

Report No.: SEWM2309000387RG07

Rev.: 01 Page: 1 of 99

# FCC SAR TEST REPORT

Application No.:SEWM2309000387RGApplicant:Cloud Mobile Holdings, LLCManufacturer:Cloud Mobile Holdings, LLC

Product Name: Smart Phone
Model No.(EUT): Stratus C8
Trade Mark: Cloud Mobile
FCC ID: 2AY6A-C8

Standards: FCC 47CFR §2.1093

**Date of Receipt:** 2023-08-14

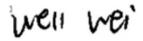
**Date of Test:** 2023-10-23 to 2023-11-11

**Date of Issue:** 2023-11-16

Test conclusion: 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 printe overlead, available on request or accessible at http://www.sgs.com/en/Terms.and-Conditions.apx 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-an-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-an-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 does not exonerate parties to transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduce except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content of appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 2 of 99

#### **REVISION HISTORY**

Report Number	Revision	Description	Issue Date
SEWM2309000387RG07	01	Original	2023-11-16



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

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

www.sgsgroup.com.cn sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 3 of 99

#### **TEST SUMMARY**

F		Maximum Reported SAR(W/kg)				
Frequency Band	Head	Body-worn	Hotspot	Product specific 10g SAR		
GSM850	0.58	0.60	0.86	/		
GSM1900	1.23	0.24	0.90	/		
WCDMA Band II	1.08	0.33	0.74	/		
WCDMA Band IV	0.22	0.37	0.74	/		
WCDMA Band V	0.28	0.26	0.38	/		
LTE Band 2	0.49	0.65	1.04	/		
LTE Band 5	0.46	0.38	0.25	/		
LTE Band 7	1.05	0.36	0.75	/		
LTE Band 12(17)	0.31	0.51	0.48	/		
LTE Band 13	0.29	0.38	0.43	/		
LTE Band 41	0.90	0.29	0.64	/		
LTE Band 66(4)	0.44	0.52	1.05	/		
LTE Band 71	0.24	0.41	0.45	/		
WI-FI (2.4GHz)	0.72	0.15	0.26	/		
WI-FI (5GHz)	0.71	0.41	0.69	1.20		
ВТ	0.09	0.02	0.04	/		
SAR Limited(W/kg)		1.6		4.0		
	Maximum Simultaneous Transmission SAR (W/kg)					
Scenario	Head	Body-worn	Hotspot	Product specific 10g SAR		
Sum SAR	1.59	1.08	1.57	1		
SPLSR	1	1	/	1		
SPLSR Limited		0.04		0.1		

Note:

1) According to TCB workshop October,2014 RF Exposure Procedures Update (Overlapping Bands): SAR for LTE Band 4 (Frequency range:1710 - 1755 MHz)/ LTE Band 17 (Frequency range:704-716 MHz) is respectively covered by LTE Band 66 (Frequency range:1710 - 1780 MHz)/ LTE Band 12 (Frequency range:699-716 MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.

2) For LTE band 4/5/12/13/17 that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Reviewed by

Nick Hu

Nick Hu

Prepared by

Leon Xu



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 so ole responsibility is to its Client and this document does not excerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plat 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裔1号的6号厂房南部 邮编: 215000

5000 t (86–512) 62992

2980 www.sgsgroup.com.cr 2980 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 4 of 99

#### **CONTENTS**

1	GEN	ERAL INFORMATION	7
	1.1	DETAILS OF CLIENT	-
	1.1	TEST LOCATION	
	1.3	TEST FACILITY	
	1.4	GENERAL DESCRIPTION OF EUT.	
		DUT Antenna Locations (Back View)	
	1.5	TEST SPECIFICATION	
	1.6	RF EXPOSURE LIMITS	
_	_		
2		ORATORY ENVIRONMENT	
3	SAR	MEASUREMENTS SYSTEM CONFIGURATION	
	3.1	THE SAR MEASUREMENT SYSTEM	
	3.2	ISOTROPIC E-FIELD PROBE EX3DV4	. 16
	3.3	DATA ACQUISITION ELECTRONICS (DAE)	
	3.4	SAM TWIN PHANTOM	
	3.5	ELI PHANTOM	
	3.6	DEVICE HOLDER FOR TRANSMITTERS	
	3.7	MEASUREMENT PROCEDURE	
		Scanning procedure	
		Data Storage	
	3.7.3	Data Evaluation by SEMCAD	. 22
4	SAR	MEASUREMENT VARIABILITY AND UNCERTAINTY	. 24
	4.1	SAR MEASUREMENT VARIABILITY	. 24
	4.2	SAR MEASUREMENT UNCERTAINTY	. 24
5	DES	CRIPTION OF TEST POSITION	21
•			
	5.1	HEAD EXPOSURE CONDITION	
		SAM Phantom Shape	
		EUT constructions	
		Definition of the "cheek" position	
	5.1.4 <b>5.2</b>	Definition of the "tilted" position	
	-	Body-worn accessory exposure conditions	
		Wireless Router exposure conditions	
	5.2.2 <b>5.3</b>	EXTREMITY EXPOSURE CONDITIONS	
_			
6	SAR	SYSTEM VERIFICATION PROCEDURE	. 30
	6.1	TISSUE SIMULATE LIQUID	
		Recipes for Tissue Simulate Liquid	
	6.1.2	Measurement for Tissue Simulate Liquid	
	6.2	SAR System Check	
	6.2.1	Justification for Extended SAR Dipole Calibrations	. 33
		SAR measurement uncertainty	
	623	Summary System Check Result(s)	3.
	0.2.0	(-)	



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Pfart, No. 1, Runsheng Read, Suchou Industrial Park, Suchou Area, China (Jangsu) 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 wv t (86–512) 62992980 sg

www.sgsgroup.com.cn sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 5 of 99

	6.2.4 Detailed System Check Results	35
7	TEST CONFIGURATION	36
	7.1 3G SAR TEST REDUCTION PROCEDURE	36
	7.2 OPERATION CONFIGURATIONS	
	7.2.1 GSM Test Configuration	
	7.2.2 WCDMA Test Configuration	
	7.2.3 WiFi Test Configuration	
	7.2.4 LTE Test Configuration	
	•	
8		
	8.1 MEASUREMENT OF RF CONDUCTED POWER	
	8.1.1 Measurement Conducted Power of GSM850	
	8.1.2 Measurement Conducted Power of GSM1900	
	8.1.3 Measurement Conducted Power of WCDMA II	
	8.1.4 Measurement Conducted Power of WCDMA IV	
	8.1.5 Measurement Conducted Power of WCDMA V	
	8.1.6 Measurement Conducted Power of LTE Band 2	
	8.1.7 Measurement Conducted Power of LTE Band 4	
	8.1.8 Measurement Conducted Power of LTE Band 58 Measurement Conducted Power of LTE Band 7	
	8.1.10 Measurement Conducted Power of LTE Band 7	
	8.1.11 Measurement Conducted Power of LTE Band 12	
	8.1.12 Measurement Conducted Power of LTE Band 13	
	8.1.13 Measurement Conducted Power of LTE Band 17	
	8.1.14 Measurement Conducted Power of LTE Band 66	
	8.1.15 Measurement Conducted Power of LTE Band 66	
	8.1.16 Measurement Conducted Power of WIFI2.4G	
	8.1.17 Measurement Conducted Power of WIFI5G	
	8.1.18 Measurement Conducted Power of Bluetooth	
	8.2 MEASUREMENT OF SAR DATA	
	8.2.1 SAR Result of GSM850	
	8.2.2 SAR Result of GSM1900	
	8.2.3 SAR Result of WCDMA Band II	
	8.2.4 SAR Result of WCDMA Band IV	
	8.2.5 SAR Result of WCDMA Band V	
	8.2.6 SAR Result of LTE Band 2.	
	8.2.7 SAR Result of LTE Band 5	
	8.2.8 SAR Result of LTE Band 7	
	8.2.9 SAR Result of LTE Band 12	
	8.2.10 SAR Result of LTE Band 13	
	8.2.11 SAR Result of LTE Band 41	
	8.2.12 SAR Result of LTE Band 66	
	8.2.13 SAR Result of LTE Band 71	
	8.2.14 SAR Result of WIFI 2.4G	
	8.2.15 SAR Result of WIFI 5G	
	8.2.16 SAR Result of BT	
	8.3 MULTIPLE TRANSMITTER EVALUATION	
	VIA MATHER HARMMINERY FACATION	



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, indeminification 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 faistification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CM.Doccheck@sgs.com

South of No. 6 Pfart, No. 1, Runsheng Read, Suchou Industrial Park, Suchou Area, China (Jangsu) 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.: SEWM2309000387RG07

Rev.: 01 Page: 6 of 99

	8.3.1 Simultaneous SAR SAR test evaluation	93
	8.3.2 Simultaneous Transmission SAR Summation Scenario	94
9	EQUIPMENT LIST	98
10	CALIBRATION CERTIFICATE	99
11	PHOTOGRAPHS	99
APP	ENDIX A: DETAILED SYSTEM CHECK RESULTS	99
APP	ENDIX B: DETAILED TEST RESULTS	99
APP	ENDIX C: CALIBRATION CERTIFICATE	99
۸DD	ENDIA DI DROLOGOVDRO	00



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Pfart, No. 1, Runsheng Read, Suchou Industrial Park, Suchou Area, China (Jangsu) 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.: SEWM2309000387RG07

Rev.: 01 Page: 7 of 99

### 1 General Information

#### 1.1 Details of Client

Applicant:	Cloud Mobile Holdings, LLC
Address:	1149 S Hill St, H-400 Los Angeles,CA 90015
Manufacturer:	Cloud Mobile Holdings, LLC
Address:	1149 S Hill St, H-400 Los Angeles,CA 90015

### 1.2 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:	Leon-Xu



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 does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 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号约6号厂房南部 邮编: 215000



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 8 of 99

### 1.3 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





Report No.: SEWM2309000387RG07

Rev.: 01 Page: 9 of 99

### 1.4 General Description of EUT

Device Type :	Smart Phone				
Exposure Category:	uncontrolled environment / general population				
Product Name:	Smart Phone				
Model No.(EUT):	Stratus C8				
FCC ID:	2AY6A-C8				
Trade Mark:	Cloud Mobile				
Product Phase:	Identical Prototype				
IN AIT I.	1# 354904220000629,354	904220000637;			
IMEI:	2# 354904220000686,354	904220000694;			
Hardware Version:	AL_W20_MB_V12_C				
Software Version:	Stratus_C8_V202_202401	29			
Device Operating Configuration	rations :				
	GSM: GMSK; WCDMA: Q	PSK,16QAM;			
Modulation Mode:	LTE: QPSK,16QAM,64QA	ιM;			
	WIFI: DSSS, OFDM; BT: 0	GFSK, π/4DQPSK,8DPSK			
Device Class:	В				
GPRS Multi-slots Class:	12	EGPRS Multi-slots Class:	12		
HSDPA UE Category:	24	HSUPA UE Category	7		
	4,tested with power level 5(GSM850)				
Power Class	1,tested with power level 0(GSM1900)				
FOWEI Class	3, tested with power contro	ol "All 1"(WCDMA Band)			
	3, tested with power contro	ol Max Power(LTE Band)			
	Band	Tx (MHz)	Rx (MHz)		
	GSM850	824-849	869-894		
	GSM1900	1850-1910	1930-1990		
	WCDMA Band II	1850-1910	1930-1990		
	WCDMA Band IV	1710-1755	2110-2155		
	WCDMA Band V	824-849	869-894		
	LTE Band 2	1850 -1910	1930-1990		
Frequency Bands:	LTE Band 4	1710-1755	2110-2155		
Frequency bands.	LTE Band 5	824-849	869-894		
	LTE Band 7	2500-2570	2620-2690		
	LTE Band 12	699-716	729-746		
	LTE Band 13	777-787	746-756		
	LTE Band 17	704-716	734-746		
	LTE Band 41	2496-2690	2496-2690		
	LTE Band 66 1710-1780 2110-22				
	LTE Band 71	LTE Band 71 663-698 617-652			



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot Free Trade Zone 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.: SEWM2309000387RG07

Rev.: 01 Page: 10 of 99

	Bluetooth	2400~2483.5	2400~2483.5
	Wi-Fi 2.4G	2400~2483.5	2400~2483.5
		5150~5250	5150~5250
	Wi-Fi 5G	5250~5350	5250~5350
		5470~5725	5470~5725
		5725~5850	5725~5850
RF Cable:	Provided by the aplicant Provided by the laboratory		

Note: \*Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.

#### 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.



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

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 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号约6号厂房南部 邮编: 215000



Report No.: SEWM2309000387RG07

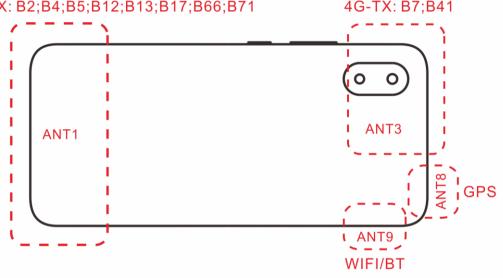
Rev.: Page: 11 of 99

#### 1.4.1 DUT Antenna Locations (Back View)

2G-TX: GSM850;EGSM900;DCS1800;PCS1900

3G-TX: WCDMA B2:B4:B5

4G-TX: B2;B4;B5;B12;B13;B17;B66;B71



#### Note:

1) The test device is a smart phone. The overall diagonal dimension of this device is 178mm. Per KDB 648474 D04, because the diagonal distance of this device is ≥160mm, so it is a phablet.

According to the distance between 5G NR/LTE/WCDMA/GSM&WIFI&BT antennas and the sides of the EUT we can draw the conclusion that:

	EUT Sides for SAR Testing						
Mode	Exposure Condition	Front	Back	Left	Right	Тор	Bottom
Ant 1	Hotspot/Product specific 10g SAR	Yes	Yes	Yes	Yes	No	Yes
Ant 3	Hotspot/Product specific 10g SAR	Yes	Yes	No	Yes	Yes	No
Ant 9	Hotspot/Product specific 10g SAR	Yes	Yes	Yes	No	Yes	No

Table 1: **EUT Sides for SAR Testing** 

#### Note:

1) When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.



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="https://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">https://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 does not excert earlies 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 settent 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 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

sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 12 of 99

### 1.5 Test Specification

Identity	Document Title	
FCC 47CFR §2.1093	Radiofrequency Radiation Exposure Evaluation: Portable Devices	
ANSI/IEEE C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.	
IEEE 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques	
IEC/IEEE 62209-1528:2020	Measurement procedure for the assessment of specific absorption ratio of human exposure to radio frequency fields from hand-held and boomounted wireless communication devices — Part 1528: Humanodels, instrumentation, and procedures (Frequency range of 4 MI to 10 GHz)	
KDB 941225 D01	3G SAR Measurement Procedures v03r01	
KDB 941225 D05	SAR for LTE Devices v02r05	
KDB 941225 D05A	LTE Rel.10 KDB Inquiry Sheet v01r02	
KDB 941225 D06	Hotspot Mode SAR v02r01	
KDB 248227 D01	SAR Guidance for IEEE 802 11 Wi-Fi SAR v02r02	
KDB 648474 D04	Handset SAR v01r03	
KDB 447498 D01	General RF Exposure Guidance v06	
KDB 865664 D01	SAR Measurement 100 MHz to 6 GHz v01r04	
KDB 865664 D02	RF Exposure Reporting v01r02	
KDB 690783 D01	SAR Listings on Grants v01r03	
KDB 616217 D04	SAR for laptop and tablets v01r02	



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Pfart, No. 1, Runsheng Read, Suchou Industrial Park, Suchou Area, China (Jangsu) 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.: SEWM2309000387RG07

Rev.: 01 Page: 13 of 99

### 1.6 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain*Trunk)	1.60 mW/g	8.00 mW/g
Spatial Average SAR** (Whole Body)	0.08 mW/g	0.40 mW/g
Spatial Peak SAR*** (Hands/Feet/Ankle/Wrist)	4.00 mW/g	20.00 mW/g

#### Notes:

**Uncontrolled Environments** are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

**Controlled Environments** are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation.)



<sup>\*</sup> The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time

<sup>\*\*</sup> The Spatial Average value of the SAR averaged over the whole body.

<sup>\*\*\*</sup> The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 14 of 99

# **2** Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C					
Relative humidity	Min. = 30%, Max. = 70%					
Ambient noise is checked and found very low and in compliance with requirement of standards.						
Reflection of surrounding objects is minimized and i	n compliance with requirement of standards.					

Table 2: The Ambient Conditions



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Kangsu) Plot Free Trade Zone 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鹿1号的6号厂房南部 邮编: 215000





Report No.: SEWM2309000387RG07

Rev.: 01 Page: 15 of 99

# 3 SAR Measurements System Configuration

### 3.1 The SAR Measurement System

This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY5 professional system). A E-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR=  $\sigma$  (|Ei|2)/ $\rho$  where  $\sigma$  and  $\rho$  are the conductivity and mass density of the tissue-Simulate.

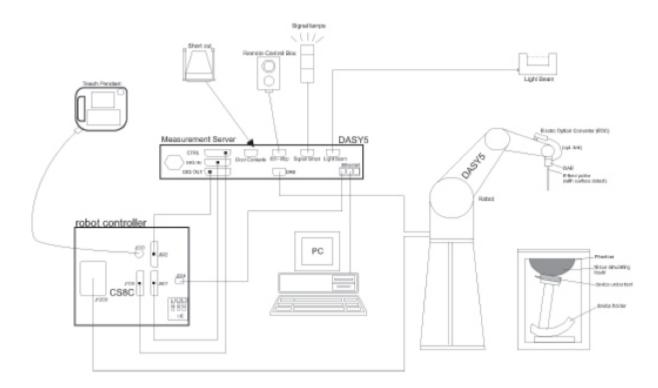
The DASY5 system for performing compliance tests consists of the following items:

A standard high precision 6-axis robot (Stabile RX family) with controller, teach pendant and software .An arm extension for accommodation the data acquisition electronics (DAE).

A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.

A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.

The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.



F-1. SAR Measurement System Configuration



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.sgs.nam">http://www.sgs.com/en/Terms-and-Conditions.sgs.nam</a>, for electronic Documents at http://www.sgs.com/en/Terms-en/Conditions/Terms-en/Comments, subject to Terms and Conditions for Electronic Document as that title://www.sgs.com/en/Terms-en/Conditions/Terms-en/Conditio

South of No. 6 Plant, No. 1, Runsheng Road, Suchou 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 sg



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 16 of 99

- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- A computer operating Windows 7.
- DASY5 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- The SAM twin phantom enabling testing left-hand, right-hand and Body Worn usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- Validation dipole kits allowing to validating the proper functioning of the system.

### 3.2 Isotropic E-field Probe EX3DV4

	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 μW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μW/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI



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

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (langsu) 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

5000 t (86–512) 6299298

sgs.china@sgs.com

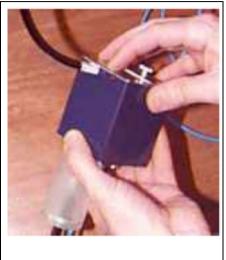


Report No.: SEWM2309000387RG07

Rev.: 17 of 99 Page:

### 3.3 Data Acquisition Electronics (DAE)

Model	DAE			
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY4/5 embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.			
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4mV,400mV)			
Input Offset Voltage	< 5μV (with auto zero)			
Input Bias Current	< 50 f A			
Dimensions	60 x 60 x 68 mm			



#### 3.4 SAM Twin Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)
Dimensions (incl. Wooden Support)	Length: 1000 mm  Width: 500 mm  Height: adjustable feet
Filling Volume	approx. 25 liters
Wooden Support	SPEAG standard phantom table



The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.

Twin SAM V5.0 has the same shell geometry and is manufactured from the same material as Twin SAM V4.0, but has reinforced top structure.



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

\*\*Attention: To check the authenticity of testing /inspection report & certificate\_please contact us at telephone: (86-755) \$307,1443.

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

sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 18 of 99

#### 3.5 ELI Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)				
Liquid	Compatible with all SPEAG tissue				
Compatibility	simulating liquids (incl. DGBE type)				
Shell Thickness	2.0 ± 0.2 mm (bottom plate)				
Dimensions	Major axis: 600 mm				
	Minor axis: 400 mm				
Filling Volume	approx. 30 liters				
Wooden Support	SPEAG standard phantom table				



The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices in the frequency range of 4 MHz to 10 GHz. ELI is fully compatible with the IEC/IEEE 62209-1528 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all of SPEAG's dosimetric probes and dipoles.

ELI V5.0 and higher has the same shell geometry and is manufactured from the same material as ELI V4.0 but has a reinforced top structure.



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

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



Report No.: SEWM2309000387RG07

Rev.: 01

Page: 19 of 99

#### 3.6 Device Holder for Transmitters



F-2. Device Holder for Transmitters

- The DASY device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation centres for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.
- The DASY device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity  $\varepsilon$ =3 and loss tangent  $\delta$ =0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic Documents subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-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 does not exonerate parties to transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduce except in full, without prior written approval of the Company, Any unauthorized alterations, forgety or fastification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jangsu) 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.: SEWM2309000387RG07

Rev.: 01 Page: 20 of 99

### 3.7 Measurement procedure

#### 3.7.1 Scanning procedure

#### Step 1: Power reference measurement

The "reference" and "drift" measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure.

#### Step 2: Area scan

The SAR distribution at the exposed side of the head was measured at a distance of 4mm from the inner surface of the shell. The area covered the entire dimension of the head and the horizontal grid spacing was 15mm\*15mm or 12mm\*12mm or 10mm\*10mm.Based on the area scan data, the area of the maximum absorption was determined by spline interpolation.

#### Step 3: Zoom scan

Around this point, a volume of 32mm\*32mm\*30mm (f≤2GHz), 30mm\*30mm\*30mm (f for 2-3GHz) and 24mm\*24mm\*22mm (f for 5-6GHz) was assessed by measuring 5x5x7 points (f≤2GHz), 7x7x7 points (f for 2-3GHz) and 7x7x12 points (f for 5-6GHz). On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

The data at the surface was extrapolated, since the centre of the dipoles is 2.0mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2mm. (This can be variable. Refer to the probe specification). The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3D-Spline interpolation algorithm. The volume was integrated with the trapezoidal algorithm. One thousand points were interpolated to calculate the average. All neighbouring volumes were evaluated until no neighboring volume with a higher average value was found.

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std. 1528-2013.



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.apx">http://www.sgs.com/en/Terms-and-Conditions.apx</a> and, for electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.apx">http://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.apx</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 does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent or 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.



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 21 of 99

			≤ 3 GHz	> 3 GHz			
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	½·δ·ln(2) ± 0.5 mm			
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30° ± 1°	20° ± 1°			
Maximum area soan su	atial racob	ution: Av. Av.	$\leq$ 2 GHz: $\leq$ 15 mm 3 - 4 GHz: $\leq$ 12 mm 2 - 3 GHz: $\leq$ 12 mm 4 - 6 GHz: $\leq$ 10 mm When the x or y dimension of the test device, in the				
Maximum area scan spatial resolution: Δx <sub>Area</sub> , Δy <sub>Area</sub>			measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.				
Maximum zoom scan s	patial reso	lution: Δx <sub>Zoom</sub> , Δy <sub>Zoom</sub>	≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*			
	uniform grid: $\Delta z_{Z\infty m}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm			
Maximum zoom scan spatial resolution, normal to phantom	graded	graded	graded	graded	Δz <sub>Zoom</sub> (1): between 1 <sup>st</sup> two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
	grid	Δz <sub>Zoom</sub> (n>1): between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(\text{n-1})$				
Minimum zoom scan volume x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm				

#### Step 4: Power reference measurement (drift)

The Power Drift Measurement job measures the field at the same location as the most recent power reference measurement job within the same procedure, and with the same settings. The indicated drift is mainly the variation of the DUT's output power and should vary max.  $\pm$  5 %



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 so ole responsibility is to its Client and this document does not excerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Pfart, No. 1, Runsheng Read, Suchou Industrial Park, Suchou Area, China (Jangsu) 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.: SEWM2309000387RG07

Rev.: 01 Page: 22 of 99

#### 3.7.2 Data Storage

The DASY software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension ".DAE4". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be reevaluated. The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [m W/g], [m W/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

#### 3.7.3 Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters: - Sensitivity Normi, ai0, ai1, ai2

- Conversion factor ConvFi - Diode compression point Dcpi

Device parameters: - Frequency f

- Crest factor cf

Media parameters: - Conductivity  $\epsilon$ 

- Density ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot c f / d c p_i$$

With Vi = compensated signal of channel i (i = x, y, z)

Ui = input signal of channel i (i = x, y, z)

cf = crest factor of exciting field (DASY parameter)

dcp i = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes:

$$E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$$



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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-en/Conditions/Terms-en/Co

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Liangsu) Pikot 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测胜路1号的6号厂房南部 邮编: 215000

Member of the SGS Group (SGS SA)

sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 23 of 99

H-field probes:

Hi = 
$$(V_i)^{1/2} \cdot (a_{i0} + a_{i1}f + a_{i2}f^2)/f$$
  
With Vi = compensated signal of channel i (i = x, y, z)  
Normi = sensor sensitivity of channel I (i = x, y, z)

[mV/(V/m)2] for E-field Probes

ConvF = sensitivity enhancement in solution

aij = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

Ei = electric field strength of channel i in V/m

Hi = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (Etot^2 \cdot \sigma) / (\varepsilon \cdot 1000)$$

with SAR = local specific absorption rate in mW/g Etot = total field strength in V/m

σ= conductivity in [mho/m] or [Siemens/m] ε= equivalent tissue density in g/cm3

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 \frac{2}{3770} \,_{or} \, P_{pwe} = H_{tot}^2 \cdot 37.7$$

Ppwe = equivalent power density of a plane wave in mW/cm2

Etot = total electric field strength in V/m

Htot = total magnetic field strength in A/m



thou 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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 24 of 99

# 4 SAR measurement variability and uncertainty

### 4.1 SAR measurement variability

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r04, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is remounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is  $\ge 1.45$  W/kg ( $\sim 10\%$  from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20. The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

### 4.2 SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.



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-en/Conditions/Terms-en/Co



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 25 of 99

# **5** Description of Test Position

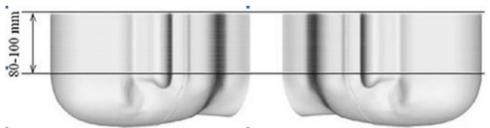
### **5.1** Head Exposure Condition

#### 5.1.1 SAM Phantom Shape

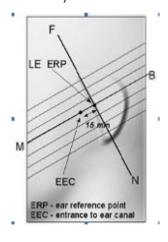


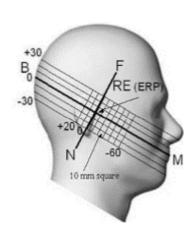
Front, back, and side views of SAM (model for the phantom shell). Full-head model is for illustration purposes only-procedures in this recommended practice are intended primarily for the phantom setup.

