FCC Test Report

(Part 27 – WCDMA B4, LTE B4/B7/B12/B13/B41/B66)

Report No.:	RFBASM-WTW-P21071003-8
FCC ID:	QYLEM7511Z
Test Model:	EM7511
Received Date:	Jul. 28, 2021
Test Date:	Aug. 24 ~ Aug. 26, 2021
Issued Date:	Nov. 19, 2021
Applicant:	Getac Technology Corporation.
Address:	5F., Building A, No. 209, Sec.1, Nangang Rd.,Nangang Dist., Taipei City 11568, 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 (1):	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
Test Location (2):	No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)
FCC Registration / Designation Number (1):	788550 / TW0003
FCC Registration / Designation Number (2):	281270 / TW0032

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RFBASM-WTW-P21071003-8	Original release	Nov. 19, 2021

1 Certificate of Conformity

Product:	Wireless Module
Brand:	Sierra Wireless, Inc.
Test Model:	EM7511
Sample Status:	Identical Prototype
Applicant:	Getac Technology Corporation.
Test Date:	Aug. 24 ~ Aug. 26, 2021
Standards:	FCC Part 27, Subpart C, F, H, L, M

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.

Prepared by : Polly Chien , **Date:** Nov. 19, 2021

Polly Chien / Specialist

Approved by : Jeremy Lin , **Date:** Nov. 19, 2021

Jeremy Lin / Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2							
FCC Clause					Test Item	Result	Remarks
WCDMA B4 / LTE B4	LTE B12	LTE B13	LTE B7/ LTE B41	LTE B66			
2.1046 27.50 (d)(4)	2.1046 27.50 (c)	2.1046 27.50 (b)	2.1046 27.50 (h)(2)	2.1046 27.50 (d)(4)	Equivalent Isotropically Radiated Power / Equivalent Radiated Power	Pass	Meet the requirement of limit.
2.1047	2.1047	2.1047	2.1047	2.1047	Modulation Characteristics	N/A	Refer to Note
27.50 (d)(5)	----	----	----	27.50 (d)(5)	Peak To Average Ratio	N/A	Refer to Note
2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	N/A	Refer to Note
2.1049	2.1049	2.1049	2.1049	2.1049	Occupied Bandwidth	N/A	Refer to Note
2.1051 27.53 (h)	2.1051 27.53 (g)	2.1051 27.53 (c)	2.1051 27.53 (m)(4)(6)	2.1051 27.53 (h)	Band Edge / Out of Band Emissions Measurements	N/A	Refer to Note
2.1051 27.53 (h)	2.1051 27.53 (g)	2.1051 27.53 (c)(f)	2.1051 27.53 (m)(4)(6)	2.1051 27.53 (h)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53 (h)	2.1053 27.53 (g)	2.1053 27.53 (c)(f)	2.1053 27.53 (m)(4)(6)	2.1053 27.53 (h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -7.00dB at 30.00MHz.

Note:

1. This report is a partial report, only test item of Equivalent Isotropically Radiated Power / Equivalent Radiated Power & Radiated Emissions were performed for this report. Other testing data please refer to SPORTON INTERNATIONAL INC. report no.: FG791919B_R01 & FG791919B_R03 for module (Brand: Sierra Wireless, Inc., Model: EM7511).
2. 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:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.00 dB
	30MHz ~ 200MHz	2.91 dB
	200MHz ~1000MHz	2.93 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	1.76 dB
	18GHz ~ 40GHz	1.77 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver Rohde & Schwarz	N9038A	MY55420137	Apr. 09, 2021	Apr. 08, 2022
Spectrum Analyzer KEYSIGHT	N9020B	MY60110440	Dec. 18, 2020	Dec. 17, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-1213	Nov. 04, 2020	Nov. 03, 2021
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-563	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	995	Nov. 22, 2020	Nov. 21, 2021
Loop Antenna TESEQ	HLA 6121	45745	Jul. 21, 2021	Jul. 20, 2022
Preamplifier EMCI	EMC330N	980782	Jan. 12, 2021	Jan. 11, 2022
Preamplifier EMCI	EMC118A45SE	980808	Jan. 12, 2021	Jan. 11, 2022
Preamplifier EMCI	EMC184045SE	980788	Jan. 12, 2021	Jan. 11, 2022
RF signal cable EMCI	EMC104-SM-SM-(9000+2000+1000)	201243+ 201231+ 210102	Jan. 12, 2021	Jan. 11, 2022
RF signal cable EMCI	EMCCFD400-NM-NM-(9000+300+500)	201236+ 201235+ 201233	Jan. 12, 2021	Jan. 11, 2022
RF signal cable EMCI	EMC101G-KM-KM-(5000+3000+2000)	201260+201257+201254	Jan. 12, 2021	Jan. 11, 2022
Software BV ADT	ADT_Radiated_V7.6.15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFT-151SS-0.5T	NA	NA	NA
Turn Table Max-Full	MF-7802BS	NA	NA	NA
Turn Table Controller Max-Full	MF-7802BS	MF780208674	NA	NA
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
DC Power Supply Keysight	U8002A	MY56330015	NA	NA
Radio Communication Analyzer Anritsu	MT8821C	6201462755	Feb. 07, 2021	Feb. 06, 2022
Digital Multimeter Fluke	87-III	70360742	Jun. 24, 2021	Jun. 23, 2022
MXG Vector signal generator Agilent	N5182B	MY53050430	Nov. 25, 2020	Nov. 24, 2021

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in WM Chamber 8.

3 General Information

3.1 General Description of EUT

Product	Wireless Module	
Brand	Sierra Wireless, Inc.	
Test Model	EM7511	
Sample Status	Identical Prototype	
Power Supply Rating	End-product : 19Vdc (from adapter) 3.84Vdc (from battery)	
Modulation Type	WCDMA: BPSK, QPSK HSDPA: BPSK HSUPA: QPSK LTE: QPSK, 16QAM, 64QAM	
Operating Frequency	WCDMA Band 4	1712.4MHz ~ 1752.6MHz
	LTE Band 4 (Channel Bandwidth 1.4MHz)	1710.7MHz ~ 1754.3MHz
	LTE Band 4 (Channel Bandwidth 3MHz)	1711.5MHz ~ 1753.5MHz
	LTE Band 4 (Channel Bandwidth 5MHz)	1712.5MHz ~ 1752.5MHz
	LTE Band 4 (Channel Bandwidth 10MHz)	1715.0MHz ~ 1750.0MHz
	LTE Band 4 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1747.5MHz
	LTE Band 4 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1745.0MHz
	LTE Band 7 (Channel Bandwidth 5MHz)	2502.5MHz ~ 2567.5MHz
	LTE Band 7 (Channel Bandwidth 10MHz)	2505.0MHz ~ 2565.0MHz
	LTE Band 7 (Channel Bandwidth 15MHz)	2507.5MHz ~ 2562.5MHz
	LTE Band 7 (Channel Bandwidth 20MHz)	2510.0MHz ~ 2560.0MHz
	LTE Band 12 (Channel Bandwidth 1.4MHz)	699.7MHz ~ 715.3MHz
	LTE Band 12 (Channel Bandwidth 3MHz)	700.5MHz ~ 714.5MHz
	LTE Band 12 (Channel Bandwidth 5MHz)	701.5MHz ~ 713.5MHz
	LTE Band 12 (Channel Bandwidth 10MHz)	704.0MHz ~ 711.0MHz
	LTE Band 13 (Channel Bandwidth 5MHz)	779.5MHz ~ 784.5MHz
	LTE Band 13 (Channel Bandwidth 10MHz)	782.0MHz
	LTE Band 41 (Channel Bandwidth 5MHz)	2498.5MHz ~ 2687.5MHz
	LTE Band 41 (Channel Bandwidth 10MHz)	2501.0MHz ~ 2685.0 MHz
	LTE Band 41 (Channel Bandwidth 15MHz)	2503.5MHz ~ 2682.5MHz
	LTE Band 41 (Channel Bandwidth 20MHz)	2506.0MHz ~ 2680.0 MHz
	LTE Band 66 (Channel Bandwidth 1.4MHz)	1710.7MHz ~ 1779.3MHz
	LTE Band 66 (Channel Bandwidth 3MHz)	1711.5MHz ~ 1778.5MHz
	LTE Band 66 (Channel Bandwidth 5MHz)	1712.5MHz ~ 1777.5MHz
	LTE Band 66 (Channel Bandwidth 10MHz)	1715.0MHz ~ 1775.0MHz
	LTE Band 66 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1772.5MHz
	LTE Band 66 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1770.0MHz

Max. EIRP Power	WCDMA Band 4	620.869mW(27.93dBm)
	LTE Band 4 (Channel Bandwidth 1.4MHz)	586.138mW(27.68dBm)
	LTE Band 4 (Channel Bandwidth 3MHz)	597.035mW(27.76dBm)
	LTE Band 4 (Channel Bandwidth 5MHz)	597.035mW(27.76dBm)
	LTE Band 4 (Channel Bandwidth 10MHz)	578.096mW(27.62dBm)
	LTE Band 4 (Channel Bandwidth 15MHz)	597.035mW(27.76dBm)
	LTE Band 4 (Channel Bandwidth 20MHz)	598.412mW(27.77dBm)
	LTE Band 7 (Channel Bandwidth 5MHz)	353.997mW(25.49dBm)
	LTE Band 7 (Channel Bandwidth 10MHz)	361.410mW(25.58dBm)
	LTE Band 7 (Channel Bandwidth 15MHz)	365.595mW(25.63dBm)
	LTE Band 7 (Channel Bandwidth 20MHz)	368.129mW(25.66dBm)
	LTE Band 41 (Channel Bandwidth 5MHz)	357.273mW(25.53dBm)
	LTE Band 41 (Channel Bandwidth 10MHz)	362.243mW(25.59dBm)
	LTE Band 41 (Channel Bandwidth 15MHz)	375.837mW(25.75dBm)
	LTE Band 41 (Channel Bandwidth 20MHz)	376.704mW(25.76dBm)
	LTE Band 66 (Channel Bandwidth 1.4MHz)	660.693mW(28.20dBm)
	LTE Band 66 (Channel Bandwidth 3MHz)	648.634mW(28.12dBm)
	LTE Band 66 (Channel Bandwidth 5MHz)	654.636mW(28.16dBm)
	LTE Band 66 (Channel Bandwidth 10MHz)	662.217mW(28.21dBm)
	LTE Band 66 (Channel Bandwidth 15MHz)	676.083mW(28.30dBm)
	LTE Band 66 (Channel Bandwidth 20MHz)	677.642mW(28.31dBm)
Max. ERP Power	LTE Band 12 (Channel Bandwidth 1.4MHz)	114.025mW(20.57dBm)
	LTE Band 12 (Channel Bandwidth 3MHz)	111.944mW(20.49dBm)
	LTE Band 12 (Channel Bandwidth 5MHz)	112.980mW(20.53dBm)
	LTE Band 12 (Channel Bandwidth 10MHz)	114.288mW(20.58dBm)
	LTE Band 13 (Channel Bandwidth 5MHz)	181.134mW(22.58dBm)
	LTE Band 13 (Channel Bandwidth 10MHz)	182.390mW(22.61dBm)
Antenna Type	Refer to Note as below	
Antenna Connector	Refer to Note as below	
Accessory Device	Refer to Note as below	
Cable Supplied	Refer to Note as below	

Note:

1. The EUT uses the following antennas.

Type	Connector	Ant.	Gain (dBi)						
			WCDMA B4	LTE B4	LTE B7	LTE B12	LTE B13	LTE B41	LTE B66
PIFA	IPEX	Main	4.24	4.24	3.68	-0.55	1.62	3.68	4.84
		Aux	4.53	4.53	1.87	-0.35	-1.26	1.87	4.53

* 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.

2. The EUT is authorized for use in specific End-product. The model of the ZX10 was chosen for final test.

Product	Brand	Model	Description
Tablet	Getac	ZX10	For marketing purpose
		ZX10Y (Y= 10 characters, Y can be 0-9, a-z, A-Z, " - ", " _ ", " / ", " \ " or blank for marketing purpose and no impact safety related critical components and constructions.)	

3. The End-product contains following accessory devices.

Product	Brand	Model	Description
Adapter	FSP	FSP065-RBBN3	I/P: 100-240 Vac, 50-60Hz, 1.5 A O/P: 19.0 Vdc, 3.42 A 1.47m non-shielded cable with 1 core
Battery 1	Getac	BP1S2P4990B	Rating: 3.84Vdc, 9740mAh, 37.4Wh Typical Capacity: 9980mAh, 38.32Wh
Battery 2	Getac	BP1S1P4990B	Rating: 3.84Vdc, 4870mAh, 18.7Wh Typical Capacity: 4990mAh, 19.16Wh
Power cord	I-SHENG ELECTRIC WIRE & CABLE CO., LTD.	SP-305B+IS-034	1.7M
Touch pen	Getac	N52 Magnet	N/A

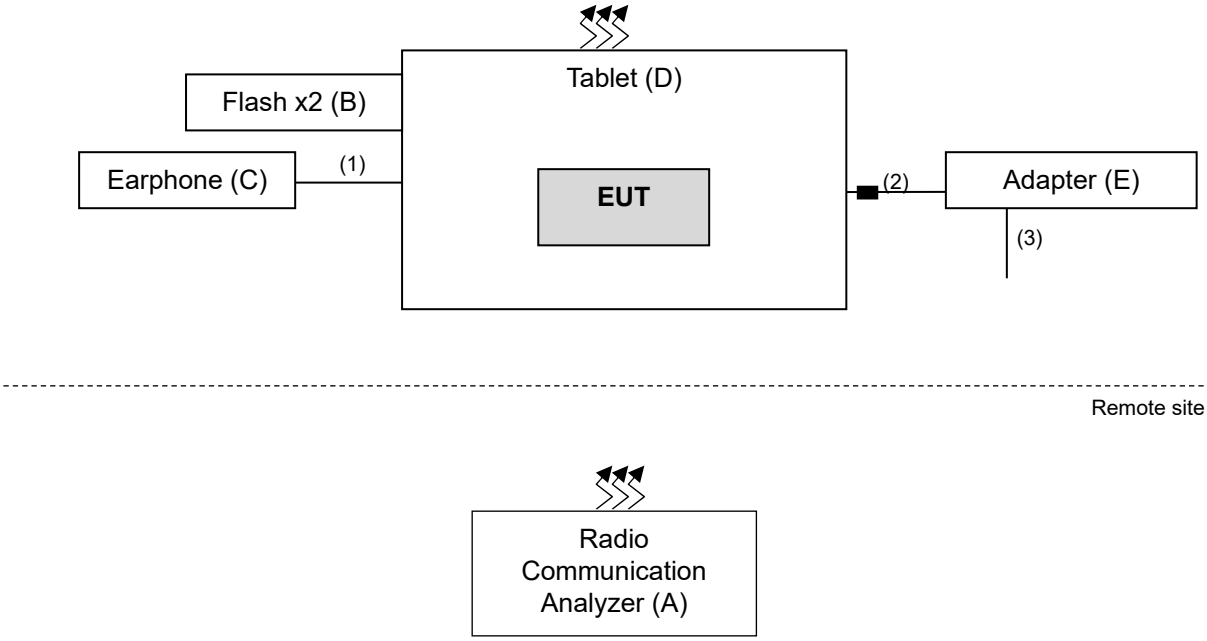
* After the pretesting battery, battery 2 mode is found to be the worst case and therefore had been chosen for final test.

