

TEST REPORT

Application No.: FYCR2211000481AT
Applicant: Leax Arkivator Telecom USA Inc.
Address of Applicant: 833 E Arapaho Rd.Suite 203 Richardson,TX 75081
Manufacturer: Leax Arkivator Telecom USA Inc.
Address of Manufacturer: 833 E Arapaho Rd.Suite 203 Richardson,TX 75081
Factory: Leax Arkivator Telecom USA Inc.
Address of Factory: 833 E Arapaho Rd.Suite 203 Richardson,TX 75081
Equipment Under Test (EUT):
EUT Name: LTE Outdoor CPE
Model No.: LCE122A
Trade Mark: N/A
FCC ID: 2AVFNLCE122A
Standard(s) : 47 CFR Part 2
 47 CFR Part 96 subpart E
Date of Receipt: 2022-11-16
Date of Test: 2022-11-16 to 2023-02-03
Date of Issue: 2023-02-07

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



Winkey Wang
EMC Technical Manager



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Compliance Certification Services (Kunshan) Inc.
Shenzhen Branch

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**Compliance Certification Services (Kunshan) Inc.
Shenzhen Branch**

Report No.: FYCR221100048102

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2023-02-07		Original

Authorized for issue by:			
		<i>Tree Zhan</i>	

		Tree Zhan/Project Engineer	
		<i>Winkey Wang</i>	

		Winkey Wang/Reviewer	



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2 Test Summary

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

Note:

- (1) The test items except radiated spurious emission of intra band non-contiguous were cover by LTE single carrier due to the CA power is reduced.



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4 General Information

4.1 Details of E.U.T.

Power supply:	POE Passive Injector powered by Adapter Adapter Model No.: ASSA107A-240050 Input: AC 100-240V; 50/60Hz; Output: DC 24V 500mA
Cable(s):	EUT Powered by POE Passive Injector; POE Model: GRT-HCQ-A Network cable: unshielded 100.5cm Cable of Adapter: unshielded 125.5cm
EUT Type:	CPE-CBSD
Category of EUT:	Category B
LTE Operation Frequency Band:	LTE FDD Band 48
LTE CA Band:	Non-contiguous: 10+10 MHz; 10+20 MHz; 20+10 MHz; 20+20MHz Contiguous: 10+20 MHz; 20+10 MHz; 20+20MHz
Modulation Type:	QPSK, 16QAM, 64QAM
Antenna Type:	Panel Antenna Ant 0: 15.6dBi Ant 2: 15.6dBi
Antenna Gain:	Single-carrier: Ant 0 and Ant 2 can Simultaneous transmission CA: Ant 0 and Ant 2 is used for transmitting antennas.

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

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 48	10	3555.0	3625.0	3695.0
	20	3560.0	3625.0	3690.0
CA Non-contiguous				
Nominal Bandwidth (MHz)	RF Channel			
	Low (L)	Middle (M)	High (H)	
	MHz	MHz	MHz	
10+10	/	3555 + 3695	/	
10+20	/	3555 + 3690	/	
20+10	/	3560 + 3695	/	
20+20	/	3560 + 3690	/	
CA Contiguous				
Nominal Bandwidth (MHz)	RF Channel			
	Low (L)	Middle (M)	High (H)	
	MHz	MHz	MHz	
10+20	3555.5 + 3569.9	3615.6 + 3630	3675.6 + 3690	
20+10	3560.1 + 3574.4	3620.1 + 3645.5	3680.1 + 3694.5	
20+20	3560 + 3579.8	3615.1 + 3634.9	3670.2 + 3690	



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4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	52%	
Atmospheric Pressure:	1015Pa	
Temperature:	TL	-30°C
	TN	+20°C
	TH	+50°C
Voltage:	VL	DC 20.4 V
	VN	DC 24.0 V
	VH	DC 27.6 V

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.

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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4.6 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc. Shenzhen branch.

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 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. 6606.01)**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6606.01.

- **FCC –Designation Number: CN1322**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

- **Innovation, Science and Economic Development Canada**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.