Note: The centre strip including the nose region has a different thickness tolerance.



Sagittally bisected phantom with extended perimeter (shown placed on its side as used for SAR measurements)







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

sgs.china@sgs.com



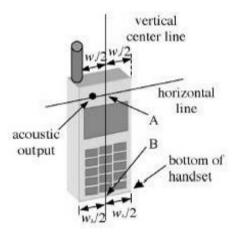
Report No.: SEWM2309000387RG07

Rev.: 01 Page: 26 of 99

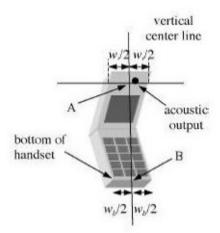
F-5. Close-up side view of phantom, showing the ear region, N-F and B-M lines, and seven cross-sectional plane locations

F-6. Side view of the phantom showing relevant markings and seven cross-sectional plane locations

#### 5.1.2 EUT constructions



F-7. Handset vertical and horizontal reference lines-"fixed case"



F-8. Handset vertical and horizontal reference lines-"clam-shell case"

### 5.1.3 Definition of the "cheek" position

a) Position the device with the vertical centre line of the body of the device and the horizontal line crossing the centre of the ear piece in a plane parallel to the sagittal plane of the phantom ("initial position"). While maintaining the device in this plane, align the vertical centre line with the reference plane containing the three ear and mouth reference points (M, RE and LE) and align the centre of the ear piece with the line RE-LE.

b) Translate the mobile phone box towards the phantom with the ear piece aligned with the line LE-RE until telephone touches the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the box until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.



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.gsx.xx">http://www.sgs.com/en/Terms-and-Conditions.gsx.xx</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 define 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 faisfication 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) stated and such sample(s) are retained for 30 days only.

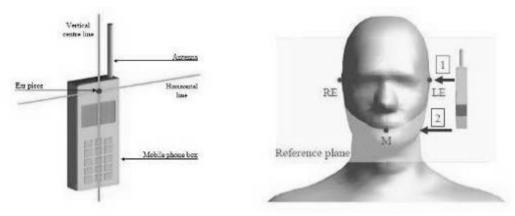


Report No.: SEWM2309000387RG07

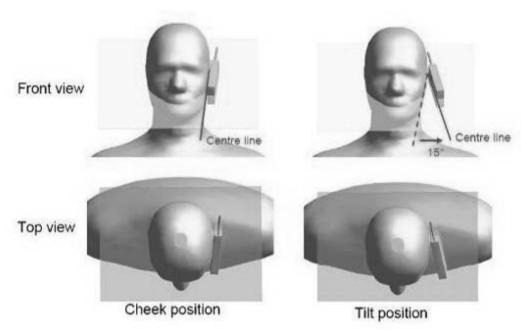
Rev.: 01 Page: 27 of 99

#### 5.1.4 Definition of the "tilted" position

- a) Position the device in the "cheek" position described above;
- b) While maintaining the device in the reference plane described above and pivoting against the ear, move it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.



F-9. Definition of the reference lines and points, on the phone and on the phantom and initial position



F-10. "Cheek" and "tilt" positions of the mobile phone on the left side



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

\*\*Attention: To check the authenticity of testing /inspection report & certificite.\*\* please contact us at telephone: (86-755) \$307.1443.

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (langsu) 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

5000 t (86–512) 62990



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 28 of 99

### **5.2** Body Exposure Condition

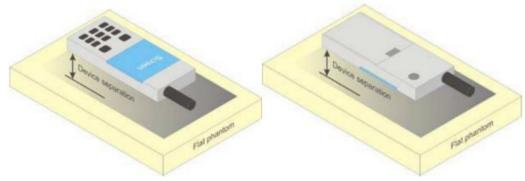
#### 5.2.1 Body-worn accessory exposure conditions

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations.

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration. Per FCC KDB Publication 648474 D04, Bodyworn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented. Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.



F-11. Test positions for body-worn devices



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.apx">http://www.sgs.com/en/Terms-and-Conditions.apx</a> and, for electronic format documents, subject to Terms and Conditions (Ferms-e-Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.apx</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 fatings 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 one concernations are accepted in their districtions 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 faislification 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.

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jangsu) 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

5000 t (86–512) 6299

sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 29 of 99

#### 5.2.2 Wireless Router exposure conditions

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 where SAR test considerations for handsets (L x W  $\geq$  9 cm x 5 cm) are based on a composite test separation distance of 10 mm from the front, back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. For devices with form factors smaller than 9 cm x 5 cm, a test separation distance of 5 mm is required.

### 5.3 Extremity exposure conditions

Per FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, the device is marketed as "Phablet". The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antennal of the same calls of

located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for Product Specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, Product Specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.

Due to the SAR result, hotspot power levels, and product specific 10g SAR power levels are the same, no frequency bands need to test with 0mm for the Product Specific 10-g SAR are not required.



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-en/Conditions/Terms-en/Co



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 30 of 99

# **6** SAR System Verification Procedure

### 6.1 Tissue Simulate Liquid

#### 6.1.1 Recipes for Tissue Simulate Liquid

The bellowing tables give the recipes for tissue simulating liquids to be used in different frequency bands:

Ingredients	Frequency (MHz)								
(% by weight)	450	700-900	700-900 1750-2000		2500-2700				
Water	38.56	40.30	55.24	55.00	54.92				
Salt (NaCl)	3.95	1.38	0.31	0.2	0.23				
Sucrose	56.32	57.90	0	0	0				
HEC	0.98	0.24	0	0	0				
Bactericide	0.19	0.18	0	0	0				
Tween	0	0	44.45	44.80	44.85				

Sucrose: 98+% Pure Sucrose

HEC: Hydroxyethyl Cellulose

Salt: 99<sup>+</sup>% Pure Sodium Chloride Water: De-ionized, 16 MΩ<sup>+</sup> resistivity

Tween: Polyoxyethylene (20) sorbitan monolaurate

HSL13MHz is composed of the following ingredients:

Water: 50-90%

Non-ionic detergents: 5-50%

Nacl: 0-2%

Preservative: 0.03-0.1%

HSL5GHz is composed of the following ingredients:

Water: 50-65%
Mineral oil: 10-30%
Emulsifiers: 8-25%
Sodium salt: 0-1.5%

Table 3: Recipe of Tissue Simulate Liquid



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

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zore 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.: SEWM2309000387RG07

Rev.: 01 Page: 31 of 99

#### 6.1.2 Measurement for Tissue Simulate Liquid

The Conductivity ( $\sigma$ ) and Permittivity ( $\rho$ ) are listed in bellow table. For the SAR measurement given in this report. The temperature variation of the Tissue Simulate Liquids was 22±2°C.

	Measurement for Tissue Simulate Liquid									
	Measured	Target Tissue (±5%)		Measure	d Tissue	Liquid Temp.				
Tissue Type	Frequency (MHz)	ε <sub>r</sub>	σ(S/m)	εr	σ(S/m)	(℃)	Test Date			
750 Head	750	41.9 (39.81~44)	0.89 (0.85~0.94)	42.575	0.889	22.3	2023-10-23			
835 Head	835	41.5 39.43~43.58)	0.90 (0.86~0.95)	42.910	0.894	22.4	2023-10-25			
1750 Head	1750	40.1 (38.10~42.11)	1.37 (1.30~1.44)	39.033	1.345	22.3	2023-11-09			
1950 Head	1950	40.0 (38.00~42.00)	1.40 (1.33~1.47)	38.820	1.459	22.5	2023-11-07			
2450 Head	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	40.192	1.779	22.4	2023-10-29			
2600 Head	2600	39.0 (37.05~40.95)	1.96 (1.86~2.06)	38.659	1.950	22.2	2023-11-11			
5250 Head	5250	35.9 (34.11~37.70)	4.66 (4.47~4.95)	35.623	4.695	22.4	2023-11-03			
5600 Head	5600	35.5 (33.73~37.30)	5.07 (4.82~5.32)	34.950	5.166	22.2	2023-11-04			
5750 Head	5750	35.4 (33.63~37.17)	5.22 (4.96~5.48)	34.579	5.349	22.3	2023-11-05			

Table 4: Measurement result of Tissue electric parameters.



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot Free Trade Zone 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号约6号厂房南部 邮编: 215000

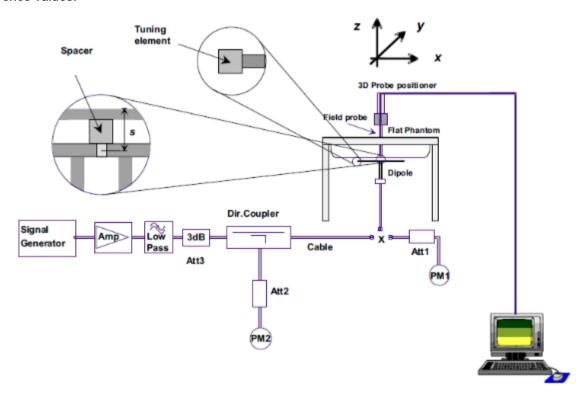


Report No.: SEWM2309000387RG07

Rev.: 01 Page: 32 of 99

### 6.2 SAR System Check

The microwave circuit arrangement for system Check is sketched in F-12. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR values. The tests were conducted on the same days as the measurement of the EUT. The obtained results from the system accuracy verification are displayed in the following table (A power level of 250mW (below 3GHz) or 100mW (3-6GHz) was input to the dipole antenna). During the tests, the ambient temperature of the laboratory was in the range 22±2°C, the relative humidity was in the range 60% and the liquid depth above the ear reference points was above 15±0.5 cm in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.



F-12. the microwave circuit arrangement used for SAR system check



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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic Documents subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-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 does not exonerate parties to transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduce except in full, without prior written approval of the Company, Any unauthorized alterations, forgety or fastification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jangsu) 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.: SEWM2309000387RG07

Rev.: 01 Page: 33 of 99

#### 6.2.1 Justification for Extended SAR Dipole Calibrations

- 1) Referring to KDB865664 D01 requirements for dipole calibration, instead of the typical annual calibration recommended by measurement standards, longer calibration intervals of up to three years may be considered when it is demonstrated that the SAR target, impedance and return loss of a dipole have remain stable according to the following requirements. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.
- a) There is no physical damage on the dipole;
- b) System check with specific dipole is within 10% of calibrated value;
- c) Return-loss is within 10% of calibrated measurement;
- d) Impedance is within  $5\Omega$  from the previous measurement.
- 2) Network analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.



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

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industria 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.: SEWM2309000387RG07

Rev.: 01 Page: 34 of 99

#### 6.2.2 SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

Measurements and results are all in compliance with the standards listed. All measurements and results are recorded and maintained at the laboratory performing the tests and measurement uncertainties are taken into account when comparing measurements to pass/ fail criteria. The expanded uncertainty (95% CONFIDENCE INTERVAL) is 23.01%.

а	b	С	d = f(d,k)	F	i = C*g/e	K
Uncertainty Component	Tol (%)	Prob.Dist.	Div.	Ci (1g)	1g ui (%)	Vi(Veff)
Probe calibration	6.65	N	1	1	6.65	∞
Axial isotropy	0.5	R	√3	1	0.29	∞
hemispherical isotropy	2.6	R	√3	1	1.50	∞
Linearity	0.6	R	√3	1	0.35	∞
Probe modulation response	0	R	√3	1	0.00	∞
Detection limits	0.25	R	√3	1	0.14	∞
Boundary effect	1.0	R	√3	1	0.58	∞
Readout electronics	0.3	N	1	1	0.30	∞
Response time	0	R	√3	1	0.00	∞
Integration time	2.6	R	√3	1	1.50	∞
RF ambient conditions – noise	3	R	√3	1	1.73	∞
RF ambient conditions – reflections	3	R	√3	1	1.73	∞
Probe positioner mech. restrictions	1.5	R	√3	1	0.87	∞
Probe positioning with respect to phantom shell	2.9	R	√3	1	1.67	∞
Post-processing	1	R	√3	1	0.58	∞
Device holder uncertainty	3.6	N	1	1	3.60	∞
Test sample positioning	3.7	N	1	1	3.70	9
Power scaling	5.0	R	√3	1	2.89	∞
Drift of output power (measured SAR drift)	5	R	√3	1	2.89	∞
Phantom uncertainty (shape and thickness tolerances)	4	R	√3	1	2.31	∞
Algorithm for correcting SAR for deviations in permittivity and conductivity	1.9	N	1	1	1.90	∞
Liquid conductivity (meas.)	5.78	N	1	0.78	4.51	4
Liquid permittivity (meas.)	0.62	N	1	0.23	0.14	5
Liquid permittivity –temperature uncertainty	0.2	R	√3	0.78	0.09	∞
Liquid conductivity –temperature uncertainty	5.37	R	√3	0.23	071	∞
Combined standard uncertainty RSS						417
xpanded uncertainty (95% CONFIDENCE INTER	23.01					

Table 1: Measurement Uncertainty.



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 so ole responsibility is to its Client and this document does not excerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 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 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 35 of 99

#### 6.2.3 Summary System Check Result(s)

Validation Kit		SAR 250mW	Measured SAR 250mW	Measured SAR (normalized to 1W)	Measured SAR (normalized to 1W)	Target SAR (normalized to 1W)	Target SAR (normalized to 1W)	Liquid Temp. (℃)	Test Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1-g(W/kg)	10-g(W/kg)		
D750V3	Head	1.96	1.29	7.84	5.16	8.48	5.56	22.3	2023-10-23
D835V2	Head	2.26	1.47	9.04	5.88	9.52	6.17	22.4	2023-10-25
D1750V2	Head	8.29	4.46	33.16	17.84	35.30	18.70	22.3	2023-11-09
D1950V2	Head	9.56	4.88	38.24	19.52	40.40	20.80	22.5	2023-11-07
D2450V2	Head	12.60	5.93	50.40	23.72	52.20	24.50	22.4	2023-10-29
D2600V2	Head	13.90	6.24	55.60	24.96	57.10	25.40	22.2	2023-11-11
Validation Kit		Measured SAR 100mW	Measured SAR 100mW	Measured SAR (normalized to 1W)	Measured SAR (normalized to 1W)	Target SAR (normalized to 1W)	Target SAR (normalized to 1W)	Liquid Temp. (℃)	Test Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1-g(W/kg)	10-g(W/kg)		
	Head(5.25GHz)	7.93	2.29	79.30	22.90	78.00	21.80	22.4	2023-11-03
D5GHzV2	Head(5.6GHz)	8.21	2.33	82.10	23.30	79.90	22.50	22.2	2023-11-04
	Head(5.75GHz)	7.81	2.23	78.10	22.30	76.40	21.20	22.3	2023-11-05

Table 5: SAR System Check Result.

### 6.2.4 Detailed System Check Results

Please see the Appendix A



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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 36 of 99

# 7 Test Configuration

#### 7.1 3G SAR Test Reduction Procedure

According to KDB 941225D01, in the following procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as "otherwise" in the applicable procedures; SAR measurement is required for the secondary mode.

### 7.2 Operation Configurations

#### 7.2.1 GSM Test Configuration

SAR tests for GSM 850 and GSM 1900, a communication link is set up with a base station by air link. Using CMW500 the power lever is set to "5" and "0" in SAR of GSM 850 and GSM 1900. The tests in the band of GSM 850 and GSM 1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 5 timeslots in downlink, the maximum total timeslot is 6. The EGPRS class is 12 for this EUT, it has at most 4 timeslots in uplink, and at most 5 timeslots in downlink, the maximum total timeslot is 6.

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.

The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary 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 <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-en/Conditions/Terms-en/Co



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 37 of 99

### 7.2.2 WCDMA Test Configuration

### 1) . Output Power Verification

Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all "1's" for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) are required in the SAR report. All configurations that are not supported by the handset or cannot be measured due to technical or equipment limitations must be clearly identified.

## 2) . Head SAR

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure

#### 3) . Body SAR

SAR for body configurations is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreaing code or DPDCHn, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the handset, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC.

### 4) . HSDPA / HSUPA / DC-HSDPA

According to KDB 941225 D01v03, RMC 12.2kbps setting is used to evaluate SAR. If the maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is  $\leq \frac{1}{4}$  dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is  $\leq$  1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA

#### a) HSDPA

HSDPA is configured according to the applicable UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms and a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors( $\beta$ c,  $\beta$ d), and HS-DPCCH power offset parameters ( $\Delta$ ACK,  $\Delta$ NACK,  $\Delta$ CQI) are set according to values indicated in the following table The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.



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-en/Conditions/Terms-en/Co



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 38 of 99

Sub-test	βс	Bd	βd(SF)	βc/βd	βhs	CM(dB)	MPR (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0
2	12/15(3)	15/15(3)	64	12/15(3)	24/15	1.0	0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note1:  $\triangle$ ACK,  $\triangle$ NACK and  $\triangle$ CQI= 8 Ahs =  $\beta$ hs/ $\beta$ c=30/15  $\beta$ hs=30/15\* $\beta$ c

Note2:For the HS-DPCCH power mask requirement test in clause 5.2C,5.7A,and the Error Vector Magnitude(EVM) with HS-DPCCH test in clause 5.13.1.A,and HSDPA EVM with phase discontinuity in clause 5.13.1AA,  $\triangle$ ACK and  $\triangle$ NACK= 8 ( Ahs=30/15) with  $\beta$ hs=30/15\* $\beta$ c,and  $\triangle$ CQI=

7 (Ahs=24/15) with  $\beta$ hs= $24/15*\beta$ c.

Note3: CM=1 for $\beta$ c/ $\beta$ d =12/15,  $\beta$ hs/ $\beta$ c=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.

Parameter	Value
Nominal average inf. bit rate	534 kbit/s
Inter-TTI Distance	3 TTI"s
Number of HARQ Processes	2 Processes
Information Bit Payload	3202 Bits
MAC-d PDU size	336 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	4800 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	9600 SMLs
Coding Rate	0.67
Number of Physical Channel Codes	5

Table 6: settings of required H-Set 1 QPSK acc. to 3GPP 34.121



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (liangsu) Plot 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

15000 t (86–512) 6299



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 39 of 99

HS-DSCH Category	Maximum HS-DSCH Codes Received	Minimum Inter- TTI Interval	MaximumH S-DSCH Transport BlockBits/HS- DSCH TTI	Total Soft Channel Bits
1	5	3	7298	19200
2	5	3	7298	28800
3	5	2	7298	28800
4	5	2	7298	38400
5	5	1	7298	57600
6	5	1	7298	67200
7	10	1	14411	115200
8	10	1	14411	134400
9	15	1	25251	172800
10	15	1	27952	172800
11	5	2	3630	14400
12	5	1	3630	28800
13	15	1	34800	259200
14	15	1	42196	259200
15	15	1	23370	345600
16	15	1	27952	345600

Table 7: HSDPA UE category

### b) HSUPA

Due to inner loop power control requirements in HSUPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSUPA should be configured according to the values indicated below as well as other applicable procedures described in the "WCDMA Handset" and "Release 5 HSUPA Data Device" sections of 3G device.



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

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

South of No. 6 Pfart, No. 1, Runsheng Read, Suchou Industria 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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 40 of 99

Sub -test₽	βορ	βd₽	βd (SF )θ	β₀∕β⋴ℴ	β <sub>hs</sub> (1 )↔	β <sub>ec+</sub> <sup>3</sup>	$eta_{ t ed} arphi$	β <sub>e</sub> <sub>o+</sub> (SF  )+	β <sub>ed</sub> ↔ (code	CM <sup>(</sup> 2)↔ (dB )↔	MP R↓ (dB)↓	AG <sup>(4</sup> )↔ Inde x↔	E- TFC I <sub>e</sub>	1
1₽	11/15(3)+3	15/15(3)	64₽	11/15(3)43	22/15₽	209/22 5₊³	1039/225	4₽	1₽	1.04	0.0₽	20₽	75₽	*
2₽	6/15₽	15/15₽	64₽	6/15₽	12/15₽	12/15₽	94/75₽	4₽	1₽	3.0₽	2.0₽	<b>12</b> ₽	67₽	-
3₽	15/15	9/15₽	64₽	15/9₽	30/15₽	30/15₽	β <sub>ed1</sub> :47/1 5 <sub>4</sub> β <sub>ed2:</sub> 47/1 5 <sub>4</sub>	4₽	2₽	2.0₽	1.0₽	15.0	92₽	4
4₽	2/15₽	15/15₽	64₽	2/15₽	4/15₽	2/15₽	56/75₽	4₽	1₽	3.0₽	2.0₽	17₽	71₽	].
5₽	15/15(4)+3	15/15(4)(3	64₽	15/15(4)43	30/15₽	24/15₽	134/15₽	40	1₽	1.0₽	0.0₽	21	81₽	]

Note 1:  $\triangle$  ACK,  $\triangle$  NACK and  $\triangle$  CQI = 8  $A_{hs} = \beta_{hs}/\beta_{e} = 30/15$   $\beta_{hs} = 30/15 * \beta_{ed}$ 

Note 2: CM = 1 for  $\beta_c/\beta_d$  = 12/15,  $\beta_{hs}/\beta_c$  = 24/15. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$ .

Note 4: For subtest 5 the  $\beta_c/\beta_d$  ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 14/15$  and  $\beta_d = 15/15$ .

Note 5: Testing UE using E-DPDCHPhysical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.

Note 6: βed can not be set directly; it is set by Absolute Grant Value.

Table 8: Subtests for UMTS Release 6 HSUPA

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI(ms)	Minimum Speading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
2	2	4	10	4	14484	1.4592
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
4	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6	4	8	10	2SF2&2SF	11484	5.76
(No DPDCH)	4	4	2	4	20000	2.00
7	4	8	2	2SF2&2SF	22996	?
(No DPDCH)	4	4	10	4	20000	?

NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4.UE categories 1 to 6 support QPSK only. UE category 7 supports QPSK and 16QAM.(TS25.306-7.3.0)

Table 9: HSUPA UE category



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) \$307.1443.

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 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) 6299



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 41 of 99

### c) DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a Second serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0

Table E.5.0: Levels for HSDPA connection setup

Parameter During Connection setup	Unit	Value
P-CPICH_Ec/lor	dB	-10
P-CCPCH and SCH_Ec/lor	dB	-12
PICH _Ec/lor	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/lor	dB	-5
OCNS_Ec/lor	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13.

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

The measurements were performed with a Fixed Reference Channel (FRC) H-Set 12 with QPSK.

Parameter	Value
Nominal average inf. bit rate	60 kbit/s
Inter-TTI Distance	1 TTI's
Number of HARQ Processes	6 Processes
Information Bit Payload	120 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	960 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	3200 SMLs
Coding Rate	0.15
Number of Physical Channel Codes	1

Table 10: settings of required H-Set 12 QPSK acc. to 3GPP 34.121

#### Note:

- 1. The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table above.
- 2. Maximum number of transmission is limited to 1,i.e.,retransmission is not allowed. The redundancy and constellation version 0 shall be used.



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

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zore 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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 42 of 99

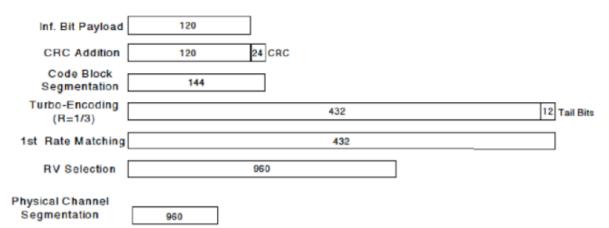


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 Sub-tests for HSDPA were completed according to Release 5 procedures. A summary of subtest settings are illustrated below:

Sub-test₽	βe₽	β <sub>d</sub> ₽	β <sub>d</sub> ·(SF)₽	$\beta_c \cdot / \beta_{d^{o}}$	β <sub>hs</sub> .(1) <sub>Θ</sub>	CM(dB)(2)	MPR ·(dB)₽
1₽	2/15₽	15/15₽	64₽	2/15₽	4/15₽	0.0₽	0₽
2₽	12/15(3)	15/15(3)	64₽	12/15(3)	24/15₽	1.0₽	0₽
3₽	15/15₽	8/15₽	64₽	15/8₽	30/15₽	1.5₽	0.5₽
4₽	15/15₽	4/15₽	64₽	15/4₽	30/15₽	1.5₽	0.5₽

Note: 1:  $\triangle$  ACK,  $\triangle$  NACK and  $\triangle$  CQI=8  $A_{hs} = \beta_{hs}/\beta_c = 30/15$   $\beta_{hs} = 30/15 * \beta_c = 30/15$ 

Note 2: CM=1 for  $\beta_c/\beta_{d=}12/15$ ,  $\beta_{hs}/\beta_c=24/15$ . For all other combinations of DPDCH,DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases. Note 3: For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to  $\beta_c=11/15$  and  $\beta_d=15/15$ .

Up commands are set continuously to set the UE to Max power. Note:

- 1. The Dual Carriers transmission only applies to HSDPA physical channels
- 2. The Dual Carriers belong to the same Node and are on adjacent carriers.
- 3. The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation
- 4. The Dual Carriers operate in the same frequency band.
- 5. The device doesn't support the modulation of 16QAM in uplink but 64QAM in downlink for DC-HSDPA mode.
- 6. The device doesn't support carrier aggregation for it just can operate in Release 8.



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-en/Conditions/Terms-en/Co

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jangsu) 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.: SEWM2309000387RG07

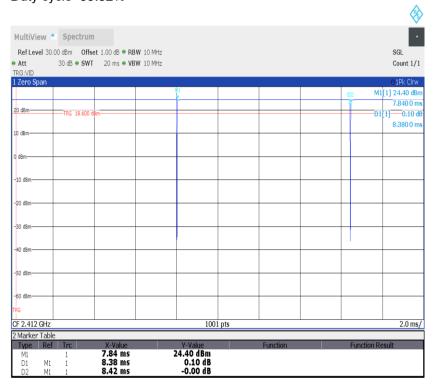
Rev.: 01 Page: 43 of 99

## 7.2.3 WiFi Test Configuration

A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.