4. The End-product contains following configurations.

Part	Brand	Model	Note	Configuration			
				1	2	3	4
CPU	Qualcomm	SDA 660	-	V	V	V	V
Memory	Samsung	KM3V6001CM-B705	4GB	V	V	V	V
VIDEO CONTROLLER	Qaulcomm	Adreno GU 512	-	V	V	V	V
eMMC Storage	Samsung	-	64GB	V	V	V	V
DISPLAY	AUO	G101UAN2.0	-	V	V	V	V
Touch Screen	EETI	EXC80H60	-	V	V	V	V
Real Camera	Unison	MV21A6A1-TF5D	16M PLCC MIPI	V	V	V	V
Front Camera	Unison	MV2980A1-TF4R-P	8M PLCC MIPI	V	V	V	V
WWAN	Sierra	EM7511	-	V	V	V	V
WLAN/BT	Qualcomm	WCN3990	-	V	V	V	V
HF-RFID	Getac	PN7150	-	V	V	V	V
GPS	Locosys	MC-1010-V2B	-	V	V	V	V
Barcode Reader	Honeywell	N6703SR-W5-103	-	V	V	V	V
Smart Card Option Bay	Alcor	AU9560-GBS-GR	-			V	V
Normal capacity battery	Getac	BP1S1P4990B	BYD Cell, CSL595490HPlus	V		V	
High capacity battery	Getac	BP1S2P4990B	BYD Cell, CSL595490HPlus		V		V

*After the pretesting, the configuration 3 is found to be the worst case and had been chosen for final test.

3.2 Configuration of System under Test



3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Radio Communication Analyzer	Anritsu	MT8821C	6261806803	NA	-
B.	Flash	SanDisk	SDDDC3-032G	NA	NA	Type-C
	Flash	HP	v250W	05	NA	Type-A
C.	Earphone	APPLE	MB770FE	NA	NA	-
D.	Tablet	Getac	ZX10	NA	NA	Provided by client
E.	Adapter	FSP	FSP065-RBBN3	NA	NA	Provided by client

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Audio cable	1	1.2	N	0	-
2.	Power cable	1	1.47	N	1	Provided by client
3.	Power cable	1	1.7	-	0	Provided by client

Note: The core(s) is(are) originally attached to the cable(s).

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned as the table below. Following channel(s) was (were) selected for the final test as listed below:

Band	Radiated Emission
WCDMA Band 4	Y-plane
LTE Band 4	Y-plane
LTE Band 7	Y-plane
LTE Band 12	X-plane
LTE Band 13	X-plane
LTE Band 41	Y-plane
LTE Band 66	Y-plane

WCDMA Band 4

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	EIRP	1312 to 1513	1312 (1712.4MHz), 1413 (1732.6MHz), 1513 (1752.6MHz)	WCDMA, HSDPA, HSUPA
-	Radiated Emission Below 1GHz	1312 to 1513	1513 (1752.6MHz)	WCDMA
-	Radiated Emission Above 1GHz	1312 to 1513	1312 (1712.4MHz), 1413 (1732.6MHz), 1513 (1752.6MHz)	WCDMA

Note: For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

LTE Band 4

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	RB #
-	EIRP	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM	1 Half Full
		19965 to 20385	19965 (1711.5MHz), 20175 (1732.5MHz), 20385 (1753.5MHz)	3MHz	QPSK / 16QAM / 64QAM	1 Half Full
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK / 16QAM / 64QAM	1 Half Full
		20000 to 20350	20000 (1715.0MHz), 20175 (1732.5MHz), 20350 (1750.0MHz)	10MHz	QPSK / 16QAM / 64QAM	1 Half Full
		20025 to 20325	20025 (1717.5MHz), 20175 (1732.5MHz), 20325 (1747.5MHz)	15MHz	QPSK / 16QAM / 64QAM	1 Half Full
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK / 16QAM / 64QAM	1 Half Full
-	Radiated Emission Below 1GHz	19957 to 20393	20175 (1732.5MHz)	1.4MHz	QPSK	1
-	Radiated Emission Above 1GHz	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK	1
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK	1
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK	1

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

LTE Band 7

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	RB #
-	EIRP	20775 to 21425	20775 (2502.5MHz), 21100 (2535.0MHz), 21425 (2567.5MHz)	5MHz	QPSK / 16QAM / 64QAM	1 Half Full
		20800 to 21400	20800 (2505.0MHz), 21100 (2535.0MHz), 21400 (2565.0MHz)	10MHz	QPSK / 16QAM / 64QAM	1 Half Full
		20825 to 21375	20825 (2507.5MHz), 21100 (2535.0MHz), 21375 (2562.5MHz)	15MHz	QPSK / 16QAM / 64QAM	1 Half Full
		20850 to 21350	20850 (2510.0MHz), 21100 (2535.0MHz), 21350 (2560.0MHz)	20MHz	QPSK / 16QAM / 64QAM	1 Half Full
-	Radiated Emission Below 1GHz	20850 to 21350	21100 (2535.0MHz)	20MHz	QPSK	1
-	Radiated Emission Above 1GHz	20775 to 21425	20775 (2502.5MHz), 21100 (2535.0MHz), 21425 (2567.5MHz)	5MHz	QPSK	1
		20850 to 21350	20850 (2510.0MHz), 21100 (2535.0MHz), 21350 (2560.0MHz)	20MHz	QPSK	1

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

LTE Band 12

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	RB #
-	ERP	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM	1 Half Full
		23025 to 23165	23025 (700.5MHz), 23095 (707.5MHz), 23165 (714.5MHz)	3MHz	QPSK / 16QAM / 64QAM	1 Half Full
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK / 16QAM / 64QAM	1 Half Full
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0 MHz)	10MHz	QPSK / 16QAM / 64QAM	1 Half Full
-	Radiated Emission Below 1GHz	23035 to 23155	23035 (701.5MHz)	5MHz	QPSK	1
-	Radiated Emission Above 1GHz	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK	1
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK	1
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0MHz)	10MHz	QPSK	1

Note:
1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

LTE Band 13

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	RB #
-	ERP	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK / 16QAM / 64QAM	1 Half Full
		23230	23230 (782.0MHz)	10MHz	QPSK / 16QAM / 64QAM	1 Half Full
-	Radiated Emission Below 1GHz	23230	23230 (782.0MHz)	10MHz	QPSK	1
-	Radiated Emission Above 1GHz	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK	1
		23230	23230 (782.0MHz)	10MHz	QPSK	1

Note:
1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

LTE Band 41

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	RB #
-	EIRP	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	QPSK / 16QAM / 64QAM	1 Half Full
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	QPSK / 16QAM / 64QAM	1 Half Full
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	QPSK / 16QAM / 64QAM	1 Half Full
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	QPSK / 16QAM / 64QAM	1 Half Full
-	Radiated Emission Below 1GHz	39750 to 41490	40620 (2593.0MHz)	20MHz	QPSK	1
-	Radiated Emission Above 1GHz	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	QPSK	1
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	QPSK	1

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

LTE Band 66

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	RB #
-	EIRP	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM	1 Half Full
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	QPSK / 16QAM / 64QAM	1 Half Full
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK / 16QAM / 64QAM	1 Half Full
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	QPSK / 16QAM / 64QAM	1 Half Full
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	QPSK / 16QAM / 64QAM	1 Half Full
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK / 16QAM / 64QAM	1 Half Full
-	Radiated Emission Below 1GHz	131979 to 132665	132647 (1777.5MHz)	5MHz	QPSK	1
-	Radiated Emission Above 1GHz	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK	1
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK	1
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK	1

Note:
1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
EIRP / ERP	25deg. C, 70%RH	120Vac, 60Hz	James Yang
Radiated Emission	23deg. C, 66%RH, 24deg. C, 67%RH	120Vac, 60Hz	Titan Hsu, Raymond Lee

3.4 EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.5 General Description of Applied Standards and References

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and References:

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 27

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For WCDMA Band 4, LTE Band 4, LTE Band 66:
Mobile / Portable station are limited to 1 watts e.i.r.p.

For LTE Band 12, LTE Band 13:
Control and mobile stations in the 698-746 MHz, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 30 watts ERP.
Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink, 746-757 MHz,787-788 MHz and 805-806 MHz band are limited to 3 watts ERP.

For LTE Band 7, LTE Band 41:
Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

4.1.2 Test Procedures

Conducted Power Measurement:

The EUT was set up for the maximum power with WCDMA, LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$EIRP = P_{Meas} + G_T$

$ERP = P_{Meas} + G_T - 2.15$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)

P_{Meas} measured transmitter output power or PSD, in dBm or dBW

G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

4.1.3 Test Setup

Conducted Power Measurement:

4.1.4 Test Results

Conducted Output Power (dBm)

Band	WCDMA IV		
TX Channel	1312	1413	1513
Rx Channel	1537	1638	1738
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	23.26	23.32	23.40
HSDPA Subtest-1	22.27	22.14	22.04
HSDPA Subtest-2	22.34	22.18	22.10
HSDPA Subtest-3	21.51	21.69	21.62
HSDPA Subtest-4	21.82	21.70	21.57
HSUPA Subtest-1	22.29	22.12	22.09
HSUPA Subtest-2	20.32	20.16	20.05
HSUPA Subtest-3	21.27	21.16	21.09
HSUPA Subtest-4	20.24	20.09	20.06
HSUPA Subtest-5	22.30	22.20	22.10

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	23.17	23.24	23.23
		1	50	22.97	23.02	23.00
		1	99	22.95	23.00	22.98
		50	0	22.51	22.56	22.54
		50	25	22.34	22.39	22.37
		50	50	22.33	22.38	22.36
		100	0	22.10	22.15	22.13
20M	16QAM	1	0	22.16	22.21	22.19
		1	50	22.06	22.11	22.09
		1	99	22.00	22.05	22.03
		50	0	21.19	21.24	21.22
		50	25	21.11	21.16	21.14
		50	50	21.07	21.12	21.10
		100	0	21.10	21.15	21.13
20M	64QAM	1	0	21.17	21.24	21.23
		1	50	20.97	21.02	21.00
		1	99	20.95	21.00	20.98
		50	0	20.16	20.21	20.19
		50	25	20.06	20.11	20.09
		50	50	20.00	20.05	20.03
		100	0	20.10	20.15	20.13

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	23.11	23.16	23.23
		1	37	22.90	22.92	22.94
		1	74	22.93	23.00	22.95
		36	0	22.12	22.13	22.09
		36	19	22.04	22.11	22.02
		36	39	21.96	22.00	22.00
		75	0	22.02	22.11	22.08
15M	16QAM	1	0	22.47	22.49	22.48
		1	37	22.27	22.39	22.35
		1	74	22.33	22.28	22.26
		36	0	21.17	21.21	21.21
		36	19	21.03	21.16	21.14
		36	39	21.04	21.11	21.02
		75	0	21.07	21.08	21.09
15M	64QAM	1	0	21.17	21.20	21.20
		1	37	20.88	20.92	20.96
		1	74	20.90	20.94	20.98
		36	0	20.15	20.14	20.11
		36	19	19.96	20.07	20.01
		36	39	19.91	20.05	19.95
		75	0	20.05	20.11	20.07

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	23.09	23.04	23.09
		1	24	22.84	22.88	22.91
		1	49	22.92	22.89	22.89
		25	0	22.01	22.04	22.05
		25	12	21.92	22.00	22.01
		25	25	21.90	21.83	21.81
		50	0	22.03	22.03	22.12
10M	16QAM	1	0	22.40	22.46	22.52
		1	24	22.26	22.35	22.25
		1	49	22.20	22.19	22.30
		25	0	21.04	21.12	21.07
		25	12	21.04	21.16	21.09
		25	25	20.96	20.99	20.96
		50	0	21.02	21.03	20.92
10M	64QAM	1	0	21.03	21.09	21.07
		1	24	20.85	21.01	20.90
		1	49	20.81	20.90	20.93
		25	0	19.98	20.05	20.11
		25	12	19.94	19.93	19.96
		25	25	19.82	20.01	19.95
		50	0	20.00	20.05	20.05

