

SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 1 of 24

TEST REPORT

Application No.: SZCR2306001888AT

Applicant: Vanstone Electronic (Beijing) Co., Ltd.

3F No.2 Building, Aisino Corporation Park 18A, Xingshikou Road, Haidian **Address of Applicant:**

District, Beijing, China 100195

Manufacturer: Vanstone Electronic (Beijing) Co., Ltd.

Address of Manufacturer: 3F No.2 Building, Aisino Corporation Park 18A, Xingshikou Road, Haidian

District, Beijing, China 100195

Equipment Under Test (EUT):

EUT Name: Android POS Terminal

Model No.: A99 FCC ID: OWLA99 Standard(s): 47 CFR Part 2

47 CFR Part 22 subpart H

47 CFR Part 24 subpart E 47 CFR Part 27 subpart C

Date of Receipt: 2023-06-16

Date of Test: 2023-06-20 to 2023-07-18

Date of Issue: 2023-07-22

Test Result: Pass*

EMC Laboratory Manager



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



SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 2 of 24

	Revision Record						
Version	rsion Chapter Date Modifier						
01		2023-07-22		Original			

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



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 3 of 24

2 Test Summary

Test Item	FCC	Requirements	Verdict	
rest item	Rule No.	Requirements	verdict	
	§2.1046,			
Effective (Isotropic) Radiated	§22.913,	ERP≤7W(WCDMA band V)	PASS	
Power Output Data	§24.232	EIRP≤2W(WCDMA band II)	F A33	
	§27.50(d)	EIRP≤1W(WCDMA Band IV)		
	§22.913			
Peak-Average Ratio	§24.232	≤13dB	PASS	
	§27.50(d)			
Modulation Characteristics	§2.1047	Digital modulation	PASS	
Bandwidth	§2.1049(h)	OBW: No limit	PASS	
Daridwidth	32.1043(II)	EBW: No limit	FAGG	
	§2.1051,	. 40 15 (40(455))		
Band Edge Compliance	§22.917,	≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the	PASS	
Band Edge Compilance	§24.238	frequency block.	17.00	
	§27.53(h)			
	§2.1051,			
Spurious emissions at antenna	§22.917,	≤ -13dBm	PASS	
terminals	§24.238	_ rough	17.00	
	§27.53(h)			
	§2.1051,			
Field strength of spurious	§22.917,	≤ -13dBm	PASS	
radiation	§24.238	_ rough	17.00	
	§27.53(h)			
	§2.1055,			
Frequency stability	§22.355,	≤ ±2.5ppm.	PASS	
1 Toquotioy Stability	§24.235		17.00	
	§27.54			



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 4 of 24

Contents

			Page
1	Cove	er Page	1
2	Test	Summary	
_	1001		
3	Cont	tents	4
4	Gene	eral Information	6
	4.1	Details of E.U.T	e
		Test Frequency	
		Test Environment	
		Description of Support Units	
		Measurement Uncertainty	
		Test Location	
		Test Facility	
		Deviation from Standards	
		Abnormalities from Standard Conditions	
_		ipment List	40
5	Equi	ipment List	TV
6	Radi	io Spectrum Matter Test Results	12
	6.1	Effective (Isotropic) Radiated Power Output Data	12
	6.1.1	` ' '	
	6.1.2	·	
	6.1.3	B Measurement Data	12
	6.2	Peak-Average Ratio	13
	6.2.1	E.U.T. Operation	13
	6.2.2	2 Test Setup Diagram	13
	6.2.3	3 Measurement Data	13
	6.3	Bandwidth	14
	6.3.1	·	14
	6.3.2	1 0	
	6.3.3		
		Band Edge Compliance	
	6.4.1		
	6.4.2		
	6.4.3		
		Spurious emissions at antenna terminals	
	6.5.1	·	
	6.5.2	1 5	
	6.5.3		
		Field strength of spurious radiation	
	6.6.1	·	
	6.6.2		
	6.6.3	Measurement Procedure and Data	18



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 5 of 24

6.7	Frequency stability	22
	E.U.T. Operation	
	Test Setup Diagram	
	Measurement Data	
6.8	Modulation Characteristics	23
6.8.1	E.U.T. Operation	23
6.8.2	Test Setup Diagram	23
	Measurement Data	
7 Test	Setup Photo	24
8 EUT	Constructional Details (EUT Photos)	24



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 6 of 24

General Information

4.1 Details of E.U.T.

Power supply: DC7.6V by li-ion battery(2600mAh)

Battery M/N:BT-991

Battery Manufacture: Zhuhai Greaton Electronic Technology Co., Ltd.

