TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 96** **47 CFR FCC Part 2**
Report No.:	RFBCMA-WTW-P23030799-4
FCC ID:	RAXTMOG4AR
Product:	5G Gateway
Brand:	T-Mobile
Model No.:	TMO-G4AR
Received Date:	2023/3/15
Test Date:	2023/4/10
Issued Date:	2023/5/23
Applicant:	Arcadyan Technology Corporation
Address:	No.8, Sec.2, Guangfu Rd.,Hsinchu City 30071, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Approved by: Jeremy Lin , **Date:** **2023/5/23**

Jeremy Lin / Project Engineer

This test report consists of 30 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The test results in the report only apply to the tested sample. The test results in this report are traceable to the national or international standards.

Prepared by : Polly Chien / Specialist

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RFBCMA-WTW-P23030799-4	Original release.	2023/5/23

1 Certificate

Product:	5G Gateway
Brand:	T-Mobile
Test Model:	TMO-G4AR
Sample Status:	Engineering sample
Applicant:	Arcadyan Technology Corporation
Test Date:	2023/4/10
Standard:	47 CFR FCC Part 96
	47 CFR FCC Part 2
Measurement procedure:	ANSI/TIA/EIA-603-E 2016
	ANSI C63.26-2015
	KDB 971168 D01 Power Meas License Digital Systems v03r01
	KDB 940660 D01 Part 96 CBRS Eqpt v03

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 96 & Part 2			
Standard / Clause	Test Item	Result	Remark
FCC 47 CFR Part 2.1046 FCC 47 CFR Part 96.41(b)	Maximum EIRP	Pass	Meet the requirement of limit. Refer to Note 3
FCC 47 CFR Part 2.1047	Modulation Characteristics	N/A	Refer to Note 1
FCC 47 CFR Part 2.1046 FCC 47 CFR Part 96.41(b)	Maximum Power Spectral Density	N/A	Refer to Note 1 & 2
FCC 47 CFR Part 96.41(g)	Peak to Average Ratio	N/A	Refer to Note 1
FCC 47 CFR Part 2.1049	Bandwidth	N/A	Refer to Note 1
FCC 47 CFR Part 2.1051 FCC 47 CFR Part 96.41(e)	Conducted Spurious Emissions	N/A	Refer to Note 1
FCC 47 CFR Part 2.1053 FCC 47 CFR Part 96.41(e)	Radiated Spurious Emissions below 1GHz	Pass	Minimum passing margin is -3.43 dB at 53.28 MHz
FCC 47 CFR Part 2.1053 FCC 47 CFR Part 96.41(e)	Radiated Spurious Emissions above 1GHz	Pass	Minimum passing margin is -2.43 dB at 7395.00 MHz
FCC 47 CFR Part 2.1055	Frequency Stability	N/A	Refer to Note 1

Note:

1. The only test item of Equivalent Isotropically Radiated Power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to SGS-CSRC Standards Technical Services (Suzhou) Co., Ltd. Report No.: KSCR221000187201 (LTE Module, Brand: Fibocom, Model: FG360-NA, FCC ID: ZMOFG360NA08).
2. Test item is not required during the test.
3. The conducted output power was copied from the original module report.
4. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Parameter	Specification	Uncertainty (±)
Radiated Spurious Emissions below 1GHz	9 kHz ~ 30 MHz	2.44 dB
	30 MHz ~ 1 GHz	2.95 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	5G Gateway
Brand	T-Mobile
Test Model	TMO-G4AR
Status of EUT	Engineering sample
Power Supply Rating	20Vdc or 15Vdc or 12Vdc or 9Vdc or 5Vdc (From adapter)

Note:

1. Base on the conducted power and all conducted result no change, the device WWAN conducted data leverage 5G module (Fibocom FG360-NA), and record EIRP in the report with Internal Antenna to prove it not over the limit.
2. EUT Overview

Full Maximum EIRP (dBm/channel bandwidth)

Band / Bandwidth	TX Frequency Range (MHz)	Max. EIRP Power			
		QPSK	16QAM	64QAM	256QAM
LTE Band 48 (Channel Bandwidth 5MHz)	3552.5-3697.5	153.109mW (21.85dBm/channel bandwidth)	121.619mW (20.85dBm/channel bandwidth)	88.512mW (19.47dBm/channel bandwidth)	48.641mW (16.87dBm/channel bandwidth)
LTE Band 48 (Channel Bandwidth 10MHz)	3555.0-3695.0	152.055mW (21.82dBm/channel bandwidth)	121.060mW (20.83dBm/channel bandwidth)	89.125mW (19.50dBm/channel bandwidth)	48.641mW (16.87dBm/channel bandwidth)
LTE Band 48 (Channel Bandwidth 15MHz)	3557.5-3692.5	157.036mW (21.96dBm/channel bandwidth)	125.026mW (20.97dBm/channel bandwidth)	88.716mW (19.48dBm/channel bandwidth)	50.119mW (17.00dBm/channel bandwidth)
LTE Band 48 (Channel Bandwidth 20MHz)	3560.0-3690.0	151.008mW (21.79dBm/channel bandwidth)	124.738mW (20.96dBm/channel bandwidth)	90.157mW (19.55dBm/channel bandwidth)	48.641mW (16.87dBm/channel bandwidth)

3. The EUT uses following accessories.

AC Adapter 1		
Brand	Model	Specification
LUCENT TRANS	1A78	AC Input : 100~240V, 1.2A, 50-60Hz DC Output : 5.0V, 3.0A,15W or 9.0V, 3.0A, 27W or 12.0V, 3.0A, 36W or 15.0V, 3.0A, 45W or 20.0V, 2.25A, 45W DC Output Cable : 1.85 m, non-shielded cable, W/O ferrite core Plug : US
AC Adapter 2		
Brand	Model	Specification
MASS POWER	PD045E-C1C0AVU	AC Input : 100~240V, 1.0A, 50-60Hz DC Output : 5.0V, 3.0A or 9.0V, 3.0A or 12.0V, 3.0A or 15.0V, 3.0A or 20.0V, 2.25A, 45W DC Output Cable : 1.8 m, non-shielded cable, W/O ferrite core Plug : US

*The adapter 1 was chosen for final test.

4. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type
WWAN Antenna (Internal)	B71 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	3.17	663-698 MHz	Monopole	ipex(MHF1)
	B71 (Rx)(M1)		RFPCA811609IMMB402_A	3.10	663-698 MHz	Monopole	ipex(MHF1)
	B71 (Rx) (D1)		RFPCA652018IMMB401_A	2.09	663-698 MHz	Monopole	ipex(MHF1)
	B71 (Rx)(D2)		RFFPA656320IMMB401_B	2.01	663-698 MHz	Monopole	ipex(MHF1)
	B12 (TRx)(M2)	PSA	RFPCA811609IMMB403_B	3.34	698-716 MHz	Monopole	ipex(MHF1)
	B12 (Rx)(D2)		RFFPA656320IMMB401_B	2.05	698-716 MHz	Monopole	ipex(MHF1)
	B5 (TRx)(M2)	PSA	RFPCA811609IMMB403_B	1.68	824-849 MHz	Monopole	ipex(MHF1)
	B5 (Rx) (D2)		RFFPA656320IMMB401_B	0.63	824-849 MHz	Monopole	ipex(MHF1)
	B4/B66 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	3.69	1710-1780 MHz	Monopole	ipex(MHF1)
	B4/B66 (TRx) (M1)		RFPCA811609IMMB402_A	5.13	1710-1780 MHz	Monopole	ipex(MHF1)
	B4/B66 (Rx) (D1)		RFPCA652018IMMB401_A	4.26	1710-1780 MHz	Monopole	ipex(MHF1)
	B4/B66 (Rx) (D2)		RFFPA656320IMMB401_B	4.10	1710-1780 MHz	Monopole	ipex(MHF1)
	B2/B25 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	3.33	1850-1915 MHz	Monopole	ipex(MHF1)
	B2/B25 (TRx) (M1)		RFPCA811609IMMB402_A	4.78	1850-1915 MHz	Monopole	ipex(MHF1)
	B2/B25 (Rx) (D1)		RFPCA652018IMMB401_A	3.79	1850-1915 MHz	Monopole	ipex(MHF1)
	B2/B25 (Rx) (D2)		RFFPA656320IMMB401_B	4.11	1850-1915 MHz	Monopole	ipex(MHF1)
	B41 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	2.78	2496-2690 MHz	Monopole	ipex(MHF1)
	B41 (TRx) (M1)		RFPCA811609IMMB402_A	3.02	2496-2690 MHz	Monopole	ipex(MHF1)
	B41 (Rx) (Omni-Antenna HC1O)		RFPCA380906IMMB401_A	4.45	2496-2690 MHz	Dipole	ipex(MHF1)
	B41 (Rx) (Omni-Antenna HC2O)		RFPCA380912IMMB401_A	3.67	2496-2690 MHz	Dipole	ipex(MHF1)
	B41 (Rx) (Semi-Antenna HC1S)		RFPCA474709IMMB401_A	7.59	2496-2690 MHz	Dipole	ipex(MHF1)
	B41 (Rx) (Semi-Antenna HC2S)		RFPCA474709IMMB401_A	7.76	2496-2690 MHz	Dipole	ipex(MHF1)
	B48 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	0.94	3550-3700 MHz	Monopole	ipex(MHF1)
	B48 (TRx) (M1)		RFPCA811609IMMB402_A	1.02	3550-3700 MHz	Monopole	ipex(MHF1)
	B48 (Rx) (Omni-Antenna HC1O)		RFPCA380906IMMB401_A	4.64	3550-3700 MHz	Dipole	ipex(MHF1)
	B48 (Rx) (Omni-Antenna HC2O)		RFPCA380912IMMB401_A	4.03	3550-3700 MHz	Dipole	ipex(MHF1)
	B48 (Rx) (Semi-Antenna HC1S)		RFPCA474709IMMB401_A	7.67	3550-3700 MHz	Dipole	ipex(MHF1)
	B48 (Rx) (Semi-Antenna HC2S)		RFPCA474709IMMB401_A	8.01	3550-3700 MHz	Dipole	ipex(MHF1)
	B77 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	0.84	3300-4200 MHz	Monopole	ipex(MHF1)
	B77(TRx) (M1)		RFPCA811609IMMB402_A	0.91	3300-4200 MHz	Monopole	ipex(MHF1)
	B77 (Rx) (Omni-Antenna HC1O)		RFPCA380906IMMB401_A	4.73	3300-4200 MHz	Dipole	ipex(MHF1)
	B77 (Rx) (Omni-Antenna HC2O)		RFPCA380912IMMB401_A	4.14	3300-4200 MHz	Dipole	ipex(MHF1)
	B77 (Rx) (Semi-Antenna HC1S)		RFPCA474709IMMB401_A	7.98	3300-4200 MHz	Dipole	ipex(MHF1)
	B77 (Rx) (Semi-Antenna HC2S)		RFPCA474709IMMB401_A	8.13	3300-4200 MHz	Dipole	ipex(MHF1)

*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.
*Only B2/B4/B25 bands support 1TX diversity.

