

FCC Test Report

(Part 27: CA mode (LTE Band 7C, 38C, 41C, 66C, 66B))

Report No.: RFBASM-WTW-P21060063-7

FCC ID: QYLEM9190K

Test Model: EM9190

Received Date: Jun. 02, 2021

Test Date: Dec. 13 ~ Dec. 15, 2021

Issued Date: Dec. 20, 2021

Applicant: Getac Technology Corporation.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 788550 / TW0003

Designation Number:



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Release Control Record

Issue No.	Description	Date Issued
RFBASM-WTW-P21060063-7	Original release	Dec. 20, 2021

1 Certificate of Conformity

Product: Wireless Module

Brand: Getac

Test Model: EM9190

Sample Status: Identical Prototype

Applicant: Getac Technology Corporation.

Test Date: Dec. 13 ~ Dec. 15, 2021

Standards: FCC Part 27, Subpart C, M, L

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

Prepared by : Polly Chien , **Date:** Dec. 20, 2021
Polly Chien / Specialist

Approved by : Jeremy Lin , **Date:** Dec. 20, 2021
Jeremy Lin / Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2				
FCC Clause		Test Item	Result	Remarks
LTE B7 / LTE B38 / LTE B41	LTE B66			
2.1046 27.50 (h)(2)	2.1046 27.50 (d)(4)	Equivalent Isotropically Radiated Power	Pass	Meet the requirement of limit.
2.1047	2.1047	Modulation Characteristics	N/A	Refer to Note
---	27.50 (d)(5)	Peak To Average Ratio	N/A	Refer to Note
2.1055 27.54	2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	N/A	Refer to Note
2.1049	2.1049	Emission Bandwidth	N/A	Refer to Note
2.1051 27.53 (m)(4)(6)	2.1051 27.53(h)	Band Edge Measurements	N/A	Refer to Note
2.1051 27.53 (m)(4)(6)	2.1051 27.53(h)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53 (m)(4)(6)	2.1053 27.53(h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -19.61dB at 5180.40MHz.

Note:

1. This report is a partial report. Therefore, only test item of Equivalent Isotropically Radiated Power, Effective radiated power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to Sporton International (Shenzhen) Inc. report no.: FG021501D_Rev. 02 and FG021501C_Rev. 02 for module (Brand: Airprime, Model: EM9190).
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.59 dB
	200MHz ~ 1000MHz	3.60 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 09, 2021	Apr. 08, 2022
Spectrum Analyzer ROHDE & SCHWARZ	FSW43	101582	Apr. 01, 2021	Mar. 31, 2022
5G Wireless Test Platforms Keysight	E7515B	MY60102114	May 21, 2021	May 20, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Oct. 28, 2021	Oct. 27, 2022
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 14, 2021	Nov. 13, 2022
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 14, 2021	Nov. 13, 2022
Preamplifier Agilent (Below 1GHz)	8447D	2944A10638	Jun. 05, 2021	Jun. 04, 2022
Preamplifier Agilent (Above 1GHz)	8449B	3008A02367	Feb. 17, 2021	Feb. 16, 2022
RF signal cable HUBER+SUHNER&EMCI	SUCOFLEX 104 & EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	Jan. 16, 2021	Jan. 15, 2022
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	Jan. 16, 2021	Jan. 15, 2022
RF signal cable Woken	8D-FB	Cable-CH9-01	Jun. 05, 2021	Jun. 04, 2022
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn BV ADT	AT100	AT93021705	NA	NA
Turn Table BV ADT	TT100	TT93021705	NA	NA
Turn Table Controller BV ADT	SC100	SC93021705	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Standard Temperature And Humidity Chamber GIANT FORCE	GTH-120-40-CP-AR	MAA1306-019	Sep. 10, 2021	Sep. 09, 2022
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
DC power supply Keysight	U8002A	MY56330015	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 9.

3 General Information

3.1 General Description of EUT

Product	Wireless Module	
Brand	Getac	
Test Model	EM9190	
Status of EUT	Identical Prototype	
Power Supply Rating	3.3 Vdc (Host equipment)	
Modulation Type	LTE: QPSK, 16QAM, 64QAM, 256QAM	
Operating Frequency	LTE Band 7C	2507.8MHz ~ 2560.0MHz
	LTE Band 38C	2580.0MHz ~ 2610.0MHz
	LTE Band 41C	2506.0MHz ~ 2680.0MHz
	LTE Band 66C	1720.0MHz ~ 1770.0MHz
	LTE Band 66B	1715.0MHz ~ 1775.0MHz
Max. EIRP Power	LTE Band 7C (20MHz+20MHz)	168.93mW
	LTE Band 7C (20MHz+15MHz)	163.57mW
	LTE Band 38C (20MHz+20MHz)	140.83mW
	LTE Band 41C (20MHz+20MHz)	177.30mW
	LTE Band 41C (20MHz+15MHz)	169.32mW
	LTE Band 41C (15MHz+10MHz)	160.95mW
	LTE Band 66C (20MHz+20MHz)	178.20mW
	LTE Band 66B (10MHz+10MHz)	168.77mW
Antenna Type	Refer to Note as below	
Antenna Connector	Refer to Note as below	
Accessory Device	N/A	
Cable Supplied	N/A	

