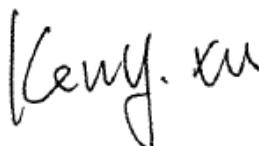


## TEST REPORT

Application No.:	SZCR2503000774AT
Applicant:	CNH Industrial America LLC
Address of Applicant:	700 State Street, Racine, Wi 53404, Racine, Wisconsin 53404 United States
Manufacturer:	CNH Industrial America LLC
Address of Manufacturer:	700 State Street, Racine, Wisconsin 53404, United States
Factory:	Raven Applied Technologies, LLC
Address of Factory:	1101 W Algonquin Sioux Falls SD 57104 USA
Equipment Under Test (EUT):	
EUT Name:	Processing & Connectivity Module
Model No.:	PCM4
FCC ID:	2B MQI-PCM4
Standard(s) :	47 CFR Part 2 47 CFR Part 22 47 CFR Part 24 47 CFR Part 27 47 CFR Part 90
Date of Receipt:	2025-03-03
Date of Test:	2025-05-08 to 2025-06-05
Date of Issue:	2025-06-10

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

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



Keny Xu  
EMC Laboratory Manager



SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Raven Applied Technologies LLC 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](mailto: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](http://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](mailto:sgs.china@sgs.com)

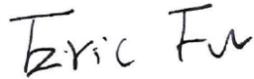
## SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250300077406

Page: 2 of 34

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2025-06-10		Original

Authorized for issue by:			
		Charlie Dai/Project Engineer	
		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](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch | Shenzhen EEC 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](http://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](mailto:sgs.china@sgs.com)

## 2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Output Power Data	§2.1046 §22.913 §24.232 §27.50(b) §27.50(c) §27.50(d) §27.50(h)	ERP≤ 7W(LTE Band 5,26b) EIRP≤ 2W(LTE Band 2) ERP≤ 3W(LTE Band 13) ERP≤ 3W(LTE Band 12) EIRP≤ 1W(LTE Band 4,66) EIRP≤ 2W(LTE Band 7,38)	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(c) §27.50(g) §27.50(h) §27.50(m)	≤ -13dBm (LTE Band5,26b) ≤ -13dBm (LTE Band2) Refer to clause 6.4 for LTE Band13 ≤ -13dBm (LTE Band12) ≤ -13dBm (LTE Band4,66) Refer to clause 6.4 for LTE Band7,38	PASS
Spurious emissions at antenna terminals	§2.1051 §22.917 §24.238 §27.50(c) §27.50(g) §27.50(h) §27.50(m)	≤ -13dBm (LTE Band5, 26b) ≤ -13dBm (LTE Band2) Refer to clause 6.5 for LTE Band13 ≤ -13dBm (LTE Band12) ≤ -13dBm (LTE Band4,66) Refer to clause 6.5 for LTE Band7,38	PASS
Field strength of spurious radiation	§2.1051 §22.917 §24.238 §27.50(c) §27.50(g) §27.50(h) §27.50(m)	≤ -13dBm (LTE Band5, 26b) ≤ -13dBm (LTE Band2) Refer to clause 6.6 for LTE Band13 ≤ -13dBm (LTE Band12) ≤ -13dBm (LTE Band4,66) Refer to clause 6.6 for LTE Band7,38	PASS
Frequency stability	§2.1055 §22.355 §24.235 §27.54	≤ ±2.5ppm.	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](mailto:CN.Doccheck@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 .....	8
4.3 Test Environment .....	11
4.4 Description of Support Units .....	11
4.5 Measurement Uncertainty .....	11
4.6 Test Location .....	12
4.7 Test Facility .....	12
4.8 Deviation from Standards .....	12
4.9 Abnormalities from Standard Conditions .....	12
5 Equipment List .....	13
6 Radio Spectrum Matter Test Results .....	15
6.1 Effective (Isotropic) Radiated Output Power Data .....	15
6.1.1 E.U.T. Operation .....	15
6.1.2 Test Setup Diagram .....	15
6.1.3 Measurement Data .....	15
6.2 Peak-Average Ratio .....	16
6.2.1 E.U.T. Operation .....	16
6.2.2 Test Setup Diagram .....	16
6.2.3 Measurement Data .....	16
6.3 Bandwidth .....	17
6.3.1 E.U.T. Operation .....	17
6.3.2 Test Setup Diagram .....	17
6.3.3 Measurement Data .....	17
6.4 Band Edge Compliance .....	18
6.4.1 E.U.T. Operation .....	18
6.4.2 Test Setup Diagram .....	19
6.4.3 Measurement Data .....	19
6.5 Spurious emissions at antenna terminals .....	20
6.5.1 E.U.T. Operation .....	20
6.5.2 Test Setup Diagram .....	20
6.5.3 Measurement Data .....	21
6.6 Field strength of spurious radiation .....	22
6.6.1 E.U.T. Operation .....	22
6.6.2 Test Setup Diagram .....	23
6.6.3 Measurement Procedure and Data .....	24
6.7 Frequency stability .....	33
6.7.1 E.U.T. Operation .....	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 <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](mailto:CN.Doccheck@sgs.com)



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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250300077406

Page: 5 of 34

6.7.2	Test Setup Diagram .....	33
6.7.3	Measurement Data .....	33
7	<b>Test Setup Photo .....</b>	<b>34</b>
8	<b>EUT Constructional Details (EUT Photos) .....</b>	<b>34</b>



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](mailto:CN.Doccheck@sgs.com)**

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch | IEC62368-1:2020 | CCC 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](http://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](mailto:sgs.china@sgs.com)

