

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page: 1 of 32

TEST REPORT

Application No.: SZCR2512005353MO
Applicant/ Manufacturer: INGENICO
Address of Applicant/ Manufacturer: 9 Avenue de la gare - Rovaltain TGV, BP25156, Valence Cedex 9 26958 France
Factory: 1. ZHANGZHOU WANLIDA TECHNOLOGY CO.,LTD.
 2. Jabil Vietnam Co. Ltd.
 3. Cal-Comp Electronics (Thailand) Public Co., Ltd.
Address of Factory: 1. Wanlida Industrial Zone, Jingcheng Town, Nanjing, Zhangzhou, Fujian, China
 2. Lot I8-1, Saigon High Tech Park, Long Thanh My Ward, Thu Duc City, Ho Chi Minh City, Vietnam
 3. 60 Moo 8, Sethakij Rd., Klong Maduea, 74110, Kratoom Bean, Samutsakorn Thailand
Equipment Under Test (EUT):
EUT Name: Smart Module
Model No.: ING-A02-1-WU
Trade Mark: ingenico
FCC ID: XKB-INGA02WU
Standard(s) : 47 CFR Part 2
 47 CFR Part 22
 47 CFR Part 24
 47 CFR Part 27
Date of Receipt: 2025-12-03
Date of Test: 2025-12-04 to 2026-01-08
Date of Issue: 2026-01-12

Test Result:	Pass
---------------------	-------------

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

Kenx. Xu

Keny Xu
EMC Laboratory Manager



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
 中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

2 of 32

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2026-01-12		Original

Authorized for issue by:				
		Calvin Weng		
		Calvin Weng/Project Engineer		
		Eric Fu		
		Eric Fu/Reviewer		



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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SZEMC) Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编:518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Output Power Data	§2.1046 §22.913 §24.232 §27.50(c) §27.50(d) §27.50(h)	ERP≤ 7W(LTE Band 5) EIRP≤ 2W(LTE Band 2) ERP≤ 3W(LTE Band 12,17) EIRP≤ 1W(LTE Band 4, 66) EIRP≤ 2W(LTE Band 7,38,41)	PASS
Peak-Average Ratio	§22.913 §24.232 §27.50(a) §27.50(d)	≤13dB	PASS
Bandwidth	§2.1049(h)	OBW: No limit EBW: No limit	PASS
Band Edge Compliance	§2.1051 §22.917 §24.238 §27.50(g) §27.50(h) §27.50(m)	≤ -13dBm (LTE Band5) ≤ -13dBm (LTE Band2) ≤ -13dBm (LTE Band12,17) ≤ -13dBm (LTE Band4,66) Refer to clause 6.4 for LTE Band7,38,41	PASS
Spurious emissions at antenna terminals	§2.1051 §22.917 §24.238 §27.50(g) §27.50(h) §27.50(m)	≤ -13dBm (LTE Band5) ≤ -13dBm (LTE Band2) ≤ -13dBm (LTE Band12,17) ≤ -13dBm (LTE Band4,66) Refer to clause 6.5 for LTE Band7,38,41	PASS
Field strength of spurious radiation	§2.1051 §22.917 §24.238 §27.50(g) §27.50(h) §27.50(m)	≤ -13dBm (LTE Band5) ≤ -13dBm (LTE Band2) ≤ -13dBm (LTE Band12,17,) ≤ -13dBm (LTE Band4,66) Refer to clause 6.6 for LTE Band7,38,41	PASS
Frequency stability	§2.1055 §22.355 §24.235 §27.54	≤ ±2.5ppm.	PASS

Remark: 47 CFR Part 2 is not accredited by A2LA.



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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Shenzhen) EMC Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编:518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

3 Contents

	Page
1 Cover Page	1
2 Test Summary	3
3 Contents	4
4 General Information	6
4.1 Details of E.U.T.	6
4.2 Test Frequency	7
4.3 Test Environment	9
4.4 Description of Support Units	9
4.5 Measurement Uncertainty	10
4.6 Test Location	11
4.7 Test Facility	11
4.8 Deviation from Standards	11
4.9 Abnormalities from Standard Conditions	11
5 Equipment List	12
6 Radio Spectrum Matter Test Results	14
6.1 Effective (Isotropic) Radiated Output Power Data	14
6.1.1 E.U.T. Operation	14
6.1.2 Test Setup Diagram	14
6.1.3 Measurement Data	14
6.2 Peak-Average Ratio	15
6.2.1 E.U.T. Operation	15
6.2.2 Test Setup Diagram	15
6.2.3 Measurement Data	15
6.3 Bandwidth	16
6.3.1 E.U.T. Operation	16
6.3.2 Test Setup Diagram	16
6.3.3 Measurement Data	16
6.4 Band Edge Compliance	17
6.4.1 E.U.T. Operation	17
6.4.2 Test Setup Diagram	17
6.4.3 Measurement Data	17
6.5 Spurious emissions at antenna terminals	18
6.5.1 E.U.T. Operation	18
6.5.2 Test Setup Diagram	18
6.5.3 Measurement Data	18
6.6 Field strength of spurious radiation	19
6.6.1 E.U.T. Operation	19
6.6.2 Test Setup Diagram	20
6.6.3 Measurement Procedure and Data	21
6.7 Frequency stability	31
6.7.1 E.U.T. Operation	31





SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page: 5 of 32

6.7.2	Test Setup Diagram	31
6.7.3	Measurement Data	31
7	Test Setup Photo	32
8	EUT Constructional Details (EUT Photos)	32



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing & Calibration Laboratory

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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

4 General Information

4.1 Details of E.U.T.

Power supply:	DC3.9V
Sample Type:	Mobile product
LTE Operation Frequency Band:	LTE B2/4/5/7/12/17/38/41/66
Modulation Type:	QPSK, 16QAM, 64QAM
LTE Power Class:	Level 3
Antenna Type:	Dipole Antenna
Antenna Gain:	LTE B2:2.86dBi, B4:1.24dBi, B5:-3.29dBi, B7:0.39dBi, B12: -1.23Bi, B17:-1.23Bi, B38:-0.57dBi, B41:0.97dBi, B66: 1.24dBi

