



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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

1 of 37

TEST REPORT

Application No.: SZCR2312004192AT
Applicant: Shenzhen Jimi IoT Co., Ltd.
Address of Applicant: 3-4/F, Block A, Building#7, Shenzhen International Innovation Valley, Dashi 1st Road, Nanshan District Shenzhen China
Manufacturer: Shenzhen Jimi IoT Co., Ltd.
Address of Manufacturer: 3-4/F, Block A, Building#7, Shenzhen International Innovation Valley, Dashi 1st Road, Nanshan District Shenzhen China
Factory: Huizhou Newthinking Electronics Co., Ltd.
Address of Factory: The third&sixth floor, 1&2 Factory Buildings, Jimi Industrial Park, No.101 Jinfu Road, Xiaojinkou street, Huicheng District, Huizhou
Equipment Under Test (EUT):
EUT Name: Module
Model No.: XQ800
FCC ID: 2AMLF-XQ800N-NA
Standard(s) : 47 CFR Part 2
47 CFR Part 22 subpart H
47 CFR Part 24 subpart E
47 CFR Part 27 subpart C
47 CFR Part 90 subpart S
47 CFR Part 90 subpart R
Date of Receipt: 2023-12-19
Date of Test: 2023-12-20 to 2024-01-15
Date of Issue: 2024-01-19

Test Result:	Pass
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* In the configuration tested, the EUT complied with the standards specified above.

Keny Xu

Keny Xu
EMC Laboratory Manager



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Shenzhen Branch EMC Laboratory

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Report No.: SZCR231200419201

Page: 2 of 37

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2024-01-19		Original

Authorized for issue by:				
		Darren Yuan		
		Darren Yuan/Project Engineer		
		Eric Fu		
		Eric Fu/Reviewer		

Keny Xu

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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) §90.635 §90.542(a)	ERP≤ 7W(LTE Band 5,26b,26c) EIRP≤ 2W(LTE Band 2,25) ERP≤ 3W(LTE Band 12,17) EIRP≤ 1W(LTE Band 4,66) EIRP≤ 2W(LTE Band 7,41) ERP≤ 100W(LTE Band 26a) ERP≤ 3W(LTE Band 14)	PASS
Peak-Average Ratio	§22.913 §24.232 §27.50(a) §27.50(d)	≤13dB	PASS
Modulation Characteristics	§2.1047	Digital modulation	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) §90.543(e) §90.691	≤ -13dBm (LTE Band5,26b,26c) ≤ -13dBm (LTE Band2,25) ≤ -13dBm (LTE Band12,17) ≤ -13dBm (LTE Band4,66) Refer to clause 6.4 for LTE Band7,41 Refer to clause 6.4 for LTE Band14 Refer to clause 6.4 for LTE Band26a	PASS
Spurious emissions at antenna terminals	§2.1051 §22.917 §24.238 §27.50(g) §27.50(h) §27.50(m) §90.543(e) §90.691	≤ -13dBm (LTE Band5,26b,26c) ≤ -13dBm (LTE Band2,25) ≤ -13dBm (LTE Band12,17) ≤ -13dBm (LTE Band4,66) Refer to clause 6.5 for LTE Band7,41 Refer to clause 6.5 for LTE Band14 Refer to clause 6.5 for LTE Band26a	PASS
Field strength of spurious radiation	§2.1051 §22.917 §24.238 §27.50(g) §27.50(h) §27.50(m) §90.543(e) §90.691	≤ -13dBm (LTE Band5,26b,26c) ≤ -13dBm (LTE Band2,25) ≤ -13dBm (LTE Band12,17) ≤ -13dBm (LTE Band4,66) Refer to clause 6.6 for LTE Band7,41 Refer to clause 6.6 for LTE Band14 Refer to clause 6.6 for LTE Band26a	PASS





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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page: 4 of 37

Frequency stability	\$2.1055 \$22.355 \$24.235 \$27.54 \$90.213	$\leq \pm 2.5\text{ppm.}$	PASS
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3 Contents

	Page
1 Cover Page	1
2 Test Summary	3
3 Contents	5
4 General Information	7
4.1 Details of E.U.T.	7
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	19
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	21
6.5.2 Test Setup Diagram	21
6.5.3 Measurement Data	21
6.6 Field strength of spurious radiation	22
6.6.1 E.U.T. Operation	23
6.6.2 Test Setup Diagram	23
6.6.3 Measurement Procedure and Data	24
6.7 Frequency stability	36
6.7.1 E.U.T. Operation	36





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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page: 6 of 37

6.7.2	Test Setup Diagram	36
6.7.3	Measurement Data.....	36
7	Test Setup Photo	37
8	EUT Constructional Details (EUT Photos).....	37



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4 General Information

4.1 Details of E.U.T.

Power supply:	Powered by 4VDC
LTE Operation Frequency Band:	LTE Band 2,4,5,7,12,14,17,25,26,41,66
Modulation Type:	QPSK, 16QAM
LTE Power Class:	Level 3
Antenna Type:	Dipole Antenna PIFA Antenna
Antenna Gain for Dipole Antenna:	LTE B2: 6.63dbi; B4: 6.28dbi; B5: 6.0dbi; B7: 6.0dbi, LTE B12: 6.0dbi; B14: 6.0dbi; B17: 6.0dbi; B25: 6.0dbi, LTE B26: 6.0dbi; B41: 6.0dbi; B66: 6.0dbi.
Antenna Gain for PIFA Antenna:	LTE B2: 6.0dbi; B4: 6.0dbi; B5: 6.0dbi; B7: 6.0dbi, LTE B12: 6.0dbi; B14: 6.0dbi; B17: 6.0dbi; B25: 6.0dbi, LTE B26: 6.0dbi; B41: 6.0dbi; B66: 6.0dbi.
Cable Loss (for RF conducted test):	Below 1GHz: 0.9dB 1GHz-2GHz: 1.4dB 2GHz-3GHz: 1.9dB 3GHz-4GHz: 2.5dB Above 4GHz: 3.2dB

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Remark2: There are two kinds of antenna were selected to test, dipole antenna is the worst-case, only the worst-case test data were recorded in this report.



