TEST REPORT

Application No.:	SZEM1911020085CR
Applicant:	Surf Communication Solutions Ltd.
Address of Applicant:	7 Hamada Street, Yokneam Ilit20692, Israel.
Manufacturer:	1. Surf Communication Solutions Ltd. 2. Dongguan Aomeijia Electronic Co., Ltd
Address of Manufacturer:	1. 7 Hamada St., P.O.B. 343 Yoqneam Hi-Tech Park 2069205 Yokneam, Israel 2. Lefushan Industry Zone, Youganpu Vilage, Fenggang Town, Dongguan, Guangdong Province, P.R.China
Factory:	Surf Communication Solutions Ltd.
Address of Factory:	7 Hamada St., P.O.B. 343 Yoqneam Hi-Tech Park 2069205 Yokneam, Israel
Equipment Under Test (EUT):	
EUT Name:	Dash Camera
Model No.:	AI-12, SF450 ♣
♣	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Trade mark:	Surfsight AI-12
FCC ID:	2APWTAI-12S
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:	2019-11-12
Date of Test:	2019-11-13 to 2019-12-04
Date of Issue:	2019-12-09
Test Result:	**Pass ***

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

Keny Xu
EMC Laboratory Manager

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		2019-12-09		Original

Authorized for issue by:				
				
		Edison Li /Project Engineer		
				
		Eric Fu /Reviewer		

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913, §24.232, §27.50(c), §27.50(d),	ERP≤7W(LTE Band 5) EIRP≤ 2W(LTE Band 2) EIRP≤ 1W(LTE Band 4) ERP≤ 3W(LTE Band 12)	PASS
Peak-Average Ratio	§24.232, §27.50(c), §27.50(d)	≤13dB	PASS
Modulation Characteristics	§2.1047	Digital modulation	PASS
Bandwidth	§2.1049(h), §22.917, §24.238, §27.53(h),	OBW: No limit EBW: No limit	PASS
Band Edge Compliance	§2.1051, §22.917, §24.238, §27.53(h), §27.53(g),	≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block(LTE Band2,4,5,12)	PASS
Spurious emissions at antenna terminals	§2.1051, §22.917, §24.238, §27.53(h), §27.53(g),	≤ -13dBm(LTE Band2,4,5,12)	PASS
Field strength of spurious radiation	§2.1051, §22.917, §24.238, §27.53(h), §27.53(g),	≤ -13dBm(LTE Band2,4,5,12)	PASS
Frequency stability	§2.1055, §22.355, §24.235, §27.54,	≤ ±2.5ppm	PASS

Remark:

Model No.: AI-12, SF450

Only the model SF450 was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, only different on model name.

3 Contents

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 3.7V, 550mAh rechargeable battery which charged by DC power port DC5V/2A from external power
Sample Type:	Fixed Device
LTE Operation Frequency Band:	LTE FDD Band 2, 4, 5, 12
Modulation Type:	QPSK, 16QAM
LTE Release Version:	R8
LTE Power Class:	Level 3
Antenna Type:	Integral
Antenna Gain:	Antenna2: 1dBi
Extreme temp. Tolerance:	-30℃ to +50℃
Extreme vol. Limits:	3.14VDC to 4.25VDC (nominal: 3.7VDC)

4.2 Test Frequency

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE FDD Band 2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855.0	1880	1905.0
	15	1857.5	1880	1902.5
	20	1860.0	1880	1900.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715.0	1732.5	1750.0
	15	1717.5	1732.5	1747.5
	20	1720.0	1732.5	1745.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829.0	836.5	844.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE FDD Band 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

4.3 Max ERP/EIRP Power, Frequency Tolerance and Emission Designator

FCC Rule	Band	Modulation	BW (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP/EIRP (W)
Part24E	LTE Band2	QPSK	1.4	1M10G7D	/	0.286418
Part24E	LTE Band2	16QAM	1.4	1M11W7D	/	0.250611
Part24E	LTE Band2	QPSK	3	2M69G7D	/	0.285102
Part24E	LTE Band2	16QAM	3	2M69W7D	/	0.250611
Part24E	LTE Band2	QPSK	5	4M54G7D	/	0.293765
Part24E	LTE Band2	16QAM	5	4M51W7D	/	0.249459
Part24E	LTE Band2	QPSK	10	8M96G7D	/	0.285759
Part24E	LTE Band2	16QAM	10	8M96W7D	/	0.240436
Part24E	LTE Band2	QPSK	15	13M5G7D	/	0.289734
Part24E	LTE Band2	16QAM	15	13M5W7D	/	0.237137
Part24E	LTE Band2	QPSK	20	18M0G7D	0.00263	0.278612
Part24E	LTE Band2	16QAM	20	18M0W7D	0.00266	0.224905
Part27	LTE Band4	QPSK	1.4	1M10G7D	/	0.273527
Part27	LTE Band4	16QAM	1.4	1M10W7D	/	0.232809
Part27	LTE Band4	QPSK	3	2M68G7D	/	0.281190
Part27	LTE Band4	16QAM	3	2M69W7D	/	0.235505
Part27	LTE Band4	QPSK	5	4M51G7D	/	0.270396
Part27	LTE Band4	16QAM	5	4M49W7D	/	0.231739
Part27	LTE Band4	QPSK	10	8M96G7D	/	0.274157
Part27	LTE Band4	16QAM	10	8M92W7D	/	0.244343
Part27	LTE Band4	QPSK	15	13M5G7D	/	0.274157
Part27	LTE Band4	16QAM	15	13M5W7D	/	0.239332
Part27	LTE Band4	QPSK	20	18M0G7D	0.00279	0.265461
Part27	LTE Band4	16QAM	20	18M0W7D	0.00343	0.236592
Part22H	LTE Band5	QPSK	1.4	1M10G7D	/	0.173780
Part22H	LTE Band5	16QAM	1.4	1M10W7D	/	0.147571
Part22H	LTE Band5	QPSK	3	2M68G7D	/	0.169044
Part22H	LTE Band5	16QAM	3	2M68W7D	/	0.150661
Part22H	LTE Band5	QPSK	5	4M50G7D	/	0.167880
Part22H	LTE Band5	16QAM	5	4M50W7D	/	0.148252
Part22H	LTE Band5	QPSK	10	8M94G7D	-0.00527	0.191426
Part22H	LTE Band5	16QAM	10	8M92W7D	0.00556	0.153109

Part27	LTE Band12	QPSK	1.4	1M10G7D	/	0.175388
Part27	LTE Band12	16QAM	1.4	1M10W7D	/	0.150314
Part27	LTE Band12	QPSK	3	2M68G7D	/	0.176198
Part27	LTE Band12	16QAM	3	2M68W7D	/	0.153109
Part27	LTE Band12	QPSK	5	4M50G7D	/	0.169824
Part27	LTE Band12	16QAM	5	4M50W7D	/	0.151356
Part27	LTE Band12	QPSK	10	8M94G7D	0.00759	0.191426
Part27	LTE Band12	16QAM	10	8M94W7D	0.00743	0.153109

4.4 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	52%	
Atmospheric Pressure:	1015Pa	
Temperature:	TN	25 ℃
Voltage:	VL	3.14 V
	VN	3.7 V
	VH	4.25 V

NOTE: VL= lower extreme test voltage
VN= nominal voltage
VH= upper extreme test voltage
TN= normal temperature

4.5 Description of Support Units

The EUT has been tested independent unit.

4.6 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.25×10^{-8}
2	Occupied Bandwidth	3%
3	RF conducted power	0.75dB
4	Conducted Spurious emissions	0.75dB
5	RF Radiated power	4.5dB (below 1GHz)
		4.8dB (above 1GHz)
6	Radiated Spurious emission test	4.5dB (Below 1GHz)
		4.8dB (Above 1GHz)
7	Temperature test	1℃
8	Humidity test	3%
9	Supply voltages	1.5%
10	Time	3%

4.7 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, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.8 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

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. 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: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• 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.