## 4 General Information

### 4.1 Details of E.U.T.

Power supply:	DC 12V		
Cable:	N/A		
Radio System Type:	<input checked="" type="checkbox"/> LTE		
Modulation Type:	QPSK, 16QAM		
Supported Frequency Range	Band	TX	RX
	LTE Band 2	1850 to 1910 MHz	1930 to 1990 MHz
	LTE Band 4	1710 to 1755 MHz	2110 to 2155 MHz
	LTE Band 5	824 to 849 MHz	869 to 894 MHz
	LTE Band 7	2500 to 2570 MHz	2620 to 2690 MHz
	LTE Band 12	699 to 716 MHz	729 to 746 MHz
	LTE Band 13	777 to 787 MHz	746 to 756 MHz
	LTE Band 26 (814 to 824 MHz )	814 to 824MHz	859 to 869 MHz
	LTE Band 26 (824 to 849 MHz )	824 to 849 MHz	869 to 894 MHz
	LTE Band 38	2570 to 2620 MHz	2570 to 2620 MHz
	LTE Band 66	1710 to 1780 MHz	2110 to 2180 MHz
Supported Channel Bandwidth	LTE Band 2	<input checked="" type="checkbox"/> 1.4 MHz <input type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz <input checked="" type="checkbox"/> 20 MHz	
	LTE Band 4	<input checked="" type="checkbox"/> 1.4 MHz <input type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz <input checked="" type="checkbox"/> 20 MHz	
	LTE Band 5	<input checked="" type="checkbox"/> 1.4 MHz <input type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz	
	LTE Band 7	<input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz <input checked="" type="checkbox"/> 20 MHz	
	LTE Band 12	<input checked="" type="checkbox"/> 1.4 MHz <input type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz	
	LTE Band 13	<input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz	
	LTE Band 26(814-824)	<input checked="" type="checkbox"/> 1.4 MHz <input type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz	
	LTE Band 26(824-849)	<input checked="" type="checkbox"/> 1.4 MHz <input type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz	
	LTE Band38	<input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15 MHz <input checked="" type="checkbox"/> 20 MHz	
	LTE Band66	<input checked="" type="checkbox"/> 1.4 MHz <input type="checkbox"/> 3 MHz <input checked="" type="checkbox"/> 5 MHz <input checked="" type="checkbox"/> 10 MHz <input checked="" type="checkbox"/> 15MHz <input checked="" type="checkbox"/> 20MHz	
Antenna Type:	FAKRA Connector Telematics Antenna		

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](mailto:CN.Doccheck@sgs.com)



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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250300077406

Page: 7 of 34

Antenna Gain:

700–1000 MHz: -0.5dBi; 1.6–2.6 GHz: 3.0dBi

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.



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](mailto:CN.Doccheck@sgs.com)**

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch | IEC62311-1:2014 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](http://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](mailto:sgs.china@sgs.com)

## 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

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](mailto:CN.Doccheck@sgs.com)

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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250300077406

Page: 9 of 34

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 13	5	779.5	782.0	784.5
	10	/	782.0	/

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 26 (814-824)	1.4	814.7	819	823.3
	3	815.5	819	822.5
	5	816.5	819	821.5
	10	819	819	819

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 26 (824-849)	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
	15	831.5	836.5	841.5

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 <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](mailto:CN.DocCheck@sgs.com)

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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250300077406

Page: 10 of 34

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 38	5	2572.5	2595	2617.5
	10	2575	2595	2615
	15	2577.5	2595	2612.5
	20	2580	2595	2610

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

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](mailto:CN.Doccheck@sgs.com)

**4.3 Test Environment**

Environment Parameter	Selected Values During Tests	
Temperature:	TL	-40°C
	TN	+20°C
	TH	+70°C
Voltage:	VL	6 Vdc
	VN	12 Vdc
	VH	36 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.
DC power supply	ZHAOXIN	KXN-6020D	REF. No.SEA27B00

**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	$\pm 3\%$

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](mailto:CN.Doccheck@sgs.com)

### 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](mailto:CN.Doccheck@sgs.com)**

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

## 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	2024-07-10	2025-07-09
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2025-02-26	2026-02-25
MXA Signal Analyzer	KEYSIGHT	N9020B	SEM004-30	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	SEM010-11	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

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
MXE EMI receiver	KEYSIGHT	N9038B	SEM004-29	2024-08-14	2025-08-13
Signal & Spectrum Analyzer	Rohde & Schwarz	FSV	SZ-WRG-M-048	2025-01-07	2026-01-06
Pre-Amplifier 30MHz-1GHz	SGS	AMP30M1G30	SEM005-33	2025-03-04	2026-03-03
Low Noise Amplifier 1G-18GHz	Tonscend	TAP01018050	SZ-WRG-M-051	2025-01-07	2026-01-06
Double-ridged waveguide horn(1-18GHz)	ETS-LINDGREN	3117	SEM033-11	2023-09-16	2025-09-15
Trilog-Broadband Antenna(25MHz-2GHz)	Schwarzbeck	VULB9168	SEM003-44	2023-06-18	2025-06-17
TRILOG Breitband Antenne 30MHz-1GHz	SCHWARZBECK	VULB 9168	SZ-WRG-M-054	2023-12-25	2025-12-24
Double Ridge Horn Antenna 1GHz-18GHz	SCHWARZBECK	BBHA 9120 D	SZ-WRG-M-055	2023-12-21	2025-12-20
Radio Communication Tester	Anritsu	MT8821C	SZ-WRG-M-042	2024-06-21	2025-06-20

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](mailto:CN.Doccheck@sgs.com)

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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250300077406