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	X-axis/ Y-axis/ Z-axis Worst Condition: Z-axis

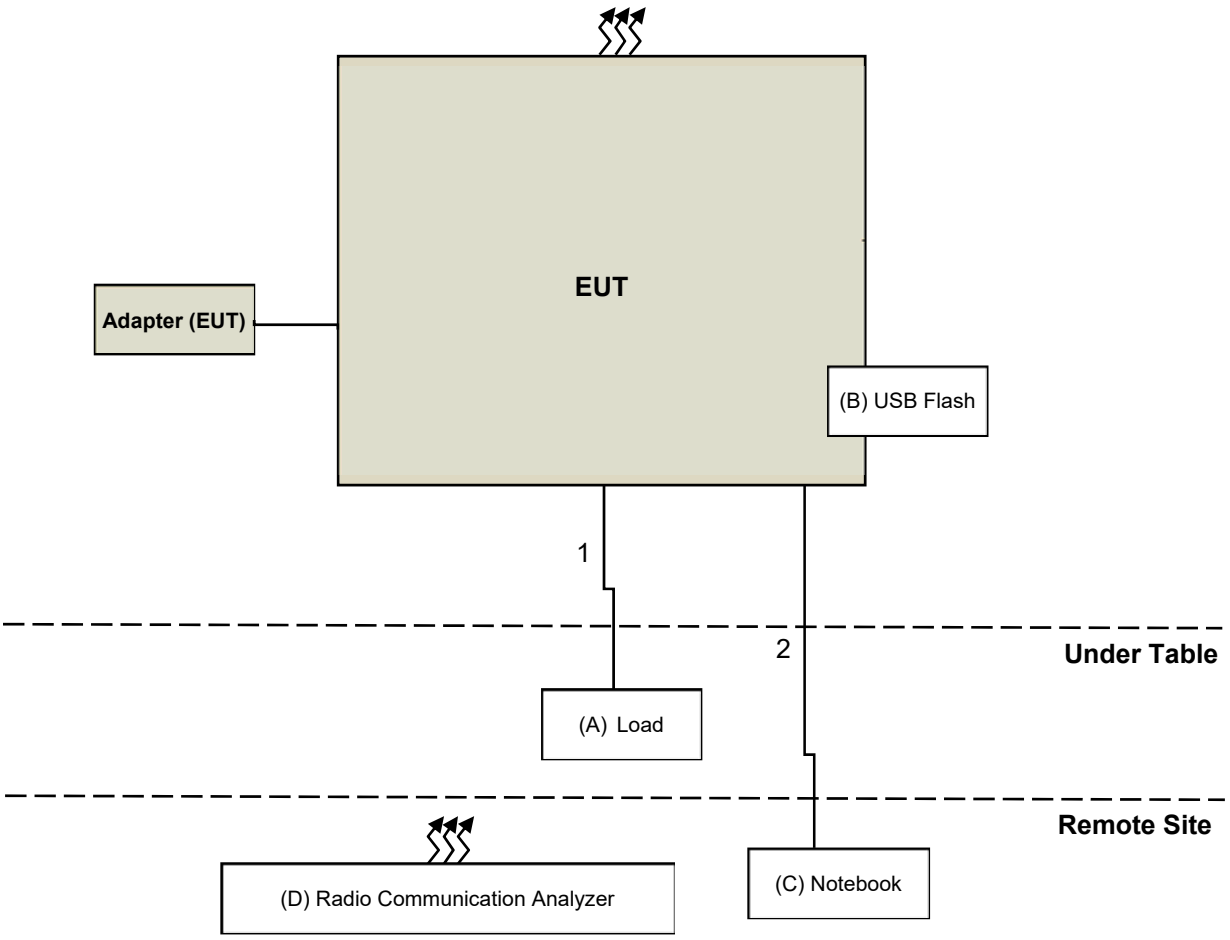
For LTE Band 48

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	55265 (3552.50 MHz) 55990 (3625.00 MHz) 56715 (3697.50 MHz)	5 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	55290 (3555.00 MHz) 55990 (3625.00 MHz) 56690 (3695.00 MHz)	10 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	55315 (3557.50 MHz) 55990 (3625.00 MHz) 56665 (3692.50 MHz)	15 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	55340 (3560.00 MHz) 55990 (3625.00 MHz) 56640 (3690.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
RE Below 1GHz	56715 (3697.50 MHz)	5 MHz	QPSK	1 RB
RE Above 1GHz	55265 (3552.50 MHz) 55990 (3625.00 MHz) 56715 (3697.50 MHz)	5 MHz	QPSK	1 RB
	55315 (3557.50 MHz) 55990 (3625.00 MHz) 56665 (3692.50 MHz)	15 MHz	QPSK	1 RB
	55340 (3560.00 MHz) 55990 (3625.00 MHz) 56640 (3690.00 MHz)	20 MHz	QPSK	1 RB

3.4 Test Program Used and Operation Descriptions

There is no need to controlling software during the test, and the EUT can be paired with the Radio Communication Analyzer to test the connection when it is powered on.

3.5 Connection Diagram of EUT and Peripheral Devices



3.6 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Load	NA	NA	NA	NA	Provided by Lab
B	USB Flash	SanDisk G	SDDDC3-032	NA	NA	Provided by Lab
C	Notebook	Lenovo	80Q7	PF0KUGU6	FCC DoC Approved	Provided by Lab
D	Radio Communication Analyzer	Anritsu	MT8821C	6201462755	NA	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	1.5	No	0	Provided by Lab
2	RJ-45 Cable	1	10	No	0	Provided by Lab

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Radiated Spurious Emissions below 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower &Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB9168	9168-472	2022/10/21	2023/10/20
Loop Antenna EMCI	EM-6879	269	2022/9/19	2023/9/18
Loop Antenna TESEQ	HLA 6121	45745	2022/7/27	2023/7/26
Pre-Ammlifier EMCI	EMC 330H	980112	2022/10/1	2023/9/30
Pre-amplifier EMCI	EMC001340	980201	2022/9/23	2023/9/22
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2023/1/7	2024/1/6
RF Coaxial Cable WORKEN	8D-FB	Cable-Ch10-01	2022/10/1	2023/9/30
Signal Analyzer Agilent	N9010A	MY52220207	2023/1/3	2024/1/2
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Test Receiver KEYSIGHT	N9038A	MY55420137	2022/4/27	2023/4/26
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2023/4/10

