

FCC TEST REPORT

(PART 27)

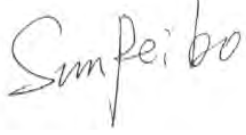
Applicant:	KYOCERA Corporation
Address:	Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan

Manufacturer or Supplier:	KYOCERA Corporation
Address:	Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan
Product:	Mobile Phone
Brand Name:	KYOCERA
Model Name:	EB1217
FCC ID	JOYEB1217
Date of tests	Oct. 21, 2024~Dec. 05, 2024

The tests have been carried out according to the requirements of the following standard:

- | | |
|---|---|
| ☒ FCC Part 27 | ☒ ANSI/TIA/EIA-603-E |
| ☒ ANSI/TIA/EIA-603-D | ☒ ANSI C63.26-2015 |
| ☒ FCC Part 2 | |

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Hanwen Xu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department
	
Date: Dec. 05, 2024	Date: Dec. 05, 2024

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-QBJ2409140110RF03	Original release	Dec. 05, 2024

1. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 27 & PART 2			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	TEST LAB*
§2.1046	Conducted Output Power	Compliance	A
§27.50(c)(10)	Effective Radiated Power (Band 12)	Compliance	A
§27.50(d)(4) §27.50(h)(2) §27.50(k)(3)	Equivalent Isotropically Radiated Power (WCMDA Band 4) (Band 41) (Band 41C) (Band 42) (Band 42C)	Compliance	A
§2.1055 §27.54	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§2.1051 §27.53(g) §27.53(h) §27.53(m)(4)	Conducted Band Edge Measurements (WCMDA Band 4) (Band 12) (Band 41) (Band 41C) (Band 42) (Band 42C)	Compliance	A
§2.1051 §27.53(g) §27.53(h) §27.53(m)(4) §27.53(n)(2)	Conducted Spurious Emissions (WCMDA Band 4) (Band 12) (Band 41) (Band 41C) (Band 42) (Band 42C)	Compliance	A
§2.1053 §27.53(g) §27.53(h) §27.53(m)(4) §27.53(n)(2)	Radiated Spurious Emissions (WCMDA Band 4) (Band 12) (Band 41) (Band 41C) (Band 42) (Band 42C)	Compliance	A
§27.50	Peak to average ratio*	Compliance	A

* Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01.



Test Report No.: PSU-QBJ2409140110RF03

***Test Lab Information Reference**

Lab A:

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province

Accredited Test Lab Cert 6613.01

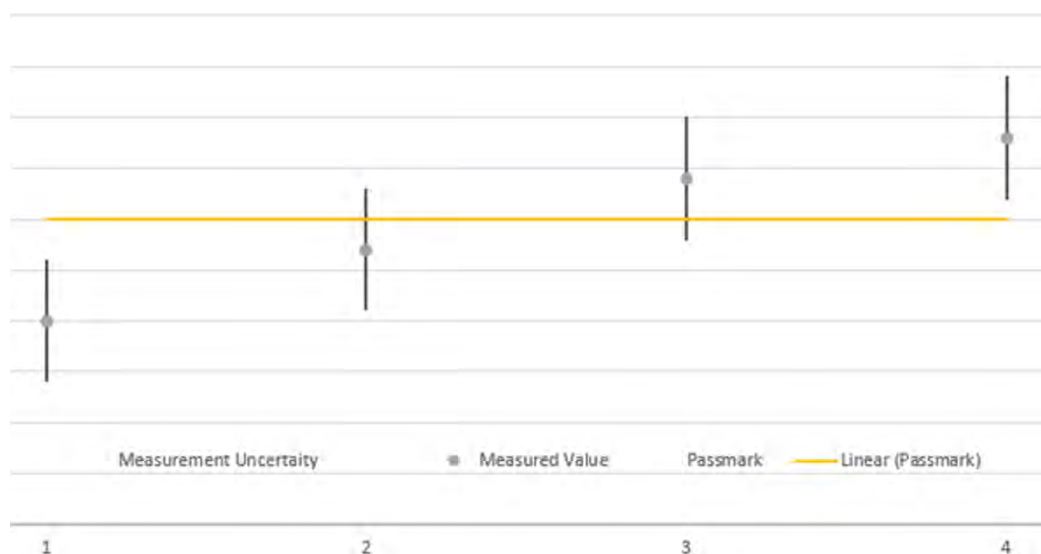
The FCC Site Registration No. is 434559; The Designation No. is CN1325.

1.1 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	UNCERTAINTY
Frequency Stability	±76.97Hz
Radiated emissions (9KHz~30MHz)	±2.68dB
Radiated emissions & Radiated Power (30MHz~1GHz)	±4.98dB
Radiated emissions & Radiated Power (1GHz ~6GHz)	±4.70dB
Radiated emissions (6GHz ~18GHz)	±4.60dB
Radiated emissions (18GHz ~40GHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Conducted Output power	±2.06dB
Band Edge Measurements	±4.70dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



The verdicts in this test report are given according the above diagram:

Case	Measured Value	Uncertainty Range	Verdict
1	below pass mark	below pass mark	Passed
2	below pass mark	within pass mark	Passed
3	above pass mark	within pass mark	Failed
4	above pass mark	above pass mark	Failed

That means, the laboratory applies, as decision rule (see ISO/IEC 17025:2017), the so-called shared risk principle.

1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.29,24	Aug.28,26
Pre-Amplifier	R&S	SCU08F1	101028	Sep.15,24	Sep.14,26
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A	182185	Mar.29,24	Mar.28,26
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-01Chamber	Nov.25,22	Nov.24,25
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Nov.25,22	Nov.24,25
EMI TEST Receiver	R&S	ESR26	101734	Mar.28,24	Mar.27,26
EMI TEST Receiver	R&S	ESW44	101973	Mar.28,24	Mar.27,26
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Dec.26,23	Dec.25,25
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.21,24	Aug.20,26
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Jul.15,24	Jul.14,26
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Aug.21,24	Aug.20,26
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.22,24	Feb.21,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
6DB attenuator	Tonscend Technology Co., Ltd	N/A	23062787	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	Sep.30,24	Sep.29,26
DC Source	HYELEC	HY3010B	551016	Aug.30,24	Aug.29,26
Hygrothermograph	DELI	20210528	SZ014	Sep.05,24	Sep.04,26
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-7.00M	N/A	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-4.00M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W12.14	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.27,24	Apr.26,25
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26

NOTE:

1. The calibration interval of the above test instruments is 6 months or 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 434559; The Designation No. is CN1325.



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT*	Mobile Phone	
BRAND NAME*	KYOCERA	
MODEL NAME*	EB1217	
NOMINAL VOLTAGE*	3.91Vdc (Battery)	
MODULATION TECHNOLOGY	WCDMA IV	BPSK, QPSK
	LTE	QPSK, 16QAM, 64QAM
FREQUENCY RANGE	WCDMA IV	1712.4MHz ~ 1752.6MHz
	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	704MHz ~ 711MHz
	LTE Band 41 Channel Bandwidth: 5MHz	2498.5MHz ~ 2687.5MHz
	LTE Band 41 Channel Bandwidth: 10MHz	2501MHz ~ 2685MHz
	LTE Band 41 Channel Bandwidth: 15MHz	2503.5MHz ~ 2682.5MHz
	LTE Band 41 Channel Bandwidth: 20MHz	2506MHz ~ 2680MHz
	LTE Band 42 Channel Bandwidth: 5MHz	3452.5 MHz ~ 3547.5MHz
	LTE Band 42 Channel Bandwidth: 10MHz	3455MHz ~ 3545MHz
	LTE Band 42 Channel Bandwidth: 15MHz	3457.5MHz ~ 3542.5MHz
	LTE Band 42 Channel Bandwidth: 20MHz	3460MHz ~ 3540MHz
	LTE Band CA_41C Channel Bandwidth: 10MHz+15MHz	2501.3MHz ~ 2682.5MHz
	LTE Band CA_41C Channel Bandwidth: 10MHz+20MHz	2501.5MHz ~ 2680MHz
	LTE Band CA_41C Channel Bandwidth:15MHz+10MHz	2503.5MHz ~ 2684.7MHz
	LTE Band CA_41C Channel Bandwidth15MHz+15MHz	2496MHz ~ 2682.5MHz



FREQUENCY RANGE	LTE Band CA_41C Channel Bandwidth: 15MHz+20MHz	2503.8MHz ~ 2680MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+10MHz	2506MHz ~ 2684.5MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+15MHz	2506MHz ~ 2682.2MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+20MHz	2506MHz ~ 2680MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+5MHz	2506MHz ~ 2686.7MHz
	LTE Band CA_41C Channel Bandwidth: 5MHz+20MHz	2499.3MHz ~ 2680MHz
	LTE Band CA_42C Channel Bandwidth: 10MHz+20MHz	3455.5MHz ~ 3450MHz
	LTE Band CA_42C Channel Bandwidth: 15MHz+20MHz	3457.8MHz ~ 3540MHz
	LTE Band CA_42C Channel Bandwidth: 20MHz+10MHz	3460MHz ~ 3544.5MHz
	LTE Band CA_42C Channel Bandwidth: 20MHz+15MHz	3460MHz ~ 3542.2MHz
	LTE Band CA_42C Channel Bandwidth: 20MHz+20MHz	3460MHz ~ 3540MHz
	LTE Band CA_42C Channel Bandwidth: 20MHz+5MHz	3460MHz ~ 3546.7MHz
	LTE Band CA_42C Channel Bandwidth: 5MHz+20MHz	3453.3MHz ~ 3540MHz



MAX. EIRP/ERP POWER	WCDMA IV	60.67mW
	LTE Band 12 Channel Bandwidth: 1.4MHz	82.99mW
	LTE Band 12 Channel Bandwidth: 3MHz	67.92mW
	LTE Band 12 Channel Bandwidth: 5MHz	67.45mW
	LTE Band 12 Channel Bandwidth: 10MHz	68.55mW
	LTE Band 41 Channel Bandwidth: 5MHz	34.91mW
	LTE Band 41 Channel Bandwidth: 10MHz	34.36mW
	LTE Band 41 Channel Bandwidth: 15MHz	34.91mW
	LTE Band 41 Channel Bandwidth: 20MHz	35.32mW
	LTE Band 42 Channel Bandwidth: 5MHz	39.63mW
	LTE Band 42 Channel Bandwidth: 10MHz	39.26mW
	LTE Band 42 Channel Bandwidth: 15MHz	39.45mW
	LTE Band 42 Channel Bandwidth: 20MHz	40.09mW
	LTE Band CA_41C Channel Bandwidth: 10MHz+15MHz	35.65mW
	LTE Band CA_41C Channel Bandwidth: 10MHz+20MHz	34.99mW
	LTE Band CA_41C Channel Bandwidth:15MHz+10MHz	35.48mW
	LTE Band CA_41C Channel Bandwidth15MHz+15MHz	35.56mW
	LTE Band CA_41C Channel Bandwidth: 15MHz+20MHz	35.81mW
	LTE Band CA_41C Channel Bandwidth: 20MHz+10MHz	35.97mW
	LTE Band CA_41C Channel Bandwidth: 20MHz+15MHz	35.89 mW
	LTE Band CA_41C Channel Bandwidth: 20MHz+20MHz	36.22mW



	LTE Band CA_41C Channel Bandwidth: 20MHz+5MHz	35.4mW
	LTE Band CA_41C Channel Bandwidth: 5MHz+20MHz	35.48mW
	LTE Band CA_42C Channel Bandwidth: 10MHz+20MHz	40.18mW
	LTE Band CA_42C Channel Bandwidth: 15MHz+20MHz	40.83mW
	LTE Band CA_42C Channel Bandwidth: 20MHz+10MHz	40.93mW
	LTE Band CA_42C Channel Bandwidth: 20MHz+15MHz	41.3mW
	LTE Band CA_42C Channel Bandwidth: 20MHz+20MHz	42.56mW
	LTE Band CA_42C Channel Bandwidth: 20MHz+5MHz	41.11mW
	LTE Band CA_42C Channel Bandwidth: 5MHz+20MHz	39.9mW
EMISSION DESIGNATOR	WCDMA IV	4M14F9W
	LTE Band 12 Channel Bandwidth: 1.4MHz	QPSK: 1M09G7D
		16QAM: 1M09W7D
		64QAM: 1M09W7D
	LTE Band 12 Channel Bandwidth: 3MHz	QPSK: 2M69G7D
		16QAM: 2M68W7D
		64QAM: 2M69W7D
	LTE Band 12 Channel Bandwidth: 5MHz	QPSK: 4M49G7D
		16QAM: 4M49W7D
		64QAM: 4M48W7D



EMISSION DESIGNATOR	LTE Band 12 Channel Bandwidth: 10MHz	QPSK: 8M95G7D
		16QAM: 8M95W7D
		64QAM: 8M96W7D
	LTE Band 41 Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM:4M52W7D
		64QAM:4M50W7D
	LTE Band 41 Channel Bandwidth: 10MHz	QPSK: 8M99G7D
		16QAM:9M05W7D
		64QAM: 9M04W7D
	LTE Band 41 Channel Bandwidth: 15MHz	QPSK: 13M6G7D
		16QAM:14 M7W7D
		64QAM:13 M9W7D
	LTE Band 41 Channel Bandwidth: 20MHz	QPSK: 18M1G7D
		16QAM: 18M4W7D
		64QAM: 18M3W7D
	LTE Band 42 Channel Bandwidth: 5MHz	QPSK: 4M49G7D
		16QAM: 4M50W7D
		64QAM:4 M51W7D
	LTE Band 42 Channel Bandwidth: 10MHz	QPSK: 8M97G7D
		16QAM: 9M00W7D
		64QAM: 8M97W7D
	LTE Band 42 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M6W7D
		64QAM: 13M5W7D
	LTE Band 42 Channel Bandwidth: 20MHz	QPSK: 17M9G7D
		16QAM: 18M0W7D
		64QAM: 17M9W7D
	LTE Band CA_41C Channel Bandwidth: 10MHz+15MHz	QPSK: 23M3G7D
		16QAM: 23M3W7D
		64QAM: 23M3W7D
	LTE Band CA_41C Channel Bandwidth: 10MHz+20MHz	QPSK: 27M9G7D
		16QAM: 27M8W7D
		64QAM: 27M9W7D
	LTE Band CA_41C Channel Bandwidth:15MHz+10MHz	QPSK: 23M3G7D
		16QAM:23M4W7D
		64QAM: 23M3W7D



EMISSION DESIGNATOR	LTE Band CA_41C Channel Bandwidth15MHz+15MHz	QPSK: 28M4G7D
		16QAM: 28M5W7D
		64QAM: 28M4W7D
	LTE Band CA_41C Channel Bandwidth: 15MHz+20MHz	QPSK: 32M8G7D
		16QAM: 32M7W7D
		64QAM: 32M7W7D
	LTE Band CA_41C Channel Bandwidth: 20MHz+10MHz	QPSK: 27M9G7D
		16QAM: 27M9W7D
		64QAM: 27M9W7D
	LTE Band CA_41C Channel Bandwidth: 20MHz+15MHz	QPSK: 32M8G7D
		16QAM: 32M8W7D
		64QAM: 32M8W7D
	LTE Band CA_41C Channel Bandwidth: 20MHz+20MHz	QPSK: 38M0G7D
		16QAM: 38M0W7D
		64QAM: 38M3W7D
	LTE Band CA_41C Channel Bandwidth: 20MHz+5MHz	QPSK: 23M1G7D
		16QAM: 23M0W7D
		64QAM: 23M0W7D
	LTE Band CA_41C Channel Bandwidth: 5MHz+20MHz	QPSK: 23M1G7D
		16QAM: 23M0W7D
		64QAM: 23M0W7D
	LTE Band CA_42C Channel Bandwidth: 10MHz+20MHz	QPSK: 27M8G7D
		16QAM: 27M8W7D
		64QAM: 27M8W7D
	LTE Band CA_42C Channel Bandwidth: 15MHz+20MHz	QPSK: 32M7G7D
		16QAM: 32M7W7D
		64QAM: 32M7W7D
	LTE Band CA_42C Channel Bandwidth: 20MHz+10MHz	QPSK: 27M8G7D
		16QAM: 27M8W7D
		64QAM: 27M8W7D
	LTE Band CA_42C Channel Bandwidth: 20MHz+15MHz	QPSK: 32M7G7D
		16QAM: 32M7W7D
		64QAM: 32M6W7D
	LTE Band CA_42C Channel Bandwidth: 20MHz+20MHz	QPSK: 37M9G7D
		16QAM: 37M8W7D
		64QAM: 37M8W7D
	LTE Band CA_42C Channel Bandwidth: 20MHz+5MHz	QPSK: 23M1G7D
		16QAM: 23M0W7D
		64QAM: 23M0W7D



EMISSION DESIGNATOR	LTE Band CA_42C Channel Bandwidth: 5MHz+20MHz	QPSK: 23M0G7D
		16QAM:23M0W7D
		64QAM: 23M0W7D
ANTENNA TYPE*	IFA Antenna with -2.3dBi gain for WCDMA IV IFA Antenna with -2.8dBi gain for LTE 12 IFA Antenna with -3.8dBi gain for LTE 41/41C IFA Antenna with -3.5dBi gain for LTE 42/42C	
HW VERSION*	DVT2	
SW VERSION*	0.330SR	
I/O PORTS*	Refer to user's manual	
CABLE SUPPLIED*	N/A	
EXTREME TEMPERATURE*	-20°C ~ 60°C	
EXTREME VOLTAGE*	3.4V~ 4.48V	

NOTE:

- *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, Test Lab is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and four receivers.