Note:

1. The EUT is authorized for use in specific End-product. The model of the K120 was chosen for final test.

Product	Brand	Model	Description
Tablet	Getac	K120	For marketing purpose
		K120G2	
		K120Y (Y= 10 , Y can be 0-9, a-z, A-Z, “-”, “_” or blank for marketing purpose)	

2. The End-product contains following accessory devices.

Product	Brand	Model	Description
Adapter 1	Getac	MTA190474W4	I/P: 100-240Vac, 1.6A, 50-60Hz O/P: 19.0Vdc, 4.74A (90.0W)
Adapter 2	Chicony	A15-090P1A	I/P: 100-240Vac, 1.2A, 50-60Hz O/P: 19.0Vdc, 4.74A (90.0W)
Battery 1	Getac	BP3S1P2100S-01	11.1Vdc , 2040mAh, 24Wh
Battery 2	Getac	BP4S1P3450P-01	14.4Vdc , 3300mAh, 48Wh
Touch Pen	Getac	340142000064	-
Dock	Getac	K120 Keyboard Dock	-

3. The following antennas were provided to the EUT.

LTE Band						
Ant. No.	Type	Connector	Gain (dBi)			
			B7	B38	B41	B66
Man	PIFA	I-PEX	4.30	3.97	4.3	3.36
AUX	PIFA	I-PEX	4.29	4.36	4.36	-0.17

* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

4. For CA mode configuration, please consult the manufacturer to declare the test mode.

5. The EUT support the following CA Configuration.

Band Configuration
7C
38C
41C
66B
66C

6. E-UTRA CA configuration / Bandwidth combination set.

E-UTRA CA configuration / Bandwidth combination set					
E-UTRA CA configuration	Uplink CA configurations	Component carriers in order of increasing carrier frequency		Maximum aggregated bandwidth [MHz]	Bandwidth combination set
		Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]		
CA_7C	CA_7C	15	15	40	0
		20	20		
		10	20	40	1
		15	15, 20		
		20	10, 15, 20		
		15	10, 15	40	2
		20	15, 20		
CA_38C	CA_38C	15	15	40	0
		20	20		
CA_41C	CA_41C	10	20	40	0
		15	15, 20		
		20	10, 15, 20		
		5, 10	20	40	1
		15	15, 20		
		20	5, 10, 15, 20		
		10	15, 20	40	2
		15	10, 15, 20		
		20	10, 15, 20		
		10	20	40	3
		20	20		
CA_66B	CA_66B	5	5, 10, 15	20	0
		10	5, 10		
		15	5		
CA_66C	CA_66C	5	20	40	0
		10	15, 20		
		15	10, 15, 20		
		20	5, 10, 15, 20		

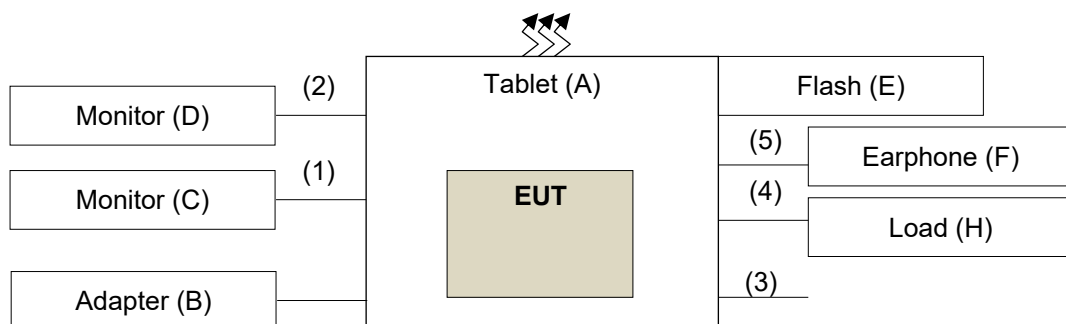
*7C is continuous CA and maximum combination is 20M+20M and 20M+15M.

*41C is continuous CA and maximum combination is 20M+20M, 20M+15M and 15M+10M.

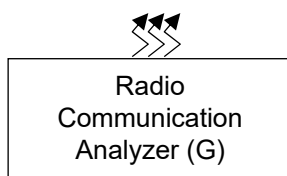
*38C/66C are continuous CA and maximum combination is 20M+20M.

*66B is continuous CA and maximum combination is 10M+10M.