Recharged by AC/DC adapter

Adapter M/N:SW-0983

Adapter Input: AC100-240V, 50/60Hz, 0.5A

Adapter Output: DC5V/2A

Cable(s): USB type C cable: 1.5m unshielded cable without ferrite core

Sample Type: Portable production Support Network: RMC, HSDPA, HSUPA

Operation Frequency

Band:

UMTS FDD Band II/IV/V

Modulation Type: QPSK for WCDMA

Supported Channel

Bandwidth:

5MHz for WCDMA

UMTS Power Class: Level 3

Antenna Type: PIFA Antenna

WCDMA Band II 3.06 dBi; WCDMA Band IV: 3.24 dBi; Antenna Gain:

WCDMA Band V:0.2 dBi

This device has dual SIM Card sockets. Both the SIM sockets have been SIM Card:

tested. SIM1 was worst case, only record SIM1.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 7 of 24

4.2 Test Frequency

Test Mode	TV		RF Channel	
i est iviode	TX	Low(L)	Middle (M)	High (H)
WCDMA Band	TV	Channel 4132	Channel 4183	Channel 4233
V	TX	826.4 MHz	836.6 MHz	846.6 MHz
Took Mode	TV		RF Channel	
Test Mode	TX	Low(L)	Middle (M)	High (H)
WCDMA Band	TV	Channel 1312	Channel 1413	Channel 1513
IV	TX	1712.4 MHz	1732.6 MHz	Channel 4233 846.6 MHz High (H)
Took Mode	TV		RF Channel	
Test Mode	TX	Low(L)	Middle (M)	High (H)
WCDMA Band	TV	Channel 9262	Channel 9400	Channel 9538
II	TX	1852.4 MHz	1880.0 MHz	1907.6 MHz

4.3 Test Environment

Environment Parameter	Selected Values During Tests			
Temperature:	TL	-30°C		
	TN	+20°C		
	TH	+50°C		
	VL	6.46 Vdc		
Voltage:	VN	7.6 Vdc		
	VH	8.74 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

The EUT has been tested independent unit.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 8 of 24

4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	± 5.4 x 10 ⁻⁸
2	Duty cycle	± 0.3%
3	Occupied Bandwidth	± 3%
4	RF conducted power	± 0.8dB
5	RF power density	± 0.4dB
6	Conducted Spurious emissions	± 2.7dB
7	Padiated Sourious emission test	± 3.1dB (Below 1GHz)
,	Radiated Spurious emission test	± 4.4dB (Above 1GHz)
8	Temperature test	± 1°C
9	Humidity test	± 3%
10	Supply voltages	± 1.5%
11	Time	± 3%



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 9 of 24

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



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 10 of 24

Equipment List 5

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
Programmable DC	Chroma	62024P-80-60	SEM011-09	2022/07/12	2023/07/11
Source	Onionia	0202 11 00 00	OLINIOTT OO	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	2022/07/12 2023/07/11	2023/07/11 2024/07/10
Measurement Software	TST	TST PASS V2.0	N/A	N/A	N/A
Attenuator	Huber+Suhner	6620_SMA-	SEM021-09	2022/07/12	2023/07/11
Allendaloi	i iuber+Suriner	50-1	3E101021-09	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	A gilont	N9038A	SEM004-05	2022/07/12	2023/07/11
INIVE EINII LEGEIAEI	Agilent	N9036A	SEIVI004-05	2023/07/11	2024/07/10
Dro omplifier	HP	8447D	SEM005-02	2022/07/12	2023/07/11
Pre-amplifier	ПР	0447D	3E1V1005-02	2023/07/11	2024/07/10
Cnootrum Anglyzor	Dobdo & Cobworz	101000	SEM004-08	2022/07/12	2023/07/11
Spectrum Analyzer	Rohde & Schwarz	101288		2023/07/11	2024/07/10
Low Noice Amplifier	CLAVIIO	BDLNA-0118-	OFMOOF OF	2022/07/12	2023/07/11
Low Noise Amplifier	CLAVIIO	352810	SEM005-05	2023/07/11	2024/07/10
Substitution Antenna	Schwarzbeck	VULB9168	SEM003-18	2022/08/07	2025/08/06
Signal Generator(9kHz-	NE472D	MY53270267	A mile mt	2022/07/12	2023/07/11
40GHz)	N5173B	W1153270267	Agilent	2023/07/11	2024/07/10
Dro omplifier	HP	8447D	SEM005-02	2022/07/12	2023/07/11
Pre-amplifier	ПР	0447D	SEIVI005-02	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	ETS-LINDGREN	3117	SEM003-34	2021/9/25	2024/9/24



