

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

Report No.: SZCR230300083602

Page: 1 of 25

TEST REPORT

Application No.: SZCR2303000836AT

Applicant: Leax Arkivator Telecom USA Inc.

Address of Applicant: 833 E Arapaho Rd Suite 203, Richardson, Texas 75081 United States

Manufacturer: Leax Arkivator Telecom USA Inc.

Address of Manufacturer: 833 E Arapaho Rd Suite 203, Richardson, Texas 75081 United States

Factory: Leax Arkivator Telecom USA Inc.

Address of Factory: 833 E Arapaho Rd Suite 203, Richardson, Texas 75081 United States

Equipment Under Test (EUT):

EUT Name: TD LTE Base Station

Model No.: LBS8529

FCC ID: 2AVFNLBS8529 Standard(s): 47 CFR Part 2

47 CFR Part 96 subpart E

Date of Receipt: 2023-03-28

Date of Test: 2023-03-29 to 2023-05-04

Date of Issue: 2023-05-18

Test Result: Pass

Keny Xu
EMC Laboratory Manager



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



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	Revision Record						
Version	Chapter	Date	Modifier	Remark			
01		2023-05-18		Original			

Authorized for issue by:		
	Benson Wong	
	Benson Wang/Project Engineer	-
	Exic Fu	
	Eric Fu/Reviewer	-



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Test Summary 2

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Output Power Data & Maximum Power Spectral Density	§2.1046 §96.41(b)	EIRP≤ 47dBm/10MHz(LTE Band 48) PSD≤ 37dBm/MHz(LTE Band 48)	PASS
Peak-Average Ratio	§96.41(g)	≤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 §96.41(e)	Refer to clause 6.4 for LTE Band48	PASS
Spurious emissions at antenna terminals	§2.1051 §96.41(e)	Refer to clause 6.5 for LTE Band48	PASS
Field strength of spurious radiation	§2.1051 §96.41(e)	Refer to clause 6.6 for LTE Band48	PASS
Frequency stability	§2.1055	≤ ±2.5ppm.	PASS



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General Information 4

4.1 Details of E.U.T.

Power supply: Adapter Model: HEP-480-54

INPUT: 100-240V 5.5A-2.2A 50/60Hz

OUTPUT: DC54V 8.9A

DC adapter: INPUT: DC48V

OUTPUT: DC13V 4A

Cable: GND Cable: 480cm unshielded

Adapter Cable: 190cm unshielded

DC Adapter cable: 87cm unshielded + 20cm unshielded

EUT Type: CBSD Category of EUT: Category B

LTE Operation Frequency Band: Band 48 (3550-3700MHz) Test Mode: E-TM1.1; E-TM3.2; E-TM3.1; Modulation Type: QPSK, 16QAM, 64QAM

Bandwidth: 5MHz; 10MHz; 15MHz; 20MHz

Transmission (TX) and

Receiving (RX) Antenna Ports:

TX port: 2

MIMO supported

2*2 UL

Antenna Type: N-Type connector for external high gain antenna

Antenna Gain: 16.5dBi

Note:

(1)The antenna gain value is provided by the customer. The test lab will not be responsible for wrong test result due to incorrect information about antenna gain values.



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4.2 Test Frequency

	Nominal	RF Channel			
Test mode:	Bandwidth	Low (L)	Middle (M)	High (H)	
	(MHz)	MHz	MHz	MHz	
	5	3552.5	3625.0	3697.5	
LTE FDD	10	3555.0	3625.0	3695.0	
Band 48	15	3557.5	3625.0	3692.5	
	20	3560.0	3625.0	3690.0	

4.3 Test Environment

Environment Parameter	Selected Values During Tests			
Relative Humidity		52%		
Atmospheric Pressure:	1020Pa			
	TL	-30°C		
Temperature:	TN	+20°C		
	TH	+50°C		
	VL	AC 102 V		
Voltage:	VN	AC 120 V		
	VH	AC 138V		

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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4.5 Measurement Uncertainty

No.	ltem	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	Radiated Spurious emission test	± 3.1dB (Below 1GHz)
/	Radiated Spurious errission 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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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