4.8 Deviation from Standards

None

4.9 Abnormalities from Standard Conditions

None



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5 Equipment List

RF Conducted					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2022/7/12	2023/7/11
MXA Signal Analyzer	KEYSIGHT	N9020A	SEM004-25	2022/5/30	2023/5/29
Signal Generator	Agilent	N5173B	SEM006-05	2022/7/12	2023/7/11
ESG Vector Signal Generator	Agilent	E4438C	SEM006-15	2022/7/12	2023/7/11
Power Sensor	Erika Fiedler	U2021XA	SEM009-15	2022/7/12	2023/7/11
Power Sensor	Erika Fiedler	U2021XA	SEM009-16	2022/7/12	2023/7/11
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-08	2022/7/12	2023/7/11
Programmable DC Source	Chroma	62024P-80-60	SEM011-09	2022/7/12	2023/7/11
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	2022/7/12	2023/7/11

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	2022/07/12	2023/07/11
Pre-amplifier	HP	8447D	SEM005-02	2022/07/12	2023/07/11
Spectrum Analyzer	Rohde & Schwarz	101288	SEM004-08	2022/07/12	2023/07/11
Low Noise Amplifier	CLAVIIO	BDLNA-0118-352810	SEM005-05	2022/07/12	2023/07/11
Substitution Antenna	Schwarzbeck	VULB9168	SEM003-18	2022/08/07	2025/08/06
Signal Generator(9kHz-40GHz)	N5173B	MY53270267	Agilent	2022/07/12	2023/07/11
Pre-amplifier	HP	8447D	SEM005-02	2022/07/12	2023/07/11
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	2022/07/12	2023/07/11



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Compliance Certification Services (Kunshan) Inc. Shenzhen Branch

Report No.: FYCR221100048102

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Low Noise Amplifier	CLAVIIO	BDLNA-0118-352810	SEM005-05	2022/07/12	2023/07/11
Pre-amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2022/07/12	2023/07/11
Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2022/07/12	2023/07/11
Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2020/06/26	2023/06/25
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2022/03/29	2023/03/28

General used equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-22	2022/7/12	2023/7/11
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-23	2022/7/12	2023/7/11
Barometer	DUMAI	DYM3	SEM002-24	2022/7/12	2023/7/11



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6 Radio Spectrum Matter Test Results

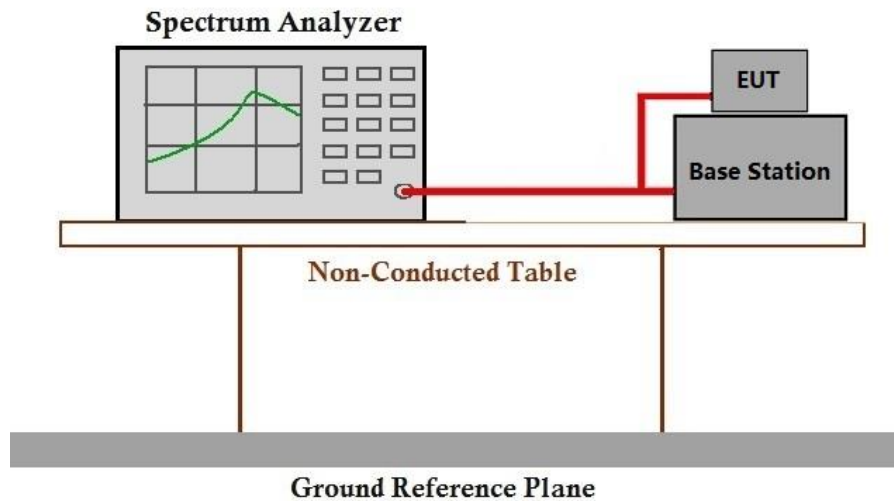
6.1 Effective (Isotropic) Radiated Output Power & Maximum Power Spectral Density

Test Requirement: §2.1046, §96.41(b)
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit: EIRP≤47dBm/10MHz(LTE Band 48)
 PSD≤37dBm/MHz(LTE Band 48)

6.1.1 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.

6.1.2 Test Setup Diagram



6.1.3 Measurement Data

Please refer to Appendix for Effective (Isotropic) Radiated Output Power Data & Maximum Power Spectral Density.