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 11 of 24

waveguide horn					
Chaotrum Anglyzor	Rohde & Schwarz	101288	SEM004-08	2022/07/12	2023/07/11
Spectrum Analyzer	Ronde & Schwarz	101200	SEIVIUU4-06	2023/07/11	2024/07/10
Low Noise Amplifier	CLAVIIO	BDLNA-0118-	SEM005-05	2022/07/12	2023/07/11
Low Noise Ampliner	CLAVIIO	352810	3EIVI003-03	2023/07/11	2024/07/10
	Compliance			2022/07/12	2023/07/11
Pre-amplifier	Directions Systems Inc.	PAP-2640-50	SEM005-08	2023/07/11	2024/07/10
Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2022/07/12	2023/07/11
Pre-ampliner	Ronde & Schwarz	CH14-H052	3EIVI003-17	2023/07/11	2024/07/10
Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2020/06/26	2023/06/25
Substitution Afferma	E i 3-Linagren	31420	3EIVIUU3-U I	2023/06/25	202606/24
Universal Radio	Rohde & Schwarz	CMW 500	SEM010-03	2022/03/29	2023/03/28
Communication Tester	Nonue & Scriwarz	CIVIVV 500	3LIVIO10-03	2024/03/28	2024/03/27

General used equipmen	t				
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2022/09/04	2023/09/03
Humidity/ Temperature Indicator	Anymetre	TH101B	SEM002-09	2022/09/04	2023/09/03
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2023/03/23	2024/03/22



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 12 of 24

6 Radio Spectrum Matter Test Results

6.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement: §2.1046, §22.913, §24.232, §27.50(d)

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

Limit: ERP≤7W(WCDMA BAND V)

EIRP≤2W(WCDMA BAND II) EIRP≤1W(WCDMA Band IV)

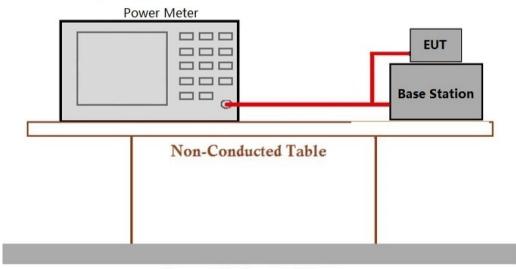
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21.5 °C Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar

Test mode: 31: TX mode Keep the EUT in transmitting mode

6.1.2 Test Setup Diagram



Ground Reference Plane

6.1.3 Measurement Data

Please refer to Appendix for WCDMA RF power test data.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 13 of 24

6.2 Peak-Average Ratio

Test Requirement: §22.913, §24.232, §27.50(d)

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

Limit:

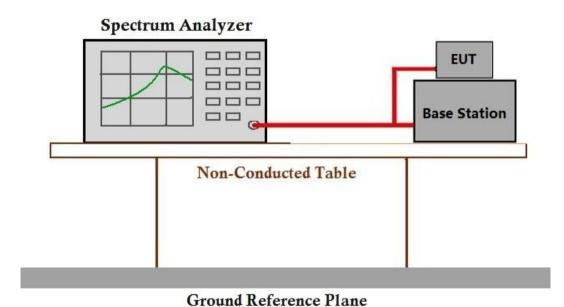
6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 53.5 % RH Atmospheric Pressure: 1020 mbar Humidity:

Test mode: 31: TX mode_Keep the EUT in transmitting mode

6.2.2 Test Setup Diagram



6.2.3 Measurement Data

Please refer to Appendix for WCDMA PAR test data.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 14 of 24

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

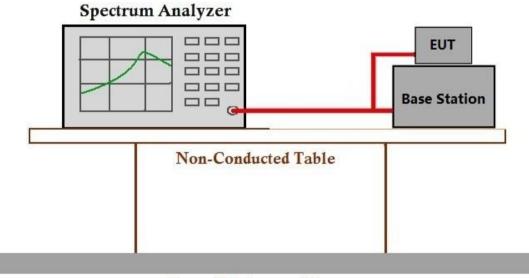
6.3.1 E.U.T. Operation

Operating Environment:

Temperature: Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar

Test mode: 31: TX mode_Keep the EUT in transmitting mode

6.3.2 Test Setup Diagram



Ground Reference Plane

6.3.3 Measurement Data

Please refer to Appendix for WCDMA bandwidth test data.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 15 of 24

6.4 Band Edge Compliance

Test Requirement: §2.1051, §22.917, §24.238, §27.53(h)

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

Limit: ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to

the frequency block.

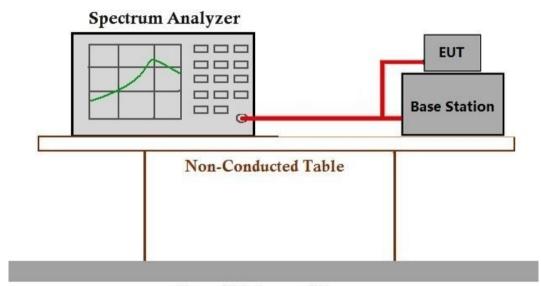
6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 21.5 °C 53.5 % RH Atmospheric Pressure: 1020 mbar Humidity:

Test mode: 31: TX mode Keep the EUT in transmitting mode

6.4.2 Test Setup Diagram



Ground Reference Plane

6.4.3 Measurement Data

Please refer to Appendix for WCDMA CSE test data.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 16 of 24

6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051, §22.917, §24.238, §27.53(h)

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

Limit: ≤ -13dBm

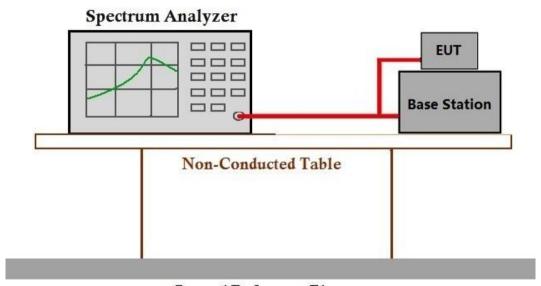
6.5.1 E.U.T. Operation

Operating Environment:

Temperature: Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar 21.5 °C

Test mode: 31: TX mode_Keep the EUT in transmitting mode

6.5.2 Test Setup Diagram



Ground Reference Plane

6.5.3 Measurement Data

Please refer to Appendix for WCDMA CSE test data.



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Report No.: SZCR230600188808

Page: 17 of 24

6.6 Field strength of spurious radiation

Test Requirement: §2.1051, §22.917, §24.238, §27.53(h)

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

Limit: ≤ -13dBm

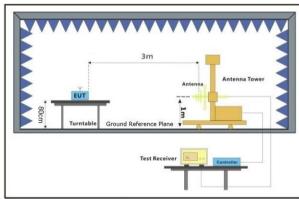
6.6.1 E.U.T. Operation

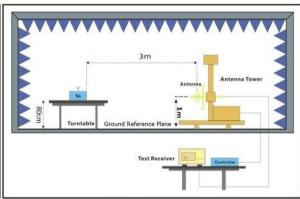
Operating Environment:

Temperature: 21.5 °C Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar

Test mode: 31: TX mode_Keep the EUT in transmitting mode

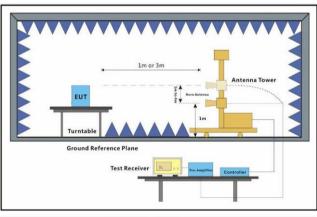
6.6.2 Test Setup Diagram

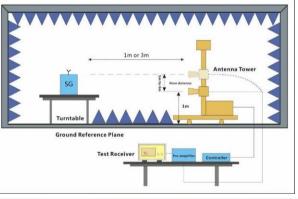




EUT

Substiute Antenna+Signal Generator





EUT

Substiute Antenna+Signal Generator



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

18 of 24 Page:

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 than 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.





SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 19 of 24

	WCDMA BAND II-Low channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
3704.8	-52.58	-13	-39.58	-59.47	0.71	7.6	Horizontal	Pass			
5557.2	-51.33	-13	-38.33	-60.78	0.85	10.3	Horizontal	Pass			
7409.6	-47.41	-13	-34.41	-59.31	1	12.9	Horizontal	Pass			
3704.8	-53.44	-13	-40.44	-60.33	0.71	7.6	Vertical	Pass			
5557.2	-50.99	-13	-37.99	-60.44	0.85	10.3	Vertical	Pass			
7409.6	-48.75	-13	-35.75	-60.65	1	12.9	Vertical	Pass			

	WCDMA BAND II-Middle channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
3760	-54.57	-13	-41.57	-61.46	0.71	7.6	Horizontal	Pass			
5640	-52.65	-13	-39.65	-62.1	0.85	10.3	Horizontal	Pass			
7520	-48.52	-13	-35.52	-60.73	0.99	13.2	Horizontal	Pass			
3760	-54.19	-13	-41.19	-61.08	0.71	7.6	Vertical	Pass			
5640	-52.88	-13	-39.88	-62.33	0.85	10.3	Vertical	Pass			
7520	-48.75	-13	-35.75	-60.96	0.99	13.2	Vertical	Pass			

	WCDMA BAND II-High channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
3815.2	-54.49	-13	-41.49	-61.38	0.71	7.6	Horizontal	Pass			
5722.8	-51.63	-13	-38.63	-61.08	0.85	10.3	Horizontal	Pass			
7630.4	-50.18	-13	-37.18	-62.39	0.99	13.2	Horizontal	Pass			
3815.2	-53.44	-13	-40.44	-60.33	0.71	7.6	Vertical	Pass			
5722.8	-51.94	-13	-38.94	-61.39	0.85	10.3	Vertical	Pass			
7630.4	-48.47	-13	-35.47	-60.68	0.99	13.2	Vertical	Pass			



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 20 of 24

	WCDMA BAND IV-Low channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
3424.8	-55.46	-13	-42.46	-61.01	0.65	6.2	Horizontal	Pass			
5137.2	-53.23	-13	-40.23	-62.01	0.82	9.6	Horizontal	Pass			
6849.6	-49.52	-13	-36.52	-60.37	0.95	11.8	Horizontal	Pass			
3424.8	-56.54	-13	-43.54	-62.09	0.65	6.2	Vertical	Pass			
5137.2	-52.71	-13	-39.71	-61.49	0.82	9.6	Vertical	Pass			
6849.6	-50.81	-13	-37.81	-61.66	0.95	11.8	Vertical	Pass			

	WCDMA BAND IV-Middle channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
3465.2	-54.76	-13	-41.76	-60.31	0.65	6.2	Horizontal	Pass			
5197.8	-54.04	-13	-41.04	-62.82	0.82	9.6	Horizontal	Pass			
6930.4	-49.67	-13	-36.67	-60.52	0.95	11.8	Horizontal	Pass			
3465.2	-55.43	-13	-42.43	-60.98	0.65	6.2	Vertical	Pass			
5197.8	-54.47	-13	-41.47	-63.25	0.82	9.6	Vertical	Pass			
6930.4	-49.92	-13	-36.92	-60.77	0.95	11.8	Vertical	Pass			

	WCDMA BAND IV-High channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
3505.2	-55.09	-13	-42.09	-61.98	0.71	7.6	Horizontal	Pass			
5257.8	-44.12	-13	-31.12	-52.9	0.82	9.6	Horizontal	Pass			
7010.4	-50.19	-13	-37.19	-62.09	1	12.9	Horizontal	Pass			
3505.2	-53.77	-13	-40.77	-60.66	0.71	7.6	Vertical	Pass			
5257.8	-41.04	-13	-28.04	-49.82	0.82	9.6	Vertical	Pass			
7010.4	-50.49	-13	-37.49	-62.39	1	12.9	Vertical	Pass			