4.2 Test Frequency

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE 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 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 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 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



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Report No.: SZCR231200419201

Page:

9 of 37

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE 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 Band 14	5	790.5	793.0	795.5
	10	/	793.0	/
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE 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 Band 25	1.4	1850.7	1882.5	1914.3
	3	1851.5	1882.5	1913.5
	5	1852.5	1882.5	1912.5
	10	1855.0	1882.5	1910.0
	15	1857.5	1882.5	1907.5
	20	1860.0	1882.5	1905.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE Band 26a	1.4	814.7	819.0	823.3
	3	815.5	819.0	822.5
	5	816.5	819.0	821.5
	10	/	819.0	/



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Report No.: SZCR231200419201

Page: 10 of 37

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE Band 26b	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 Band 26c	15	821.5	831.5	841.5
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE Band 41	5	2498.5	2593.0	2687.5
	10	2501.0	2593.0	2685.0
	15	2503.5	2593.0	2682.5
	20	2506.0	2593.0	2680.0
Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE 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



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4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Temperature:	TL	-30°C
	TN	+20°C
	TH	+50°C
Voltage:	VL	3.4 Vdc
	VN	4.0 Vdc
	VH	4.6 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.
Motherboard	JIMI	V1462_MB_V1.0	N/A
DC power supply	ZHAOXIN	KXN-6020D	N/A

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	$\pm 3\%$



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Report No.: SZCR231200419201

Page: 12 of 37

4.6 Test Location

All tests were performed at:

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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



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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	2023/07/11	2024/07/10
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2023/03/21	2024/03/20
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2023/07/11	2024/07/10
Measurement Software	TST	TST PASS V2.0	N/A	N/A	N/A
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	2023/07/11	2024/07/10
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2023/03/28	2024/03/27
Power Sensor	KEYSIGHT	U2021XA	SEM009-15	2023/03/21	2024/03/20

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
Trilog-Broadband Antenna	Schwarzbeck	VULB9168	SEM003-33	2021/9/25	2024/9/24
MXE EMI receiver	Agilent	N9038A	SEM004-05	2023/07/11	2024/07/10
Pre-amplifier	HP	8447D	SEM005-02	2023/07/11	2024/07/10
Spectrum Analyzer	Rohde & Schwarz	101288	SEM004-08	2023/07/11	2024/07/10
Low Noise Amplifier	CLAVIIO	BDLNA-0118-352810	SEM005-05	2023/07/11	2024/07/10
Substitution Antenna	Schwarzbeck	VULB9168	SEM003-18	2022/08/07	2025/08/06
Signal Generator(9kHz-40GHz)	N5173B	MY53270267	Agilent	2023/07/11	2024/07/10
Pre-amplifier	HP	8447D	SEM005-02	2023/07/11	2024/07/10
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2021/7/11	2024/7/10
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	SEM003-32	2021/9/26	2024/9/25
Double-ridged waveguide horn	ETS-LINDGREN	3117	SEM003-34	2021/9/25	2024/9/24
Spectrum Analyzer	Rohde & Schwarz	101288	SEM004-08	2023/07/11	2024/07/10
Low Noise Amplifier	CLAVIIO	BDLNA-0118-352810	SEM005-05	2023/07/11	2024/07/10



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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

14 of 37

Pre-amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2023/07/11	2024/07/10
Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2023/07/11	2024/07/10
Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2023/06/25	2026/06/24
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2023/03/28	2024/03/27

General used equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	deli	8838	SEM002-32	2023-07-28	2024-07-27
Humidity/ Temperature Indicator	deli	8838	SEM002-33	2023-07-28	2024-07-27
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2023-03-23	2024-03-22



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6 Radio Spectrum Matter Test Results

6.1 Effective (Isotropic) Radiated Output Power Data

Test Requirement: §2.1046, §22.913, §24.232, §27.50(c), §27.50(d), §27.50(h), §90.635, §90.542(a)
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit:
 ERP ≤ 7W (LTE Band 5, 26b, 26c)
 EIRP ≤ 2W (LTE Band 2, 25)
 ERP ≤ 3W (LTE Band 12, 17)
 EIRP ≤ 1W (LTE Band 4, 66)
 EIRP ≤ 2W (LTE Band 7, 41)
 ERP ≤ 100W (LTE Band 26a)
 ERP ≤ 3W (LTE Band 14)

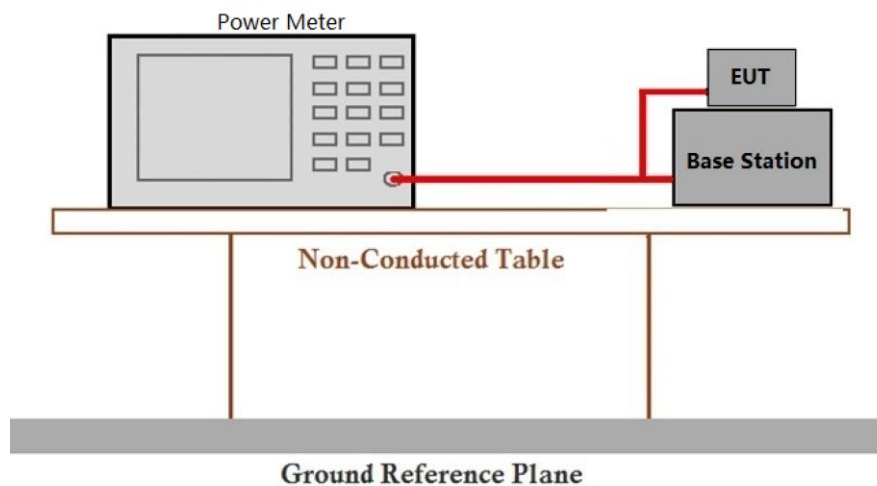
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 20.8 °C Humidity: 51.1 % RH Atmospheric Pressure: 1010 mbar

Test mode 01: 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.

