

FCC TEST REPORT

(PART 27)

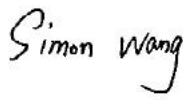
Applicant:	Lenovo (Shanghai) Electronics Technology Co., Ltd.
Address:	Section 304-305, Building No. 4, # 222, Meiyue Road, China (Shanghai) Pilot Free Trade Zone

Manufacturer or Supplier:	Lenovo PC HK Limited
Address:	23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, China
Product:	Portable Tablet Computer
Brand Name:	Lenovo
Model Name:	TB311XU
FCC ID	O57TB311XU
Date of tests	Aug. 15, 2024~Sep. 24, 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 Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
 Date: Sep. 24, 2024	 Date: Sep. 24, 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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Test Report No.: PSU-NQN2407300216RF04

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-NQN2407300216RF04	Original release	Sep. 24, 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(d)(4) §27.50(k)(3) §27.50(h)(2)	Equivalent Isotropically Radiated Power (Band 4) (Band 38) (Band 41) (Band 66)	Compliance	A
§2.1055 §27.54	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§2.1051 §27.53(h) §27.53(n)(2) §27.53(m)(4)(6)	Conducted Band Edge Measurements (Band 4) (Band 38) (Band 41) (Band 66)	Compliance	A
§2.1051 §27.53(h) §27.53(n)(2) §27.53(m)(4)(6)	Conducted Spurious Emissions (Band 4) (Band 38) (Band 41) (Band 66)	Compliance	A
§2.1053 §27.53(h) §27.53(n)(2) §27.53(m)(4)(6)	Radiated Spurious Emissions (Band 4) (Band 38) (Band 41) (Band 66)	Compliance	A
§27.50(d)(5) §27.50(k)(4)	Peak to average ratio	Compliance	A

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

***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	$\pm 76.97\text{Hz}$
Radiated emissions (9KHz~30MHz)	$\pm 2.68\text{dB}$
Radiated emissions & Radiated Power (30MHz~1GHz)	$\pm 4.98\text{dB}$
Radiated emissions & Radiated Power (1GHz ~6GHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GHz ~18GHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GHz ~40GHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Conducted Output power	$\pm 2.06\text{dB}$
Band Edge Measurements	$\pm 4.70\text{dB}$

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



1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.30,22	Aug.29,24
Pre-Amplifier	R&S	SCU18F1	100815	Aug.29,24	Aug.28,26
Pre-Amplifier	R&S	SCU08F1	101028	Sep.16,22	Sep.15,24
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.22,22	Aug.21,24
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.22,22	Aug.21,24
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	Oct.01,22	Sep.30,24
DC Source	HYELEC	HY3010B	551016	Aug.31,22	Aug.30,24
DC Source	HYELEC	HY3010B	551016	Aug.30,24	Aug.29,26
Hygrothermograph	DELI	20210528	SZ014	Sep.06,22	Sep.05,24
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



BUREAU
VERITAS

Test Report No.: PSU-NQN2407300216RF04

- NOTE:**
1. The calibration interval of the above test instruments is 12/24/36 months and the calibrations are traceable to CEPREI/CHINA, GREGT/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*	Portable Tablet Computer	
BRAND NAME*	Lenovo	
MODEL NAME*	TB311XU	
NOMINAL VOLTAGE*	5Vdc (Adapter or host equipment) 3.9Vdc (Li-Polymer, battery)	
MODULATION TECHNOLOGY	LTE	QPSK, 16QAM, 64QAM
FREQUENCY RANGE	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	1715MHz ~ 1750MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~ 1747.5 MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720MHz ~ 1745MHz
	LTE Band 38 Channel Bandwidth: 5MHz	2572.5MHz ~ 2617.5MHz
	LTE Band 38 Channel Bandwidth: 10MHz	2575MHz ~ 2615MHz
	LTE Band 38 Channel Bandwidth: 15MHz	2577.5MHz ~ 2612.5MHz
	LTE Band 38 Channel Bandwidth: 20MHz	2580MHz ~ 2610MHz
	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 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	1715MHz ~ 1775MHz
	LTE Band 66 Channel Bandwidth: 15MHz	1717.5MHz ~ 1772.5MHz
	LTE Band 66 Channel Bandwidth: 20MHz	1720MHz ~ 1770MHz



	LTE Band CA_41C Channel Bandwidth: 5MHz+20MHz	2499.3MHz ~ 2668.3MHz
	LTE Band CA_41C Channel Bandwidth: 10MHz+15MHz	2501.3MHz ~ 2670.5MHz
	LTE Band CA_41C Channel Bandwidth: 10MHz+20MHz	2501.5MHz ~ 2665.6MHz
	LTE Band CA_41C Channel Bandwidth: 15MHz+10MHz	2503.5MHz ~ 2672.7MHz
	LTE Band CA_41C Channel Bandwidth: 15MHz+15MHz	2503.5MHz ~ 2667.5MHz
	LTE Band CA_41C Channel Bandwidth: 15MHz+20MHz	2503.8MHz ~ 2662.9MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+5MHz	2506.0MHz ~ 2675.0MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+10MHz	2506.0MHz ~ 2670.1MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+15MHz	2506.0MHz ~ 2665.1MHz
	LTE Band CA_41C Channel Bandwidth: 20MHz+20MHz	2506.0MHz ~ 2660.2MHz
MAX. EIRP POWER	LTE Band 4 Channel Bandwidth: 1.4MHz	151.01mW
	LTE Band 4 Channel Bandwidth: 3MHz	151.36mW
	LTE Band 4 Channel Bandwidth: 5MHz	148.94mW
	LTE Band 4 Channel Bandwidth: 10MHz	148.25mW
	LTE Band 4 Channel Bandwidth: 15MHz	153.11mW
	LTE Band 4 Channel Bandwidth: 20MHz	153.46mW
	LTE Band 38 Channel Bandwidth: 5MHz	257.63mW
	LTE Band 38 Channel Bandwidth: 10MHz	259.42mW
	LTE Band 38 Channel Bandwidth: 15MHz	257.04mW
	LTE Band 38 Channel Bandwidth: 20MHz	263.63mW
	LTE Band 41 Channel Bandwidth: 5MHz	272.9mW
	LTE Band 41 Channel Bandwidth: 10MHz	271.64mW
	LTE Band 41 Channel Bandwidth: 15MHz	268.53mW



	LTE Band 41 Channel Bandwidth: 20MHz	276.06mW
	LTE Band 66 Channel Bandwidth: 1.4MHz	148.25mW
	LTE Band 66 Channel Bandwidth: 3MHz	147.91mW
	LTE Band 66 Channel Bandwidth: 5MHz	147.57mW
	LTE Band 66 Channel Bandwidth: 10MHz	144.88mW
	LTE Band 66 Channel Bandwidth: 15MHz	148.59mW
	LTE Band 66 Channel Bandwidth: 20MHz	149.97mW
	LTE Band CA_41C Channel Bandwidth: 5MHz+20MHz	242.1mW
	LTE Band CA_41C Channel Bandwidth: 20MHz+5MHz	240.99mW
	LTE Band CA_41C Channel Bandwidth: 10MHz+15MHz	247.17mW
	LTE Band CA_41C Channel Bandwidth: 15MHz+10MHz	239.88mW
	LTE Band CA_41C Channel Bandwidth: 15MHz+15MHz	243.78mW
	LTE Band CA_41C Channel Bandwidth: 10MHz+20MHz	246.04mW
	LTE Band CA_41C Channel Bandwidth: 20MHz+10MHz	240.99mW
	LTE Band CA_41C Channel Bandwidth: 15MHz+20MHz	243.22mW
	LTE Band CA_41C Channel Bandwidth: 20MHz+15MHz	243.78mW
	LTE Band CA_41C Channel Bandwidth: 20MHz+20MHz	248.31mW
EMISSION DESIGNATOR	LTE Band 41 Channel Bandwidth: 5MHz	QPSK: 4M53G7D
		16QAM: 4M51W7D
		64QAM: 4M52W7D
	LTE Band 41 Channel Bandwidth: 10MHz	QPSK: 9M01G7D
		16QAM: 9M00W7D
		64QAM: 9M00W7D
	LTE Band 41 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D



	LTE Band 41 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M0W7D
		64QAM: 18M0W7D
	LTE Band 66 Channel Bandwidth: 1.4MHz	QPSK: 1M09G7D
		16QAM: 1M09W7D
		64QAM: 1M09W7D
	LTE Band 66 Channel Bandwidth: 3MHz	QPSK: 2M69G7D
		16QAM: 2M68W7D
		64QAM: 2M68W7D
	LTE Band 66 Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM: 4M50W7D
		64QAM: 4M49W7D
	LTE Band 66 Channel Bandwidth: 10MHz	QPSK: 8M98G7D
		16QAM: 8M97W7D
		64QAM: 8M97W7D
	LTE Band 66 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
	LTE Band 66 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M0W7D
		64QAM: 18M0W7D
	LTE Band CA_41C Channel Bandwidth: 5MHz+20MHz	QPSK: 23M1G7D
		16QAM: 23M0W7D
		64QAM: 23M0W7D
	LTE Band CA_41C Channel Bandwidth: 10MHz+15MHz	QPSK: 22M9G7D
		16QAM: 22M9W7D
		64QAM: 22M9W7D
	LTE Band CA_41C Channel Bandwidth: 10MHz+20MHz	QPSK: 27M8G7D
		16QAM: 27M8W7D
		64QAM: 27M8W7D
	LTE Band CA_41C Channel Bandwidth: 15MHz+10MHz	QPSK: 23M3G7D
		16QAM: 23M3W7D
		64QAM: 23M3W7D
	LTE Band CA_41C Channel Bandwidth: 15MHz+15MHz	QPSK: 28M5G7D
		16QAM: 28M5W7D
		64QAM: 28M4W7D
	LTE Band CA_41C Channel Bandwidth: 15MHz+20MHz	QPSK: 32M7G7D
		16QAM: 32M7W7D
		64QAM: 32M7W7D
	LTE Band CA_41C	QPSK: 23M1G7D



	Channel Bandwidth: 20MHz+5MHz LTE Band CA_41C Channel Bandwidth: 20MHz+10MHz	16QAM: 23M0W7D
		64QAM: 23M0W7D
		QPSK: 27M9G7D
		16QAM: 27M8W7D
		64QAM: 27M8W7D
	LTE Band CA_41C Channel Bandwidth: 20MHz+15MHz	QPSK: 32M8G7D
		16QAM: 32M7W7D
		64QAM: 32M7W7D
	LTE Band CA_41C Channel Bandwidth: 20MHz+20MHz	QPSK: 38M0G7D
		16QAM: 38M0W7D
		64QAM: 37M9W7D
ANTENNA TYPE*	ANT1: PIFA Antenna with -1.56dBi gain for LTE 4 PIFA Antenna with -1.55dBi gain for LTE 66 PIFA Antenna with 1.2dBi gain for LTE 38/ LTE 41 ANT2: PIFA Antenna with -1.02dBi gain for LTE 4 PIFA Antenna with -1.0dBi gain for LTE 66 PIFA Antenna with -0.44dBi gain for LTE 38/ LTE 41	
HW VERSION*	TB311XU	
SW VERSION*	TB311XU_RF01_20240921	
I/O PORTS*	Refer to user's manual	
CABLE SUPPLIED*	USB cable1: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable2: non-shielded cable, with w/o ferrite core, 1.0 meter	
EXTREME TEMPERATURE*	-10-55 °C	
EXTREME VOLTAGE*	3.5V – 4.5V	

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.

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3. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receivers.

MODULATION MODE	TX FUNCTION
LTE 4/38/41/66	1TX/1RX

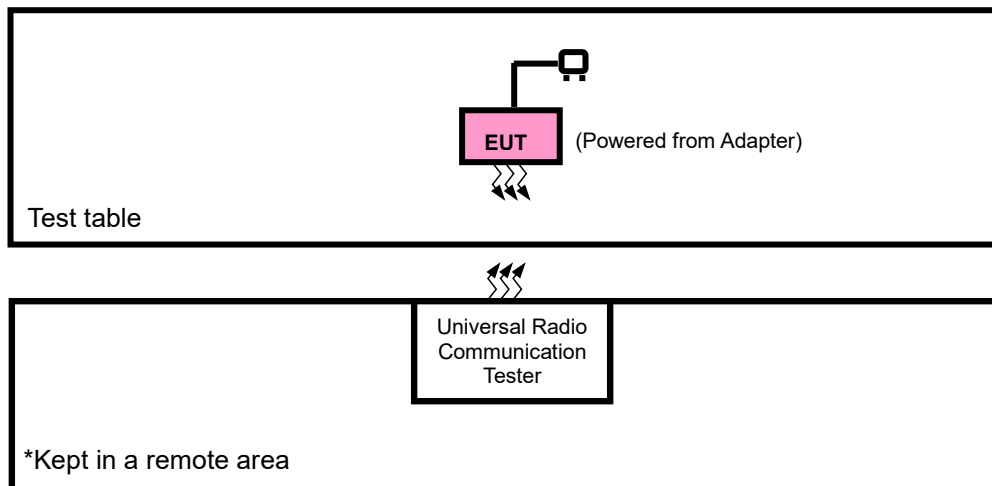
4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
5. The power of single LTE band is larger than that in CA, so single LTE band can cover the RSE risk of CA part.
6. **List of Accessory:**

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Battery 1	N/A	Zhejiang Sunwoda Electronic Co., Ltd.	L24D1P32	Nominal Energy: 19.55Wh, Typical Energy: 19.95Wh
Battery 2	N/A	Ningde Amperex Technology Limited	L24D1P32	Nominal Energy: 19.55Wh, Typical Energy: 19.95Wh
AC Adapter 1	Salcomp	Salcomp (Shenzhen) Co., Ltd	MC-201L (US)	AC Input: 100-240V~, 50/60Hz, 0.7A DC Output: 5.0Vdc 3.0A 15W 10Vdc 2.0A 20W 12Vdc 1.67A 20W
AC Adapter 2	Aohai	Jiangxi Jian Aohai Technology Co., Ltd.	MC-201L (US)	AC Input: 100-240V~, 50/60Hz, 0.7A DC Output: 5.0Vdc 3.0A 15W 10Vdc 2.0A 20W 12Vdc 1.67A 20W
USB Cable 1 (support unit)	Saibao	Saibao (Jiangxi) Industrial Co., LTD	SLQ-A263A	Signal Line, 1.0meter
USB Cable 2	Jieye	Jiangxi Jieye Electronics Co., LTD	JY-C03-422	Signal Line, 1.0meter
Earphone(optional)	Lenovo	N/A	E310	N/A
Pen(optional)	Lenovo	N/A	passive pen	N/A



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	Laptop	Lenovo	ThinkPad E14	HRSW00024	N/A
2	Earphone	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB Cable: 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 LTE link
B	EUT + DC Supply with LTE link

LTE BAND 4 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset

Note: 1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. LTE Band 4 are covered by LTE Band 66, Because it is a subset of LTE Band 66 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 66

LTE BAND 38 MODE



EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37850 to 38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset

Note:

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

2. LTE Band 38 are covered by LTE Band 41, Because it is a subset of LTE Band 41 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 41

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



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A	BAND EDGE	39675 to 41565	39675	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			41565	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		39700 to 41540	39700	10MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
			41540	10MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		39725 to 41515	39725	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			41515	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		39750 to 41490	39750	20MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset
			41490	20MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB Offset
		39750 to 41490	39750	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			41490	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
		39750 to 41490	39750	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset
			41490	20MHz	QPSK, 16QAM, 64QAM	100 RB / 0 RB Offset
A	CONDCUDET ED 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	40620	10MHz	QPSK	1 RB / 0RB Offset
		39725 to 41515	40620	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	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 66 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM,64QAM	100 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM,64QAM	6 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM,64QAM	15 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM,64QAM	25 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM,64QAM	50 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM,64QAM	75 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM,64QAM	100 RB / 0 RB Offset
A	BAND EDGE	131979 to 132322	131979	1.4MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
			132322	1.4MHz	QPSK,16QAM,64QAM	6 RB / 0 RB Offset
		131987 to 132657	131987	3MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
			132657	3MHz	QPSK,16QAM,64QAM	15 RB / 0 RB Offset
		131997 to 132647	131997	5MHz	QPSK,16QAM,64QAM	1 RB / 14 RB Offset
			132647	5MHz	QPSK,16QAM,64QAM	15 RB / 0 RB Offset
		132022 to 132622	132022	10MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
			132622	10MHz	QPSK,16QAM,64QAM	25 RB / 0 RB Offset
		132047 to 132597	132047	15MHz	QPSK,16QAM,64QAM	1 RB / 49 RB Offset
			132597	15MHz	QPSK,16QAM,64QAM	50 RB / 0 RB Offset
		132072 to 132572	132072	20MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset
						75 RB / 0 RB Offset
						1 RB / 74 RB Offset
						75 RB / 0 RB Offset
						1 RB / 0 RB Offset
						100 RB / 0 RB Offset



			132572	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset 100 RB / 0 RB Offset
A	CONDCUETED EMISSION	131979 to 132665	131979,132322,132665	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	132072 to 132572	132072,132322,132572	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset
A	RADIATED EMISSION	131979 to 132665	131979,132322,132665	1.4MHz	QPSK	1 RB / 0 RB Offset
		131987 to 132657	132322	3MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	132322	5MHz	QPSK	1 RB / 0 RB Offset
		132022 to 132622	132322	10MHz	QPSK	1 RB / 0 RB Offset
		132047 to 132597	132322	15MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132322	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 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 z	QPSK, 16QAM, 64QAM	100RB/ 0RB Offset	50RB/ 0RB Offset
		39705 to 41346	39849 to 41490	Low, Middle, High	10MHz+20MHz z	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
BAND EDGE		39750 to 41341	39921 to 41512	Low	20MHz+15MHz z	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	75RB/ 0RB Offset
				High	20MHz+15MHz z	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	75RB/ 0RB Offset
		39728 to 41319	39899 to 41490	Low	15MHz+20MHz z	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset t
							1RB/ 74RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	100RB/ 0RB Offset
				High	15MHz+20MHz z	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 74RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	100RB/ 0RB Offset
		39750 to 41391	39894 to 41535	Low	20MHz+10MHz z	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 49RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	50RB/ 0RB Offset
				High	20MHz+10MHz z	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 49RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	50RB/ 0RB Offset
		39705 to 41346	39849 to 41490	Low	10MHz+20MHz z	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 49RB Offset	1RB/ 0RB Offset
							50RB/ 0RB Offset	100RB/ 0RB Offset
				High	10MHz+20MHz z	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 49RB Offset	1RB/ 0RB Offset
							50RB/ 0RB Offset	100RB/ 0RB Offset



B	BAND EDGE	39725 to 41365	39875 to 41515	Low	15MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
				High	15MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	75RB/ 0RB Offset
							1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 74RB Offset	1RB/ 0RB Offset
				75RB/ 0RB Offset	75RB/ 0RB Offset			
		39725 to 41417	39845 to 41537	Low	15MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 49RB Offset
				High	15MHz+10MHz	QPSK, 16QAM, 64QAM	1RB/ 74RB Offset	1RB/ 0RB Offset
							75RB/ 0RB Offset	50RB/ 0RB Offset
							1RB/ 0RB Offset	1RB/ 49RB Offset
							1RB/ 74RB Offset	1RB/ 0RB Offset
				75RB/ 0RB Offset	50RB/ 0RB Offset			
		39703 to 41395	39823 to 41515	Low	10MHz+15MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 74RB Offset
				High	10MHz+15MHz		1RB/ 49RB Offset	1RB/ 0RB Offset
							50RB/ 0RB Offset	75RB/ 0RB Offset
							1RB/ 0RB Offset	1RB/ 74RB Offset
							1RB/ 49RB Offset	1RB/ 0RB Offset
				50RB/ 0RB Offset	75RB/ 0RB Offset			
		39750 to 41440	39867 to 41557	Low	20MHz+5MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 24RB Offset
				High	20MHz+5MHz		1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	25RB/ 0RB Offset
							1RB/ 0RB Offset	1RB/ 24RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
				100RB/ 0RB Offset	25RB/ 0RB Offset			
		39683 to 41373	39800 to 41490	Low	5MHz+20MHz	QPSK, 16QAM, 64QAM	1RB/ 0RB Offset	1RB/ 99RB Offset
				High	5MHz+20MHz		1RB/ 24RB Offset	1RB/ 0RB Offset
							25RB/ 0RB Offset	100RB/ 0RB Offset
							1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 24RB Offset	1RB/ 0RB Offset
				25RB/ 0RB Offset	100RB/ 0RB Offset			
B	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
							1RB/ 0RB Offset	1RB/ 99RB Offset
							1RB/ 99RB Offset	1RB/ 0RB Offset
							100RB/ 0RB Offset	100RB/ 0RB Offset
B	CONDUCTED EMISSION	39750 to 41341	39921 to 41512	Low, Middle, High	20MHz+15MHz	QPSK,	1RB/ 99RB Offset	1RB/ 0RB Offset
		39728 to 41319	39899 to 41490	Low, Middle, High	15MHz+20MHz	QPSK,	1RB/ 74RB Offset	1RB/ 0RB Offset
		39750 to 41391	39894 to 41535	Low, Middle, High	20MHz+10MHz	QPSK,	1RB/ 99RB Offset	1RB/ 0RB Offset
		39705 to 41346	39849 to 41490	Low, Middle, High	10MHz+20MHz	QPSK,	1RB/ 49RB Offset	1RB/ 0RB Offset
		39725 to 41365	39875 to 41515	Low, Middle, High	15MHz +15MHz	QPSK,	1RB/ 74RB Offset	1RB/ 0RB Offset
		39725 to 41417	39845 to 41537	Low, Middle, High	15MHz +10MHz	QPSK,	1RB / 74RB Offset	1RB / 0RB Offset
		39703 to 41395	39823 to 41515	Low, Middle, High	10MHz +15MHz	QPSK,	1RB/ 49RB Offset	1RB/ 0RB Offset
		39750 to 41440	39867 to 41557	Low, Middle, High	20MHz +5MHz	QPSK,	1RB/ 99RB Offset	1RB/ 0RB Offset
		39683 to 41373	39800 to 41490	Low, Middle, High	5MHz +20MHz	QPSK,	1RB/ 24RB Offset	1RB/ 0RB Offset
		39750 to 41341	39921 to 41512	Low, Middle, High	20MHz+15MHz	QPSK,	1RB / 99RB Offset 1RB / 0RB Offset	1RB/ 0RB Offset
		39728 to 41319	39899 to 41490	Middle,	15MHz+20MHz	QPSK,	1RB/ 74RB Offset	1RB/ 0RB Offset
		39705 to 41346	39849 to 41490	Middle	10MHz+20MHz	QPSK,	1RB/ 49RB Offset	1RB/ 0RB Offset
		39725 to 41365	39875 to 41515	Middle,	15MHz +15MHz	QPSK,	1RB/ 74RB Offset	1RB/ 0RB Offset
		39703 to 41395	39823 to 41515	Middle	10MHz +15MHz	QPSK,	1RB/ 49RB Offset	1RB/ 0RB Offset
		39683 to 41373	39800 to 41490	Low, Middle, High	5MHz +20MHz	QPSK,	1RB/ 24RB Offset	1RB/ 0RB Offset

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



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TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	23deg. C, 70%RH	DC 3.9V By Battery	Jace Hu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 5V By DC Source	James Fu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 3.9V By Battery	James Fu
BAND EDGE	23deg. C, 70%RH	DC 3.9V By Battery	James Fu
CONDCUDED EMISSION	23deg. C, 70%RH	DC 3.9V By Battery	James Fu
RADIATED EMISSION	23deg. C, 70%RH	AC 120V/60Hz	Jace Hu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 3.9V By Battery	James Fu



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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

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.”

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.

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:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_{\text{T}} - L_{\text{C}}$$

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.