4.2 Radiated Spurious Emissions above 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower &Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	7	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-969	2022/11/13	2023/11/12
	BBHA 9170	148	2022/11/13	2023/11/12
Pre-Ammlifier EMCI	EMC 184045	980116	2022/10/1	2023/9/30
Pre-Amplifier EMCI	EMC 012645	980115	2022/10/1	2023/9/30
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2022/7/9	2023/7/8
	EMC102-KM-KM-3000	150929	2022/7/9	2023/7/8
	EMC104-SM-SM-8000+3000	171005	2022/10/1	2023/9/30
RF Coaxial Cable HUBER SUHNER	SUCOFLEX 104	EMC104-SM-SM-1000(140807)	2022/10/1	2023/9/30
RF FLITER MICRO-TRONICS	BRM17690	004	2023/1/11	2024/1/10
	BRM50716	060	2023/1/11	2024/1/10
Signal Analyzer Agilent	N9010A	MY52220207	2023/1/3	2024/1/2
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Test Receiver KEYSIGHT	N9038A	MY55420137	2022/4/27	2023/4/26
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2023/4/10

5 Limits of Test Items

5.1 Maximum EIRP

Device		Maximum EIRP (dBm/10 MHz)
☒	End User Device	23
☐	Category A CBSD	30
☐	Category B CBSD	47

5.2 Radiated Spurious Emissions below 1GHz

Power of any emissions outside the Fundamental	Limit
Within 0-10 mHz above the Assigned Channel	-13 dBm/MHz
Within 0-10 mHz below the Assigned Channel	
Greater than 10 mHz above the Assigned Channel	-25 dBm/MHz
Greater than 10 mHz below the Assigned Channel	
Power of any emission below 3530 MHz	-40 dBm/MHz
Power of any emission above 3720 MHz	

5.3 Radiated Spurious Emissions above 1GHz

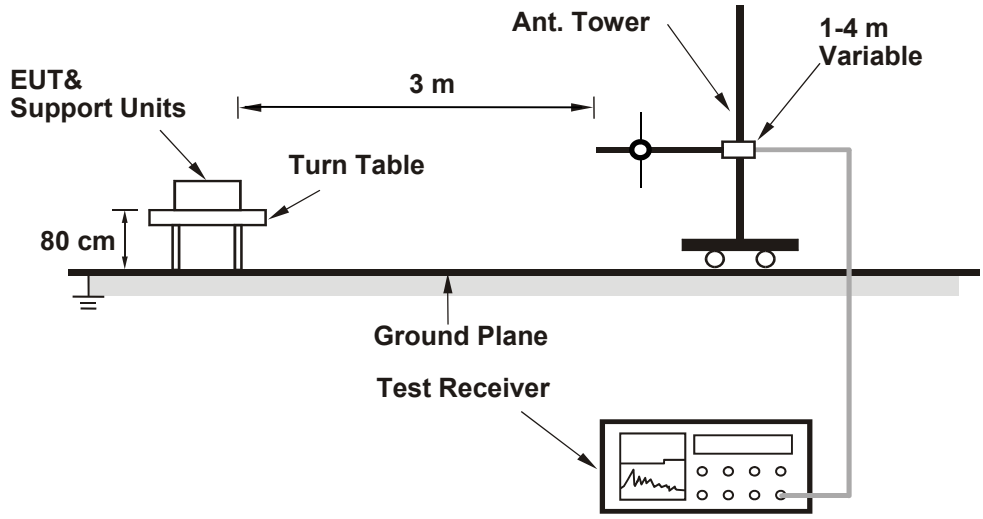
Power of any emissions outside the Fundamental	Limit
Within 0-10 mHz above the Assigned Channel	-13 dBm/MHz
Within 0-10 mHz below the Assigned Channel	
Greater than 10 mHz above the Assigned Channel	-25 dBm/MHz
Greater than 10 mHz below the Assigned Channel	
Power of any emission below 3530 MHz	-40 dBm/MHz
Power of any emission above 3720 MHz	

6 Test Arrangements

6.1 Radiated Spurious Emissions below 1GHz

6.1.1 Test Setup

For radiated emission 30 MHz to 1 GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.1.2 Test Procedure

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology.

a. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.

d. Following C63.26 section 5.5 and 5.2.7

e. EIRP (dBm) = E (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

f. ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

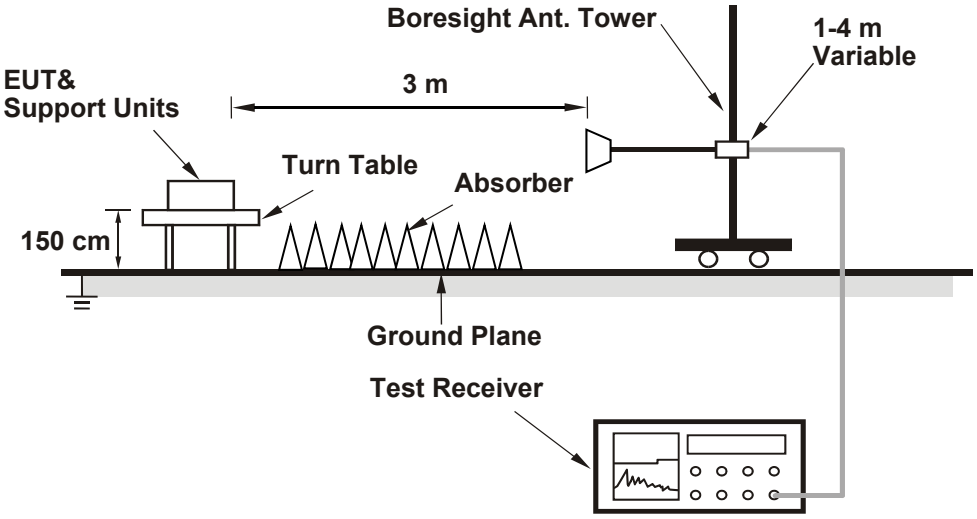
Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
   The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

6.2 Radiated Spurious Emissions above 1GHz

6.2.1 Test Setup

For radiated emission above 1 GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.2.2 Test Procedure

The EUT is configured by emulator to set data modulation and maximum power using WWAN technology.

a. In the semi-anechoic chamber, EUT placed on the 1.5 m height of turn table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.

d. Following C63.26 section 5.5 and 5.2.7

e. EIRP (dBm) = E (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

f. ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz. Set detector = average.