3.2 Configuration of System under Test



Remote site



3.2.1 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Tablet	Getac	K120	NA	NA	Provided by client.
B.	Adapter	Getac	MTA190474W4	NA	NA	Provided by client.
C.	Monitor	DELL	U2410	CN-0J257M-72872-0A 6-02NL	FCC DoC Approved	-
D.	Monitor	DELL	U2410	CN-0J257M-72872-0A 6-08JL	FCC DoC Approved	-
E.	Flash	SanDisk	SDDDC3-032G	NA	NA	-
F.	Earphone	APPLE	MB770FE	NA	NA	-
G.	Radio Communication Analyzer	Anritsu	MT8821C	6261806803	NA	-
H.	Load	NA	NA	NA	NA	-

Note:

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Display cable	1	1.8	N	0	-
2.	HDMI cable	1	2	Y	0	-
3.	RS232 cable	1	1.5	N	0	-
4.	LAN cable	1	1.8	N	0	RJ45, Cat5e
5.	Audio cable	1	1.2	N	0	-

3.3 Test Mode Applicability and Tested Channel Detail

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

LTE Band 7 (CA 7C)

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	20850 to 21152 21048 to 21350	20850(2510.0MHz)+ 21048(2529.8MHz), 21001(2525.1MHz)+ 21199(2544.9MHz), 21152(2540.2MHz)+ 21350(2560.0MHz)	20MHz + 20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 74 RB Offset 1 RB / 99 RB Offset
-		20850 to 21201 21021 to 21372	20850(2510.0MHz)+ 21021(2527.1MHz) 21026(2527.6MHz)+ 21197(2544.7MHz), 21201(2545.1MHz)+ 21372(2562.2MHz)	20MHz + 15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 74 RB Offset 1 RB / 99 RB Offset
-	Radiated Emission Below 1GHz	20850 to 21152 21048 to 21350	20850(2510.0MHz)+ 21048(2529.8MHz)	20MHz + 20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset
-	Radiated Emission Above 1GHz	20850 to 21152 21048 to 21350	20850(2510.0MHz)+ 21048(2529.8MHz), 21001(2525.1MHz)+ 21199(2544.9MHz), 21152(2540.2MHz)+ 21350(2560.0MHz)	20MHz + 20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset

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

LTE Band 38 (CA 38C)

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	37850 to 37952 38048 to 38150	37850(2580.0MHz)+ 38048(2599.8MHz), 37901(2585.1MHz)+ 38099(2604.9MHz), 37952(2590.2MHz)+ 38150(2610.0MHz)	20MHz + 20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 99 RB Offset
-	Radiated Emission Below 1GHz	37850 to 37952 38048 to 38150	37952(2590.2MHz)+ 38150(2610.0MHz)	20MHz + 20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset
-	Radiated Emission Above 1GHz	37850 to 37952 38048 to 38150	37850(2580.0MHz)+ 38048(2599.8MHz), 37901(2585.1MHz)+ 38099(2604.9MHz), 37952(2590.2MHz)+ 38150(2610.0MHz)	20MHz + 20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset

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

LTE Band 41 (CA 41C)

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	39750 to 41292 39948 to 41490	39750(2506.0MHz)+ 39948(2525.8MHz), 40521(2583.1MHz)+ 40719(2602.9MHz), 41292(2660.2MHz)+ 41490(2680.0MHz)	20MHz + 20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 99 RB Offset
		39750 to 41341 39921 to 51512	39750(2506.0MHz)+ 39921(2523.1MHz), 40546(2585.6MHz)+ 40717(2602.7MHz), 41341(2665.1MHz)+ 51512(2682.2MHz)	20MHz + 15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 74 RB Offset 1 RB / 99 RB Offset
		39725 to 41417 39845 to 41537	39725(2503.5MHz)+ 39845(2515.5MHz), 40571(2588.1MHz)+ 40691(2600.1MHz), 41417(2672.7MHz)+ 41537(2684.7MHz)	15MHz + 10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 49 RB Offset 1 RB / 74 RB Offset
-	Radiated Emission Below 1GHz	39750 to 41292 39948 to 41490	39750(2506.0MHz)+ 39948(2525.8MHz),	20MHz + 20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset
-	Radiated Emission Above 1GHz	39750 to 41292 39948 to 41490	39750(2506.0MHz)+ 39948(2525.8MHz), 40521(2583.1MHz)+ 40719(2602.9MHz), 41292(2660.2MHz)+ 41490(2680.0MHz)	20MHz + 20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 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 (CA 66C)

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	132072 to 132374 132270 to 132572	132072(1720.0MHz)+ 132270(1739.8MHz), 132323(1745.1MHz)+ 132521(1764.9MHz), 132374(1750.2MHz)+ 132572(1770.0MHz)	20MHz + 20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 99 RB Offset
-	Radiated Emission Below 1GHz	132072 to 132374 132270 to 132572	132374(1750.2MHz)+ 132572(1770.0MHz)	20MHz + 20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 RB Offset
-	Radiated Emission Above 1GHz	132072 to 132374 132270 to 132572	132072(1720.0MHz)+ 132270(1739.8MHz), 132323(1745.1MHz)+ 132521(1764.9MHz), 132374(1750.2MHz)+ 132572(1770.0MHz)	20MHz + 20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 99 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 (CA 66B)