4.9 Abnormalities from Standard Conditions

None



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5 **Equipment List**

RF test system					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
Shielding Room	SAEMC	MSR733	SEM001-09	2022-05-14	2025-05-13
MXA Signal Analyzer	KEYSIGHT	N9020B	SEM004-17	2023-03-20	2024-03-14
Mobile Communications DC Source	Agilent	66319D	SEM011-12	2022-05-07	2023-05-06
Manual Step Attenuator	KEYSIGHT	8494B	SEM021-05	2022-04-07 2023-04-06	2023-04-06 2024-04-05
Manual Step Attenuator	KEYSIGHT	8496B	SEM021-06	2022-04-07 2023-04-06	2023-04-06 2024-04-05
Power Sensor	KEYSIGHT	U2021XA	SEM009-15	2022-04-07 2023-04-06	2023-04-06 2024-04-05
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2022-04-07 2023-04-06	2023-04-06 2024-04-05
Coaxial Cable	SGS	N/A	SEM031-01	2022-07-08	2023-07-07

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2022-04-02	2025-04-01
EXA Signal Analyzer (10Hz-44GHz)	Agilent Technologies Inc	N9010A	SEM004-12	2022-04-07 2023-04-06	2023-04-06 2024-04-05
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2021-09-17	2023-09-16
Horn Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2022-07-24	2024-07-23
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2022-08-10	2024-08-09
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	SEM003-32	2021-09-26	2024-09-25
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2022-09-15	2023-09-14
Microwave System Amplifier(0.5-26.5GHz)	Agilent	83017A	SEM005-25	2022-09-21	2023-09-20



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Pre-amplifier (26- 40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2023-03-21	2024-03-20
Substitution Antenna	Rohde & Schwarz	HF907	SEM003-06	2022-08-07	2024-08-06
Substitution Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2022-08-10	2024-08-09
Signal Generator(9kHz- 40GHz)	N5173B	MY53270267	Agilent	2022-07-12	2023-07-11
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-06	2022-07-08	2023-07-07

RE in Chamber					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Loop Antenna	ETS-Lindgren	6502	SEM003-08	2021-11-30	2023-11-29
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2020-07-19	2023-07-18
MXE EMI Receiver	Agilent Technologies	N9038A	SEM004-15	2022-10-20	2023-10-19
BiConiLog Antenna	ETS-LINDGREN	3142C	SEM003-01	2021-09-17	2023-09-16
Substitution Antenna	Schwarzbeck	VULB9163	SEM003-05	2021-09-17	2023-09-16
Pre-Amplifier	Agilent Technologies	8447D	SEM005-01	2023-03-20	2024-03-19
Signal Generator(9kHz- 40GHz)	N5173B	MY53270267	Agilent	2022-07-12	2023-07-11
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2022-07-08	2023-07-07

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	2023-03-20	2024-03-19



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Radio Spectrum Matter Test Results

6.1 Effective (Isotropic) Radiated Output Power & Maximum Power Spectral Density

§2.1046, §96.41(b) Test Requirement:

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

EIRP≤47dBm/10MHz(LTE Band 48) Limit:

PSD≤37dBm/MHz(LTE Band 48)

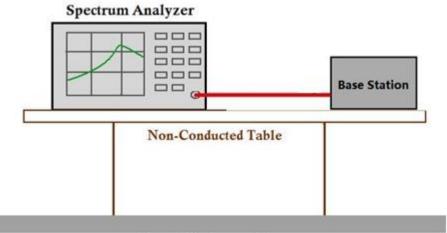
6.1.1 E.U.T. Operation

Operating Environment:

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

Test mode 01: 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 Effective (Isotropic) Radiated Output Power Data & Maximum Power Spectral Density.



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6.2 Peak-Average Ratio

§96.41(g) Test Requirement:

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

Limit:

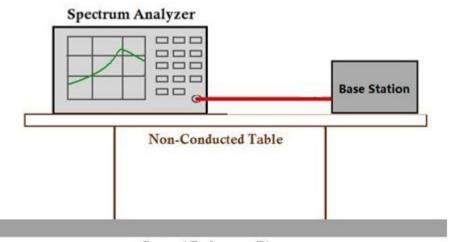
6.2.1 E.U.T. Operation

Operating Environment:

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

Test mode 01: Tx mode, Keep the EUT in transmitting mode.

6.2.2 Test Setup Diagram



Ground Reference Plane

6.2.3 Measurement Data

Please refer to Appendix for Peak-Average Ratio.