7 Test Results of Test Item

7.1 Maximum EIRP

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	20°C, 60% RH	Tested By:	Frank Liu

7.1.1 LTE Band 48

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
Band 48	5MHz	QPSK	55265	1RB#0	20.51	21.53
Band 48	5MHz	QPSK	55265	1RB#12	20.49	21.51
Band 48	5MHz	QPSK	55265	1RB#24	20.43	21.45
Band 48	5MHz	QPSK	55265	25RB#0	19.43	20.45
Band 48	5MHz	QPSK	55990	1RB#0	20.75	21.77
Band 48	5MHz	QPSK	55990	1RB#12	20.69	21.71
Band 48	5MHz	QPSK	55990	1RB#24	20.69	21.71
Band 48	5MHz	QPSK	55990	25RB#0	19.64	20.66
Band 48	5MHz	QPSK	56715	1RB#0	20.82	21.84
Band 48	5MHz	QPSK	56715	1RB#12	20.83	**21.85**
Band 48	5MHz	QPSK	56715	1RB#24	20.83	**21.85**
Band 48	5MHz	QPSK	56715	25RB#0	19.79	20.81
Band 48	5MHz	16QAM	55265	1RB#0	19.52	20.54
Band 48	5MHz	16QAM	55265	1RB#12	19.44	20.46
Band 48	5MHz	16QAM	55265	1RB#24	19.46	20.48
Band 48	5MHz	16QAM	55265	25RB#0	18.35	19.37
Band 48	5MHz	16QAM	55990	1RB#0	19.66	20.68
Band 48	5MHz	16QAM	55990	1RB#12	19.68	20.70
Band 48	5MHz	16QAM	55990	1RB#24	19.68	20.70
Band 48	5MHz	16QAM	55990	25RB#0	18.57	19.59
Band 48	5MHz	16QAM	56715	1RB#0	19.82	20.84
Band 48	5MHz	16QAM	56715	1RB#12	19.80	20.82
Band 48	5MHz	16QAM	56715	1RB#24	19.83	**20.85**
Band 48	5MHz	16QAM	56715	25RB#0	18.71	19.73

Note:

1. The conducted output power was copied from the original module report.
2. EIRP (dBm / Channel Bandwidth) = Conducted Output Power (dBm / Channel Bandwidth) + Antenna Gain (dBi).

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
Band 48	5MHz	64QAM	55265	1RB#0	18.18	19.20
Band 48	5MHz	64QAM	55265	1RB#12	18.09	19.11
Band 48	5MHz	64QAM	55265	1RB#24	18.08	19.10
Band 48	5MHz	64QAM	55265	25RB#0	17.53	18.55
Band 48	5MHz	64QAM	55990	1RB#0	18.31	19.33
Band 48	5MHz	64QAM	55990	1RB#12	18.32	19.34
Band 48	5MHz	64QAM	55990	1RB#24	18.34	19.36
Band 48	5MHz	64QAM	55990	25RB#0	17.67	18.69
Band 48	5MHz	64QAM	56715	1RB#0	18.45	**19.47**
Band 48	5MHz	64QAM	56715	1RB#12	18.42	19.44
Band 48	5MHz	64QAM	56715	1RB#24	18.45	**19.47**
Band 48	5MHz	64QAM	56715	25RB#0	17.90	18.92
Band 48	5MHz	256QAM	55265	1RB#0	15.63	16.65
Band 48	5MHz	256QAM	55265	1RB#12	15.34	16.36
Band 48	5MHz	256QAM	55265	1RB#24	15.29	16.31
Band 48	5MHz	256QAM	55265	25RB#0	15.38	16.40
Band 48	5MHz	256QAM	55990	1RB#0	15.85	**16.87**
Band 48	5MHz	256QAM	55990	1RB#12	15.46	16.48
Band 48	5MHz	256QAM	55990	1RB#24	15.39	16.41
Band 48	5MHz	256QAM	55990	25RB#0	15.45	16.47
Band 48	5MHz	256QAM	56715	1RB#0	15.74	16.76
Band 48	5MHz	256QAM	56715	1RB#12	15.69	16.71
Band 48	5MHz	256QAM	56715	1RB#24	15.73	16.75
Band 48	5MHz	256QAM	56715	25RB#0	15.72	16.74

Note:

1. The conducted output power was copied from the original module report.
2. EIRP (dBm / Channel Bandwidth) = Conducted Output Power (dBm / Channel Bandwidth) + Antenna Gain (dBi).