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	132022 to 132523 132121 to 132622	132022(1715.0MHz)+ 132121(1724.9MHz), 132373(1750.1MHz)+ 132472(1760.0MHz), 132523(1765.1MHz)+ 132622(1775.0MHz)	10MHz + 10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 49 RB Offset
-	Radiated Emission Above 1GHz	132022 to 132523 132121 to 132622	132373(1750.1MHz)+ 132472(1760.0MHz)	10MHz + 10MHz	QPSK	1 RB / 49 RB Offset 1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	132022 to 132523 132121 to 132622	132022(1715.0MHz)+ 132121(1724.9MHz), 132373(1750.1MHz)+ 132472(1760.0MHz), 132523(1765.1MHz)+ 132622(1775.0MHz)	10MHz + 10MHz	QPSK	1 RB / 49 RB Offset 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.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
EIRP	22deg. C, 66%RH	3.3 Vdc	Karl Lee
Radiated Emission	22deg. C, 66%RH	120Vac, 60Hz	Rex Wang, Hans Wu

3.4 EUT Operating Conditions

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

3.5 General Description of Applied Standards and References

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

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 27

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

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

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

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

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

LTE Band 66:

Mobile / Portable station are limited to 1 watts e.i.r.p.

LTE Band 7, LTE Band 38, LTE Band 41:

Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

4.1.2 Test Procedures

Conducted Power Measurement:

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

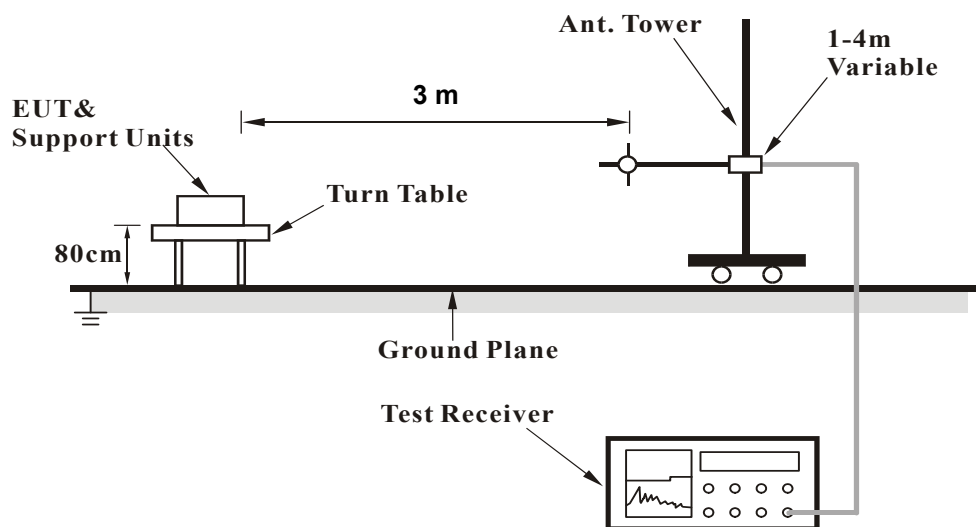
EIRP / ERP Measurement:

- a. All measurements were done at low, middle and high operational frequency range. RBW is 10MHz, 15 MHz and 20MHz for LTE mode, VBW $\geq 3 \times$ RBW. When the RBW setting value exceeds the maximum value set by the Spectrum instrument, the measurement method refers to ANSI C63.26 section 5.2.4.4.
- b. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. $EIRP = \text{Output power level} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15 \text{ dB}$. Correction Factor (includes EIRP and ERP unit conversion factor) = Antenna gain of substitution horn. – Tx cable loss. Measurement method refers to ANSI C63.26 section 5.2.7 & 5.2.4.

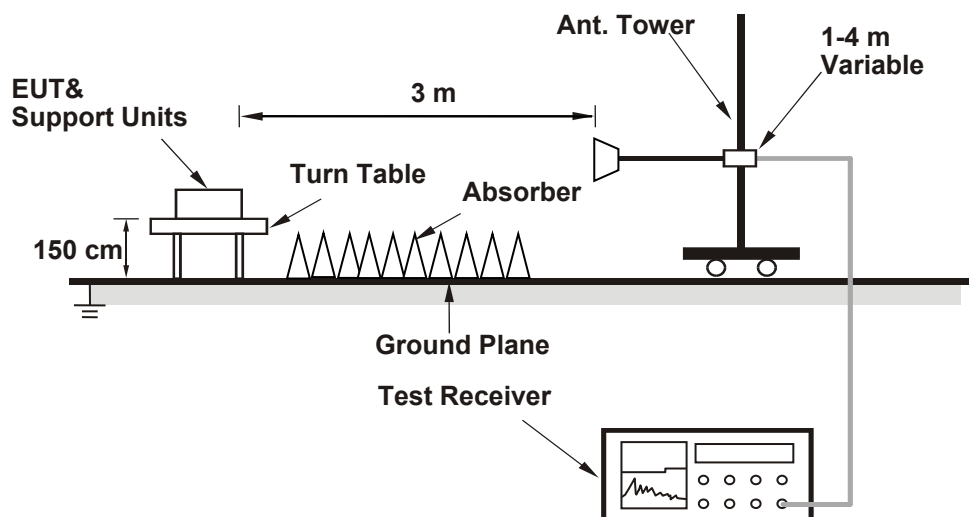
4.1.3 Test Setup

EIRP / ERP Measurement:

<Radiated Emission below or equal 1 GHz>



<Radiated Emission above 1 GHz>



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

Conducted Power Measurement:



4.1.4 Test Results

Conducted Output Power (dBm)

LTE Band 7 (CA 7C)

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
																Total
Intra Band Conti- guous	CA_7C	7	20	QPSK	1	0	20850	2510	7	20	QPSK	1	99	21048	2529.8	15.63
					1	99						1	0			23.17
		7	20	QPSK	1	0	21001	2525.1	7	20	QPSK	1	99	21199	2544.9	15.89
					1	99						1	0			23.07
		7	20	QPSK	1	0	21152	2540.2	7	20	QPSK	1	99	21350	2560	15.54
					1	99						1	0			22.82

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
																Total
Intra Band Conti- guous	CA_7C	7	20	QPSK	1	0	20850	2510	7	15	QPSK	1	99	21021	2527.1	15.53
					1	99						1	0			23.02
		7	20	QPSK	1	0	21001	2525.1	7	15	QPSK	1	99	21197	2544.7	15.74
					1	99						1	0			22.99
		7	20	QPSK	1	0	21152	2540.2	7	15	QPSK	1	99	21372	2562.2	15.45
					1	99						1	0			22.70

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
																Total
Intra Band Conti- guous	CA_7C	7	20	16QAM	1	0	20850	2510	7	20	16QAM	1	99	21048	2529.8	14.77
					1	99						1	0			22.38
		7	20	16QAM	1	0	21001	2525.1	7	20	16QAM	1	99	21199	2544.9	15.22
					1	99						1	0			22.34
		7	20	16QAM	1	0	21152	2540.2	7	20	16QAM	1	99	21350	2560	14.77
					1	99						1	0			21.89

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
																Total
Intra Band Conti- guous	CA_7C	7	20	16QAM	1	0	20850	2510	7	15	16QAM	1	99	21021	2527.1	14.65
					1	99						1	0			22.24
		7	20	16QAM	1	0	21001	2525.1	7	15	16QAM	1	99	21197	2544.7	15.16
					1	99						1	0			22.22
		7	20	16QAM	1	0	21152	2540.2	7	15	16QAM	1	99	21372	2562.2	14.61
					1	99						1	0			21.79

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_7C	7	20	64QAM	1	0	20850	2510	7	20	64QAM	1	99	21048	2529.8	14.14
					1	99						1	0			21.67
		7	20	64QAM	1	0	21001	2525.1	7	20	64QAM	1	99	21199	2544.9	14.39
					1	99						1	0			21.77
		7	20	64QAM	1	0	21152	2540.2	7	20	64QAM	1	99	21350	2560	14.09
					1	99						1	0			21.21

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_7C	7	20	64QAM	1	0	20850	2510	7	15	64QAM	1	99	21021	2527.1	14.03
					1	99						1	0			21.57
		7	20	64QAM	1	0	21001	2525.1	7	15	64QAM	1	99	21197	2544.7	14.30
					1	99						1	0			21.65
		7	20	64QAM	1	0	21152	2540.2	7	15	64QAM	1	99	21372	2562.2	13.95
					1	99						1	0			21.04

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_7C	7	20	256QAM	1	0	20850	2510	7	20	256QAM	1	99	21048	2529.8	13.31
					1	99						1	0			20.88
		7	20	256QAM	1	0	21001	2525.1	7	20	256QAM	1	99	21199	2544.9	13.58
					1	99						1	0			20.91
		7	20	256QAM	1	0	21152	2540.2	7	20	256QAM	1	99	21350	2560	13.41
					1	99						1	0			20.24

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_7C	7	20	256QAM	1	0	20850	2510	7	15	256QAM	1	99	21021	2527.1	13.19
					1	99						1	0			20.72
		7	20	256QAM	1	0	21001	2525.1	7	15	256QAM	1	99	21197	2544.7	13.46
					1	99						1	0			20.82
		7	20	256QAM	1	0	21152	2540.2	7	15	256QAM	1	99	21372	2562.2	13.31
					1	99						1	0			20.08

LTE Band 38 (CA 38C)

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_38C	38	20	QPSK	1	0	37850	2580	38	20	QPSK	1	99	38048	2599.8	18.42
					1	99						1	0			22.38
		38	20	QPSK	1	0	37901	2585.1	38	20	QPSK	1	99	38099	2604.9	18.27
					1	99						1	0			22.33
		38	20	QPSK	1	0	37952	2590.2	38	20	QPSK	1	99	38150	2610	18.21
					1	99						1	0			22.31