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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

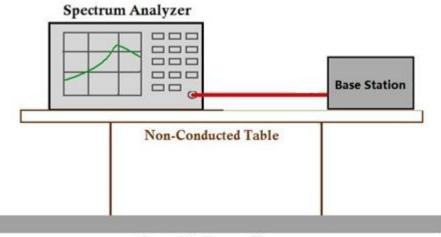
6.3.1 E.U.T. Operation

Operating Environment:

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

Test mode 01: 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 Bandwidth.



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6.4 Band Edge Compliance

Test Requirement: §2.1051, §96.41(e),

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

Limit: For **Band48**:

- 1) The conducted power of any CBSD emission outside the fundamental emission bandwidth (whether the emission is inside or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed -25 dBm/MHz.
- 2) The conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

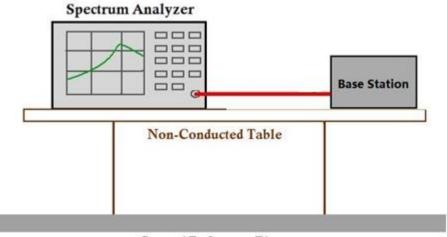
6.4.1 E.U.T. Operation

Operating Environment:

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

Test mode 01: 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 Spurious emissions at antenna terminals & Band Edge.



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6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051 ,§96.41(e)

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

Limit: For **Band48**:

- 1) The conducted power of any CBSD emission outside the fundamental emission bandwidth (whether the emission is inside or outside of the authorized band) shall not exceed –13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed –25 dBm/MHz.
- 2) The conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

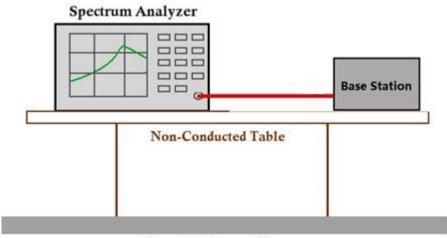
6.5.1 E.U.T. Operation

Operating Environment:

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

Test mode 01: 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 Spurious emissions at antenna terminals & Band Edge.



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6.6 Field strength of spurious radiation

Test Requirement: §2.1051, §96.41(e)

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

Limit: For **Band48**:

1) Emission outside the fundamental emission bandwidth (whether the emission is inside or outside of the authorized band) shall not exceed −13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the emission shall not exceed −25 dBm/MHz.

2) Emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

6.6.1 E.U.T. Operation

Operating Environment:

Temperature: 18.5 °C Humidity: 39.5 % RH Atmospheric Pressure: 1020 mbar

Test mode 01: Tx mode, Keep the EUT in transmitting mode.



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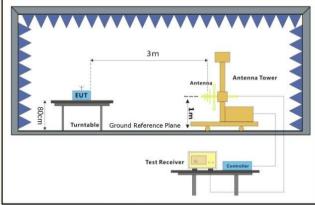


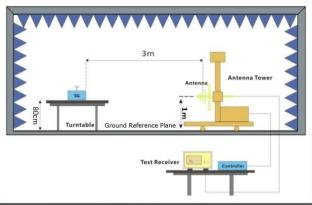
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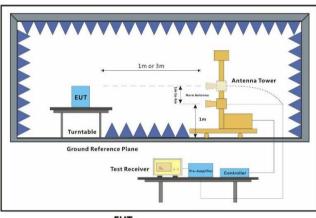
6.6.2 Test Setup Diagram

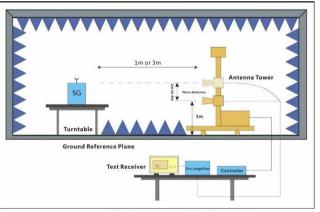




EUT

Substiute Antenna+Signal Generator





EUT

Substiute Antenna+Signal Generator



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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.



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TM1.1 5MHz

Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7100.5	-49.38	-40	-9.38	-61.28	1	12.9	Horizontal	Pass
10650.75	-45. 4	-40	-5.4	-57.41	1.49	13.5	Horizontal	Pass
14201	-44. 53	-40	-4.53	-56.46	1.67	13.6	Horizontal	Pass
7100.5	-48.71	-40	-8.71	-60.61	1	12.9	Vertical	Pass
10650.75	-45.44	-40	-5.44	-57.45	1.49	13.5	Vertical	Pass
14201	-43. 75	-40	-3, 75	-55, 68	1.67	13.6	Vertical	Pass