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
Band 48	10MHz	QPSK	55290	1RB#0	20.44	21.46
Band 48	10MHz	QPSK	55290	1RB#24	20.40	21.42
Band 48	10MHz	QPSK	55290	1RB#49	20.32	21.34
Band 48	10MHz	QPSK	55290	50RB#0	19.43	20.45
Band 48	10MHz	QPSK	55990	1RB#0	20.59	21.61
Band 48	10MHz	QPSK	55990	1RB#24	20.66	21.68
Band 48	10MHz	QPSK	55990	1RB#49	20.63	21.65
Band 48	10MHz	QPSK	55990	50RB#0	19.65	20.67
Band 48	10MHz	QPSK	56690	1RB#0	20.69	21.71
Band 48	10MHz	QPSK	56690	1RB#24	20.74	21.76
Band 48	10MHz	QPSK	56690	1RB#49	20.80	**21.82**
Band 48	10MHz	QPSK	56690	50RB#0	19.74	20.76
Band 48	10MHz	16QAM	55290	1RB#0	19.46	20.48
Band 48	10MHz	16QAM	55290	1RB#24	19.46	20.48
Band 48	10MHz	16QAM	55290	1RB#49	19.33	20.35
Band 48	10MHz	16QAM	55290	50RB#0	18.43	19.45
Band 48	10MHz	16QAM	55990	1RB#0	19.63	20.65
Band 48	10MHz	16QAM	55990	1RB#24	19.70	20.72
Band 48	10MHz	16QAM	55990	1RB#49	19.67	20.69
Band 48	10MHz	16QAM	55990	50RB#0	18.68	19.70
Band 48	10MHz	16QAM	56690	1RB#0	19.68	20.70
Band 48	10MHz	16QAM	56690	1RB#24	19.77	20.79
Band 48	10MHz	16QAM	56690	1RB#49	19.81	**20.83**
Band 48	10MHz	16QAM	56690	50RB#0	18.77	19.79
Band 48	10MHz	64QAM	55290	1RB#0	18.11	19.13
Band 48	10MHz	64QAM	55290	1RB#24	18.06	19.08
Band 48	10MHz	64QAM	55290	1RB#49	18.00	19.02
Band 48	10MHz	64QAM	55290	50RB#0	17.55	18.57
Band 48	10MHz	64QAM	55990	1RB#0	18.31	19.33
Band 48	10MHz	64QAM	55990	1RB#24	18.32	19.34
Band 48	10MHz	64QAM	55990	1RB#49	18.33	19.35
Band 48	10MHz	64QAM	55990	50RB#0	17.75	18.77
Band 48	10MHz	64QAM	56690	1RB#0	18.37	19.39
Band 48	10MHz	64QAM	56690	1RB#24	18.42	19.44
Band 48	10MHz	64QAM	56690	1RB#49	18.48	**19.50**
Band 48	10MHz	64QAM	56690	50RB#0	17.87	18.89
Band 48	10MHz	256QAM	55290	1RB#0	15.31	16.33
Band 48	10MHz	256QAM	55290	1RB#24	15.31	16.33
Band 48	10MHz	256QAM	55290	1RB#49	15.22	16.24
Band 48	10MHz	256QAM	55290	50RB#0	15.35	16.37
Band 48	10MHz	256QAM	55990	1RB#0	15.66	16.68
Band 48	10MHz	256QAM	55990	1RB#24	15.43	16.45
Band 48	10MHz	256QAM	55990	1RB#49	15.43	16.45
Band 48	10MHz	256QAM	55990	50RB#0	15.51	16.53
Band 48	10MHz	256QAM	56690	1RB#0	15.85	**16.87**
Band 48	10MHz	256QAM	56690	1RB#24	15.62	16.64
Band 48	10MHz	256QAM	56690	1RB#49	15.69	16.71
Band 48	10MHz	256QAM	56690	50RB#0	15.70	16.72

Note:

1. The conducted output power was copied from the original module report.
2. EIRP (dBm / Channel Bandwidth) = Conducted Output Power (dBm / Channel Bandwidth) + Antenna Gain (dBi).

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
Band 48	15MHz	QPSK	55315	1RB#0	20.41	21.43
Band 48	15MHz	QPSK	55315	1RB#38	20.27	21.29
Band 48	15MHz	QPSK	55315	1RB#74	20.30	21.32
Band 48	15MHz	QPSK	55315	75RB#0	19.38	20.40
Band 48	15MHz	QPSK	55990	1RB#0	20.52	21.54
Band 48	15MHz	QPSK	55990	1RB#38	20.60	21.62
Band 48	15MHz	QPSK	55990	1RB#74	20.59	21.61
Band 48	15MHz	QPSK	55990	75RB#0	19.60	20.62
Band 48	15MHz	QPSK	56665	1RB#0	20.60	21.62
Band 48	15MHz	QPSK	56665	1RB#38	20.67	21.69
Band 48	15MHz	QPSK	56665	1RB#74	20.94	**21.96**
Band 48	15MHz	QPSK	56665	75RB#0	19.72	20.74
Band 48	15MHz	16QAM	55315	1RB#0	19.44	20.46
Band 48	15MHz	16QAM	55315	1RB#38	19.33	20.35
Band 48	15MHz	16QAM	55315	1RB#74	19.37	20.39
Band 48	15MHz	16QAM	55315	75RB#0	18.35	19.37
Band 48	15MHz	16QAM	55990	1RB#0	19.61	20.63
Band 48	15MHz	16QAM	55990	1RB#38	19.65	20.67
Band 48	15MHz	16QAM	55990	1RB#74	19.65	20.67
Band 48	15MHz	16QAM	55990	75RB#0	18.61	19.63
Band 48	15MHz	16QAM	56665	1RB#0	19.67	20.69
Band 48	15MHz	16QAM	56665	1RB#38	19.73	20.75
Band 48	15MHz	16QAM	56665	1RB#74	19.95	**20.97**
Band 48	15MHz	16QAM	56665	75RB#0	18.69	19.71
Band 48	15MHz	64QAM	55315	1RB#0	18.05	19.07
Band 48	15MHz	64QAM	55315	1RB#38	17.95	18.97
Band 48	15MHz	64QAM	55315	1RB#74	18.01	19.03
Band 48	15MHz	64QAM	55315	75RB#0	17.44	18.46
Band 48	15MHz	64QAM	55990	1RB#0	18.22	19.24
Band 48	15MHz	64QAM	55990	1RB#38	18.29	19.31
Band 48	15MHz	64QAM	55990	1RB#74	18.31	19.33
Band 48	15MHz	64QAM	55990	75RB#0	17.68	18.70
Band 48	15MHz	64QAM	56665	1RB#0	18.29	19.31
Band 48	15MHz	64QAM	56665	1RB#38	18.38	19.40
Band 48	15MHz	64QAM	56665	1RB#74	18.46	**19.48**
Band 48	15MHz	64QAM	56665	75RB#0	17.85	18.87
Band 48	15MHz	256QAM	55315	1RB#0	15.28	16.30
Band 48	15MHz	256QAM	55315	1RB#38	15.18	16.20
Band 48	15MHz	256QAM	55315	1RB#74	15.20	16.22
Band 48	15MHz	256QAM	55315	75RB#0	15.25	16.27
Band 48	15MHz	256QAM	55990	1RB#0	15.98	**17.00**
Band 48	15MHz	256QAM	55990	1RB#38	15.36	16.38
Band 48	15MHz	256QAM	55990	1RB#74	15.39	16.41
Band 48	15MHz	256QAM	55990	75RB#0	15.44	16.46
Band 48	15MHz	256QAM	56665	1RB#0	15.98	**17.00**
Band 48	15MHz	256QAM	56665	1RB#38	15.56	16.58
Band 48	15MHz	256QAM	56665	1RB#74	15.68	16.70
Band 48	15MHz	256QAM	56665	75RB#0	15.63	16.65