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



4.2 Test Frequency

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855.0	1880	1905.0
	15	1857.5	1880	1902.5
	20	1860.0	1880	1900.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1751.5
	5	1712.5	1732.5	1752.5
	10	1715.0	1732.5	1750.0
	15	1717.5	1732.5	1747.5
	20	1720.0	1732.5	1745.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829.0	836.5	844.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 7	5	2502.5	2535.0	2567.5
	10	2505.0	2535.0	2565.0
	15	2507.5	2535.0	2562.5
	20	2510.0	2535.0	2560.0



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

8 of 32

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704.0	707.5	711.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 17	5	706.5	710.0	713.5
	10	709.0	710.0	711.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 38	5	2572.5	2595.0	2617.5
	10	2575.0	2595.0	2615.0
	15	2577.5	2595.0	2612.5
	20	2580.0	2595.0	2610.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE TDD Band 41	5	2502.5	2595.0	2687.5
	10	2505.0	2595.0	2685.0
	15	2507.5	2595.0	2682.5
	20	2510.0	2595.0	2680.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 66	1.4	1710.7	1745.0	1779.3
	3	1711.5	1745.0	1778.5
	5	1712.5	1745.0	1777.5
	10	1715.0	1745.0	1775.0
	15	1717.5	1745.0	1772.5
	20	1720.0	1745.0	1770.0



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Technical Services Co., Ltd. Laboratory.

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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Temperature:	TL	-30°C
	TN	+20°C
	TH	+50°C
Voltage:	VL	3.5 Vdc
	VN	3.9 Vdc
	VH	4.4 Vdc

NOTE: VL= lower extreme test voltage
 VN= nominal voltage
 VH= upper extreme test voltage
 TL= lower extreme test temperature
 TN= normal temperature
 TH= upper extreme test temperature

4.4 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Adapter	LITEON	PA-1041-81	/
Debug board	Ingenico	ING-A01/A02_Demo_V020	/



4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 5.4 \times 10^{-8}$
2	Duty cycle	$\pm 0.3\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF conducted power	$\pm 0.8\text{dB}$
5	RF power density	$\pm 0.4\text{dB}$
6	Conducted Spurious emissions	$\pm 2.7\text{dB}$
7	Radiated Spurious emission test	$\pm 3.1\text{dB}$ (Below 1GHz)
		$\pm 4.4\text{dB}$ (Above 1GHz)
8	Temperature test	$\pm 1^\circ\text{C}$
9	Humidity test	$\pm 3\%$
10	Supply voltages	$\pm 1.5\%$
11	Time	$\pm 3\%$



4.6 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.7 Test Facility

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

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI (Member No. 1937)

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC –Designation Number: CN1336

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.8 Deviation from Standards

None

4.9 Abnormalities from Standard Conditions

None



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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch EMC Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编:518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

12 of 32

5 Equipment List

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
Programmable DC Source	Chroma	62024P-80-60	SEM011-09	2025-03-06	2026-03-05
MXA Signal Analyzer	KEYSIGHT	N9020B	SEM004-24	2025-03-03	2026-03-02
Measurement Software	TST	TST PASS V2.0	N/A	N/A	N/A
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	N/A	N/A
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-14	2025-03-03	2026-03-02
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2025-02-26	2026-02-25
Power Sensor	KEYSIGHT	U2021XA	SEM009-15	2025-03-05	2026-03-04
Coaxial Cable	SGS	N/A	SEM031-01	2025-07-05	2026-07-04

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
3m Fully-Anechoic Chamber	AUDIX	N/A	SEM001-02	2024-05-11	2027-05-10
Signal Analyzer	Rohde & Schwarz	FSV40	SEM008-04	2025-03-04	2026-03-03
Trilog-Broadband Antenna	Schwarzbeck	VULB9168	SEM003-33	2025-08-29	2027-08-28
Substitution Antenna	Schwarzbeck	VULB9168	SEM003-18	2025-08-29	2027-08-28
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2025-07-22	2026-07-21
Microwave system amplifier	Agilent	83017A	SEM005-25	2025-09-10	2026-09-09
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2025-07-05	2026-07-04
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2025-08-09	2026-08-04
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2025-03-21	2026-03-20
Signal Generator(9kHz-40GHz)	N5173B	MY53270267	Agilent	2025-09-13	2026-09-12



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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (CMAA, CNAS, CMC Laboratory)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

13 of 32

Horn Antenna	Rohde & Schwarz	HF907	SEM003-53	2025-03-30	2026-03-29
Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2025-03-21	2026-03-20
Substitution Antenna	Rohde & Schwarz	HF907	SEM003-06	2024-08-03	2026-08-02
Substitution Antenna	ETS-LINDGREN	3160-09	SEM003-12	2024-08-03	2026-08-02
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2025-03-03	2026-03-02

General used equipment

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Humidity- Temperature Indicator	deli	8838	SEM002-32	2025-07-23	2026-07-22
Humidity- Temperature Indicator	deli	8838	SEM002-33	2025-07-23	2026-07-22
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2025-03-03	2026-03-02



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SZEMC) Calibration Laboratory

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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

6 Radio Spectrum Matter Test Results

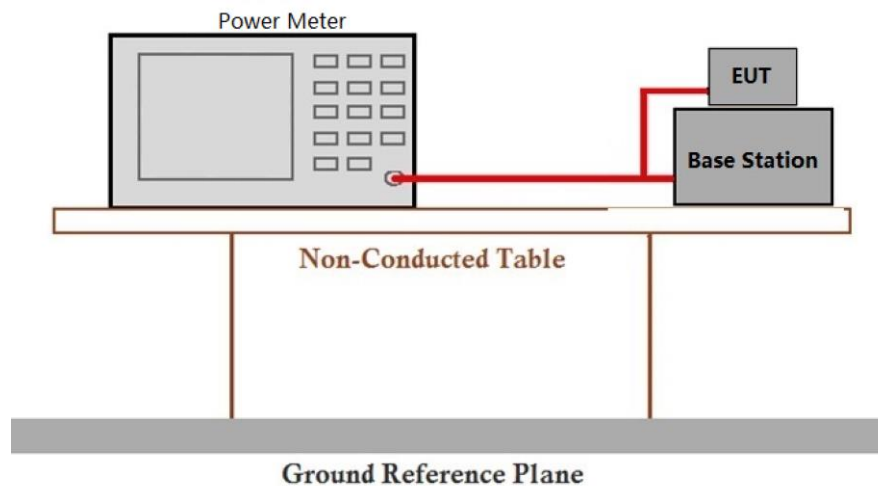
6.1 Effective (Isotropic) Radiated Output Power Data