### 7. 2. 3. 1. Duty cycle

Wi-Fi 2.4GHz 802.11b : Duty cycle=99.52%





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 so ole responsibility is to its Client and this document does not excerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jangsu) 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

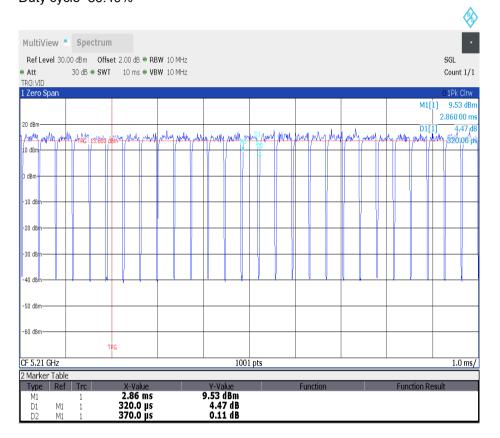
t (86–512) 62992980 www.sgsgroup.com. t (86–512) 62992980 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 44 of 99

Wi-Fi 5GHz 802.11ac 80M : Duty cycle=86.49%





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.apx.and.for electronic format documents">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.apx.and.for electronic Document as this prints.and.for electronic Document as part and strawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extend to 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 & certificite.\*\* please contact us at telephone: (86-755) 8307 1443.\*\*

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industria Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 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 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 45 of 99

#### 7. 2. 3. 2. Initial Test Position SAR Test Reduction Procedure

DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures. The initial test position procedure is described in the following:

- 1) . When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other (remaining) test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band. SAR is also not required for that exposure configuration in the subsequent test configuration(s).
- 2) . When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.
- 3) . For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested. a) Additional power measurements may be required for this step, which should be limited to those necessary for identifying the subsequent highest output power channels.

#### 7. 2. 3. 3. Initial Test Configuration Procedures

An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. For configurations with the same specified or measured maximum output power, additional transmission mode and test channel selection procedures are required. SAR test reduction for subsequent highest output test channels is determined according to *reported* SAR of the initial test configuration. For next to the ear, hotspot mode and UMC mini-tablet exposure configurations where multiple test positions are required, the initial test position procedure is applied to minimize the number of test positions required for SAR measurement using the initial test configuration transmission mode. For fixed exposure conditions that do not have multiple SAR test positions, SAR is measured in the transmission mode determined by the initial test configuration.

When the *reported* SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest measured output power channel(s) in the initial test configuration until *reported* SAR is ≤ 1.2 W/kg or all required channels are tested.

### 7. 2. 3. 4. Subsequent Test Configuration Procedures

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. The initial test position procedure is applied to next to the ear, UMPC mini-tablet and hotspot mode configurations. When the same maximum output power is specified for multiple transmission modes, additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. The subsequent test configuration and SAR measurement procedures are described in the following.

 When SAR test exclusion provisions of KDB Publication 447498 are applicable and SAR measurement is not required for the initial test configuration, SAR is also not required for the next highest maximum output power transmission mode subsequent test configuration(s) in that frequency band or aggregated



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 so ole responsibility is to its Client and this document does not excerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (langsu) 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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 46 of 99

band and exposure configuration.

- 2) . When the highest reported SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.
- 3) . The number of channels in the initial test configuration and subsequent test configuration can be different due to differences in channel bandwidth. When SAR measurement is required for a subsequent test configuration and the channel bandwidth is smaller than that in the initial test configuration, all channels in the subsequent test configuration that overlap with the larger bandwidth channel tested in the initial test configuration should be used to determine the highest maximum output power channel. This step requires additional power measurement to identify the highest maximum output power channel in the subsequent test configuration to determine SAR test reduction.
  - SAR should first be measured for the channel with highest measured output power in the subsequent test configuration.
  - b) SAR for subsequent highest measured maximum output power channels in the subsequent test configuration is required only when the *reported* SAR of the preceding higher maximum output power channel(s) in the subsequent test configuration is > 1.2 W/kg or until all required channels are tested. i) For channels with the same measured maximum output power, SAR should be measured using the channel closest to the center frequency of the larger channel bandwidth channel in the initial test configuration.
- 4) . SAR measurements for the remaining highest specified maximum output power OFDM transmission mode configurations that have not been tested in the initial test configuration (highest maximum output) or subsequent test configuration(s) (subsequent next highest maximum output power) is determined by recursively applying the subsequent test configuration procedures in this section to the remaining configurations according to the following:
  - replace "subsequent test configuration" with "next subsequent test configuration" (i.e., subsequent next highest specified maximum output power configuration)
  - b) replace "initial test configuration" with "all tested higher output power configurations"



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/lerms-and-Conditions.apx.and.">http://www.sgs.com/en/lerms-and-Conditions/lerms-a-Documents.and.</a> to a company subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/lerms-and-Conditions/lerms-a-Documents.and.">http://www.sgs.com/en/lerms-and-Conditions/lerms-a-Document.and.</a> to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) area retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificites. please creatined for 30 days only.



Report No.: SEWM2309000387RG07

Rev.: Page: 47 of 99

#### 7. 2. 3. 5. 2.4 GHz WiFi SAR Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. For 802.11b DSSS SAR measurements. DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions. When SAR measurement is required for an OFDM configuration, the initial test configuration, subsequent test configuration and initial test position procedures are applied. The SAR test exclusion requirements for 802.11g/n OFDM configurations are described in following.

### 802.11b DSSS SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either a fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

- 1) . When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
- 2) . When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

### 2.4 GHz 802.11g/n OFDM SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11q/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3, including sub-sections). SAR is not required for the following 2.4 GHz OFDM conditions.

- 1) . When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
- 2) . When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

### **SAR Test Requirements for OFDM configurations**

When SAR measurement is required for 802.11 g/n OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.



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-en/Conditions/Terms-en/Co



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 48 of 99

## 7.2.4 LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The Anritsu MT8820C was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

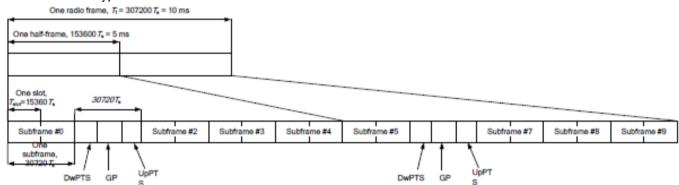
#### **TDD LTE test consideration**

For Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7.

LTE TDD Band support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

### Frame structure type 2:





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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 49 of 99

Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special	•	nal cyclic prefix in	downlink	Extended cyclic prefix in downlink				
subframe	DwPTS	Up	PTS	DwPTS	UpPTS			
configuration		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		
0	6592.Ts			7680.Ts				
1	19760.Ts			20480.Ts	2192.Ts	2560.Ts		
2	21952.Ts	2192.Ts	2560.Ts	23040.Ts	2192.18			
3	24144.Ts			25600.Ts				
4	26336.Ts			7680.Ts				
5	6592.Ts			20480.Ts	4204 To	5120 To		
6	19760.Ts			23040.Ts	4384.Ts	5120.Ts		
7	21952.Ts	4384.Ts	5120.Ts	25600.Ts				
8	24144.Ts			-	-	-		
9	13168.Ts			=	-	-		

### Uplink-downlink configurations.

Uplink-downlink	Downlink-to-				St	ubframe	e numb	er			
configuration	Uplink Switch- point periodicity	0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

### Calculated Duty Cycle=[Extended cyclic prefix in uplink x (Ts) x # of S + # of U]/10ms

Uplink- Downlink Configurat	Downlink-to- Uplink Switch- point Periodicity		Subframe Number								Calculated Duty Cycle (%)	
ion	point Feriodicity	0	1	2	3	4	5	6	7	8	9	Cycle (%)
0	5 ms	D	S	U	U	J	D	S	J	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	J	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot Free Trade Zone 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号约6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 50 of 99

### A) Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

#### B) MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

Modulation	Cha	nnel bandwi	idth / Tra	ansmission	bandwidth (	N <sub>RB</sub> )	MPR (dB)
	1.4	3.0	5	10	15	20	1
	MHz	MHz	MHz	MHz	MHz	MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3

#### C) A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

### D) Largest channel bandwidth standalone SAR test requirements

### 1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

### 2) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

#### 3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

### 4) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is  $> \frac{1}{2}$  dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

### E) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is >  $\frac{1}{2}$  dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.



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-en/Conditions/Terms-en/Co

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 51 of 99

# 8 Test Result

## 8.1 Measurement of RF conducted Power

#### Note:

1) . For GSM SAR the time based average power is relevant. The difference in between depends on the duty cycle of the TDMA signal:

No. of timeslots	1	2	3	4
Duty Cycle	1:8.3	1:4.15	1:2.77	1:2.075
Time based avg. power compared to slotted avg. power	-9.19	-6.18	-4.42	-3.17

- 2) The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below: Frame-averaged power = 10 x log (Burst-averaged power mW x Slot used / 8
- 3) . When the maximum output power variation across the required test channels is >  $\frac{1}{2}$  dB, instead of the middle channel, the highest output power channel must be used
- 4) . According to FCC guidance, the output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.
- 5) . In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs.
- 6) . Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05.
- 7) . Conducted power measurement results of downlink LTE carrier aggregation are provided to quantify downlink only carrier aggregation SAR test exclusion per KDB 941225 D05A.Uplink maximum output power is measured with downlink carrier aggregation active, using the channel with highest measured maximum output power when downlink carrier aggregation is inactive, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive, therefore SAR evaluation with downlink carrier aggregation can be excluded.
  - The possible downlink LTE CA combinations supported by this device are as below tables per 3GPP TS 36.101 V15.4.0. The detailed conducted power measurement results of downlink LTE CA are provided in the SAR report per 3GPP TS 36.521-1 V14.4.0. According to KDB 941225 D05A, the downlink only carrier aggregation conditions for this device can be excluded from SAR testing.
  - The conducted power measurement results of downlink LTE CA Conducted Power are as Appendix E conducted RF output power, so the downlink only carrier aggregation conditions for this device can be excluded from SAR testing
- 8) . For conducted power of WIFI must be measured at each transmit antenna port according to the DSSS and OFDM transmission configurations in each standalone and aggregated frequency band. For each transmission mode configuration, power must be measured for the highest and lowest channels; and at the mid-band channel(s) when there are at least 3 channels. For configurations with multiple mid-band channels, due to an even number of channels, both channels should be measured. Power measurement is required for the transmission mode configuration with the highest maximum output power specified for production units.
  - 1) When the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration with the lowest order modulation and lowest data rate is measured.



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jangsu) 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

00 t (86–512) 6299298



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 52 of 99

2) When the same highest maximum output power is specified for multiple largest channel bandwidth configurations with the same lowest order modulation or lowest order modulation and lowest data rate, power measurement is required for all equivalent 802.11 configurations with the same maximum output power.

9) . The conducted power of BT is measured with RMS detector. BT DH5 Duty Cycle=76.80%





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 so ole responsibility is to its Client and this document does not excerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No.6 Plant, No.1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Fee Trade Zore 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. t (86–512) 62992980 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 53 of 99

### 8.1.1 Measurement Conducted Power of GSM850

GSM 850												
Burst Output Power(dBm)					Tungun	Division Factors	Frame-Ave	rage Output F	Power(dBm)	_		
Char	nnel	128	190	251	Tune up	DIVISION FACIOIS	128	190	251	Tune up		
GSM(GMSK)	GSM	32.03	32.03	31.88	33.50	-9.19	22.84	22.84	22.69	24.31		
	1 TX Slot	32.01	32.02	31.86	33.50	-9.19	22.82	22.83	22.67	24.31		
GPRS/EGPRS	2 TX Slots	31.36	31.41	31.27	32.50	-6.18	25.18	25.23	25.09	26.32		
(GMSK)	3 TX Slots	29.47	29.64	29.46	30.50	-4.42	25.05	25.22	25.04	26.08		
	4 TX Slots	27.93	28.11	28.01	29.00	-3.17	24.76	24.94	24.84	25.83		

Table 11: Measurement Conducted Power of GSM850.

### 8.1.2 Measurement Conducted Power of GSM1900

	GSM 1900											
В	Burst Output Power(dBm)				Tune up	Division Factors	Frame-Ave	rage Output F	Power(dBm)	T		
Chan	nel	512	661	810	Turie up	512 661		661	810	Tune up		
GSM(GMSK)	GSM	26.98	27.13	27.02	28.00	-9.19	17.79	17.94	17.83	18.81		
	1 TX Slot	26.96	27.10	27.00	28.00	-9.19	17.77	17.91	17.81	18.81		
GPRS/EGPRS	2 TX Slots	26.07	26.15	26.14	27.00	-6.18	19.89	19.97	19.96	20.82		
(GMSK)	3 TX Slots	23.94	23.97	23.91	25.00	-4.42	19.52	19.55	19.49	20.58		
	4 TX Slots	22.77	22.84	22.56	23.50	-3.17	19.60	19.67	19.39	20.33		

Table 12: Measurement Conducted Power of GSM1900.

## 8.1.3 Measurement Conducted Power of WCDMA II

		WCDMA Ban	d II							
Average Conducted Power(dBm)										
Channel		9262	9400	9538	Tune up					
WCDMA	12.2kbps RMC	20.02	20.08	20.04	21.00					
VVCDIVIA	12.2kbps AMR	19.83	20.02	19.85	21.00					
	Subtest 1	18.99	18.97	18.92	20.00					
HSDPA	Subtest 2	18.88	18.88	18.92	20.00					
ПОПРА	Subtest 3	18.50	18.41	18.34	19.50					
	Subtest 4	18.49	18.41	18.35	19.50					
	Subtest 1	16.91	17.03	16.92	18.00					
	Subtest 2	16.98	17.05	16.93	18.00					
HSUPA	Subtest 3	17.95	17.89	17.87	19.00					
	Subtest 4	16.33	16.53	16.36	17.50					
	Subtest 5	18.00	17.96	18.00	19.00					
HSPA+	16QAM	18.01	18.07	17.88	19.00					

Table 13: Measurement Conducted Power of WCDMA II.

## 8.1.4 Measurement Conducted Power of WCDMA IV

	WCDMA Band IV										
	Average Conducted Power(dBm)										
Channel		1312	1412	1513	Tune up						
MCDMA	12.2kbps RMC	21.98	22.06	22.04	23.00						
WCDMA	12.2kbps AMR	21.81	22.01	21.92	23.00						
HCDDA	Subtest 1	20.96	20.94	20.85	22.00						
HSDPA	Subtest 2	20.78	20.96	20.89	22.00						



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>. Advised that information contained hereon reflects the Company's Inditings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document on the most 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. Duless 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 & certificite, please contact us at telephone: (86-755) 8307 1443, \*\*Attention:\*\* To check the authenticity of testing /inspection report & certificite, please contact us at telephone: (86-755) 8307 1443,

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

t (86–512) 62992980



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 54 of 99

	Subtest 3	20.34	20.53	20.44	21.50
	Subtest 4	20.38	20.37	20.35	21.50
	Subtest 1	18.86	18.87	18.92	20.00
	Subtest 2	18.94	18.98	18.90	20.00
HSUPA	Subtest 3	19.94	19.99	20.00	21.00
	Subtest 4	18.45	18.50	18.36	19.50
	Subtest 5	19.87	19.86	19.96	21.00
HSPA+	16QAM	19.80	19.86	19.91	21.00

Table 14: Measurement Conducted Power of WCDMA IV.

### 8.1.5 Measurement Conducted Power of WCDMA V

	WCDMA Band V										
	Average Conducted Power(dBm)										
	Channel	4132	4182	4233	Tune up						
WCDMA	12.2kbps RMC	21.86	22.04	22.01	23.00						
VVCDIVIA	12.2kbps AMR	21.74	21.95	21.86	23.00						
	Subtest 1	20.86	20.99	20.88	22.00						
HSDPA	Subtest 2	20.81	21.02	20.88	22.00						
ПОДРА	Subtest 3	20.25	20.39	20.34	21.50						
	Subtest 4	20.27	20.52	20.43	21.50						
	Subtest 1	18.78	18.96	18.83	20.00						
	Subtest 2	18.85	18.94	18.86	20.00						
HSUPA	Subtest 3	19.70	19.88	19.99	21.00						
	Subtest 4	18.30	18.45	18.38	19.50						
	Subtest 5	19.82	20.02	19.83	21.00						
HSPA+	16QAM	19.67	19.84	19.96	21.00						

Table 15: Measurement Conducted Power of WCDMA V.

## 8.1.6 Measurement Conducted Power of LTE Band 2

	LTE Ba	and 2		Conducted Power(dBm)				
Dan dud didb	NA - de de tiene	DD -i	DD -#+	Channel	Channel	Channel	T	
Bandwidth	Modulation	RB size	RB offset	18607	18900	19193	Tune up	
		1	0	24.08	24.18	23.93	25.00	
		1	2	24.06	24.16	23.93	25.00	
		1	5	24.06	24.15	23.88	25.00	
	QPSK	3	0	24.01	24.16	24.04	25.00	
		3	2	24.09	24.15	23.88	25.00	
		3	3	24.14	24.02	23.98	25.00	
		6	0	23.15	23.18	23.02	24.00	
1.4MHz		1	0	23.16	23.16	23.04	24.00	
		1	2	23.09	23.16	22.94	24.00	
		1	5	23.04	23.20	23.00	24.00	
	16QAM	3	0	23.01	23.15	23.00	24.00	
		3	2	23.10	23.03	22.97	24.00	
		3	3	23.13	23.17	22.87	24.00	
		6	0	22.18	22.10	22.05	23.00	
	64QAM	1	0	22.07	22.09	21.87	23.00	



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.spx.px.">http://www.sgs.com/en/Terms-and-Conditions.spx.px.</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 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 advantage of the content or the content or a present of the content or a present or a present of the content or a present or a pre

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

(86–512) 62992980 www.sgsgroup.com. (86–512) 62992980 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 55 of 99

		1 4	1 0	00.40	00.40	00.00	00.00
		1	2	22.10	22.19	22.02	23.00
		1	5	22.10	22.05	22.01	23.00
		3	0	22.10	22.09	21.99	23.00
		3	2	22.11	22.07	22.04	23.00
		3	3	22.05	22.07	22.02	23.00
		6	0	20.16	20.03	19.99	21.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
Danuwium	Modulation	IND SIZE	IND Oliset	18615	18900	19185	rune up
		1	0	24.10	24.20	23.90	25.00
		1	7	24.04	24.08	24.04	25.00
		1	14	24.09	24.03	24.02	25.00
	QPSK	8	0	23.19	23.03	22.90	24.00
		8	4	23.17	23.05	22.93	24.00
		8	7	23.09	23.14	23.04	24.00
		15	0	23.08	23.13	22.99	24.00
		1	0	23.08	23.17	22.93	24.00
		1	7	23.00	23.16	22.91	24.00
		1	14	23.04	23.15	22.94	24.00
3MHz	16QAM	8	0	22.05	22.06	22.00	23.00
· · · · · · ·		8	4	22.08	22.19	22.06	23.00
		8	7	22.17	22.15	21.98	23.00
		15	0	22.07	22.17	22.04	23.00
		1	0	22.17	22.15	21.93	23.00
		1	7	22.03	22.17	22.06	23.00
		1	14	22.18	22.16	21.86	23.00
	64QAM	8	0	21.13	21.17	20.89	22.00
		8	4	21.08	21.03	20.95	22.00
		8	7	21.09	21.05	20.94	22.00
		15	0	21.03	21.04	20.98	22.00
		.0		Channel	Channel	Channel	
Bandwidth	Modulation	RB size	RB offset	18625	18900	19175	Tune up
		4	0	24.15		24.04	25.00
		1	0		24.05		
		1	13 24	24.03	24.06	23.96	25.00
	QPSK		0	24.02	24.08	24.01	25.00
	QFSK	12		23.01	23.09	22.95	24.00
		12 12	6 13	22.99	23.16 23.19	22.89	24.00 24.00
		25	0	23.12	1	23.05	1
				23.01	23.08	22.90	24.00
		1	0	23.00	23.10	22.93	24.00
5MHz		1	13 24	23.02	23.10	22.99	24.00
	160 4 4			23.12	23.02	22.86	24.00
	16QAM	12	0	21.99	22.16	22.00	23.00
		12	6	22.01	22.04	21.90	23.00
		12	13	22.12	22.16	21.94	23.00
		25	0	22.19	22.03	21.89	23.00
		1	0	22.15	22.21	22.01	23.00
	64QAM	1	13	22.05	22.10	21.97	23.00
		1	24	22.08	22.20	21.93	23.00
		12	0	21.15	21.09	21.01	22.00



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 relects 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 one on texonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CAD.Doccheck@sgs.com</a>

South of No. 6 Plant, No. 1, Runsharg Road, Suchou Industrial Park, Suzhou Area, Chira (Jiangsu) Pilot Free Trade Zone 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最1号的6号厂房商部 邮编: 215000

: 215000 t (86–



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 56 of 99

		12	6	21.00	21.02	21.03	22.00
		12	13	21.00	21.02	21.03	22.00
		25	0	21.09	21.18	20.94	22.00
		25	0	Channel	Channel	Channel	22.00
Bandwidth	Modulation	RB size	RB offset	18650	18900	19150	Tune up
		1	0	24.15	24.20	24.03	25.00
		1	25	24.13	24.20	24.03	25.00
		1	49	24.11	24.17	23.91	25.00
	QPSK	25	0	23.16	23.01	23.91	24.00
	QFSK	25	13	23.10	23.05	23.02	24.00
		25	25	23.10	23.18	22.90	24.00
		50	0	23.09	23.05	22.89	24.00
		1	0	23.11	23.03	23.03	24.00
		1	25	23.09	23.04	23.03	24.00
		1	49	23.00	23.20	23.02	24.00
10MHz	16QAM	25	0	23.00	23.20	23.02	23.00
IUWITZ	TOWAIN	25	13	22.17	22.08	22.01	23.00
		25	25	22.14	22.04	22.03	23.00
		50	0	22.12	22.10	21.91	23.00
		1	0	22.14	22.13	21.94	23.00
		1	25	22.13	22.18	22.03	23.00
	64QAM	1	49	22.08	22.10	21.94	23.00
		25	0	21.13	21.11	20.94	22.00
	04QAIVI	25	13	21.13	21.15	20.88	22.00
		25	25	21.12	21.13	20.88	22.00
		50	0	21.01	21.10	20.93	22.00
		30	Ü	Channel	Channel	Channel	22.00
Bandwidth	Modulation	RB size	RB offset	18675	18900	19125	Tune up
		1	0	24.16	24.06	24.03	25.00
		1	38	24.01	24.05	23.91	25.00
		1	74	24.09	24.02	23.90	25.00
	QPSK	36	0	23.19	23.10	22.97	24.00
	<b>—</b>	36	18	23.00	23.01	22.97	24.00
		36	39	23.06	23.01	22.97	24.00
		75	0	23.11	23.03	23.01	24.00
		1	0	23.05	23.19	22.88	24.00
		1	38	23.15	23.21	22.87	24.00
		1	74	23.13	23.14	22.91	24.00
15MHz	16QAM	36	0	22.12	22.08	22.06	23.00
		36	18	22.06	22.10	21.96	23.00
		36	39	22.10	22.19	21.88	23.00
		75	0	22.04	22.14	21.95	23.00
		1	0	22.10	22.03	21.89	23.00
		1	38	22.07	22.12	21.87	23.00
		1	74	22.12	22.04	21.91	23.00
	640AM	36	0	21.08	21.08	21.04	22.00
	64QAM	30		1	1	· · · · · · · · · · · · · · · · · · ·	
	64QAM			21.11	21.10	20.91	22.00
	64QAM	36	18	21.11 21.11	21.10 21.18	20.91	22.00 22.00
	64QAM			21.11 21.11 21.01	+	20.91 20.92 20.89	22.00 22.00 22.00



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Kangsu) Plot Free Trade Zone 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鹿1号的6号厂房南部 邮编: 215000

t (86–512) 62992980 www.sgsg t (86–512) 62992980 sgs.china(



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 57 of 99

				18700	18900	19100	
		1	0	24.19	24.21	24.06	25.00
		1	50	24.12	24.17	24.01	25.00
		1	99	24.06	24.19	23.97	25.00
	QPSK	50	0	23.22	23.23	23.16	24.00
		50	25	23.19	23.13	22.88	24.00
		50	50	23.07	23.12	22.89	24.00
		100	0	23.08	23.06	22.91	24.00
		1	0	23.16	23.20	23.02	24.00
		1	50	23.02	23.07	22.92	24.00
		1	99	23.13	23.09	22.95	24.00
20MHz	16QAM	50	0	22.09	22.10	22.01	23.00
		50	25	22.11	22.03	21.92	23.00
		50	50	22.15	22.11	22.03	23.00
		100	0	21.99	22.09	21.86	23.00
		1	0	22.05	22.12	21.98	23.00
		1	50	22.14	22.07	21.97	23.00
		1	99	22.17	22.16	21.98	23.00
	64QAM	50	0	21.17	21.16	21.04	22.00
		50	25	21.02	21.18	20.93	22.00
		50	50	21.09	21.09	20.86	22.00
		100	0	21.08	21.05	21.01	22.00

Table 16: Measurement Conducted Power of LTE Band 2.