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_38C	38	20	16QAM	1	0	37850	2580	38	20	16QAM	1	99	38048	2599.8	17.61
					1	99						1	0			21.85
		38	20	16QAM	1	0	37901	2585.1	38	20	16QAM	1	99	38099	2604.9	17.44
					1	99						1	0			21.45
		38	20	16QAM	1	0	37952	2590.2	38	20	16QAM	1	99	38150	2610	17.31
					1	99						1	0			21.58

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_38C	38	20	64QAM	1	0	37850	2580	38	20	64QAM	1	99	38048	2599.8	16.68
					1	99						1	0			20.99
		38	20	64QAM	1	0	37901	2585.1	38	20	64QAM	1	99	38099	2604.9	16.62
					1	99						1	0			20.69
		38	20	64QAM	1	0	37952	2590.2	38	20	64QAM	1	99	38150	2610	16.57
					1	99						1	0			20.81

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_38C	38	20	256QAM	1	0	37850	2580	38	20	256QAM	1	99	38048	2599.8	15.85
					1	99						1	0			20.23
		38	20	256QAM	1	0	37901	2585.1	38	20	256QAM	1	99	38099	2604.9	15.87
					1	99						1	0			19.78
		38	20	256QAM	1	0	37952	2590.2	38	20	256QAM	1	99	38150	2610	15.84
					1	99						1	0			20.07

LTE Band 41 (CA 41C)

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	20	QPSK	1	0	39750	2506	41	20	QPSK	1	99	39948	2525.8	19.07
					1	99						1	0			23.57
		41	20	QPSK	1	0	40521	2583.1	41	20	QPSK	1	99	40719	2602.9	19.02
					1	99						1	0			23.50
		41	20	QPSK	1	0	41292	2660.2	41	20	QPSK	1	99	41490	2680	18.37
					1	99						1	0			23.07

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	20	QPSK	1	0	39750	2506	41	15	QPSK	1	99	39921	2523.1	18.92
					1	99						1	0			23.46
		41	20	QPSK	1	0	40521	2583.1	41	15	QPSK	1	99	40717	2602.7	18.82
					1	99						1	0			23.36
		41	20	QPSK	1	0	41292	2660.2	41	15	QPSK	1	99	41512	2682.2	18.16
					1	99						1	0			22.98

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	15	QPSK	1	0	39725	2503.5	41	10	QPSK	1	99	39845	2515.5	18.79
					1	99						1	0			23.28
		41	15	QPSK	1	0	40571	2588.1	41	10	QPSK	1	99	40691	2600.1	18.68
					1	99						1	0			23.18
		41	15	QPSK	1	0	41417	2672.7	41	10	QPSK	1	99	41537	2684.7	18.01
					1	99						1	0			22.88

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	20	16QAM	1	0	39750	2506	41	20	16QAM	1	99	39948	2525.8	18.31
					1	99						1	0			22.81
		41	20	16QAM	1	0	40521	2583.1	41	20	16QAM	1	99	40719	2602.9	18.50
					1	99						1	0			22.70
		41	20	16QAM	1	0	41292	2660.2	41	20	16QAM	1	99	41490	2680	17.80
					1	99						1	0			22.29

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	20	16QAM	1	0	39750	2506	41	15	16QAM	1	99	39921	2523.1	18.20
					1	99						1	0			22.64
		41	20	16QAM	1	0	40521	2583.1	41	15	16QAM	1	99	40717	2602.7	18.37
					1	99						1	0			22.58
		41	20	16QAM	1	0	41292	2660.2	41	15	16QAM	1	99	41512	2682.2	17.69
					1	99						1	0			22.11

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	15	16QAM	1	0	39725	2503.5	41	10	16QAM	1	99	39845	2515.5	18.03
					1	99						1	0			22.46
		41	15	16QAM	1	0	40571	2588.1	41	10	16QAM	1	99	40691	2600.1	18.16
					1	99						1	0			22.50
		41	15	16QAM	1	0	41417	2672.7	41	10	16QAM	1	99	41537	2684.7	17.51
					1	99						1	0			21.96

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	20	64QAM	1	0	39750	2506	41	20	64QAM	1	99	39948	2525.8	17.49
					1	99						1	0			22.33
		41	20	64QAM	1	0	40521	2583.1	41	20	64QAM	1	99	40719	2602.9	17.72
					1	99						1	0			21.97
		41	20	64QAM	1	0	41292	2660.2	41	20	64QAM	1	99	41490	2680	17.02
					1	99						1	0			21.54

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	20	64QAM	1	0	39750	2506	41	15	64QAM	1	99	39921	2523.1	17.29
					1	99						1	0			22.23
		41	20	64QAM	1	0	40521	2583.1	41	15	64QAM	1	99	40717	2602.7	17.54
					1	99						1	0			21.84
		41	20	64QAM	1	0	41292	2660.2	41	15	64QAM	1	99	41512	2682.2	16.93
					1	99						1	0			21.39