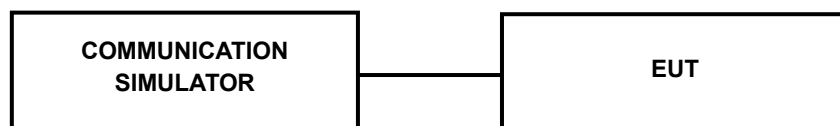
CONDUCTED POWER MEASUREMENT:

- 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)

LTE Band 4

Band/BW	Modulation	RB Size	RB Offset	Low CH 19957	Mid CH 20175	High CH 20393
				Frequency 1710.7 MHz	Frequency 1732.5 MHz	Frequency 1754.3 MHz
4/ 1.4	QPSK	1	0	22.72	22.63	22.98
		1	2	23.03	23.18	23.34
		1	5	22.88	23.01	22.98
		3	0	23.13	23.13	23.35
		3	1	23.05	23.13	23.08
		3	3	23.10	23.07	23.12
		6	0	21.97	21.95	22.23
	16QAM	1	0	22.04	22.21	22.24
		1	2	22.35	22.46	22.63
		1	5	22.38	22.29	22.48
		3	0	22.15	22.13	22.19
		3	1	22.17	22.09	22.24
		3	3	21.89	21.78	22.19
		6	0	21.04	20.88	21.23
	64QAM	1	0	20.97	20.96	21.12
		1	2	21.19	21.49	21.48
		1	5	21.15	21.16	21.34
		3	0	21.00	21.12	21.12
		3	1	21.05	21.08	21.11
		3	3	20.93	20.90	21.14
		6	0	19.87	19.85	19.97



Band/BW	Modulation	RB Size	RB Offset	Low CH 19965	Mid CH 20175	High CH 20385
				Frequency 1711.5 MHz	Frequency 1732.5 MHz	Frequency 1753.5 MHz
4/ 3	QPSK	1	0	22.84	22.69	22.90
		1	7	23.09	23.25	23.36
		1	14	22.89	23.08	23.01
		8	0	22.05	22.17	22.29
		8	3	22.02	22.11	22.12
		8	7	22.08	22.06	22.19
		15	0	22.04	21.99	22.24
	16QAM	1	0	22.01	22.15	22.24
		1	7	22.37	22.49	22.68
		1	14	22.39	22.32	22.41
		8	0	21.10	21.12	21.25
		8	3	21.11	21.10	21.13
		8	7	20.81	20.84	21.11
		15	0	20.96	20.86	21.16
	64QAM	1	0	20.89	20.97	21.10
		1	7	21.20	21.47	21.58
		1	14	21.13	21.19	21.29
		8	0	20.05	20.10	20.21
		8	3	20.02	20.10	20.17
		8	7	19.82	19.88	20.09
		15	0	19.95	19.99	20.05



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Band/BW	Modulation	RB Size	RB Offset	Low CH 19975	Mid CH 20175	High CH 20375
				Frequency 1712.5 MHz	Frequency 1732.5 MHz	Frequency 1752.5 MHz
4/ 5	QPSK	1	0	22.85	22.75	23.01
		1	12	23.05	23.26	23.29
		1	24	22.84	23.09	22.99
		12	0	22.13	22.15	22.25
		12	6	21.96	22.10	22.10
		12	13	22.07	22.03	22.08
		25	0	21.94	21.95	22.27
	16QAM	1	0	22.04	22.22	22.28
		1	12	22.42	22.47	22.63
		1	24	22.43	22.35	22.50
		12	0	21.13	21.02	21.22
		12	6	21.04	21.15	21.23
		12	13	20.92	20.83	21.13
		25	0	21.00	20.95	21.19
	64QAM	1	0	20.92	20.89	21.04
		1	12	21.28	21.42	21.57
		1	24	21.14	21.16	21.33
		12	0	20.10	20.15	20.19
		12	6	20.11	20.13	20.08
		12	13	19.94	19.88	20.07
		25	0	19.93	19.98	19.98



Band/BW	Modulation	RB Size	RB Offset	Low CH 20000	Mid CH 20175	High CH 20350
				Frequency 1715 MHz	Frequency 1732.5 MHz	Frequency 1750 MHz
4/ 10	QPSK	1	0	22.82	22.72	23.02
		1	24	23.00	23.18	23.27
		1	49	22.84	23.02	22.95
		25	0	22.03	22.20	22.38
		25	12	21.98	22.04	22.14
		25	25	22.03	22.06	22.17
		50	0	21.94	21.94	22.31
	16QAM	1	0	22.05	22.10	22.28
		1	24	22.45	22.51	22.69
		1	49	22.31	22.31	22.47
		25	0	21.12	21.07	21.22
		25	12	21.16	21.16	21.23
		25	25	20.87	20.78	21.17
		50	0	21.05	20.96	21.25
	64QAM	1	0	20.97	20.90	21.15
		1	24	21.19	21.47	21.61
		1	49	21.10	21.19	21.34
		25	0	20.09	20.15	20.17
		25	12	20.05	20.11	20.15
		25	25	19.87	19.88	20.04
		50	0	19.87	19.89	19.98



Band/BW	Modulation	RB Size	RB Offset	Low CH 20025	Mid CH 20175	High CH 20325
				Frequency 1717.5 MHz	Frequency 1732.5 MHz	Frequency 1747.5 MHz
4/ 15	QPSK	1	0	22.84	22.72	22.94
		1	37	23.08	23.13	23.41
		1	74	22.91	23.00	23.05
		36	0	22.10	22.21	22.28
		36	19	21.95	22.08	22.12
		36	39	21.96	22.03	22.12
		75	0	21.96	21.95	22.30
	16QAM	1	0	22.04	22.11	22.35
		1	37	22.44	22.49	22.72
		1	74	22.38	22.29	22.48
		36	0	21.08	21.08	21.14
		36	19	21.09	21.12	21.10
		36	39	20.92	20.82	21.17
		75	0	21.02	20.88	21.28
	64QAM	1	0	20.94	21.01	21.15
		1	37	21.31	21.45	21.47
		1	74	21.20	21.22	21.40
		36	0	19.98	20.14	20.12
		36	19	20.12	20.02	20.21
		36	39	19.89	19.89	20.09
		75	0	19.87	19.88	20.09



Band/BW	Modulation	RB Size	RB Offset	Low CH 20050	Mid CH 20175	High CH 20300
				Frequency 1720 MHz	Frequency 1732.5 MHz	Frequency 1745 MHz
4/ 20	QPSK	1	0	22.87	22.78	23.03
		1	50	23.12	23.27	23.42
		1	99	22.93	23.14	23.07
		50	0	22.14	22.28	22.40
		50	25	22.06	22.16	22.22
		50	50	22.11	22.09	22.23
		100	0	22.05	22.00	22.35
	16QAM	1	0	22.12	22.24	22.36
		1	50	22.47	22.57	22.75
		1	99	22.45	22.40	22.53
		50	0	21.18	21.16	21.29
		50	25	21.19	21.17	21.25
		50	50	20.96	20.92	21.21
		100	0	21.06	21.00	21.30
	64QAM	1	0	20.98	21.02	21.17
		1	50	21.32	21.51	21.62
		1	99	21.22	21.31	21.44
		50	0	20.13	20.16	20.26
		50	25	20.14	20.15	20.23
		50	50	19.97	19.95	20.15
		100	0	20.01	20.00	20.11



Band/BW	Modulation	RB Size	RB Offset	Low CH (37775)	Low Mid CH (38000)	Mid CH (38225)
				Frequency (2572.5)MHz	Frequency (2595)MHz	Frequency (2617.5)MHz
38/ 5	QPSK	1	0	22.87	22.73	22.74
		1	12	22.91	22.85	22.90
		1	24	22.62	22.65	22.67
		12	0	21.98	21.78	21.94
		12	6	21.85	21.67	21.82
		12	13	21.79	21.60	21.78
		25	0	21.75	21.74	21.77
	16QAM	1	0	22.00	21.84	21.89
		1	12	22.03	21.97	22.05
		1	24	21.60	21.69	21.66
		12	0	20.84	20.93	21.03
		12	6	20.75	20.84	20.85
		12	13	20.72	20.79	20.71
		25	0	20.79	20.76	20.81
	64QAM	1	0	20.52	20.39	20.50
		1	12	20.50	20.61	20.57
		1	24	20.28	20.30	20.28
		12	0	19.95	19.82	20.05
		12	6	19.83	19.84	19.82
		12	13	19.85	19.78	19.78
		25	0	19.84	19.81	19.84



Band/BW	Modulation	RB Size	RB Offset	Low CH (37800)	Low Mid CH (38000)	Mid CH (38200)
				Frequency (2575)MHz	Frequency (2595)MHz	Frequency (2615)MHz
38/ 10	QPSK	1	0	22.88	22.72	22.75
		1	24	22.88	22.94	22.94
		1	49	22.71	22.73	22.65
		25	0	21.99	21.80	21.88
		25	12	21.85	21.80	21.75
		25	25	21.75	21.63	21.66
		50	0	21.85	21.69	21.81
	16QAM	1	0	21.94	21.80	21.86
		1	24	22.04	21.90	22.05
		1	49	21.60	21.66	21.78
		25	0	20.82	20.88	20.97
		25	12	20.86	20.81	20.91
		25	25	20.83	20.81	20.82
		50	0	20.81	20.78	20.77
	64QAM	1	0	20.51	20.46	20.41
		1	24	20.51	20.55	20.52
		1	49	20.15	20.28	20.26
		25	0	19.85	19.88	19.97
		25	12	19.87	19.84	19.95
		25	25	19.85	19.68	19.69
		50	0	19.87	19.73	19.82



Band/BW	Modulation	RB Size	RB Offset	Low CH (37825)	Low Mid CH (38000)	Mid CH (38175)
				Frequency (2577.5)MHz	Frequency (2595)MHz	Frequency (2612.5)MHz
38/ 15	QPSK	1	0	22.90	22.67	22.74
		1	37	22.87	22.84	22.86
		1	74	22.74	22.74	22.75
		36	0	21.98	21.73	21.97
		36	19	21.86	21.73	21.77
		36	39	21.75	21.60	21.77
		75	0	21.73	21.73	21.71
	16QAM	1	0	22.02	21.85	21.88
		1	37	22.08	21.97	21.91
		1	74	21.59	21.63	21.77
		36	0	20.86	20.90	20.99
		36	19	20.88	20.80	20.94
		36	39	20.81	20.80	20.76
		75	0	20.82	20.76	20.78
	64QAM	1	0	20.46	20.38	20.45
		1	37	20.50	20.55	20.55
		1	74	20.23	20.25	20.33
		36	0	19.93	19.88	20.07
		36	19	19.90	19.89	19.86
		36	39	19.81	19.68	19.77
		75	0	19.82	19.81	19.93



Band/BW	Modulation	RB Size	RB Offset	Low CH (37850)	Low Mid CH (38000)	Mid CH (38150)
				Frequency (2580)MHz	Frequency (2595)MHz	Frequency (2610)MHz
38/ 20	QPSK	1	0	22.82	22.93	22.86
		1	50	22.99	23.01	23.00
		1	99	22.75	22.77	22.78
		50	0	21.88	22.05	22.03
		50	25	21.82	21.88	21.86
		50	50	21.74	21.80	21.80
		100	0	21.78	21.86	21.85
	16QAM	1	0	22.05	21.90	21.97
		1	50	22.09	22.03	22.06
		1	99	21.73	21.75	21.79
		50	0	20.94	20.99	21.12
		50	25	20.90	20.95	20.96
		50	50	20.85	20.84	20.86
		100	0	20.90	20.82	20.92
	64QAM	1	0	20.57	20.50	20.55
		1	50	20.61	20.66	20.65
		1	99	20.30	20.34	20.40
		50	0	20.00	19.97	20.11
		50	25	19.97	19.90	19.96
		50	50	19.89	19.82	19.82
		100	0	19.91	19.85	19.94



LTE Band 41

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
7/5	QPSK	1	0	22.86	22.67	22.49
		1	12	23.09	22.96	22.78
		1	24	22.74	22.75	22.58
		12	0	21.81	21.64	21.66
		12	6	21.92	21.60	21.54
		12	13	21.82	21.59	21.45
		25	0	21.86	21.58	21.56
	16QAM	1	0	21.90	21.76	21.58
		1	12	22.05	21.77	21.75
		1	24	21.79	21.68	21.56
		12	0	20.94	20.80	20.66
		12	6	20.81	20.70	20.68
		12	13	20.75	20.66	20.58
		25	0	20.85	20.63	20.68
	64QAM	1	0	20.42	20.42	20.32
		1	12	20.60	20.66	20.40
		1	24	20.36	20.34	20.30
		12	0	19.86	19.79	19.69
		12	6	19.81	19.70	19.55
		12	13	19.73	19.52	19.46
		25	0	19.86	19.65	19.63



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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
7/ 10	QPSK	1	0	22.84	22.65	22.58
		1	24	23.01	22.94	22.70
		1	49	22.77	22.72	22.64
		25	0	21.87	21.69	21.57
		25	12	21.90	21.65	21.59
		25	25	21.84	21.55	21.43
		50	0	21.86	21.59	21.56
	16QAM	1	0	21.93	21.71	21.57
		1	24	22.10	21.85	21.76
		1	49	21.80	21.61	21.66
		25	0	20.92	20.76	20.78
		25	12	20.83	20.65	20.69
		25	25	20.81	20.65	20.49
		50	0	20.94	20.62	20.60
	64QAM	1	0	20.43	20.41	20.40
		1	24	20.57	20.58	20.36
		1	49	20.48	20.40	20.34
		25	0	19.92	19.82	19.68
		25	12	19.86	19.74	19.64
		25	25	19.82	19.55	19.56
		50	0	19.82	19.64	19.64



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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
7/ 15	QPSK	1	0	22.91	22.63	22.51
		1	37	23.07	22.85	22.83
		1	74	22.75	22.73	22.62
		36	0	21.82	21.71	21.65
		36	19	21.86	21.65	21.54
		36	39	21.73	21.61	21.42
		75	0	21.92	21.58	21.54
	16QAM	1	0	21.98	21.76	21.60
		1	37	22.10	21.85	21.74
		1	74	21.87	21.66	21.62
		36	0	20.84	20.73	20.79
		36	19	20.82	20.69	20.71
		36	39	20.74	20.61	20.49
		75	0	20.88	20.62	20.59
	64QAM	1	0	20.49	20.47	20.42
		1	37	20.65	20.64	20.43
		1	74	20.36	20.29	20.32
		36	0	19.83	19.73	19.72
		36	19	19.85	19.75	19.60
		36	39	19.78	19.51	19.58
		75	0	19.90	19.64	19.61



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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
7/ 20	QPSK	1	0	22.95	22.76	22.62
		1	50	23.14	22.98	22.84
		1	99	22.86	22.76	22.68
		50	0	21.95	21.77	21.72
		50	25	21.94	21.70	21.63
		50	50	21.86	21.63	21.53
		100	0	21.98	21.71	21.64
	16QAM	1	0	22.02	21.83	21.72
		1	50	22.20	21.90	21.79
		1	99	21.91	21.74	21.69
		50	0	20.99	20.81	20.81
		50	25	20.90	20.79	20.77
		50	50	20.86	20.68	20.63
		100	0	20.98	20.77	20.71
	64QAM	1	0	20.57	20.51	20.47
		1	50	20.72	20.67	20.51
		1	99	20.49	20.44	20.35
		50	0	19.95	19.87	19.82
		50	25	19.94	19.76	19.69
		50	50	19.87	19.64	19.61
		100	0	19.95	19.75	19.68



LTE Band 66

Band/BW	Modulation	RB Size	RB Offset	Low CH 131979	Mid CH 132322	High CH 132665
				Frequency 1710.7MHz	Frequency 1745MHz	Frequency 1779.3MHz
66/ 1.4	QPSK	1	0	22.83	22.89	22.86
		1	2	23.02	23.21	22.97
		1	5	22.95	23.03	22.92
		3	0	23.07	23.19	23.06
		3	1	22.99	23.26	22.97
		3	3	23.07	23.15	23.10
		6	0	21.96	22.18	22.00
	16QAM	1	0	22.09	22.10	22.07
		1	2	22.19	22.28	22.19
		1	5	22.10	22.32	22.30
		3	0	22.57	22.28	22.06
		3	1	22.08	22.31	21.96
		3	3	22.08	22.24	22.12
		6	0	21.06	21.36	20.99
	64QAM	1	0	20.93	21.19	21.31
		1	2	21.39	21.45	21.32
		1	5	21.22	21.39	21.24
		3	0	21.05	21.21	21.01
		3	1	21.04	21.34	20.97
		3	3	21.10	21.24	21.14
		6	0	19.92	20.25	20.01



Band/BW	Modulation	RB Size	RB Offset	Low CH 131987	Mid CH 132322	High CH 132657
				Frequency 1711.5MHz	Frequency 1745MHz	Frequency 1778.5MHz
66/ 3	QPSK	1	0	22.76	22.85	22.98
		1	7	23.07	23.25	22.94
		1	14	22.86	23.01	22.89
		8	0	22.00	22.22	22.08
		8	3	21.95	22.13	21.90
		8	7	22.06	22.12	22.09
		15	0	21.95	22.21	21.97
	16QAM	1	0	22.03	22.05	22.06
		1	7	22.19	22.34	22.27
		1	14	22.21	22.32	22.19
		8	0	21.52	21.23	21.06
		8	3	21.06	21.26	20.93
		8	7	20.97	21.22	21.10
		15	0	21.07	21.23	21.00
	64QAM	1	0	20.91	21.11	21.41
		1	7	21.42	21.41	21.32
		1	14	21.28	21.35	21.14
		8	0	19.94	20.29	20.00
		8	3	20.04	20.35	19.94
		8	7	20.04	20.26	20.18
		15	0	19.97	20.25	20.14



Band/BW	Modulation	RB Size	RB Offset	Low CH 131997	Mid CH 132322	High CH 132647
				Frequency 1712.5MHz	Frequency 1745MHz	Frequency 1777.5MHz
66/ 5	QPSK	1	0	22.72	22.79	22.92
		1	12	23.00	23.24	23.04
		1	24	22.92	22.90	22.85
		12	0	22.05	22.28	22.03
		12	6	22.00	22.12	21.99
		12	13	22.06	22.16	22.08
		25	0	21.92	22.19	21.99
	16QAM	1	0	22.08	22.12	21.99
		1	12	22.22	22.40	22.28
		1	24	22.21	22.30	22.28
		12	0	21.47	21.25	21.00
		12	6	21.03	21.26	20.91
		12	13	20.99	21.24	21.15
		25	0	21.08	21.25	21.05
	64QAM	1	0	20.98	21.17	21.38
		1	12	21.36	21.50	21.21
		1	24	21.26	21.34	21.21
		12	0	20.05	20.19	20.06
		12	6	20.05	20.34	19.96
		12	13	20.16	20.29	20.17
		25	0	20.01	20.20	20.11



Band/BW	Modulation	RB Size	RB Offset	Low CH 132022	Mid CH 132322	High CH 132622
				Frequency 1715MHz	Frequency 1745MHz	Frequency 1775MHz
66/ 10	QPSK	1	0	22.73	22.89	22.89
		1	24	23.11	23.16	23.02
		1	49	22.92	22.93	22.81
		25	0	22.09	22.28	22.12
		25	12	21.98	22.23	21.90
		25	25	21.94	22.14	22.00
		50	0	21.95	22.18	22.06
	16QAM	1	0	22.11	22.09	22.04
		1	24	22.24	22.37	22.17
		1	49	22.14	22.31	22.29
		25	0	21.56	21.29	21.01
		25	12	21.01	21.34	20.99
		25	25	21.01	21.34	21.16
		50	0	21.05	21.36	21.08
	64QAM	1	0	20.95	21.14	21.39
		1	24	21.37	21.54	21.24
		1	49	21.27	21.29	21.14
		25	0	20.04	20.19	20.10
		25	12	20.03	20.31	20.00
		25	25	20.08	20.22	20.13
		50	0	20.00	20.30	20.12



Band/BW	Modulation	RB Size	RB Offset	Low CH 132047	Mid CH 132322	High CH 132597
				Frequency 1717.5 MHz	Frequency 1745MHz	Frequency 1772.5 MHz
66/ 15	QPSK	1	0	22.75	22.88	22.96
		1	37	23.04	23.27	23.08
		1	74	22.88	22.94	22.87
		36	0	21.98	22.14	22.10
		36	19	22.00	22.20	22.01
		36	39	21.95	22.16	22.10
		75	0	21.95	22.11	22.02
	16QAM	1	0	22.05	22.16	22.13
		1	37	22.26	22.36	22.21
		1	74	22.15	22.24	22.19
		36	0	21.51	21.35	21.10
		36	19	21.04	21.31	20.91
		36	39	21.00	21.29	21.18
		75	0	21.02	21.26	21.05
	64QAM	1	0	20.96	21.17	21.36
		1	37	21.31	21.45	21.26
		1	74	21.15	21.35	21.16
		36	0	20.00	20.22	20.02
		36	19	20.04	20.29	20.08
		36	39	20.12	20.21	20.14
		75	0	19.99	20.29	20.05



Band/BW	Modulation	RB Size	RB Offset	Low CH 132072	Mid CH 132322	High CH 132572
				Frequency 1720MHz	Frequency 1745MHz	Frequency 1770MHz
66/ 20	QPSK	1	0	22.86	22.92	22.99
		1	50	23.12	23.31	23.09
		1	99	22.99	23.04	22.95
		50	0	22.11	22.29	22.13
		50	25	22.08	22.27	22.04
		50	50	22.09	22.22	22.11
		100	0	22.01	22.25	22.11
	16QAM	1	0	22.16	22.19	22.14
		1	50	22.32	22.43	22.31
		1	99	22.24	22.34	22.33
		50	0	21.59	21.36	21.11
		50	25	21.11	21.37	21.05
		50	50	21.12	21.35	21.22
		100	0	21.09	21.38	21.13
	64QAM	1	0	21.02	21.24	21.45
		1	50	21.46	21.56	21.34
		1	99	21.29	21.43	21.27
		50	0	20.09	20.34	20.11
		50	25	20.10	20.43	20.09
		50	50	20.18	20.33	20.24
		100	0	20.06	20.35	20.16



CA_41C Ant0

Combination 20MHz+20MHz (100RB+100RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39750	2506	39948	2525.8	QPSK	1	99	1	0	1	22.67
				16QAM	1	99	1	0	1	21.74
				64QAM	1	99	1	0	1	20.23
40521	2583.1	40719	2602.9	QPSK	1	99	1	0	1	22.75
				16QAM	1	99	1	0	1	21.64
				64QAM	1	99	1	0	1	20.19
41292	2660.2	41490	2680	QPSK	1	99	1	0	1	22.51
				16QAM	1	99	1	0	1	21.66
				64QAM	1	99	1	0	1	20.21

Combination 20MHz+15MHz (100RB+75RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39750	2506	39921	2523.1	QPSK	1	99	1	0	1	22.65
				16QAM	1	99	1	0	1	21.66
				64QAM	1	99	1	0	1	20.15
40546	2585.6	40717	2602.7	QPSK	1	99	1	0	1	22.67
				16QAM	1	99	1	0	1	21.51
				64QAM	1	99	1	0	1	20.17
41341	2665.1	41512	2682.2	QPSK	1	99	1	0	1	22.40
				16QAM	1	99	1	0	1	21.53
				64QAM	1	99	1	0	1	20.13

Combination 15MHz+20MHz (75RB+100RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39728	2503.8	39899	2520.9	QPSK	1	74	1	0	1	22.66
				16QAM	1	74	1	0	1	21.59
				64QAM	1	74	1	0	1	20.21
40523	2583.3	40694	2600.4	QPSK	1	74	1	0	1	22.61
				16QAM	1	74	1	0	1	21.50
				64QAM	1	74	1	0	1	20.10
41319	2662.9	41490	2680	QPSK	1	74	1	0	1	22.38
				16QAM	1	74	1	0	1	21.65
				64QAM	1	74	1	0	1	20.14

Combination 15MHz+15MHz (75RB+75RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39725	2503.5	39875	2518.5	QPSK	1	74	1	0	1	22.52
				16QAM	1	74	1	0	1	21.71
				64QAM	1	74	1	0	1	20.22
40545	2585.5	40695	2600.5	QPSK	1	74	1	0	1	22.67
				16QAM	1	74	1	0	1	21.50
				64QAM	1	74	1	0	1	20.09
41365	2667.5	41515	2682.5	QPSK	1	74	1	0	1	22.43
				16QAM	1	74	1	0	1	21.60
				64QAM	1	74	1	0	1	20.12