MODULATION MODE	TX FUNCTION
WCDMA	1TX/1RX
LTE	1TX/4RX

- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in the test report.
- The detail differences from the Main manufacturer and Secondary manufacturer are as listed below:

Description	Main manufacturer	Secondary manufacturer
LCM	ShenZhen LIDE Communications Ltd.	Wannian Lianchuang Display Technology Co., Ltd.
Audio jack FPC	Shenzhen Xinyu Tengyue Electronics Co.,Ltd.	Jiangxi Zhiboxin Technology Limited Company
MIC	AAC	Gettop
Memory	Samsung	Biwin



Radio frequency switch_DFN-6_0.4-4.2 GHz_SPDT_GPIO_patch	Innowave	Champhill
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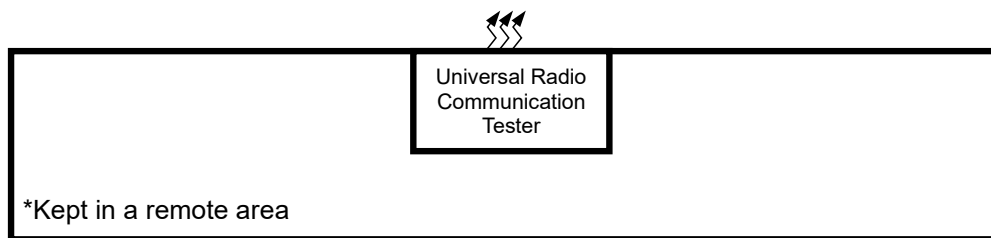
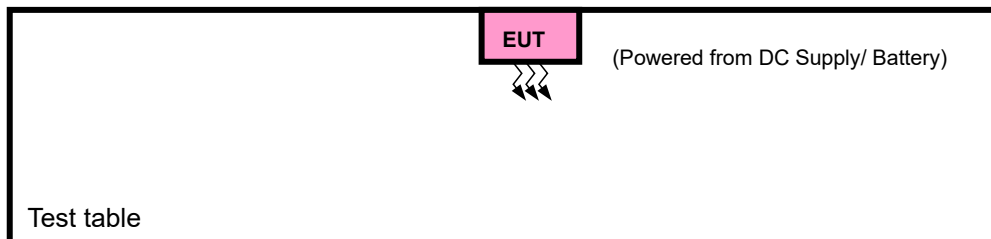
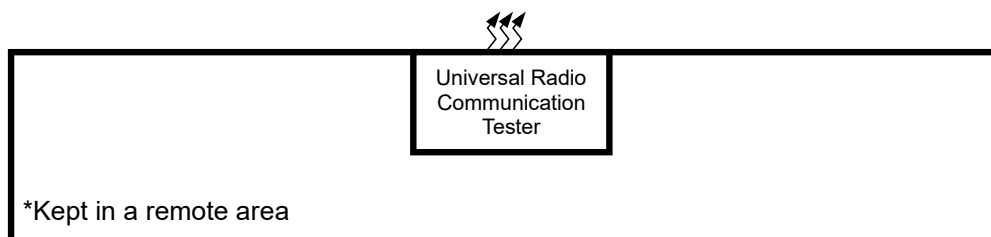
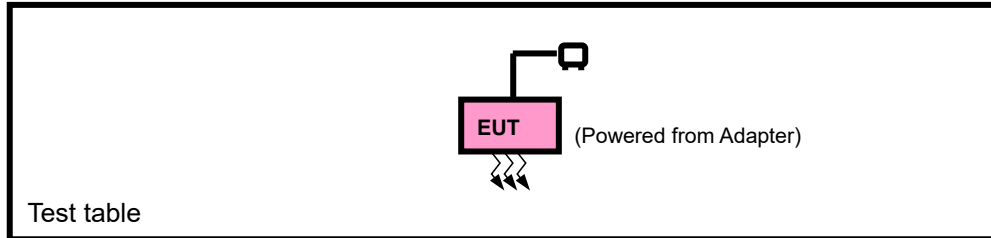
The above materials have only manufacturer differences, and the functions are the same. Other than these changes, other RF performance is the same and does not affect the RF results.

6. List of Accessory:

ACCESSORIES	BRAND	MODEL	SPECIFICATION
CPU	MTK	MT6835T	N/A
eMMC 1 (=ROM 1)	samsung	KM5P9001DM-B424	N/A
eMMC 2 (=ROM 2)	biwin	BW2A2KZC02-64G	N/A
RAM 1	samsun	KM5P9001DM-B424	N/A
RAM 2	biwin	BW2A2KZC02-64G	N/A
Battery	KYOCERA	5AAXB152	Capacity: 3.91Vdc, 4400mAh/17.3Wh

2.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST





2.3 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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Adapter	N/A	N/A	N/A	N/A
2	Earphone	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB Line: Unshielded, Detachable, 1.0m;

2.4 TEST ITEM AND TEST CONFIGURATION

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 on Y-plane for EIRP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + Adapter with WCDMA or LTE link
B	EUT + DC Supply/Battery with WCDMA or LTE link

WCDMA MODE				
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
A	EIRP	1312 to 1513	1312, 1413, 1513	WCDMA
B	FREQUENCY STABILITY	1312 to 1513	1312, 1413, 1513	WCDMA
A	OCCUPIED BANDWIDTH	1312 to 1513	1312, 1413, 1513	WCDMA
A	BAND EDGE	1312 to 1513	1312, 1513	WCDMA
A	PEAK TO AVERAGE RATIO	1312 to 1513	1312, 1413, 1513	WCDMA
A	CONDUCTED EMISSION	1312 to 1513	1312, 1413, 1513	WCDMA
A	RADIATED EMISSION	1312 to 1513	1312, 1413, 1513	WCDMA

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

LTE BAND 12 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
B	FREQUENCY STABILITY	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB offset
A	OCCUPIED BANDWIDTH	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB offset
A	PEAK TO AVERAGE RATIO	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 50 RB / 0 RB offset
A	BAND EDGE	23017 to 23173	23017	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 6 RB / 0 RB offset
			23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 5 RB offset 6 RB / 0 RB offset
		23025 to 23165	23025	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 15 RB / 0 RB offset
			23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 14 RB offset 15 RB / 0 RB offset
		23035 to 23155	23035	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 25 RB / 0 RB offset
			23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB offset 25 RB / 0 RB offset
		23060 to 23130	23060	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 50 RB / 0 RB offset
			23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB offset 50 RB / 0 RB offset
A	CONDCUDED EMISSION	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
A	RADIATED EMISSION	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK	1 RB / 0 RB offset
		23025 to 23165	23095	3MHz	QPSK	1 RB / 0 RB offset
		23035 to 23155	23095	5MHz	QPSK	1 RB / 0 RB offset
		23060 to 23130	23095	10MHz	QPSK	1 RB / 0 RB offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.



LTE BAND 41 MODE						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
A	BAND EDGE	39675 to 41565	39675	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
			41565	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset 25 RB / 0 RB Offset
		39700 to 41540	39700	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
			41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset 50 RB / 0 RB Offset
		39725 to 41515	39725	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 75 RB / 0 RB Offset
			41515	15MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset 75 RB / 0 RB Offset
		39750 to 41490	39750	20MHz	QPSK, 16QAM,	1 RB / 0 RB Offset



					64QAM	100 RB / 0 RB Offset
			41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset
						100 RB / 0 RB Offset
A	CONDCUDED EMISSION	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	39675 to 41565	40620	5MHz	QPSK	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK	1 RB / 0RB Offset
		39725 to 41515	40620	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	40620	20MHz	QPSK	1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

LTE band 42						
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	42115 to 43065	42115,42590,43065	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		42140 to 43040	42140,42590,43040	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		42165 to 43015	42165,42590,43015	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		42190 to 42990	42190,42590,42990	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	42190 to 42990	42190,42590,42990	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	42115 to 43065	42115,42590,43065	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		42140 to 43040	42140,42590,43040	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		42165 to 43015	42165,42590,43015	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		42190 to 42990	42190,42590,42990	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	42190 to 42990	42190,42590,42990	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
A	BAND EDGE	42115 to 43065	42115	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset



		43065	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
		42140 to 43040	42140	10MHz	QPSK, 16QAM, 64QAM
					1 RB / 0 RB Offset
					50 RB / 0 RB Offset
		42165 to 43015	43040	10MHz	QPSK, 16QAM, 64QAM
					1 RB / 49 RB Offset
					50 RB / 0 RB Offset
		42165 to 43015	42165	15MHz	QPSK, 16QAM, 64QAM
					1 RB / 0 RB Offset
					75 RB / 0 RB Offset
		42190 to 42990	43015	15MHz	QPSK, 16QAM, 64QAM
					1 RB / 74 RB Offset
A	CONDCUETED EMISSION	42115 to 43065	42115,42590,43065	5MHz	QPSK, 16QAM, 64QAM
					1 RB / 0 RB Offset
		42140 to 43040	42140,42590,43040	10MHz	QPSK, 16QAM, 64QAM
					1 RB / 0RB Offset
A	RADIATED EMISSION	42165 to 43015	42165,42590,43015	15MHz	QPSK, 16QAM, 64QAM
					1 RB / 0 RB Offset
		42190 to 42990	42190,42590,42990	20MHz	QPSK, 16QAM, 64QAM
					1 RB / 0 RB Offset
A	RADIATED EMISSION	42115 to 43065	42115,42590,43065	5MHz	QPSK, 16QAM, 64QAM
					1 RB / 0 RB Offset
		42140 to 43040	42590	10MHz	QPSK, 16QAM, 64QAM
					1 RB / 0RB Offset
A	RADIATED EMISSION	42165 to 43015	42590	15MHz	QPSK, 16QAM, 64QAM
					1 RB / 0 RB Offset
A	RADIATED EMISSION	42190 to 42990	42590	20MHz	QPSK, 16QAM, 64QAM
					1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.



LTE BAND CA_41C MODE								
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE PCC CHANNEL	AVAILABLE SCC CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(PCC)	MODE(SCC)
A	EIRP	39750 to 41341	39921 to 41512	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		39728 to 41319	39899 to 41490	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		39750 to 41391	39894 to 41535	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		39705 to 41346	39849 to 41490	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset
		39725 to 41365	39875 to 41515	Low, Middle, High	15MHz +15MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		39725 to 41417	39845 to 41537	Low, Middle, High	15MHz +10MHz	QPSK, 16QAM, 64QAM	1RB / 74RB Offset	1RB / 0RB Offset
		39703 to 41395	39823 to 41515	Low, Middle, High	10MHz +15MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset
		39750 to 41440	39867 to 41557	Low, Middle, High	20MHz +5MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		39683 to 41373	39800 to 41490	Low, Middle, High	5MHz +20MHz	QPSK, 16QAM, 64QAM	1RB/ 24RB Offset	1RB/ 0RB Offset
		39750 to 41292	39948 to 41490	Low, Middle, High	20MHz +20MHz	QPSK, 16QAM, 64QAM	1RB / 99RB Offset 1RB / 0RB Offset	1RB/ 0RB Offset
A	OCCUPIED BANDWIDTH	39750 to 41341	39921 to 41512	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	75RB/ 0RB Offset
		39728 to 41319	39899 to 41490	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM	75RB/ 0RB Offset	100RB/ 0RB Offset
		39750 to 41391	39894 to 41535	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	50RB/ 0RB Offset
		39705 to 41346	39849 to 41490	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	50RB/ 0RB Offset	100RB/ 0RB Offset
		39725 to 41365	39875 to 41515	Low, Middle, High	15MHz +15MHz	QPSK, 16QAM, 64QAM	75RB/ 0RB Offset	75RB/ 0RB Offset
		39725 to 41417	39845 to 41537	Low, Middle, High	15MHz +10MHz	QPSK, 16QAM, 64QAM	75RB/ 0RB Offset	50RB/ 0RB Offset
		39703 to 41395	39823 to 41515	Low, Middle, High	10MHz +15MHz	QPSK, 16QAM, 64QAM	50RB/ 0RB Offset	75RB/ 0RB Offset
		39750 to 41440	39867 to 41557	Low, Middle, High	20MHz +5MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	25RB/ 0RB Offset
		39683 to 41373	39800 to 41490	Low, Middle, High	5MHz +20MHz	QPSK, 16QAM, 64QAM	25RB/ 0RB Offset	100RB/ 0RB Offset



A	OCCUPIED BANDWIDTH	39750 to 41292	39948 to 41490	Low, Middle, High	20MHz +20MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	100RB/ 0RB Offset
A	BAND EDGE	39750 to 41292	39948 to 41490	Low	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	100RB/ 0RB Offset
				High	20MHz+20MHz		1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	100RB/ 0RB Offset
A	CONDUCTED EMISSION	39750 to 41292	39948 to 41490	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
A	RADIATED EMISSION	39683 to 41373	39800 to 41490	Middle	5MHz+20MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset
		39703 to 41395	39823 to 41515	Middle	10MHz+15MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset
		39725 to 41365	39875 to 41515	Middle	15MHz+15MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset
		39728 to 41319	39899 to 41490	Low, Middle, High	15MHz+20MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset
		39750 to 41292	39948 to 41490	Middle	20MHz+20MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