Note:

1. The conducted output power was copied from the original module report.
2. EIRP (dBm / Channel Bandwidth) = Conducted Output Power (dBm / Channel Bandwidth) + Antenna Gain (dBi).

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
Band 48	20MHz	QPSK	55340	1RB#0	20.42	21.44
Band 48	20MHz	QPSK	55340	1RB#49	20.69	21.71
Band 48	20MHz	QPSK	55340	1RB#99	20.34	21.36
Band 48	20MHz	QPSK	55340	100RB#0	20.34	21.36
Band 48	20MHz	QPSK	55990	1RB#0	20.47	21.49
Band 48	20MHz	QPSK	55990	1RB#49	20.72	21.74
Band 48	20MHz	QPSK	55990	1RB#99	20.60	21.62
Band 48	20MHz	QPSK	55990	100RB#0	19.65	20.67
Band 48	20MHz	QPSK	56640	1RB#0	20.56	21.58
Band 48	20MHz	QPSK	56640	1RB#49	20.72	21.74
Band 48	20MHz	QPSK	56640	1RB#99	20.77	**21.79**
Band 48	20MHz	QPSK	56640	100RB#0	19.73	20.75
Band 48	20MHz	16QAM	55340	1RB#0	19.43	20.45
Band 48	20MHz	16QAM	55340	1RB#49	19.34	20.36
Band 48	20MHz	16QAM	55340	1RB#99	19.37	20.39
Band 48	20MHz	16QAM	55340	100RB#0	18.39	19.41
Band 48	20MHz	16QAM	55990	1RB#0	19.50	20.52
Band 48	20MHz	16QAM	55990	1RB#49	19.67	20.69
Band 48	20MHz	16QAM	55990	1RB#99	19.64	20.66
Band 48	20MHz	16QAM	55990	100RB#0	18.65	19.67
Band 48	20MHz	16QAM	56640	1RB#0	19.58	20.60
Band 48	20MHz	16QAM	56640	1RB#49	19.73	20.75
Band 48	20MHz	16QAM	56640	1RB#99	19.94	**20.96**
Band 48	20MHz	16QAM	56640	100RB#0	18.73	19.75
Band 48	20MHz	64QAM	55340	1RB#0	18.10	19.12
Band 48	20MHz	64QAM	55340	1RB#49	17.97	18.99
Band 48	20MHz	64QAM	55340	1RB#99	17.99	19.01
Band 48	20MHz	64QAM	55340	100RB#0	17.44	18.46
Band 48	20MHz	64QAM	55990	1RB#0	18.17	19.19
Band 48	20MHz	64QAM	55990	1RB#49	18.28	19.30
Band 48	20MHz	64QAM	55990	1RB#99	18.28	19.30
Band 48	20MHz	64QAM	55990	100RB#0	17.72	18.74
Band 48	20MHz	64QAM	56640	1RB#0	18.25	19.27
Band 48	20MHz	64QAM	56640	1RB#49	18.37	19.39
Band 48	20MHz	64QAM	56640	1RB#99	18.53	**19.55**
Band 48	20MHz	64QAM	56640	100RB#0	17.82	18.84
Band 48	20MHz	256QAM	55340	1RB#0	15.30	16.32
Band 48	20MHz	256QAM	55340	1RB#49	15.20	16.22
Band 48	20MHz	256QAM	55340	1RB#99	15.21	16.23
Band 48	20MHz	256QAM	55340	100RB#0	15.27	16.29
Band 48	20MHz	256QAM	55990	1RB#0	15.85	**16.87**
Band 48	20MHz	256QAM	55990	1RB#49	15.43	16.45
Band 48	20MHz	256QAM	55990	1RB#99	15.36	16.38
Band 48	20MHz	256QAM	55990	100RB#0	15.42	16.44
Band 48	20MHz	256QAM	56640	1RB#0	15.69	16.71
Band 48	20MHz	256QAM	56640	1RB#49	15.56	16.58
Band 48	20MHz	256QAM	56640	1RB#99	15.74	16.76
Band 48	20MHz	256QAM	56640	100RB#0	15.65	16.67

Note:

1. The conducted output power was copied from the original module report.
2. EIRP (dBm / Channel Bandwidth) = Conducted Output Power (dBm / Channel Bandwidth) + Antenna Gain (dBi).