Test Requirement: §2.1046, §22.913, §24.232, §27.50(b), §27.50(c), §27.50(d), §27.50(h),
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit:
 ERP ≤ 7W (LTE Band 5)
 EIRP ≤ 2W (LTE Band 2)
 ERP ≤ 3W (LTE Band 12, 17)
 EIRP ≤ 1W (LTE Band 4, 66)
 EIRP ≤ 2W (LTE Band 7, 38, 41)
 Test Engineer: Xing Guo

6.1.1 E.U.T. Operation

Operating Environment:
 Temperature: 18.6 °C Humidity: 48.9 % RH Atmospheric Pressure: 1020 mbar
 Test mode 32: TX mode_Keep the EUT in transmitting mode

6.1.2 Test Setup Diagram



6.1.3 Measurement Data

Please refer to Appendix for LTE test data.

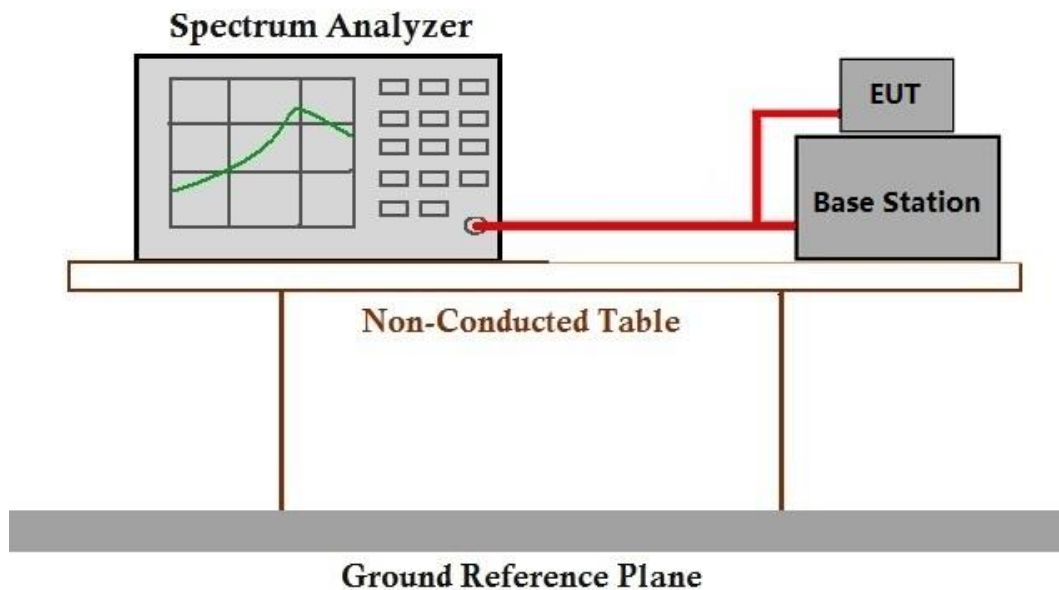
6.2 Peak-Average Ratio

Test Requirement: §22.913, §24.232, §27.50(a), §27.50(d)
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit: ≤13dB
 Test Engineer: Xing Guo

6.2.1 E.U.T. Operation

Operating Environment:
 Temperature: 18.6 °C Humidity: 48.9 % RH Atmospheric Pressure: 1020 mbar
 Test mode 32: TX mode_Keep the EUT in transmitting mode

6.2.2 Test Setup Diagram



6.2.3 Measurement Data

Please refer to Appendix for LTE test data.

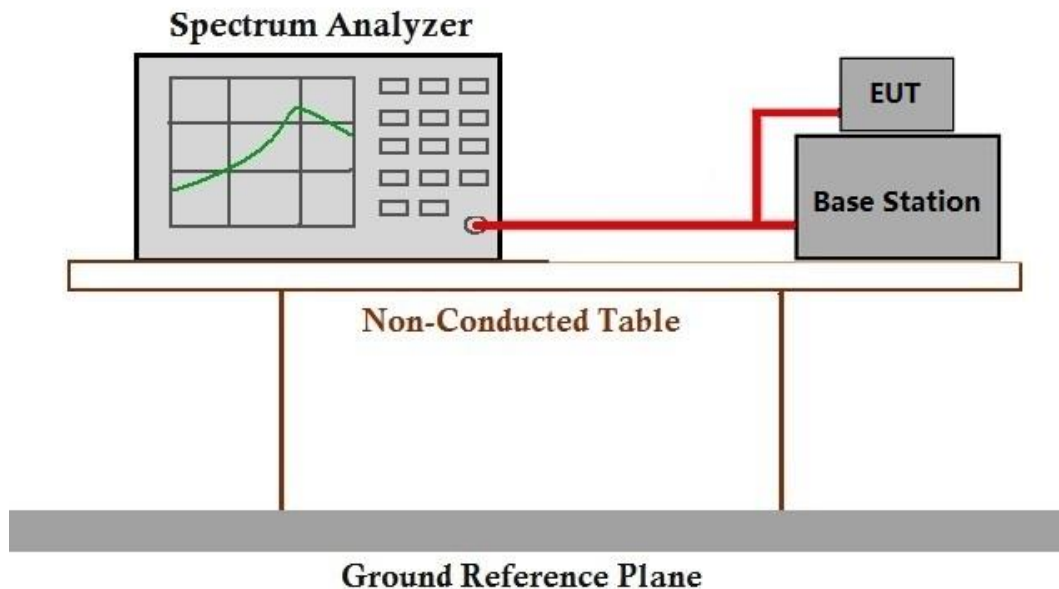
6.3 Bandwidth

Test Requirement: §2.1049(h)
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit: OBW: No limit
 EBW: No limit
 Test Engineer: Xing Guo

6.3.1 E.U.T. Operation

Operating Environment:
 Temperature: 18.6 °C Humidity: 48.9 % RH Atmospheric Pressure: 1020 mbar
 Test mode 32: TX mode_Keep the EUT in transmitting mode

6.3.2 Test Setup Diagram



6.3.3 Measurement Data

Please refer to Appendix for LTE test data.