LTE BAND CA_42C MODE								
EUT CONFIGURE MODE	TEST ITEM	AVAILABLE PCC CHANNEL	AVAILABLE SCC CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(PCC)	MODE(SCC)
A	EIRP	42145 to 42846	42289 to 42990	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		42168 to 42819	42339 to 42990	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		42190 to 42891	42334 to 43035	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		42190 to 42841	42361 to 43012	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset
		42190 to 42792	42388 to 42990	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
		42190 to 42940	41807 to 43557	Low, Middle, High	20MHz+5MHz	QPSK, 16QAM, 64QAM	1RB / 74RB Offset	1RB / 0RB Offset
		42123 to 42873	42240 to 42990	Low, Middle, High	5MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset



A	OCCUPIED BANDWIDTH	42145 to 42846	42289 to 42990	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	50RB/ 0RB Offset	100RB/ 0RB Offset
		42168 to 42819	42339 to 42990	Low, Middle, High	15MHz+20MHz	QPSK, 16QAM, 64QAM	75RB/ 0RB Offset	100RB/ 0RB Offset
		42190 to 42891	42334 to 43035	Low, Middle, High	20MHz+10MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	50RB/ 0RB Offset
		42190 to 42841	42361 to 43012	Low, Middle, High	20MHz+15MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	75RB/ 0RB Offset
		42190 to 42792	42388 to 42990	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	100RB/ 0RB Offset
		42190 to 42940	41807 to 43557	Low, Middle, High	20MHz+5MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
		42123 to 42873	42240 to 42990	Low, Middle, High	5MHz+20MHz	QPSK, 16QAM, 64QAM	25RB/ 0RB Offset	100RB/ 0RB Offset
		42145 to 42846	42289 to 42990	Low, Middle, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 49RB Offset	1RB/ 0RB Offset
A	BAND EDGE	42190 to 42792	42388 to 42990	Low	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	100RB/ 0RB Offset
			High	20MHz+20MHz	1RB/ 0RB Offset		1RB/ 99RB Offset	
					1RB/ 99RB Offset		1RB/ 0RB Offset	
					100RB/ 0RB Offset		100RB/ 0RB Offset	
A	CONDUCTED EMISSION	42190 to 42792	42388 to 42990	Low, Middle, High	20MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 99RB Offset	1RB/ 0RB Offset
A	RADIATED EMISSION	42123 to 42873	42240 to 42990	Middle	5MHz+20MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset
		42145 to 42846	42289 to 42990	Middle	10MHz+20MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset
		42168 to 42819	42339 to 42990	Low, Middle, High	15MHz+20MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset
		42190 to 42792	42388 to 42990	Middle	20MHz+20MHz	QPSK	1RB / 99RB Offset	1RB/ 0RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

TEST CONDITION			
TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 3.4V/ 3.91V/ 4.48V By Battery	Hanwen Xu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
BAND EDGE	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
CONDCUDED EMISSION	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
RADIATED EMISSION	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC 47 CFR Part 2

FCC 47 CFR Part 27

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-D

ANSI/TIA/EIA-603-E

ANSI C63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.



3. TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

§27.50(d)(4):

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

§27.50(c)(10):

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 band are limited to 3 watts ERP.

§27.50(h)(2) :

The radiated peak output power shall be according to the specific rule Part 27.50(h)(2) that “User stations are limited to 2 watts” and 27.50(i) specific that “Peak transmit power must be measure over any interval of continuous transmission using instrumentation calibration in terms of rms-equivalent voltage.

§27.50(k)(3):

According to the specific rule Part 27.50 (k)(3) Mobile devices are limited to 1Watt (30 dBm) EIRP, Mobile devices operating inl these bands must employ a means for limiting power to the minimum necessary for successful communications.

3.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determing the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T - L_C$$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Meas} , typically dBW or dBm);

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);

L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.



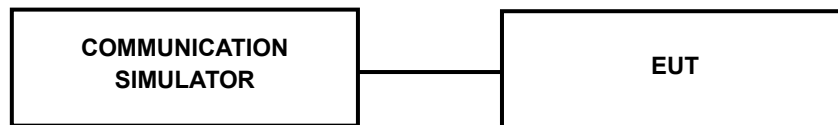
CONDUCTED POWER MEASUREMENT:

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



3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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



3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band	WCDMA IV (Ant1)		
TX Channel	1312	1413	1513
Rx Channel	1537	1638	1738
Frequency	1712.4	1732.6	1752.6
RMC 12.2K	20.13	19.87	19.91
HSDPA Subtest-1	19.39	19.12	19.17
HSDPA Subtest-2	19.28	19.03	19.05
HSDPA Subtest-3	18.93	18.65	18.71
HSDPA Subtest-4	18.93	18.63	18.70
DC-HSDPA Subtest-1	19.35	18.98	19.06
DC-HSDPA Subtest-2	19.22	18.91	19.01
DC-HSDPA Subtest-3	18.89	18.51	18.57
DC-HSDPA Subtest-4	18.82	18.49	18.59
HSUPA Subtest-1	17.05	16.66	16.72
HSUPA Subtest-2	17.38	17.11	17.15
HSUPA Subtest-3	17.84	17.86	17.88
HSUPA Subtest-4	16.91	16.68	16.67
HSUPA Subtest-5	18.38	18.09	18.11
HSPA+ Subtest-1	18.83	18.58	18.63



LTE Band 12(Ant0)						
Band/BW	Modulation	RB Size	RB offset	Low CH 23017	Mid CH 23095	High CH 23173
				Frequency 699.7 MHz	Frequency 707.5 MHz	Frequency 715.3 MHz
12/ 1.4	QPSK	1	0	23.18	23.17	23.17
		1	2	23.08	23.10	23.18
		1	5	23.19	23.15	23.10
		3	0	23.09	24.14	23.26
		3	1	23.19	23.12	23.21
		3	3	23.16	23.08	23.11
		6	0	22.15	22.11	22.21
	16QAM	1	0	22.41	22.35	22.28
		1	2	22.39	22.22	22.23
		1	5	22.49	22.17	22.37
		3	0	22.05	22.11	22.17
		3	1	22.06	22.02	22.18
		3	3	22.15	22.23	22.10
		6	0	21.09	21.19	21.16
	64QAM	1	0	21.35	21.37	21.32
		1	2	21.21	21.22	21.26
		1	5	21.18	21.20	21.25
		3	0	21.24	21.07	21.02
		3	1	20.99	20.98	20.94
		3	3	21.03	20.97	21.12
		6	0	20.07	20.03	20.10



LTE Band 12(Ant0)						
Band/BW	Modulation	RB Size	RB offset	Low CH 23025	Mid CH 23095	High CH 23165
				Frequency 700.5 MHz	Frequency 707.5 MHz	Frequency 714.5 MHz
12/ 3	QPSK	1	0	23.21	23.13	23.27
		1	7	23.05	23.16	23.16
		1	14	23.26	23.06	23.17
		8	0	22.08	23.15	22.18
		8	3	22.13	22.09	22.19
		8	7	22.10	22.06	22.23
		15	0	22.01	22.17	22.21
	16QAM	1	0	22.45	22.43	22.24
		1	7	22.43	22.21	22.35
		1	14	22.40	22.27	22.35
		8	0	21.13	21.07	21.15
		8	3	21.17	21.08	21.11
		8	7	21.13	21.15	21.02
		15	0	21.03	21.15	21.14
	64QAM	1	0	21.28	21.36	21.35
		1	7	21.26	21.19	21.16
		1	14	21.12	21.30	21.25
		8	0	20.07	20.23	20.12
		8	3	20.02	19.97	19.99
		8	7	20.03	19.93	20.04
		15	0	20.05	20.01	20.00



LTE Band 12(Ant0)						
Band/BW	Modulation	RB Size	RB offset	Low CH 23035	Mid CH 23095	High CH 23155
				Frequency 701.5 MHz	Frequency 707.5 MHz	Frequency 713.5 MHz
12/ 5	QPSK	1	0	23.23	23.18	23.30
		1	12	23.02	23.10	23.22
		1	24	23.24	23.05	23.08
		12	0	22.13	23.10	22.15
		12	6	22.20	22.14	22.27
		12	13	22.10	22.06	22.23
		25	0	22.07	22.13	22.17
	16QAM	1	0	22.41	22.40	22.31
		1	12	22.38	22.20	22.25
		1	24	22.48	22.17	22.36
		12	0	21.01	21.10	21.22
		12	6	21.05	21.07	21.06
		12	13	21.12	21.12	21.10
		25	0	21.01	21.14	21.13
	64QAM	1	0	21.32	21.38	21.38
		1	12	21.13	21.11	21.27
		1	24	21.19	21.28	21.17
		12	0	20.05	20.39	20.06
		12	6	19.96	19.93	19.99
		12	13	19.94	20.05	19.99
		25	0	20.07	20.09	20.05



LTE Band 12(Ant0)						
Band/BW	Modulation	RB Size	RB offset	Low CH 23060	Mid CH 23095	High CH 23130
				Frequency 704 MHz	Frequency 707.5 MHz	Frequency 711 MHz
12/ 10	QPSK	1	0	23.27	23.28	23.31
		1	24	23.16	23.22	23.24
		1	49	23.24	23.20	23.19
		25	0	22.23	22.25	22.30
		25	12	22.22	22.21	22.28
		25	25	22.18	22.18	22.25
		50	0	22.16	22.23	22.26
	16QAM	1	0	22.53	22.44	22.39
		1	24	22.46	22.35	22.37
		1	49	22.50	22.31	22.41
		25	0	21.16	21.18	21.25
		25	12	21.20	21.17	21.21
		25	25	21.17	21.24	21.16
		50	0	21.15	21.22	21.23
	64QAM	1	0	21.38	21.41	21.46
		1	24	21.27	21.26	21.30
		1	49	21.27	21.31	21.27
		25	0	20.15	20.17	20.13
		25	12	20.09	20.07	20.09
		25	25	20.08	20.08	20.13
		50	0	20.10	20.15	20.13



LTE Band 41(Ant0)						
Band/BW	Modulation	RB Size	RB Offset	Low CH (39675)	Mid CH (40620)	High CH (41565)
				Frequency (2498.5)MHz	Frequency (2593)MHz	Frequency (2687.5)MHz
41/ 5	QPSK	1	0	19.08	19.23	19.01
		1	12	19.06	19.05	18.91
		1	24	18.90	19.05	18.91
		12	0	19.07	19.04	19.09
		12	6	19.08	19.12	19.03
		12	13	19.01	18.96	19.02
		25	0	19.07	19.12	19.00
	16QAM	1	0	19.07	18.99	18.95
		1	12	19.06	19.10	18.91
		1	24	18.93	19.02	18.78
		12	0	18.86	18.94	18.91
		12	6	18.89	18.99	18.89
		12	13	18.94	18.86	18.81
		25	0	18.99	18.85	18.80
	64QAM	1	0	18.95	18.69	18.73
		1	12	18.64	18.80	18.70
		1	24	18.57	18.73	18.63
		12	0	19.05	18.97	18.97
		12	6	18.94	19.01	18.83
		12	13	18.88	18.93	18.90
		25	0	18.90	18.97	18.87



LTE Band 41(Ant0)						
Band/BW	Modulation	RB Size	RB Offset	Low CH (39700)	Mid CH (40620)	High CH (41540)
				Frequency (2501)MHz	Frequency (2593)MHz	Frequency (2685)MHz
41/ 10	QPSK	1	0	19.13	19.13	18.96
		1	24	19.01	19.16	18.91
		1	49	18.91	19.00	18.94
		25	0	19.09	19.08	19.07
		25	12	19.10	19.01	19.04
		25	25	19.09	19.03	18.99
		50	0	19.06	19.06	18.90
	16QAM	1	0	19.01	19.03	18.90
		1	24	18.97	19.05	18.93
		1	49	18.80	19.03	18.85
		25	0	18.90	18.99	18.81
		25	12	18.88	18.94	18.90
		25	25	18.95	18.92	18.77
		50	0	18.99	18.88	18.82
	64QAM	1	0	18.95	18.73	18.68
		1	24	18.77	18.77	18.60
		1	49	18.61	18.63	18.63
		25	0	19.00	19.01	19.11
		25	12	18.97	18.91	18.93
		25	25	18.88	18.85	18.84
		50	0	18.87	18.97	18.80



LTE Band 41(Ant0)						
Band/BW	Modulation	RB Size	RB Offset	Low CH (39725)	Mid CH (40620)	High CH(41515)
				Frequency (2503.5)MHz	Frequency (2593)MHz	Frequency (2682.5)MHz
41/ 15	QPSK	1	0	19.07	19.23	18.95
		1	37	19.08	19.17	18.89
		1	74	19.00	18.98	18.83
		36	0	19.14	19.04	19.07
		36	19	18.96	19.07	19.05
		36	39	19.02	19.09	18.91
		75	0	19.12	19.13	18.94
	16QAM	1	0	19.03	18.99	18.90
		1	37	19.05	19.06	18.81
		1	74	18.80	18.98	18.83
		36	0	18.92	18.95	18.84
		36	19	18.89	18.89	18.89
		36	39	18.87	18.90	18.86
		75	0	18.91	18.97	18.81
	64QAM	1	0	19.00	18.78	18.66
		1	37	18.76	18.85	18.63
		1	74	18.60	18.72	18.56
		36	0	19.02	18.95	19.00
		36	19	18.97	18.95	18.90
		36	39	18.95	18.93	18.78
		75	0	18.93	18.93	18.91



LTE Band 41(Ant0)						
Band/BW	Modulation	RB Size	RB Offset	Low CH(39750)	Mid CH(40620)	High CH(41490)
				Frequency (2506)MHz	Frequency (2593)MHz	Frequency (2680)MHz
41/ 20	QPSK	1	0	19.16	19.28	19.06
		1	50	19.12	19.20	19.04
		1	99	19.02	19.11	18.97
		50	0	19.16	19.19	19.10
		50	25	19.11	19.14	19.07
		50	50	19.14	19.11	19.04
		100	0	19.15	19.21	19.05
	16QAM	1	0	19.08	19.12	18.99
		1	50	19.07	19.12	18.95
		1	99	18.94	19.05	18.92
		50	0	19.01	19.02	18.93
		50	25	19.01	19.00	18.93
		50	50	18.97	19.00	18.89
		100	0	19.00	19.00	18.91
	64QAM	1	0	19.01	18.83	18.76
		1	50	18.79	18.87	18.72
		1	99	18.70	18.76	18.66
		50	0	19.06	19.02	19.12
		50	25	19.00	19.04	18.95
		50	50	18.96	18.99	18.91
		100	0	18.98	19.01	18.92



LTE band 42 (Ant0)						
Band/BW	Modulation	RB Size	RB Offset	Low CH (42115)	Mid CH (42590)	High CH (43065)
				Frequency (3452.5)MHz	Frequency (3500)MHz	Frequency (3547.5)MHz
42/ 5	QPSK	1	0	19.15	19.27	19.17
		1	12	19.15	19.42	19.21
		1	24	19.48	19.43	19.15
		12	0	19.24	19.19	19.22
		12	6	19.12	19.18	19.22
		12	13	19.35	19.29	19.27
		25	0	19.44	19.25	19.25
	16QAM	1	0	19.25	19.31	19.29
		1	12	19.33	19.25	19.22
		1	24	19.14	19.19	19.24
		12	0	19.20	19.38	19.20
		12	6	19.17	19.19	19.22
		12	13	19.15	19.06	19.16
		25	0	19.22	19.14	19.27
	64QAM	1	0	18.83	19.13	18.83
		1	12	18.82	19.21	18.80
		1	24	18.83	19.05	18.86
		12	0	19.27	19.09	19.21
		12	6	19.22	19.38	19.19
		12	13	19.15	19.19	19.20
		25	0	19.15	19.11	19.27