Page: 14 of 34

Universal Radio Communication Tester	Rohde & Schwarz	CMW500	SEM010-11	2025-03-03	2026-03-02
RSE Test Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Chamber	CRTSGSSAC966	N/A	SZ-WRG-C-063	2025-01-06	2028-01-05
Signal Generator(9kHz-40GHz)	N5173B	MY53270267	Agilent	2024-09-14	2025-09-13
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	SEM003-32	2023-09-17	2025-09-16
Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2025-03-21	2026-03-20
Substitution Antenna	Rohde & Schwarz	HF907	SEM003-06	2024-08-03	2025-08-02
Substitution Antenna	ETS-LINDGREN	3160-09	SEM003-12	2024-08-03	2025-08-02
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	2024-07-24	2025-07-23
Humidity- Temperature Indicator	deli	8838	SEM002-33	2024-07-24	2025-07-23
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2025-03-03	2026-03-02

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](mailto:CN.Doccheck@sgs.com)

## 6 Radio Spectrum Matter Test Results

### 6.1 Effective (Isotropic) Radiated Output Power Data

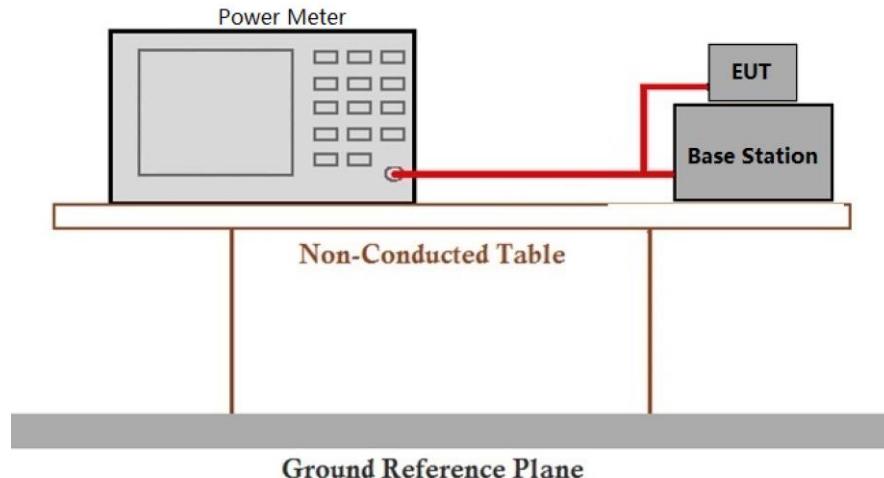
Test Requirement: §2.1046, §22.913, §24.232, §27.50(b), §27.50(c), §27.50(d), §27.50(h), §90.635  
Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01  
Limit:   
ERP≤ 7W(LTE Band 5,26b)  
EIRP≤ 2W(LTE Band 2)  
ERP≤ 3W(LTE Band 13)  
ERP≤ 3W(LTE Band 12)  
EIRP≤ 1W(LTE Band 4, 66)  
EIRP≤ 2W(LTE Band 7,38,41)

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 20.8 °C      Humidity: 43.5 % 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 Band 2/4/5/7/12/13/26/38/66 test data.



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](mailto:CN.Doccheck@sgs.com)

### 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

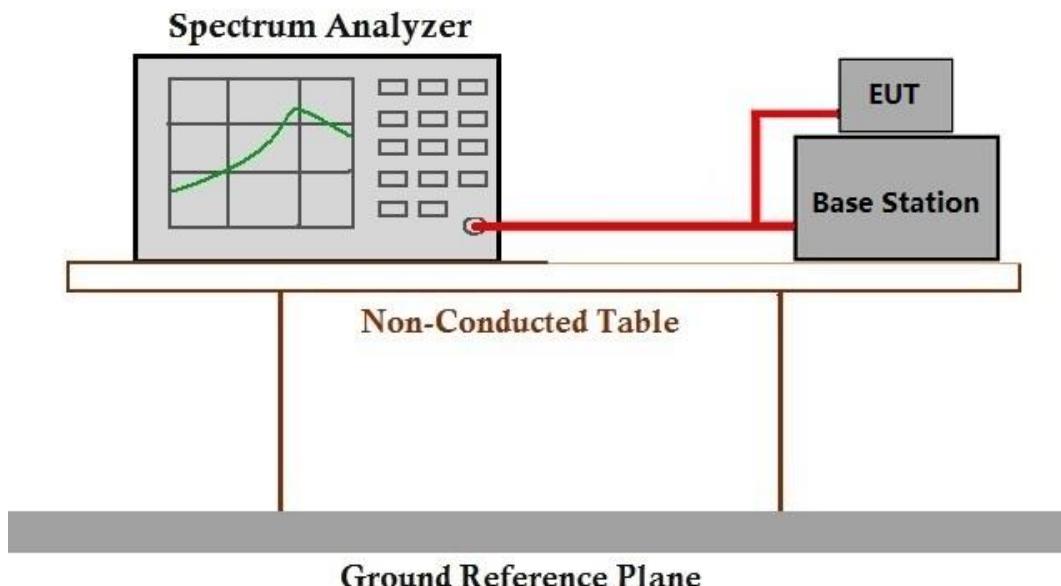
#### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 20.8 °C Humidity: 43.5 % 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 Band 2/4/5/7/12/13/26/38/66 test data.