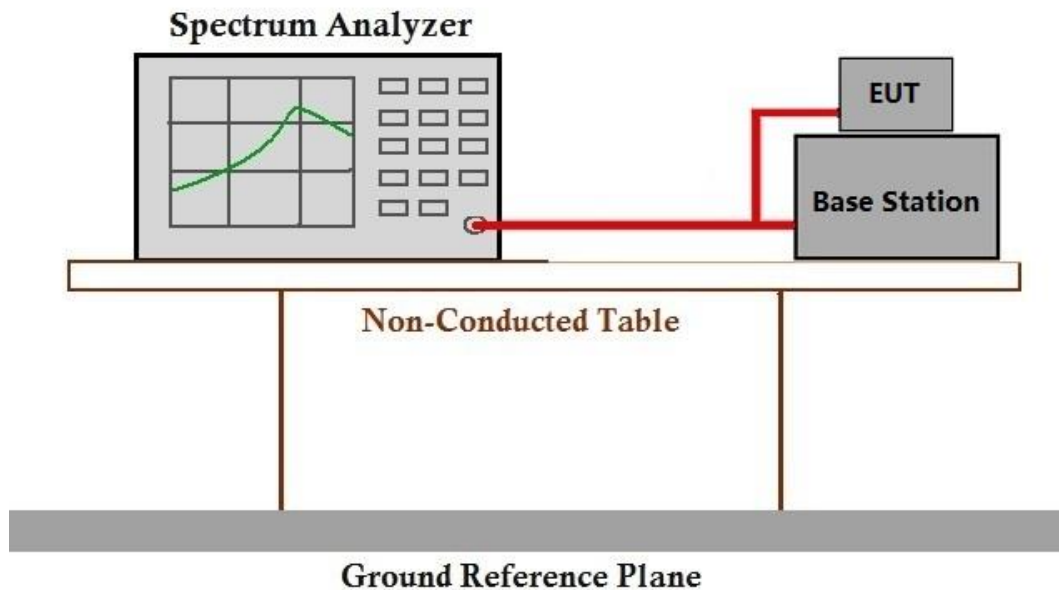
6.2 Peak-Average Ratio

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

6.2.1 E.U.T. Operation

Operating Environment:
 Temperature: 20.8 °C Humidity: 51.1 % RH Atmospheric Pressure: 1010 mbar
 Test mode 01: 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.

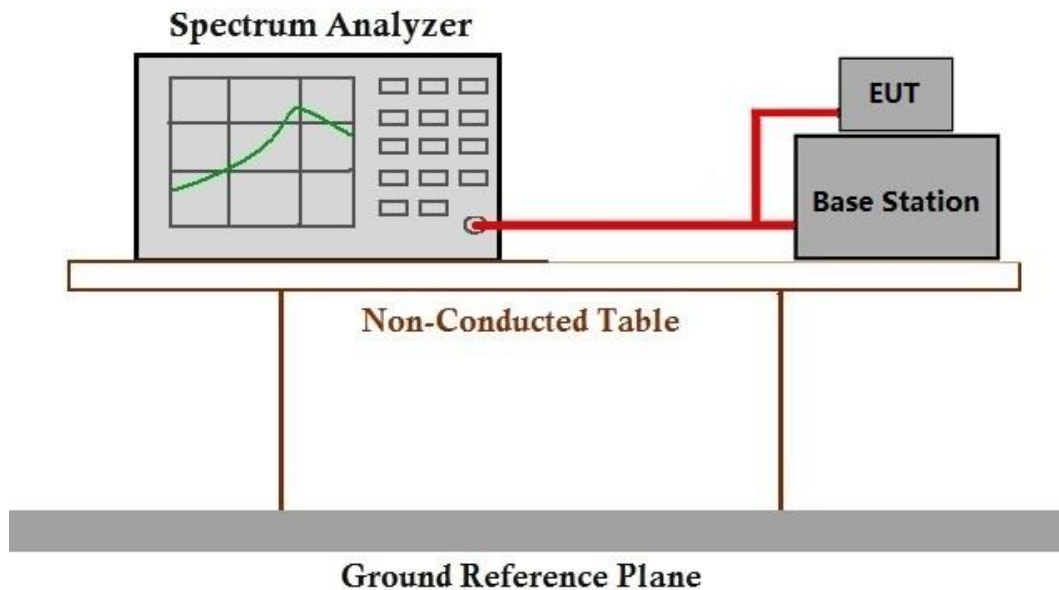
6.3 Bandwidth

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

6.3.1 E.U.T. Operation

Operating Environment:
 Temperature: 20.8 °C Humidity: 51.1 % RH Atmospheric Pressure: 1010 mbar
 Test mode 01: 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), §90.543(e), §90.691

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

Limit: ≤ -13dBm (LTE Band5,26b,26c)
 ≤ -13dBm (LTE Band2,25)
 ≤ -13dBm (LTE Band12,17)
 ≤ -13dBm (LTE Band4,66)

For Band7,41:

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 Band14

For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

For Band26a

For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50+10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.



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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page: 19 of 37

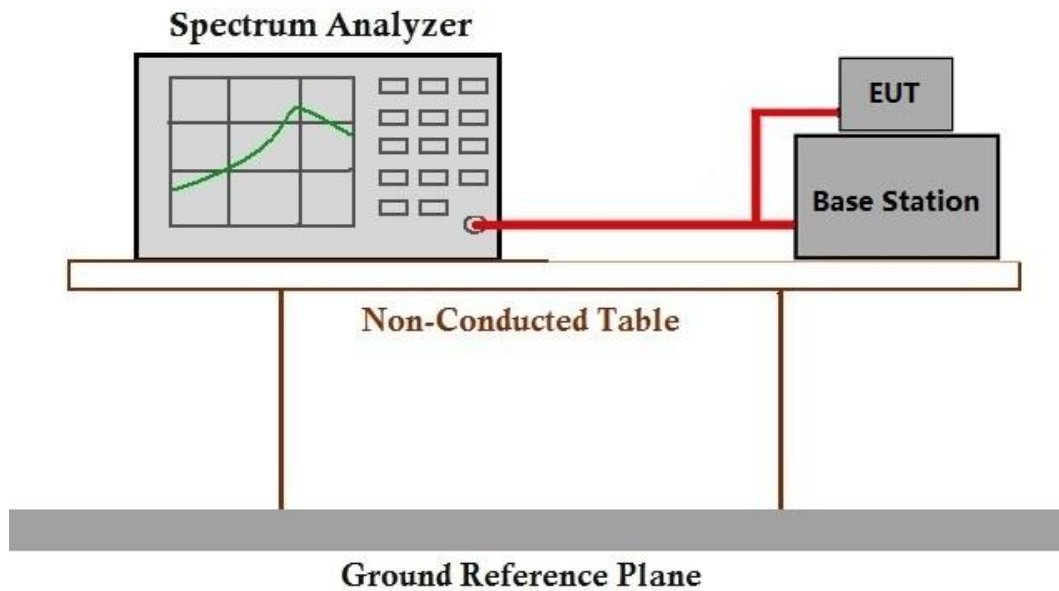
6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 20.8 °C Humidity: 51.1 % RH Atmospheric Pressure: 1010 mbar