LTE band 42 (Ant0)						
Band/BW	Modulation	RB Size	RB Offset	Low CH (42140)	Mid CH (42590)	High CH (43040)
				Frequency (3455)MHz	Frequency (3500)MHz	Frequency (3545)MHz
42/ 10	QPSK	1	0	19.13	19.17	19.16
		1	24	19.17	19.34	19.19
		1	49	19.40	19.37	19.23
		25	0	19.24	19.21	19.25
		25	12	19.17	19.30	19.18
		25	25	19.44	19.25	19.25
		50	0	19.42	19.35	19.25
	16QAM	1	0	19.32	19.40	19.34
		1	24	19.24	19.34	19.10
		1	49	19.17	19.20	19.18
		25	0	19.26	19.27	19.14
		25	12	19.19	19.19	19.27
		25	25	19.18	19.07	19.19
		50	0	19.23	19.08	19.20
	64QAM	1	0	18.93	19.22	18.82
		1	24	18.87	19.20	18.83
		1	49	18.89	19.15	18.77
		25	0	19.27	19.16	19.26
		25	12	19.19	19.27	19.15
		25	25	19.22	19.13	19.19
		50	0	19.22	19.07	19.22



LTE band 42 (Ant0)						
Band/BW	Modulation	RB Size	RB Offset	Low CH (42165)	Mid CH (42590)	High CH (43015)
				Frequency (3457.5)MHz	Frequency (3500)MHz	Frequency (3542.5)MHz
42/ 15	QPSK	1	0	19.21	19.27	19.25
		1	37	19.20	19.42	19.21
		1	74	19.46	19.42	19.25
		36	0	19.27	19.27	19.13
		36	19	19.22	19.28	19.08
		36	39	19.37	19.29	19.22
		75	0	19.38	19.32	19.20
	16QAM	1	0	19.32	19.26	19.32
		1	37	19.19	19.21	19.12
		1	74	19.16	19.30	19.19
		36	0	19.16	19.40	19.19
		36	19	19.24	19.26	19.26
		36	39	19.15	19.03	19.22
		75	0	19.17	19.09	19.16
	64QAM	1	0	18.85	19.13	18.81
		1	37	18.86	19.30	18.83
		1	74	18.86	19.05	18.90
		36	0	19.30	19.20	19.23
		36	19	19.18	19.29	19.25
		36	39	19.14	19.17	19.30
		75	0	19.16	19.09	19.28



LTE band 42 (Ant0)						
Band/BW	Modulation	RB Size	RB Offset	Low CH (42190)	Mid CH (42590)	High CH (42990)
				Frequency (3460)MHz	Frequency (3500)MHz	Frequency (3540)MHz
42/ 20	QPSK	1	0	19.27	19.32	19.27
		1	50	19.25	19.44	19.26
		1	99	19.53	19.48	19.29
		50	0	19.28	19.29	19.27
		50	25	19.27	19.31	19.23
		50	50	19.46	19.36	19.30
		100	0	19.47	19.38	19.27
	16QAM	1	0	19.38	19.41	19.37
		1	50	19.34	19.35	19.25
		1	99	19.27	19.33	19.31
		50	0	19.30	19.41	19.29
		50	25	19.28	19.32	19.28
		50	50	19.29	19.18	19.30
		100	0	19.29	19.17	19.28
	64QAM	1	0	18.96	19.23	18.95
		1	50	18.91	19.33	18.94
		1	99	18.96	19.18	18.91
		50	0	19.31	19.24	19.29
		50	25	19.32	19.39	19.30
		50	50	19.28	19.25	19.31
		100	0	19.30	19.19	19.29



VERTAS

CA_41C Ant0									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39750	2506	39948	2525.8	QPSK	1	99	1	0	19.12
				16QAM	1	99	1	0	19.29
				64QAM	1	99	1	0	18.85
40521	2583.1	40719	2602.9	QPSK	1	99	1	0	19.39
				16QAM	1	99	1	0	19.31
				64QAM	1	99	1	0	18.97
41292	2660.2	41490	2680	QPSK	1	99	1	0	19.09
				16QAM	1	99	1	0	19.21
				64QAM	1	99	1	0	18.79
Combination 20MHz+15MHz (100RB+75RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39750	2506	39921	2523.1	QPSK	1	99	1	0	19.08
				16QAM	1	99	1	0	19.16
				64QAM	1	99	1	0	18.76
40546	2585.6	40717	2602.7	QPSK	1	99	1	0	19.35
				16QAM	1	99	1	0	19.19
				64QAM	1	99	1	0	18.84
41341	2665.1	41512	2682.2	QPSK	1	99	1	0	18.98
				16QAM	1	99	1	0	19.12
				64QAM	1	99	1	0	18.65



VERTAS

CA_41C Ant0									
Combination 15MHz+20MHz (75RB+100RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39728	2503.8	39899	2520.9	QPSK	1	74	1	0	18.98
				16QAM	1	74	1	0	19.22
				64QAM	1	74	1	0	18.78
40523	2583.3	40694	2600.4	QPSK	1	74	1	0	19.34
				16QAM	1	74	1	0	19.21
				64QAM	1	74	1	0	18.91
41319	2662.9	41490	2680	QPSK	1	74	1	0	18.94
				16QAM	1	74	1	0	19.06
				64QAM	1	74	1	0	18.73
Combination 15MHz+15MHz (75RB+75RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39725	2503.5	39875	2518.5	QPSK	1	74	1	0	19.10
				16QAM	1	74	1	0	19.20
				64QAM	1	74	1	0	18.79
40545	2585.5	40695	2600.5	QPSK	1	74	1	0	19.31
				16QAM	1	74	1	0	19.17
				64QAM	1	74	1	0	18.83
41365	2667.5	41515	2682.5	QPSK	1	74	1	0	19.03
				16QAM	1	74	1	0	19.10
				64QAM	1	74	1	0	18.76



VERTITAS

CA_41C Ant0									
Combination 20MHz+10MHz (100RB+50RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39750	2506	39894	2520.4	QPSK	1	99	1	0	18.98
				16QAM	1	99	1	0	19.18
				64QAM	1	99	1	0	18.75
40571	2588.1	40715	2602.5	QPSK	1	99	1	0	19.36
				16QAM	1	99	1	0	19.28
				64QAM	1	99	1	0	18.87
41391	2670.1	41535	2684.5	QPSK	1	99	1	0	19.05
				16QAM	1	99	1	0	19.10
				64QAM	1	99	1	0	18.70
Combination 10MHz+20MHz (50RB+100RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39705	2501.5	39849	2515.9	QPSK	1	49	1	0	19.05
				16QAM	1	49	1	0	19.22
				64QAM	1	49	1	0	18.76
40526	2583.6	40670	2598	QPSK	1	49	1	0	19.24
				16QAM	1	49	1	0	19.24
				64QAM	1	49	1	0	18.95
41346	2665.6	41490	2680	QPSK	1	49	1	0	18.97
				16QAM	1	49	1	0	19.08
				64QAM	1	49	1	0	18.65



CA_41C Ant0									
Combination 15MHz+10MHz (75RB+50RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39725	2503.5	39845	2515.5	QPSK	1	74	1	0	19.09
				16QAM	1	74	1	0	19.20
				64QAM	1	74	1	0	18.81
40571	2588.1	40691	2600.1	QPSK	1	74	1	0	19.30
				16QAM	1	74	1	0	19.22
				64QAM	1	74	1	0	18.92
41417	2672.7	41537	2684.7	QPSK	1	74	1	0	18.95
				16QAM	1	74	1	0	19.16
				64QAM	1	74	1	0	18.75
Combination 10MHz+15MHz (50RB+75RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39703	2501.3	39823	2513.3	QPSK	1	49	1	0	19.11
				16QAM	1	49	1	0	19.20
				64QAM	1	49	1	0	18.81
40549	2585.9	40669	2597.9	QPSK	1	49	1	0	19.32
				16QAM	1	49	1	0	19.17
				64QAM	1	49	1	0	18.94
41395	2670.5	41515	2682.5	QPSK	1	49	1	0	19.06
				16QAM	1	49	1	0	19.17
				64QAM	1	49	1	0	18.73



CA_41C Ant0									
Combination 20MHz+5MHz (100RB+25RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39750	2506	39867	2517.7	QPSK	1	99	1	0	19.01
				16QAM	1	99	1	0	19.18
				64QAM	1	99	1	0	18.79
40595	2590.5	40712	2602.2	QPSK	1	99	1	0	19.29
				16QAM	1	99	1	0	19.24
				64QAM	1	99	1	0	18.85
41440	2675	41557	2686.7	QPSK	1	99	1	0	19.00
				16QAM	1	99	1	0	19.07
				64QAM	1	99	1	0	18.73
Combination 5MHz+20MHz (25RB+100RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
39683	2499.3	39800	2511	QPSK	1	24	1	0	18.99
				16QAM	1	24	1	0	19.18
				64QAM	1	24	1	0	18.82
40528	2583.8	40645	2595.5	QPSK	1	24	1	0	19.30
				16QAM	1	24	1	0	19.24
				64QAM	1	24	1	0	18.86
41373	2668.3	41490	2680	QPSK	1	24	1	0	18.97
				16QAM	1	24	1	0	19.09
				64QAM	1	24	1	0	18.76



Part27 CA_42C Ant0									
Combination 20MHz+20MHz (100RB+100RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
42190	3460	42388	3480	QPSK	1	99	1	0	19.34
				16QAM	1	99	1	0	19.45
				64QAM	1	99	1	0	19.02
42491	3490.1	42689	3510	QPSK	1	99	1	0	19.79
				16QAM	1	99	1	0	19.72
				64QAM	1	99	1	0	19.57
42792	3520.2	42990	3540	QPSK	1	99	1	0	19.25
				16QAM	1	99	1	0	19.29
				64QAM	1	99	1	0	19.01
Combination 20MHz+15MHz (100RB+75RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
42190	3460	42361	3477	QPSK	1	99	1	0	19.33
				16QAM	1	99	1	0	19.30
				64QAM	1	99	1	0	18.94
42516	3492.6	42687	3510	QPSK	1	99	1	0	19.66
				16QAM	1	99	1	0	19.66
				64QAM	1	99	1	0	19.54
42841	3525.1	43012	3542	QPSK	1	99	1	0	19.14
				16QAM	1	99	1	0	19.22
				64QAM	1	99	1	0	18.80



Part27 CA_42C Ant0									
Combination 15MHz+20MHz (75RB+100RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
42168	3457.8	42339	3475	QPSK	1	74	1	0	19.29
				16QAM	1	74	1	0	19.38
				64QAM	1	74	1	0	18.96
42493	3490.3	42664	3507	QPSK	1	74	1	0	19.60
				16QAM	1	74	1	0	19.61
				64QAM	1	74	1	0	19.56
42819	3522.9	42990	3540	QPSK	1	74	1	0	19.19
				16QAM	1	74	1	0	19.23
				64QAM	1	74	1	0	18.83
Combination 20MHz+10MHz (100RB+50RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
42190	3460	42334	3474	QPSK	1	99	1	0	19.32
				16QAM	1	99	1	0	19.20
				64QAM	1	99	1	0	18.84
42541	3495.1	42685	3510	QPSK	1	99	1	0	19.58
				16QAM	1	99	1	0	19.62
				64QAM	1	99	1	0	19.42
42891	3530.1	43035	3545	QPSK	1	99	1	0	19.06
				16QAM	1	99	1	0	19.20
				64QAM	1	99	1	0	18.70

Part27 CA_42C Ant0									
Combination 10MHz+20MHz (50RB+100RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
42145	3455.5	42289	3470	QPSK	1	49	1	0	19.17
				16QAM	1	49	1	0	19.25
				64QAM	1	49	1	0	18.82
42496	3490.6	42640	3505	QPSK	1	49	1	0	19.46
				16QAM	1	49	1	0	19.54
				64QAM	1	49	1	0	19.41
42846	3525.6	42990	3540	QPSK	1	49	1	0	19.13
				16QAM	1	49	1	0	19.20
				64QAM	1	49	1	0	18.78
Combination 20MHz+5MHz (100RB+25RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
42190	3460	42307	3472	QPSK	1	99	1	0	19.30
				16QAM	1	99	1	0	19.25
				64QAM	1	99	1	0	18.85
42565	3497.5	42682	3509	QPSK	1	99	1	0	19.55
				16QAM	1	99	1	0	19.64
				64QAM	1	99	1	0	19.46
42940	3535	43057	3547	QPSK	1	99	1	0	19.09
				16QAM	1	99	1	0	19.15
				64QAM	1	99	1	0	18.79



Part27 CA_42C Ant0									
Combination 5MHz+20MHz (25RB+100RB)									
PCC Chann el	PCC Frequen cy (MHz)	SCC Chann el	SCC Frequen cy (MHz)	Modulati on	PCC		SCC		Measur ed Power (dBm)
					RB Size	RB offset	RB Size	RB offset	
42123	3453.3	42240	3465	QPSK	1	24	1	0	19.16
				16QAM	1	24	1	0	19.25
				64QAM	1	24	1	0	18.88
42498	3490.8	42615	3503	QPSK	1	24	1	0	19.49
				16QAM	1	24	1	0	19.45
				64QAM	1	24	1	0	19.51
42873	3528.3	42990	3540	QPSK	1	24	1	0	19.17
				16QAM	1	24	1	0	19.12
				64QAM	1	24	1	0	18.82



EIRP

WCDMA IV

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
1312	1712.4	20.13	-2.3	17.83	60.67	1
1413	1732.6	19.87	-2.3	17.57	57.15	1
1513	1752.6	19.91	-2.3	17.61	57.68	1

LTE BAND 12

1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	23.19	-2.8	18.24	66.68	3
23095	707.5	24.14	-2.8	19.19	82.99	3
23173	715.3	23.26	-2.8	18.31	67.76	3

1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	22.49	-2.8	17.54	56.75	3
23095	707.5	22.35	-2.8	17.4	54.95	3
23173	715.3	22.37	-2.8	17.42	55.21	3

1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	21.35	-2.8	16.4	43.65	3
23095	707.5	21.37	-2.8	16.42	43.85	3
23173	715.3	21.32	-2.8	16.37	43.35	3

3MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	23.26	-2.8	18.31	67.76	3
23095	707.5	23.16	-2.8	18.21	66.22	3
23165	714.5	23.27	-2.8	18.32	67.92	3

3MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	22.45	-2.8	17.5	56.23	3
23095	707.5	22.43	-2.8	17.48	55.98	3
23165	714.5	22.35	-2.8	17.4	54.95	3

3MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	21.28	-2.8	16.33	42.95	3
23095	707.5	21.36	-2.8	16.41	43.75	3
23165	714.5	21.35	-2.8	16.4	43.65	3



5MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	23.24	-2.8	18.29	67.45	3
23095	707.5	23.18	-2.8	18.23	66.53	3
23155	713.5	23.3	-2.8	18.35	68.39	3

5MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	22.48	-2.8	17.53	56.62	3
23095	707.5	22.4	-2.8	17.45	55.59	3
23155	713.5	22.36	-2.8	17.41	55.08	3

5MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	21.32	-2.8	16.37	43.35	3
23095	707.5	21.38	-2.8	16.43	43.95	3
23155	713.5	21.38	-2.8	16.43	43.95	3



10MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	23.27	-2.8	18.32	67.92	3
23095	707.5	23.28	-2.8	18.33	68.08	3
23130	711	23.31	-2.8	18.36	68.55	3

10MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	22.53	-2.8	17.58	57.28	3
23095	707.5	22.44	-2.8	17.49	56.1	3
23130	711	22.41	-2.8	17.46	55.72	3

10MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	21.38	-2.8	16.43	43.95	3
23095	707.5	21.41	-2.8	16.46	44.26	3
23130	711	21.46	-2.8	16.51	44.77	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).