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](mailto:CN.Doccheck@sgs.com)

### 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

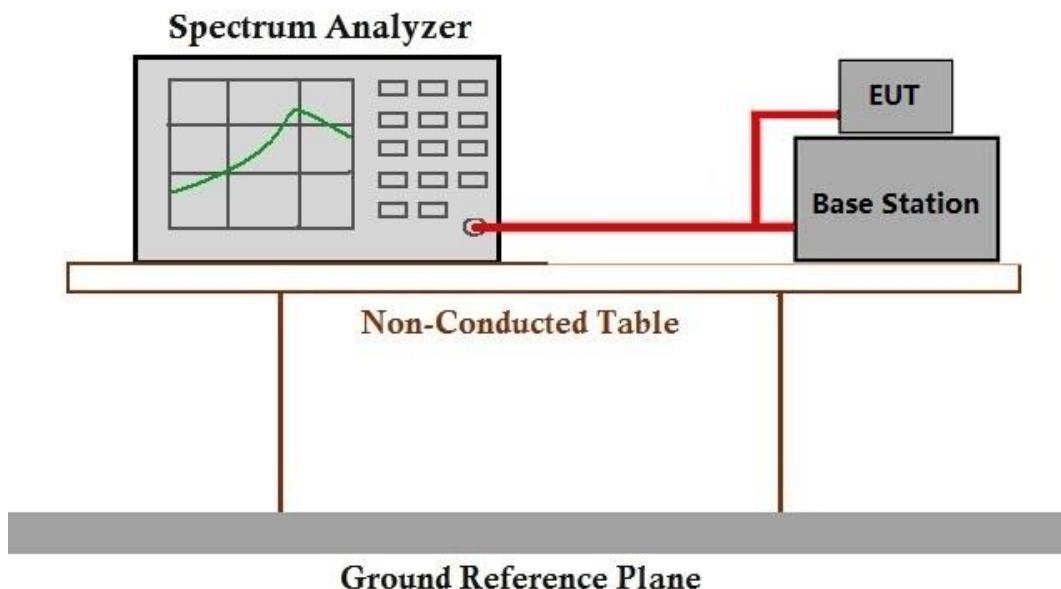
#### 6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 20.8 °C Humidity: 43.5 % 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 Band 2/4/5/7/12/13/26/38/66 test data.



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](mailto:CN.DocCheck@sgs.com)

### 6.4 Band Edge Compliance

Test Requirement: §2.1051,§22.917,§24.238,§27.50(c),§27.50(g),§27.50(h),§27.50(m),§90.691

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

Limit: ≤ -13dBm (**LTE Band2,4,5,12,26b,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.

For **band 13**:

(1) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;

(2) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations

#### 6.4.1 E.U.T. Operation

Operating Environment:

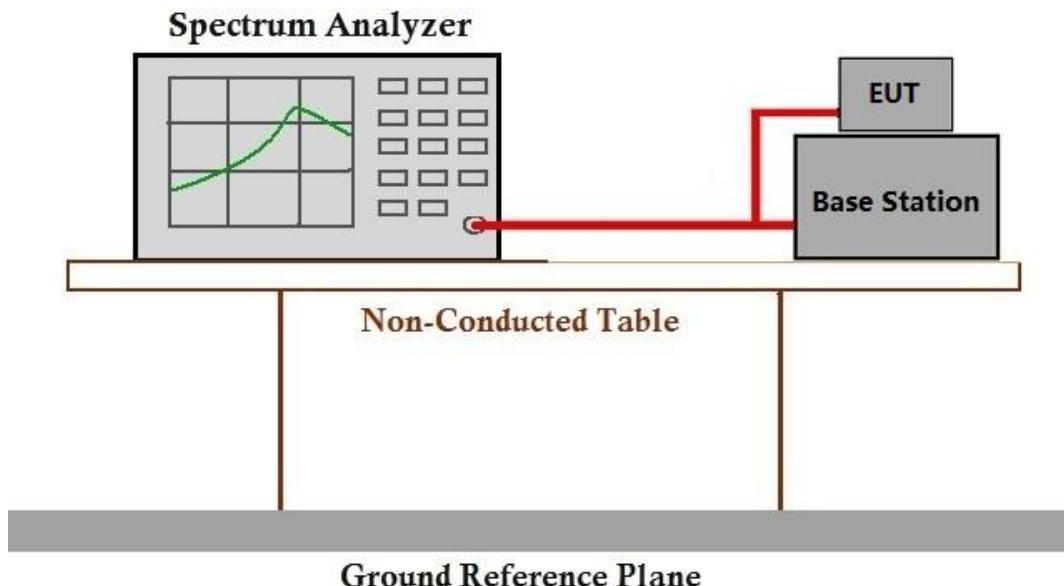
Temperature: 20.8 °C      Humidity: 43.5 % RH      Atmospheric Pressure: 1020 mbar

Test mode 32: TX mode\_Keep the EUT in transmitting 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 <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](mailto:CN.Doccheck@sgs.com)**

### 6.4.2 Test Setup Diagram



### 6.4.3 Measurement Data

Please refer to Appendix for LTE Band 2/4/5/7/12/13/26/38/66 test data.



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](mailto:CN.Doccheck@sgs.com)

### 6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051, §22.917, §24.238, §27.50(c), §27.50(g), §27.50(h), §27.50(m), §90.691

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

Limit: ≤ -13dBm (LTE Band2,4,5,12,26b,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.

#### For band 13:

- (1) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;
- (2) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations

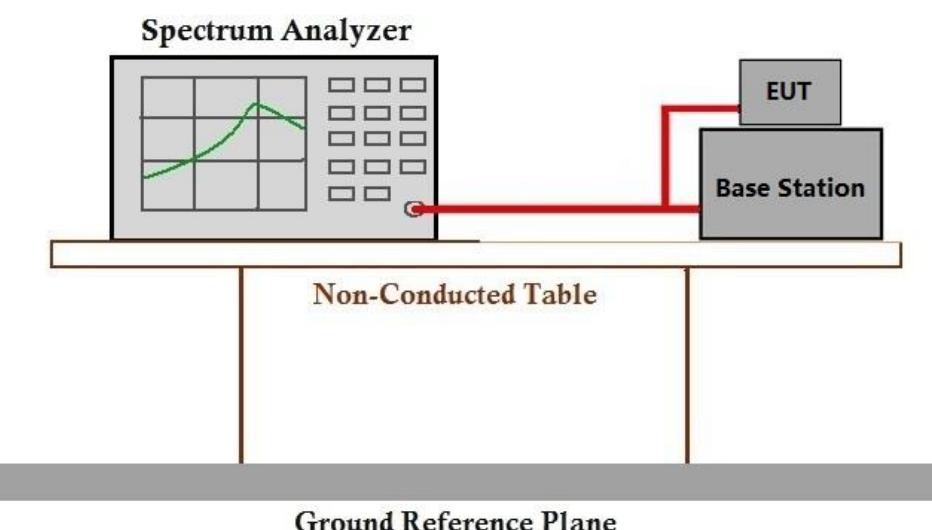
#### 6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 20.8 °C Humidity: 43.5 % RH Atmospheric Pressure: 1020 mbar