Combination 20MHz+10MHz (100RB+50RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39750	2506	39894	2520.4	QPSK	1	99	1	0	1	22.58
				16QAM	1	99	1	0	1	21.71
				64QAM	1	99	1	0	1	20.13
40571	2588.1	40715	2602.5	QPSK	1	99	1	0	1	22.62
				16QAM	1	99	1	0	1	21.49
				64QAM	1	99	1	0	1	20.07
41391	2670.1	41535	2684.5	QPSK	1	99	1	0	1	22.43
				16QAM	1	99	1	0	1	21.53
				64QAM	1	99	1	0	1	20.12

Combination 10MHz+20MHz (50RB+100RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39705	2501.5	39849	2515.9	QPSK	1	49	1	0	1	22.57
				16QAM	1	49	1	0	1	21.64
				64QAM	1	49	1	0	1	20.19
40526	2583.6	40670	2598	QPSK	1	49	1	0	1	22.71
				16QAM	1	49	1	0	1	21.57
				64QAM	1	49	1	0	1	20.09
41346	2665.6	41490	2680	QPSK	1	49	1	0	1	22.46
				16QAM	1	49	1	0	1	21.51
				64QAM	1	49	1	0	1	20.07

Combination 15MHz+10MHz (75RB+50RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39725	2503.5	39845	2515.5	QPSK	1	74	1	0	1	22.58
				16QAM	1	74	1	0	1	21.72
				64QAM	1	74	1	0	1	20.08
40571	2588.1	40691	2600.1	QPSK	1	74	1	0	1	22.60
				16QAM	1	74	1	0	1	21.50
				64QAM	1	74	1	0	1	20.12
41417	2672.7	41537	2684.7	QPSK	1	74	1	0	1	22.36
				16QAM	1	74	1	0	1	21.54
				64QAM	1	74	1	0	1	20.13

Combination 10MHz+15MHz (50RB+75RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39703	2501.3	39823	2513.3	QPSK	1	49	1	0	1	22.60
				16QAM	1	49	1	0	1	21.66
				64QAM	1	49	1	0	1	20.08
40549	2585.9	40669	2597.9	QPSK	1	49	1	0	1	22.73
				16QAM	1	49	1	0	1	21.54
				64QAM	1	49	1	0	1	20.08
41395	2670.5	41515	2682.5	QPSK	1	49	1	0	1	22.44
				16QAM	1	49	1	0	1	21.65
				64QAM	1	49	1	0	1	20.11



Combination 20MHz+5MHz (100RB+25RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39750	2506	39867	2517.7	QPSK	1	99	1	0	1	22.61
				16QAM	1	99	1	0	1	21.62
				64QAM	1	99	1	0	1	20.16
40595	2590.5	40712	2602.2	QPSK	1	99	1	0	1	22.62
				16QAM	1	99	1	0	1	21.54
				64QAM	1	99	1	0	1	20.04
41440	2675	41557	2686.7	QPSK	1	99	1	0	1	22.48
				16QAM	1	99	1	0	1	21.57
				64QAM	1	99	1	0	1	20.15

Combination 5MHz+20MHz (25RB+100RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
					RB Size	RB offset	RB Size	RB offset		
39683	2499.3	39800	2511	QPSK	1	24	1	0	1	22.57
				16QAM	1	24	1	0	1	21.63
				64QAM	1	24	1	0	1	20.11
40528	2583.8	40645	2595.5	QPSK	1	24	1	0	1	22.64
				16QAM	1	24	1	0	1	21.63
				64QAM	1	24	1	0	1	20.15
41373	2668.3	41490	2680	QPSK	1	24	1	0	1	22.44
				16QAM	1	24	1	0	1	21.53
				64QAM	1	24	1	0	1	20.11



EIRP

LTE BAND 4

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	23.13	-1.56	21.57	143.55	1
20175	1732.5	23.18	-1.56	21.62	145.21	1
20393	1754.3	23.35	-1.56	21.79	151.01	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	22.38	-1.56	20.82	120.78	1
20175	1732.5	22.46	-1.56	20.9	123.03	1
20393	1754.3	22.63	-1.56	21.07	127.94	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	21.19	-1.56	19.63	91.83	1
20175	1732.5	21.49	-1.56	19.93	98.4	1
20393	1754.3	21.48	-1.56	19.92	98.17	1



BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	23.09	-1.56	21.53	142.23	1
20175	1732.5	23.25	-1.56	21.69	147.57	1
20385	1753.5	23.36	-1.56	21.8	151.36	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	22.39	-1.56	20.83	121.06	1
20175	1732.5	22.49	-1.56	20.93	123.88	1
20385	1753.5	22.41	-1.56	20.85	121.62	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	21.2	-1.56	19.64	92.04	1
20175	1732.5	21.47	-1.56	19.91	97.95	1
20385	1753.5	21.58	-1.56	20.02	100.46	1



BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	23.05	-1.56	21.49	140.93	1
20175	1732.5	23.26	-1.56	21.7	147.91	1
20375	1752.5	23.29	-1.56	21.73	148.94	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.43	-1.56	20.87	122.18	1
20175	1732.5	22.47	-1.56	20.91	123.31	1
20375	1752.5	22.63	-1.56	21.07	127.94	1

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	21.28	-1.56	19.72	93.76	1
20175	1732.5	21.42	-1.56	19.86	96.83	1
20375	1752.5	21.57	-1.56	20.01	100.23	1



BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	23	-1.56	21.44	139.32	1
20175	1732.5	23.18	-1.56	21.62	145.21	1
20350	1750	23.27	-1.56	21.71	148.25	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	22.45	-1.56	20.89	122.74	1
20175	1732.5	22.51	-1.56	20.95	124.45	1
20350	1750	22.69	-1.56	21.13	129.72	1

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	21.19	-1.56	19.63	91.83	1
20175	1732.5	21.47	-1.56	19.91	97.95	1
20350	1750	21.61	-1.56	20.05	101.16	1



BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	23.08	-1.56	21.52	141.91	1
20175	1732.5	23.13	-1.56	21.57	143.55	1
20325	1747.5	23.41	-1.56	21.85	153.11	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	22.44	-1.56	20.88	122.46	1
20175	1732.5	22.49	-1.56	20.93	123.88	1
20325	1747.5	22.72	-1.56	21.16	130.62	1

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	21.31	-1.56	19.75	94.41	1
20175	1732.5	21.45	-1.56	19.89	97.5	1
20325	1747.5	21.47	-1.56	19.91	97.95	1



BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.12	-1.56	21.56	143.22	1
20175	1732.5	23.27	-1.56	21.71	148.25	1
20300	1745	23.42	-1.56	21.86	153.46	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	22.47	-1.56	20.91	123.31	1
20175	1732.5	22.57	-1.56	21.01	126.18	1
20300	1745	22.75	-1.56	21.19	131.52	1

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	21.32	-1.56	19.76	94.62	1
20175	1732.5	21.51	-1.56	19.95	98.86	1
20300	1745	21.62	-1.56	20.06	101.39	1



LTE BAND 38

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	22.91	1.2	24.11	257.63	2
38000	2595.0	22.85	1.2	24.05	254.1	2
38225	2617.5	22.9	1.2	24.1	257.04	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	22.03	1.2	23.23	210.38	2
38000	2595.0	21.97	1.2	23.17	207.49	2
38225	2617.5	22.05	1.2	23.25	211.35	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	20.52	1.2	21.72	148.59	2
38000	2595	20.61	1.2	21.81	151.71	2
38225	2617.5	20.57	1.2	21.77	150.31	2



CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	22.88	1.2	24.08	255.86	2
38000	2595.0	22.94	1.2	24.14	259.42	2
38200	2615.0	22.94	1.2	24.14	259.42	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	22.04	1.2	23.24	210.86	2
38000	2595.0	21.9	1.2	23.1	204.17	2
38200	2615.0	22.05	1.2	23.25	211.35	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575	20.51	1.2	21.71	148.25	2
38000	2595	20.55	1.2	21.75	149.62	2
38200	2615	20.52	1.2	21.72	148.59	2



CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	22.9	1.2	24.1	257.04	2
38000	2595.0	22.84	1.2	24.04	253.51	2
38175	2612.5	22.86	1.2	24.06	254.68	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	22.08	1.2	23.28	212.81	2
38000	2595.0	21.97	1.2	23.17	207.49	2
38175	2612.5	21.91	1.2	23.11	204.64	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	20.5	1.2	21.7	147.91	2
38000	2595	20.55	1.2	21.75	149.62	2
38175	2612.5	20.55	1.2	21.75	149.62	2



CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	22.99	1.2	24.19	262.42	2
38000	2595.0	23.01	1.2	24.21	263.63	2
38150	2610.0	23	1.2	24.2	263.03	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	22.09	1.2	23.29	213.3	2
38000	2595.0	22.03	1.2	23.23	210.38	2
38150	2610.0	22.06	1.2	23.26	211.84	2

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580	20.61	1.2	21.81	151.71	2
38000	2595	20.66	1.2	21.86	153.46	2
38150	2610	20.65	1.2	21.85	153.11	2



CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39715	2502.5	22.99	1.2	24.19	262.42	2
39675	2498.5	23.09	1.2	24.29	268.53	2
40148	2545.8	23.16	1.2	24.36	272.9	2
40620	2593	22.96	1.2	24.16	260.62	2
41093	2640.3	22.9	1.2	24.1	257.04	2
41565	2687.5	22.78	1.2	23.98	250.03	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39715	2502.5	22.06	1.2	23.26	211.84	2
39675	2498.5	22.05	1.2	23.25	211.35	2
40148	2545.8	22.12	1.2	23.32	214.78	2
40620	2593	21.77	1.2	22.97	198.15	2
41093	2640.3	21.96	1.2	23.16	207.01	2
41565	2687.5	21.75	1.2	22.95	197.24	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39715	2502.5	20.69	1.2	21.89	154.53	2
39675	2498.5	20.6	1.2	21.8	151.36	2
40148	2545.8	20.82	1.2	22.02	159.22	2
40620	2593	20.66	1.2	21.86	153.46	2
41093	2640.3	20.57	1.2	21.77	150.31	2
41565	2687.5	20.4	1.2	21.6	144.54	2



CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39740	2505	23.05	1.2	24.25	266.07	2
39700	2501	23.01	1.2	24.21	263.63	2
40160	2547	23.14	1.2	24.34	271.64	2
40620	2593	22.94	1.2	24.14	259.42	2
41080	2639	22.83	1.2	24.03	252.93	2
41540	2685	22.7	1.2	23.9	245.47	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39740	2505	22.16	1.2	23.36	216.77	2
39700	2501	22.1	1.2	23.3	213.8	2
40160	2547	22.12	1.2	23.32	214.78	2
40620	2593	21.85	1.2	23.05	201.84	2
41080	2639	21.92	1.2	23.12	205.12	2
41540	2685	21.76	1.2	22.96	197.7	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39740	2505	20.63	1.2	21.83	152.41	2
39700	2501	20.57	1.2	21.77	150.31	2
40160	2547	20.71	1.2	21.91	155.24	2
40620	2593	20.58	1.2	21.78	150.66	2
41080	2639	20.5	1.2	21.7	147.91	2
41540	2685	20.4	1.2	21.6	144.54	2



CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39765	2507.5	22.98	1.2	24.18	261.82	2
39725	2503.5	23.07	1.2	24.27	267.3	2
40173	2548.3	23.09	1.2	24.29	268.53	2
40620	2593	22.85	1.2	24.05	254.1	2
41068	2637.8	22.86	1.2	24.06	254.68	2
41515	2682.5	22.83	1.2	24.03	252.93	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39765	2507.5	22.11	1.2	23.31	214.29	2
39725	2503.5	22.1	1.2	23.3	213.8	2
40173	2548.3	22.11	1.2	23.31	214.29	2
40620	2593	21.85	1.2	23.05	201.84	2
41068	2637.8	21.89	1.2	23.09	203.7	2
41515	2682.5	21.74	1.2	22.94	196.79	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39765	2507.5	20.68	1.2	21.88	154.17	2
39725	2503.5	20.65	1.2	21.85	153.11	2
40173	2548.3	20.68	1.2	21.88	154.17	2
40620	2593	20.64	1.2	21.84	152.76	2
41068	2637.8	20.49	1.2	21.69	147.57	2
41515	2682.5	20.43	1.2	21.63	145.55	2

**CHANNEL BANDWIDTH: 20MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39790	2510	23.11	1.2	24.31	269.77	2
39750	2506	23.14	1.2	24.34	271.64	2
40185	2549.5	23.21	1.2	24.41	276.06	2
40620	2593	22.98	1.2	24.18	261.82	2
41055	2636.5	22.92	1.2	24.12	258.23	2
41490	2680	22.84	1.2	24.04	253.51	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39790	2510	22.17	1.2	23.37	217.27	2
39750	2506	22.2	1.2	23.4	218.78	2
40185	2549.5	22.18	1.2	23.38	217.77	2
40620	2593	21.9	1.2	23.1	204.17	2
41055	2636.5	22.02	1.2	23.22	209.89	2
41490	2680	21.79	1.2	22.99	199.07	2

CHANNEL BANDWIDTH: 20 MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39790	2510	20.78	1.2	21.98	157.76	2
39750	2506	20.72	1.2	21.92	155.6	2
40185	2549.5	20.83	1.2	22.03	159.59	2
40620	2593	20.67	1.2	21.87	153.82	2
41055	2636.5	20.64	1.2	21.84	152.76	2
41490	2680	20.51	1.2	21.71	148.25	2



LTE BAND 66

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	23.07	-1.55	21.52	141.91	1
132322	1745	23.26	-1.55	21.71	148.25	1
132665	1779.3	23.1	-1.55	21.55	142.89	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	22.57	-1.55	21.02	126.47	1
132322	1745	22.32	-1.55	20.77	119.4	1
132665	1779.3	22.3	-1.55	20.75	118.85	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	21.39	-1.55	19.84	96.38	1
132322	1745	21.45	-1.55	19.9	97.72	1
132665	1779.3	21.32	-1.55	19.77	94.84	1



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CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	23.07	-1.55	21.52	141.91	1
132322	1745	23.25	-1.55	21.7	147.91	1
132657	1778.5	22.98	-1.55	21.43	139	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	22.21	-1.55	20.66	116.41	1
132322	1745	22.34	-1.55	20.79	119.95	1
132657	1778.5	22.27	-1.55	20.72	118.03	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	21.42	-1.55	19.87	97.05	1
132322	1745	21.41	-1.55	19.86	96.83	1
132657	1778.5	21.41	-1.55	19.86	96.83	1



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CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	23	-1.55	21.45	139.64	1
132322	1745	23.24	-1.55	21.69	147.57	1
132647	1777.5	23.04	-1.55	21.49	140.93	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	22.22	-1.55	20.67	116.68	1
132322	1745	22.4	-1.55	20.85	121.62	1
132647	1777.5	22.28	-1.55	20.73	118.3	1

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	21.36	-1.55	19.81	95.72	1
132322	1745	21.5	-1.55	19.95	98.86	1
132647	1777.5	21.38	-1.55	19.83	96.16	1



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CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	23.11	-1.55	21.56	143.22	1
132322	1745	23.16	-1.55	21.61	144.88	1
132622	1775	23.02	-1.55	21.47	140.28	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	22.24	-1.55	20.69	117.22	1
132322	1745	22.37	-1.55	20.82	120.78	1
132622	1775	22.29	-1.55	20.74	118.58	1

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	21.37	-1.55	19.82	95.94	1
132322	1745	21.54	-1.55	19.99	99.77	1
132622	1775	21.39	-1.55	19.84	96.38	1



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CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	23.04	-1.55	21.49	140.93	1
132322	1745	23.27	-1.55	21.72	148.59	1
132597	1772.5	23.08	-1.55	21.53	142.23	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	22.26	-1.55	20.71	117.76	1
132322	1745	22.36	-1.55	20.81	120.5	1
132597	1772.5	22.21	-1.55	20.66	116.41	1

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	21.31	-1.55	19.76	94.62	1
132322	1745	21.45	-1.55	19.9	97.72	1
132597	1772.5	21.36	-1.55	19.81	95.72	1



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CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	23.12	-1.55	21.57	143.55	1
132322	1745	23.31	-1.55	21.76	149.97	1
132572	1770	23.09	-1.55	21.54	142.56	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	22.32	-1.55	20.77	119.4	1
132322	1745	22.43	-1.55	20.88	122.46	1
132572	1770	22.33	-1.55	20.78	119.67	1

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	21.46	-1.55	19.91	97.95	1
132322	1745	21.56	-1.55	20.01	100.23	1
132572	1770	21.45	-1.55	19.9	97.72	1

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



CA 41C Ant0

Combination 20MHz+20MHz (100RB+100RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39750	2506	39948	2525.8	QPSK	1	99	1	0	1	22.67	1.20	23.87	243.78	2
				16QAM	1	99	1	0	1	21.74	1.20	22.94	196.79	2
				64QAM	1	99	1	0	1	20.23	1.20	21.43	139	2
40521	2583.1	40719	2602.9	QPSK	1	99	1	0	1	22.75	1.20	23.95	248.31	2
				16QAM	1	99	1	0	1	21.64	1.20	22.84	192.31	2
				64QAM	1	99	1	0	1	20.19	1.20	21.39	137.72	2
41292	2660.2	41490	2680	QPSK	1	99	1	0	1	22.51	1.20	23.71	234.96	2
				16QAM	1	99	1	0	1	21.66	1.20	22.86	193.2	2
				64QAM	1	99	1	0	1	20.21	1.20	21.41	138.36	2

Combination 20MHz+15MHz (100RB+75RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39750	2506	39921	2523.1	QPSK	1	99	1	0	1	22.65	1.20	23.85	242.66	2
				16QAM	1	99	1	0	1	21.66	1.20	22.86	193.2	2
				64QAM	1	99	1	0	1	20.15	1.20	21.35	136.46	2
40546	2585.6	40717	2602.7	QPSK	1	99	1	0	1	22.67	1.20	23.87	243.78	2
				16QAM	1	99	1	0	1	21.51	1.20	22.71	186.64	2
				64QAM	1	99	1	0	1	20.17	1.20	21.37	137.09	2
41341	2665.1	41512	2682.2	QPSK	1	99	1	0	1	22.40	1.20	23.6	229.09	2
				16QAM	1	99	1	0	1	21.53	1.20	22.73	187.5	2
				64QAM	1	99	1	0	1	20.13	1.20	21.33	135.83	2

Combination 15MHz+20MHz (75RB+100RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39728	2503.8	39899	2520.9	QPSK	1	74	1	0	1	22.66	1.20	23.86	243.22	2
				16QAM	1	74	1	0	1	21.59	1.20	22.79	190.11	2
				64QAM	1	74	1	0	1	20.21	1.20	21.41	138.36	2
40523	2583.3	40694	2600.4	QPSK	1	74	1	0	1	22.61	1.20	23.81	240.44	2
				16QAM	1	74	1	0	1	21.50	1.20	22.7	186.21	2
				64QAM	1	74	1	0	1	20.10	1.20	21.3	134.9	2
41319	2662.9	41490	2680	QPSK	1	74	1	0	1	22.38	1.20	23.58	228.03	2
				16QAM	1	74	1	0	1	21.65	1.20	22.85	192.75	2
				64QAM	1	74	1	0	1	20.14	1.20	21.34	136.14	2

Combination 15MHz+15MHz (75RB+75RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39725	2503.5	39875	2518.5	QPSK	1	74	1	0	1	22.52	1.20	23.72	235.5	2
				16QAM	1	74	1	0	1	21.71	1.20	22.91	195.43	2
				64QAM	1	74	1	0	1	20.22	1.20	21.42	138.68	2
40545	2585.5	40695	2600.5	QPSK	1	74	1	0	1	22.67	1.20	23.87	243.78	2
				16QAM	1	74	1	0	1	21.50	1.20	22.7	186.21	2
				64QAM	1	74	1	0	1	20.09	1.20	21.29	134.59	2
41365	2667.5	41515	2682.5	QPSK	1	74	1	0	1	22.43	1.20	23.63	230.67	2
				16QAM	1	74	1	0	1	21.60	1.20	22.8	190.55	2
				64QAM	1	74	1	0	1	20.12	1.20	21.32	135.52	2

Combination 20MHz+10MHz (100RB+50RB)

PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39750	2506	39894	2520.4	QPSK	1	99	1	0	1	22.58	1.20	23.78	238.78	2
				16QAM	1	99	1	0	1	21.71	1.20	22.91	195.43	2
				64QAM	1	99	1	0	1	20.13	1.20	21.33	135.83	2
40571	2588.1	40715	2602.5	QPSK	1	99	1	0	1	22.62	1.20	23.82	240.99	2
				16QAM	1	99	1	0	1	21.49	1.20	22.69	185.78	2
				64QAM	1	99	1	0	1	20.07	1.20	21.27	133.97	2
41391	2670.1	41535	2684.5	QPSK	1	99	1	0	1	22.43	1.20	23.63	230.67	2
				16QAM	1	99	1	0	1	21.53	1.20	22.73	187.5	2
				64QAM	1	99	1	0	1	20.12	1.20	21.32	135.52	2



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Combination 10MHz+20MHz (50RB+100RB)														
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39705	2501.5	39849	2515.9	QPSK	1	49	1	0	1	22.57	1.20	23.77	238.23	2
				16QAM	1	49	1	0	1	21.64	1.20	22.84	192.31	2
				64QAM	1	49	1	0	1	20.19	1.20	21.39	137.72	2
40526	2583.6	40670	2598	QPSK	1	49	1	0	1	22.71	1.20	23.91	246.04	2
				16QAM	1	49	1	0	1	21.57	1.20	22.77	189.23	2
				64QAM	1	49	1	0	1	20.09	1.20	21.29	134.59	2
41346	2665.6	41490	2680	QPSK	1	49	1	0	1	22.46	1.20	23.66	232.27	2
				16QAM	1	49	1	0	1	21.51	1.20	22.71	186.64	2
				64QAM	1	49	1	0	1	20.07	1.20	21.27	133.97	2
Combination 15MHz+10MHz (75RB+50RB)														
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39725	2503.5	39845	2515.5	QPSK	1	74	1	0	1	22.58	1.20	23.78	238.78	2
				16QAM	1	74	1	0	1	21.72	1.20	22.92	195.88	2
				64QAM	1	74	1	0	1	20.08	1.20	21.28	134.28	2
40571	2588.1	40691	2600.1	QPSK	1	74	1	0	1	22.60	1.20	23.8	239.88	2
				16QAM	1	74	1	0	1	21.50	1.20	22.7	186.21	2
				64QAM	1	74	1	0	1	20.12	1.20	21.32	135.52	2
41417	2672.7	41537	2684.7	QPSK	1	74	1	0	1	22.36	1.20	23.56	226.99	2
				16QAM	1	74	1	0	1	21.54	1.20	22.74	187.93	2
				64QAM	1	74	1	0	1	20.13	1.20	21.33	135.83	2
Combination 10MHz+15MHz (50RB+75RB)														
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39703	2501.3	39823	2513.3	QPSK	1	49	1	0	1	22.60	1.20	23.8	239.88	2
				16QAM	1	49	1	0	1	21.66	1.20	22.86	193.2	2
				64QAM	1	49	1	0	1	20.08	1.20	21.28	134.28	2
40549	2585.9	40669	2597.9	QPSK	1	49	1	0	1	22.73	1.20	23.93	247.17	2
				16QAM	1	49	1	0	1	21.54	1.20	22.74	187.93	2
				64QAM	1	49	1	0	1	20.08	1.20	21.28	134.28	2
41395	2670.5	41515	2682.5	QPSK	1	49	1	0	1	22.44	1.20	23.64	231.21	2
				16QAM	1	49	1	0	1	21.65	1.20	22.85	192.75	2
				64QAM	1	49	1	0	1	20.11	1.20	21.31	135.21	2
Combination 20MHz+5MHz (100RB+25RB)														
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39750	2506	39867	2517.7	QPSK	1	99	1	0	1	22.61	1.20	23.81	240.44	2
				16QAM	1	99	1	0	1	21.62	1.20	22.82	191.43	2
				64QAM	1	99	1	0	1	20.16	1.20	21.36	136.77	2
40595	2590.5	40712	2602.2	QPSK	1	99	1	0	1	22.62	1.20	23.82	240.99	2
				16QAM	1	99	1	0	1	21.54	1.20	22.74	187.93	2
				64QAM	1	99	1	0	1	20.04	1.20	21.24	133.05	2
41440	2675	41557	2686.7	QPSK	1	99	1	0	1	22.48	1.20	23.68	233.35	2
				16QAM	1	99	1	0	1	21.57	1.20	22.77	189.23	2
				64QAM	1	99	1	0	1	20.15	1.20	21.35	136.46	2
Combination 5MHz+20MHz (25RB+100RB)														
PCC Channel	PCC Frequency (MHz)	SCC Channel	SCC Frequency (MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	Gain (dBi)	EIRP(dBm)	EIRP(mW)	Limit (W)
					RB Size	RB offset	RB Size	RB offset						
39683	2499.3	39800	2511	QPSK	1	24	1	0	1	22.57	1.20	23.77	238.23	2
				16QAM	1	24	1	0	1	21.63	1.20	22.83	191.87	2
				64QAM	1	24	1	0	1	20.11	1.20	21.31	135.21	2
40528	2583.8	40645	2595.5	QPSK	1	24	1	0	1	22.64	1.20	23.84	242.1	2
				16QAM	1	24	1	0	1	21.63	1.20	22.83	191.87	2
				64QAM	1	24	1	0	1	20.15	1.20	21.35	136.46	2
41373	2668.3	41490	2680	QPSK	1	24	1	0	1	22.44	1.20	23.64	231.21	2
				16QAM	1	24	1	0	1	21.53	1.20	22.73	187.5	2
				64QAM	1	24	1	0	1	20.11	1.20	21.31	135.21	2



3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

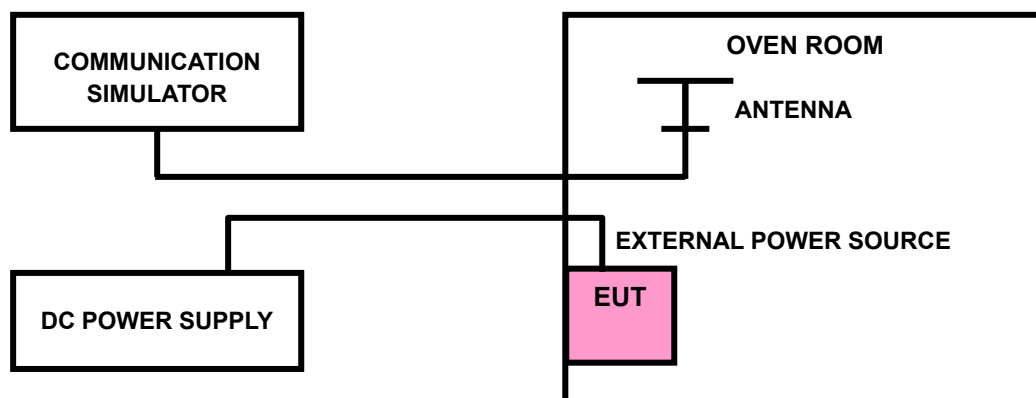
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

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





BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

3.2.4 TEST RESULTS

Please Refer to Appendix Of this test report.