4.9 Deviation from Standards

None

4.10 Abnormalities from Standard Conditions

None

5 Equipment List

RF Conducted Test					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Shielding Room	SAEMC	MSR733	SEM001-09	2019-06-13	2022-06-12
DC Power Supply	Zhao Xin	KXN-6020D	SEM011-08	2019-09-24	2020-09-23
Spectrum Analyzer	Rohde & Schwarz	FSP	SEM004-06	2019-09-24	2020-09-23
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-02	2019-07-11	2020-07-10
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2019-09-24	2020-09-23
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2019-09-24	2020-09-23
Electric and Magnetic Field Analyzer	Narda	NBM-550/EHP-50F	EMC2143	2018-02-07	2020-02-06
Electric Field Probe(100KHz-3GHz)	WANDEL & GOLTERMANN	EMR-20	EMC0907	2019-05-21	2020-05-20
EMF Tester	Narda	ELT-400	SZE039-4	2019-07-08	2020-07-07
Radio Communication Analyzer	Anritsu	MT8820C	SEM010-04	2019-04-02	2020-04-01
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2019-04-02	2020-04-01
Universal Radio Communication Tester	Rohde & Schwarz	CMU200	SEM010-02	2019-04-02	2020-04-01
Signal Analyzer (10Hz-40GHz)	Rohde & Schwarz	FSV40	SEM008-04	2019-04-01	2020-03-31
EXA Signal Analyzer (10Hz-26.5GHz)	KEYSIGHT	N9010A	SEM004-09	2019-04-12	2020-04-11
Power Splitter	Narda	4324-2	0168	N/A	N/A

RE in chamber					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017-08-05	2020-08-04
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2019-07-11	2020-07-10
EMI Test Receiver	Agilent Technologies	N9038A	SEM004-05	2019-09-24	2020-09-23
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2017-06-27	2020-06-26
Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2019-04-01	2020-03-31

Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Signal Generator	R&S	SMA100A	102174	2018-07-12	2019-07-11

RE in chamber					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2019-07-11	2020-07-10
EXA Spectrum Analyzer	AgilentTechnologies Inc	N9010A	SEM004-12	2019-04-12	2020-04-11
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna(15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-Amplifier(0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2019-09-24	2020-09-23
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2019-04-01	2020-03-31
Pre-amplifier(26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2019-04-01	2020-03-31
DC Power Supply	Zhao Xin	KXN-6020D	SEM011-08	2019-09-24	2020-09-23
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Signal Generator	R&S	SMA100A	102174	2018-07-12	2019-07-11

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2019-09-26	2020-09-25
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2019-09-26	2020-09-25
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2019-04-04	2020-04-03

6 Radio Spectrum Matter Test Results

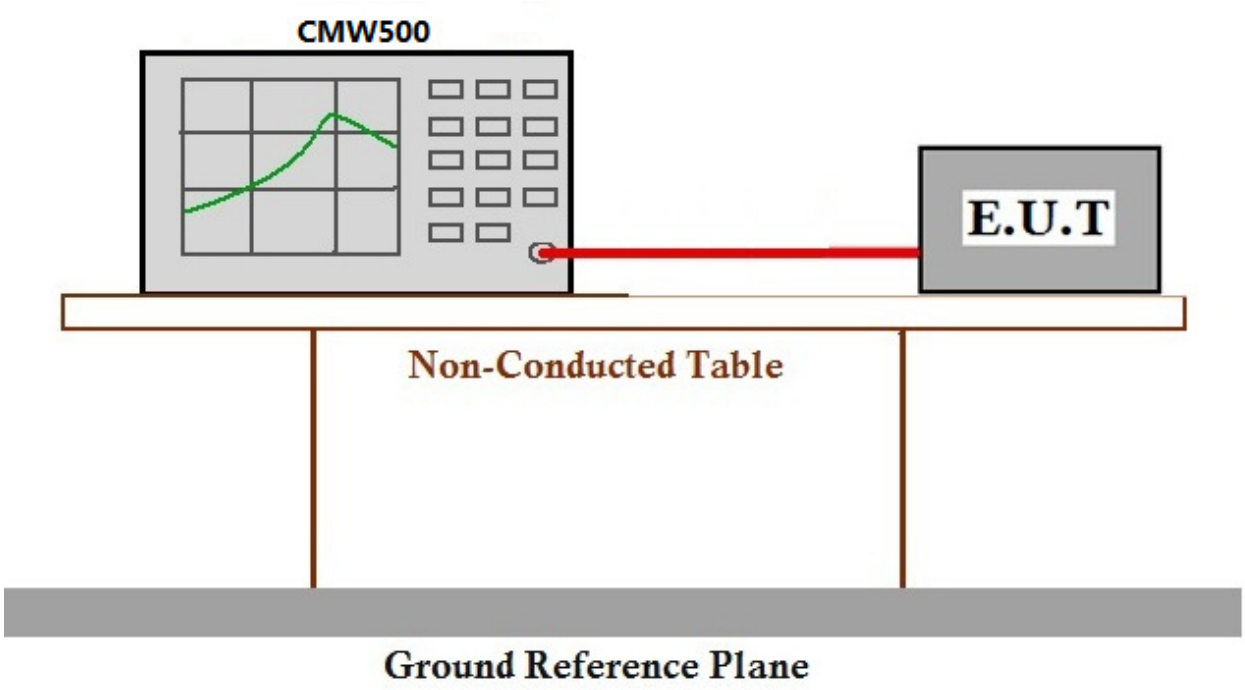
6.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement: §2.1046, §22.913, §24.232, §27.50(c), §27.50(d)
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ERP≤7W(LTE Band 5)
EIRP≤ 2W(LTE Band 2)
EIRP≤ 1W(LTE Band 4)
ERP≤ 3W(LTE Band 12)

6.1.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 57 % RH Atmospheric Pressure: 1015 mbar
Test mode: f: TX mode_Keep the EUT in transmitting mode.

6.1.2 Test Setup Diagram



6.1.3 Measurement Data

Please refer to Appendix A-Output power

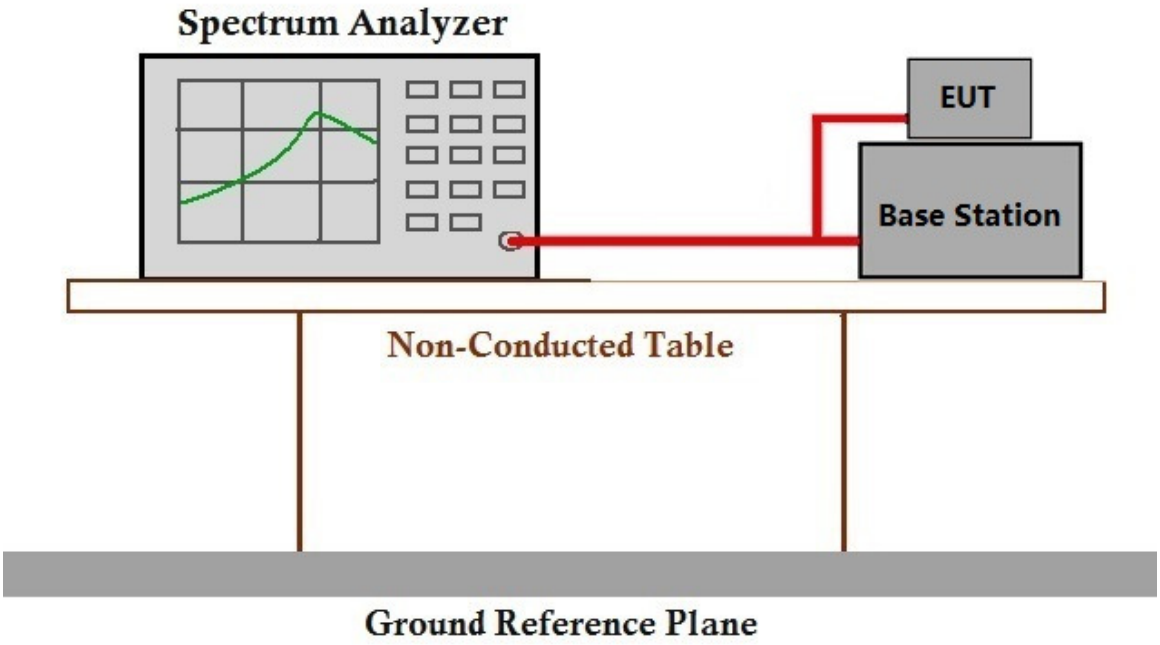
6.2 Peak-Average Ratio

Test Requirement: §24.232, §27.50(c), §27.50(d)
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ≤13dB

6.2.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 57 % RH Atmospheric Pressure: 1015 mbar
Test mode: f: TX mode_Keep the EUT in transmitting mode.