## 8.1.7 Measurement Conducted Power of LTE Band 4

	LTE B	and 4		Conducted Power(dBm)				
Dominio della	NA - ded - time			Channel	Channel	Channel	<b>T</b>	
Bandwidth	Modulation	RB size	RB offset	19957	20175	20393	Tune up	
		1	0	22.79	22.86	22.68	24.00	
		1	2	22.70	22.78	22.78	24.00	
		1	5	22.72	22.74	22.77	24.00	
	QPSK	3	0	22.67	22.79	22.77	24.00	
		3	2	22.61	22.84	22.55	24.00	
		3	3	22.67	22.78	22.68	24.00	
		6	0	21.76	21.74	21.77	23.00	
		1	0	21.69	21.70	21.80	23.00	
		1	2	21.79	21.84	21.69	23.00	
1.4MHz		1	5	21.77	21.71	21.80	23.00	
	16QAM	3	0	21.74	21.58	21.50	23.00	
		3	2	21.77	21.64	21.58	23.00	
		3	3	21.73	21.52	21.65	23.00	
		6	0	20.69	20.71	20.79	22.00	
		1	0	20.80	20.80	20.68	22.00	
		1	2	20.77	20.87	20.66	22.00	
	64QAM	1	5	20.73	20.73	20.77	22.00	
		3	0	20.69	20.86	20.59	22.00	
		3	2	20.72	20.75	20.70	22.00	



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Kangsu) Plot Free Trade Zone 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鹿1号的6号厂房南部 邮编: 215000

t (86–512) 62992980 v



Report No.: SEWM2309000387RG07

Rev.: Page: 58 of 99

	1	3	3	20.60	20.66	20.75	22.00
		6	0	19.85	19.88	19.80	21.00
		0	U				21.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19965	20175	20385	·
		1	0	22.76	22.85	22.69	24.00
		1	7	22.81	22.83	22.70	24.00
		1	14	22.75	22.82	22.70	24.00
	QPSK	8	0	21.77	21.78	21.78	23.00
		8	4	21.87	21.84	21.76	23.00
		8	7	21.87	21.71	21.81	23.00
		15	0	21.83	21.77	21.75	23.00
		1	0	21.85	21.70	21.68	23.00
		1	7	21.80	21.89	21.71	23.00
		1	14	21.70	21.83	21.70	23.00
3MHz	16QAM	8	0	20.69	20.77	20.71	22.00
		8	4	20.79	20.87	20.83	22.00
		8	7	20.69	20.82	20.66	22.00
		15	0	20.69	20.86	20.74	22.00
		1	0	20.68	20.71	20.70	22.00
		1	7	20.88	20.76	20.68	22.00
		1	14	20.70	20.76	20.67	22.00
	64QAM	8	0	19.69	19.81	19.70	21.00
		8	4	19.83	19.75	19.74	21.00
		8	7	19.83	19.76	19.72	21.00
		15	0	19.73	19.87	19.69	21.00
Down alvest altib	Madulatian	DD sins	DD offerst	Channel	Channel	Channel	T
Bandwidth	Modulation	RB size	RB offset	19975	20175	20375	Tune up
		1	0	22.83	22.88	22.81	24.00
		1	13	22.69	22.72	22.82	24.00
		1	24	22.85	22.83	22.78	24.00
	QPSK	12	0	21.84	21.85	21.83	23.00
		12	6	21.79	21.88	21.80	23.00
		12	13	21.68	21.76	21.71	23.00
		25	0	21.72	21.74	21.78	23.00
		1	0	21.78	21.81	21.71	23.00
		1	13	21.81	21.74	21.69	23.00
		1	24	21.86	21.87	21.74	23.00
5MHz	16QAM	12	0	20.83	20.70	20.75	22.00
		12	6	20.75	20.80	20.79	22.00
		12	13	20.71	20.71	20.67	22.00
		25	0	20.77	20.72	20.76	22.00
		1	0	20.86	20.82	20.72	22.00
		1	13	20.75	20.81	20.76	22.00
		1	24	20.79	20.72	20.71	22.00
	64QAM	12	0	19.81	19.87	19.83	21.00
		12	6	19.80	19.83	19.68	21.00
		12	13	19.79	19.80	19.68	21.00
		25	0	19.73	19.76	19.68	21.00



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 relects 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 one on texonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CAD.Doccheck@sgs.com</a>

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 59 of 99

				20000	20175	20350	
		1	0		22.73	22.67	24.00
		1		22.87 22.79	22.73	22.82	24.00
		1	25				
	ODCK	1	49	22.75 21.85	22.85 21.89	22.67	24.00
	QPSK	25	0			21.67	23.00
		25	13	21.73	21.89	21.81	23.00
		25	25	21.73	21.81	21.69	23.00
		50	0	21.70	21.76	21.80	23.00
		1	0	21.80	21.72	21.71	23.00
		1	25	21.76	21.72	21.73	23.00
	400444	1	49	21.86	21.73	21.67	23.00
10MHz	16QAM	25	0	20.79	20.84	20.73	22.00
		25	13	20.82	20.83	20.65	22.00
		25	25	20.83	20.85	20.66	22.00
		50	0	20.85	20.69	20.76	22.00
		1	0	20.69	20.71	20.82	22.00
		1	25	20.80	20.86	20.78	22.00
		1	49	20.68	20.81	20.65	22.00
	64QAM	25	0	19.81	19.75	19.66	21.00
		25	13	19.71	19.82	19.74	21.00
		25	25	19.70	19.71	19.81	21.00
		50	0	19.72	19.74	19.67	21.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
	odd.di.o.i			20025	20175	20325	· ·
		1	0	22.85	22.72	22.70	24.00
		1	38	22.70	22.74	22.71	24.00
		1	74	22.78	22.71	22.74	24.00
	QPSK	36	0	21.81	21.78	21.73	23.00
		36	18	21.74	21.70	21.80	23.00
		36	39	21.88	21.75	21.80	23.00
		75	0	21.79	21.88	21.67	23.00
		1	0	21.86	21.84	21.73	23.00
		1	38	21.74	21.74	21.80	23.00
		1	74	21.86	21.87	21.80	23.00
15MHz	16QAM	36	0	20.69	20.84	20.73	22.00
		36	18	20.84	20.85	20.76	22.00
		36	39	20.73	20.84	20.74	22.00
		75	0	20.73	20.70	20.65	22.00
		1	0	20.74	20.84	20.77	22.00
		1	38	20.68	20.73	20.72	22.00
		1	74	20.82	20.72	20.79	22.00
	64QAM	36	0	19.88	19.87	19.76	21.00
		36	18	19.69	19.76	19.78	21.00
		36	39	19.76	19.80	19.70	21.00
		75	0	19.69	19.71	19.71	21.00
Bandwidth	Modulation	RB size	RB offset	Channel 20050	Channel 20175	Channel 20300	Tune up
		1	0	22.88	22.89	22.84	24.00
20MHz	QPSK	1	50	22.70	22.85	22.79	24.00
	Σ. Ο	1	99	22.85	22.74	22.79	24.00



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

000 t (86–512) 62992980



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 60 of 99

		50	0	22.06	22.08	22.05	23.00
		50	25	21.71	21.88	21.68	23.00
		50	50	21.72	21.82	21.66	23.00
		100	0	21.84	21.83	21.66	23.00
		1	0	21.73	21.76	21.78	23.00
		1	50	21.75	21.87	21.83	23.00
		1	99	21.77	21.82	21.77	23.00
	16QAM	50	0	20.81	20.85	20.69	22.00
		50	25	20.69	20.88	20.80	22.00
		50	50	20.81	20.75	20.79	22.00
		100	0	20.86	20.83	20.83	22.00
		1	0	20.86	20.69	20.72	22.00
		1	50	20.82	20.76	20.76	22.00
		1	99	20.70	20.86	20.84	22.00
	64QAM	50	0	19.87	19.88	19.76	21.00
		50	25	19.85	19.71	19.66	21.00
		50	50	19.82	19.79	19.79	21.00
		100	0	19.70	19.74	19.80	21.00
T 11 47 NA	10 1 1						

Table 17: Measurement Conducted Power of LTE Band 4.

## 8.1.8 Measurement Conducted Power of LTE Band 5

	LTE Band	d 5		Conducted Power(dBm)				
	NA - ded - di	DD -:	DD -#t	Channel	Channel	Channel	T	
Bandwidth	Modulation	RB size	RB offset	20407	20525	20643	Tune up	
		1	0	23.72	23.77	23.79	25.00	
		1	2	23.68	23.61	23.73	25.00	
		1	5	23.66	23.69	23.76	25.00	
	QPSK	3	0	23.60	23.41	23.76	25.00	
		3	2	23.77	23.68	23.63	25.00	
		3	3	23.75	23.58	23.58	25.00	
		6	0	22.71	22.69	22.75	24.00	
		1	0	22.75	22.58	22.73	24.00	
		1	2	22.81	22.66	22.64	24.00	
		1	5	22.77	22.66	22.77	24.00	
1.4MHz	16QAM	3	0	22.76	22.62	22.43	24.00	
		3	2	22.44	22.62	22.41	24.00	
		3	3	22.65	22.47	22.65	24.00	
		6	0	21.66	21.58	21.66	23.00	
		1	0	21.70	21.66	21.61	23.00	
		1	2	21.79	21.58	21.71	23.00	
		1	5	21.81	21.62	21.74	23.00	
	64QAM	3	0	21.72	21.60	21.65	23.00	
		3	2	21.48	21.60	21.61	23.00	
		3	3	21.70	21.55	21.64	23.00	
		6	0	20.70	20.74	20.75	22.00	
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tungun	
Danuwidin	Modulation	ND SIZE	ND Ollset	20415	20525	20635	Tune up	



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) \$307.1443.

South of No. 6 Plant, No. 1, Runsharq Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Plot Free Trade Zone 215000 中国 - 苏州 - 中国(江苏)自由贸易试验区苏州上区苏州工业园区洞胜路1号的6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 61 of 99

	Т	T .	1 -				T
		1	0	23.82	23.64	23.75	25.00
		1	7	23.69	23.64	23.73	25.00
		1	14	23.72	23.63	23.61	25.00
	QPSK	8	0	22.82	22.66	22.77	24.00
		8	4	22.71	22.72	22.67	24.00
		8	7	22.81	22.75	22.79	24.00
		15	0	22.67	22.65	22.64	24.00
		1	0	22.76	22.69	22.76	24.00
		1	7	22.74	22.65	22.67	24.00
		1	14	22.65	22.69	22.80	24.00
3MHz	16QAM	8	0	21.67	21.68	21.73	23.00
		8	4	21.78	21.73	21.66	23.00
		8	7	21.78	21.65	21.75	23.00
		15	0	21.69	21.70	21.61	23.00
		1	0	21.75	21.58	21.79	23.00
		1	7	21.79	21.76	21.62	23.00
		1	14	21.66	21.62	21.78	23.00
	64QAM	8	0	20.81	20.72	20.80	22.00
		8	4	20.75	20.73	20.79	22.00
		8	7	20.72	20.76	20.77	22.00
		15	0	20.64	20.67	20.69	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
Banuwiutii	Modulation	ND SIZE	KB oliset	20425	20525	20625	Tune up
		1	0	23.75	23.64	23.78	25.00
		1	13	23.63	23.75	23.62	25.00
		1	24	23.77	23.59	23.67	25.00
	QPSK	12	0	22.67	22.63	22.74	24.00
		12	6	22.65	22.74	22.73	24.00
		12	13	22.82	22.71	22.79	24.00
		25	0	22.66	22.61	22.61	24.00
		1	0	22.64	22.60	22.61	24.00
		1	13	22.76	22.69	22.75	24.00
		1	24	22.68	22.74	22.65	24.00
5MHz	16QAM	12	0	21.80	21.67	21.61	23.00
		12	6	21.76	21.60	21.66	23.00
		12	13	21.82	21.66	21.72	23.00
		25	0	21.71	21.63	21.63	23.00
		1	0	21.68	21.77	21.68	23.00
		1	13	21.74	21.68	21.72	23.00
		1	24	21.75	21.64	21.63	23.00
	64QAM	12	0	20.68	20.69	20.66	22.00
		12	6	20.75	20.59	20.75	22.00
		12	13	20.82	20.65	20.71	22.00
		25	0	20.81	20.64	20.77	22.00
David 110	Marakata ti an	DD -:	DD effect	Channel	Channel	Channel	T
Bandwidth	Modulation	RB size	RB offset	20450	20525	20600	Tune up
		1	0	23.83	23.87	23.80	25.00
		1	U	23.03	20.07	_0.00	20.00
10MHz	QPSK	1	25	23.64	23.57	23.65	25.00



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 relects 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 one on texonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CAD.Doccheck@sgs.com</a>

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

t (86–512) 62992980 www.sgsgroup.com.



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 62 of 99

		25	0	22.83	22.85	22.84	24.00
		25	13	22.75	22.68	22.77	24.00
		25	25	22.67	22.61	22.73	24.00
		50	0	22.63	22.69	22.62	24.00
		1	0	22.64	22.77	22.71	24.00
		1	25	22.80	22.60	22.62	24.00
		1	49	22.69	22.70	22.66	24.00
	16QAM	25	0	21.68	21.68	21.78	23.00
		25	13	21.75	21.73	21.66	23.00
		25	25	21.71	21.62	21.67	23.00
		50	0	21.73	21.68	21.67	23.00
		1	0	21.68	21.77	21.75	23.00
		1	25	21.82	21.58	21.79	23.00
		1	49	21.71	21.63	21.65	23.00
	64QAM	25	0	20.72	20.62	20.66	22.00
		25	13	20.63	20.76	20.62	22.00
		25	25	20.70	20.58	20.67	22.00
		50	0	20.68	20.61	20.63	22.00
T 11 40 M		( TE D					

Table 18: Measurement Conducted Power of LTE Band 5.

## 8.1.9 Measurement Conducted Power of LTE Band 7

	LTE B	and 7		Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tungun	
Bandwidth	Modulation	RD SIZE	Rb oliset	20775	21100	21425	Tune up	
		1	0	17.61	17.65	17.46	18.50	
		1	13	17.54	17.58	17.41	18.50	
		1	24	17.56	17.60	17.37	18.50	
	QPSK	12	0	16.50	16.49	16.39	17.50	
		12	6	16.54	16.62	16.35	17.50	
		12	13	16.61	16.59	16.45	17.50	
	25	0	16.47	16.62	16.51	17.50		
		1	0	16.55	16.56	16.34	17.50	
		1	13	16.51	16.63	16.34	17.50	
		1	24	16.61	16.65	16.48	17.50	
5MHz	16QAM	12	0	15.47	15.62	15.47	16.50	
		12	6	15.46	15.54	15.36	16.50	
		12	13	15.63	15.63	15.44	16.50	
		25	0	15.43	15.57	15.38	16.50	
		1	0	15.60	15.57	15.51	16.50	
		1	13	15.53	15.62	15.40	16.50	
		1	24	15.58	15.60	15.49	16.50	
	64QAM	12	0	14.44	14.64	14.34	15.50	
		12	6	14.54	14.57	14.36	15.50	
		12	13	14.49	14.50	14.47	15.50	
		25	0	14.54	14.63	14.50	15.50	
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up	
Danuwium	Modulation	ND SIZE	No oliset	20800	21100	21400	rune up	



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) \$307.1443.

South of No. 6 Plant, No. 1, Runsheng Risad, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pllot 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

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



Report No.: SEWM2309000387RG07

Rev.: 63 of 99 Page:

		1 .					
		1	0	17.47	17.50	17.38	18.50
		1	25	17.44	17.58	17.33	18.50
		1	49	17.51	17.56	17.51	18.50
	QPSK	25	0	16.61	16.59	16.41	17.50
		25	13	16.62	16.60	16.37	17.50
		25	25	16.57	16.56	16.37	17.50
		50	0	16.57	16.57	16.52	17.50
		1	0	16.44	16.47	16.50	17.50
		1	25	16.61	16.56	16.50	17.50
		1	49	16.52	16.53	16.40	17.50
10MHz	16QAM	25	0	15.44	15.53	15.36	16.50
		25	13	15.52	15.54	15.43	16.50
		25	25	15.45	15.61	15.32	16.50
		50	0	15.45	15.62	15.36	16.50
		1	0	15.52	15.55	15.35	16.50
		1	25	15.49	15.59	15.42	16.50
		1	49	15.43	15.49	15.51	16.50
	64QAM	25	0	14.45	14.60	14.43	15.50
		25	13	14.63	14.64	14.32	15.50
		25	25	14.57	14.51	14.49	15.50
		50	0	14.61	14.57	14.33	15.50
			DD " '	Channel	Channel	Channel	_
Bandwidth	Modulation	RB size	RB offset	20825	21100	21375	Tune up
		1	0	17.62	17.53	17.33	18.50
		1	38	17.47	17.59	17.47	18.50
		1	74	17.48	17.52	17.42	18.50
	QPSK	36	0	16.62	16.55	16.38	17.50
		36	18	16.58	16.55	16.32	17.50
		36	39	16.48	16.59	16.35	17.50
		75	0	16.58	16.51	16.43	17.50
		1	0	16.49	16.64	16.34	17.50
		1	38	16.62	16.48	16.50	17.50
		1	74	16.61	16.61	16.51	17.50
15MHz	16QAM	36	0	15.55	15.53	15.50	16.50
		36	18	15.51	15.57	15.50	16.50
		36	39	15.46	15.60	15.36	16.50
		75	0	15.44	15.62	15.32	16.50
		1	0	15.52	15.65	15.44	16.50
		1	38	15.57	15.56	15.51	16.50
		1	74	15.59	15.62	15.44	16.50
	64QAM	36	0	14.60	14.63	14.45	15.50
		36	18	14.54	14.48	14.50	15.50
		36	39	14.55	14.52	14.44	15.50
		50					
		75	0	14.45	14.62	14.34	15.50
Donald 110	Madulation	75		14.45 Channel	14.62 Channel	14.34 Channel	
Bandwidth	Modulation		0 RB offset				15.50 Tune up
Bandwidth	Modulation	75		Channel	Channel	Channel	
Bandwidth 20MHz	Modulation QPSK	75 RB size	RB offset	Channel 20850	Channel 21100	Channel 21350	Tune up



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 relects 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 one on texonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CAD.Doccheck@sgs.com</a>

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 64 of 99

		50	0	16.71	16.78	16.75	17.50
		50	25	16.47	16.50	16.33	17.50
		50	50	16.56	16.58	16.36	17.50
		100	0	16.62	16.63	16.48	17.50
		1	0	16.53	16.54	16.39	17.50
		1	50	16.45	16.56	16.43	17.50
		1	99	16.48	16.65	16.46	17.50
	16QAM	50	0	15.43	15.51	15.41	16.50
		50	25	15.45	15.56	15.50	16.50
		50	50	15.46	15.55	15.39	16.50
		100	0	15.44	15.64	15.34	16.50
		1	0	15.62	15.52	15.48	16.50
		1	50	15.59	15.60	15.52	16.50
		1	99	15.60	15.60	15.41	16.50
	64QAM	50	0	14.45	14.49	14.48	15.50
		50	25	14.57	14.63	14.47	15.50
		50	50	14.60	14.54	14.40	15.50
		100	0	14.57	14.64	14.36	15.50
T 11 40 M	10 1 1						

Table 19: Measurement Conducted Power of LTE Band 7.

## 8.1.10 Measurement Conducted Power of LTE Band 12

	LTE FDD	Band 12		Conducted Power(dBm)				
Dan duri déla	Modulation	RB size	RB offset	Channel	Channel	Channel	Tungun	
Bandwidth	Modulation	RD SIZE	RD Ollset	23017	23095	23173	Tune up	
		1	0	24.27	24.42	24.26	25.50	
		1	2	24.22	24.25	24.25	25.50	
		1	5	24.38	24.38	24.29	25.50	
	QPSK	3	0	24.20	24.36	24.18	25.50	
		3	2	24.18	24.16	24.16	25.50	
		3	3	24.04	24.15	24.17	25.50	
		6	0	23.29	23.33	23.25	24.50	
		1	0	23.22	23.25	23.34	24.50	
		1	2	23.21	23.34	23.31	24.50	
		1	5	23.26	23.24	23.41	24.50	
1.4MHz	16QAM	3	0	23.02	23.21	23.12	24.50	
		3	2	23.26	23.07	23.18	24.50	
		3	3	23.29	23.24	23.36	24.50	
		6	0	22.37	22.29	22.31	23.50	
		1	0	22.35	22.24	22.31	23.50	
		1	2	22.36	22.27	22.34	23.50	
		1	5	22.26	22.23	22.31	23.50	
	64QAM	3	0	22.02	22.19	22.24	23.50	
		3	2	22.10	22.35	22.40	23.50	
		3	3	22.07	22.16	22.25	23.50	
		6	0	21.25	21.29	21.41	22.50	
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up	
Balluwiuth	Modulation	ND SIZE	ND UISEL	23025	23095	23165	Turie up	
3MHz	QPSK	1	0	24.35	24.37	24.21	25.50	



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 does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

t (86–512) 62992980 ww t (86–512) 62992980 sgs



Report No.: SEWM2309000387RG07

Rev.: Page: 65 of 99

Г			T _	1	T	T	T
		1	7	24.33	24.39	24.32	25.50
		1	14	24.19	24.24	24.24	25.50
		8	0	23.27	23.41	23.22	24.50
		8	4	23.37	23.38	23.23	24.50
		8	7	23.32	23.33	23.40	24.50
		15	0	23.31	23.25	23.31	24.50
		1	0	23.32	23.32	23.27	24.50
		1	7	23.29	23.24	23.22	24.50
		1	14	23.25	23.30	23.37	24.50
	16QAM	8	0	22.36	22.24	22.40	23.50
		8	4	22.20	22.35	22.24	23.50
		8	7	22.24	22.35	22.26	23.50
		15	0	22.30	22.29	22.34	23.50
		1	0	22.27	22.38	22.37	23.50
		1	7	22.32	22.25	22.41	23.50
		1	14	22.34	22.29	22.36	23.50
	64QAM	8	0	21.38	21.41	21.30	22.50
		8	4	21.27	21.33	21.37	22.50
		8	7	21.20	21.29	21.38	22.50
		15	0	21.38	21.32	21.38	22.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tungun
Danuwium	Wodulation	RD SIZE	KD Ollset	23035	23095	23155	Tune up
		1	0	24.26	24.42	24.28	25.50
		1	13	24.27	24.24	24.30	25.50
		1	24	24.33	24.40	24.23	25.50
	QPSK	12	0	23.29	23.38	23.22	24.50
		12	6	23.36	23.42	23.30	24.50
		12	13	23.35	23.32	23.30	24.50
		25	0	23.26	23.39	23.25	24.50
		1	0	23.31	23.25	23.33	24.50
		1	13	23.37	23.32	23.33	24.50
		1	24	23.36	23.34	23.29	24.50
5MHz	16QAM	12	0	22.19	22.32	22.21	23.50
		12	6	22.24	22.29	22.40	23.50
		12	13	22.25	22.30	22.25	23.50
		25	0	22.30	22.38	22.30	23.50
Ī		1	0	22.23	22.28	22.36	23.50
		1	13	22.23	22.24	22.38	23.50
		1	24	22.33	22.27	22.22	23.50
	64QAM	12	0	21.32	21.27	21.21	22.50
		12	6	21.36	21.31	21.41	22.50
		12	13	21.27	21.24	21.39	22.50
		25	0	21.20	21.31	21.32	22.50
Pandwidth	Modulation	DD size	DD offeet	Channel	Channel	Channel	Tuna
Bandwidth	Modulation	RB size	RB offset	23060	23095	23130	Tune up
		1	0	24.39	24.43	24.41	25.50
		1	25	24.20	24.11	24.32	25.50
10MHz	QPSK	1	49	24.32	24.25	24.35	25.50
		25	0	23.33	23.43	23.39	24.50
		25	13	23.28	23.17	23.34	24.50



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 66 of 99

	).F	25	22.20	22.24	22.22	24.50
	25	25	23.30	23.21	23.33	24.50
	50	0	23.36	23.14	23.27	24.50
	1	0	23.29	23.18	23.31	24.50
	1	25	23.39	23.22	23.38	24.50
	1	49	23.21	23.23	23.37	24.50
16QAI	Л 25	0	22.33	22.24	22.41	23.50
	25	13	22.34	22.18	22.26	23.50
	25	25	22.31	22.20	22.37	23.50
	50	0	22.23	22.19	22.30	23.50
	1	0	22.38	22.11	22.32	23.50
	1	25	22.23	22.14	22.29	23.50
	1	49	22.37	22.17	22.34	23.50
64QAI	Л 25	0	21.30	21.14	21.34	22.50
	25	13	21.22	21.23	21.35	22.50
	25	25	21.33	21.19	21.33	22.50
	50	0	21.19	21.11	21.29	22.50

Table 20: Measurement Conducted Power of LTE Band 12.

### 8.1.11 Measurement Conducted Power of LTE Band 13

	LTE FDD	Band 13		Conducted Power(dBm)				
	NA - ded - di - e	DD die	DD -#+	Channel	Channel	Channel	T	
Bandwidth	Modulation	RB size	RB offset	23205	23230	23255	Tune up	
		1	0	23.71	23.77	23.75	25.00	
		1	13	23.70	23.57	23.59	25.00	
		1	24	23.59	23.60	23.60	25.00	
	QPSK	12	0	22.63	22.64	22.67	24.00	
		12	6	22.57	22.66	22.70	24.00	
		12	13	22.66	22.59	22.57	24.00	
		25	0	22.64	22.66	22.56	24.00	
		1	0	22.59	22.64	22.69	24.00	
		1	13	22.57	22.61	22.65	24.00	
		1	24	22.66	22.67	22.55	24.00	
5MHz	16QAM	12	0	21.64	21.71	21.68	23.00	
		12	6	21.61	21.72	21.59	23.00	
		12	13	21.61	21.73	21.67	23.00	
		25	0	21.56	21.73	21.66	23.00	
		1	0	21.52	21.64	21.59	23.00	
		1	13	21.70	21.60	21.63	23.00	
		1	24	21.71	21.68	21.56	23.00	
	64QAM	12	0	20.70	20.69	20.69	22.00	
		12	6	20.51	20.58	20.56	22.00	
		12	13	20.58	20.59	20.70	22.00	
		25	0	20.55	20.69	20.69	22.00	
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up	
Balluwium	Modulation	IVD SIZE	IVD Ollset	1	23230	1	Turie up	
		1	0	1	23.78	1	25.00	
10MHz	QPSK	1	25	1	23.62	1	25.00	
		1	49	1	23.71	1	25.00	



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

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

South of No. 6 Plant, No. 1, Runsharg Road, Suchou Industrial Park, Suzhou Area, Chira (Jiangsu) Pilot Free Trade Zone 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最1号的6号厂房商部 邮编: 215000

t (86–512) 62992980 wy



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 67 of 99

		25	0	1	22.7	1	24.00
		25	13	1	22.58	1	24.00
		25	25	1	22.77	1	24.00
		50	0	1	22.59	1	24.00
		1	0	1	22.6	1	24.00
		1	25	1	22.59	1	24.00
		1	49	1	22.66	1	24.00
	16QAM	25	0	1	21.71	1	23.00
		25	13	1	21.7	1	23.00
		25	25	1	21.68	1	23.00
		50	0	1	21.59	1	23.00
		1	0	1	21.74	1	23.00
		1	25	1	21.71	1	23.00
		1	49	1	21.66	1	23.00
	64QAM	25	0	1	20.70	1	22.00
		25	13	1	20.73	1	22.00
		25	25	1	20.64	1	22.00
		50	0	1	20.69	1	22.00
T 11 04 M							

Table 21: Measurement Conducted Power of LTE Band 13.

## 8.1.12 Measurement Conducted Power of LTE Band 17

	LTE FDD	Band 17		Conducted Power(dBm)				
Bandwidth	Modulation	RB size	RB offset	Channel 23755	Channel 23790	Channel 23825	Tune up	
		1	0	23.79	23.75	23.83	25.00	
		<u>'</u> 1	13	23.86	23.75	23.82	25.00	
		<u>'</u> 1	24	23.80	23.71	23.81	25.00	
	QPSK	12	0	22.79	22.71	22.73	24.00	
	QFSK	12	6	22.79	22.71	22.73	24.00	
		12	13	22.76	22.67	22.87	24.00	
						_		
		25	0	22.80	22.69	22.87	24.00	
		1	0	22.75	22.84	22.82	24.00	
		1	13	22.73	22.81	22.92	24.00	
		11	24	22.80	22.77	22.88	24.00	
5MHz	16QAM	12	0	21.82	21.69	21.79	23.00	
		12	6	21.86	21.86	21.88	23.00	
		12	13	21.70	21.83	21.75	23.00	
		25	0	21.75	21.81	21.76	23.00	
		1	0	21.68	21.75	21.79	23.00	
		1	13	21.70	21.86	21.74	23.00	
		1	24	21.85	21.79	21.90	23.00	
	64QAM	12	0	20.68	20.73	20.80	22.00	
		12	6	20.78	20.75	20.76	22.00	
		12	13	20.80	20.77	20.87	22.00	
		25	0	20.81	20.76	20.79	22.00	
Bandwidth	Modulation	RB size	RB offset	Channel 23780	Channel 23790	Channel 23800	Tune up	
10MHz	QPSK	1	0	23.86	23.87	23.82	25.00	



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

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

South of No. 6 Plant, No. 1, Runshang Road, Suchou Industrial Park, Suzhou Area, Chira (Jiangsu) Pilot Free Trade Zone 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最1号的6号厂房商部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: Page: 68 of 99

		1	25	23.85	23.76	23.76	25.00
		1	49	23.69	23.69	23.80	25.00
		25	0	23.03	23.09	23.10	24.00
		25	13	22.77	22.78	22.91	24.00
		25	25	22.70	22.73	22.91	24.00
		50	0	22.70	22.77	22.86	24.00
		1	0	22.81	22.75	22.76	24.00
		1	25	22.72	22.84	22.90	24.00
		1	49	22.78	22.73	22.91	24.00
	16QAM	25	0	21.74	21.72	21.89	23.00
		25	13	21.78	21.68	21.88	23.00
		25	25	21.68	21.68	21.88	23.00
		50	0	21.67	21.72	21.86	23.00
		1	0	21.86	21.80	21.79	23.00
		1	25	21.73	21.69	21.87	23.00
		1	49	21.82	21.71	21.73	23.00
	64QAM	25	0	20.70	20.76	20.88	22.00
		25	13	20.84	20.74	20.81	22.00
		25	25	20.78	20.70	20.79	22.00
		50	0	20.69	20.72	20.83	22.00
T-61-00 M		ad Davis at LTC C					

Table 22: Measurement Conducted Power of LTE Band 17.