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	23.13	23.23	22.93
		1	12	22.80	22.85	22.81
		1	24	22.85	22.77	22.85
		12	0	21.99	22.05	22.01
		12	6	21.91	22.05	21.84
		12	13	22.00	21.96	21.92
		25	0	22.05	22.05	21.97
5M	16QAM	1	0	22.38	22.50	22.44
		1	12	22.18	22.33	22.18
		1	24	22.26	22.30	22.18
		12	0	21.07	21.17	21.12
		12	6	20.94	20.92	20.99
		12	13	20.90	21.04	20.98
		25	0	21.00	21.06	21.00
5M	64QAM	1	0	21.03	21.19	21.02
		1	12	20.76	20.92	20.91
		1	24	20.80	20.91	20.80
		12	0	20.02	20.11	20.05
		12	6	19.85	19.96	19.95
		12	13	19.82	19.96	19.90
		25	0	20.03	20.02	20.04

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	23.05	23.23	23.17
		1	7	22.74	22.92	22.97
		1	14	22.81	22.88	22.89
		8	0	22.08	22.06	21.98
		8	3	21.96	21.89	21.92
		8	7	21.92	22.04	21.99
		15	0	21.96	21.92	22.06
3M	16QAM	1	0	22.36	22.49	22.41
		1	7	22.19	22.16	22.25
		1	14	22.11	22.20	22.21
		8	0	21.07	21.16	21.15
		8	3	21.06	21.00	20.94
		8	7	21.02	20.89	20.94
		15	0	20.90	20.97	20.97
3M	64QAM	1	0	21.09	21.05	21.23
		1	7	20.74	20.94	20.83
		1	14	20.87	20.90	20.86
		8	0	20.06	20.09	20.14
		8	3	19.99	19.94	19.99
		8	7	19.80	19.96	19.87
		15	0	20.01	20.07	19.95

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	23.03	23.02	23.13
		1	2	22.88	22.88	22.82
		1	5	22.86	22.92	22.95
		3	0	22.97	23.15	23.08
		3	1	22.81	22.91	22.94
		3	3	22.91	22.88	22.90
		6	0	21.88	22.03	21.99
1.4M	16QAM	1	0	22.29	22.41	22.34
		1	2	22.17	22.21	22.29
		1	5	22.14	22.33	22.18
		3	0	22.16	22.06	22.03
		3	1	22.09	22.00	22.00
		3	3	21.89	21.98	21.96
		6	0	21.06	21.09	20.95
1.4M	64QAM	1	0	21.14	21.16	21.14
		1	2	20.90	20.88	20.89
		1	5	20.95	20.88	20.86
		3	0	20.98	21.01	21.05
		3	1	20.96	21.02	20.94
		3	3	20.84	20.89	20.82
		6	0	19.98	19.92	19.95

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	21.85	21.87	21.98
		1	50	21.82	21.85	21.96
		1	99	21.72	21.75	21.86
		50	0	21.25	21.28	21.39
		50	25	21.22	21.25	21.36
		50	50	21.15	21.18	21.29
		100	0	21.19	21.22	21.33
20M	16QAM	1	0	21.11	21.14	21.25
		1	50	21.02	21.05	21.16
		1	99	20.99	21.02	21.13
		50	0	19.86	19.89	20.00
		50	25	19.84	19.87	19.98
		50	50	19.80	19.83	19.94
		100	0	19.82	19.85	19.96
20M	64QAM	1	0	19.85	19.87	19.98
		1	50	19.82	19.85	19.96
		1	99	19.72	19.75	19.86
		50	0	18.85	18.88	18.99
		50	25	18.82	18.85	18.96
		50	50	18.75	18.78	18.89
		100	0	18.79	18.82	18.93

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	21.75	21.83	21.88
		1	37	21.82	21.80	21.95
		1	74	21.69	21.66	21.86
		36	0	20.76	20.80	20.92
		36	19	20.78	20.79	20.95
		36	39	20.70	20.70	20.81
		75	0	20.70	20.73	20.84
15M	16QAM	1	0	21.06	21.07	21.23
		1	37	20.97	21.04	21.15
		1	74	20.92	20.97	21.04
		36	0	19.76	19.83	19.91
		36	19	19.75	19.80	19.97
		36	39	19.79	19.77	19.88
		75	0	19.78	19.81	19.95
15M	64QAM	1	0	19.75	19.87	19.91
		1	37	19.79	19.85	19.89
		1	74	19.62	19.67	19.79
		36	0	18.82	18.82	18.95
		36	19	18.74	18.84	18.96
		36	39	18.72	18.78	18.87
		75	0	18.69	18.81	18.89

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	21.66	21.77	21.77
		1	24	21.72	21.75	21.90
		1	49	21.66	21.59	21.77
		25	0	20.71	20.72	20.86
		25	12	20.63	20.73	20.83
		25	25	20.57	20.69	20.85
		50	0	20.62	20.79	20.75
10M	16QAM	1	0	21.08	21.05	21.06
		1	24	20.91	20.93	21.04
		1	49	20.83	20.91	20.98
		25	0	19.71	19.79	19.91
		25	12	19.73	19.80	19.86
		25	25	19.62	19.63	19.80
		50	0	19.70	19.69	19.90
10M	64QAM	1	0	19.69	19.64	19.83
		1	24	19.70	19.82	19.81
		1	49	19.52	19.58	19.79
		25	0	18.70	18.78	18.80
		25	12	18.60	18.71	18.95
		25	25	18.55	18.57	18.79
		50	0	18.71	18.76	18.87

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	21.65	21.80	21.75
		1	12	21.66	21.81	21.62
		1	24	21.67	21.69	21.72
		12	0	20.81	20.81	20.92
		12	6	20.69	20.75	20.74
		12	13	20.62	20.61	20.64
		25	0	20.66	20.59	20.67
5M	16QAM	1	0	20.91	21.04	21.12
		1	12	20.83	20.89	20.98
		1	24	20.91	20.84	20.98
		12	0	19.71	19.77	19.84
		12	6	19.77	19.69	19.85
		12	13	19.65	19.77	19.89
		25	0	19.70	19.78	19.93
5M	64QAM	1	0	19.71	19.78	19.86
		1	12	19.67	19.68	19.79
		1	24	19.62	19.57	19.74
		12	0	18.83	18.82	18.90
		12	6	18.70	18.75	18.75
		12	13	18.61	18.66	18.76
		25	0	18.70	18.61	18.83

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	23.08	23.03	22.99
		1	24	23.06	23.02	22.98
		1	49	23.02	22.98	22.94
		25	0	22.48	22.44	22.40
		25	12	22.47	22.43	22.39
		25	25	22.46	22.42	22.38
		50	0	22.44	22.40	22.36
10M	16QAM	1	0	22.38	22.34	22.30
		1	24	22.31	22.27	22.23
		1	49	22.26	22.22	22.18
		25	0	21.19	21.15	21.11
		25	12	21.15	21.11	21.07
		25	25	21.14	21.10	21.06
		50	0	21.11	21.07	21.03
10M	64QAM	1	0	21.08	21.03	20.99
		1	24	21.06	21.02	20.98
		1	49	21.02	20.98	20.94
		25	0	20.18	20.14	20.10
		25	12	20.17	20.13	20.09
		25	25	20.16	20.12	20.08
		50	0	20.14	20.10	20.06

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	23.03	22.99	22.97
		1	12	22.96	23.02	22.95
		1	24	22.97	22.94	22.93
		12	0	22.17	22.11	22.00
		12	6	22.13	22.11	21.99
		12	13	22.11	22.07	22.06
		25	0	22.13	22.06	22.01
5M	16QAM	1	0	22.32	22.32	22.28
		1	12	22.22	22.21	22.17
		1	24	22.16	22.17	22.14
		12	0	21.11	21.05	21.08
		12	6	21.10	21.07	20.98
		12	13	21.10	21.05	21.04
		25	0	21.06	21.02	20.98
5M	64QAM	1	0	20.98	20.94	20.99
		1	12	20.99	21.02	20.94
		1	24	21.00	20.91	20.89
		12	0	20.15	20.06	20.05
		12	6	20.12	20.07	20.05
		12	13	20.15	20.08	20.02
		25	0	20.05	20.03	20.06

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	22.99	22.97	22.92
		1	7	22.92	22.87	22.83
		1	14	22.94	22.83	22.81
		8	0	22.09	22.05	22.08
		8	3	21.99	22.01	21.96
		8	7	22.11	21.93	21.92
		15	0	21.96	21.87	22.04
3M	16QAM	1	0	22.30	22.29	22.19
		1	7	22.24	22.16	22.20
		1	14	22.16	22.05	21.98
		8	0	21.07	21.06	20.96
		8	3	21.02	21.01	20.91
		8	7	21.10	20.94	21.05
		15	0	21.09	21.01	20.96
3M	64QAM	1	0	21.00	20.93	20.81
		1	7	20.87	20.95	20.84
		1	14	20.90	20.82	20.79
		8	0	20.03	20.09	19.94
		8	3	20.06	20.08	19.95
		8	7	20.05	20.10	19.93
		15	0	19.97	19.98	19.96

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	23.01	22.98	22.86
		1	2	22.91	22.93	22.84
		1	5	22.90	22.92	22.84
		3	0	23.00	23.00	23.07
		3	1	23.02	22.95	22.90
		3	3	23.05	23.00	22.89
		6	0	22.03	21.95	21.94
1.4M	16QAM	1	0	22.14	22.27	22.12
		1	2	22.22	22.12	22.07
		1	5	22.15	22.13	21.99
		3	0	21.97	22.10	21.99
		3	1	22.00	22.03	22.02
		3	3	22.01	21.96	21.98
		6	0	20.93	20.97	20.95
1.4M	64QAM	1	0	20.94	20.88	20.88
		1	2	20.93	20.94	20.85
		1	5	20.94	20.91	20.82
		3	0	21.09	21.09	20.88
		3	1	20.99	21.02	20.93
		3	3	21.09	20.93	20.96
		6	0	20.11	20.03	19.86

LTE Band 13				
BW	MCS Index	RB Size	RB Offset	Low
		Channel		23230
		Frequency (MHz)		782
10M	QPSK	1	0	23.14
		1	24	23.10
		1	49	23.00
		25	0	22.24
		25	12	22.21
		25	25	22.06
		50	0	22.17
10M	16QAM	1	0	22.37
		1	24	22.23
		1	49	22.22
		25	0	21.27
		25	12	21.20
		25	25	21.10
		50	0	21.22
10M	64QAM	1	0	21.14
		1	24	21.10
		1	49	21.00
		25	0	20.24
		25	12	20.21
		25	25	20.06
		50	0	20.17

LTE Band 13						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	23.08	23.11	23.07
		1	12	23.09	23.01	23.08
		1	24	22.95	22.96	22.94
		12	0	22.17	22.21	22.18
		12	6	22.19	22.12	22.11
		12	13	22.04	22.06	21.99
		25	0	22.15	22.12	22.11
5M	16QAM	1	0	22.28	22.31	22.37
		1	12	22.17	22.22	22.19
		1	24	22.14	22.18	22.19
		12	0	21.20	21.17	21.21
		12	6	21.19	21.18	21.11
		12	13	21.08	21.02	21.01
		25	0	21.22	21.12	21.20
5M	64QAM	1	0	21.11	21.14	21.06
		1	12	21.07	21.02	21.07
		1	24	20.96	20.98	21.00
		12	0	20.18	20.15	20.24
		12	6	20.14	20.18	20.21
		12	13	19.96	19.99	20.06
		25	0	20.14	20.11	20.09

LTE Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	QPSK	1	0	21.82	21.87	22.08
		1	50	21.67	21.71	21.90
		1	99	21.55	21.59	21.78
		50	0	21.14	21.18	21.37
		50	25	21.12	21.16	21.35
		50	50	20.94	20.98	21.17
		100	0	21.15	21.19	21.20
20M	16QAM	1	0	20.96	21.00	21.19
		1	50	20.80	20.84	21.03
		1	99	20.58	20.62	20.81
		50	0	19.95	19.99	20.18
		50	25	19.69	19.73	19.92
		50	50	19.61	19.65	19.84
		100	0	19.76	19.80	19.99
20M	64QAM	1	0	19.82	19.87	20.08
		1	50	19.67	19.71	19.90
		1	99	19.55	19.59	19.78
		50	0	18.74	18.78	18.97
		50	25	18.72	18.76	18.95
		50	50	18.54	18.58	18.77
		100	0	18.75	18.79	18.98

LTE Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	QPSK	1	0	21.76	21.78	22.07
		1	37	21.62	21.61	21.82
		1	74	21.55	21.54	21.75
		36	0	20.67	20.69	20.92
		36	19	20.63	20.76	20.95
		36	39	20.51	20.52	20.71
		75	0	20.74	20.73	20.90
15M	16QAM	1	0	20.90	21.00	21.12
		1	37	20.71	20.78	20.99
		1	74	20.55	20.57	20.81
		36	0	19.93	19.97	20.09
		36	19	19.66	19.71	19.88
		36	39	19.53	19.61	19.81
		75	0	19.74	19.78	19.97
15M	64QAM	1	0	19.82	19.81	20.08
		1	37	19.62	19.62	19.86
		1	74	19.51	19.52	19.76
		36	0	18.67	18.70	18.89
		36	19	18.69	18.66	18.92
		36	39	18.53	18.58	18.73
		75	0	18.67	18.76	18.94

LTE Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	QPSK	1	0	21.63	21.63	21.91
		1	24	21.46	21.65	21.74
		1	49	21.44	21.49	21.65
		25	0	20.60	20.67	20.82
		25	12	20.66	20.65	20.80
		25	25	20.47	20.35	20.54
		50	0	20.54	20.62	20.90
10M	16QAM	1	0	20.88	20.81	21.00
		1	24	20.65	20.74	20.96
		1	49	20.38	20.54	20.66
		25	0	19.90	19.84	20.08
		25	12	19.57	19.55	19.81
		25	25	19.50	19.54	19.79
		50	0	19.71	19.62	19.96
10M	64QAM	1	0	19.74	19.76	19.87
		1	24	19.51	19.60	19.79
		1	49	19.38	19.49	19.74
		25	0	18.61	18.63	18.87
		25	12	18.48	18.58	18.76
		25	25	18.47	18.40	18.68
		50	0	18.59	18.56	18.95