6.2.2 Test Setup Diagram



6.2.3 Measurement Data

Please refer to Appendix B- Peak-Average Ratio

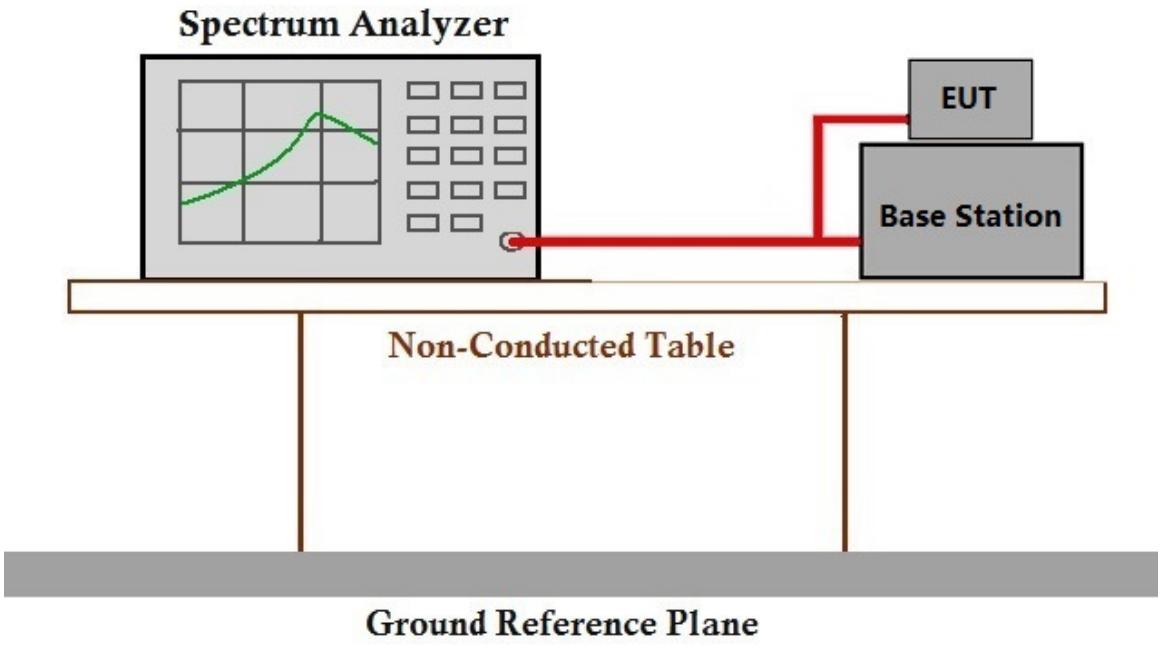
6.3 Bandwidth

Test Requirement: §2.1049(h), §22.917, §24.238, §27.53(h)
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: OBW: No limit
EBW: No limit

6.3.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 57 % RH Atmospheric Pressure: 1015 mbar
Test mode: f: TX mode_Keep the EUT in transmitting mode.

6.3.2 Test Setup Diagram



6.3.3 Measurement Data

Please refer to Appendix C- Bandwidth

6.4 Band Edge Compliance

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

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: ≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block(LTE Band2,4,5,12)

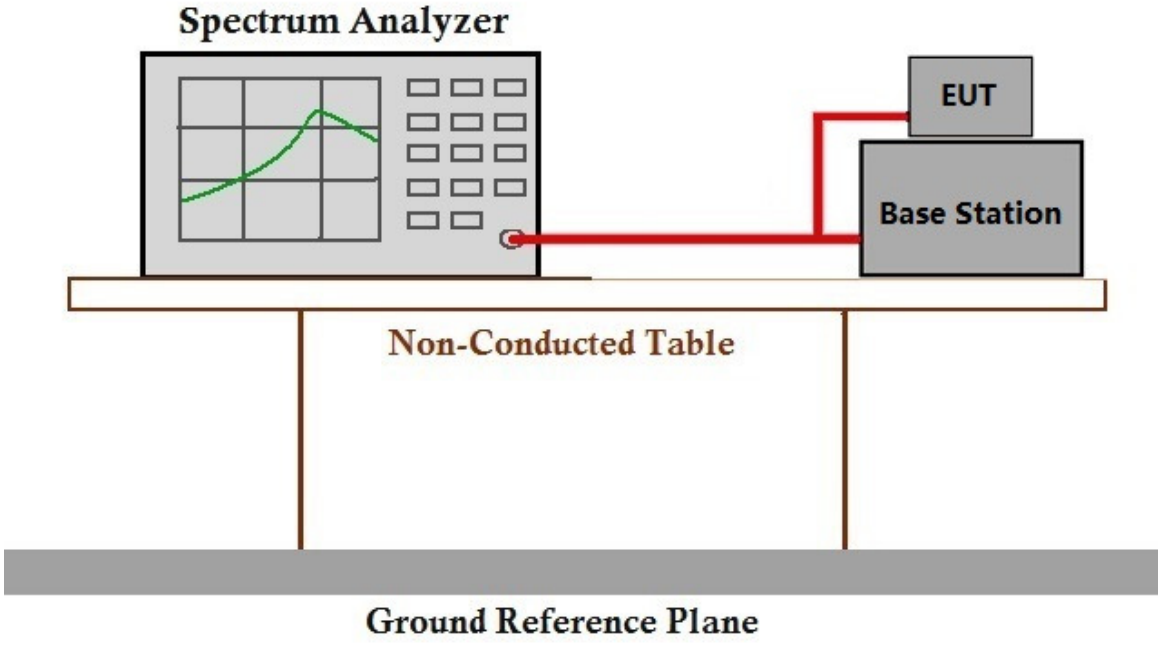
6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 57 % RH Atmospheric Pressure: 1015 mbar

Test mode: f: TX mode_Keep the EUT in transmitting mode.

6.4.2 Test Setup Diagram



6.4.3 Measurement Data

Please refer to Appendix D- Band Edge

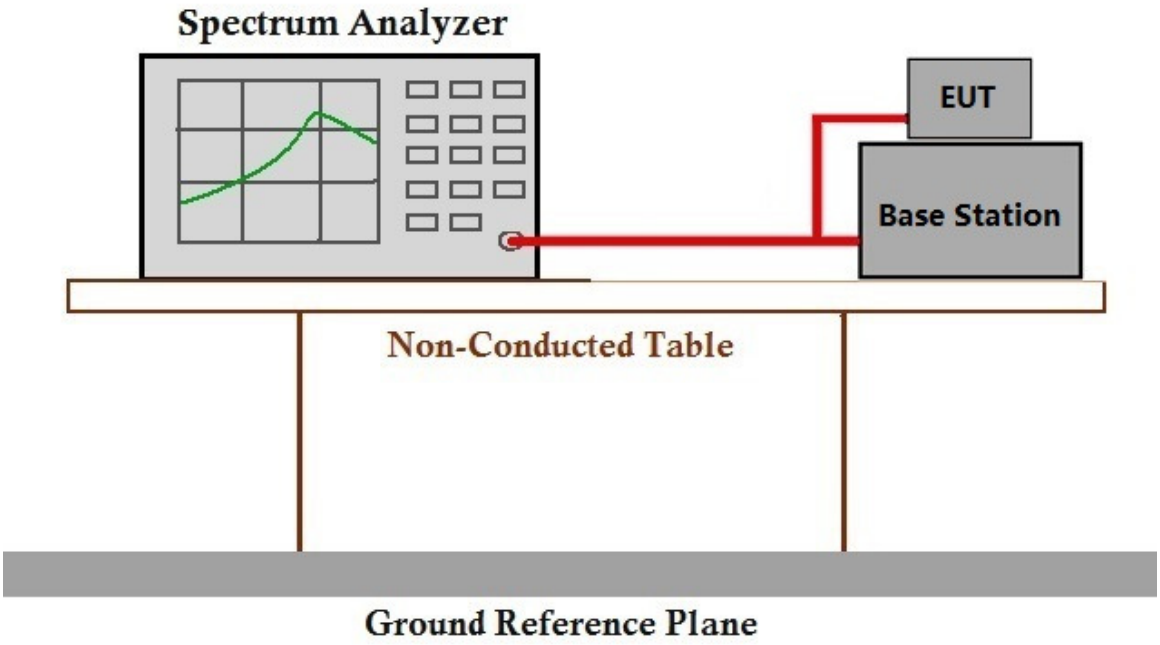
6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051, §22.917, §24.238, §27.53(h), §27.53(g)
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ≤ -13dBm(LTE Band2,4,5,12)

6.5.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 57 % RH Atmospheric Pressure: 1015 mbar
Test mode: f: TX mode_Keep the EUT in transmitting mode.