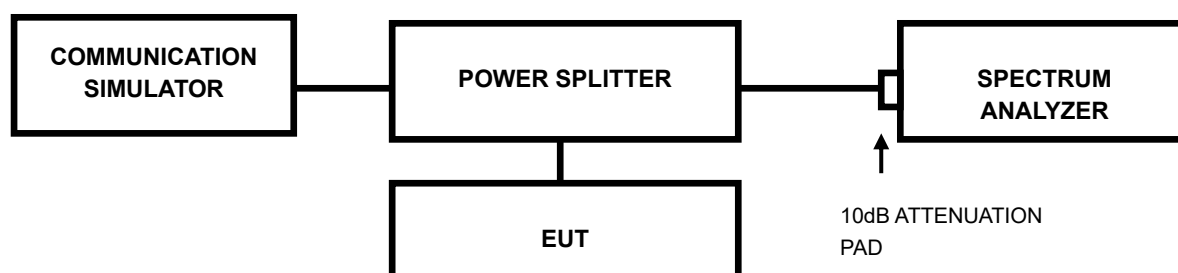


3.3 OCCUPIED BANDWIDTH MEASUREMENT

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.



BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

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

According to FCC Part 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.

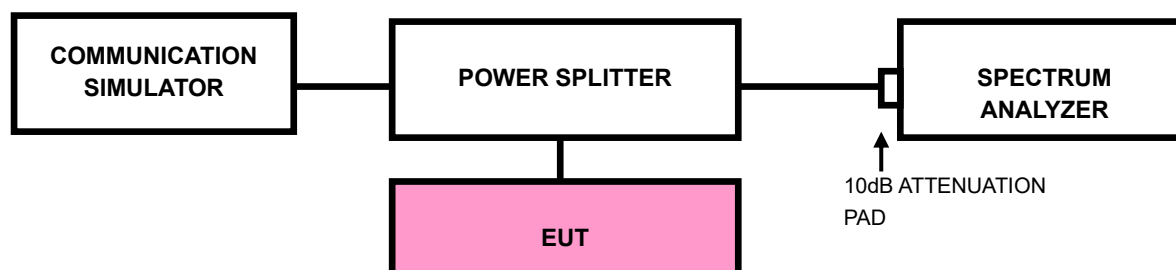
47 CFR 27.50(d)(4)

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. Fixed stations operating in the 1710–1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

47 CFR 27.50(k)(3)

3450 – 3550 MHz : Mobile devices are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

3.4.2 TEST SETUP



3.4.3 TEST PROCEDURES

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



BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

3.4.4 TEST RESULTS

Please Refer to Appendix Of this test report.



3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

For LTE Band4/66

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 is equal to -13dBm .

For: LTE Band42

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 .

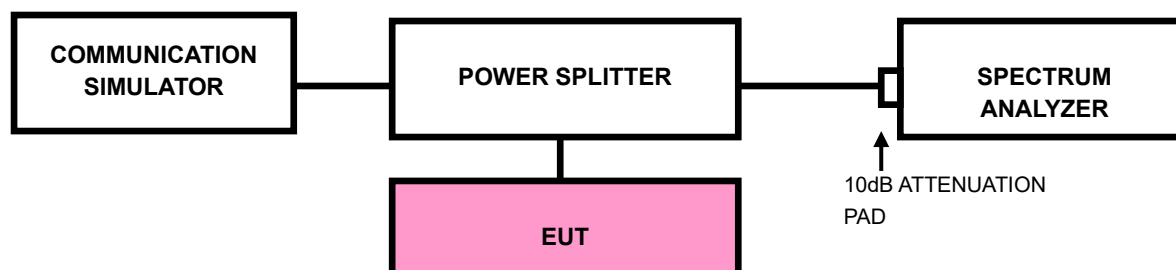
For LTE Band38/41

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

- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. 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

For LTE Band4/66

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 is equal to -13dBm .

For: LTE Band42

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 .

For LTE Band38/41

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.

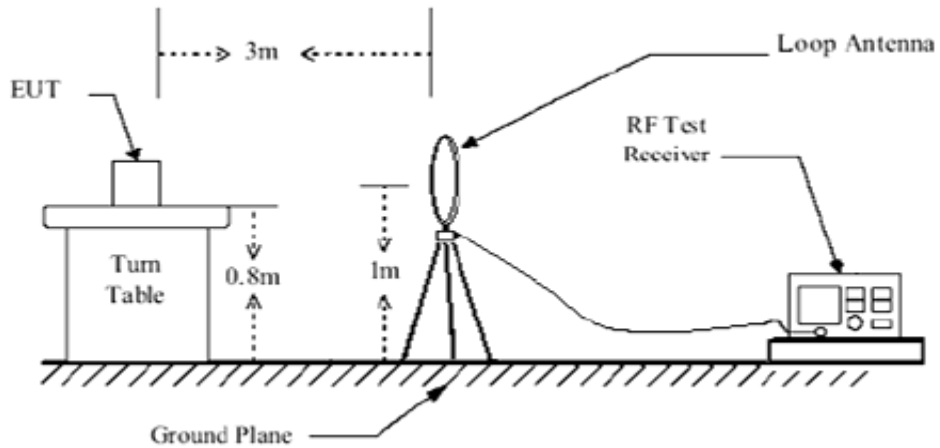
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

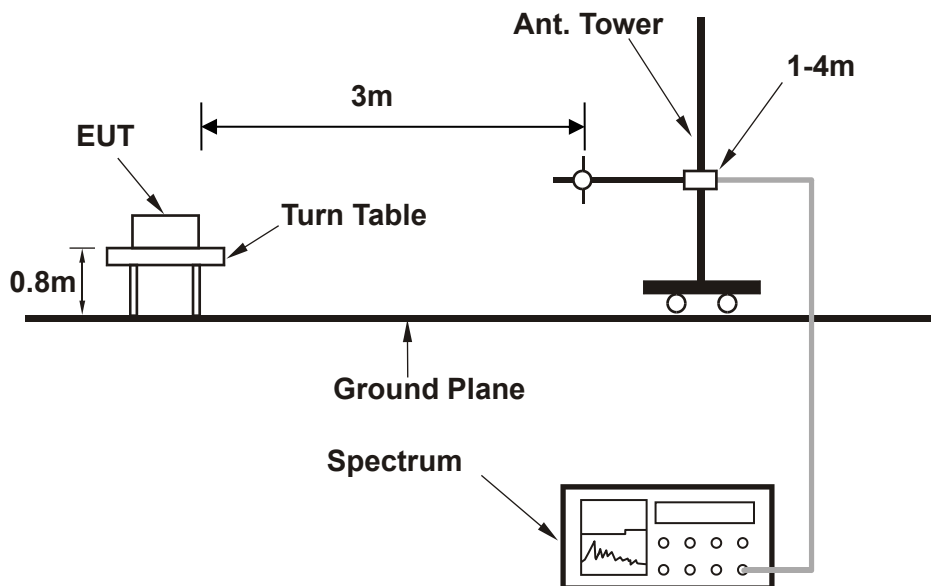


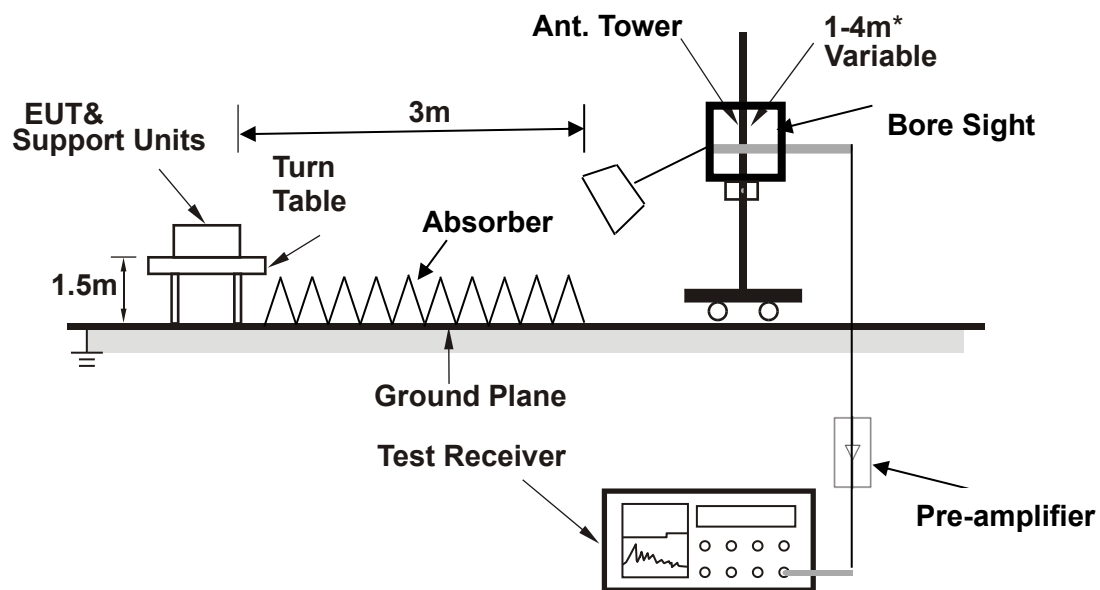
3.6.4 TEST SETUP

< 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.

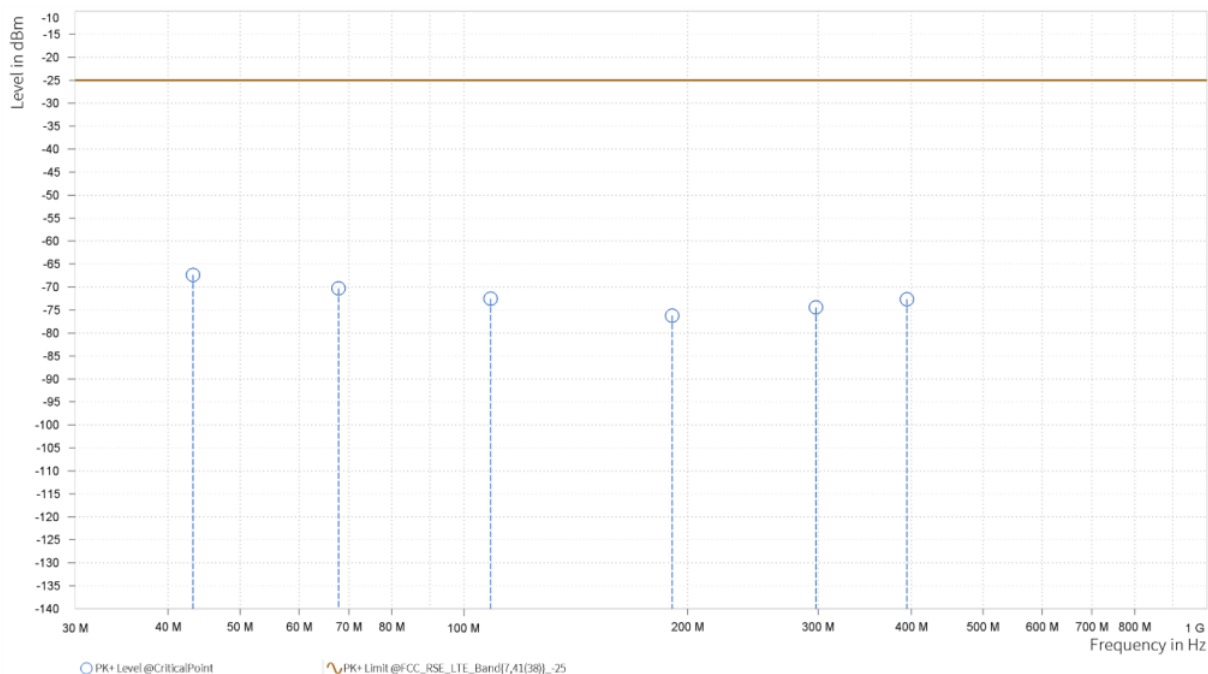
BELOW 1GHz WORST-CASE DATA

30 MHz – 1GHz data:

LTE Band 41

CHANNEL BANDWIDTH: 20MHz / QPSK

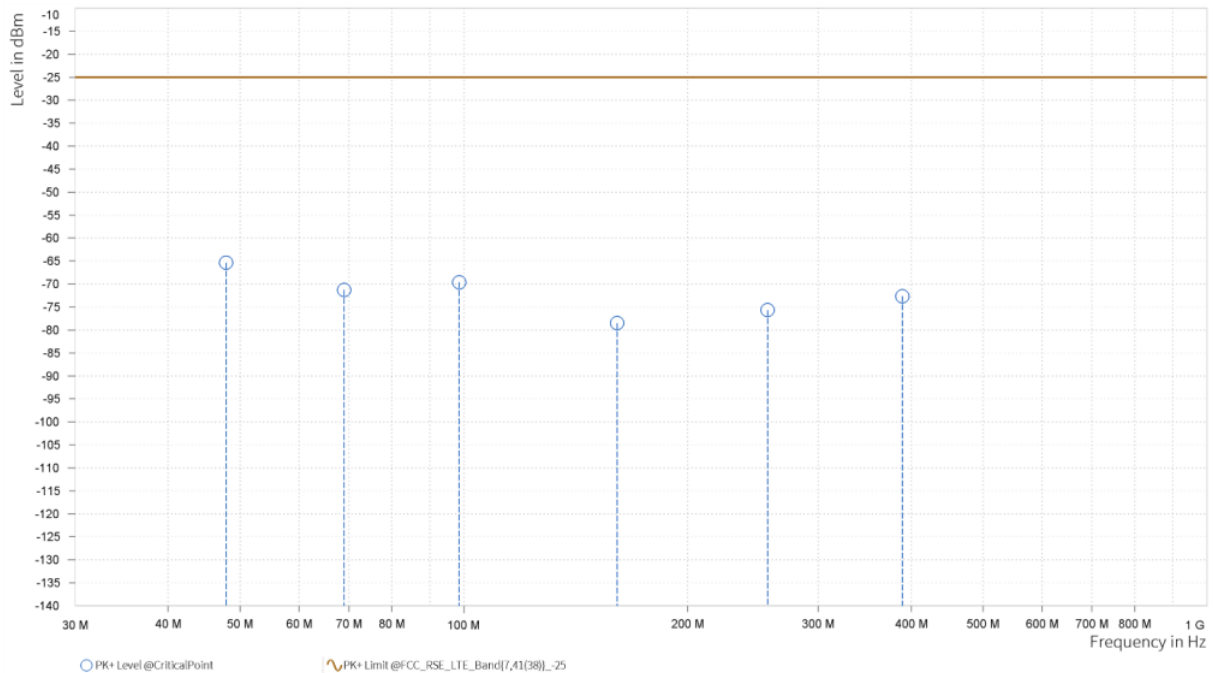
MODE		TX channel 39750			FREQUENCY RANGE		Below 1000MHz	
ENVIRONMENTAL CONDITIONS		23deg. C, 70%RH			INPUT POWER		AC 120V 60HZ	
TESTED BY		Jace Hu						
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	43.2	-67.35	-25.0	42.35	-0.88	H	359.9	2.0
1	67.85	-70.31	-25.0	45.31	-3.12	H	359.9	1.0
1	108.7	-72.56	-25.0	47.56	-5.36	H	359.9	2.0
1	190.65	-76.21	-25.0	51.21	-5.11	H	218.6	1.0
1	297.75	-74.46	-25.0	49.46	0.08	H	218.6	1.0
1	395.0	-72.67	-25.0	47.67	1.65	H	359.9	1.0





MODE	TX channel 39750	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		
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	47.85	-65.36	-25.0	40.36	0.05	V	0.0	2.0
1	69.05	-71.28	-25.0	46.28	-3.52	V	24.4	2.0
1	98.55	-69.59	-25.0	44.59	-0.11	V	178.6	2.0
1	160.7	-78.5	-25.0	53.5	-5.94	V	360.0	1.0
1	256.3	-75.66	-25.0	50.66	-1.18	V	359.9	2.0
1	389.3	-72.65	-25.0	47.65	1.3	V	360.0	1.0





BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

ABOVE 1GHz

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

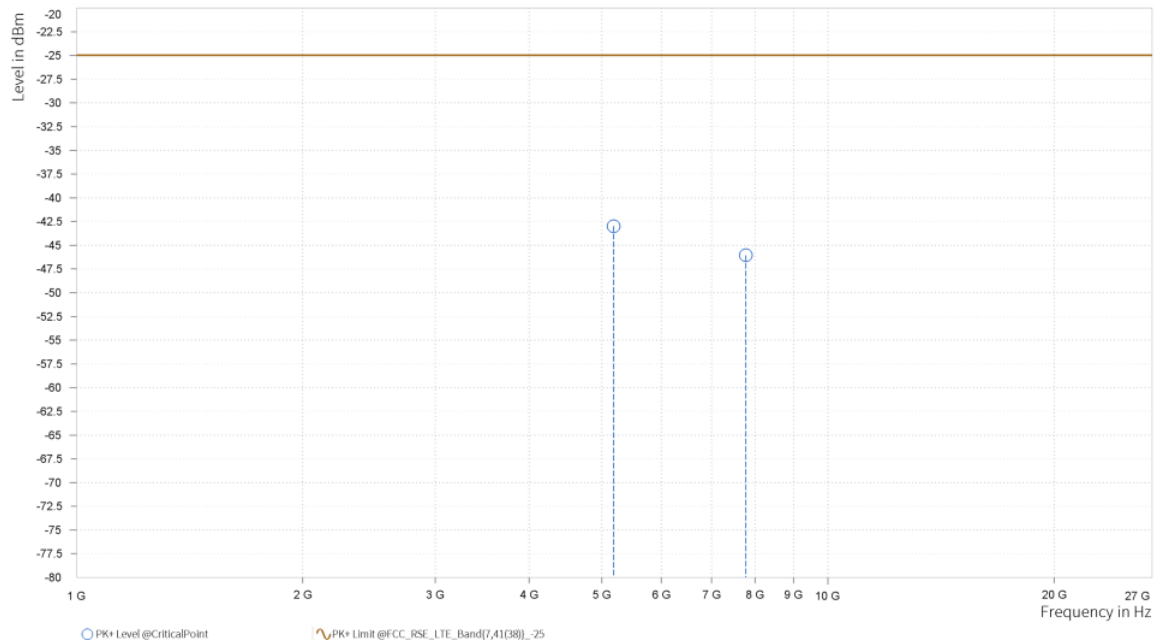
LTE BAND 41

CHANNEL BANDWIDTH: 5MHz / QPSK

MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	5,181.500	-42.99	-25.0	17.99	30.11	H	107.1	2.0
5	7,772.250	-46.05	-25.0	21.05	34.6	H	343.8	1.0

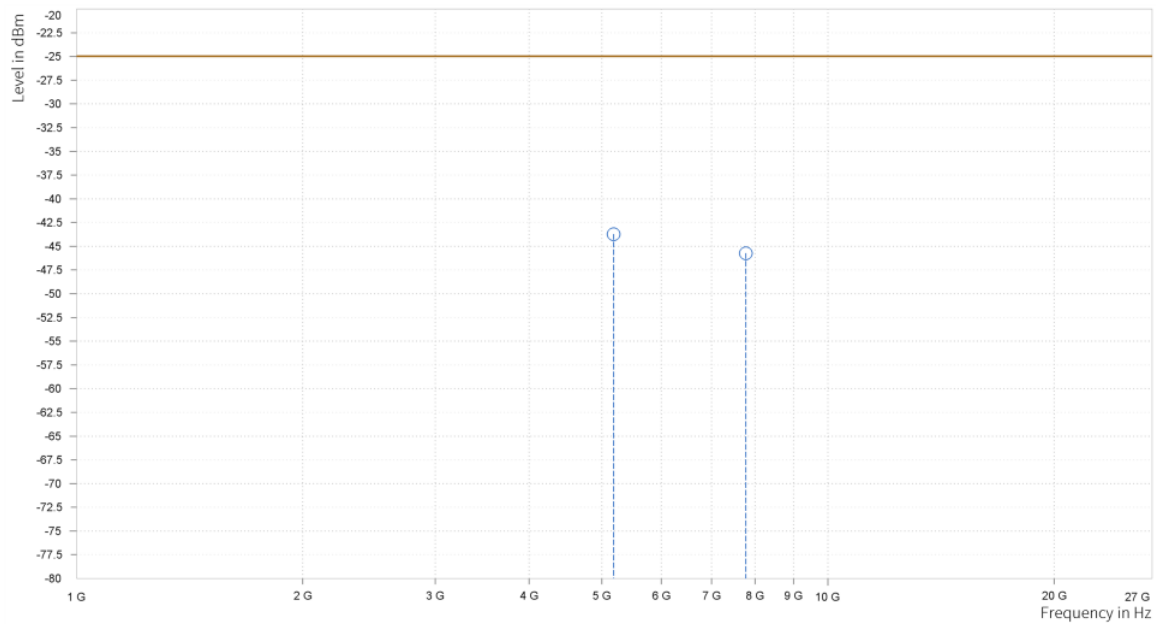




MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	5,181.500	-43.72	-25.0	18.72	30.05	V	359.0	2.0
5	7,772.250	-45.74	-25.0	20.74	34.64	V	345.1	1.0