LTE Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	21.70	21.85	21.71
		1	12	21.58	21.56	21.68
		1	24	21.51	21.50	21.45
		12	0	20.61	20.58	20.82
		12	6	20.63	20.65	20.78
		12	13	20.36	20.47	20.54
		25	0	20.66	20.57	20.82
5M	16QAM	1	0	20.86	20.81	21.04
		1	12	20.70	20.74	20.88
		1	24	20.51	20.55	20.59
		12	0	19.71	19.87	20.09
		12	6	19.48	19.58	19.80
		12	13	19.52	19.51	19.73
		25	0	19.67	19.66	19.86
5M	64QAM	1	0	19.75	19.72	19.87
		1	12	19.60	19.66	19.80
		1	24	19.36	19.50	19.68
		12	0	18.60	18.64	18.78
		12	6	18.58	18.66	18.82
		12	13	18.40	18.52	18.69
		25	0	18.72	18.73	18.81

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132572
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	23.47	23.41	23.29
		1	50	23.27	23.22	23.11
		1	99	23.17	23.12	23.01
		50	0	22.75	22.70	22.59
		50	25	22.65	22.60	22.49
		50	50	22.64	22.59	22.48
		100	0	22.66	22.61	22.50
20M	16QAM	1	0	22.70	22.65	22.54
		1	50	22.53	22.48	22.37
		1	99	22.33	22.28	22.17
		50	0	21.41	21.36	21.25
		50	25	21.36	21.31	21.20
		50	50	21.29	21.24	21.13
		100	0	21.32	21.27	21.16
20M	64QAM	1	0	21.47	21.41	21.29
		1	50	21.27	21.22	21.11
		1	99	21.17	21.12	21.01
		50	0	20.40	20.35	20.24
		50	25	20.30	20.25	20.14
		50	50	20.29	20.24	20.13
		100	0	20.31	20.26	20.15

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	23.46	23.34	23.23
		1	37	23.19	23.22	23.06
		1	74	23.07	23.05	22.91
		36	0	22.38	22.31	22.15
		36	19	22.26	22.20	22.10
		36	39	22.29	22.18	22.07
		75	0	22.30	22.20	22.13
15M	16QAM	1	0	22.67	22.56	22.49
		1	37	22.44	22.41	22.29
		1	74	22.29	22.21	22.08
		36	0	21.31	21.33	21.25
		36	19	21.36	21.23	21.18
		36	39	21.29	21.14	21.07
		75	0	21.26	21.25	21.10
15M	64QAM	1	0	21.39	21.41	21.27
		1	37	21.22	21.18	21.06
		1	74	21.09	21.09	20.95
		36	0	20.36	20.28	20.16
		36	19	20.28	20.21	20.09
		36	39	20.25	20.24	20.08
		75	0	20.31	20.22	20.06

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	23.28	23.37	23.14
		1	24	23.16	23.18	22.92
		1	49	23.04	22.99	22.87
		25	0	22.27	22.26	22.15
		25	12	22.13	22.25	22.06
		25	25	22.13	22.15	21.99
		50	0	22.15	22.10	22.12
10M	16QAM	1	0	22.67	22.53	22.40
		1	24	22.48	22.39	22.19
		1	49	22.15	22.16	22.08
		25	0	21.25	21.25	21.11
		25	12	21.26	21.12	21.11
		25	25	21.09	21.20	21.07
		50	0	21.18	21.08	20.91
10M	64QAM	1	0	21.36	21.27	21.12
		1	24	21.14	21.15	21.02
		1	49	21.08	21.03	20.90
		25	0	20.27	20.20	20.19
		25	12	20.21	20.03	19.99
		25	25	20.12	20.09	19.99
		50	0	20.09	20.09	20.00

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	23.32	23.23	23.09
		1	12	23.14	23.10	22.87
		1	24	22.99	22.93	22.83
		12	0	22.26	22.22	21.89
		12	6	22.21	22.11	21.78
		12	13	22.24	22.03	22.00
		25	0	22.23	22.18	21.90
5M	16QAM	1	0	22.59	22.56	22.37
		1	12	22.38	22.30	22.28
		1	24	22.29	22.13	21.99
		12	0	21.35	21.19	21.09
		12	6	21.33	21.21	21.18
		12	13	21.22	21.16	21.03
		25	0	21.18	21.18	20.98
5M	64QAM	1	0	21.34	21.28	21.24
		1	12	21.18	21.10	21.00
		1	24	21.00	21.01	20.95
		12	0	20.34	20.22	20.08
		12	6	20.18	20.25	20.04
		12	13	20.19	20.17	20.06
		25	0	20.22	20.12	20.05

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	23.28	23.21	23.18
		1	7	23.07	23.09	22.92
		1	14	23.10	23.00	22.97
		8	0	22.29	22.13	22.17
		8	3	22.14	22.15	22.06
		8	7	22.13	22.10	21.98
		15	0	22.16	22.04	21.96
3M	16QAM	1	0	22.54	22.65	22.47
		1	7	22.46	22.40	22.19
		1	14	22.25	22.08	21.97
		8	0	21.39	21.22	21.07
		8	3	21.18	21.09	21.14
		8	7	21.15	21.15	20.97
		15	0	21.12	21.14	20.98
3M	64QAM	1	0	21.37	21.32	21.09
		1	7	21.12	21.21	20.89
		1	14	21.02	20.94	20.87
		8	0	20.30	20.26	20.18
		8	3	20.17	20.12	20.06
		8	7	20.12	20.15	20.11
		15	0	20.19	20.08	19.99

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	23.36	23.21	23.09
		1	2	23.08	23.16	22.92
		1	5	23.02	22.97	22.87
		3	0	23.30	23.14	23.12
		3	1	23.15	23.11	23.04
		3	3	23.15	23.17	23.07
		6	0	22.20	22.22	22.03
1.4M	16QAM	1	0	22.60	22.58	22.45
		1	2	22.36	22.29	22.20
		1	5	22.27	22.08	22.08
		3	0	22.31	22.26	22.15
		3	1	22.20	22.09	22.00
		3	3	22.23	22.15	21.94
		6	0	21.22	21.17	20.92
1.4M	64QAM	1	0	21.32	21.27	21.24
		1	2	21.19	21.06	21.00
		1	5	21.02	20.99	20.88
		3	0	21.26	21.24	21.09
		3	1	21.21	21.11	21.00
		3	3	21.10	21.08	21.07
		6	0	20.17	20.14	19.95

EIRP / ERP Power (dBm)

Band	WCDMA IV		
TX Channel	1312	1413	1513
Rx Channel	1537	1638	1738
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	27.79	27.85	**27.93**
HSDPA Subtest-1	26.80	26.67	26.57
HSDPA Subtest-2	26.87	26.71	26.63
HSDPA Subtest-3	26.04	26.22	26.15
HSDPA Subtest-4	26.35	26.23	26.10
HSUPA Subtest-1	26.82	26.65	26.62
HSUPA Subtest-2	24.85	24.69	24.58
HSUPA Subtest-3	25.80	25.69	25.62
HSUPA Subtest-4	24.77	24.62	24.59
HSUPA Subtest-5	26.83	26.73	26.63

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	27.70	**27.77**	27.76
		1	50	27.50	27.55	27.53
		1	99	27.48	27.53	27.51
		50	0	27.04	27.09	27.07
		50	25	26.87	26.92	26.90
		50	50	26.86	26.91	26.89
		100	0	26.63	26.68	26.66
20M	16QAM	1	0	26.69	26.74	26.72
		1	50	26.59	26.64	26.62
		1	99	26.53	26.58	26.56
		50	0	25.72	25.77	25.75
		50	25	25.64	25.69	25.67
		50	50	25.60	25.65	25.63
		100	0	25.63	25.68	25.66
20M	64QAM	1	0	25.70	25.77	25.76
		1	50	25.50	25.55	25.53
		1	99	25.48	25.53	25.51
		50	0	24.69	24.74	24.72
		50	25	24.59	24.64	24.62
		50	50	24.53	24.58	24.56
		100	0	24.63	24.68	24.66

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	27.64	27.69	**27.76**
		1	37	27.43	27.45	27.47
		1	74	27.46	27.53	27.48
		36	0	26.65	26.66	26.62
		36	19	26.57	26.64	26.55
		36	39	26.49	26.53	26.53
		75	0	26.55	26.64	26.61
15M	16QAM	1	0	27.00	27.02	27.01
		1	37	26.80	26.92	26.88
		1	74	26.86	26.81	26.79
		36	0	25.70	25.74	25.74
		36	19	25.56	25.69	25.67
		36	39	25.57	25.64	25.55
		75	0	25.60	25.61	25.62
15M	64QAM	1	0	25.70	25.73	25.73
		1	37	25.41	25.45	25.49
		1	74	25.43	25.47	25.51
		36	0	24.68	24.67	24.64
		36	19	24.49	24.60	24.54
		36	39	24.44	24.58	24.48
		75	0	24.58	24.64	24.60

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	**27.62**	27.57	27.62
		1	24	27.37	27.41	27.44
		1	49	27.45	27.42	27.42
		25	0	26.54	26.57	26.58
		25	12	26.45	26.53	26.54
		25	25	26.43	26.36	26.34
		50	0	26.56	26.56	26.65
10M	16QAM	1	0	26.93	26.99	27.05
		1	24	26.79	26.88	26.78
		1	49	26.73	26.72	26.83
		25	0	25.57	25.65	25.60
		25	12	25.57	25.69	25.62
		25	25	25.49	25.52	25.49
		50	0	25.55	25.56	25.45
10M	64QAM	1	0	25.56	25.62	25.60
		1	24	25.38	25.54	25.43
		1	49	25.34	25.43	25.46
		25	0	24.51	24.58	24.64
		25	12	24.47	24.46	24.49
		25	25	24.35	24.54	24.48
		50	0	24.53	24.58	24.58

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	27.66	**27.76**	27.46
		1	12	27.33	27.38	27.34
		1	24	27.38	27.30	27.38
		12	0	26.52	26.58	26.54
		12	6	26.44	26.58	26.37
		12	13	26.53	26.49	26.45
		25	0	26.58	26.58	26.50
5M	16QAM	1	0	26.91	27.03	26.97
		1	12	26.71	26.86	26.71
		1	24	26.79	26.83	26.71
		12	0	25.60	25.70	25.65
		12	6	25.47	25.45	25.52
		12	13	25.43	25.57	25.51
		25	0	25.53	25.59	25.53
5M	64QAM	1	0	25.56	25.72	25.55
		1	12	25.29	25.45	25.44
		1	24	25.33	25.44	25.33
		12	0	24.55	24.64	24.58
		12	6	24.38	24.49	24.48
		12	13	24.35	24.49	24.43
		25	0	24.56	24.55	24.57

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	27.58	**27.76**	27.70
		1	7	27.27	27.45	27.50
		1	14	27.34	27.41	27.42
		8	0	26.61	26.59	26.51
		8	3	26.49	26.42	26.45
		8	7	26.45	26.57	26.52
		15	0	26.49	26.45	26.59
3M	16QAM	1	0	26.89	27.02	26.94
		1	7	26.72	26.69	26.78
		1	14	26.64	26.73	26.74
		8	0	25.60	25.69	25.68
		8	3	25.59	25.53	25.47
		8	7	25.55	25.42	25.47
		15	0	25.43	25.50	25.50
3M	64QAM	1	0	25.62	25.58	25.76
		1	7	25.27	25.47	25.36
		1	14	25.40	25.43	25.39
		8	0	24.59	24.62	24.67
		8	3	24.52	24.47	24.52
		8	7	24.33	24.49	24.40
		15	0	24.54	24.60	24.48

LTE Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	27.56	27.55	27.66
		1	2	27.41	27.41	27.35
		1	5	27.39	27.45	27.48
		3	0	27.50	**27.68**	27.61
		3	1	27.34	27.44	27.47
		3	3	27.44	27.41	27.43
		6	0	26.41	26.56	26.52
1.4M	16QAM	1	0	26.82	26.94	26.87
		1	2	26.70	26.74	26.82
		1	5	26.67	26.86	26.71
		3	0	26.69	26.59	26.56
		3	1	26.62	26.53	26.53
		3	3	26.42	26.51	26.49
		6	0	25.59	25.62	25.48
1.4M	64QAM	1	0	25.67	25.69	25.67
		1	2	25.43	25.41	25.42
		1	5	25.48	25.41	25.39
		3	0	25.51	25.54	25.58
		3	1	25.49	25.55	25.47
		3	3	25.37	25.42	25.35
		6	0	24.51	24.45	24.48

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20850	21100	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	25.53	25.55	**25.66**
		1	50	25.50	25.53	25.64
		1	99	25.40	25.43	25.54
		50	0	24.93	24.96	25.07
		50	25	24.90	24.93	25.04
		50	50	24.83	24.86	24.97
		100	0	24.87	24.90	25.01
20M	16QAM	1	0	24.79	24.82	24.93
		1	50	24.70	24.73	24.84
		1	99	24.67	24.70	24.81
		50	0	23.54	23.57	23.68
		50	25	23.52	23.55	23.66
		50	50	23.48	23.51	23.62
		100	0	23.50	23.53	23.64
20M	64QAM	1	0	23.53	23.55	23.66
		1	50	23.50	23.53	23.64
		1	99	23.40	23.43	23.54
		50	0	22.53	22.56	22.67
		50	25	22.50	22.53	22.64
		50	50	22.43	22.46	22.57
		100	0	22.47	22.50	22.61