6.5.2 Test Setup Diagram



6.5.3 Measurement Data

Please refer to Appendix E- Spurious emissions at antenna terminals

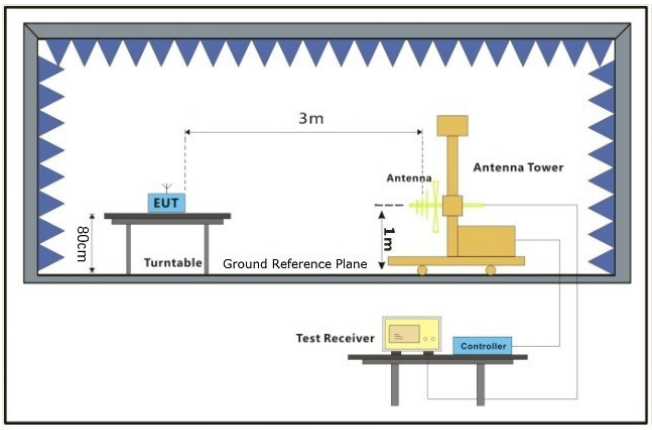
6.6 Field strength of spurious radiation

Test Requirement: §2.1051, §22.917, §24.238, §27.53(h), §27.53(g)
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ≤ -13dBm(LTE Band2,4,5,12)

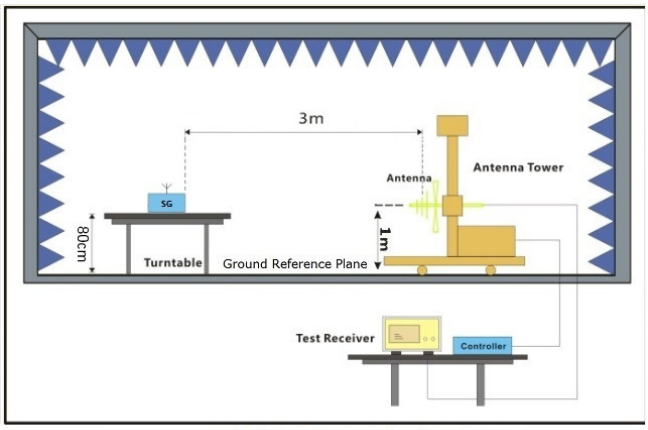
6.6.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 57 % RH Atmospheric Pressure: 1015 mbar
Test mode: f: TX mode_Keep the EUT in transmitting mode.

6.6.2 Test Setup Diagram



EUT



Substiute Antenna+Signal Generator

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.

FDD LTE Band2- Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3700.14	-53.48	0.71	7.6	-46.59	-13	-33.59	Horizontal	Pass
5550.21	-52.92	0.85	10.3	-43.47	-13	-30.47	Horizontal	Pass
7400.28	-57.89	1	12.9	-45.99	-13	-32.99	Horizontal	Pass
3700.14	-52.91	0.71	7.6	-46.02	-13	-33.02	Vertical	Pass
5550.21	-49.37	0.85	10.3	-39.92	-13	-26.92	Vertical	Pass
7400.28	-55.91	1	12.9	-44.01	-13	-31.01	Vertical	Pass

FDD LTE Band2- Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3758.74	-51.81	0.71	7.6	-44.92	-13	-31.92	Horizontal	Pass
5638.11	-50.53	0.85	10.3	-41.08	-13	-28.08	Horizontal	Pass
7517.48	-53.79	0.99	13.2	-41.58	-13	-28.58	Horizontal	Pass
3758.74	-49.93	0.71	7.6	-43.04	-13	-30.04	Vertical	Pass
5638.11	-49.67	0.85	10.3	-40.22	-13	-27.22	Vertical	Pass
7517.48	-54.34	0.99	13.2	-42.13	-13	-29.13	Vertical	Pass

FDD LTE Band2- High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3817.34	-49.9	0.71	7.6	-43.01	-13	-30.01	Horizontal	Pass
5726.01	-49.77	0.85	10.3	-40.32	-13	-27.32	Horizontal	Pass
7634.68	-54.04	0.99	13.2	-41.83	-13	-28.83	Horizontal	Pass
3817.34	-49.23	0.71	7.6	-42.34	-13	-29.34	Vertical	Pass
5726.01	-50.66	0.85	10.3	-41.21	-13	-28.21	Vertical	Pass
7634.68	-54.86	0.99	13.2	-42.65	-13	-29.65	Vertical	Pass

FDD LTE Band4-Low channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3420.14	-51.39	0.65	6.2	-45.84	-13	-32.84	Horizontal	Pass
5130.21	-50.21	0.82	9.6	-41.43	-13	-28.43	Horizontal	Pass
6840.28	-49.16	0.95	11.8	-38.31	-13	-25.31	Horizontal	Pass
3420.14	-53.42	0.65	6.2	-47.87	-13	-34.87	Vertical	Pass
5130.21	-51.23	0.82	9.6	-42.45	-13	-29.45	Vertical	Pass
6840.28	-50.55	0.95	11.8	-39.7	-13	-26.7	Vertical	Pass

FDD LTE Band4-Middle channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3463.74	-50.52	0.65	6.2	-44.97	-13	-31.97	Horizontal	Pass
5195.61	-52.08	0.82	9.6	-43.3	-13	-30.3	Horizontal	Pass
6927.48	-51.82	0.95	11.8	-40.97	-13	-27.97	Horizontal	Pass
3463.74	-51.81	0.65	6.2	-46.26	-13	-33.26	Vertical	Pass
5195.61	-52.22	0.82	9.6	-43.44	-13	-30.44	Vertical	Pass
6927.48	-51.6	0.95	11.8	-40.75	-13	-27.75	Vertical	Pass

FDD LTE Band4-High channel, Modulation: QPSK, Bandwidth: 20MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3507.34	-52.12	0.71	7.6	-45.23	-13	-32.23	Horizontal	Pass
5261.01	-51.18	0.82	9.6	-42.4	-13	-29.4	Horizontal	Pass
7014.68	-53.9	1	12.9	-42	-13	-29	Horizontal	Pass
3507.34	-54.86	0.71	7.6	-47.97	-13	-34.97	Vertical	Pass
5261.01	-47.87	0.82	9.6	-39.09	-13	-26.09	Vertical	Pass
7014.68	-55.03	1	12.9	-43.13	-13	-30.13	Vertical	Pass

FDD LTE Band5-Low channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1648.14	-53.52	0.52	6	-50.19	-13	-37.19	Horizontal	Pass
2472.21	-54.31	0.53	5.8	-51.19	-13	-38.19	Horizontal	Pass
3296.28	-56.42	0.65	6.2	-53.02	-13	-40.02	Horizontal	Pass
1648.14	-56.21	0.52	6	-52.88	-13	-39.88	Vertical	Pass
2472.21	-57.87	0.53	5.8	-54.75	-13	-41.75	Vertical	Pass
3296.28	-57.28	0.65	6.2	-53.88	-13	-40.88	Vertical	Pass