TM1.1 10MHz

Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7245. 5	-48. 76	-40	-8.76	-60.66	1	12.9	Horizontal	Pass
10868. 25	-44.72	-40	-4.72	-56.73	1.49	13.5	Horizontal	Pass
14491	-43.41	-40	-3.41	-55.34	1.67	13.6	Horizontal	Pass
7245. 5	-49.35	-40	-9.35	-61.25	1	12.9	Vertical	Pass
10868. 25	-44. 75	-40	-4.75	-56.76	1.49	13.5	Vertical	Pass
14491	-43.89	-40	-3.89	-55.82	1.67	13.6	Vertical	Pass

TIVIT. I TO	IVII IZ							
Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7390. 5	-49.03	-40	-9.03	-60.93	1	12.9	Horizontal	Pass
11085.75	-45.84	-40	-5.84	-57.85	1.59	13.6	Horizontal	Pass
14781	-43.91	-40	-3.91	-54.94	1. 37	12.4	Horizontal	Pass
7390.5	-48.48	-40	-8.48	-60.38	1	12.9	Vertical	Pass
11085.75	-44.57	-40	-4.57	-56. 58	1.59	13.6	Vertical	Pass
14781	-43 29	-40	-3 29	-54 32	1. 37	12.4	Vertical	Pass

TM1 1 20MHz

11011.1 20	IVII IZ							
Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7101	-49.03	-40	-9.03	-60.93	1	12.9	Horizontal	Pass
10651.5	-45. 79	-40	-5.79	-57.8	1.49	13.5	Horizontal	Pass
14202	-43.88	-40	-3.88	-55.81	1.67	13.6	Horizontal	Pass
7101	-48.6	-40	-8.6	-60.5	1	12.9	Vertical	Pass
10651.5	-45. 21	-40	-5.21	-57.22	1.49	13.5	Vertical	Pass
14202	-44. 7	-40	-4.7	-56.63	1.67	13.6	Vertical	Pass



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TM3.1 5MHz

Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7241	-50.23	-40	-10.23	-62.13	1	12.9	Horizontal	Pass
10861.5	-44.77	-40	-4.77	-56.78	1.49	13.5	Horizontal	Pass
14482	-43. 1	-40	-3.1	-55.03	1.67	13.6	Horizontal	Pass
7241	-49.89	-40	-9.89	-61.79	1	12.9	Vertical	Pass
10861.5	-44.62	-40	-4.62	-56.63	1.49	13.5	Vertical	Pass
14482	-44.17	-40	-4.17	-56. 1	1.67	13.6	Vertical	Pass

TM3.1 10MHz

Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7381	-48.94	-40	-8.94	-60.84	1	12.9	Horizontal	Pass
11071.5	-45.12	-40	-5.12	-57.13	1.59	13.6	Horizontal	Pass
14762	-43.35	-40	-3.35	-54.38	1.37	12.4	Horizontal	Pass
7381	-48.81	-40	-8.81	-60.71	1	12.9	Vertical	Pass
11071.5	-45.51	-40	-5.51	-57.52	1.59	13.6	Vertical	Pass
14762	-44.08	-40	-4.08	-55.11	1. 37	12.4	Vertical	Pass

TM3 1 15MHz

11010.1 10	IVII IZ							
Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7101.5	-48.66	-40	-8.66	-60.56	1	12.9	Horizontal	Pass
10652.25	-45. 56	-40	-5.56	-57.57	1.49	13.5	Horizontal	Pass
14203	-44.03	-40	-4.03	-55.96	1.67	13.6	Horizontal	Pass
7101.5	-49.53	-40	-9.53	-61.43	1	12.9	Vertical	Pass
10652. 25	-45. 21	-40	-5.21	-57.22	1.49	13.5	Vertical	Pass
14203	-43.96	-40	-3.96	-55.89	1.67	13.6	Vertical	Pass

TM3 1 20MHz

11010.1 20								
Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7236.5	-49.87	-40	-9.87	-61.77	1	12.9	Horizontal	Pass
10854.75	-45. 28	-40	-5. 28	-57. 29	1.49	13.5	Horizontal	Pass
14473	-43.74	-40	-3.74	-55.67	1.67	13.6	Horizontal	Pass
7236.5	-49.69	-40	-9.69	-61.59	1	12.9	Vertical	Pass
10854.75	-45.39	-40	-5.39	-57.4	1.49	13.5	Vertical	Pass
14473	-43. 29	-40	-3.29	-55.22	1.67	13.6	Vertical	Pass