Test mode 01: 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), §90.543(e), §90.691

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

Limit: ≤ -13dBm (LTE Band5,26b,26c)
≤ -13dBm (LTE Band2,25)
≤ -13dBm (LTE Band12,17)
≤ -13dBm (LTE Band4,66)

For Band7,41:

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 Band14

For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log(P)$ dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

For Band26a

For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.



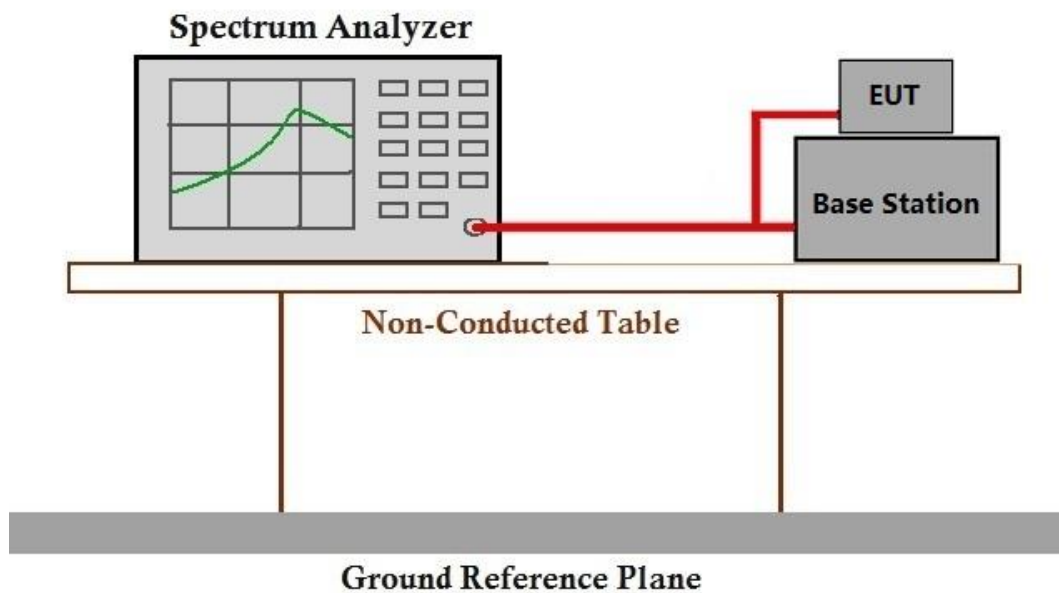
6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 20.8 °C Humidity: 51.1 % RH Atmospheric Pressure: 1010 mbar

Test mode 01: 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), §90.543(e), §90.691

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

Limit: ≤ -13dBm (LTE Band5,26b,26c)
 ≤ -13dBm (LTE Band2,25)
 ≤ -13dBm (LTE Band12,17)
 ≤ -13dBm (LTE Band4,66)
 For Band7,41:

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 Band14

For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations.
- (2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.
- (3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log(P)$ dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

For Band26a

For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.



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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

23 of 37

6.6.1 E.U.T. Operation

Operating Environment:

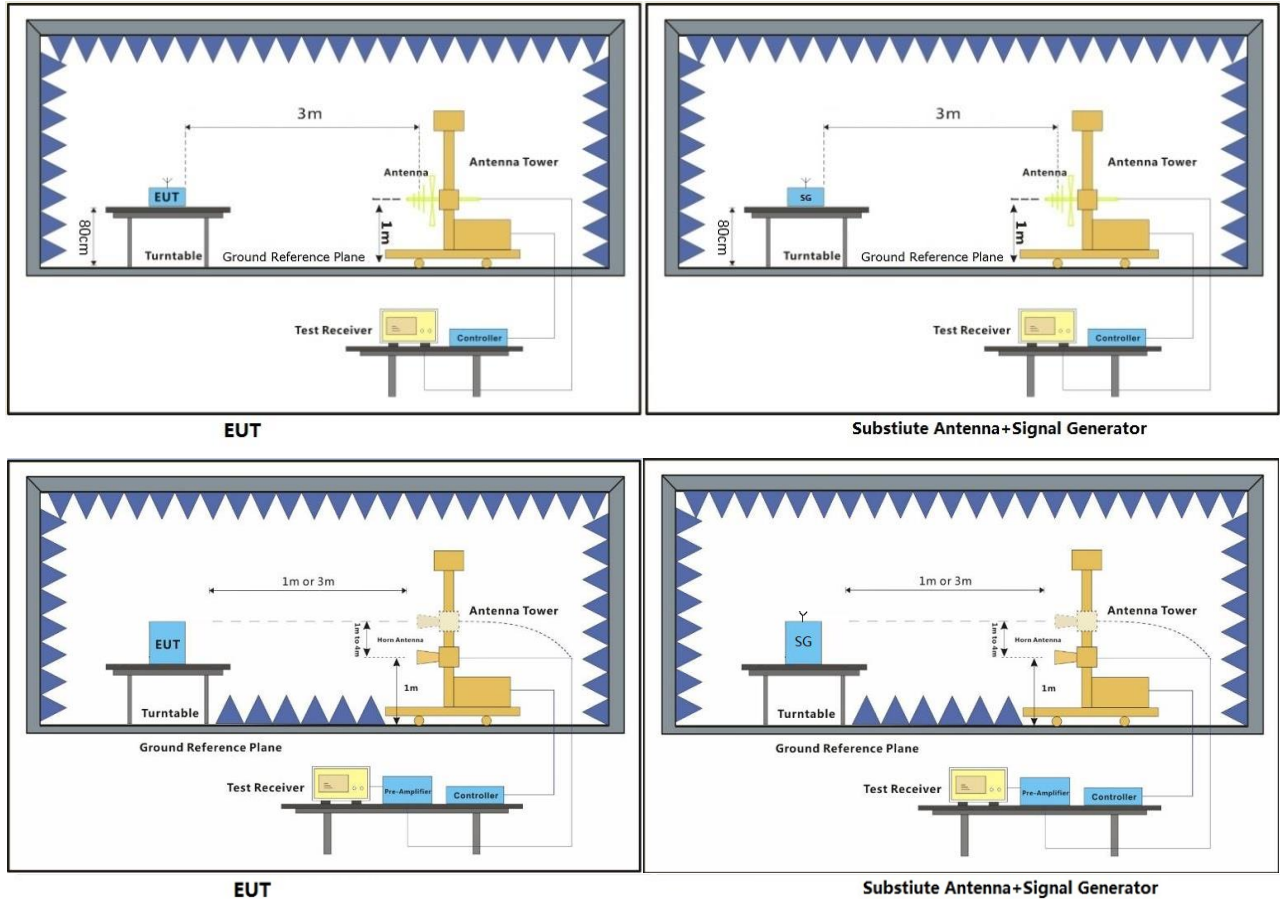
Temperature: 22.5 °C

Humidity: 47.5 % RH

Atmospheric Pressure: 1010 mbar

Test mode 01: TX mode_Keep the EUT in transmitting mode

6.6.2 Test Setup Diagram



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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

24 of 37

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.



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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

25 of 37

LTE Band2-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3701	-30.97	-13	-17.97	-35.85	3.29	8.17	Horizontal	Pass
5551.5	-34.83	-13	-21.83	-41.04	4.24	10.45	Horizontal	Pass
7402	-36.54	-13	-23.54	-43.48	4.19	11.13	Horizontal	Pass
3701	-32.19	-13	-19.19	-37.07	3.29	8.17	Vertical	Pass
5551.5	-35.1	-13	-22.1	-41.31	4.24	10.45	Vertical	Pass
7402	-35.87	-13	-22.87	-42.81	4.19	11.13	Vertical	Pass

LTE Band2-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3700.14	-31.8	-13	-18.8	-36.68	3.29	8.17	Horizontal	Pass
5550.21	-35.02	-13	-22.02	-41.23	4.24	10.45	Horizontal	Pass
7400.28	-37.78	-13	-24.78	-44.72	4.19	11.13	Horizontal	Pass
3700.14	-31.86	-13	-18.86	-36.74	3.29	8.17	Vertical	Pass
5550.21	-34.08	-13	-21.08	-40.29	4.24	10.45	Vertical	Pass
7400.28	-37.44	-13	-24.44	-44.38	4.19	11.13	Vertical	Pass

LTE Band2-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3700.3	-31.39	-13	-18.39	-36.27	3.29	8.17	Horizontal	Pass
5550.45	-34.98	-13	-21.98	-41.19	4.24	10.45	Horizontal	Pass
7400.6	-37.38	-13	-24.38	-44.32	4.19	11.13	Horizontal	Pass
3700.3	-30.78	-13	-17.78	-35.66	3.29	8.17	Vertical	Pass
5550.45	-34.48	-13	-21.48	-40.69	4.24	10.45	Vertical	Pass
7400.6	-37.97	-13	-24.97	-44.91	4.19	11.13	Vertical	Pass

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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

26 of 37

LTE Band4-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3420.14	-36.09	-13	-23.09	-40.05	2.96	6.92	Horizontal	Pass
5130.21	-31.33	-13	-18.33	-37.21	4.26	10.14	Horizontal	Pass
6840.28	-41.04	-13	-28.04	-47.325	4.205	10.49	Horizontal	Pass
3420.14	-36.72	-13	-23.72	-40.68	2.96	6.92	Vertical	Pass
5130.21	-33.21	-13	-20.21	-39.09	4.26	10.14	Vertical	Pass
6840.28	-40.37	-13	-27.37	-46.655	4.205	10.49	Vertical	Pass

LTE Band4-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3463.74	-36.75	-13	-23.75	-40.71	2.96	6.92	Horizontal	Pass
5195.61	-32.36	-13	-19.36	-38.24	4.26	10.14	Horizontal	Pass
6927.48	-41.44	-13	-28.44	-47.725	4.205	10.49	Horizontal	Pass
3463.74	-36.78	-13	-23.78	-40.74	2.96	6.92	Vertical	Pass
5195.61	-31.64	-13	-18.64	-37.52	4.26	10.14	Vertical	Pass
6927.48	-41.73	-13	-28.73	-48.015	4.205	10.49	Vertical	Pass

LTE Band4-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3507.34	-38	-13	-25	-42.88	3.29	8.17	Horizontal	Pass
5261.01	-32.26	-13	-19.26	-38.14	4.26	10.14	Horizontal	Pass
7014.68	-41.98	-13	-28.98	-48.92	4.19	11.13	Horizontal	Pass
3507.34	-36.2	-13	-23.2	-41.08	3.29	8.17	Vertical	Pass
5261.01	-33.01	-13	-20.01	-38.89	4.26	10.14	Vertical	Pass
7014.68	-41.23	-13	-28.23	-48.17	4.19	11.13	Vertical	Pass

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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

27 of 37

LTE Band5-Low channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1648.14	-57.36	-13	-44.36	-61.245	1.995	5.88	Horizontal	Pass
2472.21	-34.73	-13	-21.73	-34.85	2.35	4.62	Horizontal	Pass
3296.28	-45.48	-13	-32.48	-47.29	2.96	6.92	Horizontal	Pass
1648.14	-58.91	-13	-45.91	-60.645	1.995	5.88	Vertical	Pass
2472.21	-34.27	-13	-21.27	-34.39	2.35	4.62	Vertical	Pass
3296.28	-46.76	-13	-33.76	-48.57	2.96	6.92	Vertical	Pass