LTE BAND 41 (2.6G Band)

5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	19.08	-3.8	15.28	33.73	2
40620	2593	19.23	-3.8	15.43	34.91	2
41565	2687.5	19.09	-3.8	15.29	33.81	2

5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	19.07	-3.8	15.27	33.65	2
40620	2593	19.1	-3.8	15.3	33.88	2
41565	2687.5	18.95	-3.8	15.15	32.73	2

5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	19.05	-3.8	15.25	33.5	2
40620	2593	19.01	-3.8	15.21	33.19	2
41565	2687.5	18.97	-3.8	15.17	32.89	2



10MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501	19.13	-3.8	15.33	34.12	2
40620	2593	19.16	-3.8	15.36	34.36	2
41540	2685	19.07	-3.8	15.27	33.65	2

10MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501	19.01	-3.8	15.21	33.19	2
40620	2593	19.05	-3.8	15.25	33.5	2
41540	2685	18.93	-3.8	15.13	32.58	2

10MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501	19	-3.8	15.2	33.11	2
40620	2593	19.01	-3.8	15.21	33.19	2
41540	2685	19.11	-3.8	15.31	33.96	2

15MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	19.14	-3.8	15.34	34.2	2
40620	2593	19.23	-3.8	15.43	34.91	2
41515	2682.5	19.07	-3.8	15.27	33.65	2

15MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	19.05	-3.8	15.25	33.5	2
40620	2593	19.06	-3.8	15.26	33.57	2
41515	2682.5	18.9	-3.8	15.1	32.36	2

15MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	19.02	-3.8	15.22	33.27	2
40620	2593	18.95	-3.8	15.15	32.73	2
41515	2682.5	19	-3.8	15.2	33.11	2

20MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506	19.16	-3.8	15.36	34.36	2
40620	2593	19.28	-3.8	15.48	35.32	2
41490	2680	19.1	-3.8	15.3	33.88	2

20MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506	19.08	-3.8	15.28	33.73	2
40620	2593	19.12	-3.8	15.32	34.04	2
41490	2680	18.99	-3.8	15.19	33.04	2

20 MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506	19.06	-3.8	15.26	33.57	2
40620	2593	19.04	-3.8	15.24	33.42	2
41490	2680	19.12	-3.8	15.32	34.04	2



LTE Band 42						
5MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42115	3452.5	19.48	-3.5	15.98	39.63	2
42590	3500	19.43	-3.5	15.93	39.17	2
43065	3547.5	19.27	-3.5	15.77	37.76	2

5MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42115	3452.5	19.33	-3.5	15.83	38.28	2
42590	3500	19.38	-3.5	15.88	38.73	2
43065	3547.5	19.29	-3.5	15.79	37.93	2

5MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42115	3452.5	19.27	-3.5	15.77	37.76	2
42590	3500	19.38	-3.5	15.88	38.73	2
43065	3547.5	19.27	-3.5	15.77	37.76	2



10MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42140	3455	19.44	-3.5	15.94	39.26	2
42590	3500	19.37	-3.5	15.87	38.64	2
43040	3545	19.25	-3.5	15.75	37.58	2

10MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42140	3455	19.32	-3.5	15.82	38.19	2
42590	3500	19.4	-3.5	15.9	38.9	2
43040	3545	19.34	-3.5	15.84	38.37	2

10MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42140	3455	19.27	-3.5	15.77	37.76	2
42590	3500	19.27	-3.5	15.77	37.76	2
43040	3545	19.26	-3.5	15.76	37.67	2



15MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42165	3457.5	19.46	-3.5	15.96	39.45	2
42590	3500	19.42	-3.5	15.92	39.08	2
43015	3542.5	19.25	-3.5	15.75	37.58	2

15MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42165	3457.5	19.32	-3.5	15.82	38.19	2
42590	3500	19.4	-3.5	15.9	38.9	2
43015	3542.5	19.32	-3.5	15.82	38.19	2

15MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42165	3457.5	19.3	-3.5	15.8	38.02	2
42590	3500	19.3	-3.5	15.8	38.02	2
43015	3542.5	19.3	-3.5	15.8	38.02	2

20MHz QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42190	3460	19.53	-3.5	16.03	40.09	19.53
42590	3500	19.48	-3.5	15.98	39.63	19.48
42990	3540	19.3	-3.5	15.8	38.02	19.3

20MHz 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42190	3460	19.38	-3.5	15.88	38.73	2
42590	3500	19.41	-3.5	15.91	38.99	2
42990	3540	19.37	-3.5	15.87	38.64	2

20MHz 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
42190	3460	19.32	-3.5	15.82	38.19	2
42590	3500	19.39	-3.5	15.89	38.82	2
42990	3540	19.31	-3.5	15.81	38.11	2



LTE B41 20M+20M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39948	2506/2525.8	19.12	-3.8	15.32	34.04	2
40521/40719	2583.1/2602.9	19.39	-3.8	15.59	36.22	2
41292/41490	2660.2/2680	19.09	-3.8	15.29	33.81	2

LTE B41 20M+20M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39948	2506/2525.8	19.29	-3.8	15.49	35.4	2
40521/40719	2583.1/2602.9	19.31	-3.8	15.51	35.56	2
41292/41490	2660.2/2680	19.21	-3.8	15.41	34.75	2

LTE B41 20M+20M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39948	2506/2525.8	18.85	-3.8	15.05	31.99	2
40521/40719	2583.1/2602.9	18.97	-3.8	15.17	32.89	2
41292/41490	2660.2/2680	18.79	-3.8	14.99	31.55	2



LTE B41 20M+15M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39921	2506/2523.1	19.08	-3.8	15.28	33.73	2
40546/40717	2585.6/2602.7	19.35	-3.8	15.55	35.89	2
41341/41512	2665.1/2682.2	18.98	-3.8	15.18	32.96	2

LTE B41 20M+15M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39921	2506/2523.1	19.16	-3.8	15.36	34.36	2
40546/40717	2585.6/2602.7	19.19	-3.8	15.39	34.59	2
41341/41512	2665.1/2682.2	19.12	-3.8	15.32	34.04	2

LTE B41 20M+15M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39921	2506/2523.1	18.76	-3.8	14.96	31.33	2
40546/40717	2585.6/2602.7	18.84	-3.8	15.04	31.92	2
41341/41512	2665.1/2682.2	18.65	-3.8	14.85	30.55	2



LTE B41 15M+20M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39728/39899	2503.8/2520.9	18.98	-3.8	15.18	32.96	2
40523/40694	2583.3/2600.4	19.34	-3.8	15.54	35.81	2
41319/41490	2662.9/2680	18.94	-3.8	15.14	32.66	2

LTE B41 15M+20M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39728/39899	2503.8/2520.9	19.22	-3.8	15.42	34.83	2
40523/40694	2583.3/2600.4	19.21	-3.8	15.41	34.75	2
41319/41490	2662.9/2680	19.06	-3.8	15.26	33.57	2

LTE B41 15M+20M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39728/39899	2503.8/2520.9	18.78	-3.8	14.98	31.48	2
40523/40694	2583.3/2600.4	18.91	-3.8	15.11	32.43	2
41319/41490	2662.9/2680	18.73	-3.8	14.93	31.12	2



LTE B41 15M+15M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39725/39875	2503.5/2518.5	19.1	-3.8	15.3	33.88	2
40545/40695	2585.5/2600.5	19.31	-3.8	15.51	35.56	2
41365/41515	2667.5/2682.5	19.03	-3.8	15.23	33.34	2

LTE B41 15M+15M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39725/39875	2503.5/2518.5	19.2	-3.8	15.4	34.67	2
40545/40695	2585.5/2600.5	19.17	-3.8	15.37	34.43	2
41365/41515	2667.5/2682.5	19.1	-3.8	15.3	33.88	2

LTE B41 15M+15M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39725/39875	2503.5/2518.5	18.79	-3.8	14.99	31.55	2
40545/40695	2585.5/2600.5	18.83	-3.8	15.03	31.84	2
41365/41515	2667.5/2682.5	18.76	-3.8	14.96	31.33	2



LTE B41 20M+10M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39894	2506/2520.4	18.98	-3.8	15.18	32.96	2
40571/40715	2588.1/2602.5	19.36	-3.8	15.56	35.97	2
41391/41535	2670.1/2684.5	19.05	-3.8	15.25	33.5	2

LTE B41 20M+10M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39894	2506/2520.4	19.18	-3.8	15.38	34.51	2
40571/40715	2588.1/2602.5	19.28	-3.8	15.48	35.32	2
41391/41535	2670.1/2684.5	19.1	-3.8	15.3	33.88	2

LTE B41 20M+10M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39894	2506/2520.4	18.75	-3.8	14.95	31.26	2
40571/40715	2588.1/2602.5	18.87	-3.8	15.07	32.14	2
41391/41535	2670.1/2684.5	18.7	-3.8	14.9	30.9	2



LTE B41 10M+20M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39894	2506/2520.4	19.05	-3.8	15.25	33.5	2
40571/40715	2588.1/2602.5	19.24	-3.8	15.44	34.99	2
41391/41535	2670.1/2684.5	18.97	-3.8	15.17	32.89	2

LTE B41 10M+20M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39894	2506/2520.4	19.22	-3.8	15.42	34.83	2
40571/40715	2588.1/2602.5	19.24	-3.8	15.44	34.99	2
41391/41535	2670.1/2684.5	19.08	-3.8	15.28	33.73	2

LTE B41 10M+20M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39894	2506/2520.4	18.76	-3.8	14.96	31.33	2
40571/40715	2588.1/2602.5	18.95	-3.8	15.15	32.73	2
41391/41535	2670.1/2684.5	18.65	-3.8	14.85	30.55	2



LTE B41 15M+10M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39725/39845	2503.5/2515.5	19.09	-3.8	15.29	33.81	2
40571/40691	2588.1/2600.1	19.3	-3.8	15.5	35.48	2
41417/41537	2672.7/2684.7	18.95	-3.8	15.15	32.73	2

LTE B41 15M+10M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39725/39845	2503.5/2515.5	19.2	-3.8	15.4	34.67	2
40571/40691	2588.1/2600.1	19.22	-3.8	15.42	34.83	2
41417/41537	2672.7/2684.7	19.16	-3.8	15.36	34.36	2

LTE B41 15M+10M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39725/39845	2503.5/2515.5	18.81	-3.8	15.01	31.7	2
40571/40691	2588.1/2600.1	18.92	-3.8	15.12	32.51	2
41417/41537	2672.7/2684.7	18.75	-3.8	14.95	31.26	2



LTE B41 10M+15M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39703/39823	2501.3/2513.3	19.11	-3.8	15.31	33.96	2
40549/40669	2585.9/2597.9	19.32	-3.8	15.52	35.65	2
413952/41515	2670.5/2682.5	19.06	-3.8	15.26	33.57	2

LTE B41 10M+15M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39703/39823	2501.3/2513.3	19.2	-3.8	15.4	34.67	2
40549/40669	2585.9/2597.9	19.17	-3.8	15.37	34.43	2
413952/41515	2670.5/2682.5	19.17	-3.8	15.37	34.43	2

LTE B41 10M+15M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39703/39823	2501.3/2513.3	18.81	-3.8	15.01	31.7	2
40549/40669	2585.9/2597.9	18.94	-3.8	15.14	32.66	2
413952/41515	2670.5/2682.5	18.73	-3.8	14.93	31.12	2



LTE B41 20M+5M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39867	2506/2517.7	19.01	-3.8	15.21	33.19	2
40595/40712	2590.5/2602.2	19.29	-3.8	15.49	35.4	2
41440/41557	2675/2686.7	19	-3.8	15.2	33.11	2

LTE B41 20M+5M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39867	2506/2517.7	19.18	-3.8	15.38	34.51	2
40595/40712	2590.5/2602.2	19.24	-3.8	15.44	34.99	2
41440/41557	2675/2686.7	19.07	-3.8	15.27	33.65	2

LTE B41 20M+5M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39750/39867	2506/2517.7	18.79	-3.8	14.99	31.55	2
40595/40712	2590.5/2602.2	18.85	-3.8	15.05	31.99	2
41440/41557	2675/2686.7	18.73	-3.8	14.93	31.12	2



LTE B41 5M +20M (CA_41C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39683/39800	2499.3/2511	18.99	-3.8	15.19	33.04	2
40528/40645	2583.8/2595.5	19.3	-3.8	15.5	35.48	2
41373/41490	2668.3/2680	18.97	-3.8	15.17	32.89	2

LTE B41 5M +20M (CA_41C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39683/39800	2499.3/2511	19.18	-3.8	15.38	34.51	2
40528/40645	2583.8/2595.5	19.24	-3.8	15.44	34.99	2
41373/41490	2668.3/2680	19.09	-3.8	15.29	33.81	2

LTE B41 5M +20M (CA_41C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
39683/39800	2499.3/2511	18.82	-3.8	15.02	31.77	2
40528/40645	2583.8/2595.5	18.86	-3.8	15.06	32.06	2
41373/41490	2668.3/2680	18.76	-3.8	14.96	31.33	2



LTE B42 5M+20M (CA_42C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42123/42240	3453.3/3465	19.16	-3.5	15.66	36.81	2
42498/42615	3490.8/3502.5	19.49	-3.5	15.99	39.72	2
42873/42990	3528.3/3540	19.17	-3.5	15.67	36.9	2

LTE B42 5M+20M (CA_42C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42123/42240	3453.3/3465	19.25	-3.5	15.75	37.58	2
42498/42615	3490.8/3502.5	19.45	-3.5	15.95	39.36	2
42873/42990	3528.3/3540	19.12	-3.5	15.62	36.48	2

LTE B42 5M+20M (CA_42C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42123/42240	3453.3/3465	18.88	-3.5	15.38	34.51	2
42498/42615	3490.8/3502.5	19.51	-3.5	16.01	39.9	2
42873/42990	3528.3/3540	18.82	-3.5	15.32	34.04	2



LTE B42 20M+5M (CA_42C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42307	3460/3471.7	19.3	-3.5	15.8	38.02	2
42565/42682	3497.5/3509.2	19.55	-3.5	16.05	40.27	2
42940/43057	3535/3546.7	19.09	-3.5	15.59	36.22	2

LTE B42 20M+5M (CA_42C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42307	3460/3471.7	19.25	-3.5	15.75	37.58	2
42565/42682	3497.5/3509.2	19.64	-3.5	16.14	41.11	2
42940/43057	3535/3546.7	19.15	-3.5	15.65	36.73	2

LTE B42 20M+5M (CA_42C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42307	3460/3471.7	18.85	-3.5	15.35	34.28	2
42565/42682	3497.5/3509.2	19.46	-3.5	15.96	39.45	2
42940/43057	3535/3546.7	18.79	-3.5	15.29	33.81	2



LTE B42 10M+20M (CA_42C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42145/42289	3455.5/3469.9	19.17	-3.5	15.67	36.9	2
42496/42640	3490.6/3505	19.46	-3.5	15.96	39.45	2
42846/42990	3525.6/3540	19.13	-3.5	15.63	36.56	2

LTE B42 10M+20M (CA_42C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42145/42289	3455.5/3469.9	19.25	-3.5	15.75	37.58	2
42496/42640	3490.6/3505	19.54	-3.5	16.04	40.18	2
42846/42990	3525.6/3540	19.2	-3.5	15.7	37.15	2