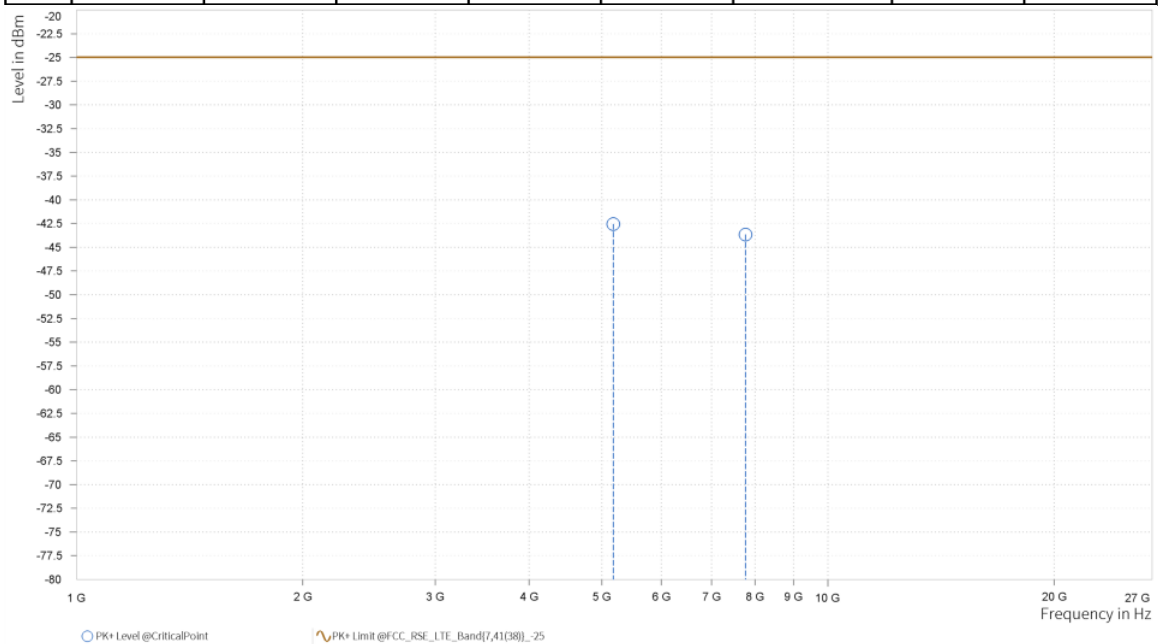


CHANNEL BANDWIDTH: 10MHz / QPSK

MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	5,177.000	-42.56	-25.0	17.56	30.24	H	359	2.0
5	7,765.500	-43.65	-25.0	18.65	35.52	H	359	1.0

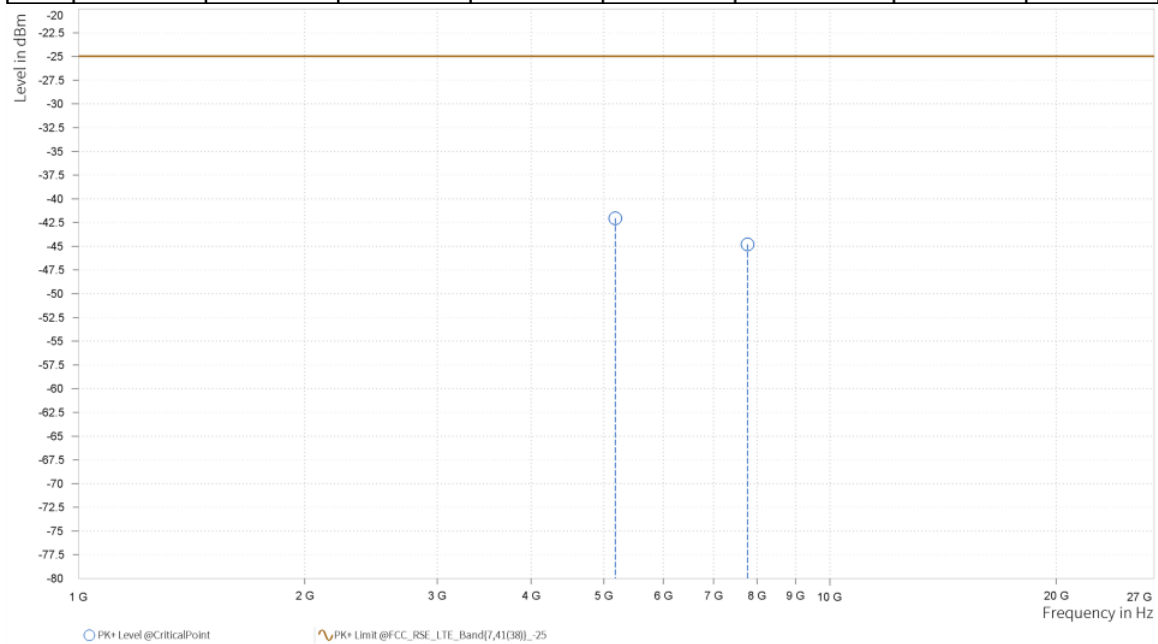




MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	5,177.000	-42.04	-25.0	17.04	30.17	V	1.0	1.0
5	7,765.500	-44.8	-25.0	19.8	35.55	V	0.9	2.0



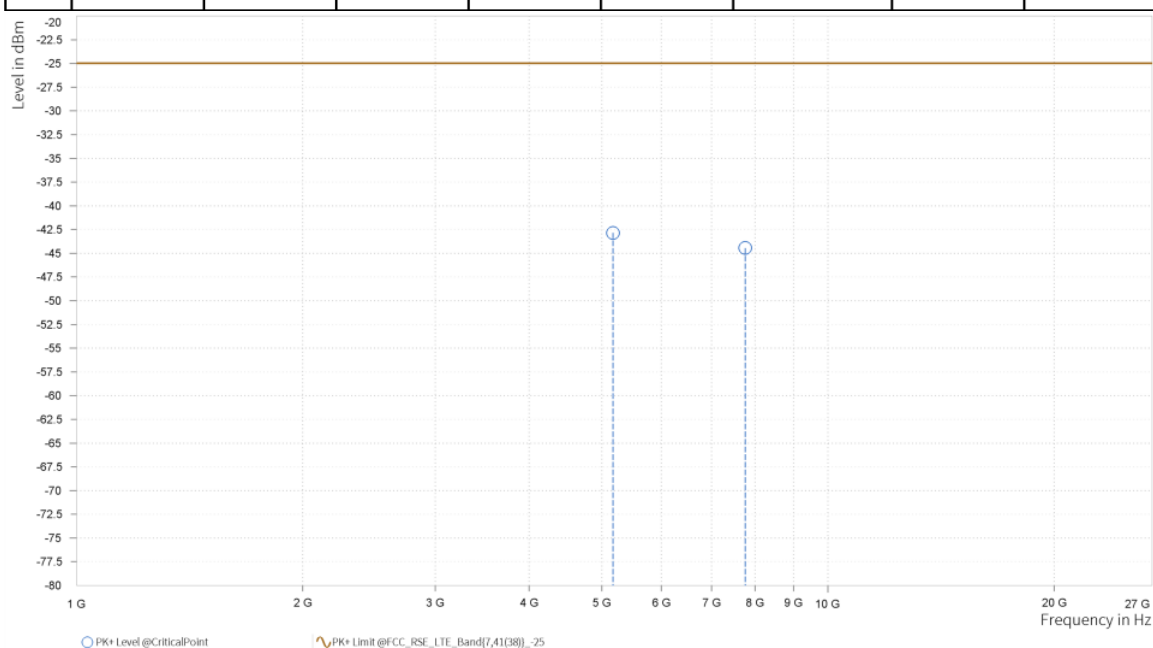


CHANNEL BANDWIDTH: 15MHz / QPSK
CH40620

MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	5,172.500	-42.85	-25.0	17.85	30.38	H	102.3	2.0
5	7,758.750	-44.44	-25.0	19.44	36.23	H	359.0	2.0

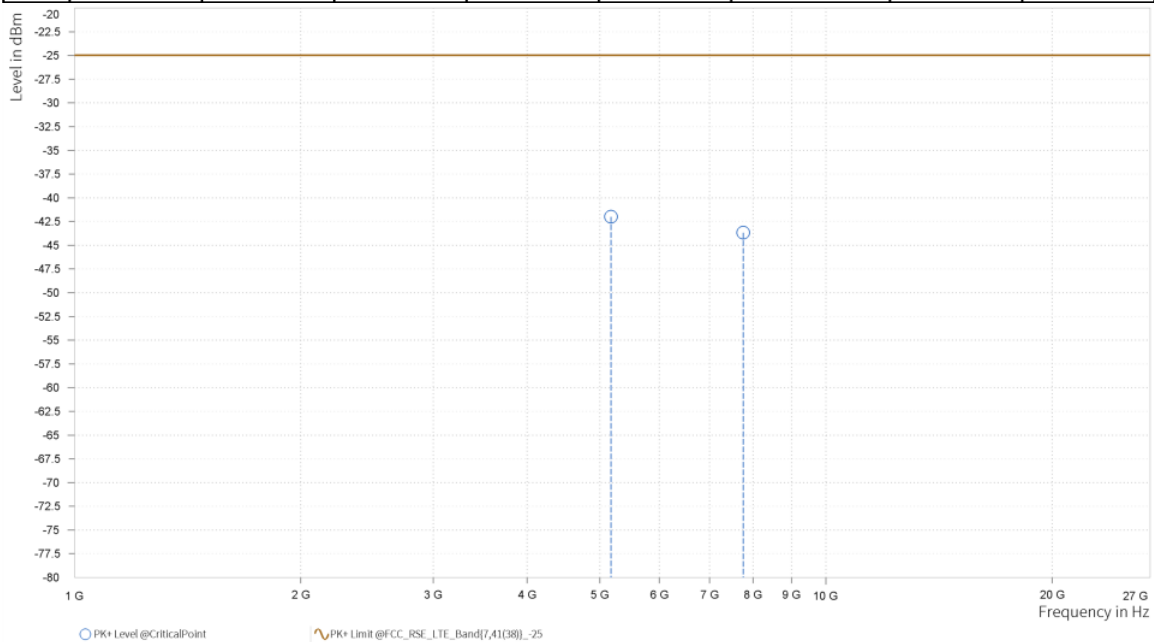




MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	5,172.500	-42.0	-25.0	17.0	30.3	V	359.0	2.0
5	7,758.750	-43.68	-25.0	18.68	36.26	V	359.1	1.0



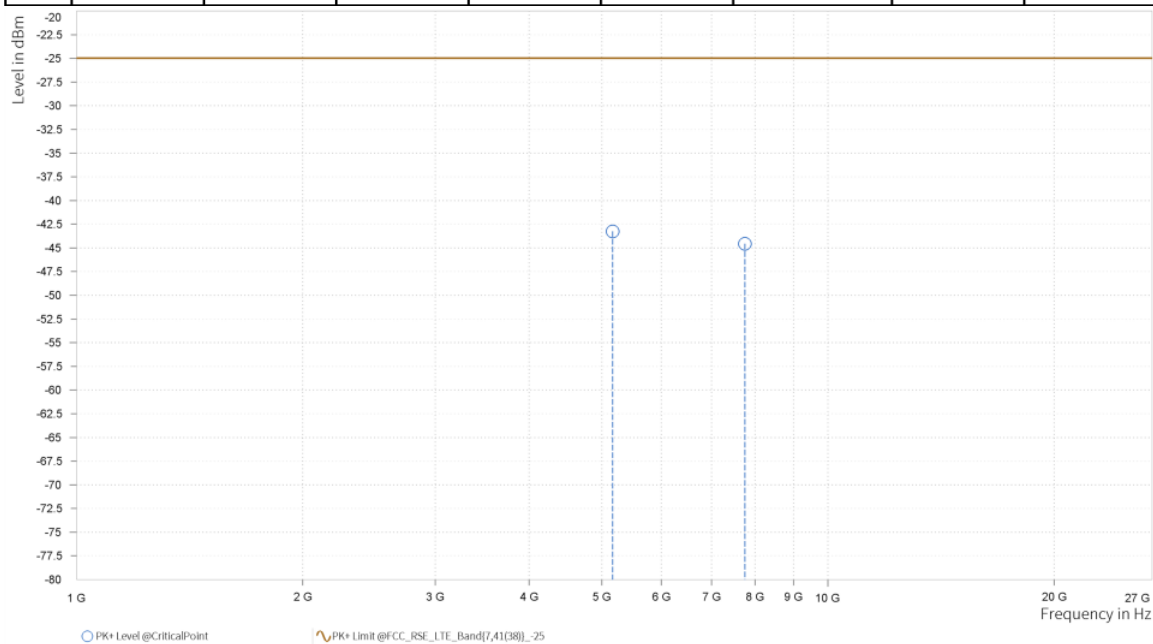


CHANNEL BANDWIDTH: 20MHz / QPSK

MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	5,168.000	-43.26	-25.0	18.26	30.55	H	0.9	2.0
5	7,752.000	-44.57	-25.0	19.57	35.55	H	11.4	2.0

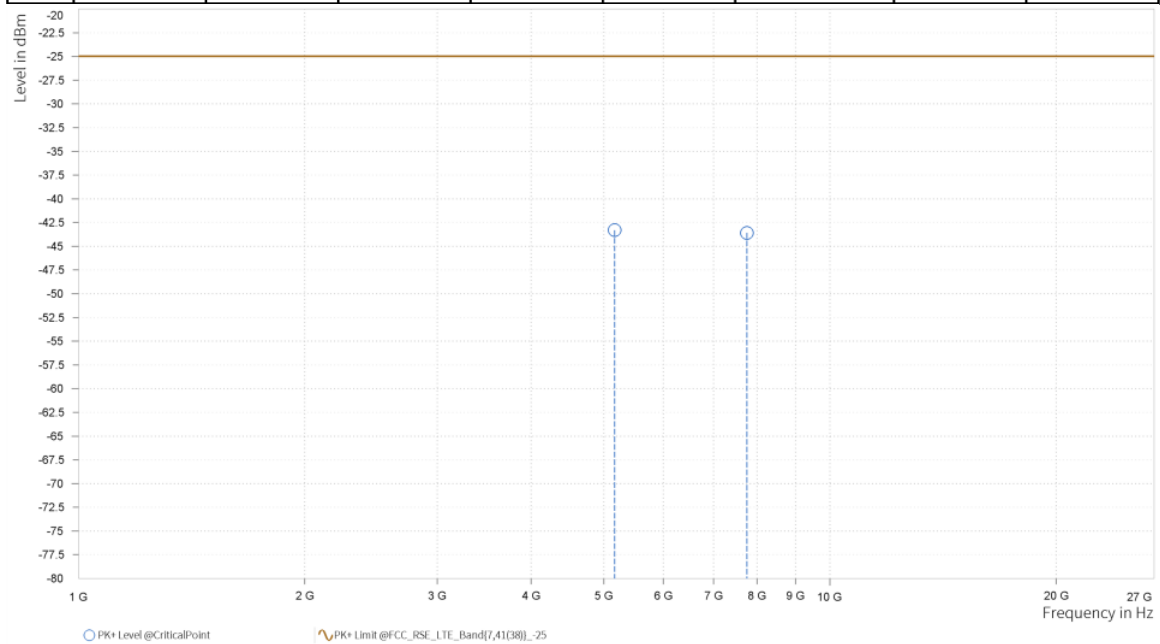




MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	5,168.000	-43.31	-25.0	18.31	30.46	V	0.9	2.0
5	7,752.000	-43.59	-25.0	18.59	35.57	V	1.0	1.0





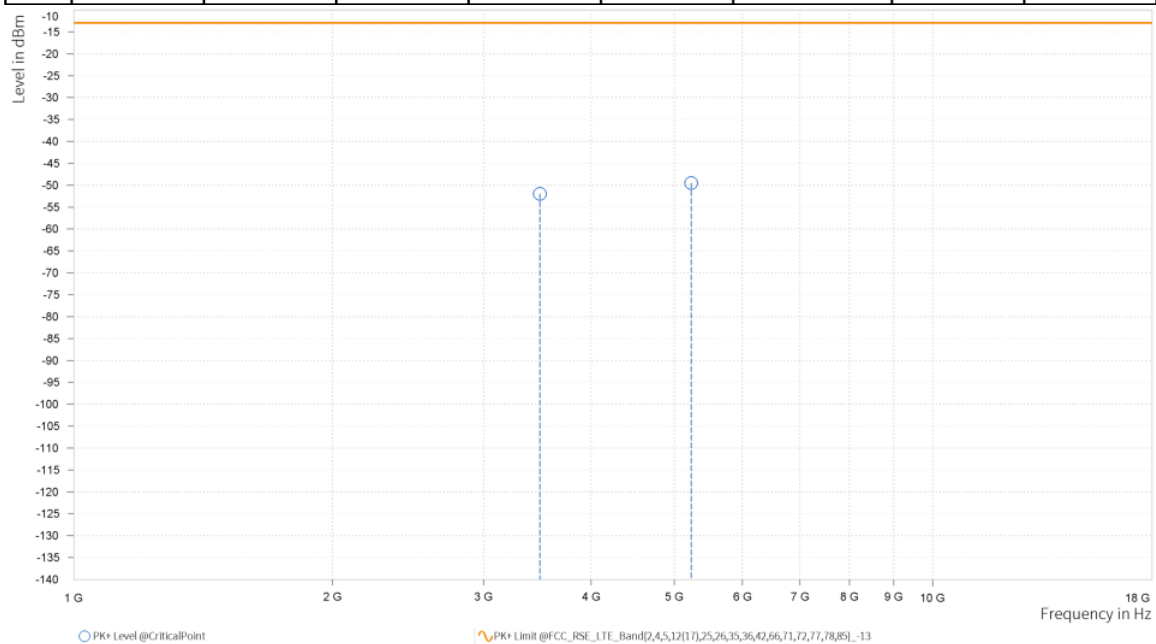
LTE B66

CHANNEL BANDWIDTH: 1.4MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,488.740	-51.96	-13.0	38.96	20.51	H	261.0	2.0
4	5,233.110	-49.5	-13.0	36.5	23.57	H	14.7	2.0

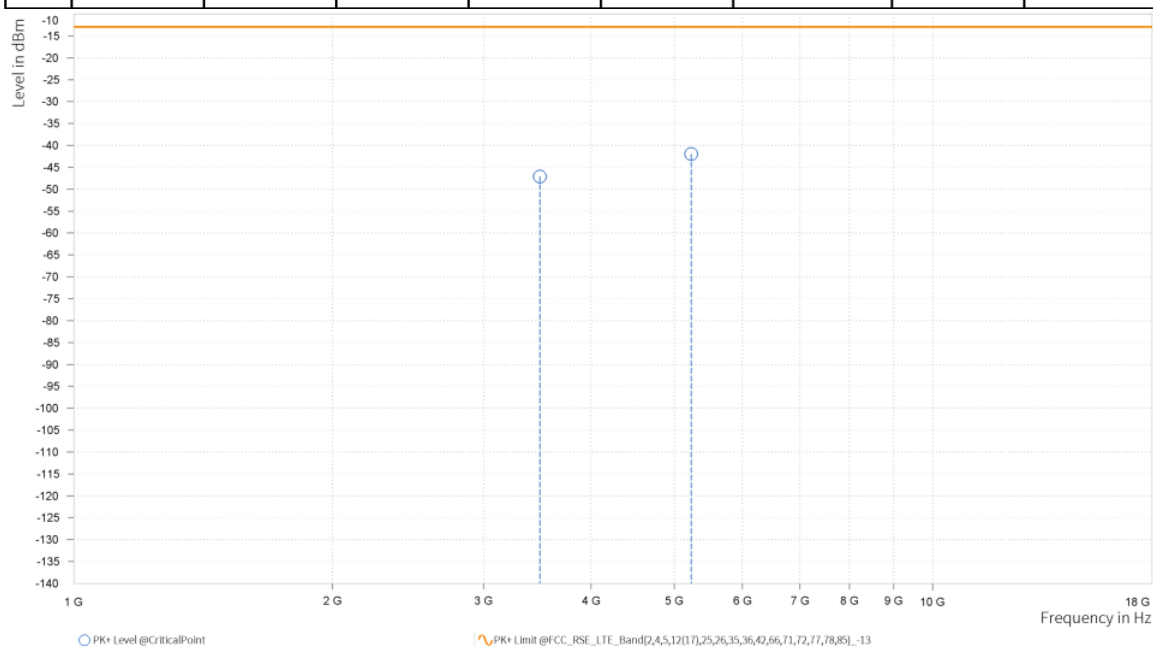




MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,488.500	-47.08	-13.0	34.08	21.3	V	2.2	2.0
4	5,234.000	-41.97	-13.0	28.97	24.1	V	99.0	1.0



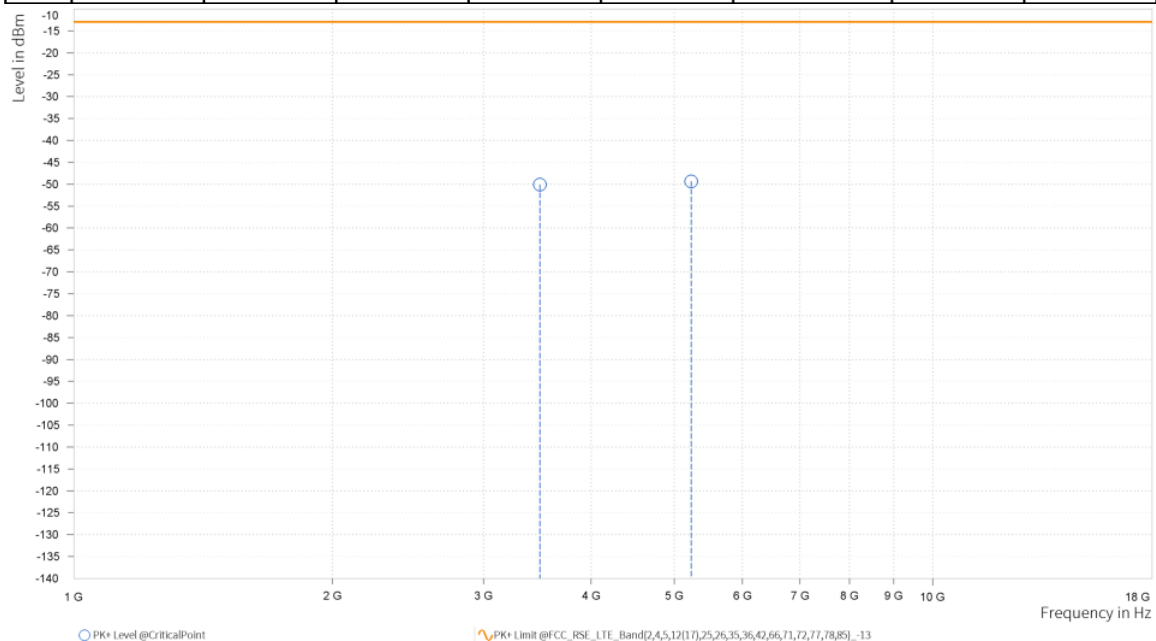


CHANNEL BANDWIDTH: 3MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,487.300	-50.11	-13.0	37.11	20.5	H	359.1	1.0
4	5,230.950	-49.33	-13.0	36.33	23.56	H	348.1	1.0