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 21 of 24

	WCDMA Band V-Low channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
1652.8	-64.99	-13	-51.99	-70.47	0.52	6	Horizontal	Pass			
2479.2	-61.14	-13	-48.14	-66.41	0.53	5.8	Horizontal	Pass			
3305.6	-57.27	-13	-44.27	-62.82	0.65	6.2	Horizontal	Pass			
1652.8	-64.05	-13	-51.05	-69.53	0.52	6	Vertical	Pass			
2479.2	-62.13	-13	-49.13	-67.4	0.53	5.8	Vertical	Pass			
3305.6	-57.31	-13	-44.31	-62.86	0.65	6.2	Vertical	Pass			

	WCDMA Band V-Middle channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
1672.8	-61.95	-13	-48.95	-67.43	0.52	6	Horizontal	Pass			
2509.2	-59.96	-13	-46.96	-64.67	0.59	5.3	Horizontal	Pass			
3345.6	-56.45	-13	-43.45	-62	0.65	6.2	Horizontal	Pass			
1672.8	-64.58	-13	-51.58	-70.06	0.52	6	Vertical	Pass			
2509.2	-61.12	-13	-48.12	-65.83	0.59	5.3	Vertical	Pass			
3345.6	-56.75	-13	-43.75	-62.3	0.65	6.2	Vertical	Pass			

	WCDMA Band V-High channel										
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result			
1693.2	-64.33	-13	-51.33	-69.81	0.52	6	Horizontal	Pass			
2539.8	-60.41	-13	-47.41	-65.12	0.59	5.3	Horizontal	Pass			
3386.4	-57.01	-13	-44.01	-62.56	0.65	6.2	Horizontal	Pass			
1693.2	-64.27	-13	-51.27	-69.75	0.52	6	Vertical	Pass			
2539.8	-60.97	-13	-47.97	-65.68	0.59	5.3	Vertical	Pass			
3386.4	-56.34	-13	-43.34	-61.89	0.65	6.2	Vertical	Pass			

Note:

All modes have been tested and we found RMC Test mode has the worst test result. Only record the worst test result.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 22 of 24

6.7 Frequency stability

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

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

Limit: $\leq \pm 2.5$ ppm.

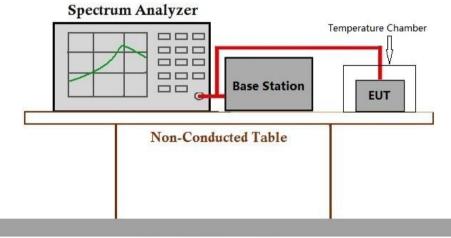
6.7.1 E.U.T. Operation

Operating Environment:

Temperature: 53.5 % RH Atmospheric Pressure: 1020 mbar Humidity:

Test mode: 31: TX mode_Keep the EUT in transmitting mode

6.7.2 Test Setup Diagram



Ground Reference Plane

6.7.3 Measurement Data

Please refer to Appendix for WCDMA FE test data.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 23 of 24

6.8 Modulation Characteristics

Test Requirement: §2.1047

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

Limit: Digital modulation

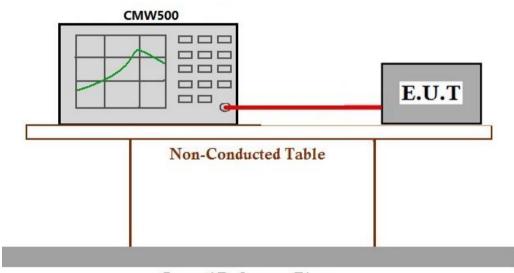
6.8.1 E.U.T. Operation

Operating Environment:

Temperature: 21.5 °C Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar

Test mode: 31: TX mode_Keep the EUT in transmitting mode

6.8.2 Test Setup Diagram



Ground Reference Plane

6.8.3 Measurement Data

Pass, it's a digital modulation device.



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600188808

Page: 24 of 24

Test Setup Photo

Refer to Appendix - Test Setup Photo for SZCR2306001888AT

EUT Constructional Details (EUT Photos) 8

Refer to Appendix - External and Internal Photos for SZCR2306001888AT

- End of the Report -



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