6.4 Band Edge Compliance

Test Requirement: §2.1051, §22.917, §24.238, §27.50(g), §27.50(h), §27.50(m)

Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01

Limit: ≤ -13dBm (**LTE Band2,4,5,12,17,66**)

For **Band7,38,41**:

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Test Engineer: Xing Guo

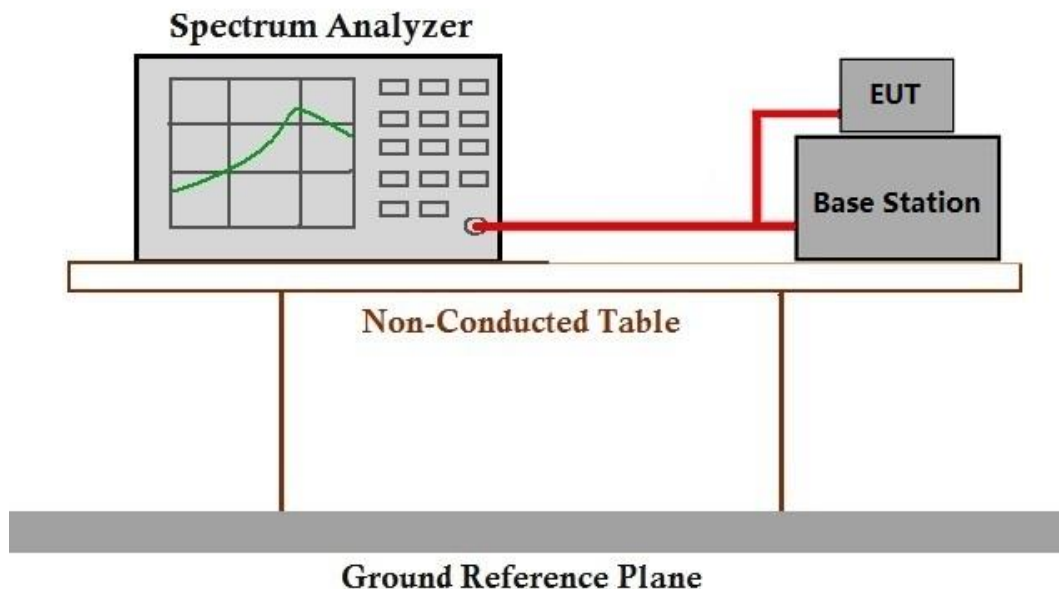
6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 48.9 % RH Atmospheric Pressure: 1020 mbar

Test mode 32: TX mode_Keep the EUT in transmitting mode

6.4.2 Test Setup Diagram



6.4.3 Measurement Data

Please refer to Appendix for LTE test data.

6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051, §22.917, §24.238, §27.50(g), §27.50(h), §27.50(m)

Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01

Limit: ≤ -13dBm (LTE Band2,4,5,12,17,66)

For Band7,38,41:

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Test Engineer: Xing Guo

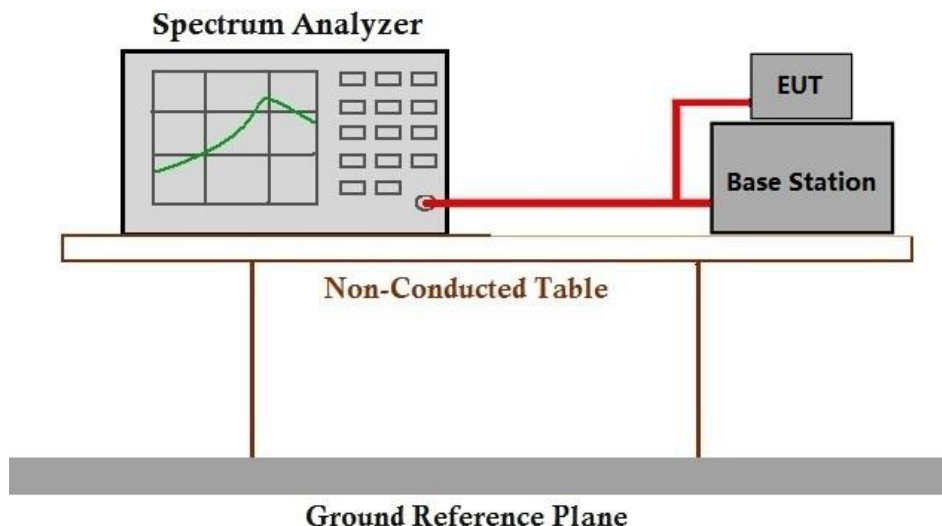
6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 48.9 % RH Atmospheric Pressure: 1020 mbar

Test mode 32: TX mode_Keep the EUT in transmitting mode

6.5.2 Test Setup Diagram



6.5.3 Measurement Data

Please refer to Appendix for LTE test data.