7.2 Radiated Spurious Emissions below 1GHz

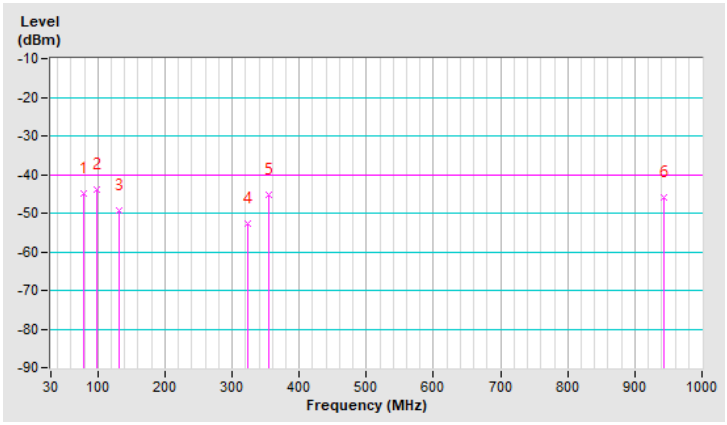
7.2.1 LTE Band 48

RF Mode	LTE Band 48 Channel Bandwidth: 5MHz	**Channel**	CH 56715：3697.5 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 78% RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	78.50	-44.84	-40.00	-4.84	2.00 H	33	66.84	-111.68
2	97.90	-43.83	-40.00	-3.83	2.00 H	44	68.54	-112.37
3	130.88	-49.35	-40.00	-9.35	1.50 H	46	59.31	-108.66
4	323.91	-52.63	-40.00	-12.63	1.00 H	215	53.77	-106.40
5	353.98	-45.29	-40.00	-5.29	2.00 H	2	60.62	-105.91
6	943.74	-45.95	-40.00	-5.95	1.50 H	85	49.85	-95.80

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The EIRP levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

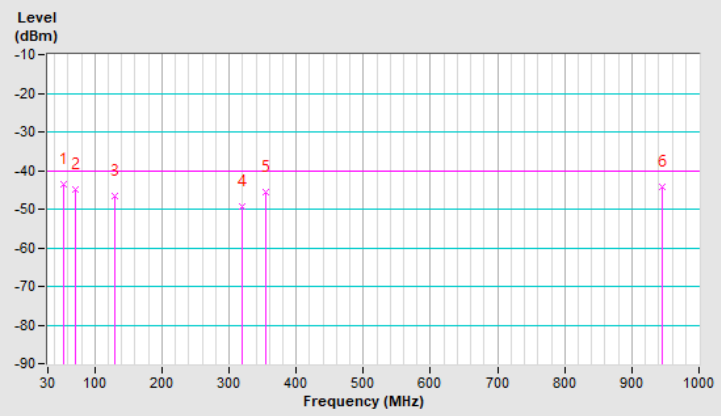


RF Mode	LTE Band 48 Channel Bandwidth: 5MHz	**Channel**	CH 56715：3697.5 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 78% RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	**53.28**	**-43.43**	**-40.00**	**-3.43**	**1.00 V**	**186**	**64.22**	**-107.65**
2	70.74	-44.88	-40.00	-4.88	2.00 V	140	64.84	-109.72
3	129.91	-46.69	-40.00	-6.69	2.50 V	2	61.98	-108.67
4	319.06	-49.16	-40.00	-9.16	2.00 V	47	57.39	-106.55
5	353.98	-45.58	-40.00	-5.58	2.50 V	2	60.33	-105.91
6	944.71	-44.21	-40.00	-4.21	1.50 V	102	51.57	-95.78

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The EIRP levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



7.3 Radiated Spurious Emissions above 1GHz

7.3.1 LTE Band 48

RF Mode	LTE Band 48 Channel Bandwidth: 5MHz	**Channel**	CH 55265：3552.5 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 78% RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7105.00	-43.28	-40.00	-3.28	1.64 H	248	56.58	-99.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7105.00	-44.23	-40.00	-4.23	2.98 V	92	55.63	-99.86

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

RF Mode	LTE Band 48 Channel Bandwidth: 5MHz	**Channel**	CH 55990：3625 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 78% RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7250.00	-43.09	-40.00	-3.09	3.59 H	355	56.58	-99.67
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7250.00	-43.91	-40.00	-3.91	2.60 V	125	55.76	-99.67

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

RF Mode	LTE Band 48 Channel Bandwidth: 5MHz	**Channel**	CH 56715：3697.5 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 78% RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	**7395.00**	**-42.43**	**-40.00**	**-2.43**	**2.22 H**	**137**	**56.87**	**-99.30**
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7395.00	-43.51	-40.00	-3.51	1.28 V	342	55.79	-99.30

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

RF Mode	LTE Band 48 Channel Bandwidth: 20MHz	**Channel**	CH 55340：3560 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 78% RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7120.00	-43.18	-40.00	-3.18	1.87 H	82	56.70	-99.88
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7120.00	-44.06	-40.00	-4.06	1.16 V	173	55.82	-99.88

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

RF Mode	LTE Band 48 Channel Bandwidth: 20MHz	**Channel**	CH 55990：3625 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 78% RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7250.00	-43.36	-40.00	-3.36	3.27 H	335	56.31	-99.67
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7250.00	-43.81	-40.00	-3.81	2.41 V	155	55.86	-99.67

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

RF Mode	LTE Band 48 Channel Bandwidth: 20MHz	**Channel**	CH 56640：3690 MHz
Frequency Range	1 GHz ~ 40 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	24°C, 78% RH
Tested By	Thomas Cheng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7380.00	-43.10	-40.00	-3.10	1.10 H	161	56.19	-99.29
Antenna Polarity & Test Distance : Vertical at 3 m								
No	**Frequency (MHz)**	**EIRP (dBm)**	**Limit (dBm)**	**Margin (dB)**	**Antenna Height (m)**	**Table Angle (Degree)**	**Raw Value (dBuV)**	**Correction Factor (dB/m)**
1	7380.00	-43.86	-40.00	-3.86	2.65 V	302	55.43	-99.29

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@bureauveritas.com
Web Site: http://ee.bureauveritas.com.tw

The address and road map of all our labs can be found in our web site also.

--- END ---