Test mode 32: TX mode\_Keep the EUT in transmitting mode

#### 6.5.2 Test Setup Diagram



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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](mailto:CN.Doccheck@sgs.com)

### 6.5.3 Measurement Data

Please refer to Appendix for LTE Band 2/4/5/7/12/13/26/38/66 test data.



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](mailto:CN.Doccheck@sgs.com)**

### 6.6 Field strength of spurious radiation

Test Requirement: §2.1051,§22.917,§24.238,§27.50(c),§27.50(g),§27.50(h),§27.50(m),§90.691

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

Limit: ≤ -13dBm (LTE Band2,4,5,12,26b,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.

For band 13:

(1) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;

(2) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations

#### 6.6.1 E.U.T. Operation

Operating Environment:

Temperature: 21.5 °C Humidity: 49.5 % RH Atmospheric Pressure: 1020 mbar

Test mode 32: TX mode\_Keep the EUT in transmitting mode

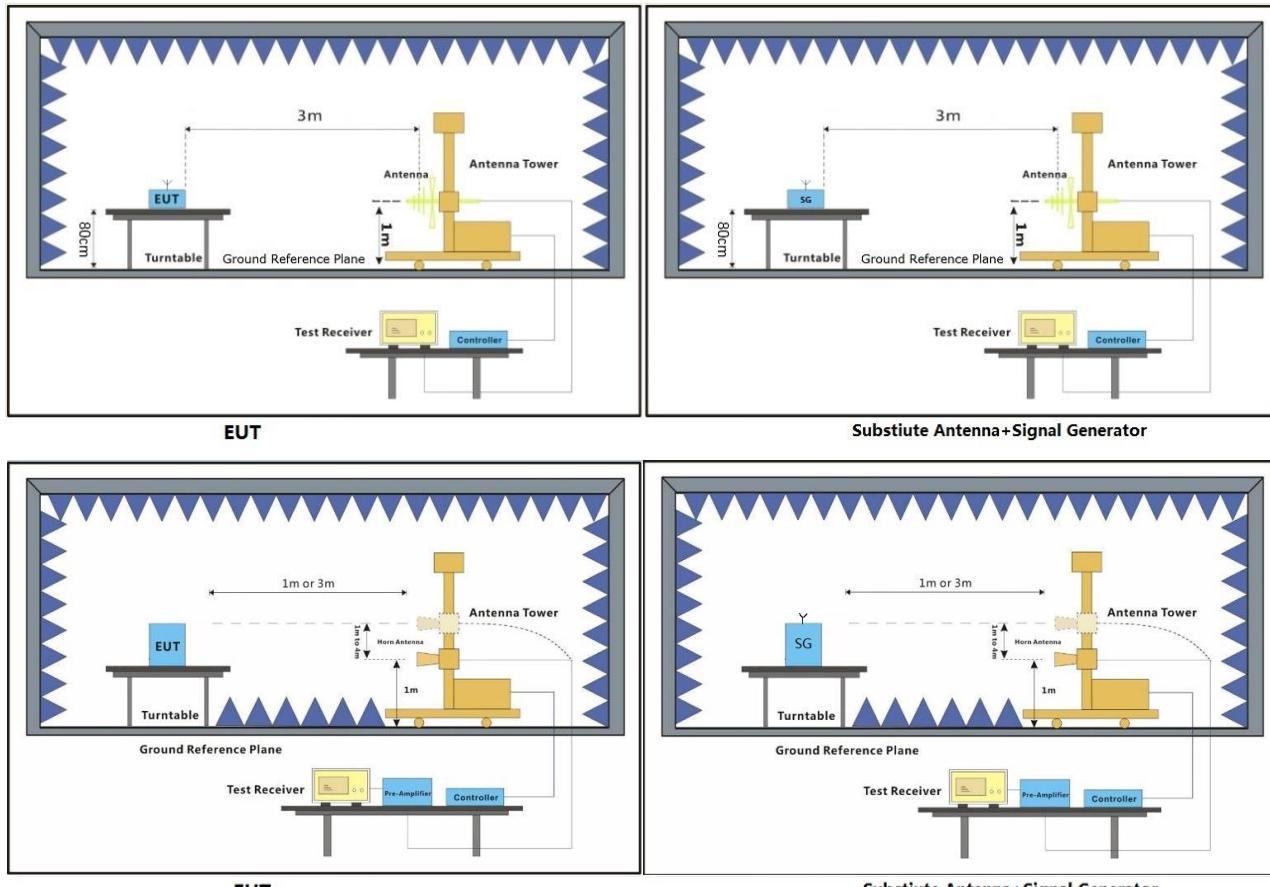


Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction 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](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
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](http://www.sgsgroup.com.cn)  
Shenzhen Branch | Shenzhen SGS Laboratory  
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](mailto:sgs.china@sgs.com)

### 6.6.2 Test Setup Diagram



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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](mailto:CN.Doccheck@sgs.com)