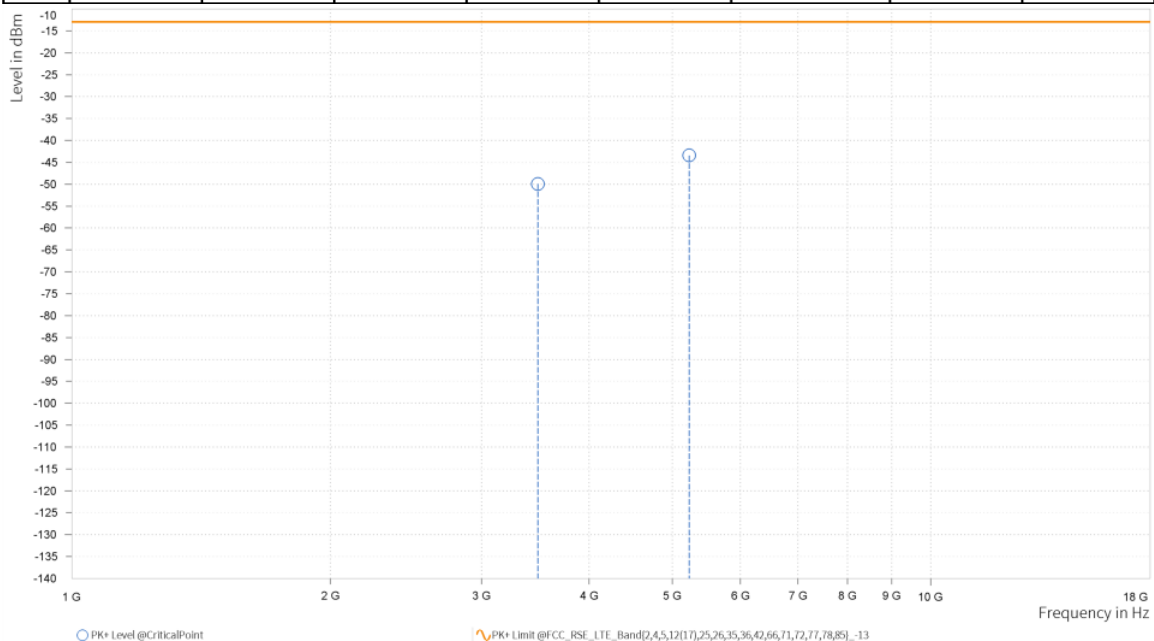




MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,487.300	-49.93	-13.0	36.93	21.29	V	278.0	1.0
4	5,231.500	-43.44	-13.0	30.44	24.09	V	77.7	2.0



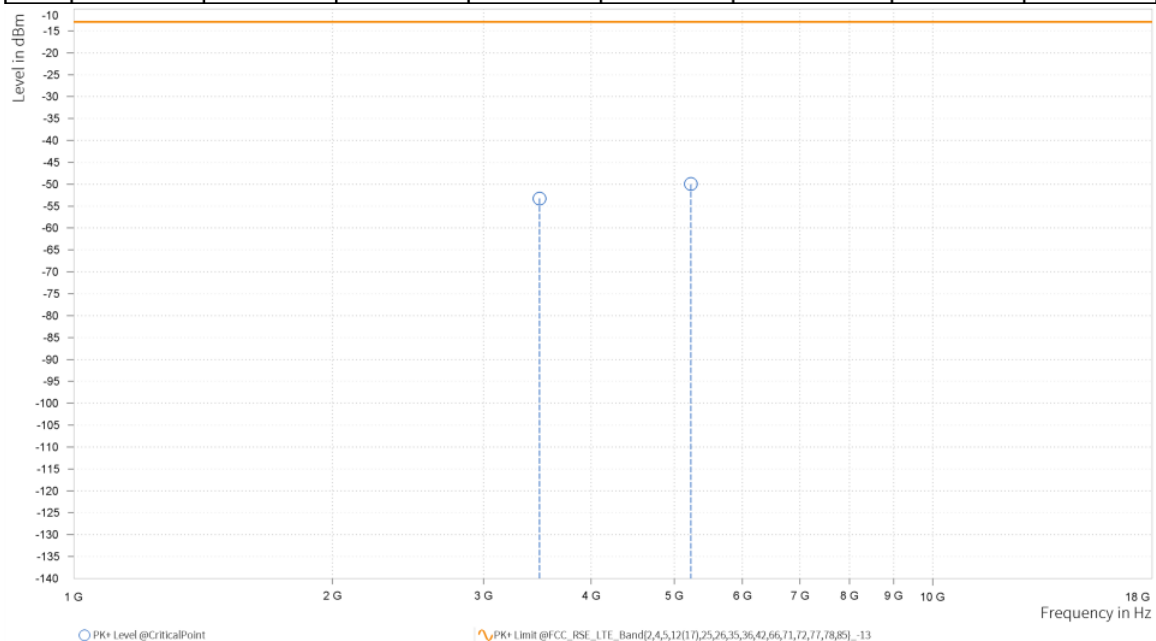


CHANNEL BANDWIDTH: 5MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,485.500	-53.26	-13.0	40.26	20.49	H	288.6	1.0
4	5,228.250	-49.97	-13.0	36.97	23.55	H	359.0	2.0

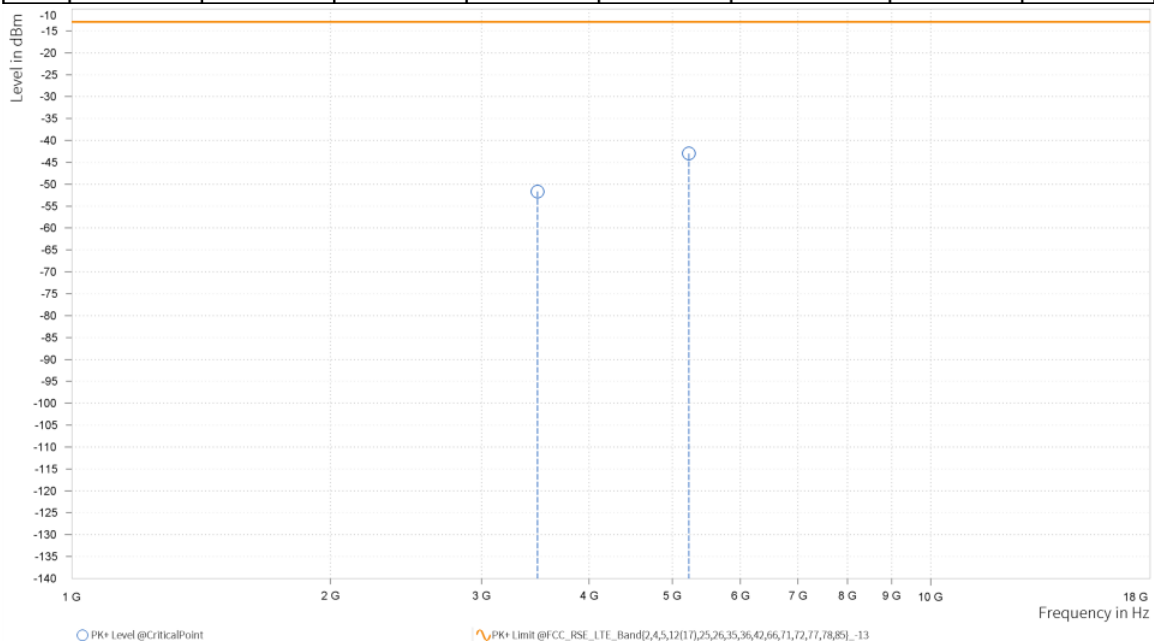




MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,485.500	-51.67	-13.0	38.67	21.27	V	78.4	2.0
4	5,229.000	-42.98	-13.0	29.98	24.09	V	99.7	1.0





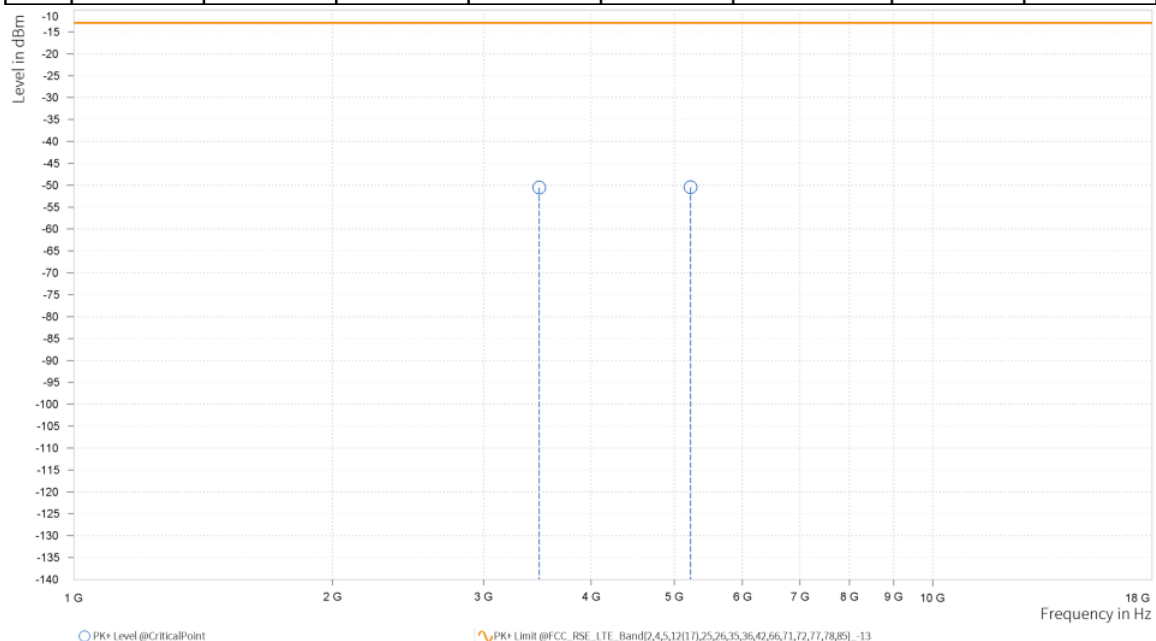
CHANNEL BANDWIDTH: 10MHz / QPSK

CH132322

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,481.000	-50.54	-13.0	37.54	20.47	H	316.2	1.0
4	5,221.500	-50.45	-13.0	37.45	23.52	H	1.0	1.0

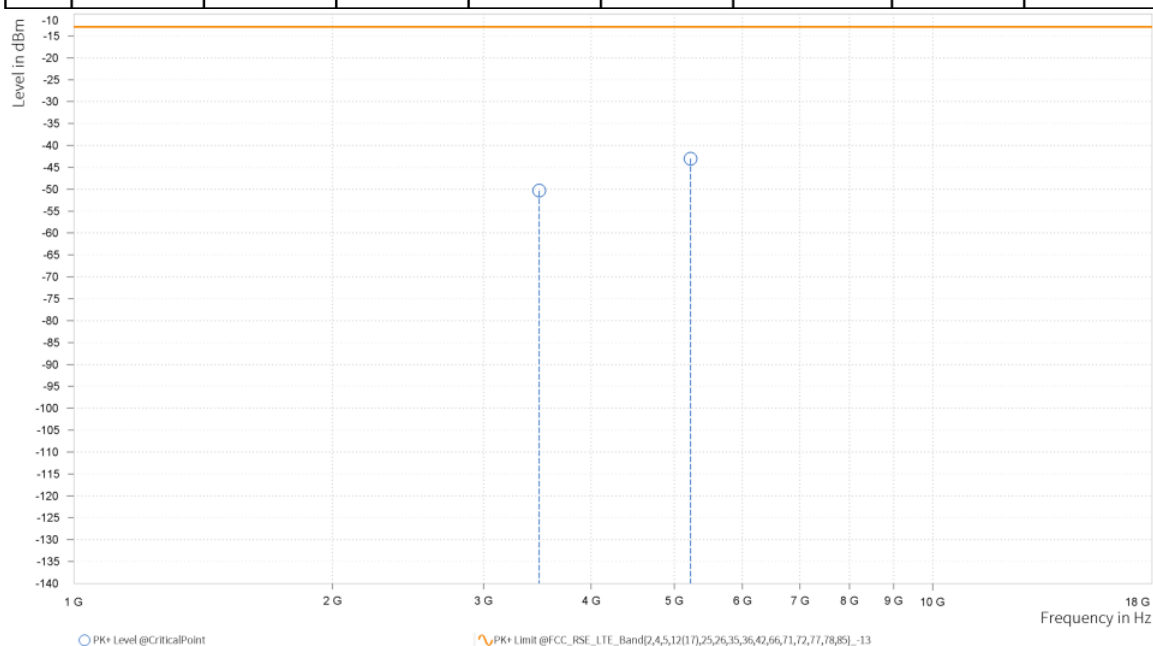




MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,481.000	-50.32	-13.0	37.32	21.23	V	103.1	2.0
4	5,221.500	-43.02	-13.0	30.02	24.08	V	101.8	1.0



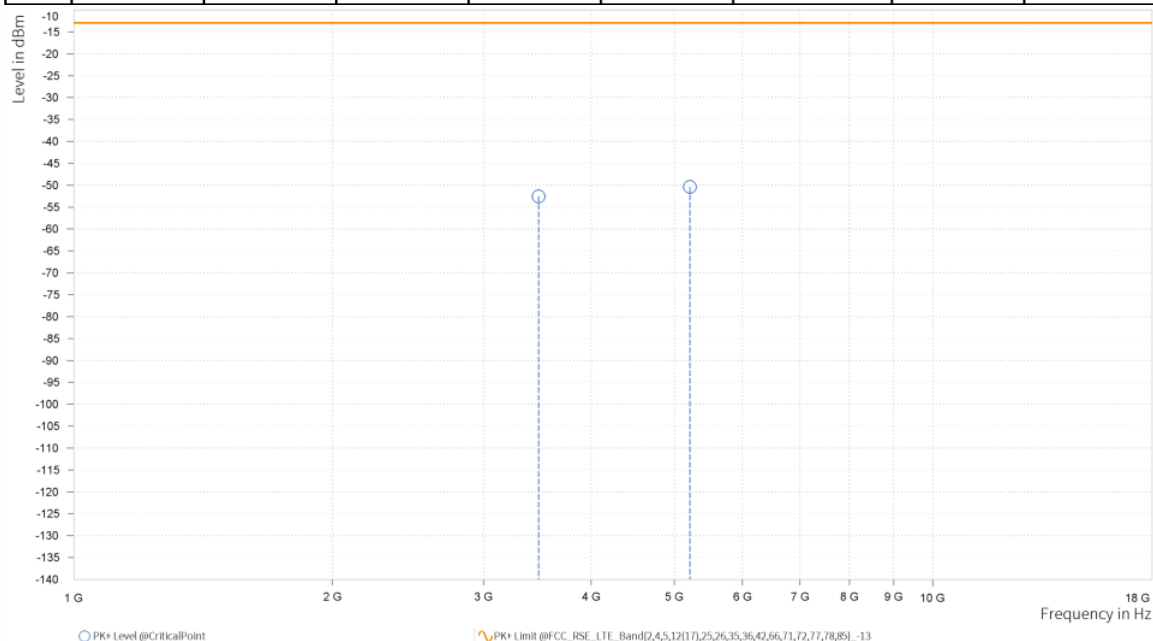


CHANNEL BANDWIDTH: 15MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,476.500	-52.53	-13.0	39.53	20.45	H	1.0	1.0
4	5,214.750	-50.39	-13.0	37.39	23.5	H	0.9	2.0

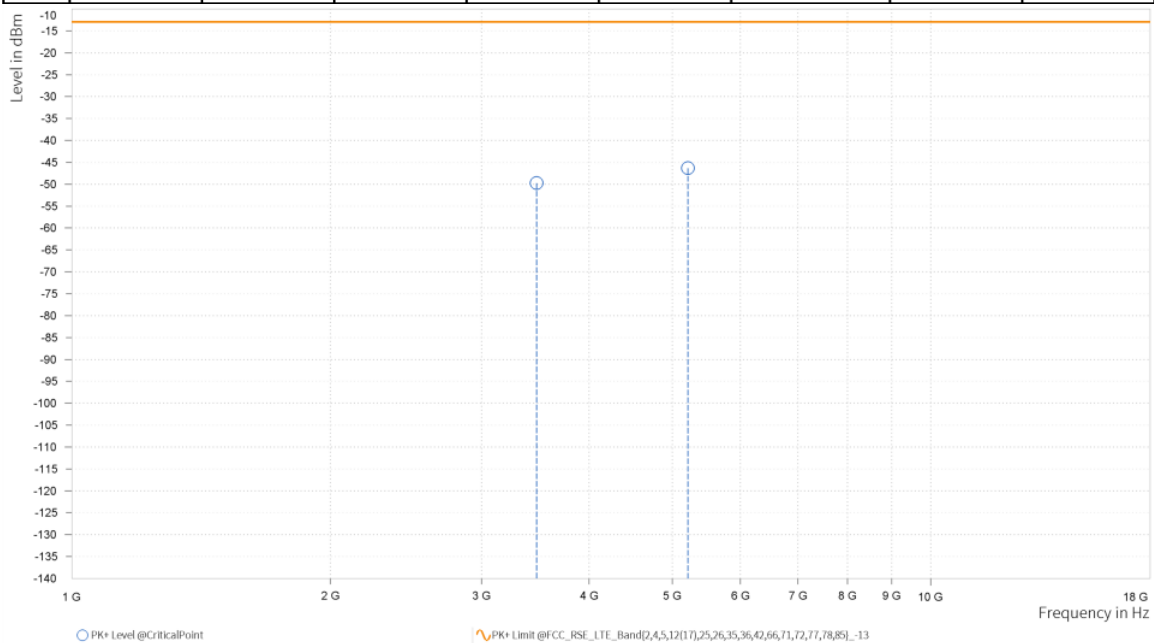




MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,476.500	-49.74	-13.0	36.74	21.19	V	260.2	2.0
4	5,214.750	-46.34	-13.0	33.34	24.08	V	99.0	1.0



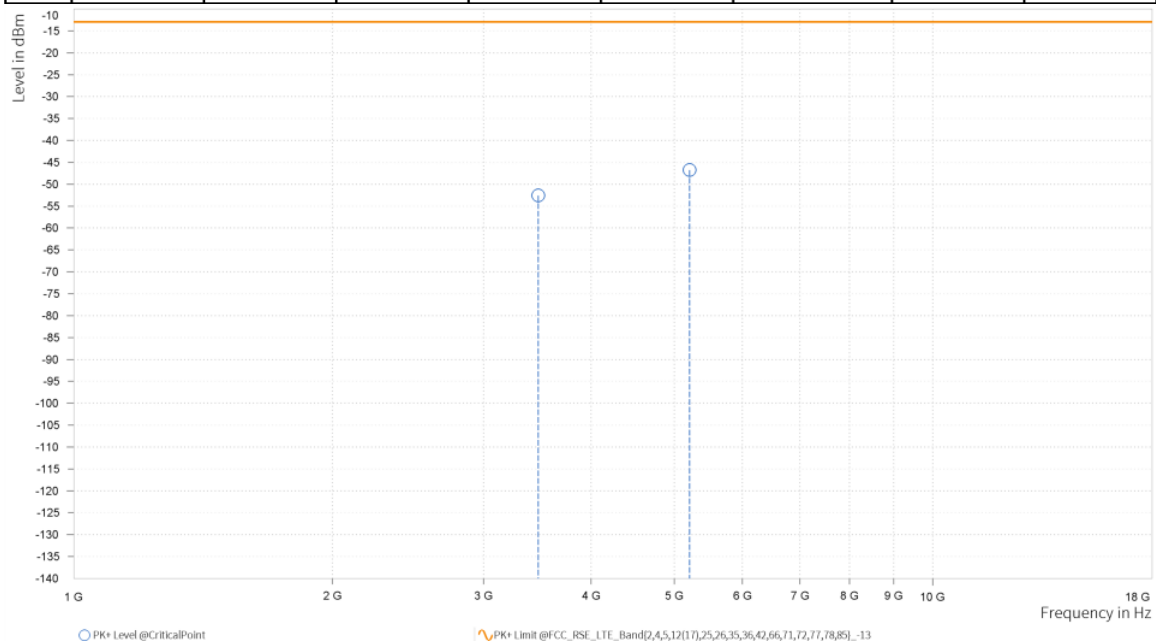


CHANNEL BANDWIDTH: 20MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,472.000	-52.56	-13.0	39.56	20.43	H	205.8	2.0
4	5,208.000	-46.76	-13.0	33.76	23.47	H	287.2	1.0

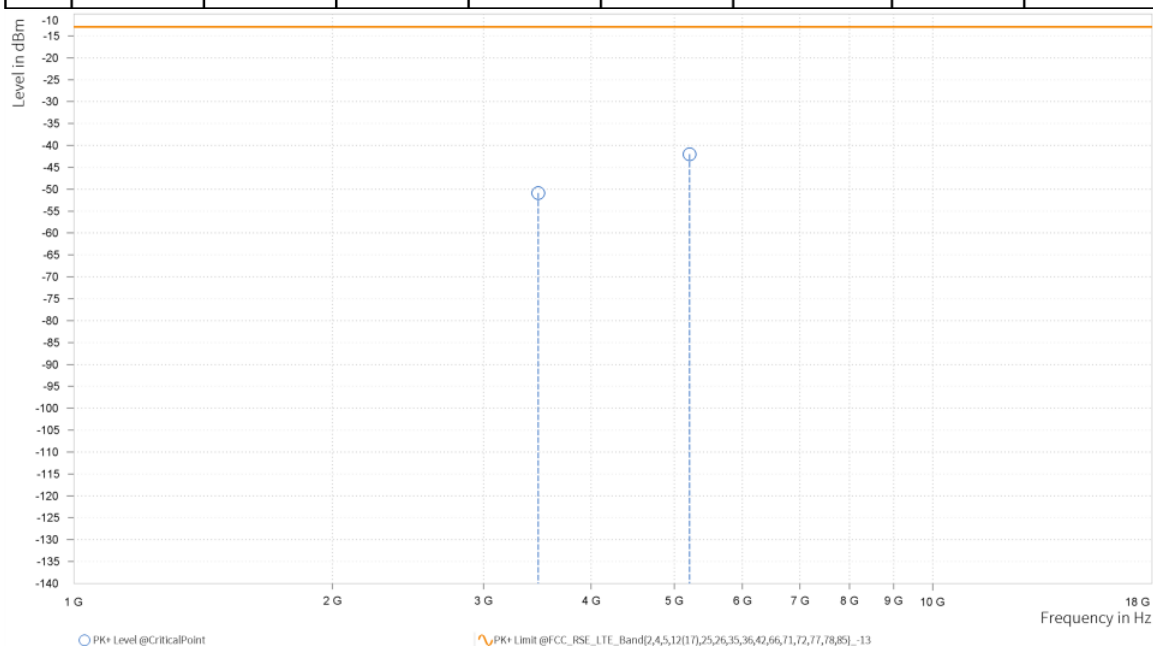




MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Jace Hu		

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	3,472.000	-50.87	-13.0	37.87	21.15	V	244	1.0
4	5,208.500	-41.99	-13.0	28.99	24.07	V	261	2.0





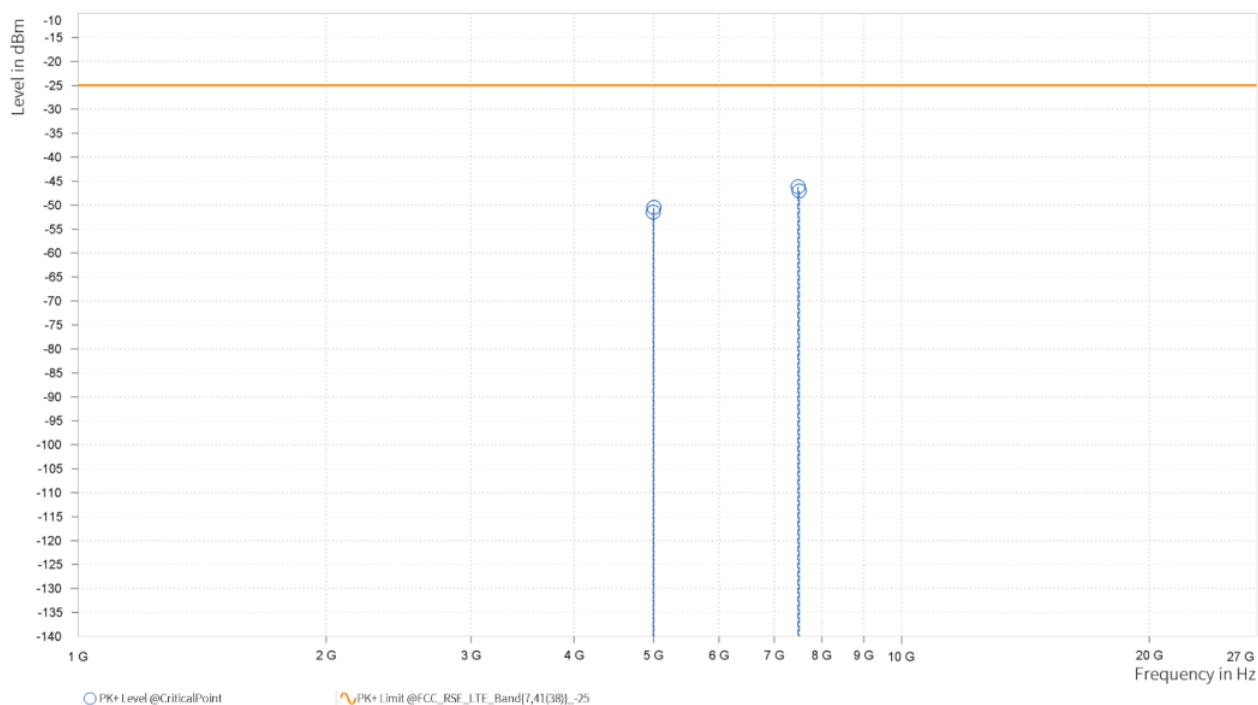
BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