FDD LTE Band5-Middle channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1671.74	-56.1	0.52	6	-52.77	-13	-39.77	Horizontal	Pass
2507.61	-55.99	0.59	5.3	-53.43	-13	-40.43	Horizontal	Pass
3343.48	-55.46	0.65	6.2	-52.06	-13	-39.06	Horizontal	Pass
1671.74	-58.2	0.52	6	-54.87	-13	-41.87	Vertical	Pass
2507.61	-57.06	0.59	5.3	-54.5	-13	-41.5	Vertical	Pass
3343.48	-55.79	0.65	6.2	-52.39	-13	-39.39	Vertical	Pass

FDD LTE Band5-High channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1695.34	-52.52	0.52	6	-49.19	-13	-36.19	Horizontal	Pass
2543.01	-55.91	0.59	5.3	-53.35	-13	-40.35	Horizontal	Pass
3390.68	-57.48	0.65	6.2	-54.08	-13	-41.08	Horizontal	Pass
1695.34	-55.5	0.52	6	-52.17	-13	-39.17	Vertical	Pass
2543.01	-58.77	0.59	5.3	-56.21	-13	-43.21	Vertical	Pass
3390.68	-55.95	0.65	6.2	-52.55	-13	-39.55	Vertical	Pass

FDD LTE Band12-Low channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1398.14	-46.08	0.43	1.9	-46.76	-13	-33.76	Horizontal	Pass
2097.21	-47.73	0.53	5.8	-44.61	-13	-31.61	Horizontal	Pass
2796.28	-50.29	0.59	5.3	-47.73	-13	-34.73	Horizontal	Pass
1398.14	-50.24	0.43	1.9	-50.92	-13	-37.92	Vertical	Pass
2097.21	-52.11	0.53	5.8	-48.99	-13	-35.99	Vertical	Pass
2796.28	-52.19	0.59	5.3	-49.63	-13	-36.63	Vertical	Pass

FDD LTE Band12-Middle channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1413.74	-49.01	0.43	1.9	-49.69	-13	-36.69	Horizontal	Pass
2120.61	-49.74	0.53	5.8	-46.62	-13	-33.62	Horizontal	Pass
2827.48	-50.4	0.59	5.3	-47.84	-13	-34.84	Horizontal	Pass
1413.74	-47.65	0.43	1.9	-48.33	-13	-35.33	Vertical	Pass
2120.61	-48.98	0.53	5.8	-45.86	-13	-32.86	Vertical	Pass
2827.48	-51.68	0.59	5.3	-49.12	-13	-36.12	Vertical	Pass

FDD LTE Band12-High channel, Modulation: QPSK, Bandwidth: 10MHz, 1 RB								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1429.34	-51.26	0.43	1.9	-51.94	-13	-38.94	Horizontal	Pass
2144.01	-51.98	0.53	5.8	-48.86	-13	-35.86	Horizontal	Pass
2858.68	-50.74	0.59	5.3	-48.18	-13	-35.18	Horizontal	Pass
1429.34	-48.52	0.43	1.9	-49.2	-13	-36.2	Vertical	Pass
2144.01	-52.91	0.53	5.8	-49.79	-13	-36.79	Vertical	Pass
2858.68	-51.25	0.59	5.3	-48.69	-13	-35.69	Vertical	Pass

Note: All modes have been tested and we found max bandwidth, 1 RB0 has the worst test result. Only record the worst test result.

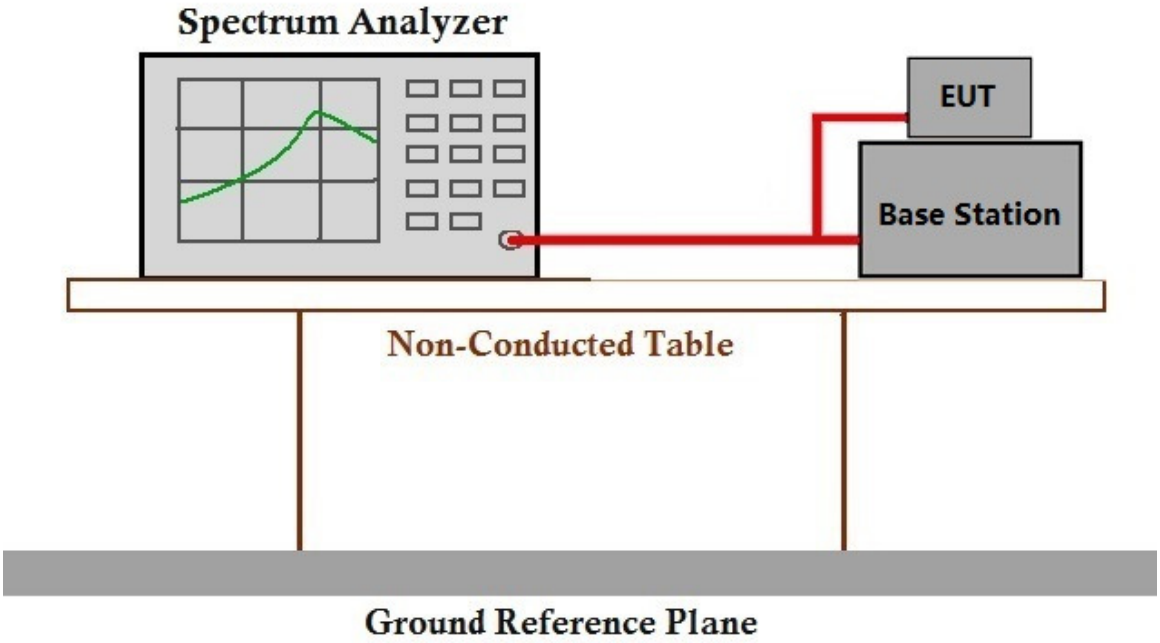
6.7 Frequency stability

Test Requirement: §2.1055, §22.355, §24.235, §27.54
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ≤ ±2.5ppm.

6.7.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 57 % RH Atmospheric Pressure: 1015 mbar
Test mode: f: TX mode_Keep the EUT in transmitting mode.

6.7.2 Test Setup Diagram



6.7.3 Measurement Data

Frequency Error VS. Voltage

Test Band	Test mode:	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband2	QPSK/20MHz	LCH	TN	VL	-4.93	-0.00265	PASS
				VN	0.02	0.00001	PASS
				VH	-3.1	-0.00167	PASS
		MCH	TN	VL	1.06	0.00056	PASS
				VN	-3.21	-0.00171	PASS
				VH	2.22	0.00118	PASS
		HCH	TN	VL	-1.96	-0.00103	PASS
				VN	-1.57	-0.00083	PASS
				VH	-1.15	-0.00061	PASS
	16QAM/20MHz	LCH	TN	VL	-4.66	-0.00251	PASS
				VN	-3.37	-0.00181	PASS
				VH	-3.5	-0.00188	PASS
		MCH	TN	VL	1.13	0.00060	PASS
				VN	-3.24	-0.00172	PASS
				VH	2.19	0.00116	PASS
		HCH	TN	VL	-3.45	-0.00182	PASS
				VN	-2.42	-0.00127	PASS
				VH	1.04	0.00055	PASS

Test Band	Test mode:	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband4	QPSK/20MHz	LCH	TN	VL	-4.87	-0.00283	PASS
				VN	0.12	0.00007	PASS
				VH	-2.05	-0.00119	PASS
		MCH	TN	VL	1.17	0.00068	PASS
				VN	-3.16	-0.00182	PASS
				VH	2.32	0.00134	PASS
		HCH	TN	VL	-2.82	-0.00162	PASS
				VN	-1.47	-0.00084	PASS
				VH	-1.08	-0.00062	PASS
	16QAM/20MHz	LCH	TN	VL	-4.57	-0.00266	PASS
				VN	-3.26	-0.00190	PASS
				VH	-1.43	-0.00083	PASS
		MCH	TN	VL	1.21	0.00070	PASS
				VN	-3.15	-0.00182	PASS
				VH	2.24	0.00129	PASS
		HCH	TN	VL	-3.37	-0.00193	PASS
				VN	-2.34	-0.00134	PASS
				VH	0.11	0.00006	PASS