### 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**

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250300077406

Page: 25 of 34

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
3709.6	-37.84	-13	-24.84	-42.86	3.43	8.45	Horizontal	Pass
5574.6	-40.08	-13	-27.08	-46.29	4.24	10.45	Horizontal	Pass
7432.6	-42.35	-13	-29.35	-49.79	4.22	11.66	Horizontal	Pass
3709.6	-39.98	-13	-26.98	-45.0	3.43	8.45	Vertical	Pass
5574.6	-37.87	-13	-24.87	-44.08	4.24	10.45	Vertical	Pass
7432.6	-45.49	-13	-32.49	-52.93	4.22	11.66	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
3748.0	-35.67	-13	-22.67	-40.72	3.45	8.5	Horizontal	Pass
5632.0	-44.63	-13	-31.63	-50.85	4.23	10.45	Horizontal	Pass
7509.0	-42.65	-13	-29.65	-50.18	4.22	11.75	Horizontal	Pass
3748.0	-36.77	-13	-23.77	-41.82	3.45	8.5	Vertical	Pass
5632.0	-43.79	-13	-30.79	-50.01	4.23	10.45	Vertical	Pass
7509.0	-47.04	-13	-34.04	-54.57	4.22	11.75	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
3796.0	-35.38	-13	-22.38	-40.46	3.49	8.57	Horizontal	Pass
5689.0	-43.0	-13	-30.0	-49.22	4.23	10.45	Horizontal	Pass
7585.0	-45.41	-13	-32.41	-53.03	4.22	11.84	Horizontal	Pass
3796.0	-35.59	-13	-22.59	-40.67	3.49	8.57	Vertical	Pass
5689.0	-44.92	-13	-31.92	-51.14	4.23	10.45	Vertical	Pass
7585.0	-46.9	-13	-33.9	-54.52	4.22	11.84	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](mailto:CN.Doccheck@sgs.com)

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

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
3422.0	-40.32	-13	-27.32	-45.06	3.24	7.98	Horizontal	Pass
5133.0	-40.94	-13	-27.94	-46.91	4.25	10.22	Horizontal	Pass
6844.0	-38.87	-13	-25.87	-45.61	4.19	10.93	Horizontal	Pass
3422.0	-40.13	-13	-27.13	-44.87	3.24	7.98	Vertical	Pass
5133.0	-34.99	-13	-21.99	-40.96	4.25	10.22	Vertical	Pass
6844.0	-42.47	-13	-29.47	-49.21	4.19	10.93	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
3447.0	-37.76	-13	-24.76	-42.54	3.26	8.04	Horizontal	Pass
5170.5	-41.98	-13	-28.98	-47.98	4.25	10.25	Horizontal	Pass
6894.0	-43.81	-13	-30.81	-50.61	4.19	10.99	Horizontal	Pass
3447.0	-38.13	-13	-25.13	-42.91	3.26	8.04	Vertical	Pass
5170.5	-37.3	-13	-24.3	-43.3	4.25	10.25	Vertical	Pass
6894.0	-44.11	-13	-31.11	-50.91	4.19	10.99	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
3472.0	-37.0	-13	-24.0	-41.83	3.27	8.1	Horizontal	Pass
5208.0	-44.38	-13	-31.38	-50.4	4.25	10.27	Horizontal	Pass
6944.0	-39.01	-13	-26.01	-45.88	4.19	11.06	Horizontal	Pass
3472.0	-38.03	-13	-25.03	-42.86	3.27	8.1	Vertical	Pass
5208.0	-36.85	-13	-23.85	-42.87	4.25	10.27	Vertical	Pass
6944.0	-41.06	-13	-28.06	-47.93	4.19	11.06	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](mailto:CN.Doccheck@sgs.com)

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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250300077406

Page: 27 of 34

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
1649.0	-52.44	-13	-39.44	-55.84	2.1	5.5	Horizontal	Pass
2473.5	-35.07	-13	-22.07	-38.19	2.64	5.76	Horizontal	Pass
3298.0	-38.7	-13	-25.7	-43.2	3.16	7.66	Horizontal	Pass
1649.0	-49.25	-13	-36.25	-52.65	2.1	5.5	Vertical	Pass
2473.5	-37.06	-13	-24.06	-40.18	2.64	5.76	Vertical	Pass
3298.0	-36.5	-13	-23.5	-41.0	3.16	7.66	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
1664.0	-52.8	-13	-39.8	-56.16	2.11	5.47	Horizontal	Pass
2496.0	-36.24	-13	-23.24	-39.39	2.66	5.81	Horizontal	Pass
3328.0	-37.37	-13	-24.37	-41.93	3.18	7.74	Horizontal	Pass
1664.0	-48.92	-13	-35.92	-52.28	2.11	5.47	Vertical	Pass
2496.0	-37.44	-13	-24.44	-40.59	2.66	5.81	Vertical	Pass
3328.0	-34.85	-13	-21.85	-39.41	3.18	7.74	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
1679.0	-52.58	-13	-39.58	-55.88	2.13	5.43	Horizontal	Pass
2518.5	-37.2	-13	-24.2	-40.39	2.67	5.86	Horizontal	Pass
3358.0	-40.1	-13	-27.1	-44.72	3.2	7.82	Horizontal	Pass
1679.0	-49.39	-13	-36.39	-52.69	2.13	5.43	Vertical	Pass
2518.5	-41.54	-13	-28.54	-44.73	2.67	5.86	Vertical	Pass
3358.0	-36.24	-13	-23.24	-40.86	3.2	7.82	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](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd. 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  
Shenzhen Branch is fully accredited by SGS Group. China · 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/1