## 8.1.13 Measurement Conducted Power of LTE Band 41

	LTE Band 41	Full power				Conducted P	ower(dBm)		
Dan duvidéla	NA - de de di - di	DD -:	DD -#4	Channel	Channel	Channel	Channel	Channel	T
Bandwidth	Modulation	RB size	RB offset	39675	40148	40620	41093	41565	Tune up
		1	0	19.09	19.17	19.24	19.1	19.18	20.00
		1	13	19.09	19.07	19.08	19.15	19.14	20.00
		1	24	19.02	19.12	19.15	19.05	19.12	20.00
	QPSK	12	0	18.06	18.01	18.18	18.1	18.11	19.00
		12	6	18.15	18.14	18.13	18.12	18.11	19.00
		12	13	18.15	18.11	18.06	18.04	18.18	19.00
		25	0	18.17	18.1	18.15	18.2	18.1	19.00
		1	0	18.07	18.07	18.15	18.18	18.23	19.00
		1	13	18.02	18.13	18.25	18.2	18.23	19.00
		1	24	18.1	18.01	18.2	18.05	18.06	19.00
5MHz	16QAM	12	0	17.07	17.03	17.09	17.19	17.17	18.00
		12	6	17.12	17.18	17.09	17.13	17.13	18.00
		12	13	17.02	17.18	17.2	17.13	17.22	18.00
		25	0	17.16	17.12	17.23	17.12	17.24	18.00
		1	0	17.12	17.13	17.23	17.15	17.22	18.00
		1	13	17.19	17.07	17.18	17.06	17.11	18.00
		1	24	17.21	17.05	17.18	17.22	17.08	18.00
	64QAM	12	0	16.05	16.06	16.24	16.10	16.12	17.00
		12	6	16.02	16.09	16.07	16.18	16.16	17.00
		12	13	16.01	16.10	16.13	16.07	16.09	17.00
		25	0	16.12	16.13	16.24	16.21	16.13	17.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Channel	Channel	Tune up



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CND.occheck@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号厂房南部 邮编: 215000



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 69 of 99

				39700	40160	40620	41080	41540	
		1	0	19.13	19.02	19.19	19.15	19.11	20.00
		1	25	19.17	19.09	19.09	19.1	19.1	20.00
		1	49	19.05	19.14	19.14	19.18	19.16	20.00
	QPSK	25	0	18.05	18.06	18.24	18.14	18.16	19.00
		25	13	18.04	18.05	18.16	18.08	18.2	19.00
		25	25	18.06	18.05	18.1	18.08	18.11	19.00
		50	0	18.09	18.01	18.21	18.1	18.23	19.00
		1	0	18.1	18.05	18.19	18.17	18.17	19.00
		1	25	18.04	18	18.17	18.05	18.24	19.00
		1	49	18.15	18.05	18.09	18.13	18.17	19.00
10MHz	16QAM	25	0	17.17	17.15	17.07	17.17	17.12	18.00
		25	13	17.05	17.03	17.25	17.03	17.08	18.00
		25	25	17.02	17.02	17.15	17.08	17.24	18.00
		50	0	17.08	17.09	17.14	17.23	17.23	18.00
		1	0	17.07	17.17	17.17	17.21	17.12	18.00
		1	25	17.17	17.01	17.23	17.20	17.24	18.00
		1	49	17.01	17.13	17.08	17.09	17.13	18.00
	64QAM	25	0	16.07	16.15	16.14	16.05	16.16	17.00
		25	13	16.18	15.99	16.09	16.22	16.11	17.00
		25	25	16.13	16.14	16.16	16.17	16.18	17.00
		50	0	16.14	16.08	16.11	16.17	16.24	17.00
Donalis i altib	NA - de de Aires	DD -:	DD offeet	Channel	Channel	Channel	Channel	Channel	T
Bandwidth	Modulation	RB size	RB offset	39725	40173	40620	41068	41515	Tune up
		1	0	19.06	19.08	19.25	19.21	19.07	20.00
		1	38	19.06	19.16	19.12	19.16	19.2	20.00
		1	74	19.07	19.04	19.11	19.11	19.13	20.00
	QPSK	36	0	18.14	18.12	18.09	18.11	18.21	19.00
		36	18	18.12	17.99	18.13	18.04	18.17	19.00
		36	39	18.11	18.12	18.13	18.11	18.08	19.00
		75	0	18.16	18.18	18.08	18.06	18.08	19.00
		1	0	18.16	18.09	18.06	18.11	18.25	19.00
		1	38	18.16	18.07	18.25	18.05	18.22	19.00
		1	74	18.17	18.03	18.2	18.23	18.06	19.00
15MHz	16QAM	36	0	17.09	16.99	17.26	17.12	17.2	18.00
		36	18	17.04	17.07	17.16	17.06	17.13	18.00
		36	39	17.19	17.11	17.09	17.05	17.23	18.00
		75	0	17.12	16.98	17.1	17.14	17.08	18.00
		1	0	17.20	17.15	17.13	17.23	17.20	18.00
		1	38	17.06	17.02	17.12	17.14	17.22	18.00
		1	74	17.01	17.12	17.20	17.10	17.15	18.00
	64QAM	36	0	16.13	16.00	16.20	16.23	16.23	17.00
		36	18	16.15	16.06	16.07	16.20	16.11	17.00
		36	39	16.16	16.14	16.14	16.15	16.06	17.00
		75	0	16.14	16.15	16.16	16.18	16.15	17.00
Dond: :: sltl:	Modulatian	DD -:	DD c#s-st	Channel	Channel	Channel	Channel	Channel	Tuna
Bandwidth	Modulation	RB size	RB offset	39750	40185	40620	41055	41490	Tune up
		1	0	19.21	19.18	19.26	19.23	19.25	20.00
20MHz	QPSK	1	50	19.02	19.1	19.2	19.05	19.25	20.00
	~. J.	1	99	19.2	19.16	19.13	19.1	19.16	20.00



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, indeminification 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 faistification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CM.Doccheck@sgs.com

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot Free Trade Zone 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号约6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 70 of 99

		50	0	18.37	18.46	18.56	18.53	18.55	19.00
		50	25	18.17	18.14	18.19	18.13	18.22	19.00
		50	50	18.2	18.13	18.1	18.04	18.21	19.00
		100	0	18.13	18.1	18.23	18.21	18.15	19.00
		1	0	18.2	18.05	18.18	18.17	18.14	19.00
		1	50	18.1	18.17	18.09	18.12	18.14	19.00
		1	99	18.2	18.02	18.18	18.22	18.12	19.00
	16QAM	50	0	17.06	17.1	17.18	17.15	17.22	18.00
		50	25	17.13	17.17	17.21	17.08	17.09	18.00
		50	50	17.19	17.12	17.15	17.12	17.09	18.00
		100	0	17.15	17.01	17.09	17.17	17.19	18.00
		1	0	17.08	17.04	17.11	17.19	17.25	18.00
		1	50	17.10	17.12	17.11	17.06	17.15	18.00
		1	99	17.04	17.12	17.06	17.08	17.12	18.00
	64QAM	50	0	16.06	15.99	16.09	16.06	16.16	17.00
		50	25	16.12	15.98	16.09	16.16	16.10	17.00
		50	50	16.06	16.10	16.13	16.17	16.08	17.00
		100	0	16.06	16.16	16.07	16.22	16.18	17.00
T 11 00 14			( ) TE D	1.44					

Table 23: Measurement Conducted Power of LTE Band 41.

## 8.1.14 Measurement Conducted Power of LTE Band 66

	LTE Ba	nd 66		Conducted Power(dBm)				
Domahusi alah	Madulatian	DD sins	DD -#+	Channel	Channel	Channel	T	
Bandwidth	Modulation	RB size	RB offset	131979	132322	132665	Tune up	
		1	0	22.74	22.93	22.85	24.00	
		1	2	22.72	22.81	22.77	24.00	
		1	5	22.86	22.80	22.80	24.00	
	QPSK	3	0	22.71	22.76	22.67	24.00	
		3	1	22.68	22.75	22.82	24.00	
		3	3	22.58	22.61	22.78	24.00	
		6	0	21.83	21.92	21.81	23.00	
		1	0	21.85	21.76	21.80	23.00	
		1	2	21.82	21.86	21.72	23.00	
		1	5	21.87	21.80	21.90	23.00	
1.4MHz	16QAM	3	0	21.66	21.74	21.88	23.00	
		3	1	21.72	21.77	21.80	23.00	
		3	3	21.75	21.88	21.60	23.00	
		6	0	20.74	20.77	20.84	22.00	
		1	0	20.82	20.90	20.85	22.00	
		1	2	20.79	20.78	20.74	22.00	
		1	5	20.69	20.87	20.75	22.00	
	64QAM	3	0	20.60	20.83	20.70	22.00	
		3	1	20.68	20.70	20.77	22.00	
		3	3	20.66	20.80	20.57	22.00	
		6	0	19.70	19.80	19.87	21.00	
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tungun	
Bandwidth	wodulation	RD SIZE	RD Ollset	131987	132322	132657	Tune up	



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 so ole responsibility is to its Client and this document does not excerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 71 of 99

		1	1		T	T	1
		1	0	22.72	22.75	22.82	24.00
		1	7	22.68	22.85	22.77	24.00
		1	14	22.70	22.91	22.71	24.00
	QPSK	8	0	21.74	21.91	21.87	23.00
		8	4	21.85	21.88	21.77	23.00
		8	7	21.69	21.78	21.74	23.00
		15	0	21.84	21.81	21.84	23.00
		1	0	21.81	21.90	21.74	23.00
		1	7	21.78	21.75	21.91	23.00
		1	14	21.70	21.90	21.88	23.00
3MHz	16QAM	8	0	20.72	20.78	20.72	22.00
		8	4	20.74	20.77	20.77	22.00
		8	7	20.84	20.89	20.73	22.00
		15	0	20.72	20.76	20.86	22.00
		1	0	20.76	20.84	20.75	22.00
		1	7	20.81	20.88	20.76	22.00
		1	14	20.84	20.79	20.84	22.00
	64QAM	8	0	19.83	19.88	19.90	21.00
	0.140.111	8	4	19.88	19.90	19.74	21.00
		8	7	19.83	19.92	19.89	21.00
		15	0	19.72	19.92	19.88	21.00
				Channel	Channel	Channel	
Bandwidth	Modulation	RB size	RB offset	131997	132322	132647	Tune up
		1	0	22.80	22.74	22.90	24.00
		1	13	22.73	22.85	22.83	24.00
		1	24	22.82	22.77	22.75	24.00
	QPSK	12	0	21.71	21.79	21.77	23.00
		12	6	21.81	21.86	21.86	23.00
		12	13	21.84	21.77	21.77	23.00
		25	0	21.85	21.89	21.71	23.00
-		1	0	21.75	21.80	21.73	23.00
		1	13	21.85	21.77	21.86	23.00
		1	24	21.75	21.75	21.86	23.00
5MHz	16QAM	12	0	20.71	20.90	20.78	22.00
		12	6	20.86	20.75	20.73	22.00
		12	13	20.75	20.84	20.86	22.00
		25	0	20.76	20.74	20.79	22.00
-		1	0	20.75	20.77	20.86	22.00
		1	13	20.71	20.83	20.84	22.00
		1	24	20.78	20.80	20.88	22.00
	64QAM	12	0	19.78	19.84	19.83	21.00
	5 . W. III	12	6	19.75	19.86	19.90	21.00
		12	13	19.75	19.84	19.75	21.00
		25	0	19.72	19.78	19.84	21.00
			Ů	Channel	Channel	Channel	
Bandwidth	Modulation	RB size	RB offset	132022	132322	132622	Tune up
		1	0	22.87	22.79	22.82	24.00
		1	25	22.74	22.79	22.75	24.00
10MHz	QPSK	1	49	22.74	22.85	22.75	24.00
		25	0	21.88	21.81	21.85	23.00



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 1 PPartt, No. 1, Runshang Road, Sudhou Industria Park, Suzhou Area, Chine (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洞胜路1号的4号厂房南部 邮编: 215000

t (86–512) 62992980 www.sgsgroup.com.



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 72 of 99

			T 40		04.00	0.4.00	
		25	13	21.78	21.90	21.88	23.00
		25	25	21.70	21.82	21.75	23.00
		50	0	21.70	21.90	21.77	23.00
		1	0	21.80	21.73	21.87	23.00
		1	25	21.83	21.80	21.71	23.00
		1	49	21.78	21.75	21.79	23.00
	16QAM	25	0	20.68	20.83	20.73	22.00
		25	13	20.82	20.93	20.79	22.00
		25	25	20.74	20.84	20.73	22.00
		50	0	20.88	20.86	20.89	22.00
		1	0	20.73	20.88	20.71	22.00
		1	25	20.72	20.81	20.90	22.00
		1	49	20.85	20.87	20.83	22.00
	64QAM	25	0	19.84	19.84	19.83	21.00
		25	13	19.81	19.76	19.82	21.00
		25	25	19.84	19.82	19.72	21.00
		50	0	19.85	19.92	19.74	21.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
24114714411	modulum	1 (5 0)20	112 011001	132047	132322	132597	rano ap
		1	0	22.87	22.91	22.82	24.00
		1	38	22.81	22.90	22.79	24.00
		1	74	22.85	22.84	22.90	24.00
	QPSK	36	0	21.86	21.92	21.83	23.00
		36	18	21.85	21.82	21.90	23.00
		36	39	21.73	21.79	21.77	23.00
		75	0	21.79	21.87	21.81	23.00
		1	0	21.80	21.90	21.88	23.00
		1	38	21.73	21.80	21.80	23.00
		1	74	21.70	21.93	21.80	23.00
15MHz	16QAM	36	0	20.83	20.87	20.77	22.00
		36	18	20.72	20.78	20.79	22.00
		36	39	20.76	20.86	20.81	22.00
		75	0	20.84	20.83	20.90	22.00
		1	0	20.80	20.87	20.82	22.00
		1	38	20.70	20.92	20.87	22.00
		1	74	20.79	20.87	20.79	22.00
	64QAM	36	0	19.76	19.74	19.77	21.00
		36	18	19.68	19.89	19.82	21.00
		36	39	19.83	19.89	19.91	21.00
		75	0	19.77	19.81	19.72	21.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
			1.2 011001	132072	132322	132572	·
		1	0	22.88	22.93	22.91	24.00
		1	50	22.83	22.81	22.86	24.00
		1	99	22.72	22.83	22.90	24.00
20MHz	QPSK	50	0	22.25	22.31	22.28	23.00
20111112		50	25	21.74	21.89	21.76	23.00
		50	50	21.75	21.82	21.86	23.00
<u> </u>		100	0	21.71	21.82	21.78	23.00
	16QAM	1	0	21.80	21.90	21.83	23.00



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

t (86–512) 62992980 sq



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 73 of 99

1	50	21.82	21.92	21.81	23.00
1	99	21.79	21.90	21.76	23.00
50	0	20.76	20.84	20.89	22.00
50	25	20.73	20.75	20.77	22.00
50	50	20.75	20.80	20.71	22.00
100	0	20.79	20.92	20.80	22.00
1	0	20.81	20.88	20.86	22.00
1	50	20.87	20.75	20.85	22.00
1	99	20.69	20.91	20.82	22.00
50	0	19.86	19.74	19.76	21.00
50	25	19.70	19.85	19.87	21.00
50	50	19.78	19.79	19.77	21.00
100	0	19.87	19.81	19.71	21.00
	50 50 100 1 1 1 1 50 50	1     99       50     0       50     25       50     50       100     0       1     0       1     50       1     99       50     0       50     25       50     50	1     99     21.79       50     0     20.76       50     25     20.73       50     50     20.75       100     0     20.79       1     0     20.81       1     50     20.87       1     99     20.69       50     0     19.86       50     25     19.70       50     50     19.78	1     99     21.79     21.90       50     0     20.76     20.84       50     25     20.73     20.75       50     50     20.75     20.80       100     0     20.79     20.92       1     0     20.81     20.88       1     50     20.87     20.75       1     99     20.69     20.91       50     0     19.86     19.74       50     25     19.70     19.85       50     50     19.78     19.79	1     99     21.79     21.90     21.76       50     0     20.76     20.84     20.89       50     25     20.73     20.75     20.77       50     50     20.75     20.80     20.71       100     0     20.79     20.92     20.80       1     0     20.81     20.88     20.86       1     50     20.87     20.75     20.85       1     99     20.69     20.91     20.82       50     0     19.86     19.74     19.76       50     25     19.70     19.85     19.87       50     50     19.78     19.79     19.77

Table 24: Measurement Conducted Power of LTE Band 66.

#### 8.1.15 Measurement Conducted Power of LTE Band 71

	LTE Ba	nd 71			Conducted I	Power(dBm)	
Daniel delle	Madulatian	DD sins	DD -#+	Channel	Channel	Channel	T
Bandwidth	Modulation	RB size	RB offset	133147	133247	133447	Tune up
		1	0	23.53	23.64	23.39	25.00
		1	13	23.45	23.46	23.50	25.00
		1	24	23.57	23.57	23.47	25.00
	QPSK	12	0	22.45	22.57	22.49	24.00
		12	6	22.44	22.65	22.39	24.00
		12	13	22.49	22.65	22.37	24.00
		25	0	22.54	22.52	22.37	24.00
		1	0	22.60	22.50	22.44	24.00
		1	13	22.44	22.53	22.51	24.00
		1	24	22.44	22.46	22.41	24.00
5MHz	16QAM	12	0	21.55	21.46	21.49	23.00
		12	6	21.44	21.46	21.48	23.00
		12	13	21.61	21.46	21.34	23.00
		25	0	21.62	21.46	21.44	23.00
		1	0	21.61	21.55	21.38	23.00
		1	13	21.54	21.61	21.35	23.00
		1	24	21.54	21.46	21.35	23.00
	64QAM	12	0	20.43	20.56	20.47	22.00
		12	6	20.61	20.54	20.35	22.00
		12	13	20.57	20.54	20.52	22.00
		25	0	20.61	20.61	20.47	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tungun
Danawiath	Modulation	KD SIZE	KD Ollset	133172	133272	133422	Tune up
		1	0	23.58	23.52	23.41	25.00
		1	25	23.55	23.63	23.50	25.00
10MHz	QPSK	1	49	23.45	23.54	23.54	25.00
TUIVITZ	QP3N	25	0	22.59	22.64	22.53	24.00
		25	13	22.51	22.54	22.48	24.00
		25	25	22.57	22.46	22.41	24.00



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 74 of 99

		T _	_		T		T
		50	0	22.49	22.64	22.46	24.00
		1	0	22.47	22.63	22.42	24.00
		1	25	22.59	22.55	22.34	24.00
		1	49	22.57	22.62	22.36	24.00
	16QAM	25	0	21.57	21.53	21.40	23.00
		25	13	21.59	21.53	21.48	23.00
		25	25	21.48	21.45	21.36	23.00
-		50	0	21.58	21.59	21.49	23.00
		1	0	21.46	21.57	21.45	23.00
		1	25	21.45	21.55	21.50	23.00
		1	49	21.49	21.57	21.52	23.00
	64QAM	25	0	20.62	20.58	20.54	22.00
		25	13	20.50	20.60	20.53	22.00
		25	25	20.44	20.57	20.39	22.00
		50	0	20.54	20.57	20.50	22.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
Danawiatii	Woddiation	TAD SIZE	TAB Oliset	133197	133297	133397	rune up
		1	0	23.44	23.60	23.35	25.00
		1	38	23.57	23.54	23.46	25.00
		1	74	23.45	23.46	23.34	25.00
	QPSK	36	0	22.55	22.65	22.43	24.00
		36	18	22.57	22.62	22.50	24.00
		36	39	22.44	22.63	22.51	24.00
		75	0	22.62	22.64	22.44	24.00
		1	0	22.46	22.53	22.40	24.00
		1	38	22.59	22.64	22.44	24.00
	16QAM	1	74	22.46	22.62	22.53	24.00
15MHz		36	0	21.58	21.58	21.40	23.00
		36	18	21.55	21.56	21.43	23.00
		36	39	21.49	21.54	21.53	23.00
		75	0	21.53	21.59	21.41	23.00
		1	0	21.61	21.54	21.41	23.00
		1	38	21.61	21.61	21.34	23.00
		1	74	21.56	21.57	21.52	23.00
	64QAM	36	0	20.46	20.45	20.51	22.00
		36	18	20.59	20.52	20.46	22.00
		36	39	20.44	20.55	20.48	22.00
		75	0	20.49	20.58	20.49	22.00
Dondy did	Modulation	DP size	DP offeet	Channel	Channel	Channel	Tuna
Bandwidth	Modulation	RB size	RB offset	133222	133322	133372	Tune up
		1	0	23.63	23.65	23.54	25.00
		1	50	23.58	23.53	23.40	25.00
		1	99	23.53	23.64	23.52	25.00
	QPSK	50	0	22.88	22.91	22.89	24.00
2014:1-		50	25	22.51	22.46	22.39	24.00
20MHz		50	50	22.53	22.63	22.45	24.00
		100	0	22.60	22.61	22.39	24.00
ļ		1	0	22.60	22.56	22.39	24.00
	16QAM	1	50	22.45	22.53	22.53	24.00
		1	99	22.61	22.64	22.46	24.00



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot Free Trade Zone 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号约6号厂房南部 邮编: 215000

t (86–512) 62992980



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 75 of 99

		50	0	21.48	21.55	21.35	23.00
		50	25	21.60	21.47	21.44	23.00
		50	50	21.58	21.58	21.35	23.00
		100	0	21.57	21.52	21.43	23.00
		1	0	21.46	21.52	21.47	23.00
	64QAM	1	50	21.44	21.47	21.40	23.00
		1	99	21.56	21.54	21.43	23.00
		50	0	20.54	20.63	20.40	22.00
		50	25	20.62	20.61	20.40	22.00
		50	50	20.45	20.64	20.52	22.00
		100	0	20.59	20.48	20.49	22.00

Table 25: Measurement Conducted Power of LTE Band 71.

#### 8.1.16 Measurement Conducted Power of WIFI2.4G

Mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
	1	2412		14.02	15.00
802.11b	6	2437	1	14.15	15.00
	11	2462		14.01	15.00
	1	2412		14.08	15.00
802.11g	6	2437	6	14.03	15.00
	11	2462		14.09	15.00
902 11p	1	2412		14.09	15.00
802.11n HT20	6	2437	6.5	14.12	15.00
11120	11	2462		14.13	15.00

Table 26: Measurement Conducted Power of WIFI2.4G.

#### 8.1.17 Measurement Conducted Power of WIFI5G

5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
		36	5180		14.05	15.00
	U-NII-1	40	5200		14.17	15.00
	U-MII- I	44	5220		14.06	15.00
		48	5240		14.26	15.00
	U-NII-2A	52	5260		14.16	15.00
		56	5280		13.46	15.00
		60	5300		13.36	15.00
802.11a		64	5320	6	13.35	15.00
		100	5500		13.65	14.50
		104	5520		13.45	14.50
		108	5540		13.60	14.50
	U-NII-2C	112	5560	]	13.43	14.50
		116	5580		13.61	14.50
		120	5600		13.65	14.50
		124	5620		13.56	14.50



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 so ole responsibility is to its Client and this document does not exceed except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

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

t (86–512) 62992980 www t (86–512) 62992980 sgs.



Report No.: SEWM2309000387RG07

Rev.: Page: 76 of 99

	1	100	F640	1	13.65	14 50
		128	5640	-		14.50
		132	5660	_	13.73	14.50
		136	5680	_	13.80	14.50
		140	5700	_	13.80	14.50
		149	5745	1	15.81	16.50
		153	5765	_	15.67	16.50
	U-NII-3	157	5785	_	15.65	16.50
		161	5805		15.53	16.50
		165	5825		15.78	16.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
		36	5180	_	13.95	15.00
	U-NII-1	40	5200		13.88	15.00
	O-MII-1	44	5220		13.77	15.00
		48	5240		13.75	15.00
		52	5260		13.99	15.00
	U-NII-2A	56	5280		13.65	15.00
	U-MII-ZA	60	5300	]	13.82	15.00
		64	5320	]	13.40	15.00
		100	5500		13.58	14.50
		104	5520		13.31	14.50
		108	5540		13.52	14.50
802.11n-HT20		112	5560		13.51	14.50
		116	5580	MCS0	12.95	14.50
	U-NII-2C	120	5600		12.99	14.50
		124	5620		13.06	14.50
		128	5640	1	13.18	14.50
		132	5660	1	13.06	14.50
		136	5680		13.04	14.50
		140	5700		13.38	14.50
		149	5745		15.57	16.50
		153	5765	1	15.40	16.50
	U-NII-3	157	5785	1	15.58	16.50
		161	5805		15.43	16.50
		165	5825		15.36	16.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
	11 800 4	38	5190		13.99	15.00
	U-NII-1	46	5230	1	13.24	15.00
		54	5270	1	13.77	15.00
	U-NII-2A	62	5310	1	13.51	15.00
802.11n-HT40		102	5510	MCS0	13.51	14.50
		110	5550	1	13.78	14.50
	U-NII-2C	118	5590	1	13.31	14.50
		126	5630	1	13.26	14.50
		134	5670	1	13.65	14.50



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 does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: Ch.Doccheck@gs.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 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 77 of 99

		151	5755		15.42	16.50
	U-NII-3	159	5795	-	15.56	16.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
		36	5180		13.90	15.00
		40	5200		13.92	15.00
	U-NII-1	44	5220		13.86	15.00
		48	5240	]	13.88	15.00
		52	5260		13.98	15.00
		56	5280		13.71	15.00
	U-NII-2A	60	5300		13.76	15.00
		64	5320		13.77	15.00
		100	5500		13.48	14.50
		104	5520		13.44	14.50
		108	5540		13.53	14.50
000 44 00		112	5560	14000	13.51	14.50
802.11ac-20		116	5580	MCS0	13.06	14.50
	U-NII-2C	120	5600		13.14	14.50
		124	5620		13.28	14.50
		128	5640		13.25	14.50
		132	5660	1	13.33	14.50
		136	5680	1	13.20	14.50
		140	5700	1	13.48	14.50
		149	5745	1	15.59	16.50
		153	5765	1	15.53	16.50
	U-NII-3	157	5785	1	15.44	16.50
		161	5805	1	15.38	16.50
		165	5825		15.47	16.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
	U-NII-1	38	5190		14.05	15.00
	0-1111-1	46	5230		13.46	15.00
	U-NII-2A	54	5270		13.69	15.00
	U-INII-ZA	62	5310		13.66	15.00
		102	5510		13.59	14.50
802.11ac-40		110	5550	MCS0	13.80	14.50
	U-NII-2C	118	5590		13.35	14.50
		126	5630		13.42	14.50
		134	5670		13.54	14.50
	U-NII-3	151	5755		15.40	16.50
	0-1111-3	159	5795		15.67	16.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
	U-NII-1	42	5210		13.77	15.00
802.11ac	U-NII-2A	58	5290	MCS0	14.16	15.00
80M	11 NII 20	106	5530	IVICOU	13.47	14.50
	U-NII-2C	122	5610		13.80	14.50



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 relects 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 one on texonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CAD.Doccheck@sgs.com</a>

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

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



Report No.: SEWM2309000387RG07

Rev.: 01

Page: 78 of 99

	U-NII-3	155	5775	15.38	16.50

Table 27: Measurement Conducted Power of WIFI5G.