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TM3.2 5MHz

Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7371.5	-48.39	-40	-8.39	-60.29	1	12.9	Horizontal	Pass
11057. 25	-45.28	-40	-5. 28	-57. 29	1.59	13.6	Horizontal	Pass
14743	-43.5	-40	-3.5	-54.53	1.37	12.4	Horizontal	Pass
7371.5	-49.57	-40	-9.57	-61.47	1	12.9	Vertical	Pass
11057. 25	-45.33	-40	-5.33	-57.34	1.59	13.6	Vertical	Pass
14743	-43.81	-40	-3.81	-54.84	1. 37	12.4	Vertical	Pass

TM3.2 10MHz

	· · · · · —							
Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7102	-49.36	-40	-9.36	-61.26	1	12.9	Horizontal	Pass
10653	-45.93	-40	-5.93	-57.94	1.49	13.5	Horizontal	Pass
14204	-43.61	-40	-3.61	-55.54	1.67	13.6	Horizontal	Pass
7102	-49.05	-40	-9.05	-60.95	1	12.9	Vertical	Pass
10653	-46.01	-40	-6.01	-58.02	1.49	13.5	Vertical	Pass
14204	-44, 41	-40	-4.41	-56, 34	1.67	13.6	Vertical	Pass

TM3 2 15MHz

TIMO.2 TOWITZ								
Frequency (MHz)	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7232	-49.58	-40	-9.58	-61.48	1	12.9	Horizontal	Pass
10848	-45.4	-40	-5.4	-57.41	1.49	13.5	Horizontal	Pass
14464	-43.1	-40	-3.1	-55.03	1.67	13.6	Horizontal	Pass
7232	-49.42	-40	-9.42	-61.32	1	12.9	Vertical	Pass
10848	-45.81	-40	-5.81	-57.82	1.49	13.5	Vertical	Pass
14464	-43.38	-40	-3.38	-55.31	1.67	13.6	Vertical	Pass

TM3 2 20MHz

	TWO.E ZOWITE								
Frequ (MH	-	EIRP(dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
73	62	-49.29	-40	-9.29	-61.19	1	12.9	Horizontal	Pass
110	043	-45.18	-40	-5. 18	-57.19	1.59	13.6	Horizontal	Pass
147	724	-43.58	-40	-3.58	-54.61	1.37	12.4	Horizontal	Pass
73	62	-48.87	-40	-8.87	-60.77	1	12.9	Vertical	Pass
110	043	-45.28	-40	-5. 28	-57. 29	1.59	13.6	Vertical	Pass
147	724	-43.51	-40	-3.51	-54.54	1.37	12.4	Vertical	Pass



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6.7 Frequency stability

§2.1055 Test Requirement:

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

Limit: \leq ±2.5ppm.

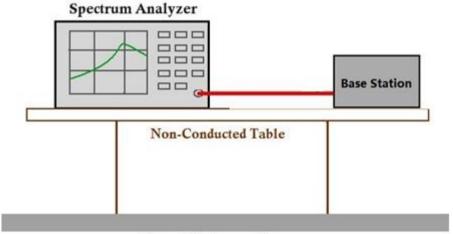
6.7.1 E.U.T. Operation

Operating Environment:

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

Test mode 01: 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 Frequency stability.



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6.8 Modulation Characteristics

Test Requirement: **§2.1047**

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

Limit: Digital modulation

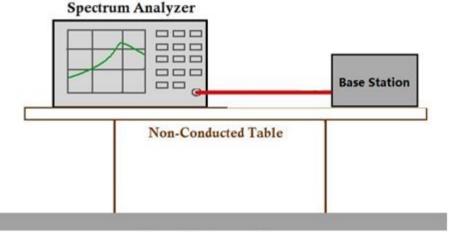
6.8.1 E.U.T. Operation

Operating Environment:

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

Test mode 01: 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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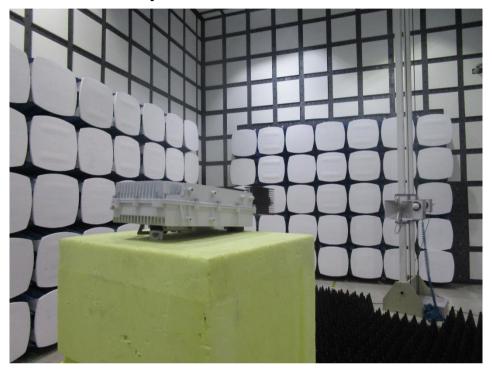


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Test Setup Photo



EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for SZCR2303000836AT

- End of the Report -



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