Report No.: SZCR250300077406

Page: 28 of 34

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
5002.0	-33.17	-25	-8.17	-39.05	4.26	10.14	Horizontal	Pass
7503.0	-35.99	-25	-10.99	-43.51	4.22	11.74	Horizontal	Pass
10004.0	-46.55	-25	-21.55	-54.5	5.08	13.03	Horizontal	Pass
5002.0	-37.74	-25	-12.74	-43.62	4.26	10.14	Vertical	Pass
7503.0	-43.04	-25	-18.04	-50.56	4.22	11.74	Vertical	Pass
10004.0	-48.31	-25	-23.31	-56.26	5.08	13.03	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
5052.0	-31.92	-25	-6.92	-37.83	4.26	10.17	Horizontal	Pass
7578.0	-41.13	-25	-16.13	-48.74	4.22	11.83	Horizontal	Pass
10104.0	-51.14	-25	-26.14	-59.11	5.08	13.05	Horizontal	Pass
5052.0	-36.72	-25	-11.72	-42.63	4.26	10.17	Vertical	Pass
7578.0	-45.12	-25	-20.12	-52.73	4.22	11.83	Vertical	Pass
10104.0	-50.89	-25	-25.89	-58.86	5.08	13.05	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
5102.0	-34.68	-25	-9.68	-40.62	4.26	10.2	Horizontal	Pass
7653.0	-46.55	-25	-21.55	-54.24	4.23	11.92	Horizontal	Pass
10204.0	-51.01	-25	-26.01	-59.0	5.08	13.07	Horizontal	Pass
5102.0	-36.9	-25	-11.9	-42.84	4.26	10.2	Vertical	Pass
7653.0	-46.65	-25	-21.65	-54.34	4.23	11.92	Vertical	Pass
10204.0	-50.99	-25	-25.99	-58.98	5.08	13.07	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](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch | Shenzhen SGS Testing & Certification Laboratory  
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057  
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 www.sgsgroup.com.cn  
Shenzhen Branch | Shenzhen SGS Testing & Certification Laboratory  
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057  
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/1

Report No.: SZCR250300077406

Page: 29 of 34

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
1399.0	-55.15	-13	-42.15	-58.46	1.93	5.24	Horizontal	Pass
2098.5	-42.88	-13	-29.88	-45.33	2.41	4.86	Horizontal	Pass
2798.0	-38.14	-13	-25.14	-41.78	2.84	6.48	Horizontal	Pass
1399.0	-54.01	-13	-41.01	-57.32	1.93	5.24	Vertical	Pass
2098.5	-38.28	-13	-25.28	-40.73	2.41	4.86	Vertical	Pass
2798.0	-43.97	-13	-30.97	-47.61	2.84	6.48	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
1406.0	-53.83	-13	-40.83	-57.18	1.93	5.28	Horizontal	Pass
2109.0	-40.92	-13	-27.92	-43.38	2.42	4.88	Horizontal	Pass
2812.0	-38.4	-13	-25.4	-42.06	2.85	6.51	Horizontal	Pass
1406.0	-51.97	-13	-38.97	-55.32	1.93	5.28	Vertical	Pass
2109.0	-36.39	-13	-23.39	-38.85	2.42	4.88	Vertical	Pass
2812.0	-43.33	-13	-30.33	-46.99	2.85	6.51	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
1413.0	-53.67	-13	-40.67	-57.06	1.94	5.33	Horizontal	Pass
2119.5	-38.74	-13	-25.74	-41.23	2.42	4.91	Horizontal	Pass
2826.0	-35.97	-13	-22.97	-39.65	2.86	6.54	Horizontal	Pass
1413.0	-51.04	-13	-38.04	-54.43	1.94	5.33	Vertical	Pass
2119.5	-40.26	-13	-27.26	-42.75	2.42	4.91	Vertical	Pass
2826.0	-41.34	-13	-28.34	-45.02	2.86	6.54	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](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd. 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  
Shenzhen Branch is fully ISO/IEC 17025:2005 accredited. 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/1

Report No.: SZCR250300077406

Page: 30 of 34

LTE Band 13-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
1559.5	-51.03	-40	-11.03	-54.72	2.04	5.73	Horizontal	Pass
2339.25	-45.13	-13	-32.13	-48.0	2.56	5.43	Horizontal	Pass
3119.0	-42.23	-13	-29.23	-46.41	3.04	7.22	Horizontal	Pass
1559.5	-52.16	-40	-12.16	-55.85	2.04	5.73	Vertical	Pass
2339.25	-48.19	-13	-35.19	-51.06	2.56	5.43	Vertical	Pass
3119.0	-41.82	-13	-28.82	-46.0	3.04	7.22	Vertical	Pass
2826.0	-45.67	-13	-32.67	-49.35	2.86	6.54	Vertical	Pass

LTE Band 26a(814-824MHz)-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
1629.0	-45.04	-13	-32.04	-48.5	2.09	5.55	Horizontal	Pass
2443.5	-36.55	-13	-23.55	-39.61	2.62	5.68	Horizontal	Pass
3258.0	-39.79	-13	-26.79	-44.22	3.13	7.56	Horizontal	Pass
1629.0	-52.51	-13	-39.51	-55.97	2.09	5.55	Vertical	Pass
2443.5	-32.87	-13	-19.87	-35.93	2.62	5.68	Vertical	Pass
3258.0	-38.0	-13	-25.0	-42.43	3.13	7.56	Vertical	Pass

LTE Band 26b(824-849MHz)-Low channel, Modulation: QPSK, Bandwidth:15MHz, 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
1649.5	-45.24	-13	-32.24	-48.64	2.1	5.5	Horizontal	Pass
2474.25	-34.21	-13	-21.21	-37.33	2.64	5.76	Horizontal	Pass
3299.0	-37.95	-13	-24.95	-42.46	3.16	7.67	Horizontal	Pass
1649.5	-49.34	-13	-36.34	-52.74	2.1	5.5	Vertical	Pass
2474.25	-32.26	-13	-19.26	-35.38	2.64	5.76	Vertical	Pass
3299.0	-37.71	-13	-24.71	-42.22	3.16	7.67	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 herein 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](mailto:CN.Doccheck@sgs.com)