### 8.1.18 Measurement Conducted Power of Bluetooth

	BT	Average Conducted Power(dBm)						
Band	Channel	0	39	78	Tune up			
	GFSK	7.34	8.16	7.03	9.00			
BT	π/4DQPSK	4.59	5.46	4.16	6.00			
	8DPSK	4.63	5.51	4.32	6.00			
Band	Channel	0	19	39	Tune up			
BLE 1M	GFSK	-4.87	-3.62	-4.59	-3.00			
Band	Channel	1	19	38	Tune up			
BLE 2M	GFSK	-4.98	-3.68	-4.32	-3.00			

Table 28: Measurement Conducted Power of Bluetooth.



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 so ole responsibility is to its Client and this document does not exceed except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000 t (86–512) 62992980 www.sgsgroup.com.d t (86–512) 62992980 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 79 of 99

#### 8.2 Measurement of SAR Data

#### Note:

- 1) The maximum Scaled SAR value is select the worst presentation of the original report SEWM2304000137RG09 and this report. Graph results refer to Appendix B.
- 2) Per KDB447498 D01, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
  - ≤ 0.8W/kg for 1-g or 2.0W/kg for 10-g respectively, when the transmission band is ≤ 100MHz.
  - $\bullet$  ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.
  - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz.
- 3) Maximum bandwidth does not support at least three non-overlapping channels in certain channel bandwidths. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

#### WiFi 2.4G:

 When the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR test for the other 802.11 modes are not required.

#### WiFi 5G:

- When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration.
- 2) For Wi-Fi 5G, U-NII-2A (5250-5350 MHz) and U-NII-2C (5470-5725 MHz) bands does not support hotspot function.
- 3) When the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR test for the other 802.11 modes are not required.



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.and">http://www.sgs.com/en/Terms-and-Conditions/Terms-en/Comditions/Terms



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 80 of 99

#### 8.2.1 SAR Result of GSM850

			GS	M850 SAR	<b>Test Reco</b>	rd						
	Ant 1 Test Record											
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)		
Head Test Data												
Left cheek         GPRS 2TS         190/836.6         1:4.15         0.447         0.03         31.41         32.50         1.285         0.575         22.4												
Left tilted	GPRS 2TS	190/836.6	1:4.15	0.339	-0.02	31.41	32.50	1.285	0.436	22.4		
Right cheek	GPRS 2TS	190/836.6	1:4.15	0.392	0.06	31.41	32.50	1.285	0.504	22.4		
Right tilted	GPRS 2TS	190/836.6	1:4.15	0.282	0.17	31.41	32.50	1.285	0.362	22.4		
			Body wo	orn Test data	a(Separate	15mm)						
Front side	GPRS 2TS	190/836.6	1:4.15	0.402	0.14	31.41	32.50	1.285	0.517	22.4		
Back side	GPRS 2TS	190/836.6	1:4.15	0.464	-0.01	31.41	32.50	1.285	0.596	22.4		
			Hotspo	ot Test data(	Separate 1	0mm)						
Front side	GPRS 2TS	190/836.6	1:4.15	0.413	0.15	31.41	32.50	1.285	0.531	22.4		
Back side	GPRS 2TS	190/836.6	1:4.15	0.666	0.03	31.41	32.50	1.285	0.856	22.4		
Back side	GPRS 2TS	128/824.2	1:4.15	0.536	-0.11	31.36	32.50	1.300	0.697	22.4		
Back side	GPRS 2TS	251/848.8	1:4.15	0.571	0.02	31.27	32.50	1.327	0.758	22.4		
Left side	GPRS 2TS	190/836.6	1:4.15	0.126	0.03	31.41	32.50	1.285	0.162	22.4		
Right side	GPRS 2TS	190/836.6	1:4.15	0.262	-0.12	31.41	32.50	1.285	0.337	22.4		
Bottom side	GPRS 2TS	190/836.6	1:4.15	0.283	-0.08	31.41	32.50	1.285	0.364	22.4		

Table 29: SAR of GSM850 for Head and Body.

#### **8.2.2 SAR Result of GSM1900**

			GSM <sup>2</sup>	1900 SAR 1	Test Reco	rd						
	Ant 3 Test Record											
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)		
Head Test Data												
Left cheek         GPRS 2TS         661/1880         1:4.15         0.930         -0.12         26.15         27.00         1.216         1.131         22.5												
Left cheek	GPRS 2TS	512/1850.2	1:4.15	0.843	-0.11	26.15	27.00	1.216	1.025	22.5		
Left cheek	GPRS 2TS	810/1909.8	1:4.15	1.010	-0.02	26.15	27.00	1.216	1.228	22.5		
Left cheek-repeated	GPRS 2TS	810/1909.8	1:4.15	0.997	0.03	26.15	27.00	1.216	1.213	22.5		
Left tilted	GPRS 2TS	661/1880	1:4.15	0.606	0.06	26.15	27.00	1.216	0.737	22.5		
Right cheek	GPRS 2TS	661/1880	1:4.15	0.402	0.02	26.15	27.00	1.216	0.489	22.5		
Right tilted	GPRS 2TS	661/1880	1:4.15	0.276	0.11	26.15	27.00	1.216	0.336	22.5		
			Body worr	n Test data(	Separate 1	15mm)						
Front side	GPRS 2TS	661/1880	1:4.15	0.109	-0.07	26.15	27.00	1.216	0.133	22.5		
Back side	GPRS 2TS	661/1880	1:4.15	0.200	0.02	26.15	27.00	1.216	0.243	22.5		
			Hotspot '	Test data(S	eparate 10	Omm)						
Front side	GPRS 2TS	661/1880	1:4.15	0.318	0.05	26.15	27.00	1.216	0.387	22.5		
Back side	GPRS 2TS	661/1880	1:4.15	0.672	-0.09	26.15	27.00	1.216	0.817	22.5		
Back side	GPRS 2TS	512/1850.2	1:4.15	0.587	0.01	26.15	27.00	1.216	0.714	22.5		
Back side	GPRS 2TS	810/1909.8	1:4.15	0.741	-0.01	26.15	27.00	1.216	0.901	22.5		
Right side	GPRS 2TS	661/1880	1:4.15	0.416	0.05	26.15	27.00	1.216	0.506	22.5		
Top side	GPRS 2TS	661/1880	1:4.15	0.436	-0.14	26.15	27.00	1.216	0.530	22.5		

Table 30: SAR of GSM1900 for Head and Body.

Test Position	Channel/ Frequency	Measured	1 <sup>st</sup> Repeated	Ratio	2nd Repeated	3 <sup>rd</sup> Repeated				
	(MHz)	SAR (1g)	SAR (1g)		SAR (1g)	SAR (1g)				
Left cheek	810/1909.8	1.010	0.997	1.013039117	N/A	N/A				
lote: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.										



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Kangsu) Pilot Free Trade Zone 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鹿1号的6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 81 of 99

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

#### 8.2.3 SAR Result of WCDMA Band II

	W B2 SAR Test Record														
	Ant 3 Test Record														
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g		Conducted Power(dBm)	Tune up Limit(dBm)	Scaled	Scaled SAR 1- g (W/kg)	Liquid Temp.(℃)					
				Head Tes	t Data										
Left cheek	RMC	9400/1880	1:1	0.871	-0.12	20.08	21.00	1.236	1.077	22.5					
Left cheek-repeated	RMC	9400/1880	1:1	0.868	0.03	20.08	21.00	1.236	1.073	22.5					
Left cheek	RMC	9262/1852.4	1:1	0.855	-0.11	20.08	21.00	1.236	1.057	22.5					
Left cheek	RMC	9538/1907.6	1:1	0.862	-0.12	20.08	21.00	1.236	1.065	22.5					
Left tilted	RMC	9400/1880	1:1	0.604	0.13	20.08	21.00	1.236	0.747	22.5					
Right cheek	RMC	9400/1880	1:1	0.565	0.19	20.08	21.00	1.236	0.698	22.5					
Right tilted	RMC	9400/1880	1:1	0.367	-0.13	20.08	21.00	1.236	0.454	22.5					
		ı	Body wor	n Test data	Separate 15	mm)									
Front side	RMC	9400/1880	1:1	0.133	0.18	20.08	21.00	1.236	0.164	22.5					
Back side	RMC	9400/1880	1:1	0.269	0.07	20.08	21.00	1.236	0.332	22.5					
			Hotspot	Test data(S	Separate 10m	nm)									
Front side	RMC	9400/1880	1:1	0.278	-0.05	20.08	21.00	1.236	0.344	22.5					
Back side	RMC	9400/1880	1:1	0.596	0.04	20.08	21.00	1.236	0.737	22.5					
Right side	RMC	9400/1880	1:1	0.412	-0.12	20.08	21.00	1.236	0.509	22.5					
Top side	RMC	9400/1880	1:1	0.466	-0.15	20.08	21.00	1.236	0.576	22.5					

Table 31: SAR of WCDMA Band II for Head and Body.

Test Position	Channel/ Frequency		1 <sup>st</sup> Repeated	Ratio	2nd Repeated	3 <sup>rd</sup> Repeated	
	(MHz)	(1g)	SAR (1g)		SAR (1g)	SAR (1g)	
Left cheek	9400/1880	0.871	0.868	1.003456221	N/A	N/A	

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

#### 8.2.4 SAR Result of WCDMA Band IV

	W B4 SAR Test Record														
	Ant 1 Test Record														
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)					
					Head Tes	st Data									
Left cheek	RMC	1412/1732.4	1:1	0.177	0.07	22.06	23.00	1.242	0.220	22.3					
Left tilted	RMC	1412/1732.4	1:1	0.048	-0.07	22.06	23.00	1.242	0.060	22.3					
Right cheek	RMC	1412/1732.4	1:1	0.165	0.1	22.06	23.00	1.242	0.205	22.3					
Right tilted	RMC	1412/1732.4	1:1	0.095	0.13	22.06	23.00	1.242	0.118	22.3					
				Body worr	n Test data	(Separate 15mm	)								
Front side RMC 1412/1732.4 1:1 0.251 -0.04 22.06 23.00 1.242 0.312 22.3															
Back side         RMC         1412/1732.4         1:1         0.301         -0.15         22.06         23.00         1.242         0.374         22.3															



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

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) \$307.1443.

South of No. 6 Plant, No. 1, Runsherg 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上区苏州工业园区测胜路1号的6号厂房南部 邮编: 215000

t (86–512) 62992980

<sup>3)</sup> A third repeated measurement was preformed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 82 of 99

	Hotspot Test data(Separate 10mm)												
Front side RMC 1412/1732.4 1:1 0.477 0.16 22.06 23.00 1.242 0.592 22.3													
Back side	RMC	1412/1732.4	1:1	0.599	-0.09	22.06	23.00	1.242	0.744	22.3			
Left side	RMC	1412/1732.4	1:1	0.216	0.01	22.06	23.00	1.242	0.268	22.3			
Right side RMC 1412/1732.4 1:1 0.299 0.07 22.06 23.00 1.242 0.371 22.3										22.3			
Bottom side RMC 1412/1732.4 1:1 0.559 -0.07 22.06 23.00 1.242 0.694 22.3													

Table 32: SAR of WCDMA Band IV for Head and Body.

#### 8.2.5 SAR Result of WCDMA Band V

	W B4 SAR Test Record													
				Ant 1	Test Rec	ord								
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)				
				Hea	ad Test Da	ta								
Left cheek	RMC	4182/836.4	1:1	0.221	0.06	22.04	23.00	1.247	0.276	22.4				
Left tilted	RMC	4182/836.4	1:1	0.145	-0.14	22.04	23.00	1.247	0.181	22.4				
Right cheek	RMC	4182/836.4	1:1	0.164	0.18	22.04	23.00	1.247	0.205	22.4				
Right tilted	RMC	4182/836.4	1:1	0.109	-0.13	22.04	23.00	1.247	0.136	22.4				
			Во	dy worn Tes	st data(Sep	arate 15mm)								
Front side	RMC	4182/836.4	1:1	0.171	0.14	22.04	23.00	1.247	0.213	22.4				
Back side	RMC	4182/836.4	1:1	0.212	-0.03	22.04	23.00	1.247	0.264	22.4				
			Н	otspot Test	data(Sepa	rate 10mm)								
Front side	RMC	4182/836.4	1:1	0.162	0.03	22.04	23.00	1.247	0.202	22.4				
Back side	RMC	4182/836.4	1:1	0.307	-0.03	22.04	23.00	1.247	0.383	22.4				
Left side	RMC	4182/836.4	1:1	0.106	0.02	22.04	23.00	1.247	0.132	22.4				
Right side	RMC	4182/836.4	1:1	0.119	0.08	22.04	23.00	1.247	0.148	22.4				
Bottom side	RMC	4182/836.4	1:1	0.115	0.03	22.04	23.00	1.247	0.143	22.4				

Table 33: SAR of WCDMA Band V for Head and Body.

#### 8.2.6 SAR Result of LTE Band 2

			Ľ	TE Band	12 SAR	Test Rec	ord							
	Ant 1 Test Record													
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)			
	·			Head	Test Da	ta(1RB)								
Left cheek	20	QPSK 1_0	18900/1880	1:1	0.241	0.11	24.21	25.00	1.199	0.289	22.5			
Left tilted	20	QPSK 1_0	18900/1880	1:1	0.218	0.05	24.21	25.00	1.199	0.261	22.5			
Right cheek	20	QPSK 1_0	18900/1880	1:1	0.410	0.09	24.21	25.00	1.199	0.492	22.5			
Right tilted	20	QPSK 1_0	18900/1880	1:1	0.245	-0.07	24.21	25.00	1.199	0.294	22.5			
				Head <sup>-</sup>	Γest Data	(50%RB)	)							
Left cheek	20	QPSK 50_0	18900/1880	1:1	0.202	-0.11	23.23	24.00	1.194	0.241	22.5			
Left tilted	20	QPSK 50_0	18900/1880	1:1	0.175	-0.19	23.23	24.00	1.194	0.209	22.5			
Right cheek	20	QPSK 50_0	18900/1880	1:1	0.335	0.03	23.23	24.00	1.194	0.400	22.5			
Right tilted	20	QPSK 50_0	18900/1880	1:1	0.193	-0.17	23.23	24.00	1.194	0.230	22.5			
			Body w	orn Test	data(Se	parate 15	mm 1RB)			•				
Front side	20	QPSK 1_0	18900/1880	1:1	0.459	0.14	24.21	25.00	1.199	0.551	22.5			
Back side	20	QPSK 1_0	18900/1880	1:1	0.541	0.02	24.21	25.00	1.199	0.649	22.5			
			Body wor	n Test c	lata(Sepa	rate 15n	nm 50%RB)							
Front side	20	QPSK 50_0	18900/1880	1:1	0.371	0.16	23.23	24.00	1.194	0.443	22.5			
Back side	20	QPSK 50_0	18900/1880	1:1	0.442	-0.17	23.23	24.00	1.194	0.528	22.5			
	•		Hotspe	ot Test o	ata(Sepa	rate 10m	nm 1RB)			•				
Front side	20	QPSK 1 0	18900/1880	1:1	0.720	0.04	24.21	25.00	1.199	0.864	22.5			



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 so ole responsibility is to its Client and this document does not exceed except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runsharg Road, Suchou Industrial Park, Suzhou Area, Chira (Jiangsu) Pilot Free Trade Zone 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最1号的6号厂房商部 邮编: 215000

t (86–512) 62992980 www. t (86–512) 62992980 sgs.c



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 83 of 99

Front side	20	QPSK 1_0	18700/1860	1:1	0.761	-0.01	24.19	25.00	1.205	0.917	22.5
Front side	20	QPSK 1_0	19100/1900	1:1	0.627	0.04	24.06	25.00	1.242	0.779	22.5
Back side	20	QPSK 1_0	18900/1880	1:1	0.799	0.16	24.21	25.00	1.199	0.958	22.5
Back side	20	QPSK 1_0	18700/1860	1:1	0.861	-0.01	24.19	25.00	1.205	1.038	22.5
Back side-repeated	20	QPSK 1_0	18700/1860	1:1	0.855	0.04	24.19	25.00	1.205	1.030	22.5
Back side	20	QPSK 1_0	19100/1900	1:1	0.747	-0.06	24.06	25.00	1.242	0.928	22.5
Left side	20	QPSK 1_0	18900/1880	1:1	0.359	0.04	24.21	25.00	1.199	0.431	22.5
Right side	20	QPSK 1_0	18900/1880	1:1	0.484	0.03	24.21	25.00	1.199	0.581	22.5
Bottom side	20	QPSK 1_0	18900/1880	1:1	0.659	-0.07	24.21	25.00	1.199	0.790	22.5
			Hotspot	Test da	ta(Separa	ate 10mm	n 50%RB)				
Front side	20	QPSK 50_0	18900/1880	1:1	0.585	-0.01	23.23	24.00	1.194	0.698	22.5
Back side	20	QPSK 50_0	18900/1880	1:1	0.674	0.19	23.23	24.00	1.194	0.805	22.5
Back side	20	QPSK 50_0	18700/1860	1:1	0.735	-0.04	23.22	24.00	1.197	0.880	22.5
Back side	20	QPSK 50_0	19100/1900	1:1	0.620	0.15	23.16	24.00	1.213	0.752	22.5
Left side	20	QPSK 50_0	18900/1880	1:1	0.332	0.02	23.23	24.00	1.194	0.396	22.5
Right side	20	QPSK 50_0	18900/1880	1:1	0.437	0.01	23.23	24.00	1.194	0.522	22.5
Bottom side	20	QPSK 50_0	18900/1880	1:1	0.613	0.04	23.23	24.00	1.194	0.732	22.5
			Hotspot	Test dat	a(Separa	te 10mm	100%RB)				
Front side	20	QPSK 100_0	18700/1860	1:1	0.553	0.05	22.03	23.00	1.250	0.691	22.5
Back side	20	QPSK 100_0	18700/1860	1:1	0.769	-0.16	22.03	23.00	1.250	0.961	22.5

Table 34: SAR of LTE Band 2 for Head and Body.

Test Position	Channel/ Frequency	Measured SAR	1 <sup>st</sup> Repeated	Ratio	2 <sup>nd</sup> Repeated	3 <sup>rd</sup> Repeated
	(MHz)	(1g)	SAR (1g)		SAR (1g)	SAR (1g)
Back side	18700/1860	0.861	0.855	1.007017544	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

#### 8.2.7 SAR Result of LTE Band 5

	LTE Band 5 SAR Test Record														
	Ant 1 Test Record														
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)				
	,				Head Test	Data(1RB)	)			,					
Left cheek	10	QPSK 1_0	20525/836.5	1:1	0.353	0.16	23.87	25.00	1.297	0.458	22.4				
Left tilted	10	QPSK 1_0	20525/836.5	1:1	0.194	0.06	23.87	25.00	1.297	0.252	22.4				
Right cheek	10	QPSK 1_0	20525/836.5	1:1	0.201	-0.05	23.87	25.00	1.297	0.261	22.4				
Right tilted	10	QPSK 1_0	20525/836.5	1:1	0.160	-0.19	23.87	25.00	1.297	0.208	22.4				
				I	Head Test [	Data(50%R	B)								
Left cheek	10	QPSK 25_0	20525/836.5	1:1	0.295	0.01	22.85	24.00	1.303	0.384	22.4				
Left tilted	10	QPSK 25_0	20525/836.5	1:1	0.147	-0.12	22.85	24.00	1.303	0.192	22.4				
Right cheek	10	QPSK 25_0	20525/836.5	1:1	0.186	0.10	22.85	24.00	1.303	0.242	22.4				
Right tilted	10	QPSK 25_0	20525/836.5	1:1	0.133	-0.06	22.85	24.00	1.303	0.173	22.4				
				Body wor	n Test data	(Separate	15mm 1RB)			*	,				
Front side	10	QPSK 1_0	20525/836.5	1:1	0.240	-0.01	23.87	25.00	1.297	0.311	22.4				
Back side	10	QPSK 1_0	20525/836.5	1:1	0.295	0.02	23.87	25.00	1.297	0.383	22.4				
				Body worn	Test data(S	Separate 15	mm 50%RB)	<del></del>							
Front side	10	QPSK 25_0	20525/836.5	1:1	0.204	-0.12	22.85	24.00	1.303	0.266	22.4				
Back side	10	QPSK 25_0	20525/836.5	1:1	0.240	0.19	22.85	24.00	1.303	0.313	22.4				



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 so ole responsibility is to its Client and this document does not exceed except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plat 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裔1号的6号厂房南部 邮编: 215000

t (86-512) 62992980



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 84 of 99

	Hotspot Test data(Separate 10mm 1RB)													
Front side	10	QPSK 1_0	20525/836.5	1:1	0.051	-0.11	23.87	25.00	1.297	0.066	22.4			
Back side	10	QPSK 1_0	20525/836.5	1:1	0.091	0.12	23.87	25.00	1.297	0.118	22.4			
Left side	10	QPSK 1_0	20525/836.5	1:1	0.116	0.02	23.87	25.00	1.297	0.150	22.4			
Right side	10	QPSK 1_0	20525/836.5	1:1	0.147	0.05	23.87	25.00	1.297	0.191	22.4			
Bottom side	10	QPSK 1_0	20525/836.5	1:1	0.189	-0.05	23.87	25.00	1.297	0.245	22.4			
				Hotspot T	est data(Se	parate 10m	m 50%RB)							
Front side	10	QPSK 25_0	20525/836.5	1:1	0.044	0.09	22.85	24.00	1.303	0.057	22.4			
Back side	10	QPSK 25_0	20525/836.5	1:1	0.076	0.12	22.85	24.00	1.303	0.099	22.4			
Left side	10	QPSK 25_0	20525/836.5	1:1	0.102	0.01	22.85	24.00	1.303	0.133	22.4			
Right side	10	QPSK 25_0	20525/836.5	1:1	0.122	-0.03	22.85	24.00	1.303	0.159	22.4			
Bottom side	10	QPSK 25_0	20525/836.5	1:1	0.162	0.03	22.85	24.00	1.303	0.211	22.4			

Table 35: SAR of LTE Band 5 for Head and Body.

#### 8.2.8 SAR Result of LTE Band 7

LTE Band 7 SAR Test Record														
	Ant 3 Test Record													
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)			
					ad Test D	oata(1RB)	)							
Left cheek	20	QPSK 1_0	21100/2535	1:1	0.727	0.13	17.65	18.50	1.216	0.884	22.2			
Left cheek	20	QPSK 1_0	20850/2510	1:1	0.647	0.07	17.63	18.50	1.222	0.791	22.2			
Left cheek	20	QPSK 1_0	21350/2560	1:1	0.692	-0.10	17.52	18.50	1.253	0.867	22.2			
Left tilted	20	QPSK 1_0	21100/2535	1:1	0.846	-0.09	17.65	18.50	1.216	1.029	22.2			
Left tilted-repeated	20	QPSK 1_0	21100/2535	1:1	0.839	0.01	17.65	18.50	1.216	1.020	22.2			
Left tilted	20	QPSK 1_0	20850/2510	1:1	0.801	0.02	17.63	18.50	1.222	0.979	22.2			
Left tilted	20	QPSK 1_0	21350/2560	1:1	0.806	0.15	17.52	18.50	1.253	1.010	22.2			
Right cheek	20	QPSK 1_0	21100/2535	1:1	0.651	0.05	17.65	18.50	1.216	0.792	22.2			
Right tilted	20	QPSK 1_0	21100/2535	1:1	0.766	0.17	17.65	18.50	1.216	0.932	22.2			
Right tilted	20	QPSK 1_0	20850/2510	1:1	0.721	0.09	17.63	18.50	1.222	0.881	22.2			
Right tilted	20	QPSK 1_0	21350/2560	1:1	0.744	0.03	17.52	18.50	1.253	0.932	22.2			
				Hea	d Test Da	ta(50%R	B)							
Left cheek	20	QPSK 50_0	21100/2535	1:1	0.579	-0.05	16.78	17.50	1.180	0.683	22.2			
Left tilted	20	QPSK 50_0	21100/2535	1:1	0.695	-0.11	16.78	17.50	1.180	0.820	22.2			
Left tilted	20	QPSK 50_0	20850/2510	1:1	0.679	-0.02	16.71	17.50	1.199	0.814	22.2			
Left tilted	20	QPSK 50_0	21350/2560	1:1	0.695	-0.04	16.75	17.50	1.189	0.826	22.2			
Right cheek	20	QPSK 50_0	21100/2535	1:1	0.573	-0.05	16.78	17.50	1.180	0.676	22.2			
Right tilted	20	QPSK 50_0	21100/2535	1:1	0.637	0.06	16.78	17.50	1.180	0.752	22.2			
				Head	d Test Dat	ta(100%F	(B)							
Left cheek	20	QPSK 100_0	21100/2535	1:1	0.543	0.01	16.63	17.50	1.222	0.663	22.2			
Left tilted	20	QPSK 100_0	21100/2535	1:1	0.698	-0.18	16.63	17.50	1.222	0.853	22.2			
Right tilted	20	QPSK 100_0	21100/2535	1:1	0.621	0.05	16.63	17.50	1.222	0.759	22.2			
			Boo	ly worn T	est data(S	eparate '	15mm 1RB)							
Front side	20	QPSK 1_0	21100/2535	1:1	0.109	0.09	17.65	18.50	1.216	0.133	22.2			
Back side	20	QPSK 1_0	21100/2535	1:1	0.293	-0.16	17.65	18.50	1.216	0.356	22.2			
			Body	worn Tes	st data(Se	parate 15	mm 50%RB)							
Front side	20	QPSK 50_0	21100/2535	1:1	0.089	-0.19	16.78	17.50	1.180	0.105	22.2			
Back side	20	QPSK 50_0	21100/2535	1:1	0.239	0.04	16.78	17.50	1.180	0.282	22.2			
			Ho	tspot Tes	t data(Se	parate 10	mm 1RB)							
Front side	20	QPSK 1_0	21100/2535	1:1	0.171	0.14	17.65	18.50	1.216	0.208	22.2			
Back side	20	QPSK 1_0	21100/2535	1:1	0.614	-0.01	17.65	18.50	1.216	0.747	22.2			
Right side	20	QPSK 1_0	21100/2535	1:1	0.431	0.03	17.65	18.50	1.216	0.524	22.2			
Top side	20	QPSK 1_0	21100/2535	1:1	0.540	0.01	17.65	18.50	1.216	0.657	22.2			



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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 define 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, forger or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, Parable (24) Pascheck/Page contact.