6.6 Field strength of spurious radiation

Test Requirement: §2.1051, §22.917, §24.238, §27.50(g), §27.50(h), §27.50(m)

Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01

Limit: $\leq -13\text{dBm}$ (**LTE Band2,4,5,12,17,66**)

For **Band7,38,41**:

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Test Engineer: Xing Guo

6.6.1 E.U.T. Operation

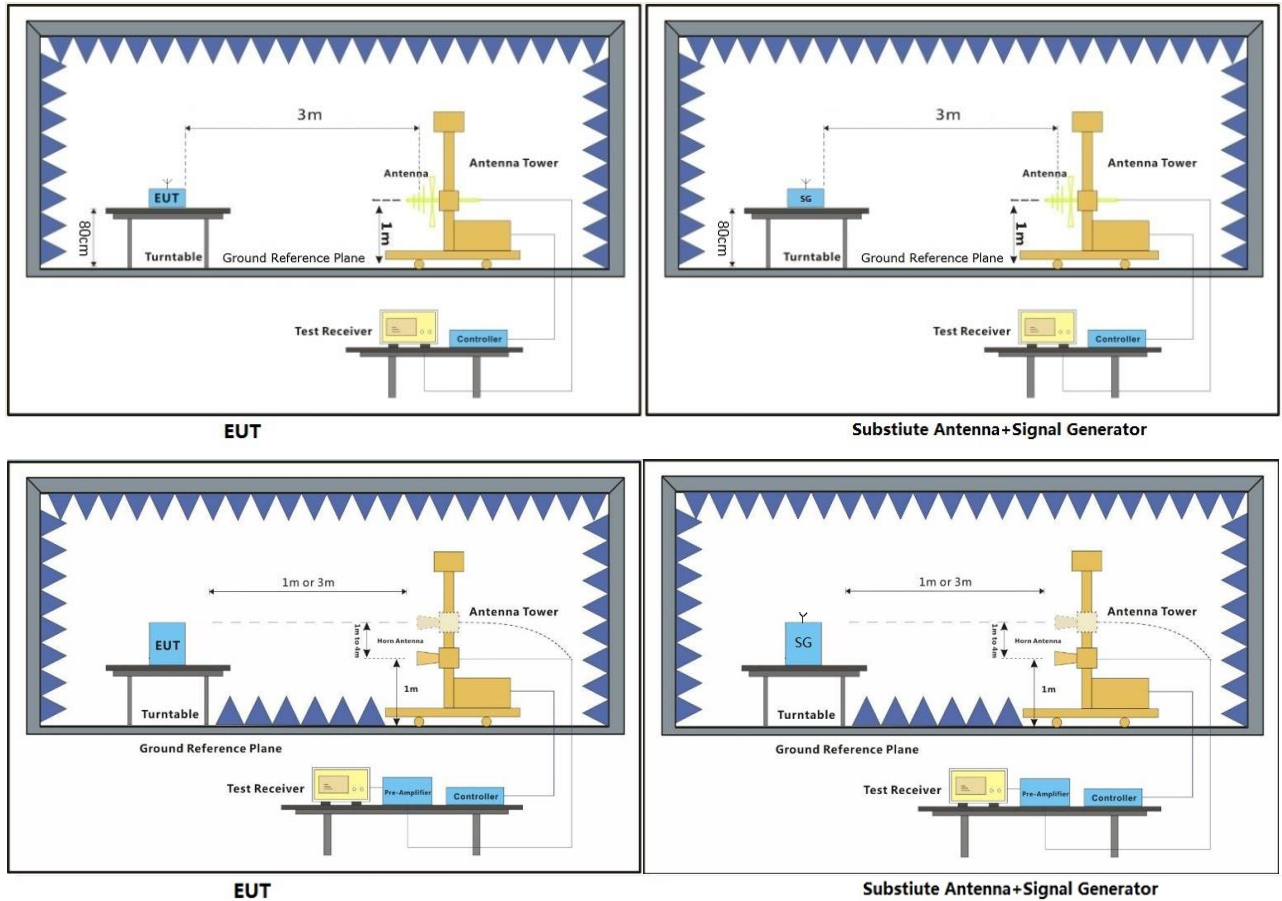
Operating Environment:

Temperature: 18.6 °C Humidity: 48.9 % RH Atmospheric Pressure: 1020 mbar

Test mode 32: TX mode_Keep the EUT in transmitting mode



6.6.2 Test Setup Diagram



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

21 of 32

6.6.3 Measurement Procedure and Data

Test Procedure:

- (1) On a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
- (2) The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
- (3) The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- (4) The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- (5) The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
- (6) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- (7) The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- (8) The maximum signal level detected by the measuring receiver shall be noted.
- (9) The measurement shall be repeated with the test antenna set to horizontal polarization.
- (10) Replace the antenna with a proper Antenna (substitution antenna).
- (11) The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
- (12) The substitution antenna shall be connected to a calibrated signal generator.
- (13) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- (14) The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- (15) The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- (16) The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- (17) The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Shenzhen EMC Laboratory)

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

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

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

22 of 32

LTE Band 2-Low channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3720.0	-58.57	-13	-45.57	-62.85	4.18	8.46	Horizontal	Pass
5580.0	-51.72	-13	-38.72	-56.8	5.37	10.45	Horizontal	Pass
7440.0	-42.66	-13	-29.66	-48.71	5.62	11.67	Horizontal	Pass
3720.0	-55.13	-13	-42.13	-59.41	4.18	8.46	Vertical	Pass
5580.0	-52.7	-13	-39.7	-57.78	5.37	10.45	Vertical	Pass
7440.0	-45.48	-13	-32.48	-51.53	5.62	11.67	Vertical	Pass

LTE Band 2-Middle channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3760.0	-51.06	-13	-38.06	-55.41	4.17	8.52	Horizontal	Pass
5640.0	-50.95	-13	-37.95	-56.05	5.35	10.45	Horizontal	Pass
7520.0	-42.32	-13	-29.32	-48.45	5.63	11.76	Horizontal	Pass
3760.0	-43.74	-13	-30.74	-48.09	4.17	8.52	Vertical	Pass
5640.0	-47.63	-13	-34.63	-52.73	5.35	10.45	Vertical	Pass
7520.0	-41.1	-13	-28.1	-47.23	5.63	11.76	Vertical	Pass

LTE Band 2-High channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3800.0	-56.84	-13	-43.84	-61.25	4.16	8.57	Horizontal	Pass
5700.0	-45.29	-13	-32.29	-50.42	5.32	10.45	Horizontal	Pass
7600.0	-50.25	-13	-37.25	-56.48	5.63	11.86	Horizontal	Pass
3800.0	-56.47	-13	-43.47	-60.88	4.16	8.57	Vertical	Pass
5700.0	-43.41	-13	-30.41	-48.54	5.32	10.45	Vertical	Pass
7600.0	-45.39	-13	-32.39	-51.62	5.63	11.86	Vertical	Pass