LTE B42 10M+20M (CA_42C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42145/42289	3455.5/3469.9	18.82	-3.5	15.32	34.04	2
42496/42640	3490.6/3505	19.41	-3.5	15.91	38.99	2
42846/42990	3525.6/3540	18.78	-3.5	15.28	33.73	2



LTE B42 20M+10M (CA_42C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42334	3460/3474.4	19.32	-3.5	15.82	38.19	2
42541/42685	3495.1/3509.5	19.58	-3.5	16.08	40.55	2
42891/43035	3530.1/3544.5	19.06	-3.5	15.56	35.97	2

LTE B42 20M+10M (CA_42C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42334	3460/3474.4	19.2	-3.5	15.7	37.15	2
42541/42685	3495.1/3509.5	19.62	-3.5	16.12	40.93	2
42891/43035	3530.1/3544.5	19.2	-3.5	15.7	37.15	2

LTE B42 20M+10M (CA_42C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42334	3460/3474.4	18.84	-3.5	15.34	34.2	2
42541/42685	3495.1/3509.5	19.42	-3.5	15.92	39.08	2
42891/43035	3530.1/3544.5	18.7	-3.5	15.2	33.11	2



LTE B42 15M+20M (CA_42C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42168/42339	3457.8/3474.9	19.29	-3.5	15.79	37.93	2
42493/42664	3490.3/3507.4	19.6	-3.5	16.1	40.74	2
42819/42990	3522.9/3540	19.19	-3.5	15.69	37.07	2

LTE B42 15M+20M (CA_42C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42168/42339	3457.8/3474.9	19.38	-3.5	15.88	38.73	2
42493/42664	3490.3/3507.4	19.61	-3.5	16.11	40.83	2
42819/42990	3522.9/3540	19.23	-3.5	15.73	37.41	2

LTE B42 15M+20M (CA_42C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42168/42339	3457.8/3474.9	18.96	-3.5	15.46	35.16	2
42493/42664	3490.3/3507.4	19.56	-3.5	16.06	40.36	2
42819/42990	3522.9/3540	18.83	-3.5	15.33	34.12	2



LTE B42 20M+15M (CA_42C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42361	3460/3477.1	19.33	-3.5	15.83	38.28	2
42516/42687	3492.6/3509.7	19.66	-3.5	16.16	41.3	2
42841/43012	3525.1/3542.2	19.14	-3.5	15.64	36.64	2

LTE B42 20M+15M (CA_42C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42361	3460/3477.1	19.3	-3.5	15.8	38.02	2
42516/42687	3492.6/3509.7	19.66	-3.5	16.16	41.3	2
42841/43012	3525.1/3542.2	19.22	-3.5	15.72	37.33	2

LTE B42 20M+15M (CA_42C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42361	3460/3477.1	18.94	-3.5	15.44	34.99	2
42516/42687	3492.6/3509.7	19.54	-3.5	16.04	40.18	2
42841/43012	3525.1/3542.2	18.8	-3.5	15.3	33.88	2



LTE B42 20M+20M (CA_42C) QPSK						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42388	3460/3479.8	19.34	-3.5	15.84	38.37	2
42491/42689	3490.1/3509.9	19.79	-3.5	16.29	42.56	2
42792/42990	3520.2/3540	19.25	-3.5	15.75	37.58	2

LTE B42 20M+20M (CA_42C) 16QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42388	3460/3479.8	19.45	-3.5	15.95	39.36	2
42491/42689	3490.1/3509.9	19.72	-3.5	16.22	41.88	2
42792/42990	3520.2/3540	19.29	-3.5	15.79	37.93	2

LTE B42 20M+20M (CA_42C) 64QAM						
Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP (mW)	Lmit (W)
42190/42388	3460/3479.8	19.02	-3.5	15.52	35.65	2
42491/42689	3490.1/3509.9	19.57	-3.5	16.07	40.46	2
42792/42990	3520.2/3540	19.01	-3.5	15.51	35.56	2

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).



3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

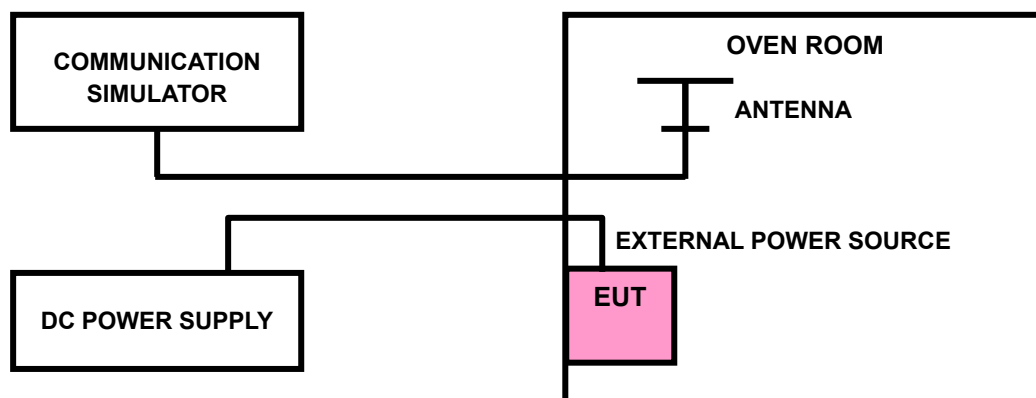
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

- Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

3.2.3 TEST SETUP



3.2.4 TEST RESULTS

Please Refer to Appendix of this test report.

Note: VL = Low voltage(3.4V); VN/NV = Normal voltage(3.91V); VH = High voltage(4.48V);
NT = Normal temperature (25°C)

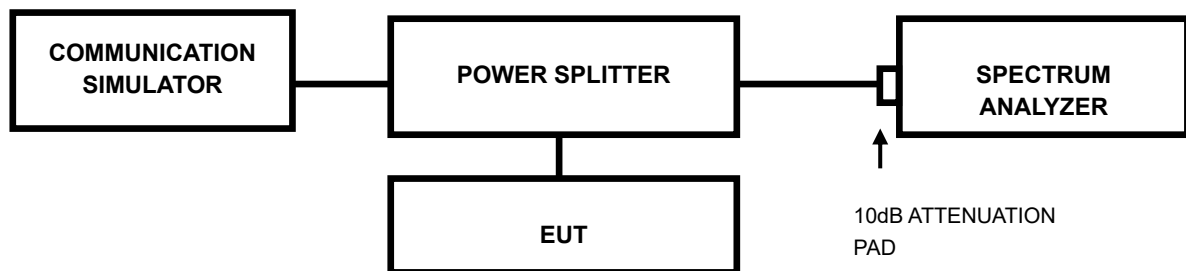


3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

- The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

3.3.4 TEST RESULTS

Please Refer to Appendix of this test report.



3.4 BAND EDGE MEASUREMENT

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

§27.53(h):

According to FCC 27.53(h) specified that For operations in the 1710-1755 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. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

§27.53(g):

According to FCC 27.53(g) specified that 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. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

§27.53(m)(4):

According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1-megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

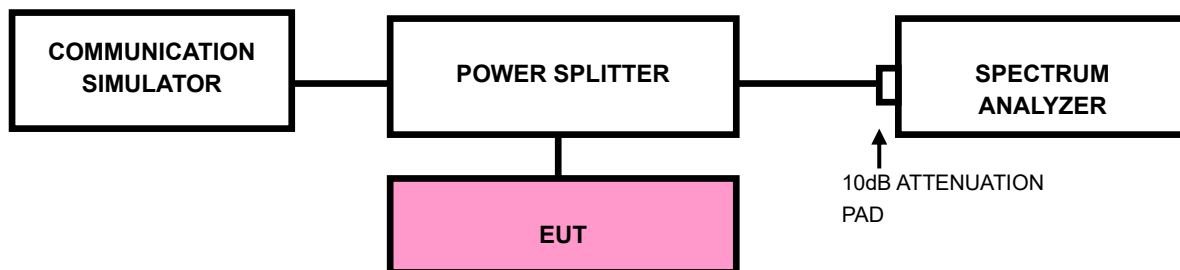
§27.50(n)(2):

According to FCC Part 27.53 (n)(2) For mobile operations in the 3450-3550 MHz



band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

3.4.2 TEST SETUP





3.4.3 TEST PROCEDURES

- a) All measurements were done at low and high operational frequency range
- b) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- c) Tune the analyzer to the nominal center frequency of the emission bandwidth

(EBW)
- d) .Set the resolution bandwidth (RBW) $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- e) Beyond the 1MHz band from the band edge, RBW=1MHz was used.
- f) Set the video bandwidth (VBW) to $\geq 3 \times$ RBW.
- g) Select the average power (RMS) display detector.
- h) Set the number of measurement points to ≥ 1001 .
- i) Use auto-coupled sweep time.
- j) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
- k) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.
- l) Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix of this test report.



CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

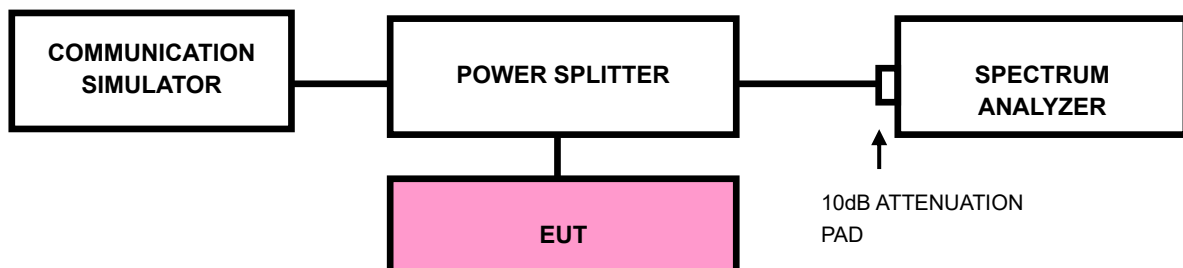
For LTE Band41/41C

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm .

3.5.2 TEST PROCEDURE

- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9kHz up to a frequency including its 10th harmonic. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.3 TEST SETUP



3.5.4 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

Please Refer to Appendix of this test report.



3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

For LTE Band41/41C

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm .

3.6.2 TEST PROCEDURES

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m 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 substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value " of step a. Record the power level of S.G.
- c. $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole,
 $\text{E.R.P power} = \text{E.I.P.R power} - 2.15\text{dBi}$.

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

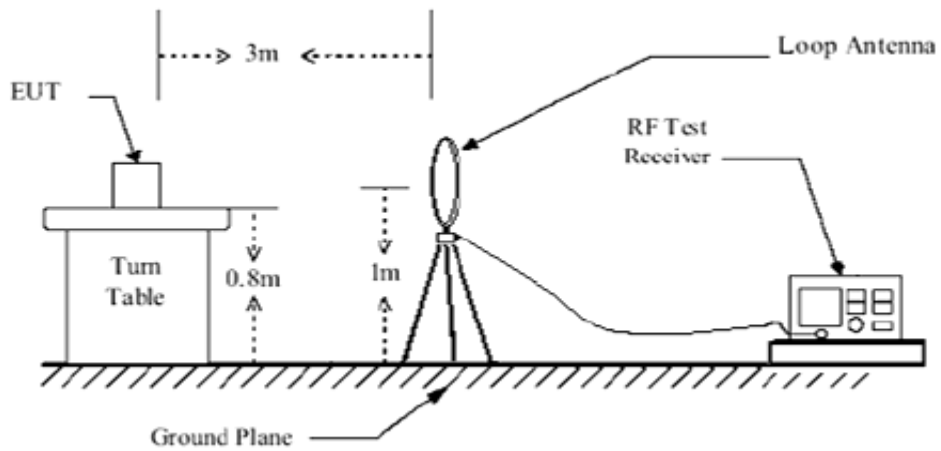
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

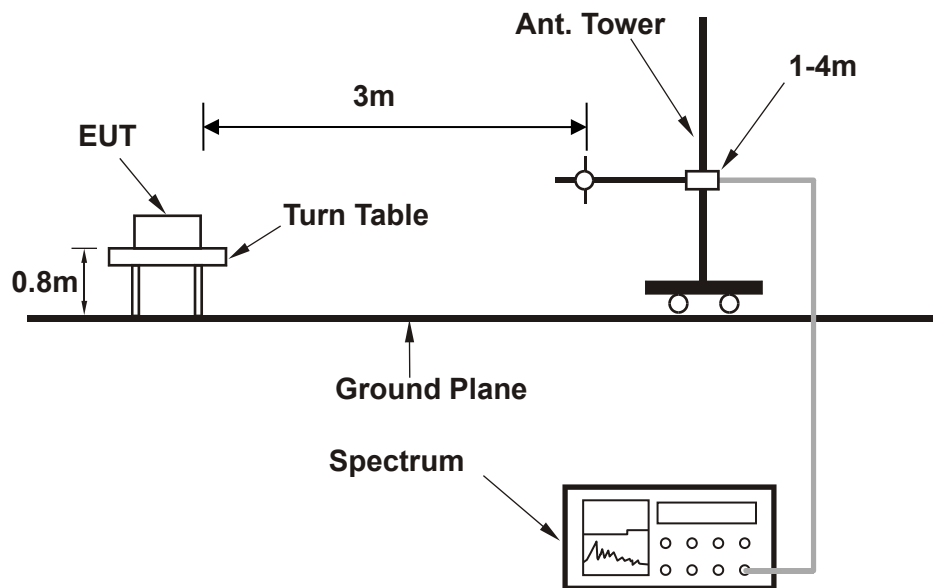


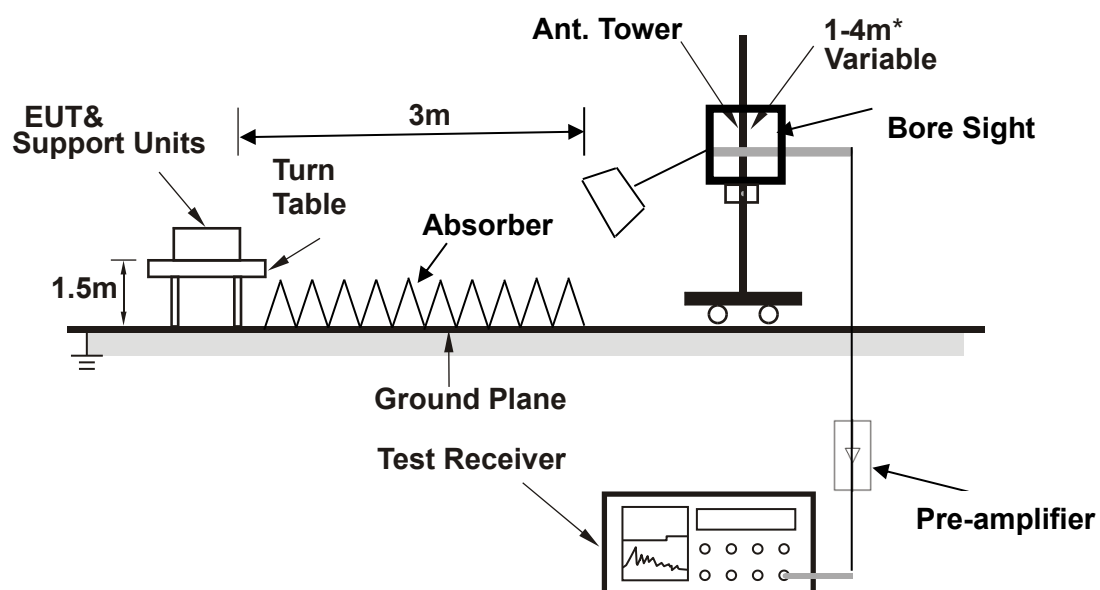
3.6.4 TEST SETUP

< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >





Note: Above 1G is a directional antenna depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