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

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 85 of 99

			Hots	spot Test	data(Sepa	arate 10m	m 50%RB)					
Front side	Front side 20 QPSK 50_0 21100/2535 1:1 0.152 0.15 16.78 17.50 1.180 0.179 22.2											
Back side	20	QPSK 50_0	21100/2535	1:1	0.521	0.02	16.78	17.50	1.180	0.615	22.2	
Right side	20	QPSK 50_0	21100/2535	1:1	0.395	-0.01	16.78	17.50	1.180	0.466	22.2	
Top side												

Table 36: SAR of LTE Band 7 for Head and Body.

Test Position	Channel/ Frequency	Measured SAR (1g)	1 <sup>st</sup> Repeated	Ratio	2 <sup>nd</sup> Repeated	3 <sup>rd</sup> Repeated
	(MHz)	, 5.	SAR (1g)		SAR (1g)	SAR (1g)
Left tilted	21100/2535	0.846	0.839	1.008343266	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

#### 8.2.9 SAR Result of LTE Band 12

				LTE B	and 12 SA	R Test Re	cord				
					Ant 1 Test	Record					
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)
				Н	lead Test D	Data(1RB)					
Left cheek	10	QPSK 1_0	23095/707.5	1:1	0.241	0.04	24.43	25.50	1.279	0.308	22.3
Left tilted	10	QPSK 1_0	23095/707.5	1:1	0.119	-0.05	24.43	25.50	1.279	0.152	22.3
Right cheek	10	QPSK 1_0	23095/707.5	1:1	0.159	0.05	24.43	25.50	1.279	0.203	22.3
Right tilted	10	QPSK 1_0	23095/707.5	1:1	0.110	-0.09	24.43	25.50	1.279	0.141	22.3
				He	ad Test Da	ta(50%RE	3)				
Left cheek	10	QPSK 25_0	23095/707.5	1:1	0.168	0.12	23.43	24.50	1.279	0.215	22.3
Left tilted	10	QPSK 25_0	23095/707.5	1:1	0.088	-0.18	23.43	24.50	1.279	0.113	22.3
Right cheek	10	QPSK 25_0	23095/707.5	1:1	0.143	0.09	23.43	24.50	1.279	0.183	22.3
Right tilted	10	QPSK 25_0	23095/707.5	1:1	0.103	-0.04	23.43	24.50	1.279	0.132	22.3
			E	Body worn <sup>-</sup>	Test data(S	Separate 1	5mm 1RB)				
Front side	10	QPSK 1_0	23095/707.5	1:1	0.274	0.02	24.43	25.50	1.279	0.351	22.3
Back side	10	QPSK 1_0	23095/707.5	1:1	0.396	-0.06	24.43	25.50	1.279	0.507	22.3
			Во	dy worn Te	est data(Se	parate 15ı	mm 50%RB)				
Front side	10	QPSK 25_0	23095/707.5	1:1	0.243	0.12	23.43	24.50	1.279	0.311	22.3
Back side	10	QPSK 25_0	23095/707.5	1:1	0.335	-0.05	23.43	24.50	1.279	0.429	22.3
				Hotspot Te	st data(Se	parate 10r	mm 1RB)				
Front side	10	QPSK 1_0	23095/707.5	1:1	0.251	0.17	24.43	25.50	1.279	0.321	22.3
Back side	10	QPSK 1_0	23095/707.5	1:1	0.378	0.03	24.43	25.50	1.279	0.484	22.3
Left side	10	QPSK 1_0	23095/707.5	1:1	0.166	0.04	24.43	25.50	1.279	0.212	22.3
Right side	10	QPSK 1_0	23095/707.5	1:1	0.228	-0.06	24.43	25.50	1.279	0.292	22.3
Bottom side	10	QPSK 1_0	23095/707.5	1:1	0.005	0.18	24.43	25.50	1.279	0.006	22.3
			Н	otspot Tes	t data(Sepa	arate 10m	m 50%RB)				
Front side	10	QPSK 25_0	23095/707.5	1:1	0.206	-0.15	23.43	24.50	1.279	0.264	22.3
Back side	10	QPSK 25_0	23095/707.5	1:1	0.266	0.09	23.43	24.50	1.279	0.340	22.3
Left side	10	QPSK 25_0	23095/707.5	1:1	0.151	0.04	23.43	24.50	1.279	0.193	22.3
Right side	10	QPSK 25_0	23095/707.5	1:1	0.201	0.06	23.43	24.50	1.279	0.257	22.3
Bottom side	10	QPSK 25_0	23095/707.5	1:1	0.003	0.07	23.43	24.50	1.279	0.004	22.3

Table 37: SAR of LTE Band 12 for Head and Body.



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 so ole responsibility is to its Client and this document does not exceed except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runshang Road, Suchou Industrial Park, Suchou Nea, China (Jiangsu) Plot Free Trade Zone
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测胜路(号的6号厂房南部 邮编: 215000

t (86–512) 62992980 sgs.cl



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 86 of 99

#### 8.2.10 SAR Result of LTE Band 13

				LTE	Band 13 S	SAR Test F	Record				
					Ant 1 Te	est Record					
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)
					Head Tes	t Data(1RE					
Left cheek	10	QPSK 1_0	23230/782	1:1	0.222	0.04	23.78	25.00	1.324	0.294	22.3
Left tilted	10	QPSK 1_0	23230/782	1:1	0.122	-0.02	23.78	25.00	1.324	0.162	22.3
Right cheek	10	QPSK 1_0	23230/782	1:1	0.176	-0.06	23.78	25.00	1.324	0.233	22.3
Right tilted	10	QPSK 1_0	23230/782	1:1	0.136	0.18	23.78	25.00	1.324	0.180	22.3
					Head Test	Data(50%F					
Left cheek	10	QPSK 25_0	23230/782	1:1	0.185	0.11	22.70	24.00	1.349	0.250	22.3
Left tilted	10	QPSK 25_0	23230/782	1:1	0.107	-0.17	22.70	24.00	1.349	0.144	22.3
Right cheek		QPSK 25_0	23230/782	1:1	0.147	0.18	22.70	24.00	1.349	0.198	22.3
Right tilted	10	QPSK 25_0	23230/782	1:1	0.115	-0.06	22.70	24.00	1.349	0.155	22.3
				Body wo	rn Test data	a(Separate	15mm 1RB)				
Front side	10	QPSK 1_0	23230/782	1:1	0.211	-0.04	23.78	25.00	1.324	0.279	22.3
Back side	10	QPSK 1_0	23230/782	1:1	0.290	-0.13	23.78	25.00	1.324	0.384	22.3
				Body worn	Test data(	Separate 1	5mm 50%RB)				
Front side	10	QPSK 25_0	23230/782	1:1	0.188	0.05	22.70	24.00	1.349	0.254	22.3
Back side	10	QPSK 25_0	23230/782	1:1	0.242	0.09	22.70	24.00	1.349	0.326	22.3
					Test data(	_	0mm 1RB)				
Front side	10	QPSK 1_0	23230/782	1:1	0.214	0.02	23.78	25.00	1.324	0.283	22.3
Back side	10	QPSK 1_0	23230/782	1:1	0.321	0.12	23.78	25.00	1.324	0.425	22.3
Left side	10	QPSK 1_0	23230/782	1:1	0.132	0.04	23.78	25.00	1.324	0.175	22.3
Right side	10	QPSK 1_0	23230/782	1:1	0.160	0.14	23.78	25.00	1.324	0.212	22.3
Bottom side	10	QPSK 1_0	23230/782	1:1	0.057	-0.01	23.78	25.00	1.324	0.075	22.3
				Hotspot T	est data(Se	eparate 10r	nm 50%RB)				
Front side		QPSK 25_0	23230/782	1:1	0.172	0.04	22.70	24.00	1.349	0.232	22.3
Back side	_	QPSK 25_0	23230/782	1:1	0.240	0.01	22.70	24.00	1.349	0.324	22.3
Left side		QPSK 25_0	23230/782	1:1	0.115	-0.07	22.70	24.00	1.349	0.155	22.3
Right side		QPSK 25_0	23230/782	1:1	0.135	0.14	22.70	24.00	1.349	0.182	22.3
Bottom side	10	QPSK 25_0	23230/782	1:1	0.051	0.05	22.70	24.00	1.349	0.069	22.3

#### 8.2.11 SAR Result of LTE Band 41

			E Balla +1								
			LTE Band 41	SAR T	est Red	cord					
			Ant 3 T	est Re	cord						
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	(W/ka)	Power drift (dB)	Conducted Power(dBm)		Scaled factor		Liquid Temp.(℃)
			Head Te	st Data	(1RB)						
Left cheek	20	QPSK 1_0	40620/2593	1:1.58	0.494	0.08	19.26	20.00	1.186	0.586	22.2
Left tilted	20	QPSK 1_0	40620/2593	1:1.58	0.678	-0.16	19.26	20.00	1.186	0.804	22.2
Left tilted	20	QPSK 1_0	39750/2506	1:1.58	0.710	-0.08	19.21	20.00	1.199	0.852	22.2
Left tilted	20	QPSK 1_0	40185/2549.5	1:1.58	0.741	0.04	19.18	20.00	1.208	0.895	22.2
Left tilted_UL 41C	20+20	QPSK 1_0	40185+39987/2549.5+2529.7	1:1.58	0.732	0.02	19.16	20.00	1.213	0.888	22.2
Left tilted	20	QPSK 1_0	41055/2636.5	1:1.58	0.602	0.12	19.23	20.00	1.194	0.719	22.2
Left tilted	20	QPSK 1_0	41490/2680	1:1.58	0.525	-0.02	19.25	20.00	1.189	0.624	22.2
Right cheek	20	QPSK 1_0	40620/2593	1:1.58	0.597	-0.12	19.26	20.00	1.186	0.708	22.2
Right tilted	20	QPSK 1_0	40620/2593	1:1.58	0.642	0.03	19.26	20.00	1.186	0.761	22.2
			Head Test	Data(5	0%RB	)					
Left cheek	20	QPSK 50_0	40620/2593	1:1.58	0.472	-0.01	18.56	19.00	1.107	0.522	22.2



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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 does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

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

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

t (86–512) 62992980 www.sgsgroup.com.c t (86–512) 62992980 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 87 of 99

Left tilted	20	QPSK 50_0	40620/2593	1:1.58	0.561	-0.14	18.56	19.00	1.107	0.621	22.2		
Right cheek	20	QPSK 50_0	40620/2593	1:1.58	0.476	-0.06	18.56	19.00	1.107	0.527	22.2		
Right tilted	20	QPSK 50_0	40620/2593	1:1.58	0.552	-0.05	18.56	19.00	1.107	0.611	22.2		
			Head Test	Data(1	00%RB	3)							
Left tilted	20	QPSK 100_0	40185/2549.5	1:1.58	0.611	0.11	18.23	19.00	1.194	0.730	22.2		
			Body worn Test dat	a(Sepa	rate 15	mm 1R	RB)						
Front side	20	QPSK 1_0	40620/2593	1:1.58	0.095	0.04	19.26	20.00	1.186	0.113	22.2		
Back side	20	QPSK 1_0	40620/2593	1:1.58	0.241	0.01	19.26	20.00	1.186	0.286	22.2		
Back side_UL 41C	20+20	QPSK 1_0	40620+40422/2593+2573.2	1:1.58	0.233	-0.02	19.22	20.00	1.197	0.279	22.2		
			Body worn Test data	(Separa	ate 15m	nm 50%	RB)						
Front side													
Back side	20	QPSK 50_0	40620/2593	1:1.58	0.201	-0.16	18.56	19.00	1.107	0.222	22.2		
	,		Hotspot Test data	Separa	ate 10m	nm 1RB	)			·			
Front side	20	QPSK 1_0	40620/2593	1:1.58	0.169	0.04	19.26	20.00	1.186	0.200	22.2		
Back side	20	QPSK 1_0	40620/2593	1:1.58	0.536	0.02	19.26	20.00	1.186	0.636	22.2		
Back side_UL 41C	20+20	QPSK 1_0	40620+40422/2593+2573.2	1:1.58	0.516	0.07	19.22	20.00	1.197	0.618	22.2		
Right side	20	QPSK 1_0	40620/2593	1:1.58	0.362	-0.01	19.26	20.00	1.186	0.429	22.2		
Top side	20	QPSK 1_0	40620/2593	1:1.58	0.471	-0.05	19.26	20.00	1.186	0.558	22.2		
			Hotspot Test data(S	eparat	e 10mn	1 50%R	(B)						
Front side	Front side 20 QPSK 50 0 40620/2593 1:1.58 0.147 -0.07 18.56 19.00 1.107 0.163 22.2												
Back side	20	QPSK 50_0	40620/2593	1:1.58	0.439	-0.09	18.56	19.00	1.107	0.486	22.2		
Right side	20	QPSK 50_0	40620/2593	1:1.58	0.314	0.08	18.56	19.00	1.107	0.347	22.2		
Top side	20	QPSK 50_0	40620/2593	1:1.58	0.390	-0.11	18.56	19.00	1.107	0.432	22.2		
T-1-1- 00 OAD -4	. == -									•			

Table 38: SAR of LTE Band 41 for Head and Body.

#### 8.2.12 SAR Result of LTE Band 66

			LTE Band 6	6 SAR Te	st Rec	ord					
			Ant 1	Test Red	ord						
Test position	BW.	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg ) 1-g		Conducted Power(dBm		d	Scale d SAR 1-g (W/kg)	Liquid Temp.(℃ )
			Head <sup>-</sup>	Test Data(	1RB)						
Left cheek	20	QPSK 1_0	132322/1745	1:1	0.317	0.11	22.93	24.00	1.279	0.406	22.3
Left tilted	20	QPSK 1_0	132322/1745	1:1	0.107	0.11	22.93	24.00	1.279	0.137	22.3
Right cheek	20	QPSK 1_0	132322/1745	1:1	0.346	-0.03	22.93	24.00	1.279	0.443	22.3
Right cheek_UL 66B	15+5	QPSK 1_0	132322+132229/1745+1 735.7	1:1	0.315	0.04	22.79	24.00	1.321	0.416	22.3
Right cheek_UL 66C	20+2 0	QPSK 1_0	132322+132124/1745+1 725.2	1:1	0.325	-0.01	22.89	24.00	1.291	0.420	22.3
Right tilted	20	QPSK 1_0	132322/1745	1:1	0.145	0.16	22.93	24.00	1.279	0.186	22.3
			Head Te	est Data(5	0%RB)						
Left cheek	20	QPSK 50_0	132322/1745	1:1	0.321	-0.11	22.31	23.00	1.172	0.376	22.3
Left tilted	20	QPSK 50_0	132322/1745	1:1	0.107	0.03	22.31	23.00	1.172	0.125	22.3
Right cheek	20	QPSK 50_0	132322/1745	1:1	0.316	0.13	22.31	23.00	1.172	0.370	22.3
Right tilted	20	QPSK 50_0	132322/1745	1:1	0.140	-0.13	22.31	23.00	1.172	0.164	22.3
	•		Body worn Test of	data(Sepa	rate 15	mm 1R	B)				
Front side	20	QPSK 1_0	132322/1745	1:1	0.390	0.00	22.93	24.00	1.279	0.499	22.3
Back side	20	QPSK 1_0	132322/1745	1:1	0.408	-0.04	22.93	24.00	1.279	0.522	22.3
Back side_UL 66B	15+5	QPSK 1_0	132322+132229/1745+1 735.7	1:1	0.355	-0.11	22.79	24.00	1.321	0.469	22.3
Back side_UL 66C	20+2 0	QPSK 1_0	132322+132124/1745+1 725.2	1:1	0.379	0.02	22.89	24.00	1.291	0.489	22.3
			Body worn Test da	ta(Separa	te 15m	m 50%	RB)		•		
Front side	20	QPSK 50_0	132322/1745	1:1	0.361	-0.06	22.31	23.00	1.172	0.423	22.3



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 so ole responsibility is to its Client and this document does not exceed except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 88 of 99

Back side	20	QPSK 50 0	132322/1745	1:1	0.399	0.14	22.31	23.00	1.172	0.468	22.3
Dack side	20	QF3K 50_0	Hotspot Test da					23.00	1.172	0.400	22.3
Front side	20	ODCK 4 0	132322/1745	1:1	0.625			24.00	4.070	0.800	22.3
		QPSK 1_0					22.93	24.00	1.279		
Front side	20	QPSK 1_0	132072/1720	1:1	0.608		22.88	24.00	1.294	0.787	22.3
Front side	20	QPSK 1_0	132572/1770	1:1	0.688		22.91	24.00	1.285	0.884	22.3
Back side	20	QPSK 1_0	132322/1745	1:1	0.821	0.17	22.93	24.00	1.279	1.050	22.3
Back side-repeated	20	QPSK 1_0	132322/1745	1:1	0.816	0.01	22.93	24.00	1.279	1.044	22.3
Back side_UL 66B	15+5	QPSK 1_0	132322+132229/1745+1 735.7	1:1	0.765	0.02	22.79	24.00	1.321	1.011	22.3
Back side_UL 66C	20+2 0	QPSK 1_0	132322+132124/1745+1 725.2	1:1	0.784	-0.12	22.89	24.00	1.291	1.012	22.3
Back side	20	QPSK 1_0	132072/1720	1:1	0.643	0.14	22.88	24.00	1.294	0.832	22.3
Back side	20	QPSK 1_0	132572/1770	1:1	0.807	-0.11	22.91	24.00	1.285	1.037	22.3
Left side	20	QPSK 1_0	132322/1745	1:1	0.265	0.01	22.93	24.00	1.279	0.339	22.3
Right side	20	QPSK 1_0	132322/1745	1:1	0.396	0.12	22.93	24.00	1.279	0.507	22.3
Bottom side	20	QPSK 1_0	132322/1745	1:1	0.667	0.17	22.93	24.00	1.279	0.853	22.3
Bottom side	20	QPSK 1_0	132322/1745	1:1	0.533	-0.09	22.88	24.00	1.294	0.690	22.3
Bottom side	20	QPSK 1_0	132322/1745	1:1	0.594	0.02	22.91	24.00	1.285	0.763	22.3
			Hotspot Test data	(Separate	10mm	50%RE	3)				
Front side	20	QPSK 50_0	132322/1745	1:1	0.554	-0.06	22.31	23.00	1.172	0.649	22.3
Back side	20	QPSK 50_0	132322/1745	1:1	0.697	0.13	22.31	23.00	1.172	0.817	22.3
Back side	20	QPSK 50 0	132072/1720	1:1	0.634	0.02	22.72	23.00	1.067	0.676	22.3
Back side	20	QPSK 50 0	132572/1770	1:1	0.690	0.08	22.90	23.00	1.023	0.706	22.3
Left side	20	QPSK 50 0	132322/1745	1:1	0.217	0.01	22.31	23.00	1.172	0.254	22.3
Right side	20	QPSK 50 0	132322/1745	1:1	0.391	0.16	22.31	23.00	1.172	0.458	22.3
Bottom side	20	QPSK 50 0	132322/1745	1:1	0.635	0.15	22.31	23.00	1.172	0.744	22.3
		_	Hotspot Test data	(Separate	10mm	100%R	B)				
Front side	20	QPSK 100 0	132322/1745	1:1	0.566	0.01	21.82	23.00	1.312	0.743	22.3
Back side	20	QPSK 100_0	132322/1745	1:1	0.672	-0.18	21.82	23.00	1.312	0.882	22.3
Bottom side	20	QPSK 100_0	132322/1745	1:1	0.614	0.02	21.82	23.00	1.312	0.806	22.3

Table 39: SAR of LTE Band 66 for Head and Body.

Test Position	Channel/ Frequency	Measured SAR	1 <sup>st</sup> Repeated	Ratio	2 <sup>nd</sup> Repeated	3rd Repeated
	(MHz)	(1g)	SAR (1g)		SAR (1g)	SAR (1g)
Back side	132322/1745	0.821	0.816	1.006127451	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

#### 8.2.13 SAR Result of LTE Band 71

				LTE B	and 71 SA	R Test Re	cord								
					Ant 1 Test	Record									
Test position	Test position BW. Test mode Test ch./Freq. Duty Cycle SAR (W/kg) 1-g Conducted (dB) Conducted Power(dBm) Conducted Power(dBm) Conducted Factor Scaled Factor (W/kg) Factor (W/kg) Cycle Conducted Factor (W/kg) Cycle Conducted Factor (W/kg) Factor (W/kg) Cycle Conducted Factor (W/kg) Factor (W/kg) Cycle Conducted Factor (W/kg) Factor (W/kg) Factor (W/kg) Cycle Conducted Factor (W/kg) Factor (W/														
				Н	lead Test D	ata(1RB)									
Left cheek	20	QPSK 1_0	133322/683	1:1	0.152	0.11	23.65	25.00	1.365	0.207	22.3				
Left tilted	Left tilted 20 QPSK 1_0 133322/683 1:1 0.086 0.06 23.65 25.00 1.365 0.117 22.3														
Right cheek	20	QPSK 1_0	133322/683												



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 so ole responsibility is to its Client and this document does not exceed except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone
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窟1号的6号厂房南部 邮编: 215000

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

www.sgsgroup.com.cn sgs.china@sgs.com

<sup>2)</sup> A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

<sup>3)</sup> A third repeated measurement was preformed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

<sup>4)</sup> Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 89 of 99

Right tilted	20	QPSK 1_0	133322/683	1:1	0.088	0.11	23.65	25.00	1.365	0.120	22.3
				He	ad Test Da	ta(50%RB	)				
Left cheek	20	QPSK 50_0	133322/683	1:1	0.139	-0.02	22.91	24.00	1.285	0.179	22.3
Left tilted	20	QPSK 50_0	133322/683	1:1	0.080	0.09	22.91	24.00	1.285	0.103	22.3
Right cheek	20	QPSK 50_0	133322/683	1:1	0.129	-0.17	22.91	24.00	1.285	0.166	22.3
Right tilted	20	QPSK 50_0	133322/683	1:1	0.070	-0.07	22.91	24.00	1.285	0.090	22.3
			E	Body worn	Test data(S	Separate 1	5mm 1RB)				
Front side	20	QPSK 1_0	133322/683	1:1	0.241	0.17	23.65	25.00	1.365	0.329	22.3
Back side	20	QPSK 1_0	133322/683	1:1	0.303	-0.01	23.65	25.00	1.365	0.413	22.3
			Вс	dy worn Te	est data(Se	parate 15r	nm 50%RB)				
Front side	20	QPSK 50_0	133322/683	1:1	0.202	-0.18	22.91	24.00	1.285	0.260	22.3
Back side	20	QPSK 50_0	133322/683	1:1	0.268	0.07	22.91	24.00	1.285	0.344	22.3
				Hotspot Te	est data(Se	parate 10n	nm 1RB)				
Front side	20	QPSK 1_0	133322/683	1:1	0.212	0.03	23.65	25.00	1.365	0.289	22.3
Back side	20	QPSK 1_0	133322/683	1:1	0.331	0.07	23.65	25.00	1.365	0.452	22.3
Left side	20	QPSK 1_0	133322/683	1:1	0.159	0.03	23.65	25.00	1.365	0.217	22.3
Right side	20	QPSK 1_0	133322/683	1:1	0.218	-0.01	23.65	25.00	1.365	0.297	22.3
Bottom side	20	QPSK 1_0	133322/683	1:1	0.039	0.17	23.65	25.00	1.365	0.053	22.3
			H	lotspot Tes	t data(Sepa	arate 10mr	n 50%RB)				
Front side	20	QPSK 50_0	133322/683	1:1	0.179	-0.14	22.91	24.00	1.285	0.230	22.3
Back side	20	QPSK 50_0	133322/683	1:1	0.288	-0.10	22.91	24.00	1.285	0.370	22.3
Left side	20	QPSK 50_0	133322/683	1:1	0.144	0.02	22.91	24.00	1.285	0.185	22.3
Right side	20	QPSK 50_0	133322/683	1:1	0.194	-0.18	22.91	24.00	1.285	0.249	22.3
Bottom side	20	QPSK 50_0	133322/683	1:1	0.024	0.10	22.91	24.00	1.285	0.031	22.3
		•		•	-						

Table 40: SAR of LTE Band 71 for Head and Body.

#### 8.2.14 SAR Result of WIFI 2.4G

				Wi-Fi 2	.4G SAR	Test Reco	rd				
				Ant8	Test Rec	ord chain0					
Test position	Test mode	Test ch./Freq.	Duty	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1- g (W/kg)	Liquid Temp.(℃)
					Head Tes	t data					
Left cheek	802.11b	6/2437	99.52%	1.005	0.199	0.09	14.15	15.00	1.216	0.243	22.4
Left tilted	802.11b	6/2437	99.52%	1.005	0.185	-0.06	14.15	15.00	1.216	0.226	22.4
Right cheek	802.11b	6/2437	99.52%	1.005	0.591	0.16	14.15	15.00	1.216	0.722	22.4
Right tilted	802.11b	6/2437	99.52%	1.005	0.273	-0.15	14.15	15.00	1.216	0.334	22.4
				Body worn	Test data(	Separate 1	5mm)				
Front side	802.11b	6/2437	99.52%	1.005	0.068	-0.19	14.15	15.00	1.216	0.083	22.4
Back side	802.11b	6/2437	99.52%	1.005	0.121	0.18	14.15	15.00	1.216	0.148	22.4
				Hotspot Te	est data (S	Separate 10	mm)				
Front side	802.11b	6/2437	99.52%	1.005	0.109	0.11	14.15	15.00	1.216	0.133	22.4
Back side	802.11b	6/2437	99.52%	1.005	0.214	-0.08	14.15	15.00	1.216	0.262	22.4
Left side	802.11b	6/2437	99.52%	1.005	0.096	0.10	14.15	15.00	1.216	0.117	22.4
Top side	802.11b	6/2437	99.52%	1.005	0.057	0.01	14.15	15.00	1.216	0.070	22.4

Table 41: SAR of WIFI 2.4G for Head and Body.