Test Band	Test mode:	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband5	QPSK/10MHz	LCH	TN	VL	-5.03	-0.00607	PASS
				VN	-0.04	-0.00005	PASS
				VH	-2.2	-0.00265	PASS
		MCH	TN	VL	0.96	0.00115	PASS
				VN	-3.29	-0.00393	PASS
				VH	2.14	0.00256	PASS
		HCH	TN	VL	-3	-0.00355	PASS
				VN	-1.64	-0.00194	PASS
				VH	-1.23	-0.00146	PASS
	16QAM/10MHz	LCH	TN	VL	-4.75	-0.00573	PASS
				VN	-3.43	-0.00414	PASS
				VH	-2.6	-0.00314	PASS
		MCH	TN	VL	1.09	0.00130	PASS
				VN	-3.34	-0.00399	PASS
				VH	2.09	0.00250	PASS
		HCH	TN	VL	-3.56	-0.00422	PASS
				VN	-1.51	-0.00179	PASS
				VH	-0.05	-0.00006	PASS

Test Band	Test mode:	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband12	QPSK/10MHz	LCH	TN	VL	-3.25	-0.00462	PASS
				VN	1.74	0.00247	PASS
				VH	-0.41	-0.00058	PASS
		MCH	TN	VL	2.77	0.00392	PASS
				VN	-1.52	-0.00215	PASS
				VH	3.92	0.00554	PASS
		HCH	TN	VL	-0.25	-0.00035	PASS
				VN	0.14	0.00020	PASS
				VH	0.55	0.00077	PASS
	16QAM/10MHz	LCH	TN	VL	-2.98	-0.00423	PASS
				VN	-1.65	-0.00234	PASS
				VH	0.18	0.00026	PASS
		MCH	TN	VL	2.89	0.00408	PASS
				VN	-1.52	-0.00215	PASS
				VH	3.83	0.00541	PASS
		HCH	TN	VL	-1.76	-0.00248	PASS
				VN	0.27	0.00038	PASS
				VH	1.73	0.00243	PASS

Frequency Error VS. Temperature

Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband2	QPSK/20MHz	LCH	VN	-30	1.91	0.00103	PASS
				-20	1.92	0.00103	PASS
				-10	1.05	0.00056	PASS
				0	4.74	0.00255	PASS
				10	4.13	0.00222	PASS
				20	4	0.00215	PASS
				30	2.54	0.00137	PASS
				40	2.05	0.00110	PASS
				50	2.2	0.00118	PASS
		MCH	VN	-30	-2.47	-0.00131	PASS
				-20	-2.46	-0.00131	PASS
				-10	-3.6	-0.00191	PASS
				0	-0.06	-0.00003	PASS
				10	-3.3	-0.00176	PASS
				20	-1.72	-0.00091	PASS
				30	-1.6	-0.00085	PASS
				40	-3.25	-0.00173	PASS
				50	-2.3	-0.00122	PASS
		HCH	VN	-30	2.94	0.00155	PASS
				-20	2.95	0.00155	PASS
				-10	0.88	0.00046	PASS
				0	3.89	0.00205	PASS
				10	-0.52	-0.00027	PASS
				20	5	0.00263	PASS
				30	1.82	0.00096	PASS
				40	-0.31	-0.00016	PASS
				50	-3.05	-0.00161	PASS

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Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband2	16QAM/20MHz	LCH	VN	-30	1.15	0.00062	PASS
				-20	1.16	0.00062	PASS
				-10	-0.69	-0.00037	PASS
				0	4.94	0.00266	PASS
				10	4.5	0.00242	PASS
				20	3.56	0.00191	PASS
				30	1.73	0.00093	PASS
				40	1.52	0.00082	PASS
				50	3.7	0.00199	PASS
		MCH	VN	-30	-1.63	-0.00087	PASS
				-20	-1.64	-0.00087	PASS
				-10	-3.42	-0.00182	PASS
				0	-1.83	-0.00097	PASS
				10	-2.96	-0.00157	PASS
				20	0.92	0.00049	PASS
				30	3.7	0.00197	PASS
				40	-1.58	-0.00084	PASS
				50	-0.86	-0.00046	PASS
		HCH	VN	-30	3.51	0.00185	PASS
				-20	3.5	0.00184	PASS
				-10	-0.49	-0.00026	PASS
				0	3.55	0.00187	PASS
				10	-1.47	-0.00077	PASS
				20	4.64	0.00244	PASS
				30	0.49	0.00026	PASS
				40	-1.23	-0.00065	PASS
				50	-2.47	-0.00130	PASS

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Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband4	QPSK/20MHz	LCH	VN	-30	1.77	0.00103	PASS
				-20	1.78	0.00103	PASS
				-10	0.91	0.00053	PASS
				0	4.6	0.00267	PASS
				10	3.99	0.00232	PASS
				20	3.86	0.00224	PASS
				30	2.4	0.00140	PASS
				40	1.91	0.00111	PASS
				50	2.06	0.00120	PASS
		MCH	VN	-30	-1.6	-0.00092	PASS
				-20	-1.6	-0.00092	PASS
				-10	-3.74	-0.00216	PASS
				0	-1.2	-0.00069	PASS
				10	-3.44	-0.00199	PASS
				20	-1.86	-0.00107	PASS
				30	-2.74	-0.00158	PASS
				40	-3.39	-0.00196	PASS
				50	-2.44	-0.00141	PASS
		HCH	VN	-30	2.82	0.00162	PASS
				-20	2.81	0.00161	PASS
				-10	0.74	0.00042	PASS
				0	3.75	0.00215	PASS
				10	-0.66	-0.00038	PASS
				20	4.86	0.00279	PASS
				30	1.68	0.00096	PASS
				40	-0.45	-0.00026	PASS
				50	-3.19	-0.00183	PASS

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Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband4	16QAM/20MHz	LCH	VN	-30	2.13	0.00124	PASS
				-20	2.12	0.00123	PASS
				-10	0.27	0.00016	PASS
				0	5.9	0.00343	PASS
				10	5.46	0.00317	PASS
				20	4.52	0.00263	PASS
				30	2.69	0.00156	PASS
				40	2.48	0.00144	PASS
				50	4.66	0.00271	PASS
		MCH	VN	-30	-0.67	-0.00039	PASS
				-20	-0.68	-0.00039	PASS
				-10	-2.46	-0.00142	PASS
				0	0.13	0.00008	PASS
				10	-2	-0.00115	PASS
				20	1.88	0.00109	PASS
				30	4.66	0.00269	PASS
				40	-0.62	-0.00036	PASS
				50	0.1	0.00006	PASS
		HCH	VN	-30	4.45	0.00255	PASS
				-20	4.46	0.00256	PASS
				-10	0.47	0.00027	PASS
				0	4.51	0.00258	PASS
				10	-0.51	-0.00029	PASS
				20	5.6	0.00321	PASS
				30	1.45	0.00083	PASS
				40	-0.27	-0.00015	PASS
				50	-1.51	-0.00087	PASS

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Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband5	QPSK/10MHz	LCH	VN	-30	1.12	0.00135	PASS
				-20	1.11	0.00134	PASS
				-10	0.24	0.00029	PASS
				0	3.93	0.00474	PASS
				10	3.32	0.00400	PASS
				20	3.19	0.00385	PASS
				30	1.73	0.00209	PASS
				40	1.24	0.00150	PASS
				50	1.39	0.00168	PASS
		MCH	VN	-30	-3.26	-0.00390	PASS
				-20	-3.27	-0.00391	PASS
				-10	-4.41	-0.00527	PASS
				0	-0.87	-0.00104	PASS
				10	-4.11	-0.00491	PASS
				20	-2.53	-0.00302	PASS
				30	-1.41	-0.00169	PASS
				40	-4.06	-0.00485	PASS
				50	-3.11	-0.00372	PASS
		HCH	VN	-30	2.15	0.00255	PASS
				-20	2.14	0.00254	PASS
				-10	0.07	0.00008	PASS
				0	3.08	0.00365	PASS
				10	-1.33	-0.00158	PASS
				20	4.19	0.00496	PASS
				30	1.01	0.00120	PASS
				40	-1.12	-0.00133	PASS
				50	-3.86	-0.00457	PASS

Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband5	16QAM/10MHz	LCH	VN	-30	0.82	0.00099	PASS
				-20	0.83	0.00100	PASS
				-10	-1.02	-0.00123	PASS
				0	4.61	0.00556	PASS
				10	4.17	0.00503	PASS
				20	3.23	0.00390	PASS
				30	1.4	0.00169	PASS
				40	1.19	0.00144	PASS
				50	3.37	0.00407	PASS
		MCH	VN	-30	-1.98	-0.00237	PASS
				-20	-1.97	-0.00236	PASS
				-10	-3.75	-0.00448	PASS
				0	-1.16	-0.00139	PASS
				10	-3.29	-0.00393	PASS
				20	0.59	0.00071	PASS
				30	3.37	0.00403	PASS
				40	-1.91	-0.00228	PASS
				50	-1.19	-0.00142	PASS
		HCH	VN	-30	3.16	0.00374	PASS
				-20	3.17	0.00376	PASS
				-10	-0.82	-0.00097	PASS
				0	3.22	0.00382	PASS
				10	-1.8	-0.00213	PASS
				20	4.31	0.00511	PASS
				30	0.16	0.00019	PASS
				40	-1.56	-0.00185	PASS
				50	-2.8	-0.00332	PASS

Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband12	QPSK/20MHz	LCH	VN	-30	2.31	0.00328	PASS
				-20	2.32	0.00330	PASS
				-10	1.45	0.00206	PASS
				0	5.14	0.00730	PASS
				10	4.53	0.00643	PASS
				20	4.4	0.00625	PASS
				30	2.94	0.00418	PASS
				40	2.45	0.00348	PASS
				50	2.6	0.00369	PASS
		MCH	VN	-30	-2.07	-0.00293	PASS
				-20	-2.06	-0.00291	PASS
				-10	-3.2	-0.00452	PASS
				0	-0.66	-0.00093	PASS
				10	-2.9	-0.00410	PASS
				20	-1.32	-0.00187	PASS
				30	0.8	0.00113	PASS
				40	-2.85	-0.00403	PASS
				50	-1.9	-0.00269	PASS
		HCH	VN	-30	3.34	0.00470	PASS
				-20	3.35	0.00471	PASS
				-10	1.28	0.00180	PASS
				0	4.29	0.00603	PASS
				10	-0.12	-0.00017	PASS
				20	5.4	0.00759	PASS
				30	2.22	0.00312	PASS
				40	0.09	0.00013	PASS
				50	-2.65	-0.00373	PASS

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Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEband12	16QAM/10MHz	LCH	VN	-30	1.44	0.00205	PASS
				-20	1.45	0.00206	PASS
				-10	-0.4	-0.00057	PASS
				0	5.23	0.00743	PASS
				10	4.79	0.00680	PASS
				20	3.85	0.00547	PASS
				30	2.02	0.00287	PASS
				40	1.81	0.00257	PASS
				50	3.99	0.00567	PASS
		MCH	VN	-30	-1.34	-0.00189	PASS
				-20	-1.35	-0.00191	PASS
				-10	-3.13	-0.00442	PASS
				0	-0.54	-0.00076	PASS
				10	-2.67	-0.00377	PASS
				20	1.21	0.00171	PASS
				30	3.99	0.00564	PASS
				40	-1.29	-0.00182	PASS
				50	-0.57	-0.00081	PASS
		HCH	VN	-30	3.8	0.00534	PASS
				-20	3.79	0.00533	PASS
				-10	-0.2	-0.00028	PASS
				0	3.84	0.00540	PASS
				10	-1.18	-0.00166	PASS
				20	4.93	0.00693	PASS
				30	0.78	0.00110	PASS
				40	-0.94	-0.00132	PASS
				50	-2.18	-0.00307	PASS

Note: All modes have been tested and we only record the worst test result.

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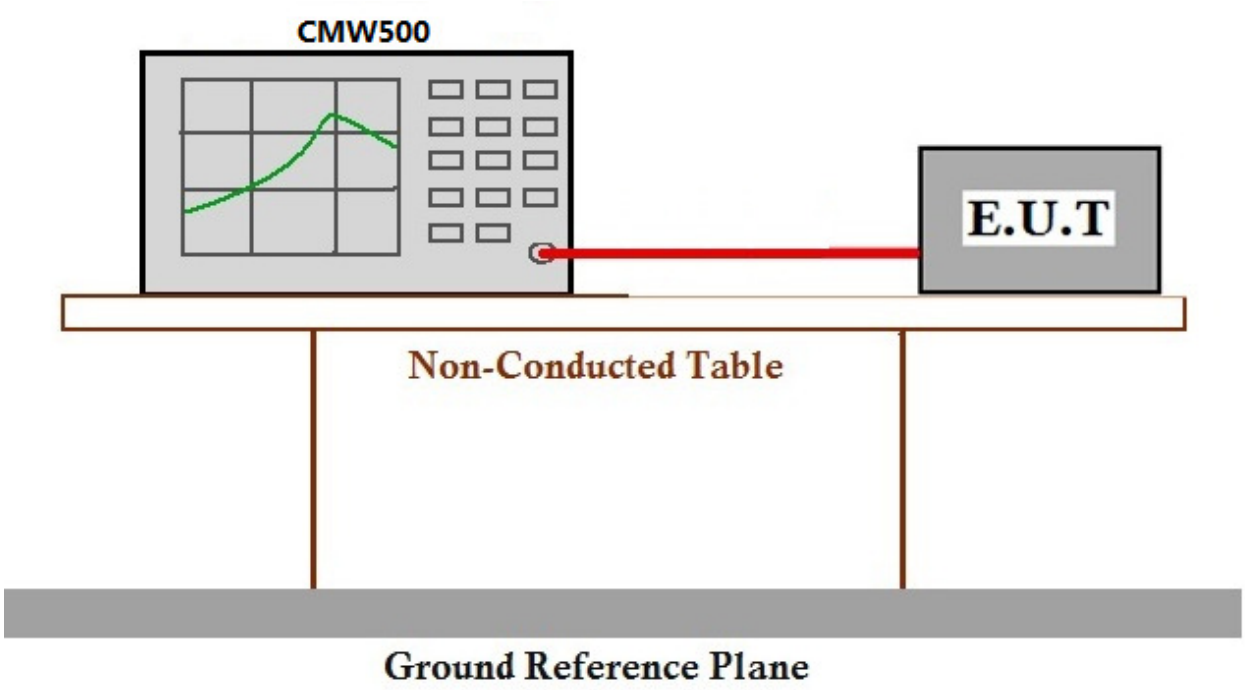
6.8 Modulation Characteristics

Test Requirement: §2.1047
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: Digital modulation