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20825	21100	21375
		Frequency (MHz)		2507.5	2535	2562.5
15M	QPSK	1	0	25.43	25.51	25.56
		1	37	25.50	25.48	**25.63**
		1	74	25.37	25.34	25.54
		36	0	24.44	24.48	24.60
		36	19	24.46	24.47	24.63
		36	39	24.38	24.38	24.49
		75	0	24.38	24.41	24.52
15M	16QAM	1	0	24.74	24.75	24.91
		1	37	24.65	24.72	24.83
		1	74	24.60	24.65	24.72
		36	0	23.44	23.51	23.59
		36	19	23.43	23.48	23.65
		36	39	23.47	23.45	23.56
		75	0	23.46	23.49	23.63
15M	64QAM	1	0	23.43	23.55	23.59
		1	37	23.47	23.53	23.57
		1	74	23.30	23.35	23.47
		36	0	22.50	22.50	22.63
		36	19	22.42	22.52	22.64
		36	39	22.40	22.46	22.55
		75	0	22.37	22.49	22.57

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20800	21100	21400
		Frequency (MHz)		2505	2535	2565
10M	QPSK	1	0	25.34	25.45	25.45
		1	24	25.40	25.43	**25.58**
		1	49	25.34	25.27	25.45
		25	0	24.39	24.40	24.54
		25	12	24.31	24.41	24.51
		25	25	24.25	24.37	24.53
		50	0	24.30	24.47	24.43
10M	16QAM	1	0	24.76	24.73	24.74
		1	24	24.59	24.61	24.72
		1	49	24.51	24.59	24.66
		25	0	23.39	23.47	23.59
		25	12	23.41	23.48	23.54
		25	25	23.30	23.31	23.48
		50	0	23.38	23.37	23.58
10M	64QAM	1	0	23.37	23.32	23.51
		1	24	23.38	23.50	23.49
		1	49	23.20	23.26	23.47
		25	0	22.38	22.46	22.48
		25	12	22.28	22.39	22.63
		25	25	22.23	22.25	22.47
		50	0	22.39	22.44	22.55

LTE Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20775	21100	21425
		Frequency (MHz)		2502.5	2535	2567.5
5M	QPSK	1	0	25.33	25.48	25.43
		1	12	25.34	**25.49**	25.30
		1	24	25.35	25.37	25.40
		12	0	24.49	24.49	24.60
		12	6	24.37	24.43	24.42
		12	13	24.30	24.29	24.32
		25	0	24.34	24.27	24.35
5M	16QAM	1	0	24.59	24.72	24.80
		1	12	24.51	24.57	24.66
		1	24	24.59	24.52	24.66
		12	0	23.39	23.45	23.52
		12	6	23.45	23.37	23.53
		12	13	23.33	23.45	23.57
		25	0	23.38	23.46	23.61
5M	64QAM	1	0	23.39	23.46	23.54
		1	12	23.35	23.36	23.47
		1	24	23.30	23.25	23.42
		12	0	22.51	22.50	22.58
		12	6	22.38	22.43	22.43
		12	13	22.29	22.34	22.44
		25	0	22.38	22.29	22.51

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	**20.58**	20.53	20.49
		1	24	20.56	20.52	20.48
		1	49	20.52	20.48	20.44
		25	0	19.98	19.94	19.90
		25	12	19.97	19.93	19.89
		25	25	19.96	19.92	19.88
		50	0	19.94	19.90	19.86
10M	16QAM	1	0	19.88	19.84	19.80
		1	24	19.81	19.77	19.73
		1	49	19.76	19.72	19.68
		25	0	18.69	18.65	18.61
		25	12	18.65	18.61	18.57
		25	25	18.64	18.60	18.56
		50	0	18.61	18.57	18.53
10M	64QAM	1	0	18.58	18.53	18.49
		1	24	18.56	18.52	18.48
		1	49	18.52	18.48	18.44
		25	0	17.68	17.64	17.60
		25	12	17.67	17.63	17.59
		25	25	17.66	17.62	17.58
		50	0	17.64	17.60	17.56

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	**20.53**	20.49	20.47
		1	12	20.46	20.52	20.45
		1	24	20.47	20.44	20.43
		12	0	19.67	19.61	19.50
		12	6	19.63	19.61	19.49
		12	13	19.61	19.57	19.56
		25	0	19.63	19.56	19.51
5M	16QAM	1	0	19.82	19.82	19.78
		1	12	19.72	19.71	19.67
		1	24	19.66	19.67	19.64
		12	0	18.61	18.55	18.58
		12	6	18.60	18.57	18.48
		12	13	18.60	18.55	18.54
		25	0	18.56	18.52	18.48
5M	64QAM	1	0	18.48	18.44	18.49
		1	12	18.49	18.52	18.44
		1	24	18.50	18.41	18.39
		12	0	17.65	17.56	17.55
		12	6	17.62	17.57	17.55
		12	13	17.65	17.58	17.52
		25	0	17.55	17.53	17.56

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	**20.49**	20.47	20.42
		1	7	20.42	20.37	20.33
		1	14	20.44	20.33	20.31
		8	0	19.59	19.55	19.58
		8	3	19.49	19.51	19.46
		8	7	19.61	19.43	19.42
		15	0	19.46	19.37	19.54
3M	16QAM	1	0	19.80	19.79	19.69
		1	7	19.74	19.66	19.70
		1	14	19.66	19.55	19.48
		8	0	18.57	18.56	18.46
		8	3	18.52	18.51	18.41
		8	7	18.60	18.44	18.55
		15	0	18.59	18.51	18.46
3M	64QAM	1	0	18.50	18.43	18.31
		1	7	18.37	18.45	18.34
		1	14	18.40	18.32	18.29
		8	0	17.53	17.59	17.44
		8	3	17.56	17.58	17.45
		8	7	17.55	17.60	17.43
		15	0	17.47	17.48	17.46

LTE Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	20.51	20.48	20.36
		1	2	20.41	20.43	20.34
		1	5	20.40	20.42	20.34
		3	0	20.50	20.50	**20.57**
		3	1	20.52	20.45	20.40
		3	3	20.55	20.50	20.39
		6	0	19.53	19.45	19.44
1.4M	16QAM	1	0	19.64	19.77	19.62
		1	2	19.72	19.62	19.57
		1	5	19.65	19.63	19.49
		3	0	19.47	19.60	19.49
		3	1	19.50	19.53	19.52
		3	3	19.51	19.46	19.48
		6	0	18.43	18.47	18.45
1.4M	64QAM	1	0	18.44	18.38	18.38
		1	2	18.43	18.44	18.35
		1	5	18.44	18.41	18.32
		3	0	18.59	18.59	18.38
		3	1	18.49	18.52	18.43
		3	3	18.59	18.43	18.46
		6	0	17.61	17.53	17.36

LTE Band 13				
BW	MCS Index	RB Size	RB Offset	Low
		Channel		23230
		Frequency (MHz)		782
10M	QPSK	1	0	**22.61**
		1	24	22.57
		1	49	22.47
		25	0	21.71
		25	12	21.68
		25	25	21.53
		50	0	21.64
10M	16QAM	1	0	21.84
		1	24	21.70
		1	49	21.69
		25	0	20.74
		25	12	20.67
		25	25	20.57
		50	0	20.69
10M	64QAM	1	0	20.61
		1	24	20.57
		1	49	20.47
		25	0	19.71
		25	12	19.68
		25	25	19.53
		50	0	19.64

LTE Band 13						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	22.55	**22.58**	22.54
		1	12	22.56	22.48	22.55
		1	24	22.42	22.43	22.41
		12	0	21.64	21.68	21.65
		12	6	21.66	21.59	21.58
		12	13	21.51	21.53	21.46
		25	0	21.62	21.59	21.58
5M	16QAM	1	0	21.75	21.78	21.84
		1	12	21.64	21.69	21.66
		1	24	21.61	21.65	21.66
		12	0	20.67	20.64	20.68
		12	6	20.66	20.65	20.58
		12	13	20.55	20.49	20.48
		25	0	20.69	20.59	20.67
5M	64QAM	1	0	20.58	20.61	20.53
		1	12	20.54	20.49	20.54
		1	24	20.43	20.45	20.47
		12	0	19.65	19.62	19.71
		12	6	19.61	19.65	19.68
		12	13	19.43	19.46	19.53
		25	0	19.61	19.58	19.56

LTE Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	QPSK	1	0	25.50	25.55	**25.76**
		1	50	25.35	25.39	25.58
		1	99	25.23	25.27	25.46
		50	0	24.82	24.86	25.05
		50	25	24.80	24.84	25.03
		50	50	24.62	24.66	24.85
		100	0	24.83	24.87	24.88
20M	16QAM	1	0	24.64	24.68	24.87
		1	50	24.48	24.52	24.71
		1	99	24.26	24.30	24.49
		50	0	23.63	23.67	23.86
		50	25	23.37	23.41	23.60
		50	50	23.29	23.33	23.52
		100	0	23.44	23.48	23.67
20M	64QAM	1	0	23.50	23.55	23.76
		1	50	23.35	23.39	23.58
		1	99	23.23	23.27	23.46
		50	0	22.42	22.46	22.65
		50	25	22.40	22.44	22.63
		50	50	22.22	22.26	22.45
		100	0	22.43	22.47	22.66

LTE Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	QPSK	1	0	25.44	25.46	**25.75**
		1	37	25.30	25.29	25.50
		1	74	25.23	25.22	25.43
		36	0	24.35	24.37	24.60
		36	19	24.31	24.44	24.63
		36	39	24.19	24.20	24.39
		75	0	24.42	24.41	24.58
15M	16QAM	1	0	24.58	24.68	24.80
		1	37	24.39	24.46	24.67
		1	74	24.23	24.25	24.49
		36	0	23.61	23.65	23.77
		36	19	23.34	23.39	23.56
		36	39	23.21	23.29	23.49
		75	0	23.42	23.46	23.65
15M	64QAM	1	0	23.50	23.49	23.76
		1	37	23.30	23.30	23.54
		1	74	23.19	23.20	23.44
		36	0	22.35	22.38	22.57
		36	19	22.37	22.34	22.60
		36	39	22.21	22.26	22.41
		75	0	22.35	22.44	22.62

LTE Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	QPSK	1	0	25.31	25.31	**25.59**
		1	24	25.14	25.33	25.42
		1	49	25.12	25.17	25.33
		25	0	24.28	24.35	24.50
		25	12	24.34	24.33	24.48
		25	25	24.15	24.03	24.22
		50	0	24.22	24.30	24.58
10M	16QAM	1	0	24.56	24.49	24.68
		1	24	24.33	24.42	24.64
		1	49	24.06	24.22	24.34
		25	0	23.58	23.52	23.76
		25	12	23.25	23.23	23.49
		25	25	23.18	23.22	23.47
		50	0	23.39	23.30	23.64
10M	64QAM	1	0	23.42	23.44	23.55
		1	24	23.19	23.28	23.47
		1	49	23.06	23.17	23.42
		25	0	22.29	22.31	22.55
		25	12	22.16	22.26	22.44
		25	25	22.15	22.08	22.36
		50	0	22.27	22.24	22.63

LTE Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	QPSK	1	0	25.38	**25.53**	25.39
		1	12	25.26	25.24	25.36
		1	24	25.19	25.18	25.13
		12	0	24.29	24.26	24.50
		12	6	24.31	24.33	24.46
		12	13	24.04	24.15	24.22
		25	0	24.34	24.25	24.50
5M	16QAM	1	0	24.54	24.49	24.72
		1	12	24.38	24.42	24.56
		1	24	24.19	24.23	24.27
		12	0	23.39	23.55	23.77
		12	6	23.16	23.26	23.48
		12	13	23.20	23.19	23.41
		25	0	23.35	23.34	23.54
5M	64QAM	1	0	23.43	23.40	23.55
		1	12	23.28	23.34	23.48
		1	24	23.04	23.18	23.36
		12	0	22.28	22.32	22.46
		12	6	22.26	22.34	22.50
		12	13	22.08	22.20	22.37
		25	0	22.40	22.41	22.49

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132572
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	**28.31**	28.25	28.13
		1	50	28.11	28.06	27.95
		1	99	28.01	27.96	27.85
		50	0	27.59	27.54	27.43
		50	25	27.49	27.44	27.33
		50	50	27.48	27.43	27.32
		100	0	27.50	27.45	27.34
20M	16QAM	1	0	27.54	27.49	27.38
		1	50	27.37	27.32	27.21
		1	99	27.17	27.12	27.01
		50	0	26.25	26.20	26.09
		50	25	26.20	26.15	26.04
		50	50	26.13	26.08	25.97
		100	0	26.16	26.11	26.00
20M	64QAM	1	0	26.31	26.25	26.13
		1	50	26.11	26.06	25.95
		1	99	26.01	25.96	25.85
		50	0	25.24	25.19	25.08
		50	25	25.14	25.09	24.98
		50	50	25.13	25.08	24.97
		100	0	25.15	25.10	24.99

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	**28.30**	28.18	28.07
		1	37	28.03	28.06	27.90
		1	74	27.91	27.89	27.75
		36	0	27.22	27.15	26.99
		36	19	27.10	27.04	26.94
		36	39	27.13	27.02	26.91
		75	0	27.14	27.04	26.97
15M	16QAM	1	0	27.51	27.40	27.33
		1	37	27.28	27.25	27.13
		1	74	27.13	27.05	26.92
		36	0	26.15	26.17	26.09
		36	19	26.20	26.07	26.02
		36	39	26.13	25.98	25.91
		75	0	26.10	26.09	25.94
15M	64QAM	1	0	26.23	26.25	26.11
		1	37	26.06	26.02	25.90
		1	74	25.93	25.93	25.79
		36	0	25.20	25.12	25.00
		36	19	25.12	25.05	24.93
		36	39	25.09	25.08	24.92
		75	0	25.15	25.06	24.90