LTE Band5-Middle channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1671.74	-57.87	-13	-44.87	-61.755	1.995	5.88	Horizontal	Pass
2507.61	-34.68	-13	-21.68	-35.695	2.655	5.82	Horizontal	Pass
3343.48	-46.13	-13	-33.13	-47.94	2.96	6.92	Horizontal	Pass
1671.74	-58.35	-13	-45.35	-60.085	1.995	5.88	Vertical	Pass
2507.61	-34.7	-13	-21.7	-35.715	2.655	5.82	Vertical	Pass
3343.48	-45.27	-13	-32.27	-47.08	2.96	6.92	Vertical	Pass

LTE Band5-High channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1695.34	-58.2	-13	-45.2	-62.085	1.995	5.88	Horizontal	Pass
2543.01	-34.96	-13	-21.96	-35.975	2.655	5.82	Horizontal	Pass
3390.68	-45.05	-13	-32.05	-46.86	2.96	6.92	Horizontal	Pass
1695.34	-59.05	-13	-46.05	-60.785	1.995	5.88	Vertical	Pass
2543.01	-34.4	-13	-21.4	-35.415	2.655	5.82	Vertical	Pass
3390.68	-45	-13	-32	-46.81	2.96	6.92	Vertical	Pass



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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

28 of 37

LTE Band7-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5000.5	-35.7	-25	-10.7	-41.58	4.26	10.14	Horizontal	Pass
7500.75	-38.92	-25	-13.92	-46.445	4.215	11.74	Horizontal	Pass
10001	-37.53	-25	-12.53	-45.48	5.08	13.03	Horizontal	Pass
5000.5	-36.31	-25	-11.31	-42.19	4.26	10.14	Vertical	Pass
7500.75	-38.21	-25	-13.21	-45.735	4.215	11.74	Vertical	Pass
10001	-38.07	-25	-13.07	-46.02	5.08	13.03	Vertical	Pass

LTE Band7-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5065.5	-36.08	-25	-11.08	-41.96	4.26	10.14	Horizontal	Pass
7598.25	-39.18	-25	-14.18	-46.705	4.215	11.74	Horizontal	Pass
10131	-36.5	-25	-11.5	-44.45	5.08	13.03	Horizontal	Pass
5065.5	-35.92	-25	-10.92	-41.8	4.26	10.14	Vertical	Pass
7598.25	-39.96	-25	-14.96	-47.485	4.215	11.74	Vertical	Pass
10131	-37.88	-25	-12.88	-45.83	5.08	13.03	Vertical	Pass

LTE Band7-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5130.5	-37	-25	-12	-42.88	4.26	10.14	Horizontal	Pass
7695.75	-40.41	-25	-15.41	-47.935	4.215	11.74	Horizontal	Pass
10261	-36.83	-25	-11.83	-44.78	5.08	13.03	Horizontal	Pass
5130.5	-36.44	-25	-11.44	-42.32	4.26	10.14	Vertical	Pass
7695.75	-40.07	-25	-15.07	-47.595	4.215	11.74	Vertical	Pass
10261	-38.5	-25	-13.5	-46.45	5.08	13.03	Vertical	Pass



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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

29 of 37

LTE Band12-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1398.14	-32.71	-13	-19.71	-33.78	1.64	2.71	Horizontal	Pass
2097.21	-54.77	-13	-41.77	-54.89	2.35	4.62	Horizontal	Pass
2796.28	-53.06	-13	-40.06	-54.075	2.655	5.82	Horizontal	Pass
1398.14	-38	-13	-25	-36.92	1.64	2.71	Vertical	Pass
2097.21	-43.48	-13	-30.48	-43.6	2.35	4.62	Vertical	Pass
2796.28	-53.97	-13	-40.97	-54.985	2.655	5.82	Vertical	Pass

LTE Band12-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1413.74	-32.8	-13	-19.8	-33.87	1.64	2.71	Horizontal	Pass
2120.61	-54.51	-13	-41.51	-54.63	2.35	4.62	Horizontal	Pass
2827.48	-53.1	-13	-40.1	-54.115	2.655	5.82	Horizontal	Pass
1413.74	-31.95	-13	-18.95	-30.87	1.64	2.71	Vertical	Pass
2120.61	-42.39	-13	-29.39	-42.51	2.35	4.62	Vertical	Pass
2827.48	-51.44	-13	-38.44	-52.455	2.655	5.82	Vertical	Pass

LTE Band12-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1429.34	-35.43	-13	-22.43	-36.5	1.64	2.71	Horizontal	Pass
2144.01	-55.57	-13	-42.57	-55.69	2.35	4.62	Horizontal	Pass
2858.68	-52.96	-13	-39.96	-53.975	2.655	5.82	Horizontal	Pass
1429.34	-33.75	-13	-20.75	-32.67	1.64	2.71	Vertical	Pass
2144.01	-44.62	-13	-31.62	-44.74	2.35	4.62	Vertical	Pass
2858.68	-53.22	-13	-40.22	-54.235	2.655	5.82	Vertical	Pass

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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

30 of 37

LTE Band14-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1576.5	-58.72	-40	-18.72	-62.605	1.995	5.88	Horizontal	Pass
2364.75	-54	-13	-41	-54.12	2.35	4.62	Horizontal	Pass
3153	-49.51	-13	-36.51	-51.32	2.96	6.92	Horizontal	Pass
1576.5	-59.16	-40	-19.16	-60.895	1.995	5.88	Vertical	Pass
2364.75	-49.45	-13	-36.45	-49.57	2.35	4.62	Vertical	Pass
3153	-49.39	-13	-36.39	-51.2	2.96	6.92	Vertical	Pass