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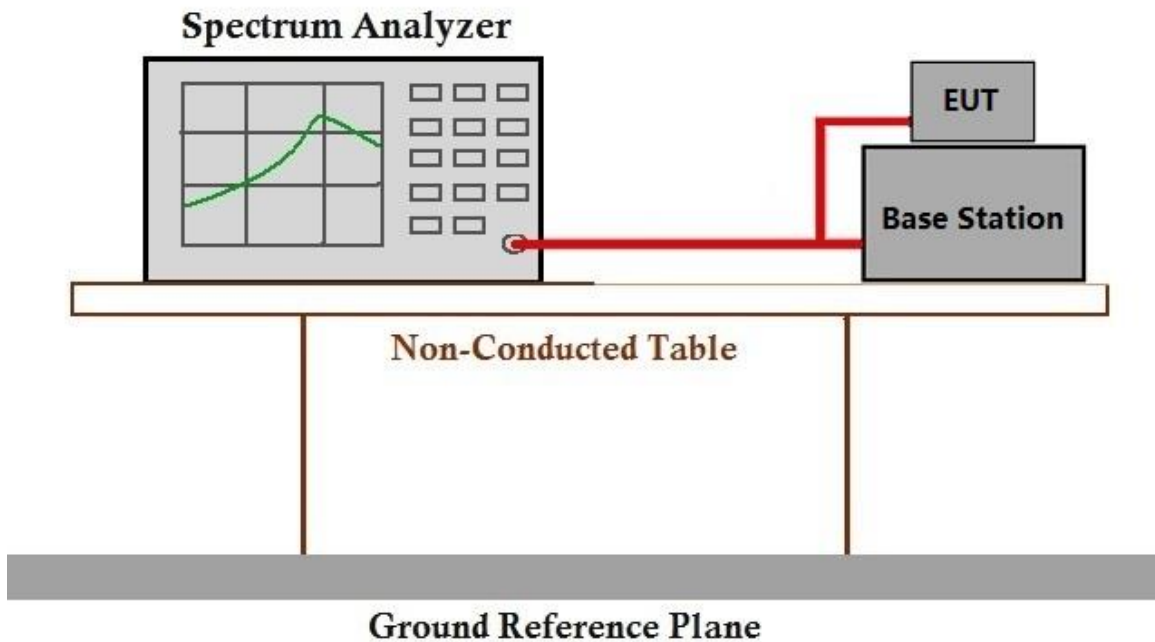
6.2 Peak-Average Ratio

Test Requirement: §96.41(g)
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit: ≤13dB

6.2.1 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.

6.2.2 Test Setup Diagram



6.2.3 Measurement Data

Please refer to Appendix for Peak-Average Ratio.



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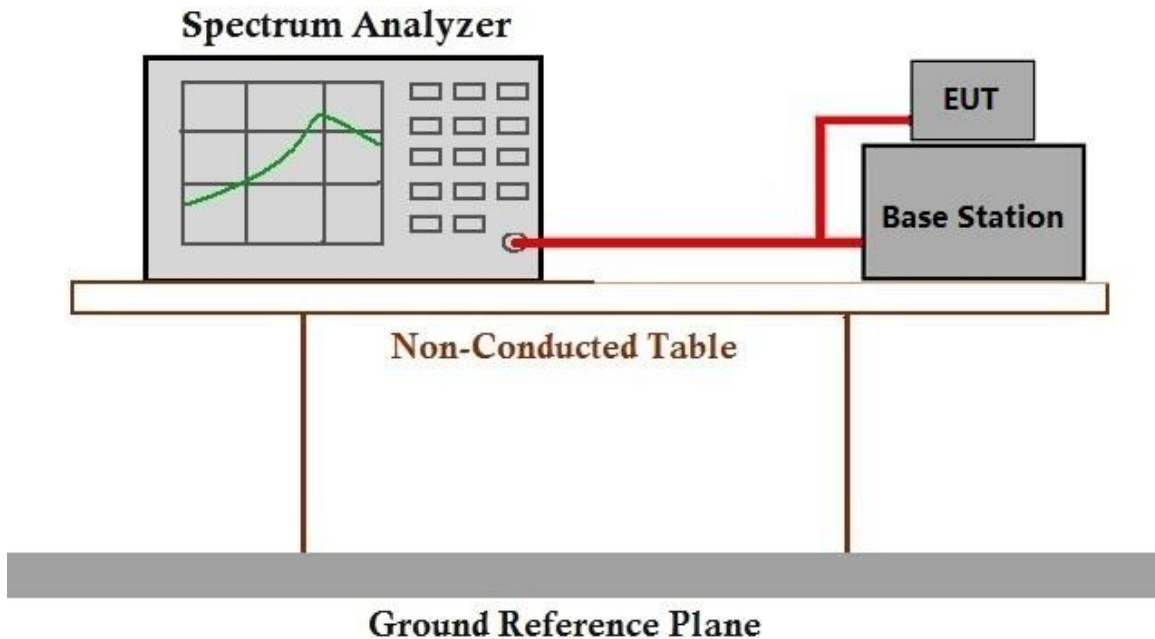
6.3 Bandwidth

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



6.3.3 Measurement Data

Please refer to Appendix for Bandwidth.