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	28.12	**28.21**	27.98
		1	24	28.00	28.02	27.76
		1	49	27.88	27.83	27.71
		25	0	27.11	27.10	26.99
		25	12	26.97	27.09	26.90
		25	25	26.97	26.99	26.83
		50	0	26.99	26.94	26.96
10M	16QAM	1	0	27.51	27.37	27.24
		1	24	27.32	27.23	27.03
		1	49	26.99	27.00	26.92
		25	0	26.09	26.09	25.95
		25	12	26.10	25.96	25.95
		25	25	25.93	26.04	25.91
		50	0	26.02	25.92	25.75
10M	64QAM	1	0	26.20	26.11	25.96
		1	24	25.98	25.99	25.86
		1	49	25.92	25.87	25.74
		25	0	25.11	25.04	25.03
		25	12	25.05	24.87	24.83
		25	25	24.96	24.93	24.83
		50	0	24.93	24.93	24.84

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	**28.16**	28.07	27.93
		1	12	27.98	27.94	27.71
		1	24	27.83	27.77	27.67
		12	0	27.10	27.06	26.73
		12	6	27.05	26.95	26.62
		12	13	27.08	26.87	26.84
		25	0	27.07	27.02	26.74
5M	16QAM	1	0	27.43	27.40	27.21
		1	12	27.22	27.14	27.12
		1	24	27.13	26.97	26.83
		12	0	26.19	26.03	25.93
		12	6	26.17	26.05	26.02
		12	13	26.06	26.00	25.87
		25	0	26.02	26.02	25.82
5M	64QAM	1	0	26.18	26.12	26.08
		1	12	26.02	25.94	25.84
		1	24	25.84	25.85	25.79
		12	0	25.18	25.06	24.92
		12	6	25.02	25.09	24.88
		12	13	25.03	25.01	24.90
		25	0	25.06	24.96	24.89

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	**28.12**	28.05	28.02
		1	7	27.91	27.93	27.76
		1	14	27.94	27.84	27.81
		8	0	27.13	26.97	27.01
		8	3	26.98	26.99	26.90
		8	7	26.97	26.94	26.82
		15	0	27.00	26.88	26.80
3M	16QAM	1	0	27.38	27.49	27.31
		1	7	27.30	27.24	27.03
		1	14	27.09	26.92	26.81
		8	0	26.23	26.06	25.91
		8	3	26.02	25.93	25.98
		8	7	25.99	25.99	25.81
		15	0	25.96	25.98	25.82
3M	64QAM	1	0	26.21	26.16	25.93
		1	7	25.96	26.05	25.73
		1	14	25.86	25.78	25.71
		8	0	25.14	25.10	25.02
		8	3	25.01	24.96	24.90
		8	7	24.96	24.99	24.95
		15	0	25.03	24.92	24.83

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	**28.20**	28.05	27.93
		1	2	27.92	28.00	27.76
		1	5	27.86	27.81	27.71
		3	0	28.14	27.98	27.96
		3	1	27.99	27.95	27.88
		3	3	27.99	28.01	27.91
		6	0	27.04	27.06	26.87
1.4M	16QAM	1	0	27.44	27.42	27.29
		1	2	27.20	27.13	27.04
		1	5	27.11	26.92	26.92
		3	0	27.15	27.10	26.99
		3	1	27.04	26.93	26.84
		3	3	27.07	26.99	26.78
		6	0	26.06	26.01	25.76
1.4M	64QAM	1	0	26.16	26.11	26.08
		1	2	26.03	25.90	25.84
		1	5	25.86	25.83	25.72
		3	0	26.10	26.08	25.93
		3	1	26.05	25.95	25.84
		3	3	25.94	25.92	25.91
		6	0	25.01	24.98	24.79

4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

For WCDMA Band 4, LTE Band 4, LTE Band 66:
According to FCC 27.53(h) for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz, 1915-1920MHz, 1995-2000 MHz, 2000-2020MHz, 2110-2155MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB.

For LTE Band 7, LTE Band 41:
In the FCC 27.53(m)(4),On any frequency outside a licensee’s frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least 55 + 10 log (P) dB. The emission limit equal to –25dBm.

For LTE Band 12:
According to FCC 27.53(g) for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater.

For LTE Band 13:
According to FCC 27.53(c)(2) for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB.

According to FCC 27.53(f) for operations in the 775-788 MHz, emissions in the band 1559-1610MHz shall be limited to -70 dBW/MHz. The limit of emissions is equal to -40 dBm

4.2.2 Test Procedure

a. In the semi-anechoic chamber, EUT placed on the 0.8m(below or equal 1GHz) and/or 1.5m(above 1GHz) 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 1m to 4m 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
   - EIRP (dBm) = E (dBμV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.
   - ERP (dBm) = E (dBμV/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

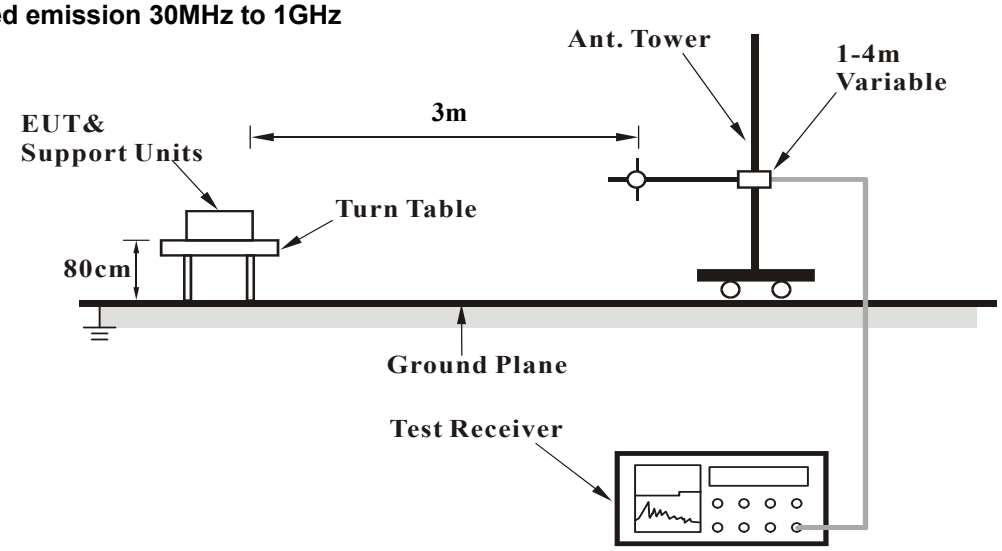
Note:
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
   The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

4.2.3 Deviation from Test Standard

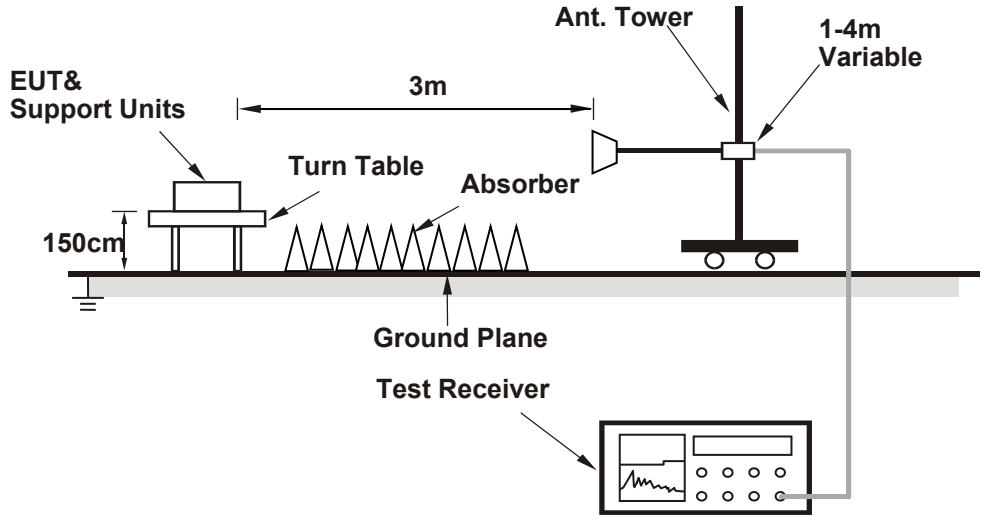
No deviation.

4.2.4 Test Setup

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



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

4.2.5 Test Results

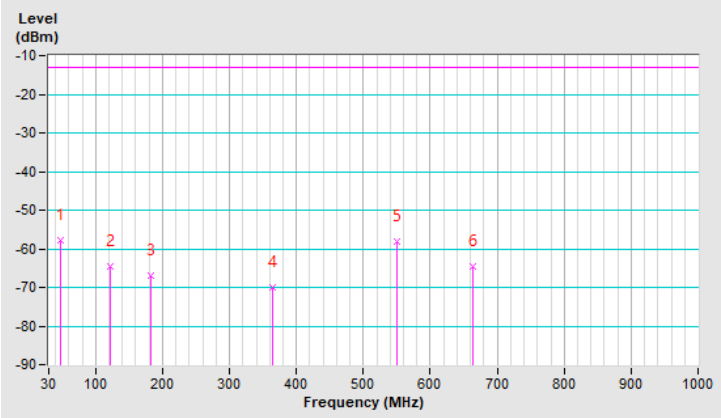
Below 1GHz
WCDMA Band 4

Mode	TX channel 1513 (1752.6MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	46.87	-57.70	-13.00	-44.70	1.49 H	105	56.20	-113.90
2	121.38	-64.50	-13.00	-51.50	1.49 H	83	51.10	-115.60
3	181.83	-66.90	-13.00	-53.90	1.49 H	315	48.40	-115.30
4	364.58	-70.00	-13.00	-57.00	1.00 H	2	41.40	-111.40
5	550.14	-58.10	-13.00	-45.10	1.49 H	63	49.20	-107.30
6	664.01	-64.70	-13.00	-51.70	1.49 H	18	40.30	-105.00

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.

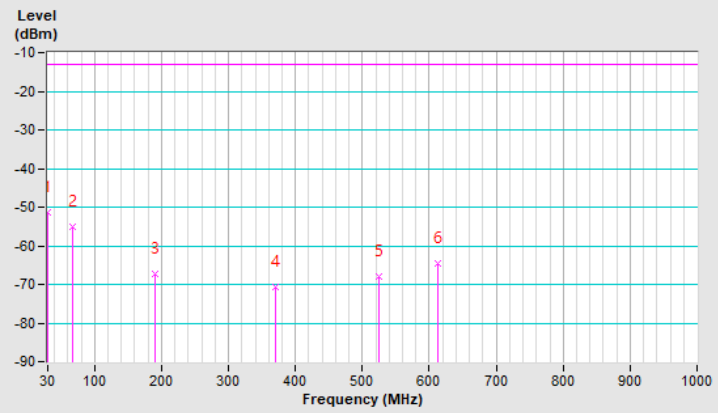


Mode	TX channel 1513 (1752.6MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-51.50	-13.00	-38.50	1.50 V	351	63.60	-115.10
2	66.55	-55.20	-13.00	-42.20	1.50 V	43	60.30	-115.50
3	190.26	-67.30	-13.00	-54.30	1.50 V	98	49.00	-116.30
4	370.20	-70.70	-13.00	-57.70	1.50 V	196	40.40	-111.10
5	524.84	-68.00	-13.00	-55.00	1.50 V	136	39.70	-107.70
6	613.41	-64.60	-13.00	-51.60	1.50 V	2	40.80	-105.40

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.



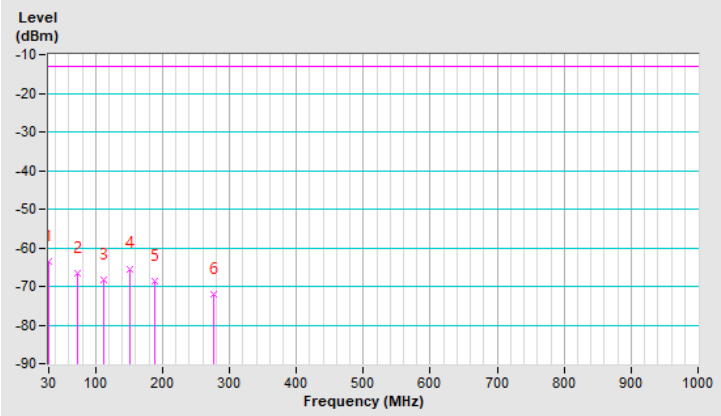
LTE Band 4, Channel Bandwidth 1.4MHz

Mode	TX channel 20175 (1732.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	30.00	-63.40	-13.00	-50.40	1.99 H	172	51.70	-115.10
2	73.58	-66.60	-13.00	-53.60	1.00 H	250	50.70	-117.30
3	112.94	-68.30	-13.00	-55.30	1.99 H	298	48.10	-116.40
4	150.90	-65.40	-13.00	-52.40	1.99 H	87	47.90	-113.30
5	187.45	-68.80	-13.00	-55.80	1.00 H	65	47.10	-115.90
6	276.01	-72.00	-13.00	-59.00	1.00 H	154	41.60	-113.60

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.

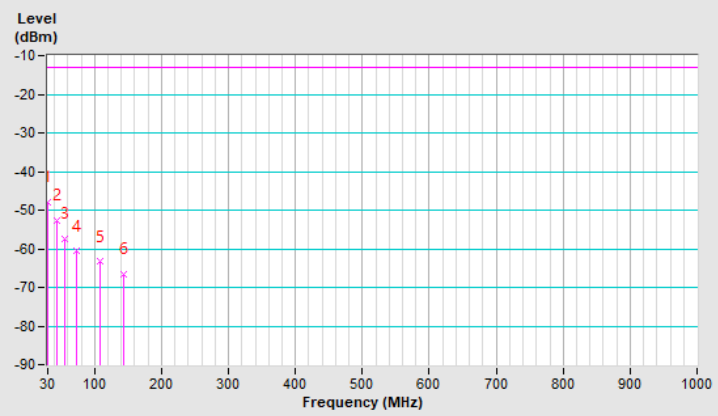


Mode	TX channel 20175 (1732.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-47.80	-13.00	-34.80	1.01 V	144	67.30	-115.10
2	44.06	-52.70	-13.00	-39.70	1.01 V	18	61.20	-113.90
3	55.30	-57.40	-13.00	-44.40	1.01 V	18	56.70	-114.10
4	72.17	-60.70	-13.00	-47.70	1.01 V	57	56.30	-117.00
5	108.72	-63.40	-13.00	-50.40	1.01 V	115	53.90	-117.30
6	143.87	-66.60	-13.00	-53.60	1.01 V	95	47.00	-113.60

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.