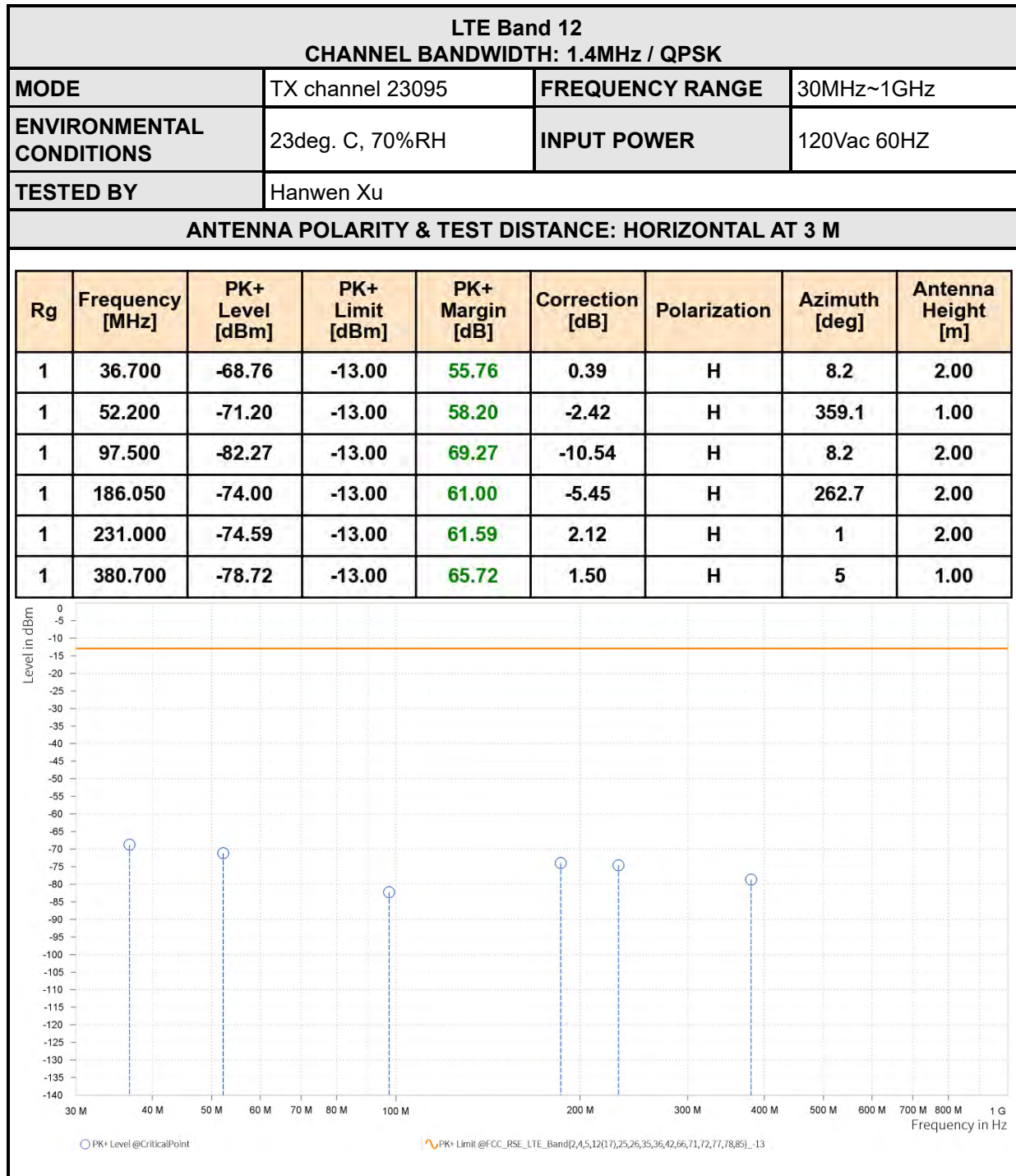
For the actual test configuration, please refer to the attached file (Test Setup Photo).



3.6.5 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

BELOW 1GHz WORST-CASE DATA

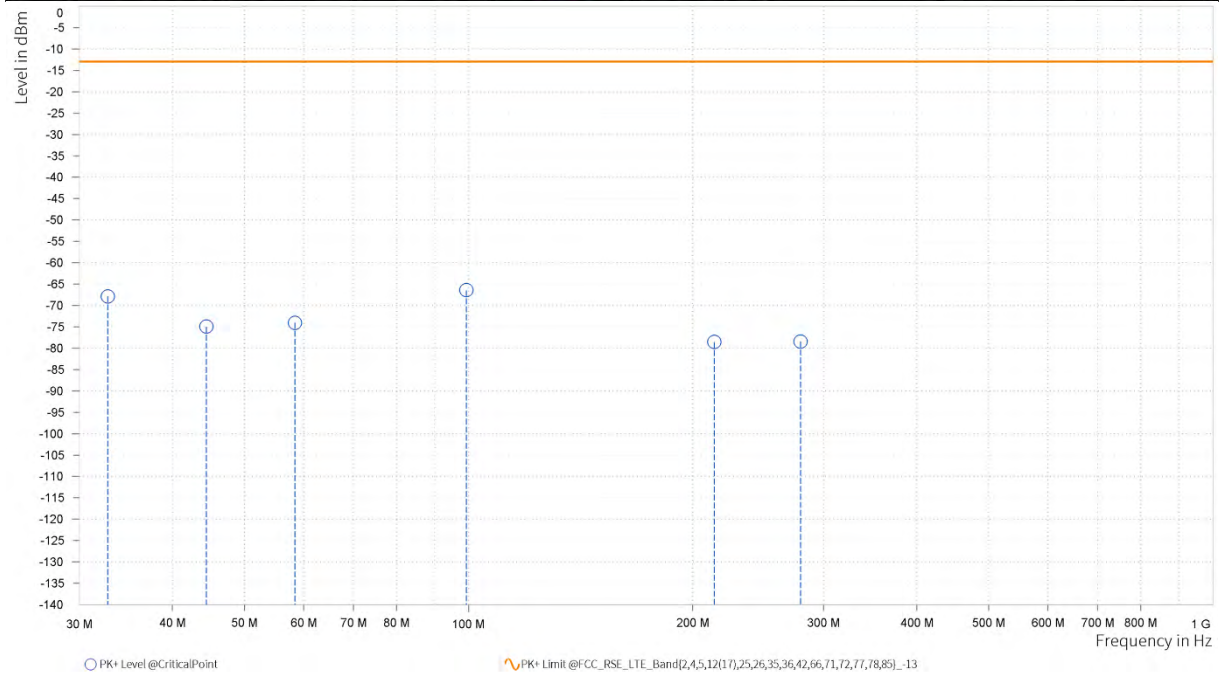




MODE	TX channel 23095	FREQUENCY RANGE	30MHz~1GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	32.750	-67.87	-13.00	54.87	-6.44	V	1	1.00
1	44.450	-74.93	-13.00	61.93	-6.10	V	132.4	2.00
1	58.450	-74.03	-13.00	61.03	-2.97	V	96.2	1.00
1	99.300	-66.41	-13.00	53.41	5.73	V	261.4	2.00
1	213.850	-78.55	-13.00	65.55	-6.80	V	197	2.00
1	279.250	-78.42	-13.00	65.42	-0.78	V	66.6	2.00



ABOVE 1GHz

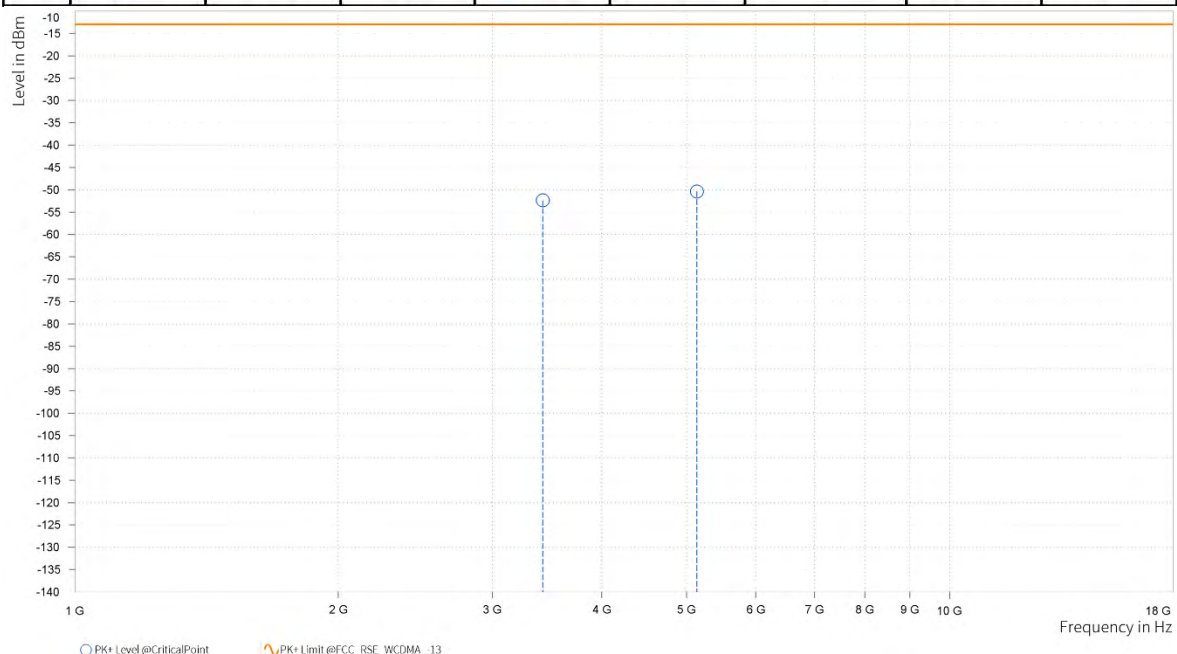
Note: For higher frequency, the emission is too low to be detected.

WCDMA Band IV

MODE	TX channel 1312	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

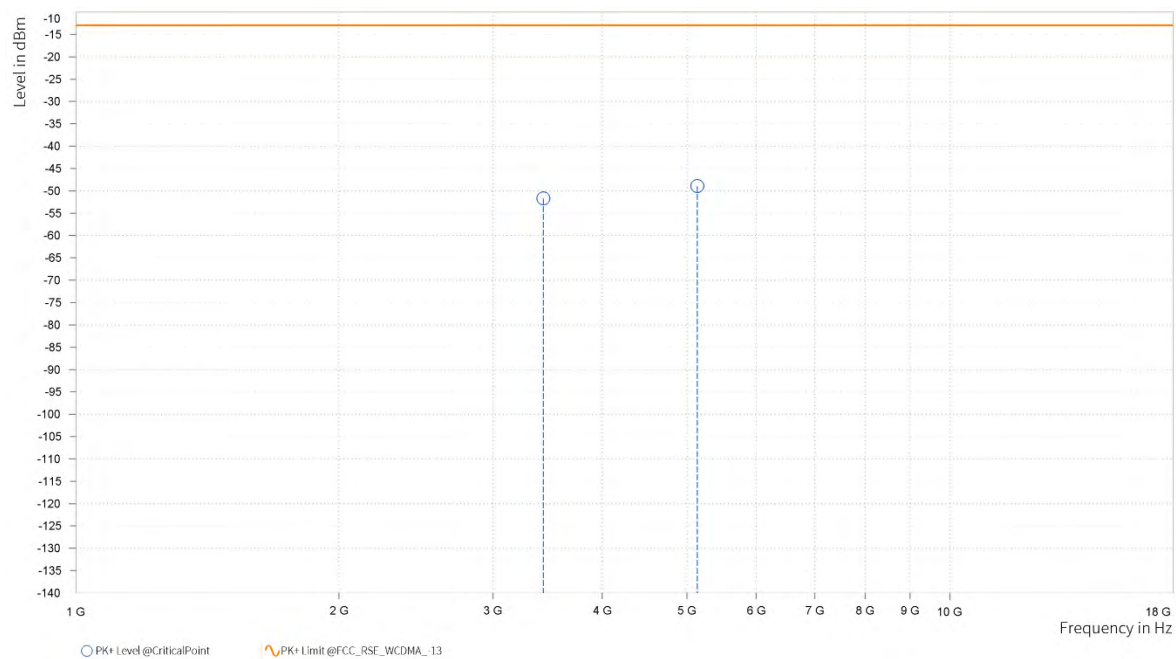
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,424.800	-52.36	-13.00	39.36	20.64	H	1	1.00
4	5,137.200	-50.36	-13.00	37.36	23.11	H	100.4	1.00





MODE		TX channel 1312			FREQUENCY RANGE		Above 1000MHz	
ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			INPUT POWER		120Vac 60HZ	
TESTED BY		Hanwen Xu						
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,424.800	-51.72	-13.00	38.72	21.03	V	240.6	1.00
4	5,137.200	-48.95	-13.00	35.95	23.39	V	264.6	2.00

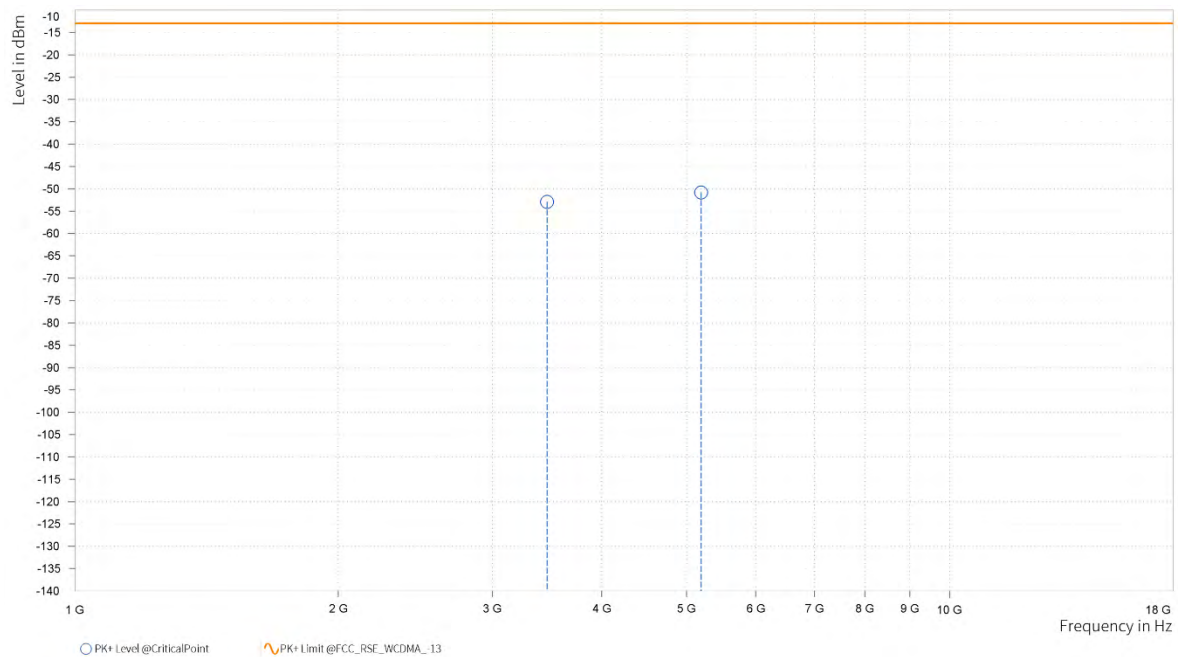




MODE	TX channel 1413	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,465.200	-52.92	-13.00	39.92	20.40	H	265.3	2.00
4	5,197.800	-50.79	-13.00	37.79	23.43	H	1	1.00