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6.4 Band Edge Compliance

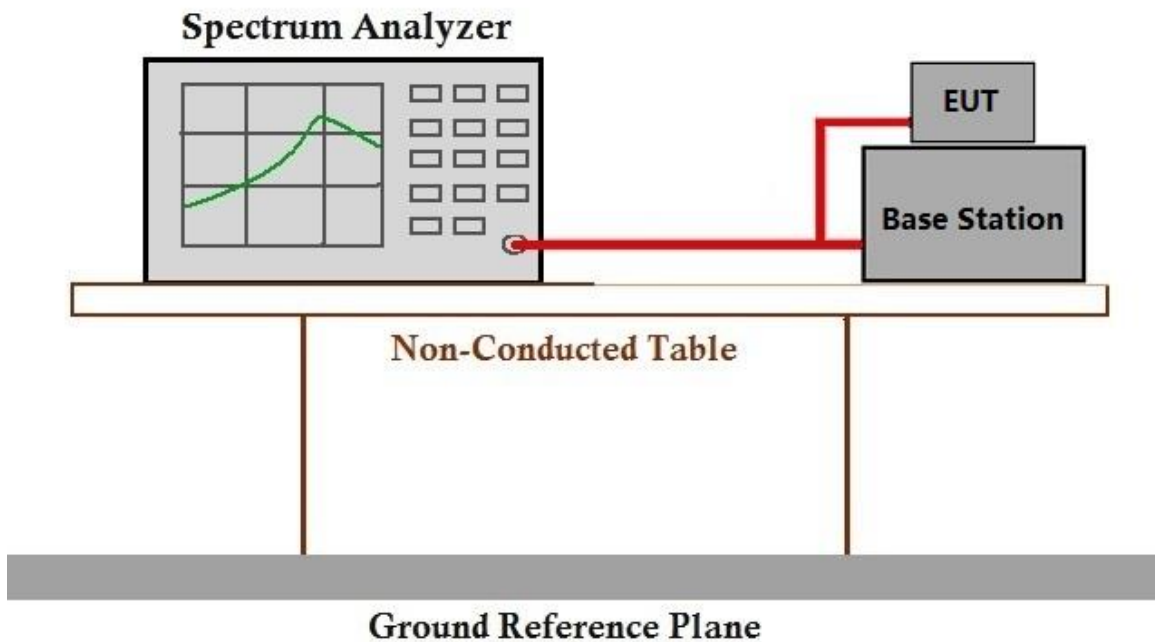
Test Requirement: §2.1051, §96.41(e),
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit: For **Band48**:

- 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



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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

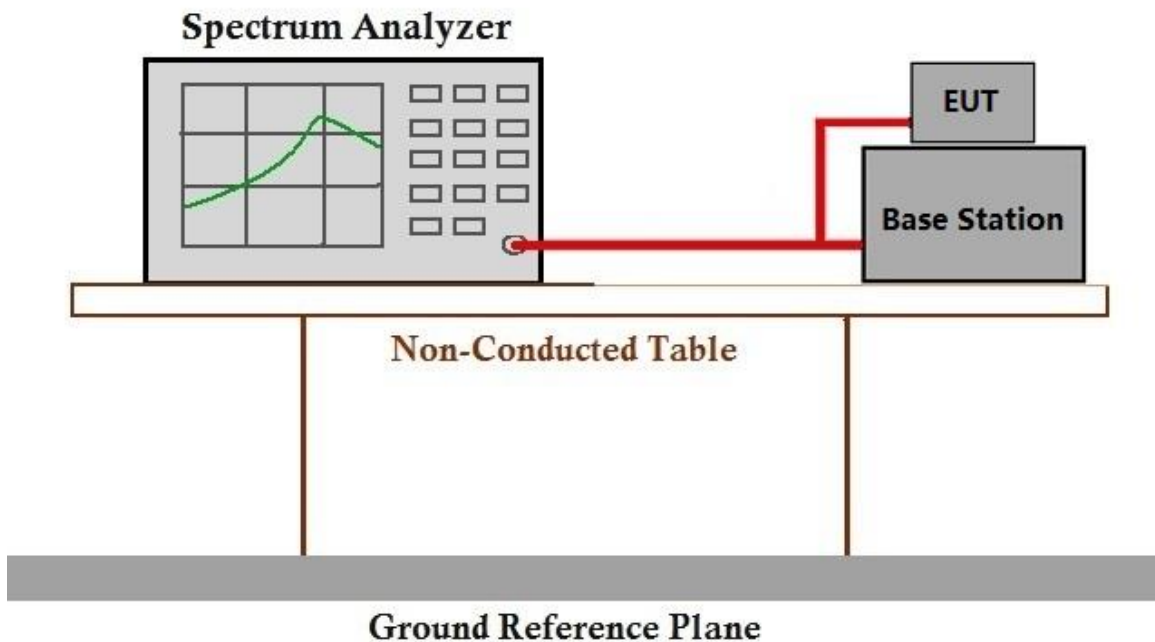
Test Requirement: §2.1051 ,§96.41(e)
 Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
 Limit: For **Band48**:

- 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



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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:

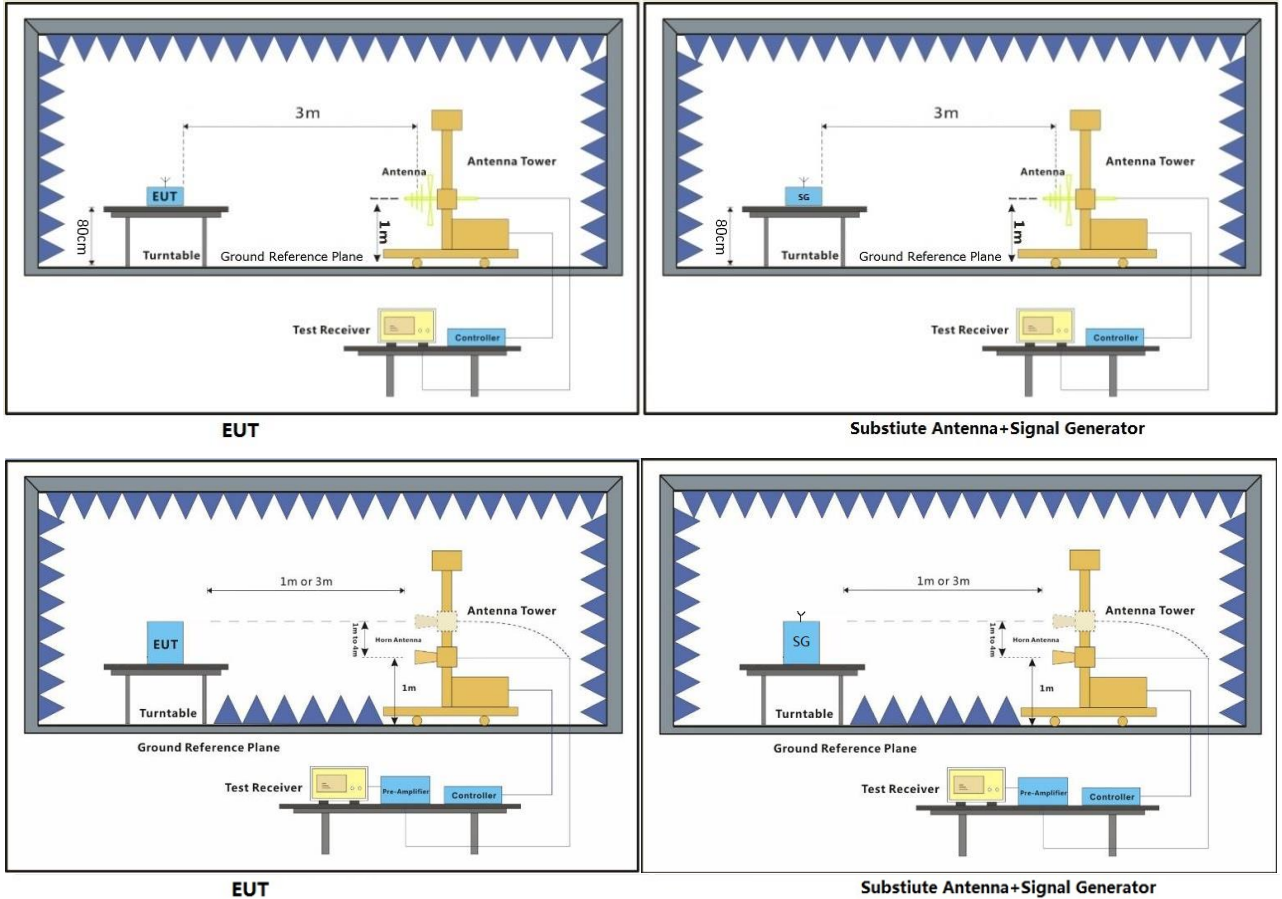
Temperature: 18.5 °C Humidity: 39.5 % RH Atmospheric Pressure: 1020 mbar
Test mode 01: Tx mode, Keep the EUT in transmitting mode.