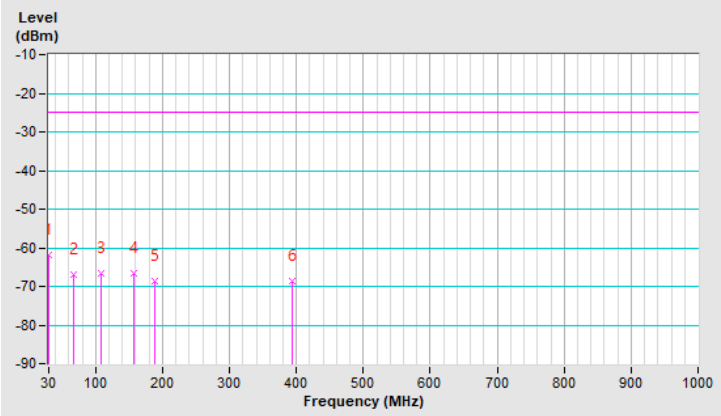
LTE Band 7, Channel Bandwidth 20MHz

Mode	TX channel 21100 (2535.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	30.00	-62.00	-25.00	-37.00	2.00 H	97	53.10	-115.10
2	66.55	-67.10	-25.00	-42.10	2.00 H	59	48.40	-115.50
3	107.32	-66.60	-25.00	-41.60	2.00 H	90	50.80	-117.40
4	156.52	-66.70	-25.00	-41.70	2.00 H	123	46.60	-113.30
5	187.45	-68.70	-25.00	-43.70	1.51 H	56	47.20	-115.90
6	394.10	-68.50	-25.00	-43.50	1.01 H	255	42.20	-110.70

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.

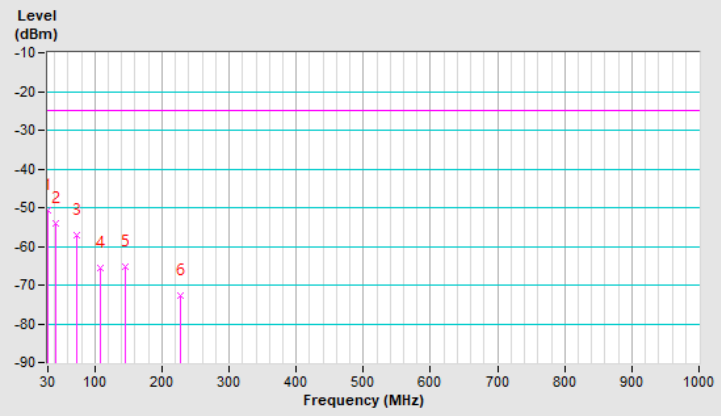


Mode	TX channel 21100 (2535.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-50.60	-25.00	-25.60	1.00 V	183	64.50	-115.10
2	42.65	-54.10	-25.00	-29.10	1.00 V	343	59.90	-114.00
3	72.17	-57.10	-25.00	-32.10	1.00 V	256	59.90	-117.00
4	108.72	-65.60	-25.00	-40.60	1.00 V	60	51.70	-117.30
5	145.28	-65.30	-25.00	-40.30	1.00 V	101	48.20	-113.50
6	228.22	-72.60	-25.00	-47.60	1.00 V	340	43.70	-116.30

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.



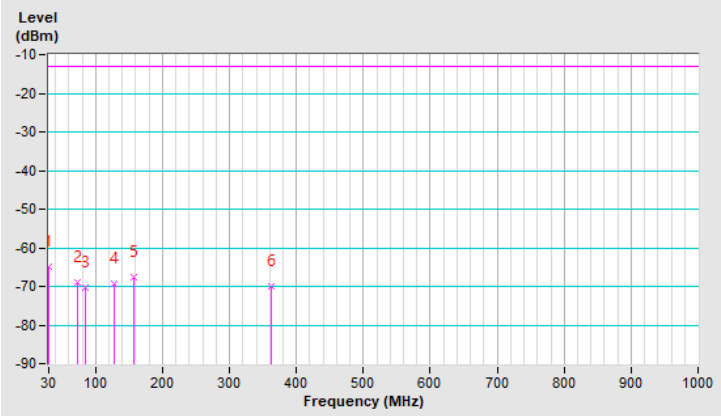
LTE Band 12, Channel Bandwidth 5MHz

Mode	TX channel 23035 (701.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-64.80	-13.00	-51.80	1.49 H	99	52.50	-117.30
2	73.58	-69.00	-13.00	-56.00	1.99 H	236	50.50	-119.50
3	84.83	-70.20	-13.00	-57.20	1.99 H	95	51.70	-121.90
4	127.00	-69.30	-13.00	-56.30	1.49 H	270	48.10	-117.40
5	156.52	-67.60	-13.00	-54.60	1.49 H	102	47.90	-115.50
6	361.77	-69.90	-13.00	-56.90	1.49 H	2	43.80	-113.70

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

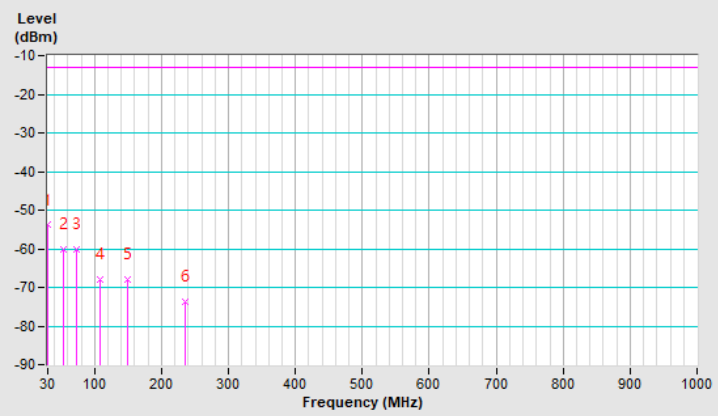


Mode	TX channel 23035 (701.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-53.90	-13.00	-40.90	1.01 V	342	63.40	-117.30
2	53.90	-60.00	-13.00	-47.00	2.00 V	338	56.40	-116.40
3	73.58	-60.00	-13.00	-47.00	1.01 V	215	59.50	-119.50
4	107.32	-67.90	-13.00	-54.90	1.01 V	90	51.60	-119.50
5	149.49	-68.10	-13.00	-55.10	1.01 V	100	47.40	-115.50
6	235.25	-73.80	-13.00	-60.80	1.01 V	319	43.70	-117.50

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



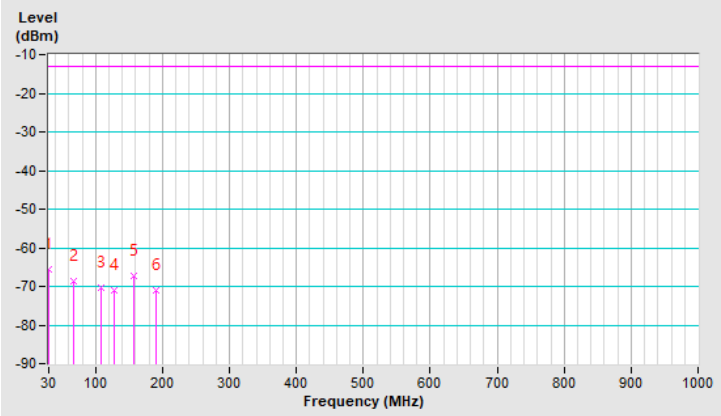
LTE Band 13, Channel Bandwidth 10MHz

Mode	TX channel 23230 (782.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-65.60	-13.00	-52.60	2.00 H	52	51.70	-117.30
2	66.55	-68.80	-13.00	-55.80	2.00 H	71	48.90	-117.70
3	107.32	-70.30	-13.00	-57.30	1.01 H	133	49.20	-119.50
4	127.00	-71.10	-13.00	-58.10	1.51 H	237	46.30	-117.40
5	157.93	-67.30	-13.00	-54.30	2.00 H	117	48.20	-115.50
6	190.26	-70.90	-13.00	-57.90	1.51 H	53	47.60	-118.50

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

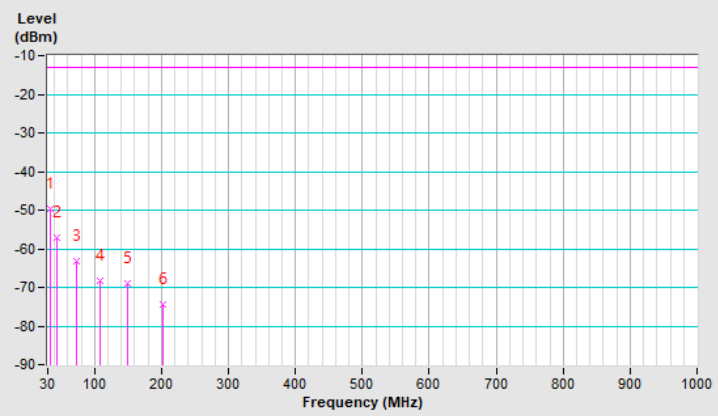


Mode	TX channel 23230 (782.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	34.22	-49.70	-13.00	-36.70	1.00 V	23	67.20	-116.90
2	44.06	-57.20	-13.00	-44.20	1.49 V	17	58.80	-116.00
3	73.58	-63.30	-13.00	-50.30	1.00 V	209	56.20	-119.50
4	108.72	-68.40	-13.00	-55.40	1.00 V	119	51.10	-119.50
5	149.49	-68.90	-13.00	-55.90	1.00 V	135	46.60	-115.50
6	201.51	-74.50	-13.00	-61.50	1.00 V	356	44.70	-119.20

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



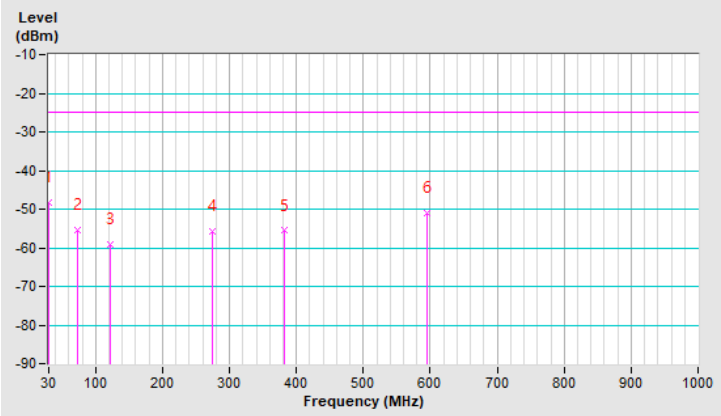
LTE Band 41, Channel Bandwidth 20MHz

Mode	TX channel 40620 (2593.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	30.00	-48.30	-25.00	-23.30	1.00 H	81	66.80	-115.10
2	73.58	-55.30	-25.00	-30.30	1.50 H	194	62.00	-117.30
3	122.78	-59.10	-25.00	-34.10	2.00 H	288	56.40	-115.50
4	274.61	-55.70	-25.00	-30.70	1.00 H	347	58.00	-113.70
5	381.45	-55.60	-25.00	-30.60	1.50 H	312	55.30	-110.90
6	595.13	-51.10	-25.00	-26.10	1.00 H	44	54.60	-105.70

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.

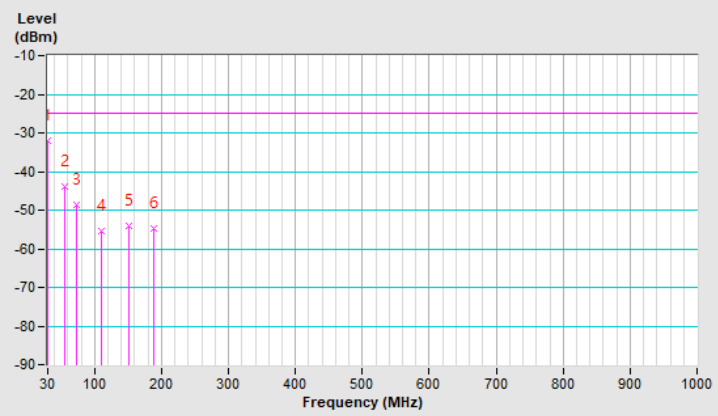


Mode	TX channel 40620 (2593.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	**30.00**	**-32.00**	**-25.00**	**-7.00**	**1.50 V**	**3**	**83.10**	**-115.10**
2	55.30	-44.00	-25.00	-19.00	2.00 V	347	70.10	-114.10
3	73.58	-48.50	-25.00	-23.50	1.00 V	164	68.80	-117.30
4	110.13	-55.50	-25.00	-30.50	1.50 V	140	61.70	-117.20
5	150.90	-54.00	-25.00	-29.00	1.00 V	174	59.30	-113.30
6	187.45	-54.70	-25.00	-29.70	1.00 V	91	61.20	-115.90

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.



