Documents.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@sgs.com

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 www.sgs.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Report No.: SEWM2311000456RG07

Rev.: 01

Page: 22 of 32

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/Terms-e-Documents.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@sgs.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号厂房南楼 邮编: 215000

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

Report No.: SEWM2311000456RG07

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 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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
t (86-512) 62992980 sgs.china@sgs.com

20dB Bandwidth



14:37:39 15.11.2023

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.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com

Frequency tolerance

Declared Frequency (MHz)		13.56MHz			
Startup					
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result
50	3.84	13.55993	0.0005	±0.01	Pass
40		13.55993	0.0005		Pass
30		13.55993	0.0005		Pass
20		13.55993	0.0005		Pass
10		13.55993	0.0005		Pass
0		13.55993	0.0005		Pass
-10		13.55993	0.0005		Pass
-20		13.55994	0.0004		Pass
20	4.25	13.55993	0.0005	Pass	
	3.60	13.55994	0.0004	Pass	

Declared Frequency (MHz)		13.56MHz			
2mins					
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result
50	3.84	13.55992	0.0006	±0.01	Pass
40		13.55993	0.0005		Pass
30		13.55995	0.0004		Pass
20		13.55993	0.0005		Pass
10		13.55993	0.0005		Pass
0		13.55993	0.0005		Pass
-10		13.55993	0.0005		Pass
-20		13.55994	0.0004		Pass
20	4.25	13.55995	0.0004	Pass	
	3.60	13.55993	0.0005	Pass	



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

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 www.sgsgroup.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Declared Frequency (MHz)		13.56MHz			
5mins					
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result
50	3.84	13.55993	0.0005	±0.01	Pass
40		13.55993	0.0005		Pass
30		13.55994	0.0004		Pass
20		13.55993	0.0005		Pass
10		13.55993	0.0005		Pass
0		13.55993	0.0005		Pass
-10		13.55993	0.0005		Pass
-20		13.55994	0.0004		Pass
20		4.25	13.55994		0.0004
	3.60	13.55993	0.0005	Pass	

Declared Frequency (MHz)		13.56MHz			
10mins					
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result
50	3.84	13.55994	0.0004	±0.01	Pass
40		13.55994	0.0004		Pass
30		13.55993	0.0005		Pass
20		13.55993	0.0005		Pass
10		13.55993	0.0005		Pass
0		13.55994	0.0004		Pass
-10		13.55993	0.0005		Pass
-20		13.55992	0.0006		Pass
20		4.25	13.55993		0.0005
	3.60	13.55994	0.0004	Pass	



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

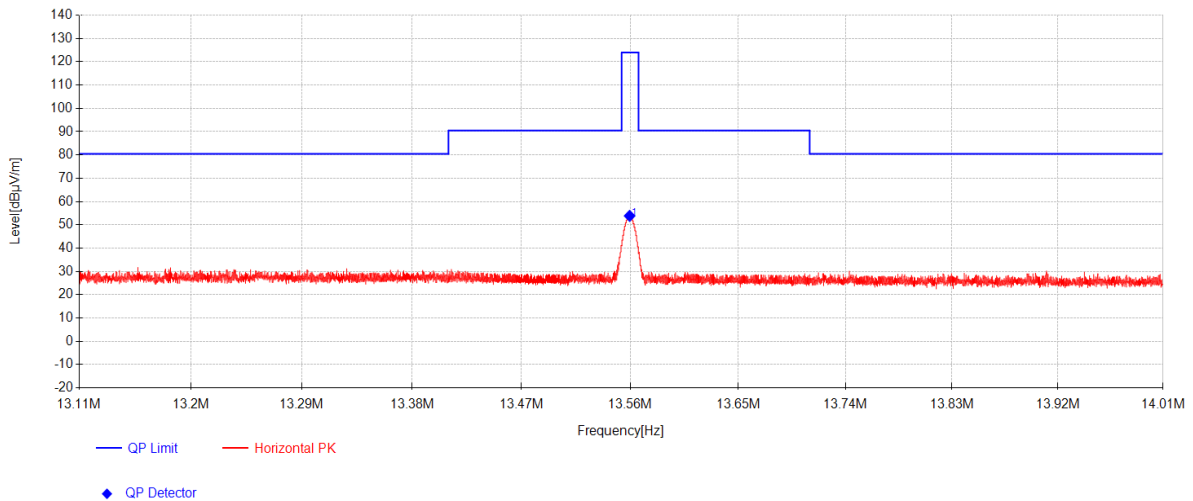
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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 www.sgsgroup.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Field Strength of Fundamental Emissions