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6.6.2 Test Setup Diagram



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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 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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Single carrier:

LTE Band 48_QPSK_10MHz_Low Channel, 1 RB0_Ant 0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7101	-43.01	-40	-3.01	-44.4	8.19	11.73	Horizontal	Pass
10651.5	-46.95	-40	-6.95	-47.22	11.06	13.48	Horizontal	Pass
14202	-44.71	-40	-4.71	-45.57	11.48	14.49	Horizontal	Pass
7101	-40.8	-40	-0.8	-42.19	8.19	11.73	Vertical	Pass
10651.5	-47.13	-40	-7.13	-47.4	11.06	13.48	Vertical	Pass
14202	-45.06	-40	-5.06	-45.92	11.48	14.49	Vertical	Pass

LTE Band 48_QPSK_10MHz_Middle Channel, 1 RB0_Ant 0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7241	-45.7	-40	-5.7	-47.09	8.19	11.73	Horizontal	Pass
10861.5	-47.13	-40	-7.13	-47.4	11.06	13.48	Horizontal	Pass
14482	-43.75	-40	-3.75	-44.61	11.48	14.49	Horizontal	Pass
7241	-43.62	-40	-3.62	-45.01	8.19	11.73	Vertical	Pass
10861.5	-46.86	-40	-6.86	-47.13	11.06	13.48	Vertical	Pass
14482	-43.61	-40	-3.61	-44.47	11.48	14.49	Vertical	Pass

LTE Band 48_QPSK_10MHz_High Channel, 1 RB0_Ant 0								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7381	-49.9	-40	-9.9	-51.29	8.19	11.73	Horizontal	Pass
11071.5	-46.65	-40	-6.65	-46.79	11.36	13.65	Horizontal	Pass
14762	-42.15	-40	-2.15	-42.9	11.4	14.3	Horizontal	Pass
7381	-49.66	-40	-9.66	-51.05	8.19	11.73	Vertical	Pass
11071.5	-46.57	-40	-6.57	-46.71	11.36	13.65	Vertical	Pass
14762	-42.42	-40	-2.42	-43.17	11.4	14.3	Vertical	Pass



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LTE Band 48_QPSK_10MHz_Low Channel, 1 RB0_Ant 0 + Ant 2								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7103	-44.21	-40	-4.21	-45.6	8.19	11.73	Horizontal	Pass
10532	-48.32	-40	-8.32	-48.59	11.06	13.48	Horizontal	Pass
14242	-45.12	-40	-5.12	-45.98	11.48	14.49	Horizontal	Pass
7143	-41.33	-40	-1.33	-42.72	8.19	11.73	Vertical	Pass
10421	-48.23	-40	-8.23	-48.33	11.12	13.37	Vertical	Pass
14432	-46.21	-40	-6.21	-47.07	11.48	14.49	Vertical	Pass

LTE Band 48_QPSK_10MHz_Middle Channel, 1 RB0_Ant 0 + Ant 2								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7243	-46.14	-40	-6.14	-47.53	8.19	11.73	Horizontal	Pass
10842	-48.11	-40	-8.11	-48.38	11.06	13.48	Horizontal	Pass
14443	-44.56	-40	-4.56	-45.42	11.48	14.49	Horizontal	Pass
7231	-45.14	-40	-5.14	-46.53	8.19	11.73	Vertical	Pass
10854	-47.98	-40	-7.98	-48.25	11.06	13.48	Vertical	Pass
14356	-43.98	-40	-3.98	-44.84	11.48	14.49	Vertical	Pass