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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Shenzhen) Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编:518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

23 of 32

LTE Band 4-Low channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3440.0	-54.25	-13	-41.25	-58.14	4.13	8.02	Horizontal	Pass
5160.0	-53.32	-13	-40.32	-58.32	5.24	10.24	Horizontal	Pass
6880.0	-52.36	-13	-39.36	-57.79	5.55	10.98	Horizontal	Pass
3440.0	-46.48	-13	-33.48	-50.37	4.13	8.02	Vertical	Pass
5160.0	-47.17	-13	-34.17	-52.17	5.24	10.24	Vertical	Pass
6880.0	-48.38	-13	-35.38	-53.81	5.55	10.98	Vertical	Pass

LTE Band 4-Middle channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3465.0	-54.82	-13	-41.82	-58.73	4.17	8.08	Horizontal	Pass
5197.5	-54.49	-13	-41.49	-59.49	5.26	10.26	Horizontal	Pass
6930.0	-52.7	-13	-39.7	-58.18	5.56	11.04	Horizontal	Pass
3465.0	-47.52	-13	-34.52	-51.43	4.17	8.08	Vertical	Pass
5197.5	-47.67	-13	-34.67	-52.67	5.26	10.26	Vertical	Pass
6930.0	-45.9	-13	-32.9	-51.38	5.56	11.04	Vertical	Pass

LTE Band 4-High channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3490.0	-54.11	-13	-41.11	-58.05	4.2	8.14	Horizontal	Pass
5235.0	-51.21	-13	-38.21	-56.22	5.28	10.29	Horizontal	Pass
6980.0	-46.52	-13	-33.52	-52.05	5.57	11.1	Horizontal	Pass
3490.0	-46.03	-13	-33.03	-49.97	4.2	8.14	Vertical	Pass
5235.0	-47.63	-13	-34.63	-52.64	5.28	10.29	Vertical	Pass
6980.0	-44.37	-13	-31.37	-49.9	5.57	11.1	Vertical	Pass



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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing & Calibration Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编:518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

24 of 32

LTE Band 5-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1658.0	-63.03	-13	-50.03	-65.2	3.31	5.48	Horizontal	Pass
2487.0	-58.48	-13	-45.48	-60.83	3.44	5.79	Horizontal	Pass
3316.0	-57.16	-13	-44.16	-60.93	3.94	7.71	Horizontal	Pass
1658.0	-60.0	-13	-47.0	-62.17	3.31	5.48	Vertical	Pass
2487.0	-52.03	-13	-39.03	-54.38	3.44	5.79	Vertical	Pass
3316.0	-59.38	-13	-46.38	-63.15	3.94	7.71	Vertical	Pass

LTE Band 5-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1673.0	-63.03	-13	-50.03	-65.16	3.31	5.44	Horizontal	Pass
2509.5	-52.62	-13	-39.62	-55.02	3.44	5.84	Horizontal	Pass
3346.0	-56.85	-13	-43.85	-60.64	3.99	7.78	Horizontal	Pass
1673.0	-60.04	-13	-47.04	-62.17	3.31	5.44	Vertical	Pass
2509.5	-50.07	-13	-37.07	-52.47	3.44	5.84	Vertical	Pass
3346.0	-48.09	-13	-35.09	-51.88	3.99	7.78	Vertical	Pass

LTE Band 5-High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1688.0	-64.01	-13	-51.01	-66.11	3.31	5.41	Horizontal	Pass
2532.0	-60.98	-13	-47.98	-63.43	3.44	5.89	Horizontal	Pass
3376.0	-58.65	-13	-45.65	-62.48	4.03	7.86	Horizontal	Pass
1688.0	-61.27	-13	-48.27	-63.37	3.31	5.41	Vertical	Pass
2532.0	-59.79	-13	-46.79	-62.24	3.44	5.89	Vertical	Pass
3376.0	-52.57	-13	-39.57	-56.4	4.03	7.86	Vertical	Pass

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

25 of 32

LTE Band 7-Low channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5020.0	-45.6	-25	-20.6	-50.57	5.18	10.15	Horizontal	Pass
7530.0	-42.44	-25	-17.44	-48.59	5.63	11.78	Horizontal	Pass
10040.0	-39.38	-25	-14.38	-46.58	5.84	13.04	Horizontal	Pass
5020.0	-37.55	-25	-12.55	-42.52	5.18	10.15	Vertical	Pass
7530.0	-40.16	-25	-15.16	-46.31	5.63	11.78	Vertical	Pass
10040.0	-36.35	-25	-11.35	-43.55	5.84	13.04	Vertical	Pass

LTE Band 7-Middle channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5070.0	-46.45	-25	-21.45	-51.43	5.2	10.18	Horizontal	Pass
7605.0	-44.41	-25	-19.41	-50.64	5.63	11.86	Horizontal	Pass
10140.0	-39.72	-25	-14.72	-46.84	5.94	13.06	Horizontal	Pass
5070.0	-38.01	-25	-13.01	-42.99	5.2	10.18	Vertical	Pass
7605.0	-43.05	-25	-18.05	-49.28	5.63	11.86	Vertical	Pass
10140.0	-37.97	-25	-12.97	-45.09	5.94	13.06	Vertical	Pass

LTE Band 7-High channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5120.0	-44.32	-25	-19.32	-49.3	5.23	10.21	Horizontal	Pass
7680.0	-44.74	-25	-19.74	-51.06	5.63	11.95	Horizontal	Pass
10240.0	-39.05	-25	-14.05	-46.08	6.04	13.07	Horizontal	Pass
5120.0	-39.69	-25	-14.69	-44.67	5.23	10.21	Vertical	Pass
7680.0	-43.48	-25	-18.48	-49.8	5.63	11.95	Vertical	Pass
10240.0	-38.98	-25	-13.98	-46.01	6.04	13.07	Vertical	Pass