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	15	64QAM	1	0	39725	2503.5	41	10	64QAM	1	99	39845	2515.5	17.19
					1	99						1	0			22.01
		41	15	64QAM	1	0	40571	2588.1	41	10	64QAM	1	99	40691	2600.1	17.45
					1	99						1	0			21.71
		41	15	64QAM	1	0	41417	2672.7	41	10	64QAM	1	99	41537	2684.7	16.69
					1	99						1	0			21.19

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	20	256QAM	1	0	39750	2506	41	20	256QAM	1	99	39948	2525.8	16.77
					1	99						1	0			21.59
		41	20	256QAM	1	0	40521	2583.1	41	20	256QAM	1	99	40719	2602.9	17.00
					1	99						1	0			21.29
		41	20	256QAM	1	0	41292	2660.2	41	20	256QAM	1	99	41490	2680	16.25
					1	99						1	0			20.85

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	20	256QAM	1	0	39750	2506	41	15	256QAM	1	99	39921	2523.1	16.64
					1	99						1	0			21.49
		41	20	256QAM	1	0	40521	2583.1	41	15	256QAM	1	99	40717	2602.7	16.80
					1	99						1	0			21.16
		41	20	256QAM	1	0	41292	2660.2	41	15	256QAM	1	99	41512	2682.2	16.05
					1	99						1	0			20.70

Con- figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_41C	41	15	256QAM	1	0	39725	2503.5	41	10	256QAM	1	99	39845	2515.5	16.53
					1	99						1	0			21.28
		41	15	256QAM	1	0	40571	2588.1	41	10	256QAM	1	99	40691	2600.1	16.70
					1	99						1	0			20.91
		41	15	256QAM	1	0	41417	2672.7	41	10	256QAM	1	99	41537	2684.7	15.95
					1	99						1	0			20.55

LTE Band 66 (CA 66C)

Con fugure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_66C	66	20	QPSK	1	0	132072	1720	66	20	QPSK	1	99	132270	1739.8	15.38
					1	99						1	0			22.74
		66	20	QPSK	1	0	132323	1745.1	66	20	QPSK	1	99	132521	1764.9	15.38
					1	99						1	0			22.96
		66	20	QPSK	1	0	132374	1750.2	66	20	QPSK	1	99	132572	1770	15.50
					1	99						1	0			23.05

Con fugure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_66C	66	20	16QAM	1	0	132072	1720	66	20	16QAM	1	99	132270	1739.8	14.58
					1	99						1	0			21.85
		66	20	16QAM	1	0	132323	1745.1	66	20	16QAM	1	99	132521	1764.9	14.63
					1	99						1	0			22.11
		66	20	16QAM	1	0	132374	1750.2	66	20	16QAM	1	99	132572	1770	14.75
					1	99						1	0			22.38

Con fugure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_66C	66	20	64QAM	1	0	132072	1720	66	20	64QAM	1	99	132270	1739.8	13.90
					1	99						1	0			21.22
		66	20	64QAM	1	0	132323	1745.1	66	20	64QAM	1	99	132521	1764.9	14.03
					1	99						1	0			21.54
		66	20	64QAM	1	0	132374	1750.2	66	20	64QAM	1	99	132572	1770	13.98
					1	99						1	0			21.72

Con fugure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_66C	66	20	256QAM	1	0	132072	1720	66	20	256QAM	1	99	132270	1739.8	13.08
					1	99						1	0			20.55
		66	20	256QAM	1	0	132323	1745.1	66	20	256QAM	1	99	132521	1764.9	13.18
					1	99						1	0			20.75
		66	20	256QAM	1	0	132374	1750.2	66	20	256QAM	1	99	132572	1770	13.23
					1	99						1	0			21.21

LTE Band 66 (CA 66B)

Con figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_66B	66	10	QPSK	1	0	132022	1715	66	10	QPSK	1	49	132121	1724.9	13.72
					1	49						1	0			22.66
		66	10	QPSK	1	0	132373	1750.1	66	10	QPSK	1	49	132472	1760	13.82
					1	49						1	0			23.10
		66	10	QPSK	1	0	132523	1765.1	66	10	QPSK	1	49	132622	1775	14.05
					1	49						1	0			23.19

Con figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_66B	66	10	16QAM	1	0	132022	1715	66	10	16QAM	1	49	132121	1724.9	13.03
					1	49						1	0			21.87
		66	10	16QAM	1	0	132373	1750.1	66	10	16QAM	1	49	132472	1760	13.06
					1	49						1	0			22.32
		66	10	16QAM	1	0	132523	1765.1	66	10	16QAM	1	49	132622	1775	13.43
					1	49						1	0			22.29