LTE Band 48_QPSK_10MHz_High Channel, 1 RB0_Ant 0 + Ant 2								
Frequency (MHz)	EIRP (dBm)	Limit(dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7331	-49.98	-40	-9.98	-51.37	8.19	11.73	Horizontal	Pass
11031	-47.88	-40	-7.88	-48.02	11.36	13.65	Horizontal	Pass
14752	-43.12	-40	-3.12	-43.87	11.4	14.3	Horizontal	Pass
7331	-49.69	-40	-9.69	-51.08	8.19	11.73	Vertical	Pass
11053	-46.65	-40	-6.65	-46.79	11.36	13.65	Vertical	Pass
14731	-43.76	-40	-3.76	-44.51	11.4	14.3	Vertical	Pass



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CA Non-contiguous

LTE Band 48_QPSK_10+10MHz_Middle Channel, PCC 1 RB0+ SCC 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
7102	-45.99	-40	-5.99	-47.38	8.19	11.73	Horizontal	Pass
10653	-47.99	-40	-7.99	-48.26	11.06	13.48	Horizontal	Pass
14204	-45.04	-40	-5.04	-45.9	11.48	14.49	Horizontal	Pass
7102	-43.46	-40	-3.46	-44.85	8.19	11.73	Vertical	Pass
10653	-47.76	-40	-7.76	-48.03	11.06	13.48	Vertical	Pass
14204	-44.89	-40	-4.89	-45.75	11.48	14.49	Vertical	Pass

CA Contiguous

LTE Band 48_QPSK_10+20MHz_Low Channel, PCC 1 RB50+ SCC 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
7232	-48.83	-40	-8.83	-50.22	8.19	11.73	Horizontal	Pass
10848	-46.58	-40	-6.58	-46.85	11.06	13.48	Horizontal	Pass
14464	-43.01	-40	-3.01	-43.87	11.48	14.49	Horizontal	Pass
7232	-44.28	-40	-4.28	-45.67	8.19	11.73	Vertical	Pass
10848	-47.22	-40	-7.22	-47.49	11.06	13.48	Vertical	Pass
14464	-43.39	-40	-3.39	-44.25	11.48	14.49	Vertical	Pass

LTE Band 48_QPSK_10+20MHz_Middle Channel, PCC 1 RB50+ SCC 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
7362	-50.64	-40	-10.64	-52.03	8.19	11.73	Horizontal	Pass
11043	-46.79	-40	-6.79	-46.93	11.36	13.65	Horizontal	Pass
14724	-42.82	-40	-2.82	-43.57	11.4	14.3	Horizontal	Pass
7362	-49.74	-40	-9.74	-51.13	8.19	11.73	Vertical	Pass
11043	-46.98	-40	-6.98	-47.12	11.36	13.65	Vertical	Pass
14724	-42.47	-40	-2.47	-43.22	11.4	14.3	Vertical	Pass



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LTE Band 48_QPSK_10+20MHz_High Channel, PCC 1 RB50+ SCC 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
7231	-51.21	-40	-11.21	-52.6	8.19	11.73	Horizontal	Pass
10842	-52.31	-40	-12.31	-52.58	11.06	13.48	Horizontal	Pass
14433	-43.75	-40	-3.75	-44.61	11.48	14.49	Horizontal	Pass
7321	-51.75	-40	-11.75	-53.14	8.19	11.73	Vertical	Pass
10843	-44.31	-40	-4.31	-44.58	11.06	13.48	Vertical	Pass
14431	-43.22	-40	-3.22	-44.08	11.48	14.49	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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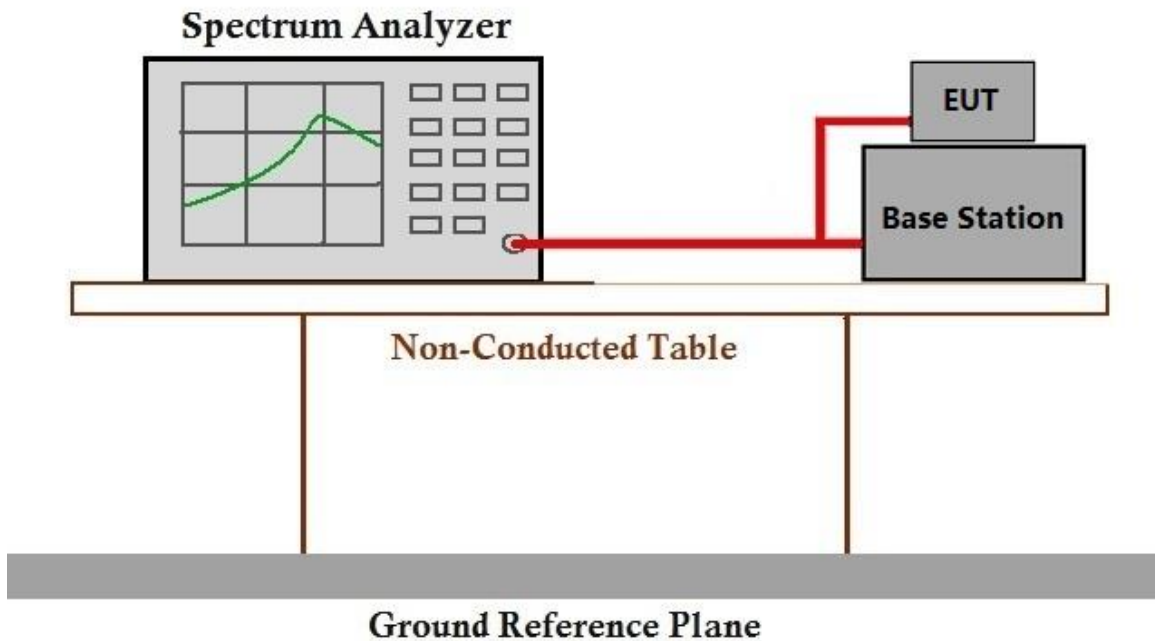
6.7 Frequency stability