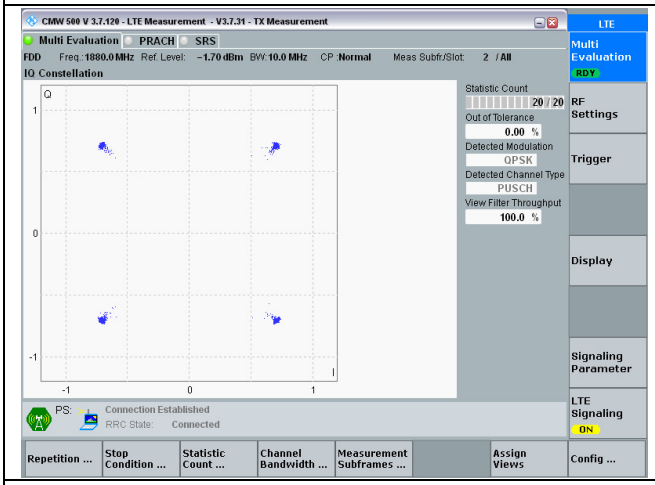
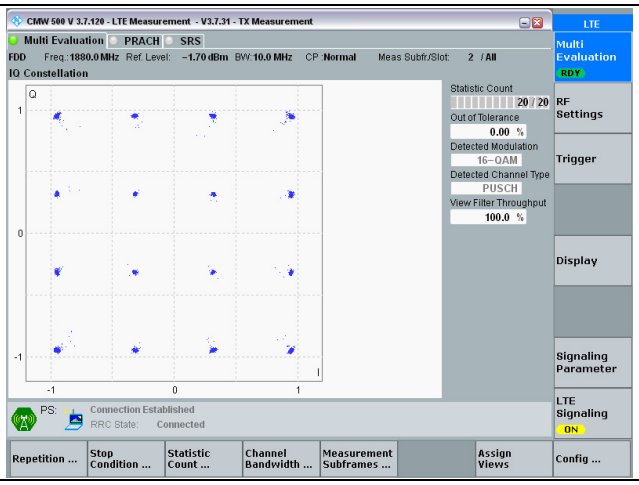
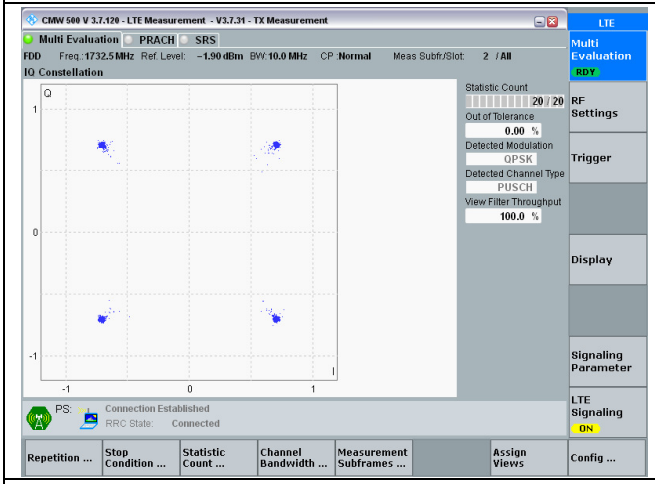
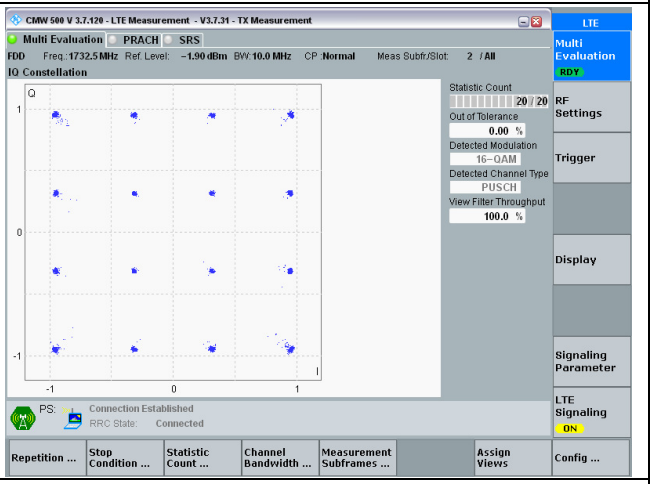
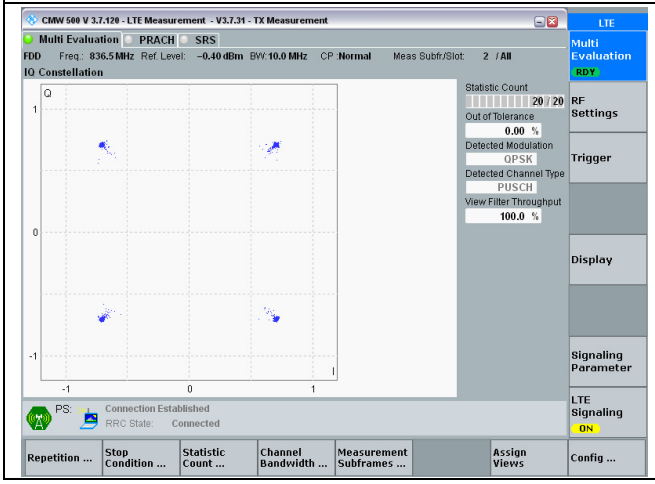
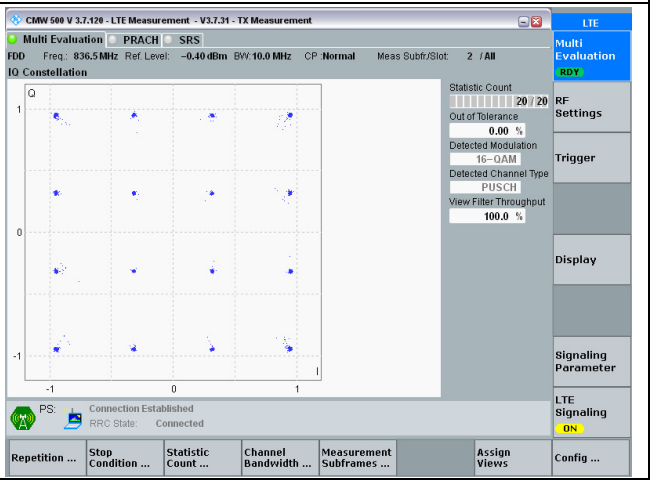
6.8.1 E.U.T. Operation

Operating Environment:
Temperature: 25 °C Humidity: 57 % RH Atmospheric Pressure: 1015 mbar
Test mode: f: TX mode_Keep the EUT in transmitting mode.

6.8.2 Test Setup Diagram



6.8.3 Measurement Data

Test Plot	
LTE FDD Band 2 QPSK	LTE FDD Band 2 16QAM
	
LTE FDD Band 4 QPSK	LTE FDD Band 4 16QAM
	
LTE FDD Band 5 QPSK	LTE FDD Band 5 16QAM
	

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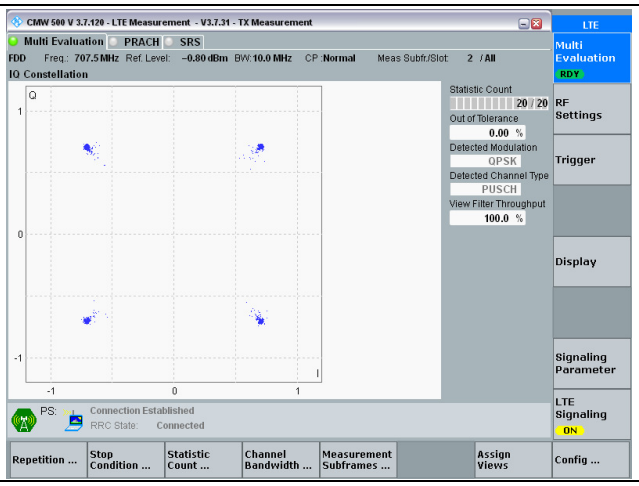
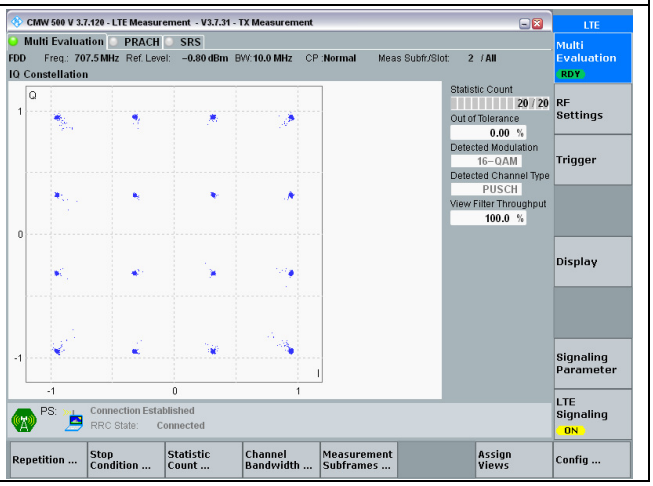
LTE FDD Band 12 QPSK	LTE FDD Band 12 16QAM
	

- End of the Report -

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