LTE Band14-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1581.5	-58.19	-40	-18.19	-62.075	1.995	5.88	Horizontal	Pass
2372.25	-49.63	-13	-36.63	-49.75	2.35	4.62	Horizontal	Pass
3163	-48.93	-13	-35.93	-50.74	2.96	6.92	Horizontal	Pass
1581.5	-58.76	-40	-18.76	-60.495	1.995	5.88	Vertical	Pass
2372.25	-45.45	-13	-32.45	-45.57	2.35	4.62	Vertical	Pass
3163	-49.92	-13	-36.92	-51.73	2.96	6.92	Vertical	Pass

LTE Band14-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1586.5	-57.67	-40	-17.67	-61.555	1.995	5.88	Horizontal	Pass
2379.75	-43.76	-13	-30.76	-43.88	2.35	4.62	Horizontal	Pass
3173	-49.57	-13	-36.57	-51.38	2.96	6.92	Horizontal	Pass
1586.5	-57.14	-40	-17.14	-58.875	1.995	5.88	Vertical	Pass
2379.75	-39.86	-13	-26.86	-39.98	2.35	4.62	Vertical	Pass
3173	-49.43	-13	-36.43	-51.24	2.96	6.92	Vertical	Pass

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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

31 of 37

LTE Band17-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1408.5	-51.65	-13	-38.65	-52.72	1.64	2.71	Horizontal	Pass
2112.75	-37.16	-13	-24.16	-37.28	2.35	4.62	Horizontal	Pass
2817	-54.68	-13	-41.68	-55.695	2.655	5.82	Horizontal	Pass
1408.5	-52.42	-13	-39.42	-51.34	1.64	2.71	Vertical	Pass
2112.75	-38.04	-13	-25.04	-38.16	2.35	4.62	Vertical	Pass
2817	-55.01	-13	-42.01	-56.025	2.655	5.82	Vertical	Pass

LTE Band17-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1415.5	-54.04	-13	-41.04	-55.11	1.64	2.71	Horizontal	Pass
2123.25	-36.02	-13	-23.02	-36.14	2.35	4.62	Horizontal	Pass
2831	-53.45	-13	-40.45	-54.465	2.655	5.82	Horizontal	Pass
1415.5	-52.43	-13	-39.43	-51.35	1.64	2.71	Vertical	Pass
2123.25	-37.11	-13	-24.11	-37.23	2.35	4.62	Vertical	Pass
2831	-54.82	-13	-41.82	-55.835	2.655	5.82	Vertical	Pass

LTE Band17-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1422.5	-52.96	-13	-39.96	-54.03	1.64	2.71	Horizontal	Pass
2133.75	-35.95	-13	-22.95	-36.07	2.35	4.62	Horizontal	Pass
2845	-54.49	-13	-41.49	-55.505	2.655	5.82	Horizontal	Pass
1422.5	-53.05	-13	-40.05	-51.97	1.64	2.71	Vertical	Pass
2133.75	-38.06	-13	-25.06	-38.18	2.35	4.62	Vertical	Pass
2845	-54.48	-13	-41.48	-55.495	2.655	5.82	Vertical	Pass



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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

32 of 37

LTE Band25-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3700.14	-28.91	-13	-15.91	-33.79	3.29	8.17	Horizontal	Pass
5550.21	-37.78	-13	-24.78	-43.99	4.24	10.45	Horizontal	Pass
7400.28	-35.44	-13	-22.44	-42.38	4.19	11.13	Horizontal	Pass
3700.14	-29.14	-13	-16.14	-34.02	3.29	8.17	Vertical	Pass
5550.21	-37.44	-13	-24.44	-43.65	4.24	10.45	Vertical	Pass
7400.28	-35.27	-13	-22.27	-42.21	4.19	11.13	Vertical	Pass

LTE Band25-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3763.74	-28.13	-13	-15.13	-33.01	3.29	8.17	Horizontal	Pass
5645.61	-38.28	-13	-25.28	-44.49	4.24	10.45	Horizontal	Pass
7527.48	-33.97	-13	-20.97	-41.495	4.215	11.74	Horizontal	Pass
3763.74	-28.04	-13	-15.04	-32.92	3.29	8.17	Vertical	Pass
5645.61	-38.21	-13	-25.21	-44.42	4.24	10.45	Vertical	Pass
7527.48	-33.72	-13	-20.72	-41.245	4.215	11.74	Vertical	Pass

LTE Band25-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3827.34	-28.3	-13	-15.3	-33.18	3.29	8.17	Horizontal	Pass
5741.01	-39.45	-13	-26.45	-45.66	4.24	10.45	Horizontal	Pass
7654.68	-35.4	-13	-22.4	-42.925	4.215	11.74	Horizontal	Pass
3827.34	-28.86	-13	-15.86	-33.74	3.29	8.17	Vertical	Pass
5741.01	-39.21	-13	-26.21	-45.42	4.24	10.45	Vertical	Pass
7654.68	-35.36	-13	-22.36	-42.885	4.215	11.74	Vertical	Pass



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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

33 of 37

LTE Band26-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1629.4	-52.33	-13	-39.33	-56.215	1.995	5.88	Horizontal	Pass
2444.1	-35.68	-13	-22.68	-35.8	2.35	4.62	Horizontal	Pass
3258.8	-46.89	-13	-33.89	-48.7	2.96	6.92	Horizontal	Pass
1629.4	-52.65	-13	-39.65	-54.385	1.995	5.88	Vertical	Pass
2444.1	-36.88	-13	-23.88	-37	2.35	4.62	Vertical	Pass
3258.8	-46.32	-13	-33.32	-48.13	2.96	6.92	Vertical	Pass

LTE Band26-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1662	-52.21	-13	-39.21	-56.095	1.995	5.88	Horizontal	Pass
2493	-36.9	-13	-23.9	-37.02	2.35	4.62	Horizontal	Pass
3324	-45.83	-13	-32.83	-47.64	2.96	6.92	Horizontal	Pass
1662	-51.95	-13	-38.95	-53.685	1.995	5.88	Vertical	Pass
2493	-38.25	-13	-25.25	-38.37	2.35	4.62	Vertical	Pass
3324	-46.47	-13	-33.47	-48.28	2.96	6.92	Vertical	Pass