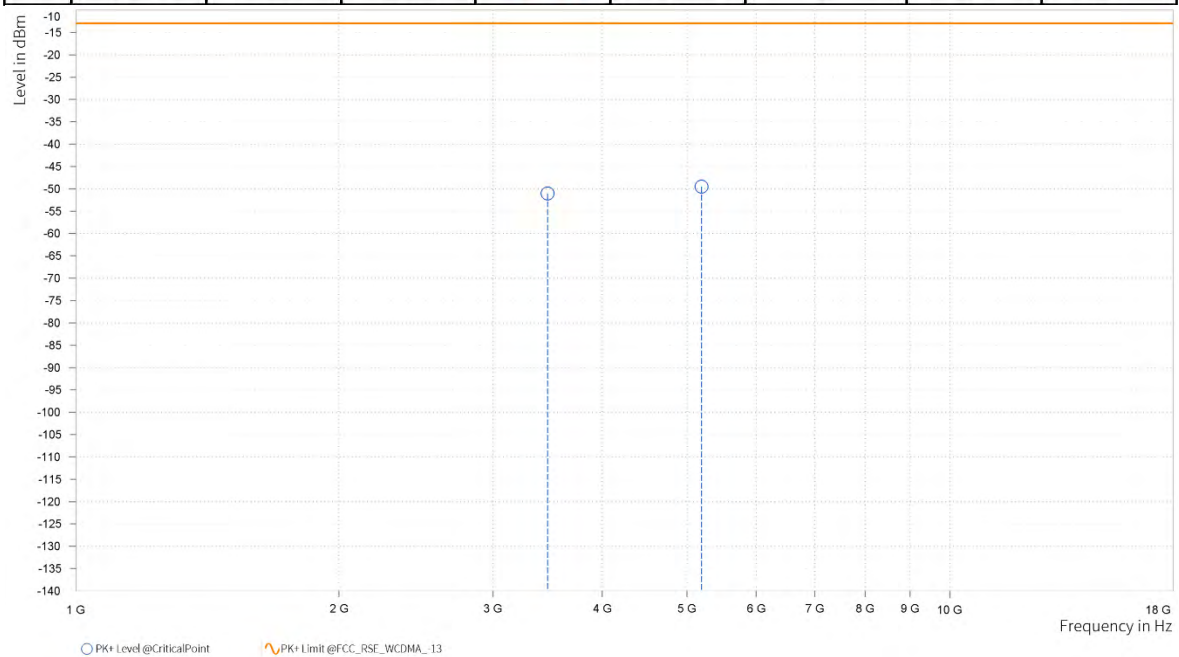




MODE	TX channel 1413	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,465.200	-51.05	-13.00	38.05	21.09	V	1	1.00
4	5,197.800	-49.54	-13.00	36.54	24.03	V	340.2	1.00

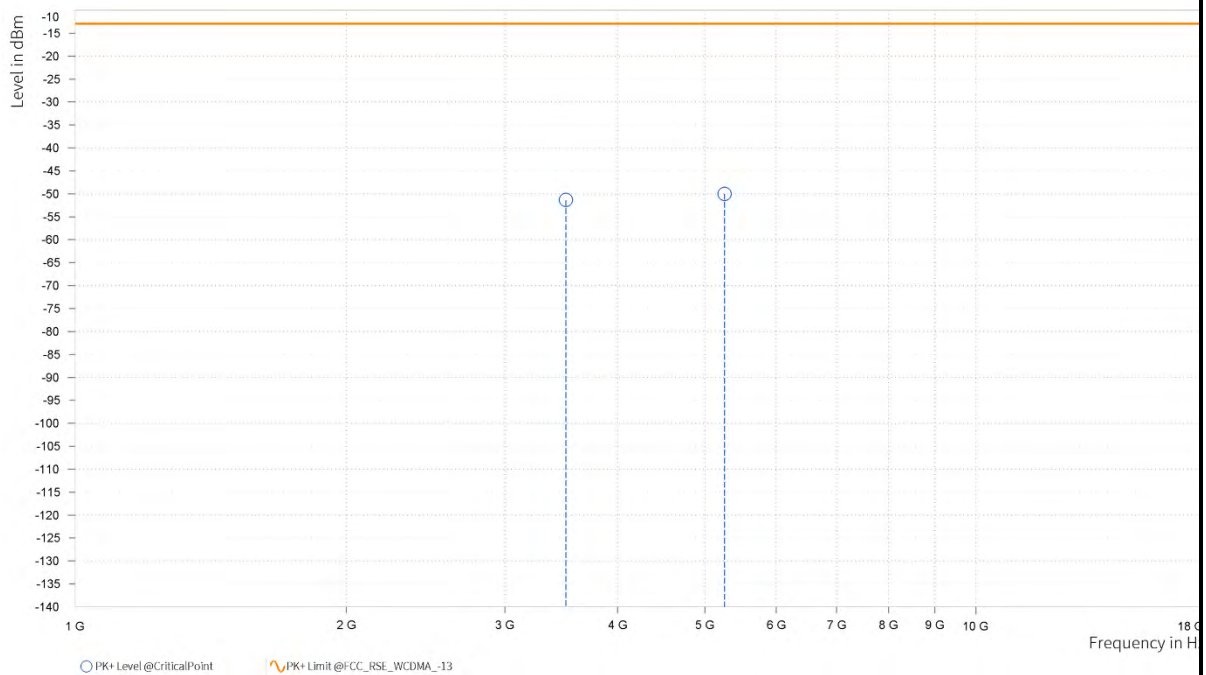




MODE	TX channel 1513	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,505.200	-51.35	-13.00	38.35	20.55	H	96.9	1.00
4	5,257.800	-50.01	-13.00	37.01	23.64	H	115.2	2.00

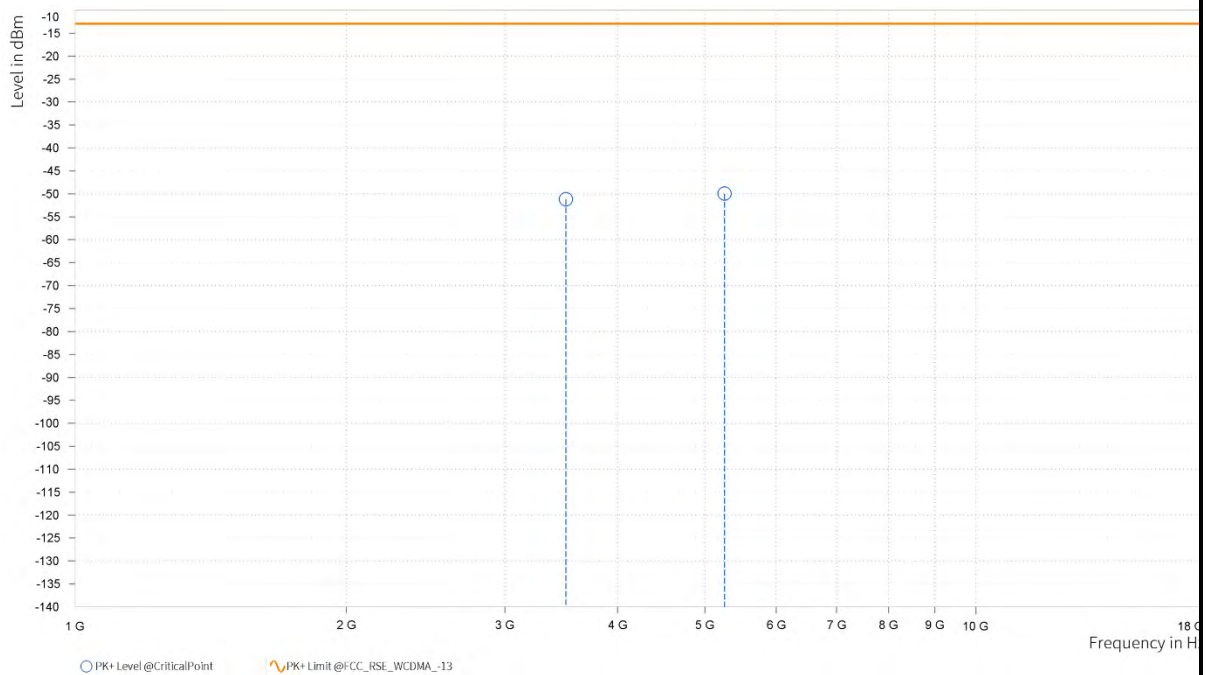


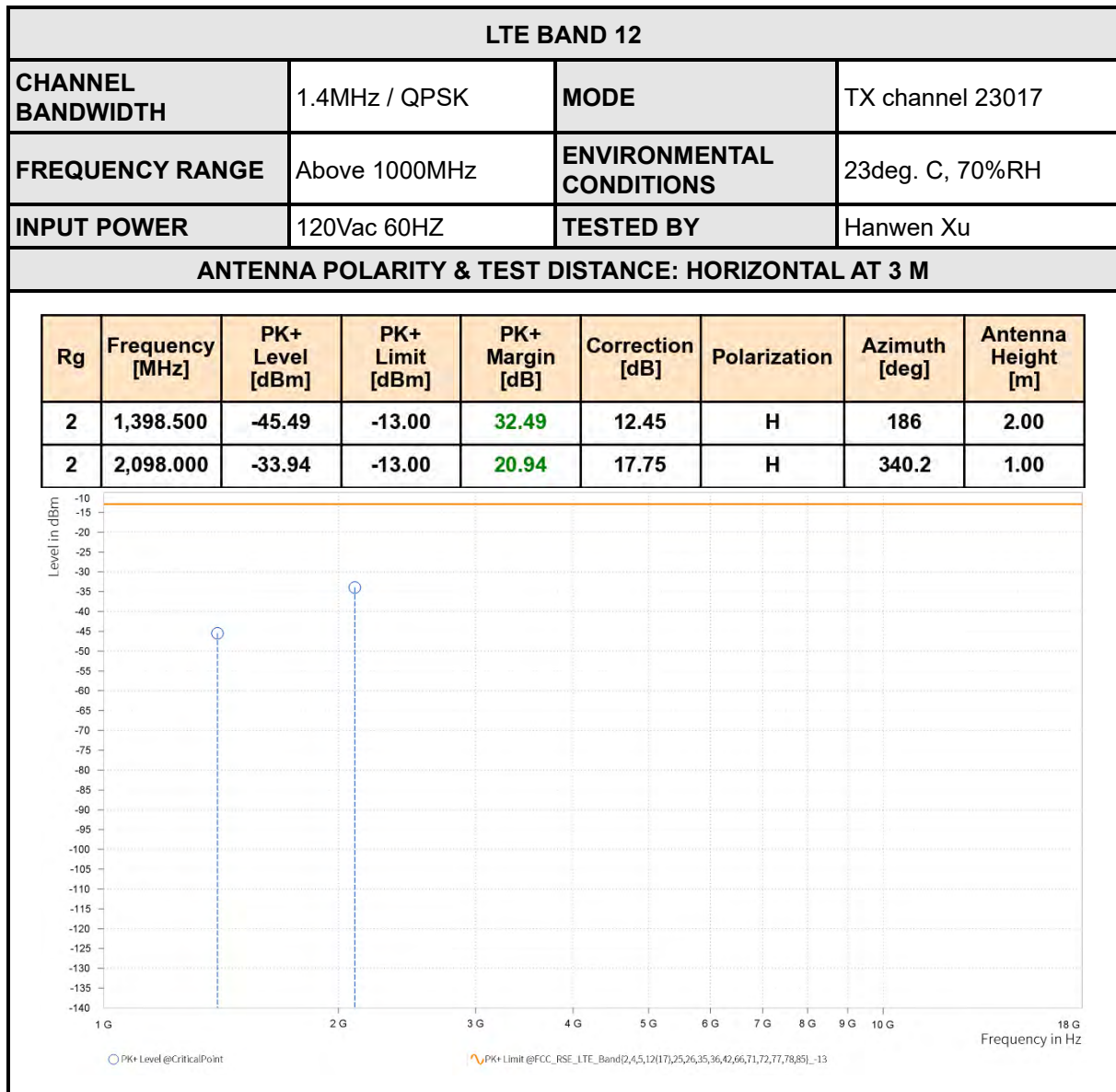


MODE	TX channel 1513	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,505.200	-51.18	-13.00	38.18	21.28	V	359	2.00
4	5,257.800	-49.95	-13.00	36.95	24.12	V	1	1.00



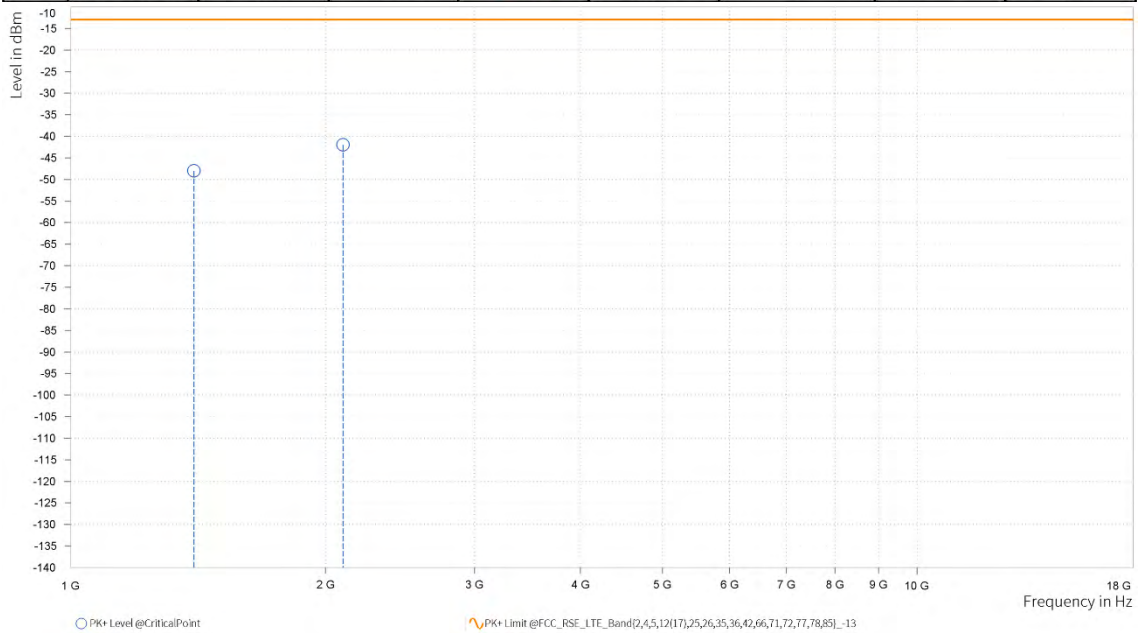




CHANNEL BANDWIDTH	1.4MHz / QPSK	MODE	TX channel 23017
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,398.000	-47.99	-13.00	34.99	12.86	V	325.4	2.00
2	2,097.500	-41.96	-13.00	28.96	18.77	V	0.9	2.00





CHANNEL BANDWIDTH	1.4MHz / QPSK	MODE	TX channel 23095
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,414.000	-41.25	-13.00	28.25	13.03	H	77.8	2.00
2	2,121.000	-29.06	-13.00	16.06	18.11	H	172.6	1.00