Note: When the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is  $\leq$  1.2 W/kg, SAR test for the other 802.11 modes are not required.



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 so ole responsibility is to its Client and this document does not exceed except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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

South of No. 6 Pfart, No. 1, Runsheng Read, Suchou Industrial Park, Suchou Area, China (Jangsu) 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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 90 of 99

#### 8.2.15 SAR Result of WIFI 5G

					5G SAR Te						
				Ant6	Test Reco	rd chain0					
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	(ab)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)
	1				Test data o				1		1
Left cheek	802.11ac 80M	58/5290	86.49%	1.156	0.076	-0.03	14.16	15.00	1.213	0.107	22.4
Left tilted	802.11ac 80M	58/5290	86.49%	1.156	0.062	-0.02	14.16	15.00	1.213	0.087	22.4
	802.11ac 80M		86.49%	1.156	0.496	0.02	14.16	15.00	1.213	0.696	22.4
Right tilted	802.11ac 80M	58/5290	86.49%	1.156	0.207	-0.01	14.16	15.00	1.213	0.290	22.4
	T				Test data o						
	802.11ac 80M		86.49%	1.156	0.060	-0.16	13.80	14.50	1.175	0.082	22.2
Left tilted	802.11ac 80M			1.156	0.036	0.10	13.80	14.50	1.175	0.049	22.2
	802.11ac 80M			1.156	0.343	-0.11	13.80	14.50	1.175	0.466	22.2
Right tilted	802.11ac 80M	122/5610	86.49%	1.156	0.161	-0.09	13.80	14.50	1.175	0.219	22.2
	T				Test data						
	802.11ac 80M		86.49%	1.156	0.055	0.02	15.38	16.50	1.294	0.082	22.3
Left tilted			86.49%	1.156	0.052	0.13	15.38	16.50	1.294	0.078	22.3
	802.11ac 80M			1.156	0.473	0.02	15.38	16.50	1.294	0.708	22.3
Right tilted	802.11ac 80M	155/5775		1.156	0.167	-0.10	15.38	16.50	1.294	0.250	22.3
	la a a						rate 15mm)				
	802.11ac 80M		86.49%	1.156	0.070	-0.16	14.16	15.00	1.213	0.098	22.4
Back side	802.11ac 80M	58/5290	86.49%	1.156	0.263	0.06	14.16	15.00	1.213	0.369	22.4
	1						rate 15mm)				
	802.11ac 80M		86.49%	1.156	0.059	-0.10	13.80	14.50	1.175	0.080	22.2
Back side	802.11ac 80M	122/5610		1.156	0.152	0.05	13.80	14.50	1.175	0.206	22.2
	1				data of U-N						
	802.11ac 80M			1.156	0.083	0.16	15.38	16.50	1.294	0.124	22.3
Back side	802.11ac 80M	155/5775		1.156	0.273	0.04	15.38	16.50	1.294	0.409	22.3
	la a a			•	ata of U-NII						
	802.11ac 80M		86.49%	1.156	0.087	0.04	13.77	15.00	1.327	0.134	22.4
Back side	802.11ac 80M		86.49%	1.156	0.287	-0.09	13.77	15.00	1.327	0.440	22.4
Left side	802.11ac 80M	42/5210	86.49%	1.156	0.428	0.06	13.77	15.00	1.327	0.657	22.4
Top side	802.11ac 80M	42/5210	86.49%	1.156	0.054	-0.12	13.77	15.00	1.327	0.083	22.4
					ata of U-NII			40.50		0.400	
	802.11ac 80M		86.49%	1.156	0.111	0.18	15.38	16.50	1.294	0.166	22.3
Back side	802.11ac 80M			1.156	0.321	0.06	15.38	16.50	1.294	0.480	22.3
Left side	802.11ac 80M		86.49%	1.156	0.459	0.04	15.38	16.50	1.294	0.687	22.3
Top side	802.11ac 80M	155/5775	86.49%	1.156	0.074	-0.09	15.38	16.50	1.294	0.111	22.3
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power(dBm)		Scaled factor	Scaled SAR 10-g (W/kg)	Liquid Temp.(℃)
		Pro	duct spec	ific 10gSAF	R Test data	of U-NII-2	A(Separate 0r	nm)			
Front side	802.11ac 80M	58/5290	86.49%	1.156	0.295	-0.09	14.16	15.00	1.213	0.414	22.4
Back side	802.11ac 80M	58/5290	86.49%	1.156	0.521	-0.01	14.16	15.00	1.213	0.731	22.4
Left side	802.11ac 80M	58/5290	86.49%	1.156	0.858	0.01	14.16	15.00	1.213	1.204	22.4
Top side	802.11ac 80M	58/5290	86.49%	1.156	0.081	0.14	14.16	15.00	1.213	0.114	22.4
		Pro	duct spec	ific 10gSAF	R Test data	of U-NII-2	C(Separate 0r	nm)			
Front side	802.11ac 80M	122/5610	86.49%	1.156	0.127	-0.04	13.80	14.50	1.175	0.173	22.2
	802.11ac 80M			1.156	0.413	-0.04	13.80	14.50	1.175	0.561	22.2
	802.11ac 80M			1.156	0.503	-0.06	13.80	14.50	1.175	0.683	22.2



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot Free Trade Zone 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号约6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 91 of 99

Top side	802.11ac 80M 122/5610	86.49%	1.156	0.037	-0.17	13.80	14.50	1.175	0.050	22.2

Table 42: SAR of WIFI 5G for Head and Body.

#### Note:

1) As the 802.11a highest reported SAR is smaller than 1.2 W/kg , and the tune-up of the other 802.11 modes are not higher than 802.11a,therefore the adjusted SAR is ≤ 1.2 W/kg for other 802.11 modes, SAR test for the other 802.11 modes are not required. For Product specific 10gSAR the highest reported SAR is smaller than 3.0 W/kg, SAR test for the other 802.11 modes are also not required.



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

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 92 of 99

#### 8.2.16 SAR Result of BT

	Bluetooth SAR Test Record												
	Ant9 Test Record												
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)		Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)		
					Head Tes	t data							
Left cheek	DH5	39/2441	78.00%	1.282	0.015	0.09	8.16	9.00	1.213	0.023	22.4		
Left tilted	DH5	39/2441	78.00%	1.282	0.009	0.09	8.16	9.00	1.213	0.014	22.4		
Right cheek	DH5	39/2441	78.00%	1.282	0.055	-0.14	8.16	9.00	1.213	0.086	22.4		
Right tilted	DH5	39/2441	78.00%	1.282	0.020	0.12	8.16	9.00	1.213	0.031	22.4		
			В	ody wor	n Test data(	Separate 1	5mm)						
Front side	DH5	39/2441	78.00%	1.282	0.009	-0.07	8.16	9.00	1.213	0.014	22.4		
Back side	DH5	39/2441	78.00%	1.282	0.014	-0.06	8.16	9.00	1.213	0.022	22.4		
				Hotspot '	Test data (S	Separate 10	mm)						
Front side	DH5	39/2441	78.00%	1.282	0.014	-0.04	8.16	9.00	1.213	0.022	22.4		
Back side	DH5	39/2441	78.00%	1.282	0.028	0.12	8.16	9.00	1.213	0.044	22.4		
Left side	DH5	39/2441	78.00%	1.282	0.009	-0.12	8.16	9.00	1.213	0.014	22.4		
Top side	DH5	39/2441	78.00%	1.282	0.013	-0.01	8.16	9.00	1.213	0.020	22.4		

Table 43: SAR of BT for Head and Body.



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Kangsu) Pilot Free Trade Zone 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鹿1号的6号厂房南部 邮编: 215000

t (86–512) 62992980 www.sgsgroup.com.c t (86–512) 62992980 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 93 of 99

### 8.3 Multiple Transmitter Evaluation

#### 8.3.1 Simultaneous SAR SAR test evaluation

#### **Simultaneous Transmission Possibilities**

	NO	Simultaneous Tx Combination	Head	Body- worn	Hotspot	Product Specific 10-g (0mm)	
ſ	1	WWAN + WIFI2.4G	Υ	Y	Y	Υ	
	2	WWAN + WIFI5G + BT	Υ	Υ	Y	Υ	

#### Note:

- 1) The device support DTM function.
- 2) For Wi-Fi 5G, U-NII-2A (5250-5350 MHz) and U-NII-2C (5470-5725 MHz) bands does not support hotspot function.
- 3) Per FCC KDB Publication 648474 D04 Handset SAR, Phablet SAR tests were not required it wireless router 1g SAR(Scaled to the maximum output power ,including tolerance) < 1.2 W/Kg. Therefore, no further analysis beyond tables included in this section was required to determine that possible Simultaneous transmission scenarios would not exceed the SAR 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.ags.com/en/Terms-and-Conditions.agx; and, for electronic Documents at http://www.ags.com/en/Terms-and-Conditions/Terms-e-Document as that this printed in the conditions for Terms and Conditions of Terms and Conditions for Terms-and-Conditions/Terms-e-Document as year. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 94 of 99

# **8.3.2** Simultaneous Transmission SAR Summation Scenario Simultaneous Transmission SAR Summation Scenario for WLAN Head:

Omitation of Transmission Of			SARmax				
Test	position	Main Ant0	WiFi 2.4G Ant6(chain0)	WiFi 5G Ant6(chain0)	ВТ	Summ	ed SAR
		1	2	3	4	1+2	1+3+4
	Left cheek	0.575	0.243	0.107	0.023	0.818	0.705
GSM850	Left tilted	0.436	0.226	0.087	0.014	0.662	0.537
GSIVIOOU	Right cheek	0.504	0.722	0.708	0.086	1.226	1.298
	Right tilted	0.362	0.334	0.290	0.031	0.696	0.683
	Left cheek	1.228	0.243	0.107	0.023	1.471	1.358
GSM1900	Left tilted	0.737	0.226	0.087	0.014	0.963	0.838
GSW1900	Right cheek	0.489	0.722	0.708	0.086	1.211	1.283
	Right tilted	0.336	0.334	0.290	0.031	0.670	0.657
	Left cheek	1.077	0.243	0.107	0.023	1.320	1.207
WCDMA II	Left tilted	0.747	0.226	0.087	0.014	0.973	0.848
WCDIVIA II	Right cheek	0.698	0.722	0.708	0.086	1.420	1.492
	Right tilted	0.454	0.334	0.290	0.031	0.788	0.775
	Left cheek	0.220	0.243	0.107	0.023	0.463	0.350
WCDMA IV	Left tilted	0.060	0.226	0.087	0.014	0.286	0.161
VVCDIVIA IV	Right cheek	0.205	0.722	0.708	0.086	0.927	0.999
	Right tilted	0.118	0.334	0.290	0.031	0.452	0.439
	Left cheek	0.276	0.243	0.107	0.023	0.519	0.406
WCDMA V	Left tilted	0.181	0.226	0.087	0.014	0.407	0.282
WCDIVIA V	Right cheek	0.205	0.722	0.708	0.086	0.927	0.999
	Right tilted	0.136	0.334	0.290	0.031	0.470	0.457
	Left cheek	0.289	0.243	0.107	0.023	0.532	0.419
LTE Band 2	Left tilted	0.261	0.226	0.087	0.014	0.487	0.362
LTE Danu Z	Right cheek	0.492	0.722	0.708	0.086	1.214	1.286
	Right tilted	0.294	0.334	0.290	0.031	0.628	0.615
	Left cheek	0.458	0.243	0.107	0.023	0.701	0.588
LTE Band 5	Left tilted	0.252	0.226	0.087	0.014	0.478	0.353
LTE Danu 3	Right cheek	0.261	0.722	0.708	0.086	0.983	1.055
	Right tilted	0.208	0.334	0.290	0.031	0.542	0.529
	Left cheek	0.884	0.243	0.107	0.023	1.127	1.014
LTE Band 7	Left tilted	1.029	0.226	0.087	0.014	1.255	1.130
ETE Band 7	Right cheek	0.792	0.722	0.708	0.086	1.514	1.586
	Right tilted	0.932	0.334	0.290	0.031	1.266	1.253
	Left cheek	0.308	0.243	0.107	0.023	0.551	0.438
LTE Band 12	Left tilted	0.152	0.226	0.087	0.014	0.378	0.253
ETE Band 12	Right cheek	0.203	0.722	0.708	0.086	0.925	0.997
	Right tilted	0.141	0.334	0.290	0.031	0.475	0.462
	Left cheek	0.294	0.243	0.107	0.023	0.537	0.424
LTF Band 13	Left tilted	0.162	0.226	0.087	0.014	0.388	0.263
LTE Band 13	Right cheek	0.233	0.722	0.708	0.086	0.955	1.027
	Right tilted	0.180	0.334	0.290	0.031	0.514	0.501
	Left cheek	0.586	0.243	0.107	0.023	0.829	0.716
LTE Band 41	Left tilted	0.895	0.226	0.087	0.014	1.121	0.996
	Right cheek	0.708	0.722	0.708	0.086	1.430	1.502



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.apx.and.for electronic format documents">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.apx.and.for electronic Document as this prints.and.for electronic Document as part advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extend to 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 reports.\*\*Certificite, please contact us at telephone: (86-755) 8307 1443.\*\*

\*\*Total Report Report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot Free Trade Zone 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号约6号厂房南部 邮编: 215000

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



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 95 of 99

	Right tilted	0.761	0.334	0.290	0.031	1.095	1.082
	Left cheek	0.406	0.243	0.107	0.023	0.649	0.536
LTE Band 66	Left tilted	0.137	0.226	0.087	0.014	0.363	0.238
LIE Band 66	Right cheek	0.443	0.722	0.708	0.086	1.165	1.237
	Right tilted	0.186	0.334	0.290	0.031	0.520	0.507
	Left cheek	0.207	0.243	0.107	0.023	0.450	0.337
LTE Band 71	Left tilted	0.117	0.226	0.087	0.014	0.343	0.218
LIE Ballu / I	Right cheek	0.240	0.722	0.708	0.086	0.962	1.034
	Right tilted	0.120	0.334	0.290	0.031	0.454	0.441

Simultaneous Transmission SAR Summation Scenario for WLAN Body:

Body-worn:

			SARmax	(W/kg)			
Test p	osition	Main Ant0	WiFi 2.4G Ant6(chain0)	WiFi 5G Ant6(chain0)	ВТ	Summed SAR	
		1	2	3	4	1+2	1+3+4
GSM850	Front side	0.517	0.083	0.124	0.014	0.600	0.655
GSIVIOSU	Back side	0.596	0.148	0.409	0.022	0.744	1.027
GSM1900	Front side	0.133	0.083	0.124	0.014	0.216	0.271
G3W1900	Back side	0.243	0.148	0.409	0.022	0.391	0.674
WCDMA II	Front side	0.164	0.083	0.124	0.014	0.247	0.302
WCDIVIA II	Back side	0.332	0.148	0.409	0.022	0.480	0.763
WCDMA IV	Front side	0.312	0.083	0.124	0.014	0.395	0.450
WCDIVIA IV	Back side	0.374	0.148	0.409	0.022	0.522	0.805
WCDMA V	Front side	0.213	0.083	0.124	0.014	0.296	0.351
VVCDIVIA V	Back side	0.264	0.148	0.409	0.022	0.412	0.695
LTE Band 2	Front side	0.551	0.083	0.124	0.014	0.634	0.689
LIE Danu Z	Back side	0.649	0.148	0.409	0.022	0.797	1.080
LTE Band 5	Front side	0.311	0.083	0.124	0.014	0.394	0.449
LIE Band 5	Back side	0.383	0.148	0.409	0.022	0.531	0.814
LTC Dand 7	Front side	0.133	0.083	0.124	0.014	0.216	0.271
LTE Band 7	Back side	0.356	0.148	0.409	0.022	0.504	0.787
LTE Band 12	Front side	0.351	0.083	0.124	0.014	0.434	0.489
LIE Dallu 12	Back side	0.507	0.148	0.409	0.022	0.655	0.938
LTE Band 13	Front side	0.279	0.083	0.124	0.014	0.362	0.417
LIE Dallu 13	Back side	0.384	0.148	0.409	0.022	0.532	0.815
LTE Band 41	Front side	0.113	0.083	0.124	0.014	0.196	0.251
LIE Dano 41	Back side	0.286	0.148	0.409	0.022	0.434	0.717
LTE Pand 66	Front side	0.499	0.083	0.124	0.014	0.582	0.637
LTE Band 66	Back side	0.522	0.148	0.409	0.022	0.670	0.953
LTE Band 71	Front side	0.329	0.083	0.124	0.014	0.412	0.467
LIE Danu / I	Back side	0.413	0.148	0.409	0.022	0.561	0.844

Hotspot:

Hotspot.							
Test position							
		Main Ant0	WiFi 2.4G Ant6(chain0)	WiFi 5G Ant6(chain0)	ВТ	Summed SAR	
		1	2	3	4	1+2	1+3+4
GSM850	Front side	0.531	0.133	0.166	0.022	0.664	0.719
G91/1030	Back side	0.856	0.262	0.480	0.044	1.118	1.380



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.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sps.com/en/Terms-and-Conditions.aspx.and">http://www.sps.com/en/Terms-and-Conditions.aspx.and</a>, for electronic Forms-e-Document exc. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues define 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 fallsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443,

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot Free Trade Zone 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号约6号厂房南部 邮编: 215000

t (86–512) 62992980 w



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 96 of 99

	Left side	0.162	0.117	0.687	0.014	0.279	0.863
	Right side	0.337	0.000	0.000	0.000	0.279	0.337
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.364	0.000	0.000	0.000	0.364	0.364
	Front side	0.387	0.133	0.166	0.022	0.520	0.575
	Back side	0.901	0.262	0.480	0.044	1.163	1.425
	Left side	0.000	0.117	0.687	0.014	0.117	0.701
GSM1900	Right side	0.506	0.000	0.000	0.000	0.506	0.506
	Top side	0.530	0.070	0.111	0.020	0.600	0.661
	Bottom side	0.000	0.000	0.000	0.000	0.000	0.000
	Front side	0.344	0.133	0.166	0.022	0.477	0.532
	Back side	0.737	0.262	0.480	0.044	0.999	1.261
	Left side	0.000	0.117	0.687	0.014	0.117	0.701
WCDMA II	Right side	0.509	0.000	0.000	0.000	0.509	0.509
	Top side	0.576	0.070	0.111	0.020	0.646	0.303
	Bottom side	0.000	0.000	0.000	0.020	0.000	0.000
	Front side	0.592	0.133	0.166	0.022	0.725	0.780
	Back side	0.744	0.262	0.480	0.022	1.006	1.268
	Left side	0.268	0.117	0.687	0.014	0.385	0.969
WCDMA IV	Right side	0.371	0.000	0.000	0.000	0.371	0.371
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.694	0.000	0.000	0.000	0.694	0.694
	Front side	0.202	0.133	0.166	0.022	0.335	0.390
	Back side	0.383	0.262	0.480	0.022	0.645	0.907
	Left side	0.132	0.117	0.687	0.014	0.249	0.833
WCDMA V	Right side	0.148	0.000	0.000	0.000	0.148	0.000
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.143	0.000	0.000	0.000	0.143	0.143
	Front side	0.917	0.133	0.166	0.022	1.050	1.105
	Back side	1.038	0.262	0.480	0.044	1.300	1.562
	Left side	0.431	0.117	0.687	0.014	0.548	1.132
LTE Band 2	Right side	0.581	0.000	0.000	0.000	0.581	0.581
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.790	0.000	0.000	0.000	0.790	0.790
	Front side	0.066	0.133	0.166	0.022	0.199	0.254
	Back side	0.118	0.262	0.480	0.044	0.380	0.642
	Left side	0.150	0.117	0.687	0.014	0.267	0.851
LTE Band 5	Right side	0.191	0.000	0.000	0.000	0.191	0.191
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.245	0.000	0.000	0.000	0.245	0.245
	Front side	0.208	0.133	0.166	0.022	0.341	0.396
	Back side	0.747	0.262	0.480	0.044	1.009	1.271
	Left side	0.000	0.117	0.687	0.014	0.117	0.701
LTE Band 7	Right side	0.524	0.000	0.000	0.000	0.524	0.524
	Top side	0.657	0.070	0.111	0.020	0.727	0.788
	Bottom side	0.000	0.000	0.000	0.000	0.000	0.000
	Front side	0.321	0.133	0.166	0.022	0.454	0.509
	Back side	0.484	0.262	0.480	0.044	0.746	1.008
	Left side	0.212	0.117	0.687	0.014	0.329	0.913
LTE Band 12	Right side	0.292	0.000	0.000	0.000	0.292	0.292
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.006	0.000	0.000	0.000	0.006	0.006
LTE Band 13	Front side	0.283	0.133	0.166	0.022	0.416	0.471



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, indeminification 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 faistification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CM.Doccheck@sgs.com

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 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号约6号厂房南部 邮编: 215000

t (86–512) 62992980



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 97 of 99

	Left side	0.175	0.117	0.687	0.014	0.292	0.876
	Right side	0.212	0.000	0.000	0.000	0.212	0.212
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.075	0.000	0.000	0.000	0.075	0.075
	Front side	0.200	0.133	0.166	0.022	0.333	0.388
	Back side	0.636	0.262	0.480	0.044	0.898	1.160
LTE Band 41	Left side	0.000	0.117	0.687	0.014	0.117	0.701
LIE Danu 41	Right side	0.429	0.000	0.000	0.000	0.429	0.429
	Top side	0.558	0.070	0.111	0.020	0.628	0.689
	Bottom side	0.000	0.000	0.000	0.000	0.000	0.000
	Front side	0.884	0.133	0.166	0.022	1.017	1.072
	Back side	1.050	0.262	0.480	0.044	1.312	1.574
LTF Band 66	Left side	0.339	0.117	0.687	0.014	0.456	1.040
LIE Danu 00	Right side	0.507	0.000	0.000	0.000	0.507	0.507
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.853	0.000	0.000	0.000	0.853	0.853
	Front side	0.289	0.133	0.166	0.022	0.422	0.477
	Back side	0.452	0.262	0.480	0.044	0.714	0.976
LTE Band 71	Left side	0.217	0.117	0.687	0.014	0.334	0.918
	Right side	0.297	0.000	0.000	0.000	0.297	0.297
	Top side	0.000	0.070	0.111	0.020	0.070	0.131
	Bottom side	0.053	0.000	0.000	0.000	0.053	0.053



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, indeminification 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 faistification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-75) 8307 1443, or email: CM.Doccheck@sgs.com

South of No. 6 Pfart, No. 1, Runsheng Road, Suchou Industrial Park, Suchou Area, China (Jiangsu) Pilot Free Trade Zone 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号约6号厂房南部 邮编: 215000

(86–512) 62992980 www.sgsgroup.com. (86–512) 62992980 sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 98 of 99

9 Equipment list

	Test Platform	SPEAG DASY5	Professional			
	Description	SAR Test Systen	n (Frequency range	300MHz-6GHz)		
	Software Reference	DASY52 52.10.4	(1527); SEMCAD X	14.6.14(7483)		
			Hardware Referenc	е		
	Equipment	Manufacturer	Model	Serial Number	Calibration Date	Due date of calibration
$\boxtimes$	Twin Phantom	SPEAG	SAM 3	1770	NCR	NCR
$\boxtimes$	DAE	SPEAG	DAE4	1374	2023-06-05	2024-06-04
$\boxtimes$	E-Field Probe	SPEAG	EX3DV4	3982	2023-01-06	2024-01-05
$\boxtimes$	E-Field Probe	SPEAG	EX3DV4	3962	2023-06-29	2024-06-28
$\boxtimes$	Validation Kits	SPEAG	D750V3	1210	2021-09-08	2024-09-07
$\boxtimes$	Validation Kits	SPEAG	D835V2	4d161	2023-08-25	2024-08-24
$\boxtimes$	Validation Kits	SPEAG	D1750V2	1038	2021-12-16	2024-12-15
$\boxtimes$	Validation Kits	SPEAG	D1950V3	1218	2023-05-04	2024-05-03
$\boxtimes$	Validation Kits	SPEAG	D2450V2	922	2023-08-28	2024-08-27
$\boxtimes$	Validation Kits	SPEAG	D2600V2	1180	2021-05-12	2024-05-11
$\boxtimes$	Validation Kits	SPEAG	D5GHzV2	1313	2022-01-25	2025-01-24
$\boxtimes$	Dielectric parameter probes	SPEAG	DAKS-3.5	1120	2023-06-06	2024-06-05
	Vector Network Analyzer and Vector Reflectometer	SPEAG	DAKS_VNA R140	0050920	2023-06-06	2024-06-05
	Universal Radio Communication Tester	R&S	CMW500	111637	2023-09-13	2024-09-12
$\boxtimes$	RF Bi-Directional Coupler	Agilent	86205-60001	MY31400031	NCR	NCR
$\boxtimes$	Signal Generator	R&S	SMB100A	182393	2023-02-06	2024-02-05
$\boxtimes$	Preamplifier	Qiji	YX28980933	202104001	NCR	NCR
$\boxtimes$	Power Sensor	Keysight	U2002H	MY48200110	2022-12-23	2023-12-22
$\boxtimes$	Attenuator	SHX	TS2-3dB	30704	NCR	NCR
$\boxtimes$	Coaxial low pass filter	Mini-Circuits	VLF-2500(+)	NA	NCR	NCR
$\boxtimes$	Coaxial low pass filter	Microlab Fxr	LA-F13	NA	NCR	NCR
$\boxtimes$	DC POWER SUPPLY	SAKO	SK1730SL5A	NA	NCR	NCR
$\boxtimes$	Speed reading thermometer	LKM	DTM3000	SUW201-19-02	2023-09-15	2024-09-14
$\boxtimes$	Humidity and Temperature Indicator	MingGao	MingGao	NA	2023-09-15	2024-09-14

Note: All the equipments are within the valid period when the tests are performed.



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

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

South of No. 6 Plant, No. 1, Runsheng Road, Suchou Industrial Park, Suzhou Area, China (Jiangsu) Plot 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裔1号约6号厂房南部 邮编: 215000

t (86–512) 62992980 wv t (86–512) 62992980 sg

www.sgsgroup.com.cn sgs.china@sgs.com



Report No.: SEWM2309000387RG07

Rev.: 01 Page: 99 of 99

10 Calibration certificate

Please see the Appendix C

11 Photographs

Please see the Appendix D

**Appendix A: Detailed System Check Results** 

**Appendix B: Detailed Test Results** 

**Appendix C: Calibration certificate** 

**Appendix D: Photographs** 





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 http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic Documents subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-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 does not exonerate parties to transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduce except in full, without prior written approval of the Company, Any unauthorized alterations, forgety or fastification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) are retained for 30 days only.