LTE Band26-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1696.6	-52.07	-13	-39.07	-55.955	1.995	5.88	Horizontal	Pass
2544.9	-36.02	-13	-23.02	-37.035	2.655	5.82	Horizontal	Pass
3393.2	-46.03	-13	-33.03	-47.84	2.96	6.92	Horizontal	Pass
1696.6	-52.29	-13	-39.29	-54.025	1.995	5.88	Vertical	Pass
2544.9	-36.68	-13	-23.68	-37.695	2.655	5.82	Vertical	Pass
3393.2	-46.48	-13	-33.48	-48.29	2.96	6.92	Vertical	Pass

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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

34 of 37

LTE Band41-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
4997	-40.88	-25	-15.88	-46.34	3.94	9.4	Horizontal	Pass
7495.5	-35.66	-25	-10.66	-42.6	4.19	11.13	Horizontal	Pass
9994	-35.11	-25	-10.11	-43.525	4.825	13.24	Horizontal	Pass
4997	-40.84	-25	-15.84	-46.3	3.94	9.4	Vertical	Pass
7495.5	-36.2	-25	-11.2	-43.14	4.19	11.13	Vertical	Pass
9994	-35.1	-25	-10.1	-43.515	4.825	13.24	Vertical	Pass

LTE Band41-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5186	-40.91	-25	-15.91	-46.79	4.26	10.14	Horizontal	Pass
7779	-35.87	-25	-10.87	-43.395	4.215	11.74	Horizontal	Pass
10372	-36.78	-25	-11.78	-44.73	5.08	13.03	Horizontal	Pass
5186	-40.6	-25	-15.6	-46.48	4.26	10.14	Vertical	Pass
7779	-35.97	-25	-10.97	-43.495	4.215	11.74	Vertical	Pass
10372	-35.75	-25	-10.75	-43.7	5.08	13.03	Vertical	Pass

LTE Band41-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5375	-40.58	-25	-15.58	-46.46	4.26	10.14	Horizontal	Pass
8062.5	-34.01	-25	-9.01	-42.1	4.24	12.33	Horizontal	Pass
10750	-34.99	-25	-9.99	-43.035	5.075	13.12	Horizontal	Pass
5375	-41.22	-25	-16.22	-47.1	4.26	10.14	Vertical	Pass
8062.5	-33.54	-25	-8.54	-41.63	4.24	12.33	Vertical	Pass
10750	-34.91	-25	-9.91	-42.955	5.075	13.12	Vertical	Pass

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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR231200419201

Page:

35 of 37

LTE Band66-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3420.14	-33.87	-13	-20.87	-37.83	2.96	6.92	Horizontal	Pass
5130.21	-31.98	-13	-18.98	-37.86	4.26	10.14	Horizontal	Pass
6840.28	-35.52	-13	-22.52	-41.805	4.205	10.49	Horizontal	Pass
3420.14	-34.98	-13	-21.98	-38.94	2.96	6.92	Vertical	Pass
5130.21	-31.65	-13	-18.65	-37.53	4.26	10.14	Vertical	Pass
6840.28	-35.5	-13	-22.5	-41.785	4.205	10.49	Vertical	Pass

LTE Band66-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3488.74	-35.96	-13	-22.96	-39.92	2.96	6.92	Horizontal	Pass
5233.11	-32.53	-13	-19.53	-38.41	4.26	10.14	Horizontal	Pass
6977.48	-34.39	-13	-21.39	-40.675	4.205	10.49	Horizontal	Pass
3488.74	-35.95	-13	-22.95	-39.91	2.96	6.92	Vertical	Pass
5233.11	-31.69	-13	-18.69	-37.57	4.26	10.14	Vertical	Pass
6977.48	-35.01	-13	-22.01	-41.295	4.205	10.49	Vertical	Pass

LTE Band66-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3557.34	-35.44	-13	-22.44	-40.32	3.29	8.17	Horizontal	Pass
5336.01	-31.49	-13	-18.49	-37.37	4.26	10.14	Horizontal	Pass
7114.68	-33.12	-13	-20.12	-40.06	4.19	11.13	Horizontal	Pass
3557.34	-35.02	-13	-22.02	-39.9	3.29	8.17	Vertical	Pass
5336.01	-31.07	-13	-18.07	-36.95	4.26	10.14	Vertical	Pass
7114.68	-34.52	-13	-21.52	-41.46	4.19	11.13	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.



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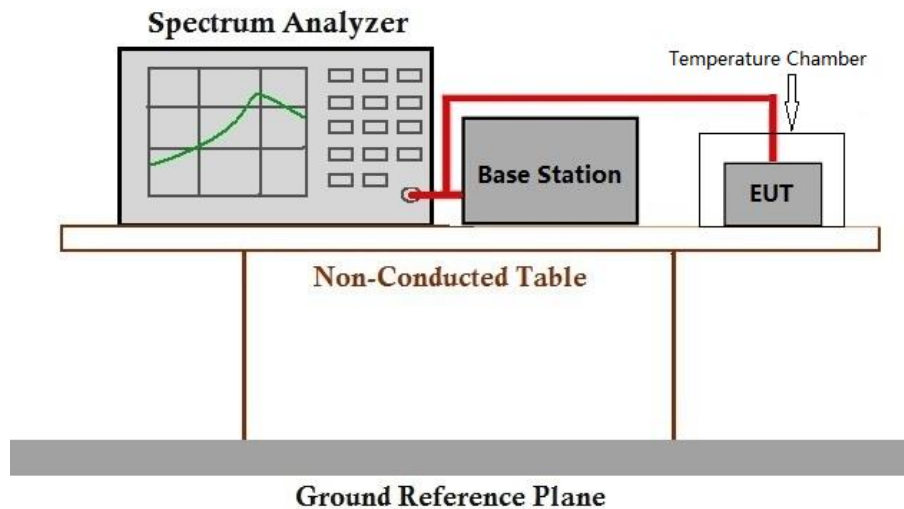
6.7 Frequency stability

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: 51.1 % RH Atmospheric Pressure: 1010 mbar
 Test mode 01: 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 SZCR2312004192AT

8 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for SZCR2312004192AT

- End of the Report -