NFC Emission Mask

Polarization: Horizontal



Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity
1	13.5596	33.35	19.80	0.69	53.84	124.00	70.16	Horizontal

Remark:

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

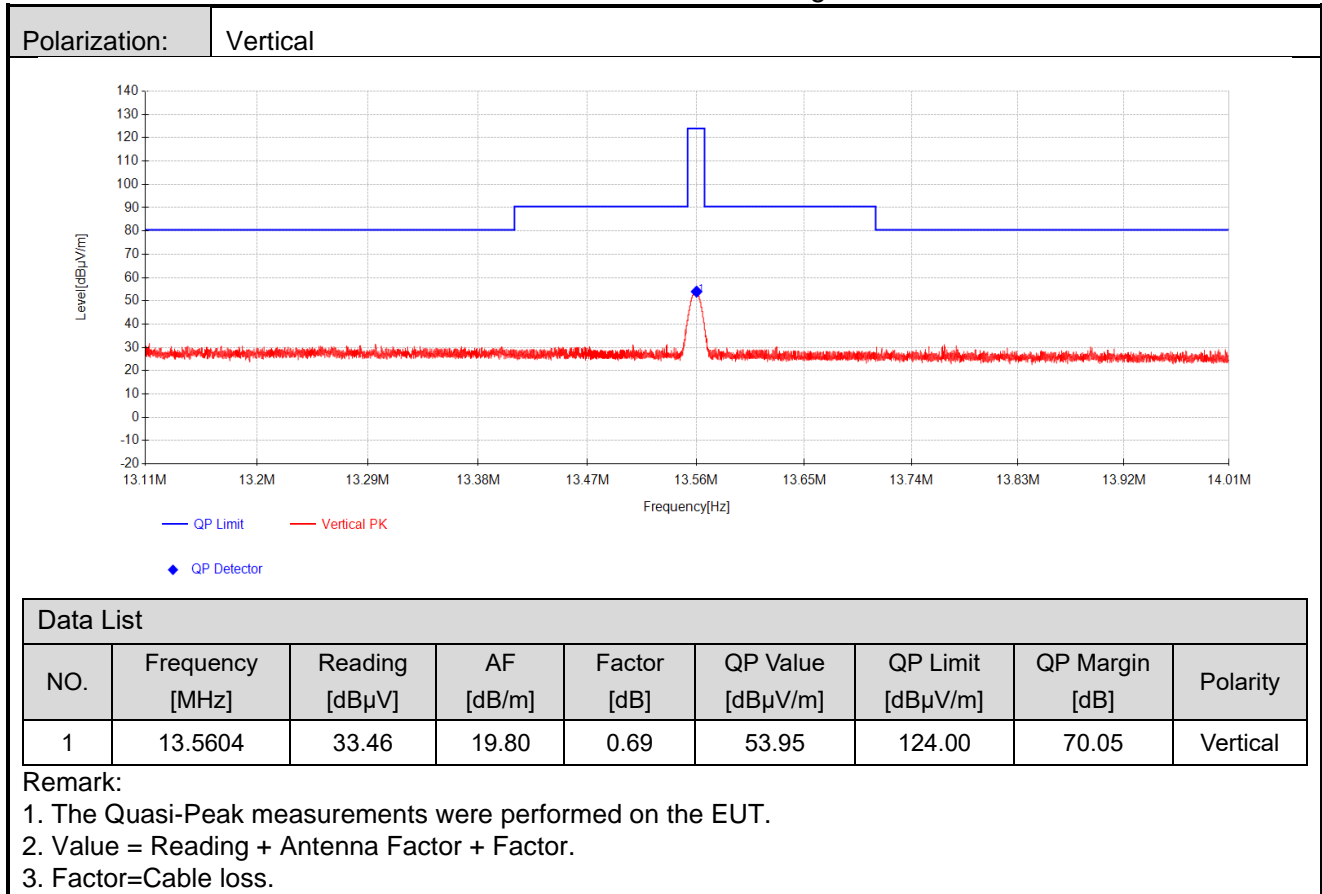


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com



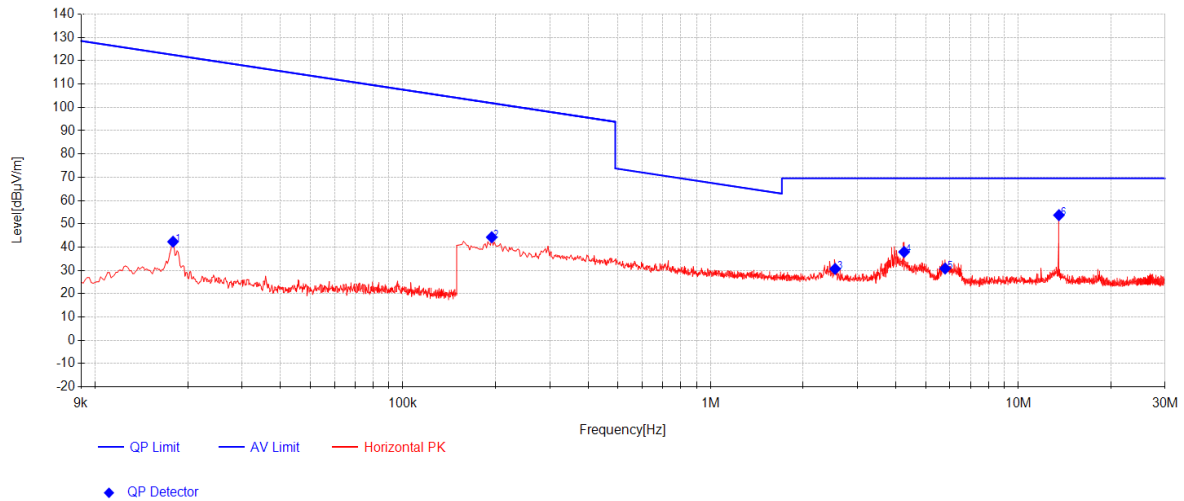
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic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

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 www.sgs.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com

Radiated Spurious Emissions

NFC_RSE

Polarization: Horizontal



Data List

NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity
3	2.54	10.35	19.82	0.48	30.65	69.54	38.89	Horizontal
4	4.256	17.63	19.80	0.51	37.94	69.54	31.60	Horizontal
5	5.786	10.36	19.92	0.54	30.82	69.54	38.72	Horizontal
6	13.559	33.23	19.80	0.69	53.72	69.54	15.82	Horizontal
NO.	Frequency [MHz]	AV Reading	AF [dB/m]	Factor [dB]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Polarity
1	0.0179	21.92	19.98	0.43	42.33	122.54	80.21	Horizontal
2	0.1944	23.53	20.29	0.43	44.25	101.83	57.58	Horizontal

Remark:

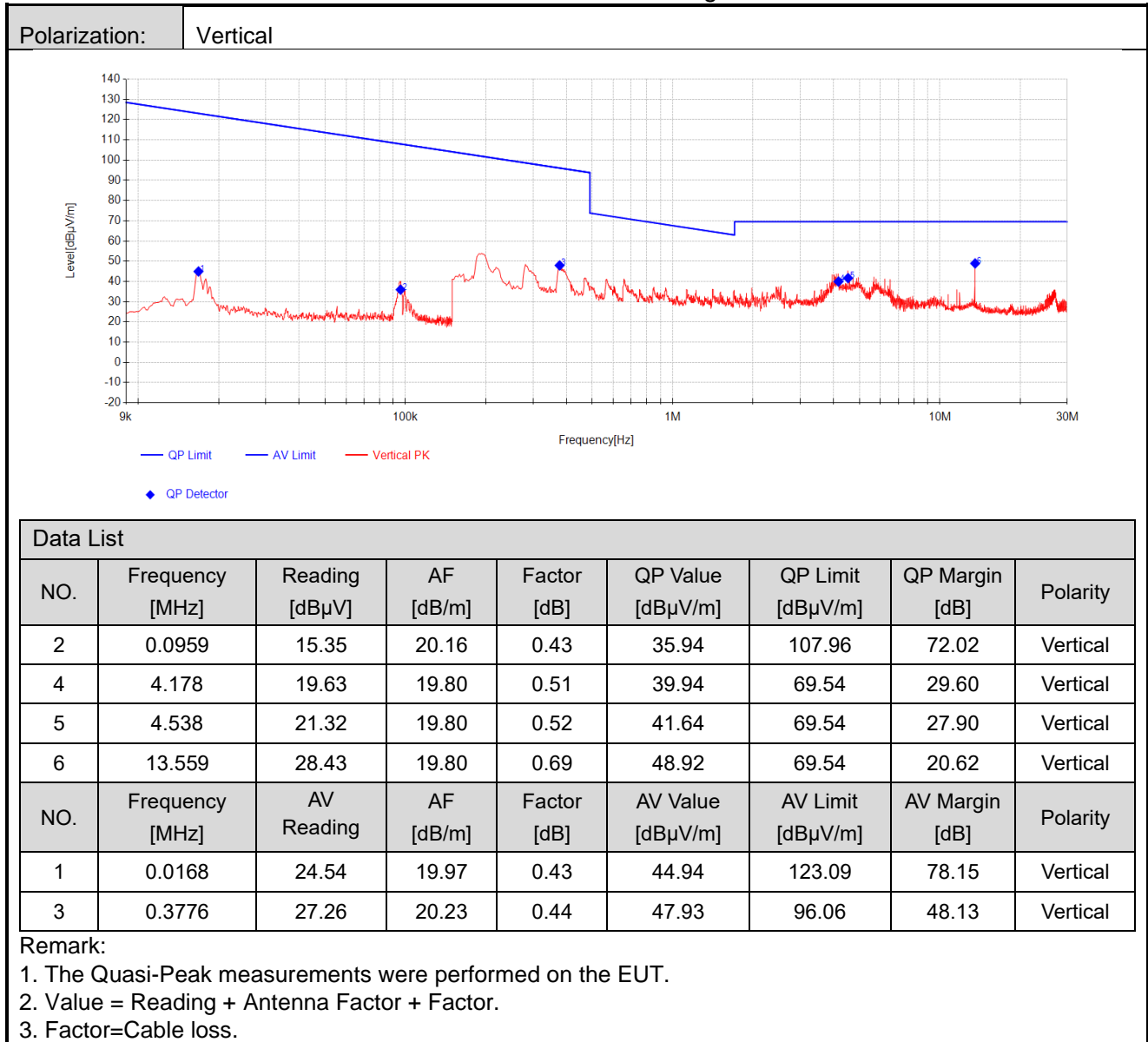
1. The Quasi-Peak measurements were performed on the EUT.
2. Value = Reading + Antenna Factor.
3. Factor=Cable loss.