LTE Band CA_41C

CHANNEL BANDWIDTH: 5MHz + 20MHz

MODE	TX channel PCC 39683	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 39800		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

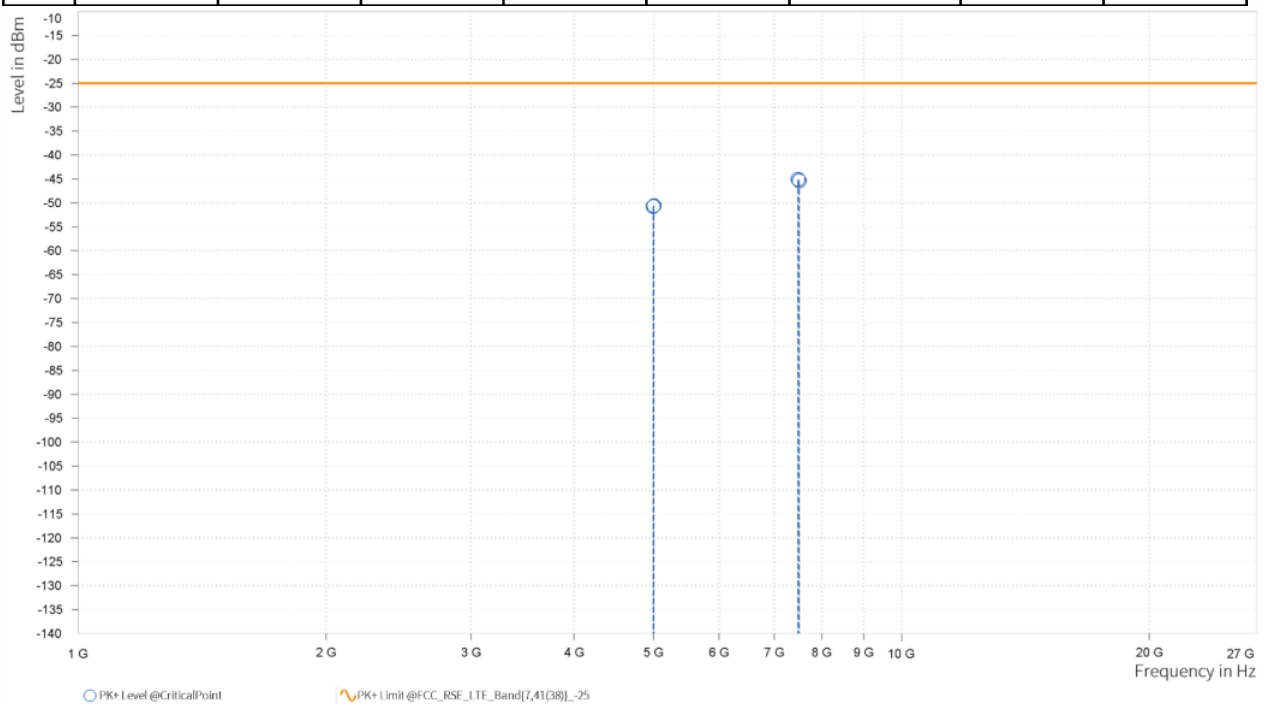
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	4,994.100	-51.44	-25.0	26.44	23.36	H	359.0	1.0
4	5,004.000	-50.48	-25.0	25.48	23.42	H	1.0	1.0
5	7,491.150	-46.16	-25.0	21.16	27.02	H	82.6	2.0
5	7,506.000	-47.04	-25.0	22.04	27.03	H	147.0	2.0



**Test Report No.: PSU-NQN2407300216RF04**

MODE	TX channel PCC 39683	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 39800		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	4,994.100	-50.77	-25.0	25.77	23.6	V	1.0	2.0
4	5,004.000	-50.58	-25.0	25.58	23.64	V	98.3	1.0
5	7,491.150	-45.11	-25.0	20.11	27.0	V	231.3	2.0
5	7,506.000	-45.34	-25.0	20.34	27.0	V	19.0	2.0

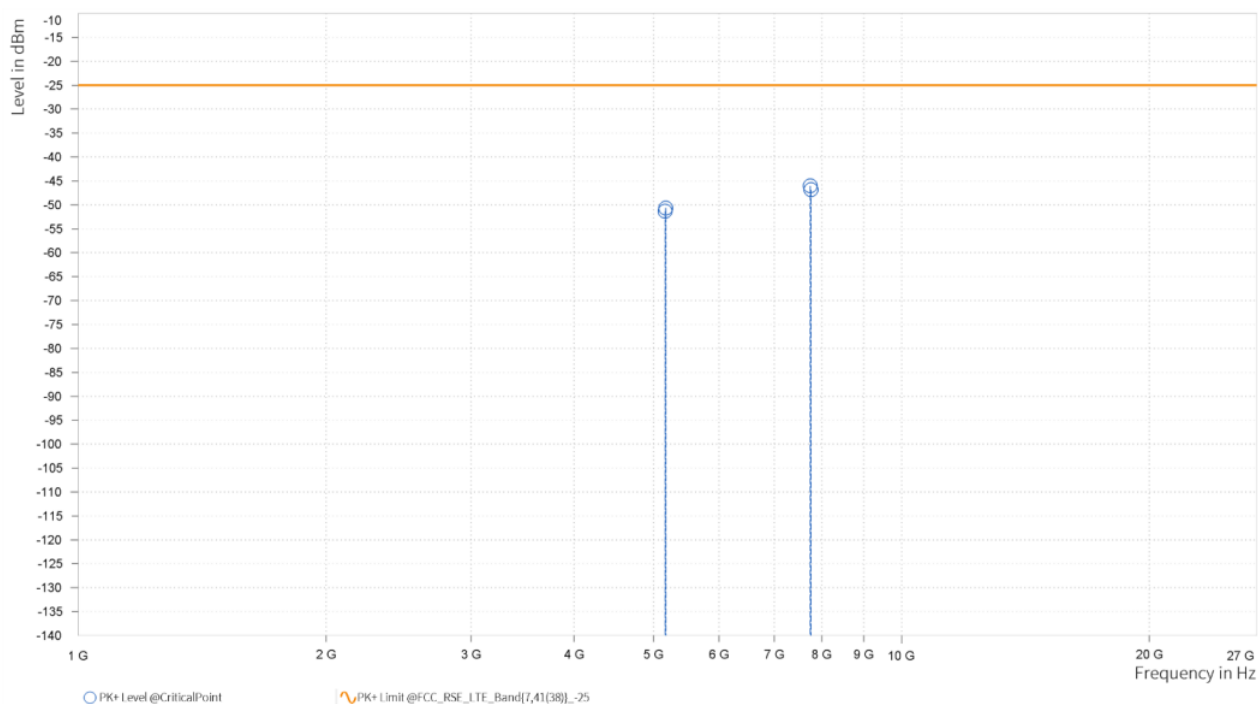




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04
CHANNEL BANDWIDTH: 5MHz + 20MHz

MODE	TX channel PCC 40528	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40645		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

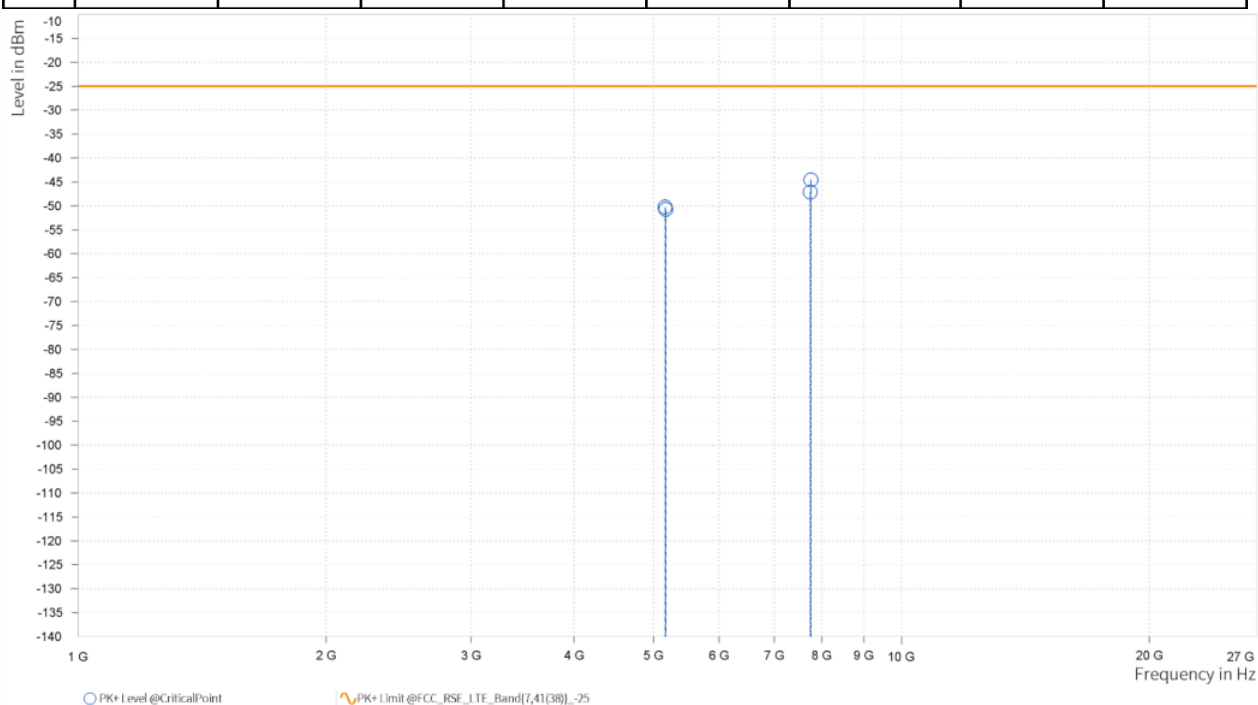
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,163.100	-51.33	-25.0	26.33	23.25	H	326.8	1.0
4	5,173.000	-50.67	-25.0	25.67	23.3	H	0.9	2.0
5	7,744.650	-46.06	-25.0	21.06	27.28	H	210.0	1.0
5	7,759.500	-46.83	-25.0	21.83	27.26	H	231.3	2.0



**BUREAU VERITAS** Test Report No.: PSU-NQN2407300216RF04

MODE	TX channel PCC 40528	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40645		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,163.100	-50.24	-25.0	25.24	23.56	V	94.6	2.0
4	5,173.000	-50.77	-25.0	25.77	23.7	V	329.6	1.0
5	7,744.650	-47.08	-25.0	22.08	27.0	V	338.9	1.0
5	7,759.500	-44.55	-25.0	19.55	27.02	V	359.0	2.0

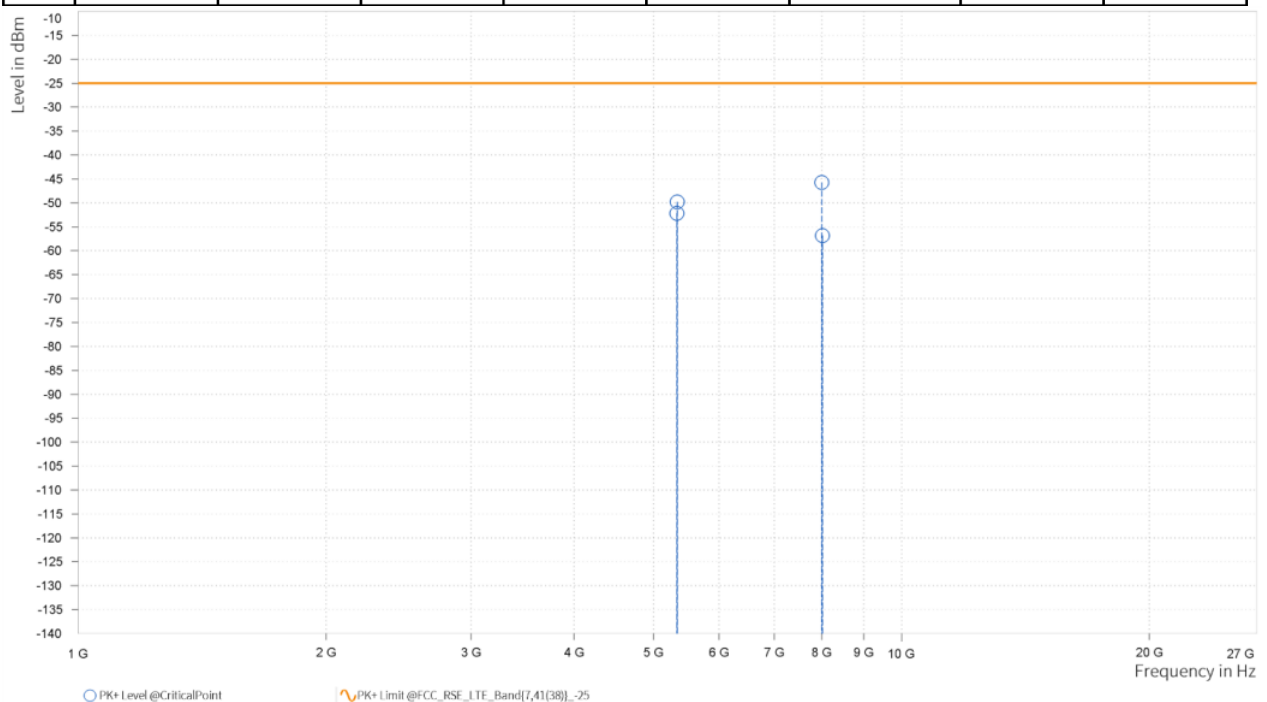




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04
CHANNEL BANDWIDTH: 5MHz + 20MHz

MODE	TX channel PCC 41373	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 41490		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,332.100	-52.19	-25.0	27.19	23.7	H	359.0	2.0
4	5,342.000	-49.78	-25.0	24.78	23.73	H	266.7	1.0
5	7,998.150	-45.71	-25.0	20.71	27.78	H	359.0	2.0
6	8,013.000	-56.84	-25.0	31.84	15.43	H	216.5	1.0

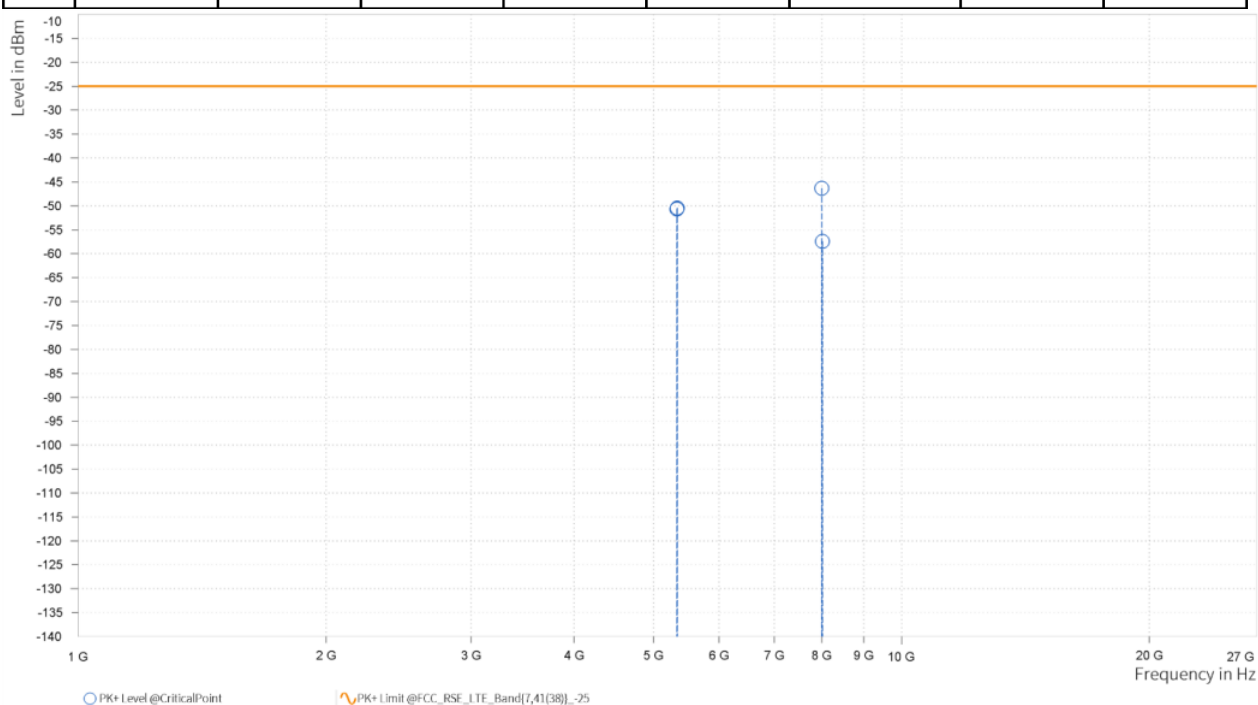




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

MODE	TX channel PCC 41373	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 41490		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,332.100	-50.64	-25.0	25.64	24.18	V	146.3	2.0
4	5,342.000	-50.44	-25.0	25.44	24.2	V	1.0	1.0
5	7,998.150	-46.29	-25.0	21.29	27.56	V	295.8	1.0
6	8,013.000	-57.42	-25.0	32.42	15.24	V	359.0	1.0

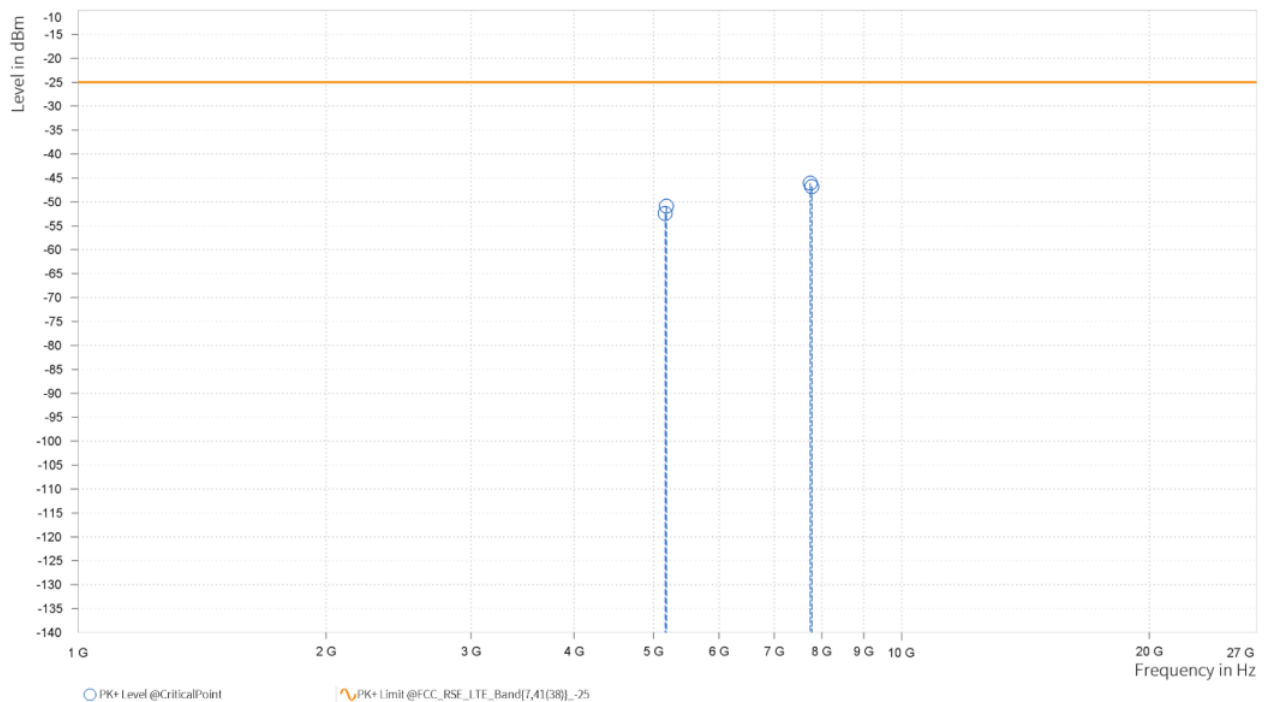




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04
CHANNEL BANDWIDTH: 10 MHz + 15MHz

MODE	TX channel PCC 40549	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40669		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,162.800	-52.38	-25.0	27.38	23.25	H	157.0	2.0
4	5,182.300	-50.92	-25.0	25.92	23.35	H	359.1	1.0
5	7,744.200	-46.09	-25.0	21.09	27.28	H	1.0	2.0
5	7,773.450	-46.79	-25.0	21.79	27.25	H	359.0	2.0

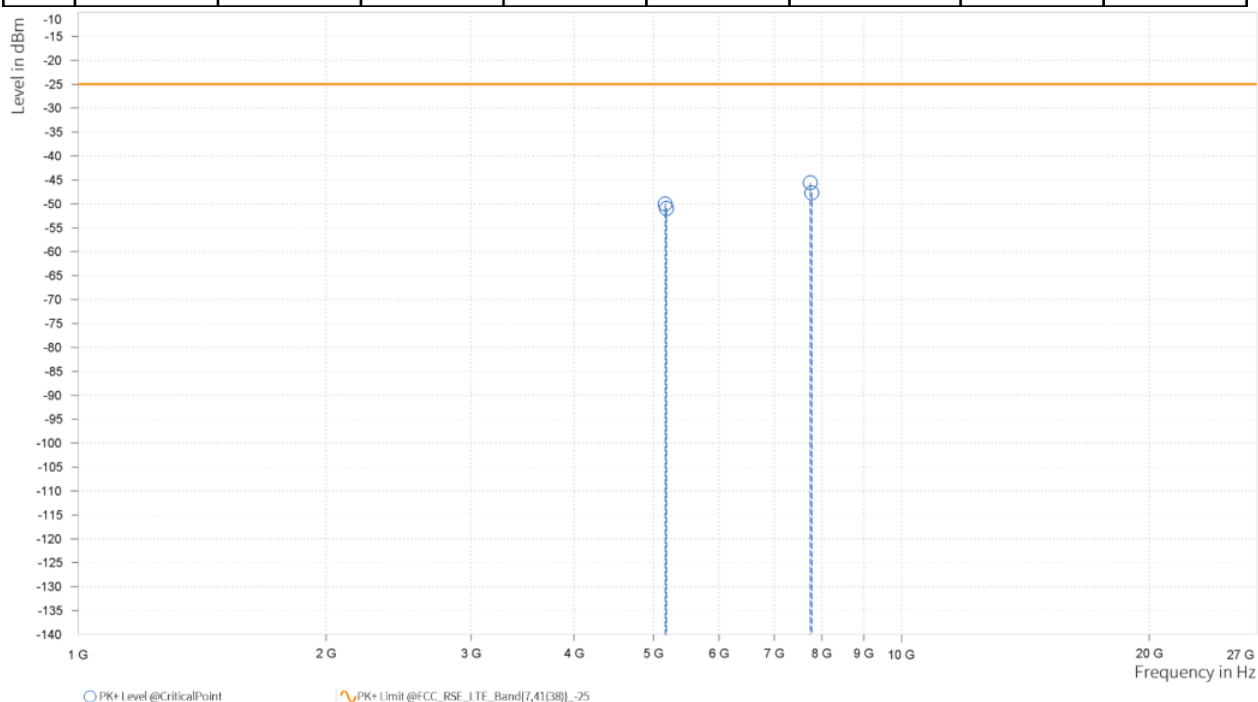




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

MODE	TX channel PCC 40549	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40669		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,162.800	-50.01	-25.0	25.01	23.56	V	156.2	2.0
4	5,182.300	-50.95	-25.0	25.95	23.82	V	359.0	2.0
5	7,744.200	-45.59	-25.0	20.59	27.0	V	230.6	2.0
5	7,773.450	-47.67	-25.0	22.67	27.03	V	341.0	1.0