Test Requirement: §2.1055
 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: 21.5 °C 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



6.7.3 Measurement Data

Please refer to Appendix for Frequency stability.



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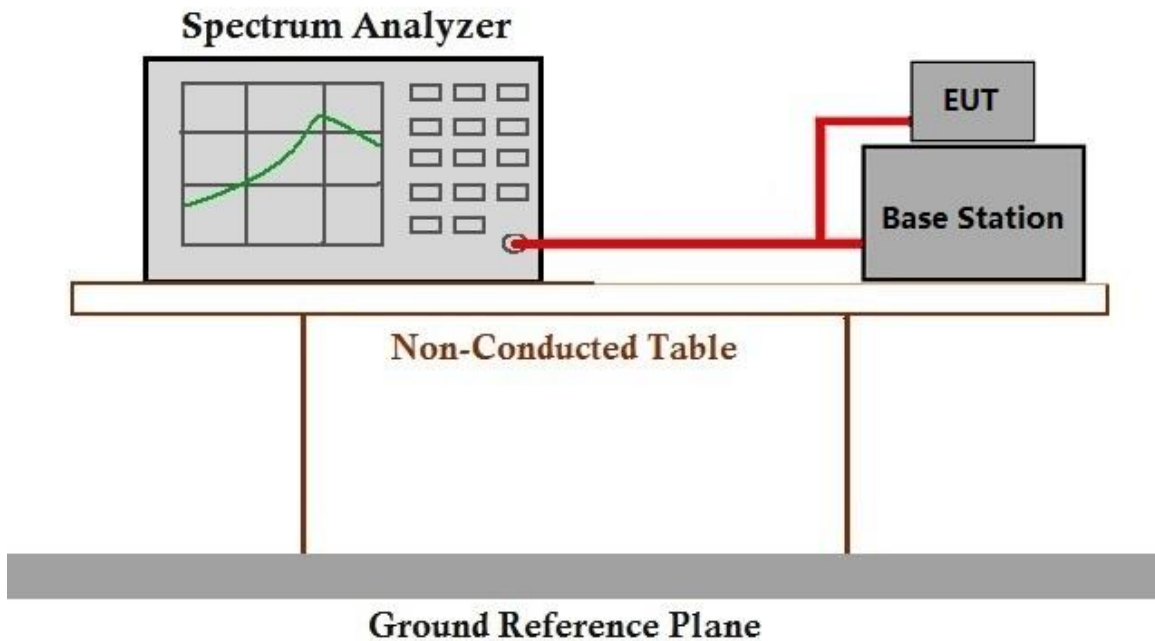
6.8 Modulation Characteristics

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: 21.5 °C 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



6.8.3 Measurement Data

Pass, it's a digital modulation device.



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7 Test Setup Photo

Refer to Appendix - Test Setup Photo for FYCR2211000481AT

8 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for FYCR2211000481AT

- End of the Report -



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