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/Terms-e-Documents.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.

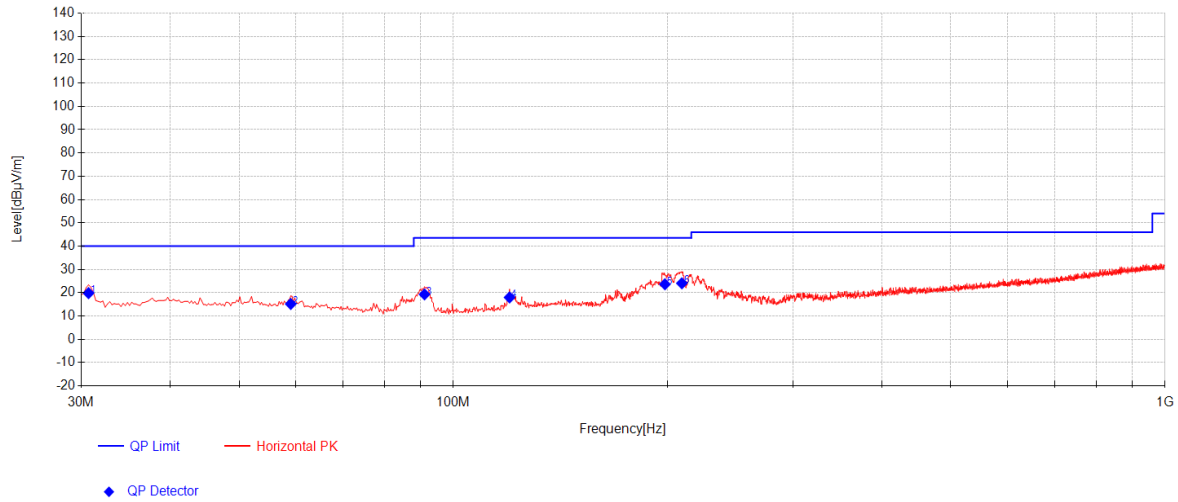
Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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 www.sgsgroup.com.cn
 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号厂房南楼 邮编: 215000 t (86-512) 62992980 sgs.china@sgs.com



NFC_RE

Polarization: Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity
1	30.7275	35.86	17.99	-34.01	19.84	40.00	20.16	Horizontal
2	59.1	30.21	18.84	-33.87	15.18	40.00	24.82	Horizontal
3	91.11	38.06	14.79	-33.56	19.29	43.50	24.21	Horizontal
4	119.9675	34.03	17.30	-33.34	17.99	43.50	25.51	Horizontal
5	198.295	41.06	15.31	-32.74	23.63	43.50	19.87	Horizontal
6	209.45	40.96	15.72	-32.63	24.05	43.50	19.45	Horizontal