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

26 of 32

LTE Band 12-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1408.0	-55.95	-13	-42.95	-58.05	3.2	5.3	Horizontal	Pass
2112.0	-61.32	-13	-48.32	-62.86	3.35	4.89	Horizontal	Pass
2816.0	-59.7	-13	-46.7	-62.77	3.45	6.52	Horizontal	Pass
1408.0	-57.97	-13	-44.97	-60.07	3.2	5.3	Vertical	Pass
2112.0	-60.84	-13	-47.84	-62.38	3.35	4.89	Vertical	Pass
2816.0	-58.95	-13	-45.95	-62.02	3.45	6.52	Vertical	Pass

LTE Band 12-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1415.0	-54.49	-13	-41.49	-56.62	3.21	5.34	Horizontal	Pass
2122.5	-57.76	-13	-44.76	-59.31	3.36	4.91	Horizontal	Pass
2830.0	-59.37	-13	-46.37	-62.47	3.45	6.55	Horizontal	Pass
1415.0	-56.77	-13	-43.77	-58.9	3.21	5.34	Vertical	Pass
2122.5	-60.21	-13	-47.21	-61.76	3.36	4.91	Vertical	Pass
2830.0	-59.34	-13	-46.34	-62.44	3.45	6.55	Vertical	Pass

LTE Band 12-High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1422.0	-54.95	-13	-41.95	-57.12	3.22	5.39	Horizontal	Pass
2133.0	-61.27	-13	-48.27	-62.85	3.36	4.94	Horizontal	Pass
2844.0	-59.73	-13	-46.73	-62.86	3.45	6.58	Horizontal	Pass
1422.0	-57.59	-13	-44.59	-59.76	3.22	5.39	Vertical	Pass
2133.0	-60.66	-13	-47.66	-62.24	3.36	4.94	Vertical	Pass
2844.0	-59.0	-13	-46.0	-62.13	3.45	6.58	Vertical	Pass

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

27 of 32

LTE Band 17-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1418.0	-56.52	-13	-43.52	-58.67	3.21	5.36	Horizontal	Pass
2127.0	-60.0	-13	-47.0	-61.56	3.36	4.92	Horizontal	Pass
2836.0	-59.54	-13	-46.54	-62.65	3.45	6.56	Horizontal	Pass
1418.0	-57.26	-13	-44.26	-59.41	3.21	5.36	Vertical	Pass
2127.0	-59.92	-13	-46.92	-61.48	3.36	4.92	Vertical	Pass
2836.0	-59.64	-13	-46.64	-62.75	3.45	6.56	Vertical	Pass

LTE Band 17-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1420.0	-56.6	-13	-43.6	-58.75	3.22	5.37	Horizontal	Pass
2130.0	-61.97	-13	-48.97	-63.54	3.36	4.93	Horizontal	Pass
2840.0	-60.09	-13	-47.09	-63.21	3.45	6.57	Horizontal	Pass
1420.0	-57.96	-13	-44.96	-60.11	3.22	5.37	Vertical	Pass
2130.0	-61.41	-13	-48.41	-62.98	3.36	4.93	Vertical	Pass
2840.0	-59.79	-13	-46.79	-62.91	3.45	6.57	Vertical	Pass

LTE Band 17-High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1422.0	-56.83	-13	-43.83	-59.0	3.22	5.39	Horizontal	Pass
2133.0	-60.51	-13	-47.51	-62.09	3.36	4.94	Horizontal	Pass
2844.0	-60.07	-13	-47.07	-63.2	3.45	6.58	Horizontal	Pass
1422.0	-56.74	-13	-43.74	-58.91	3.22	5.39	Vertical	Pass
2133.0	-59.66	-13	-46.66	-61.24	3.36	4.94	Vertical	Pass
2844.0	-59.81	-13	-46.81	-62.94	3.45	6.58	Vertical	Pass



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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing & Calibration Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编:518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

28 of 32

LTE Band 38-Low channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5254.44	-56.69	-25	-31.69	-61.7	5.29	10.3	Horizontal	Pass
7740.0	-50.39	-25	-25.39	-56.78	5.63	12.02	Horizontal	Pass
10320.0	-56.39	-25	-31.39	-63.36	6.12	13.09	Horizontal	Pass
5160.0	-55.98	-25	-30.98	-60.98	5.24	10.24	Vertical	Pass
7740.0	-49.15	-25	-24.15	-55.54	5.63	12.02	Vertical	Pass
10320.0	-55.92	-25	-30.92	-62.89	6.12	13.09	Vertical	Pass

LTE Band 38-Middle channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5190.0	-63.27	-25	-38.27	-68.27	5.26	10.26	Horizontal	Pass
7785.0	-49.72	-25	-24.72	-56.17	5.63	12.08	Horizontal	Pass
10380.0	-56.24	-25	-31.24	-63.16	6.18	13.1	Horizontal	Pass
5190.0	-55.05	-25	-30.05	-60.05	5.26	10.26	Vertical	Pass
7785.0	-49.15	-25	-24.15	-55.6	5.63	12.08	Vertical	Pass
10380.0	-55.83	-25	-30.83	-62.75	6.18	13.1	Vertical	Pass

LTE Band 38-High channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5220.0	-61.77	-25	-36.77	-66.78	5.27	10.28	Horizontal	Pass
7830.0	-58.0	-25	-33.0	-64.5	5.63	12.13	Horizontal	Pass
10440.0	-56.19	-25	-31.19	-63.06	6.24	13.11	Horizontal	Pass
5220.0	-52.11	-25	-27.11	-57.12	5.27	10.28	Vertical	Pass
7830.0	-57.8	-25	-32.8	-64.3	5.63	12.13	Vertical	Pass
10440.0	-55.92	-25	-30.92	-62.79	6.24	13.11	Vertical	Pass

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

29 of 32

LTE Band 41-Low channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5082.0	-63.8	-25	-38.8	-68.78	5.21	10.19	Horizontal	Pass
7623.0	-59.88	-25	-34.88	-66.14	5.63	11.89	Horizontal	Pass
10164.0	-53.17	-25	-28.17	-60.27	5.96	13.06	Horizontal	Pass
5082.0	-63.38	-25	-38.38	-68.36	5.21	10.19	Vertical	Pass
7623.0	-59.25	-25	-34.25	-65.51	5.63	11.89	Vertical	Pass
10164.0	-51.1	-25	-26.1	-58.2	5.96	13.06	Vertical	Pass