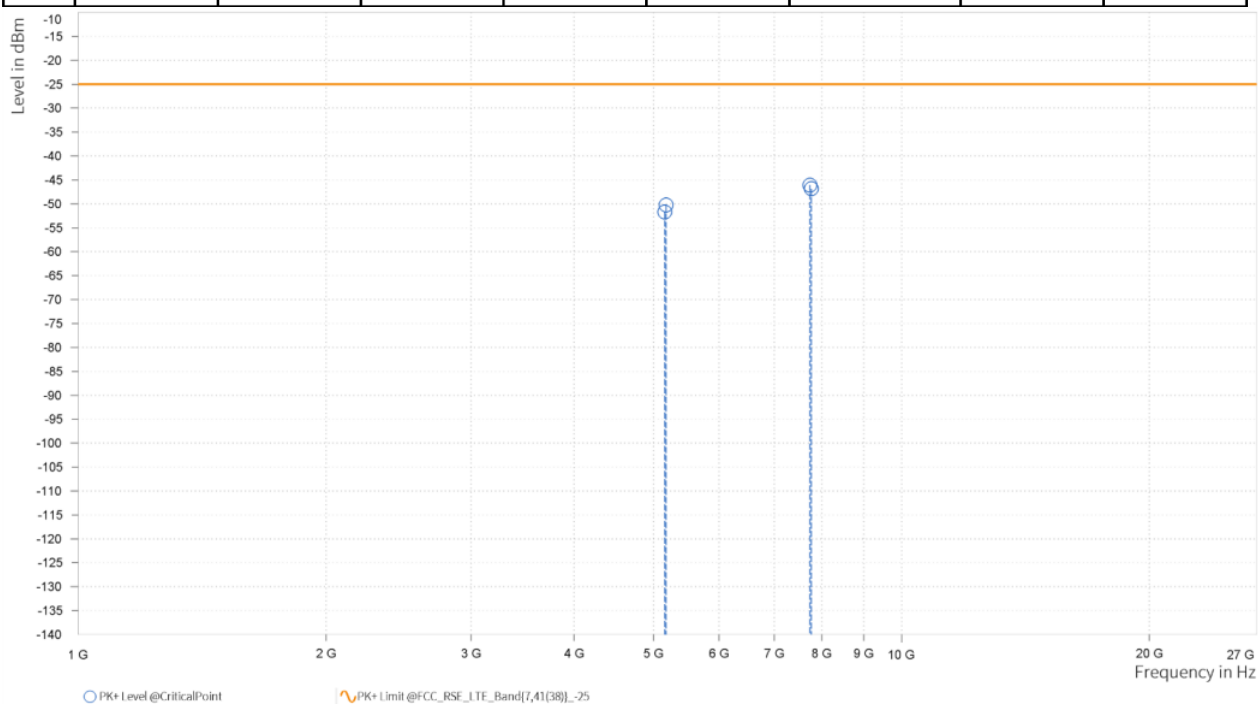




CHANNEL BANDWIDTH: 10 MHz + 20MHz

MODE	TX channel PCC 40526	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40670		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

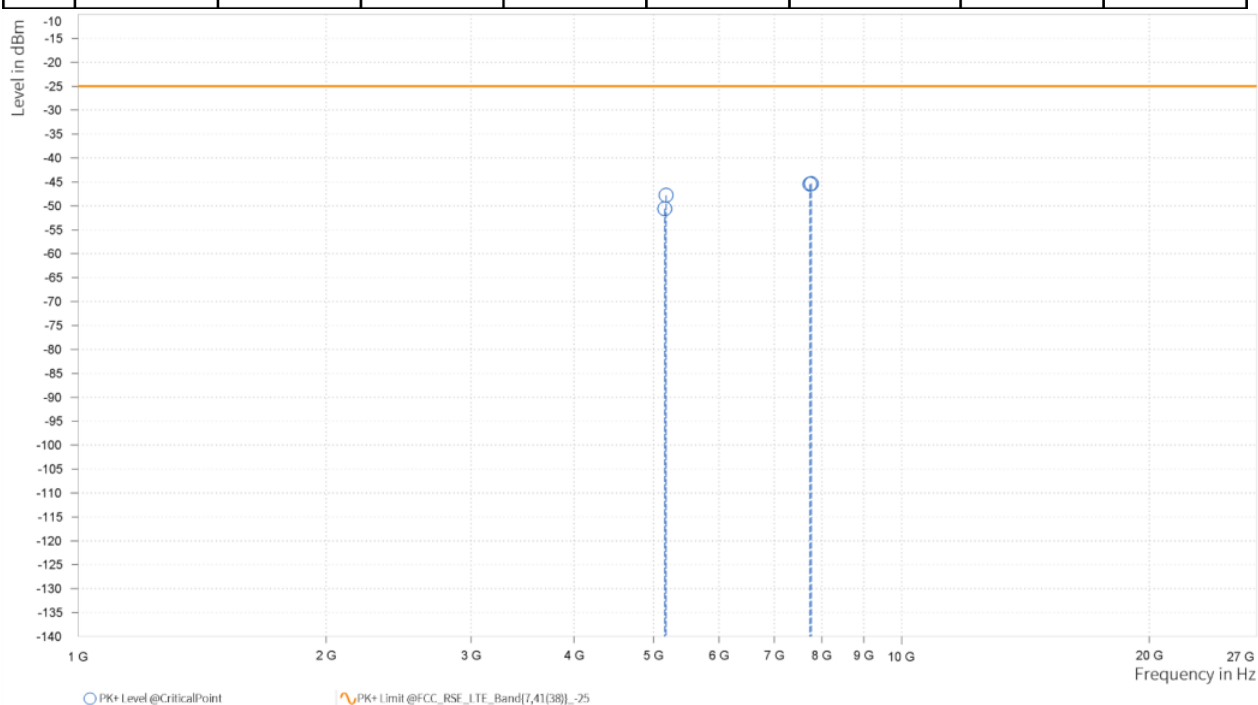
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,158.200	-51.72	-25.0	26.72	23.22	H	97.5	2.0
4	5,178.000	-50.25	-25.0	25.25	23.33	H	97.5	2.0
5	7,737.300	-46.08	-25.0	21.08	27.28	H	1.0	2.0
5	7,767.000	-46.84	-25.0	21.84	27.26	H	332.6	1.0





MODE	TX channel PCC 40526	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40670		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,158.200	-50.6	-25.0	25.6	23.49	V	359.0	2.0
4	5,178.000	-47.78	-25.0	22.78	23.76	V	95.4	1.0
5	7,737.300	-45.46	-25.0	20.46	26.99	V	336.1	1.0
5	7,767.000	-45.36	-25.0	20.36	27.02	V	1.0	1.0

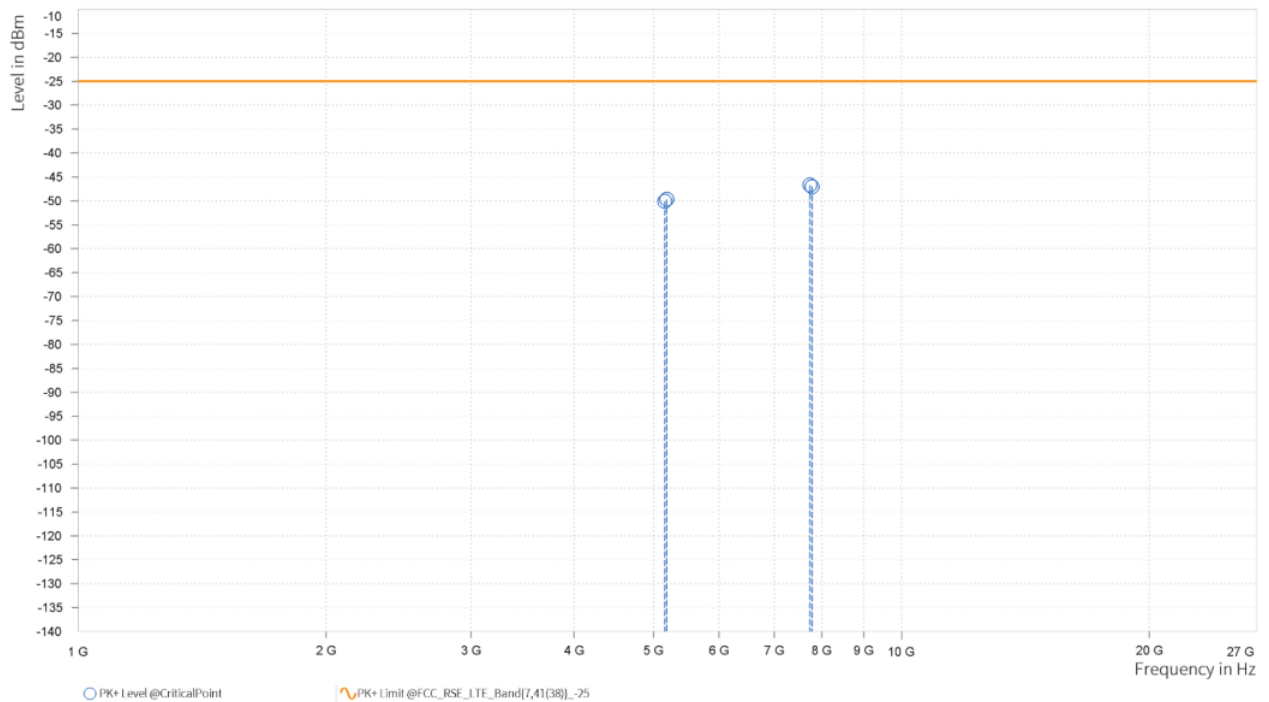




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04
CHANNEL BANDWIDTH: 15MHz + 15MHz

MODE	TX channel PCC 40545	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40695		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,157.500	-50.08	-25.0	25.08	23.22	H	26.7	2.0
4	5,187.500	-49.67	-25.0	24.67	23.38	H	98.2	1.0
5	7,736.250	-46.69	-25.0	21.69	27.27	H	340.2	1.0
5	7,781.250	-47.01	-25.0	22.01	27.25	H	276.6	1.0

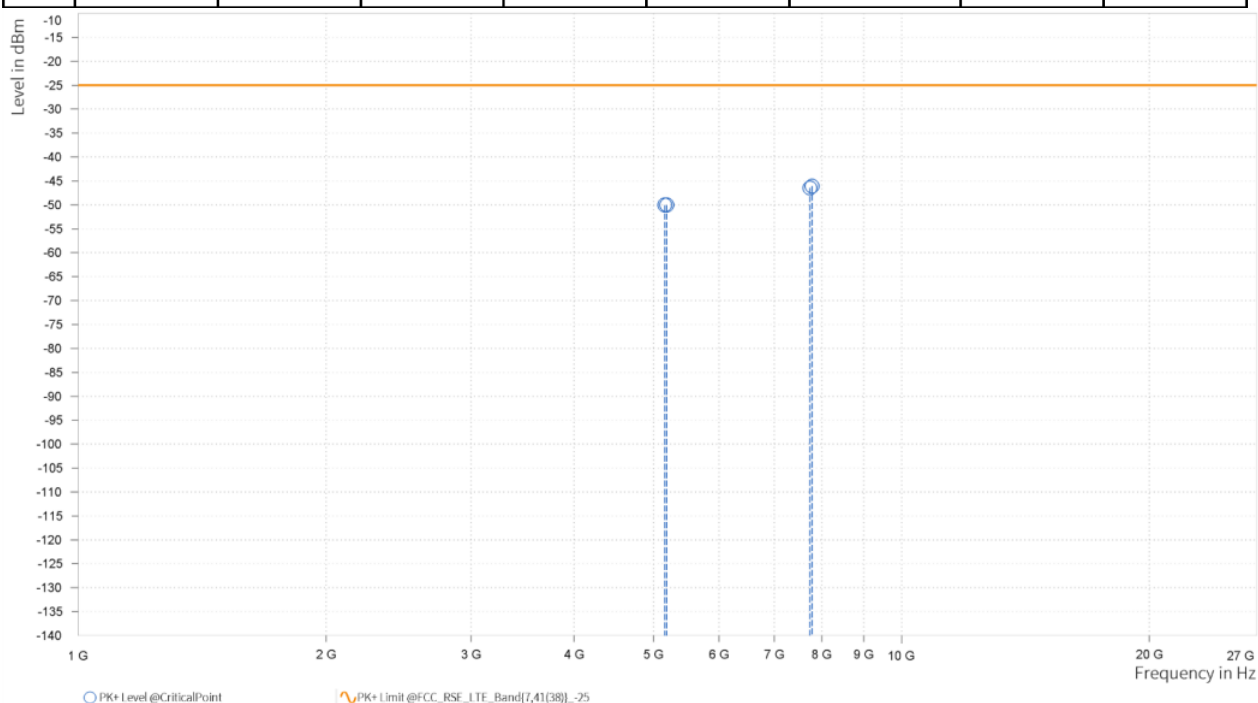




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04

MODE	TX channel PCC 40545	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40695		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,157.500	-50.05	-25.0	25.05	23.49	V	268.1	1.0
4	5,187.500	-50.02	-25.0	25.02	23.89	V	99.0	1.0
5	7,736.250	-46.43	-25.0	21.43	26.98	V	81.9	2.0
5	7,781.250	-46.09	-25.0	21.09	27.04	V	230.5	2.0

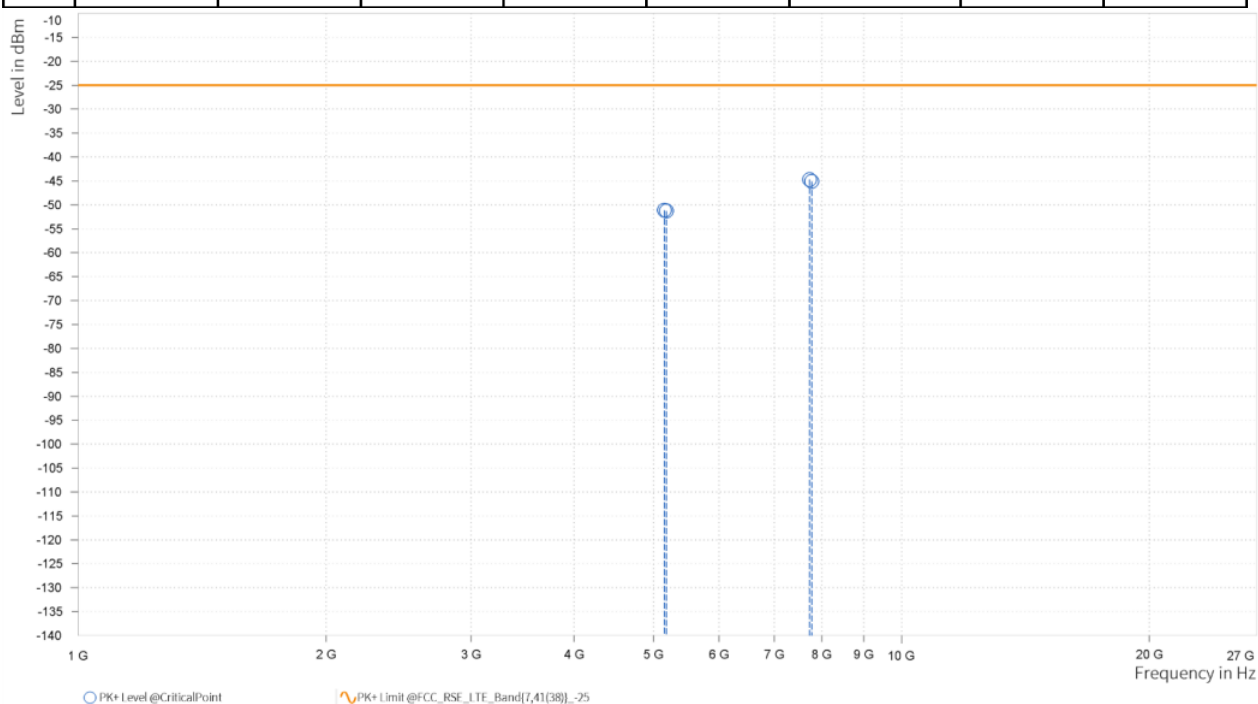




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04
CHANNEL BANDWIDTH: 15MHz + 20MHz

MODE	TX channel PCC 40523	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40694		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

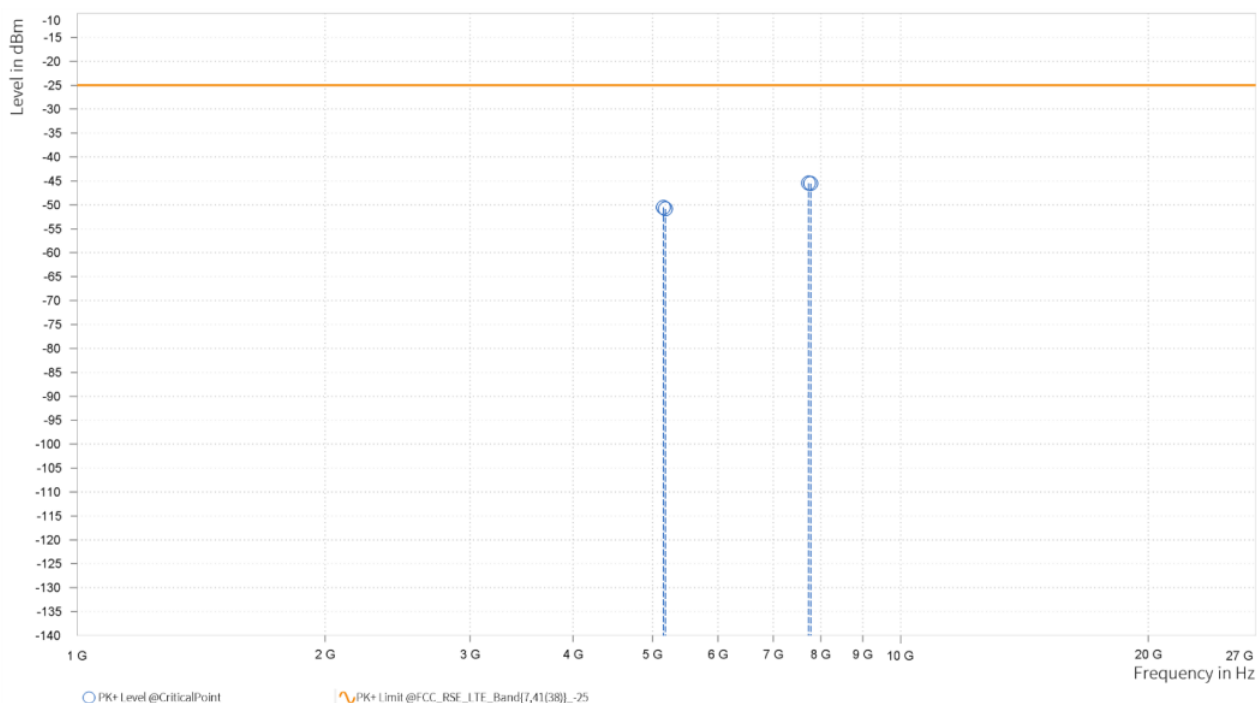
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,153.100	-51.11	-25.0	26.11	23.2	H	359.1	1.0
4	5,182.800	-51.28	-25.0	26.28	23.36	H	1.0	1.0
5	7,729.650	-44.69	-25.0	19.69	27.22	H	359.0	2.0
5	7,774.200	-45.1	-25.0	20.1	27.25	H	79.8	2.0





VERTICAL			
MODE	TX channel PCC 40523	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40694		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,153.100	-50.51	-25.0	25.51	23.43	V	90.4	2.0
4	5,182.800	-50.82	-25.0	25.82	23.83	V	268.2	1.0
5	7,729.650	-45.46	-25.0	20.46	26.95	V	128.7	1.0
5	7,774.200	-45.53	-25.0	20.53	27.03	V	276.6	1.0

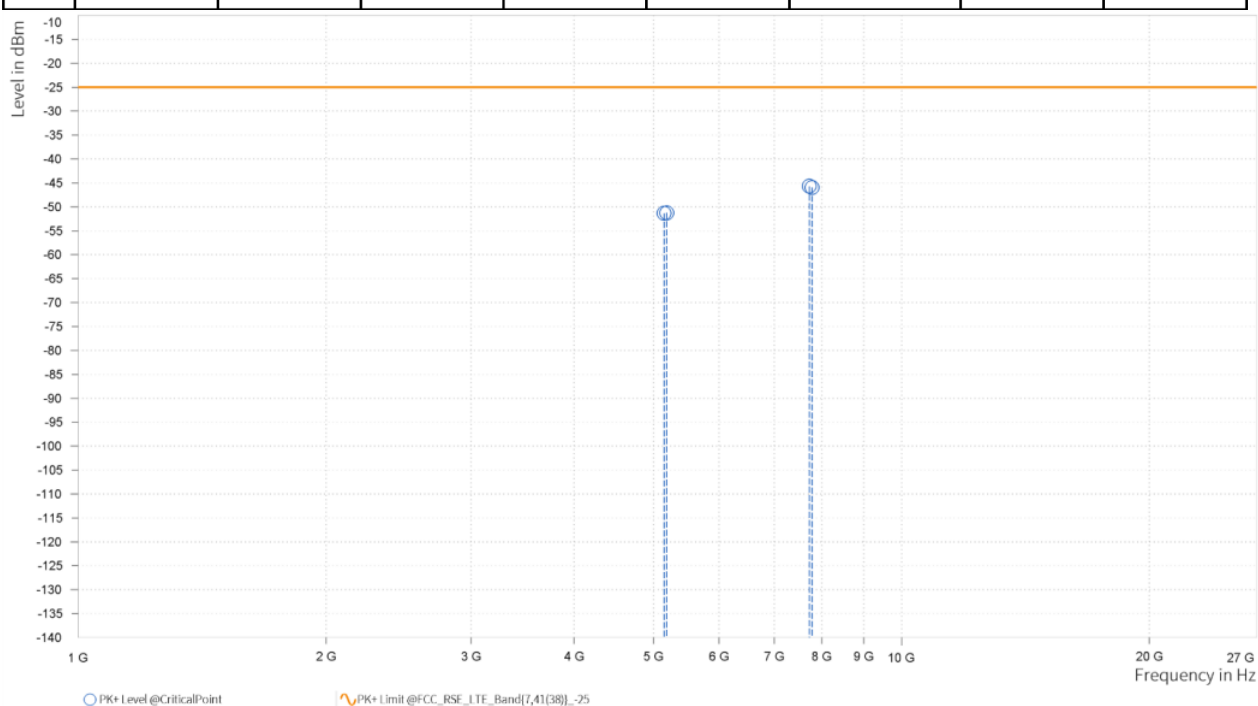




BUREAU VERITAS Test Report No.: PSU-NQN2407300216RF04
CHANNEL BANDWIDTH: 20MHz + 20MHz

MODE	TX channel PCC 40521	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40719		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,148.200	-51.35	-25.0	26.35	23.17	H	262.4	2.0
4	5,187.800	-51.25	-25.0	26.25	23.38	H	91.0	2.0
5	7,722.300	-45.68	-25.0	20.68	27.17	H	82.6	2.0
5	7,781.700	-45.94	-25.0	20.94	27.25	H	341.8	1.0





BUREAU
VERITAS

Test Report No.: PSU-NQN2407300216RF04

MODE	TX channel PCC 40521	FREQUENCY RANGE	Above 1000MHz
	TX channel SCC 40719		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
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	5,148.200	-51.01	-25.0	26.01	23.38	V	0.9	2.0
4	5,187.800	-50.42	-25.0	25.42	23.9	V	338.2	1.0
5	7,722.300	-47.54	-25.0	22.54	26.91	V	62.2	2.0
5	7,781.700	-45.52	-25.0	20.52	27.04	V	1.0	1.0