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

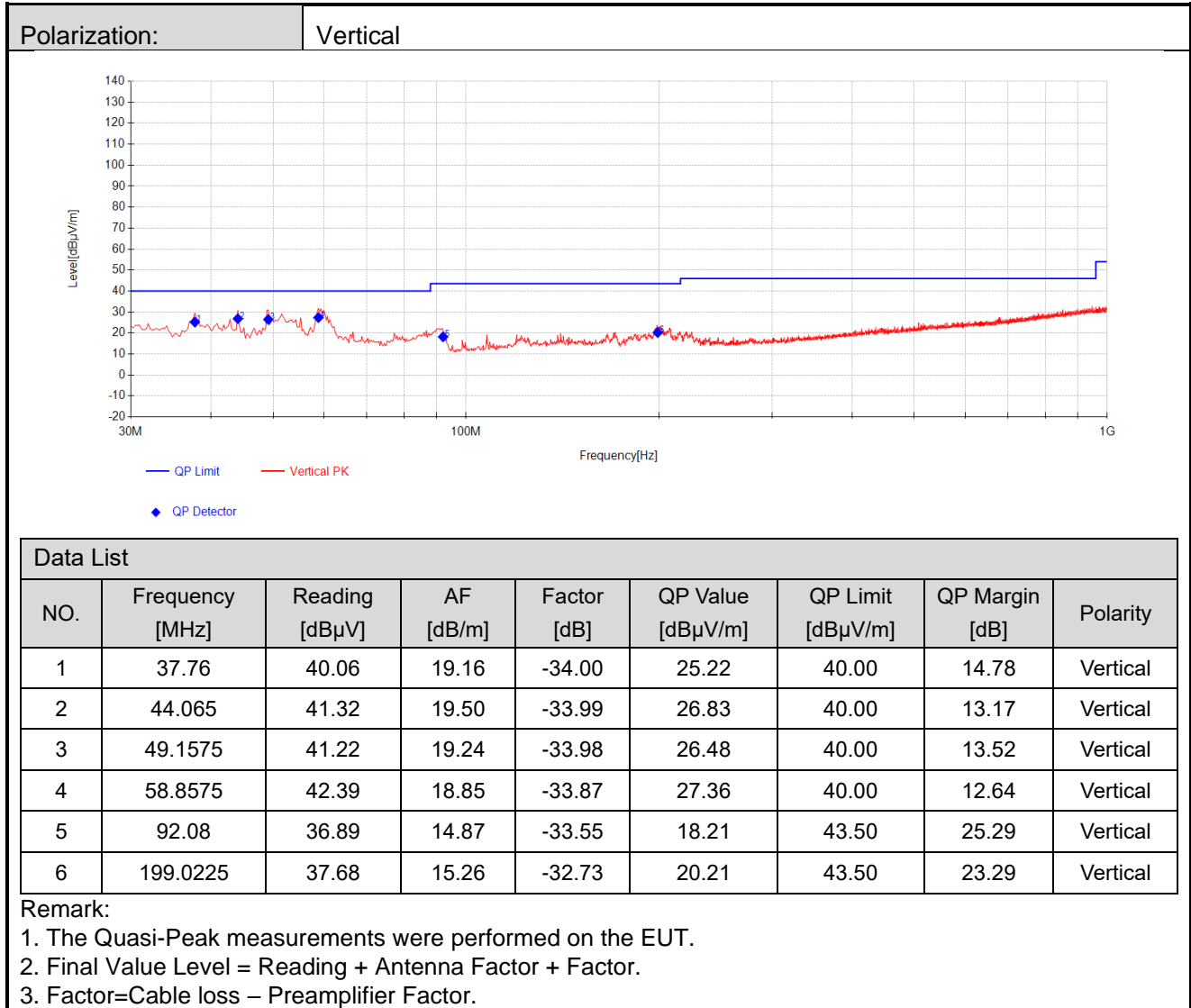


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.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@sgs.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号厂房南楼 邮编: 215000

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



Remark:

1. The Quasi-Peak measurements were performed on the EUT.
2. Final Value Level = Reading + Antenna Factor + Factor.
3. Factor=Cable loss – Pre-amplifier 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/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@sgs.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号厂房南楼 邮编: 215000

t (86-512) 62992980 www.sgs.com.cn
 t (86-512) 62992980 sgs.china@sgs.com