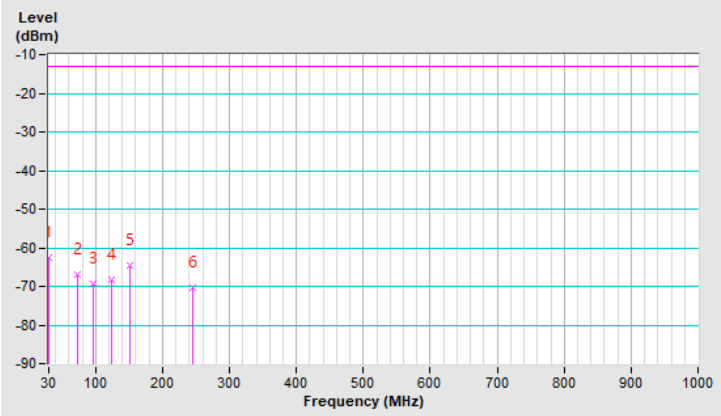
LTE Band 66, Channel Bandwidth 5MHz

Mode	TX channel 132647 (1777.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	30.00	-62.60	-13.00	-49.60	1.51 H	47	52.50	-115.10
2	73.58	-67.10	-13.00	-54.10	2.00 H	69	50.20	-117.30
3	96.07	-69.40	-13.00	-56.40	2.00 H	102	49.80	-119.20
4	124.19	-68.20	-13.00	-55.20	1.51 H	288	47.20	-115.40
5	150.90	-64.70	-13.00	-51.70	2.00 H	75	48.60	-113.30
6	245.09	-70.30	-13.00	-57.30	1.51 H	102	44.60	-114.90

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.

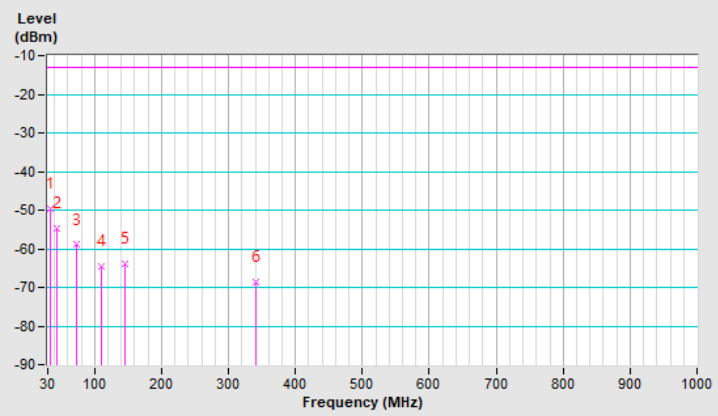


Mode	TX channel 132647 (1777.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	34.22	-49.60	-13.00	-36.60	1.00 V	51	65.20	-114.80
2	44.06	-54.70	-13.00	-41.70	1.49 V	330	59.20	-113.90
3	73.58	-59.00	-13.00	-46.00	1.49 V	154	58.30	-117.30
4	110.13	-64.70	-13.00	-51.70	1.00 V	46	52.50	-117.20
5	145.28	-64.00	-13.00	-51.00	1.49 V	131	49.50	-113.50
6	340.68	-68.70	-13.00	-55.70	1.49 V	21	43.20	-111.90

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.



Above 1GHz
WCDMA Band 4

Mode	TX channel 1312 (1712.4MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3424.80	-51.93	-13.00	-38.93	1.63 H	310	45.21	-97.14
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3424.80	-52.55	-13.00	-39.55	2.85 V	253	44.59	-97.14

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.

Mode	TX channel 1413 (1732.6MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3465.20	-51.70	-13.00	-38.70	1.68 H	312	45.30	-97.00
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.20	-52.39	-13.00	-39.39	2.88 V	255	44.61	-97.00

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.

Mode	TX channel 1513 (1752.6MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3505.20	-51.57	-13.00	-38.57	1.66 H	313	45.28	-96.85
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.20	-52.21	-13.00	-39.21	2.81 V	250	44.64	-96.85

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.

LTE Band 4, Channel Bandwidth 1.4MHz

Mode	TX channel 19957 (1710.7MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3421.40	-51.13	-13.00	-38.13	1.89 H	302	46.04	-97.17
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-51.04	-13.00	-38.04	2.72 V	266	46.13	-97.17

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.

Mode	TX channel 20175 (1732.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3465.00	-49.71	-13.00	-36.71	1.92 H	313	47.29	-97.00
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-47.36	-13.00	-34.36	2.93 V	184	49.64	-97.00

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.

Mode	TX channel 20393 (1754.3MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3508.60	-50.57	-13.00	-37.57	1.88 H	305	46.27	-96.84
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3508.60	-49.34	-13.00	-36.34	1.30 V	183	47.50	-96.84

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.

LTE Band 4, Channel Bandwidth 5MHz

Mode	TX channel 19975 (1712.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3425.00	-51.26	-13.00	-38.26	1.91 H	300	45.88	-97.14
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-51.26	-13.00	-38.26	2.75 V	261	45.88	-97.14

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.

Mode	TX channel 20175 (1732.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3465.00	-49.14	-13.00	-36.14	2.49 H	317	47.86	-97.00
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-48.57	-13.00	-35.57	2.56 V	50	48.43	-97.00

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.

Mode	TX channel 20375 (1752.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3505.00	-51.38	-13.00	-38.38	1.93 H	300	45.48	-96.86
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.00	-51.11	-13.00	-38.11	2.77 V	268	45.75	-96.86

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.

LTE Band 4, Channel Bandwidth 20MHz

Mode	TX channel 20050 (1720.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3440.00	-51.35	-13.00	-38.35	1.94 H	301	45.75	-97.10
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-51.28	-13.00	-38.28	2.74 V	260	45.82	-97.10

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.

Mode	TX channel 20175 (1732.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3465.00	-51.64	-13.00	-38.64	1.90 H	306	45.36	-97.00
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-51.80	-13.00	-38.80	2.75 V	262	45.20	-97.00

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.

Mode	TX channel 20300 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	24deg. C, 67%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	3490.00	-50.96	-13.00	-37.96	1.95 H	308	45.95	-96.91
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-49.49	-13.00	-36.49	2.76 V	264	47.42	-96.91

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.

LTE Band 7, Channel Bandwidth 5MHz

Mode	TX channel 20775 (2502.5MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5005.00	-45.66	-25.00	-20.66	2.98 H	335	47.70	-93.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5005.00	-45.96	-25.00	-20.96	1.69 V	202	47.40	-93.36

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.

Mode	TX channel 21100 (2535.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5070.00	-45.75	-25.00	-20.75	2.98 H	337	47.60	-93.35
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-46.04	-25.00	-21.04	1.69 V	199	47.31	-93.35

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.

Mode	TX channel 21425 (2567.5MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5135.00	-45.61	-25.00	-20.61	2.98 H	335	47.74	-93.35
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5135.00	-45.99	-25.00	-20.99	1.66 V	201	47.36	-93.35

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.

LTE Band 7, Channel Bandwidth 20MHz

Mode	TX channel 20850 (2510.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5020.00	-45.73	-25.00	-20.73	3.00 H	337	47.63	-93.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5020.00	-45.81	-25.00	-20.81	1.66 V	199	47.55	-93.36

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.

Mode	TX channel 21100 (2535.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5070.00	-45.48	-25.00	-20.48	2.98 H	338	47.87	-93.35
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-45.79	-25.00	-20.79	1.67 V	206	47.56	-93.35

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.

Mode	TX channel 21350 (2560.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5120.00	-45.69	-25.00	-20.69	2.98 H	335	47.66	-93.35
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5120.00	-45.81	-25.00	-20.81	1.67 V	202	47.54	-93.35

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.

LTE Band 12, Channel Bandwidth 1.4MHz

Mode	TX channel 23017 (699.7MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1399.40	-55.26	-13.00	-42.26	1.95 H	44	49.30	-104.56
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1399.40	-55.36	-13.00	-42.36	3.60 V	117	49.20	-104.56

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Mode	TX channel 23095 (707.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-55.03	-13.00	-42.03	2.00 H	42	49.51	-104.54
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-55.26	-13.00	-42.26	3.65 V	116	49.28	-104.54

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Mode	TX channel 23173 (715.3MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1430.60	-55.13	-13.00	-42.13	1.91 H	42	49.39	-104.52
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1430.60	-55.16	-13.00	-42.16	3.63 V	120	49.36	-104.52

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

LTE Band 12, Channel Bandwidth 5MHz

Mode	TX channel 23035 (701.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1403.00	-55.03	-13.00	-42.03	1.94 H	48	49.53	-104.56
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1403.00	-55.20	-13.00	-42.20	3.58 V	116	49.36	-104.56

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Mode	TX channel 23095 (707.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-55.12	-13.00	-42.12	1.97 H	46	49.42	-104.54
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-55.14	-13.00	-42.14	3.63 V	118	49.40	-104.54

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Mode	TX channel 23155 (713.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-55.22	-13.00	-42.22	1.92 H	45	49.32	-104.54
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-55.48	-13.00	-42.48	3.58 V	117	49.06	-104.54

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

LTE Band 12, Channel Bandwidth 10MHz

Mode	TX channel 23060 (704.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1408.00	-55.38	-13.00	-42.38	1.90 H	46	49.18	-104.56
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1408.00	-55.33	-13.00	-42.33	3.57 V	117	49.23	-104.56

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Mode	TX channel 23095 (707.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-55.33	-13.00	-42.33	1.91 H	43	49.21	-104.54
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-55.35	-13.00	-42.35	3.57 V	114	49.19	-104.54

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Mode	TX channel 23130 (711.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-55.08	-13.00	-42.08	1.96 H	43	49.46	-104.54
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-55.36	-13.00	-42.36	3.62 V	119	49.18	-104.54

Remarks:

1. ERP(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 - 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

LTE Band 13, Channel Bandwidth 5MHz

Mode	TX channel 23205 (779.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	1559.00	-58.42	-40.00	-18.42	2.60 H	196	43.85	-102.27
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1559.00	-58.61	-40.00	-18.61	1.00 V	77	43.66	-102.27

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.

Mode	TX channel 23230 (782.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	1564.00	-57.26	-40.00	-17.26	2.64 H	199	45.01	-102.27
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-58.63	-40.00	-18.63	1.04 V	79	43.64	-102.27

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.

Mode	TX channel 23255 (784.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	1569.00	-59.23	-40.00	-19.23	2.62 H	200	43.04	-102.27
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1569.00	-57.29	-40.00	-17.29	1.08 V	80	44.98	-102.27

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.

LTE Band 13, Channel Bandwidth 10MHz

Mode	TX channel 23230 (782.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Raymond Lee		

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	1564.00	-58.94	-40.00	-18.94	2.66 H	191	43.33	-102.27
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-58.78	-40.00	-18.78	1.02 V	75	43.49	-102.27

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.

LTE Band 41, Channel Bandwidth 5MHz

Mode	TX channel 39675 (2498.5MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	4997.00	-46.88	-25.00	-21.88	2.22 H	52	46.50	-93.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4997.00	-46.68	-25.00	-21.68	2.01 V	258	46.70	-93.38

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.

Mode	TX channel 40620 (2593.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5186.00	-45.83	-25.00	-20.83	2.26 H	56	47.53	-93.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-46.57	-25.00	-21.57	2.01 V	255	46.79	-93.36

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.

Mode	TX channel 41565 (2687.5MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5375.00	-46.05	-25.00	-21.05	2.22 H	52	47.34	-93.39
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5375.00	-46.20	-25.00	-21.20	2.04 V	255	47.19	-93.39

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.

LTE Band 41, Channel Bandwidth 20MHz

Mode	TX channel 39750 (2506.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5012.00	-46.43	-25.00	-21.43	2.19 H	49	46.94	-93.37
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5012.00	-46.61	-25.00	-21.61	1.97 V	261	46.76	-93.37

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.

Mode	TX channel 40620 (2593.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5186.00	-46.64	-25.00	-21.64	2.17 H	50	46.72	-93.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-45.72	-25.00	-20.72	2.01 V	255	47.64	-93.36

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.

Mode	TX channel 41490 (2680.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	5360.00	-46.22	-25.00	-21.22	2.26 H	50	47.16	-93.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5360.00	-46.13	-25.00	-21.13	2.05 V	255	47.25	-93.38

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.

LTE Band 66, Channel Bandwidth 1.4MHz

Mode	TX channel 131979 (1710.7MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3421.40	-49.87	-13.00	-36.87	1.72 H	137	47.30	-97.17
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-49.77	-13.00	-36.77	1.64 V	197	47.40	-97.17

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.

Mode	TX channel 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3490.00	-48.96	-13.00	-35.96	1.70 H	136	47.95	-96.91
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-48.71	-13.00	-35.71	1.60 V	197	48.20	-96.91

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.

Mode	TX channel 132665 (1779.3MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3558.60	-49.00	-13.00	-36.00	1.74 H	137	47.70	-96.70
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3558.60	-48.83	-13.00	-35.83	1.65 V	201	47.87	-96.70

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.

LTE Band 66, Channel Bandwidth 5MHz

Mode	TX channel 131997 (1712.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3425.00	-49.93	-13.00	-36.93	1.75 H	137	47.21	-97.14
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-48.85	-13.00	-35.85	1.61 V	198	48.29	-97.14

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.

Mode	TX channel 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3490.00	-49.38	-13.00	-36.38	1.69 H	140	47.53	-96.91
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-49.19	-13.00	-36.19	1.60 V	200	47.72	-96.91

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.

Mode	TX channel 132647 (1777.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3555.00	-48.62	-13.00	-35.62	1.73 H	139	48.09	-96.71
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	-48.50	-13.00	-35.50	1.69 V	197	48.21	-96.71

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.

LTE Band 66, Channel Bandwidth 20MHz

Mode	TX channel 132072 (1720.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3440.00	-49.16	-13.00	-36.16	1.74 H	138	47.94	-97.10
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-49.41	-13.00	-36.41	1.64 V	197	47.69	-97.10

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.

Mode	TX channel 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3490.00	-49.32	-13.00	-36.32	1.77 H	137	47.59	-96.91
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-49.10	-13.00	-36.10	1.60 V	196	47.81	-96.91

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.

Mode	TX channel 132572 (1770.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

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	3540.00	-49.44	-13.00	-36.44	1.67 H	140	47.32	-96.76
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3540.00	-49.00	-13.00	-36.00	1.65 V	201	47.76	-96.76

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.

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – 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 and approved 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@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

--- END ---