LTE Band 41-Middle channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5168.0	-63.28	-25	-38.28	-68.27	5.25	10.24	Horizontal	Pass
7752.0	-57.09	-25	-32.09	-63.5	5.63	12.04	Horizontal	Pass
10336.0	-56.43	-25	-31.43	-63.38	6.14	13.09	Horizontal	Pass
5168.0	-55.43	-25	-30.43	-60.42	5.25	10.24	Vertical	Pass
7752.0	-57.86	-25	-32.86	-64.27	5.63	12.04	Vertical	Pass
10336.0	-56.53	-25	-31.53	-63.48	6.14	13.09	Vertical	Pass

LTE Band 41-High channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5262.0	-56.76	-25	-31.76	-61.77	5.29	10.3	Horizontal	Pass
7893.0	-49.04	-25	-24.04	-55.61	5.63	12.2	Horizontal	Pass
10524.0	-54.84	-25	-29.84	-61.67	6.3	13.13	Horizontal	Pass
5262.0	-54.64	-25	-29.64	-59.65	5.29	10.3	Vertical	Pass
7893.0	-48.09	-25	-23.09	-54.66	5.63	12.2	Vertical	Pass
10524.0	-52.61	-25	-27.61	-59.44	6.3	13.13	Vertical	Pass

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/2

Report No.: SZCR251200535308

Page:

30 of 32

LTE Band 66-Low channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3440.0	-57.61	-13	-44.61	-61.5	4.13	8.02	Horizontal	Pass
5160.0	-54.75	-13	-41.75	-59.75	5.24	10.24	Horizontal	Pass
6880.0	-53.11	-13	-40.11	-58.54	5.55	10.98	Horizontal	Pass
3440.0	-58.33	-13	-45.33	-62.22	4.13	8.02	Vertical	Pass
5160.0	-55.54	-13	-42.54	-60.54	5.24	10.24	Vertical	Pass
6880.0	-52.84	-13	-39.84	-58.27	5.55	10.98	Vertical	Pass

LTE Band 66-Middle channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3490.0	-54.17	-13	-41.17	-58.11	4.2	8.14	Horizontal	Pass
5235.0	-53.6	-13	-40.6	-58.61	5.28	10.29	Horizontal	Pass
6980.0	-49.78	-13	-36.78	-55.31	5.57	11.1	Horizontal	Pass
3490.0	-46.16	-13	-33.16	-50.1	4.2	8.14	Vertical	Pass
5235.0	-46.15	-13	-33.15	-51.16	5.28	10.29	Vertical	Pass
6980.0	-45.87	-13	-32.87	-51.4	5.57	11.1	Vertical	Pass

LTE Band 66-High channel, Modulation: QPSK, Bandwidth:20MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3540.0	-50.97	-13	-37.97	-54.98	4.21	8.22	Horizontal	Pass
5310.0	-46.32	-13	-33.32	-51.34	5.31	10.33	Horizontal	Pass
7080.0	-43.69	-13	-30.69	-49.34	5.58	11.23	Horizontal	Pass
3540.0	-47.62	-13	-34.62	-51.63	4.21	8.22	Vertical	Pass
5310.0	-47.24	-13	-34.24	-52.26	5.31	10.33	Vertical	Pass
7080.0	-43.45	-13	-30.45	-49.1	5.58	11.23	Vertical	Pass

Note: All modes have been tested and we found QPSK test mode has the worst test result. Only record the worst test result.



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

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

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch, Inspection & Testing Services, Shenzhen Branch, China

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编:518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

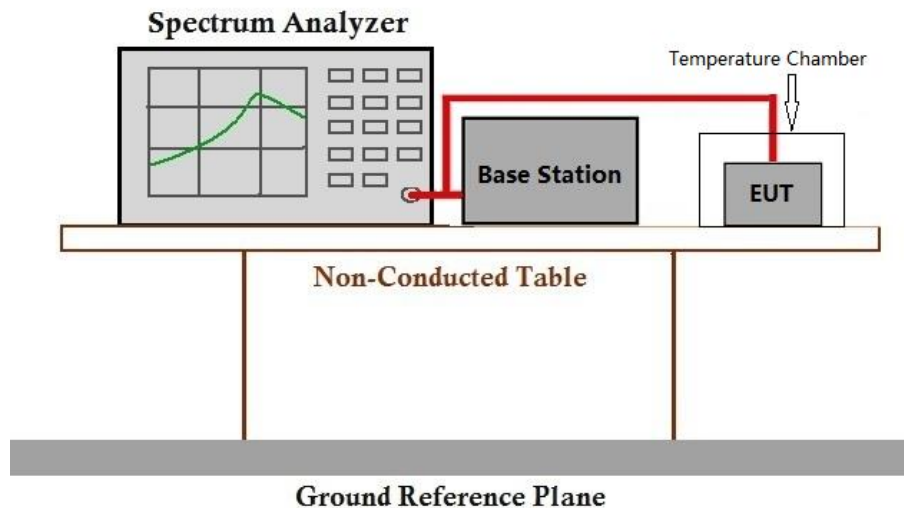
6.7 Frequency stability

Test Requirement: §2.1055, §22.355, §24.235, §27.54
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit: $\leq \pm 2.5\text{ppm}$.
 Test Engineer: Xing Guo

6.7.1 E.U.T. Operation

Operating Environment:
 Temperature: 18.6 °C Humidity: 48.9 % RH Atmospheric Pressure: 1020 mbar
 Test mode 32: TX mode_Keep the EUT in transmitting mode

6.7.2 Test Setup Diagram



6.7.3 Measurement Data

Please refer to Appendix for LTE test data.

7 Test Setup Photo

Refer to Appendix - Test Setup Photo for SZCR2512005353MO

8 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for SZCR2512005353MO

- End of the Report -