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

LTE Band 26b(824-849MHz)-Middle channel, Modulation: QPSK, Bandwidth:15MHz, 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
1659.5	-45.93	-13	-32.93	-49.3	2.11	5.48	Horizontal	Pass
2489.25	-38.32	-13	-25.32	-41.46	2.65	5.79	Horizontal	Pass
3319.0	-42.5	-13	-29.5	-47.05	3.17	7.72	Horizontal	Pass
1659.5	-51.48	-13	-38.48	-54.85	2.11	5.48	Vertical	Pass
2489.25	-35.01	-13	-22.01	-38.15	2.65	5.79	Vertical	Pass
3319.0	-37.79	-13	-24.79	-42.34	3.17	7.72	Vertical	Pass

LTE Band 26b(824-849MHz)-High channel, Modulation: QPSK, Bandwidth:15MHz, 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
1669.5	-41.6	-13	-28.6	-44.93	2.12	5.45	Horizontal	Pass
2504.25	-37.22	-13	-24.22	-40.39	2.66	5.83	Horizontal	Pass
3339.0	-40.82	-13	-27.82	-45.41	3.18	7.77	Horizontal	Pass
1669.5	-48.2	-13	-35.2	-51.53	2.12	5.45	Vertical	Pass
2504.25	-36.89	-13	-23.89	-40.06	2.66	5.83	Vertical	Pass
3339.0	-37.19	-13	-24.19	-41.78	3.18	7.77	Vertical	Pass

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
3423.4	-42.43	-13	-29.43	-47.17	3.24	7.98	Horizontal	Pass
5135.1	-43.16	-13	-30.16	-49.13	4.25	10.22	Horizontal	Pass
6846.8	-43.35	-13	-30.35	-50.09	4.19	10.93	Horizontal	Pass
3423.4	-39.9	-13	-26.9	-44.64	3.24	7.98	Vertical	Pass
5135.1	-36.23	-13	-23.23	-42.2	4.25	10.22	Vertical	Pass
6846.8	-47.44	-13	-34.44	-54.18	4.19	10.93	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](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd. 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  
Shenzhen Branch | Shenzhen SGS Laboratory | China • 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/1

Report No.: SZCR250300077406

Page: 32 of 34

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
3472.0	-37.75	-13	-24.75	-42.58	3.27	8.1	Horizontal	Pass
5208.0	-47.54	-13	-34.54	-53.56	4.25	10.27	Horizontal	Pass
6944.0	-41.47	-13	-28.47	-48.34	4.19	11.06	Horizontal	Pass
3472.0	-38.78	-13	-25.78	-43.61	3.27	8.1	Vertical	Pass
5208.0	-41.29	-13	-28.29	-47.31	4.25	10.27	Vertical	Pass
6944.0	-42.35	-13	-29.35	-49.22	4.19	11.06	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
3520.6	-40.95	-13	-27.95	-45.85	3.3	8.2	Horizontal	Pass
5280.9	-42.51	-13	-29.51	-48.57	4.25	10.31	Horizontal	Pass
7041.2	-40.4	-13	-27.4	-47.39	4.19	11.18	Horizontal	Pass
3520.6	-41.83	-13	-28.83	-46.73	3.3	8.2	Vertical	Pass
5280.9	-34.48	-13	-21.48	-40.54	4.25	10.31	Vertical	Pass
7041.2	-42.9	-13	-29.9	-49.89	4.19	11.18	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](mailto:CN.Doccheck@sgs.com)

### 6.7 Frequency stability

Test Requirement: §2.1055,§22.355,§24.235,§27.54,§90.213

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

Limit:  $\leq \pm 2.5\text{ppm}$ .

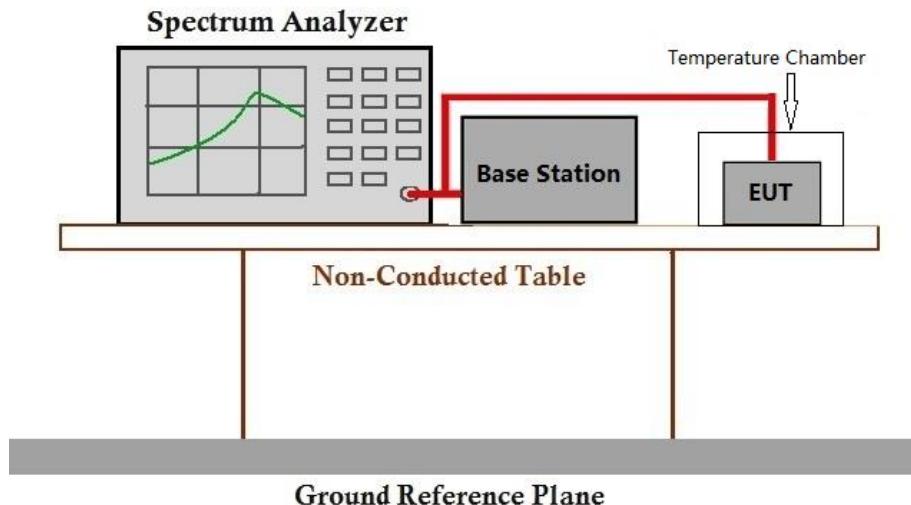
#### 6.7.1 E.U.T. Operation

Operating Environment:

Temperature: 20.8 °C Humidity: 43.5 % 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 Band 2/4/5/7/12/13/26/38/66 test data.

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](mailto:CN.Doccheck@sgs.com)

## 7 Test Setup Photo

Refer to Appendix - Test Setup Photo for SZCR2503000774AT

## 8 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for SZCR2503000774AT

- End of the Report -



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <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](mailto:CN.Doccheck@sgs.com)**