Con figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_66B	66	10	64QAM	1	0	132022	1715	66	10	64QAM	1	49	132121	1724.9	12.18
					1	49						1	0			21.32
		66	10	64QAM	1	0	132373	1750.1	66	10	64QAM	1	49	132472	1760	12.40
					1	49						1	0			21.66
		66	10	64QAM	1	0	132523	1765.1	66	10	64QAM	1	49	132622	1775	12.87
					1	49						1	0			21.58

Con figure	Com- bination	PCC							SCC							Measurement Power
		Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Band	BW (MHz)	Modu- lation	RB Size	RB Offset	UL Chan.	UL Freq. (MHz)	Tx Power with UL-CA Active (dBm)
		Total														
Intra Band Conti- guous	CA_66B	66	10	256QAM	1	0	132022	1715	66	10	256QAM	1	49	132121	1724.9	11.60
					1	49						1	0			20.51
		66	10	256QAM	1	0	132373	1750.1	66	10	256QAM	1	49	132472	1760	11.70
					1	49						1	0			20.80
		66	10	256QAM	1	0	132523	1765.1	66	10	256QAM	1	49	132622	1775	11.90
					1	49						1	0			20.77

EIRP Power (dBm)

LTE Band 7 (CA 7C)							
Channel Bandwidth: 20+20 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	20850+21048	2519.9	-22.00	44.16	22.16	164.44	H
	21001+21199	2535.0	-22.12	44.20	22.08	161.32	
	21152+21350	2550.1	-22.53	44.81	22.28	168.93	
	20850+21048	2519.9	-28.28	44.78	16.50	44.67	V
	21001+21199	2535.0	-28.56	44.09	15.53	35.71	
	21152+21350	2550.1	-28.33	44.72	16.39	43.55	
Channel Bandwidth: 20+20 MHz / 16QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	20850+21048	2519.9	-22.90	44.16	21.26	133.66	H
	21001+21199	2535.0	-23.22	44.20	20.98	125.23	
	21152+21350	2550.1	-23.63	44.81	21.18	131.13	
	20850+21048	2519.9	-29.18	44.78	15.60	36.31	V
	21001+21199	2535.0	-29.76	44.09	14.33	27.09	
	21152+21350	2550.1	-29.33	44.72	15.39	34.59	
Channel Bandwidth: 20+20 MHz / 64QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	20850+21048	2519.9	-24.10	44.16	20.06	101.39	H
	21001+21199	2535.0	-24.42	44.20	19.78	94.99	
	21152+21350	2550.1	-24.53	44.81	20.28	106.59	
	20850+21048	2519.9	-30.18	44.78	14.60	28.84	V
	21001+21199	2535.0	-30.96	44.09	13.13	20.55	
	21152+21350	2550.1	-30.43	44.72	14.29	26.85	
Channel Bandwidth: 20+20 MHz / 256QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	20850+21048	2519.9	-25.30	44.16	18.86	76.91	H
	21001+21199	2535.0	-25.52	44.20	18.68	73.74	
	21152+21350	2550.1	-25.43	44.81	19.38	86.64	
	20850+21048	2519.9	-31.28	44.78	13.50	22.39	V
	21001+21199	2535.0	-31.96	44.09	12.13	16.32	
	21152+21350	2550.1	-31.53	44.72	13.19	20.84	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 7 (CA 7C)							
Channel Bandwidth: 20+15 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	20850+21021	2518.6	-22.10	44.16	22.06	160.69	H
	21026+21197	2536.2	-22.32	44.20	21.88	154.06	
	21201+21375	2553.7	-22.67	44.81	22.14	163.57	
	20850+21021	2518.6	-28.52	44.78	16.26	42.27	V
	21026+21197	2536.2	-28.68	44.09	15.41	34.74	
	21201+21372	2553.7	-28.51	44.72	16.21	41.78	
Channel Bandwidth: 20+15 MHz / 16QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	20850+21021	2519.9	-23.12	44.16	21.04	127.06	H
	21026+21197	2535.0	-23.34	44.20	20.86	121.81	
	21201+21375	2550.1	-23.73	44.81	21.08	128.14	
	20850+21021	2519.9	-29.32	44.78	15.46	35.16	V
	21026+21197	2535.0	-29.98	44.09	14.11	25.75	
	21201+21372	2550.1	-29.55	44.72	15.17	32.89	
Channel Bandwidth: 20+15 MHz / 64QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	20850+21021	2519.9	-24.10	44.16	20.06	101.39	H
	21026+21197	2535.0	-24.42	44.20	19.78	94.99	
	21201+21375	2550.1	-24.53	44.81	20.28	106.59	
	20850+21021	2519.9	-30.18	44.78	14.60	28.84	V
	21026+21197	2535.0	-30.96	44.09	13.13	20.55	
	21201+21372	2550.1	-30.43	44.72	14.29	26.85	
Channel Bandwidth: 20+15 MHz / 256QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	20850+21021	2519.9	-25.30	44.16	18.86	76.91	H
	21026+21197	2535.0	-25.52	44.20	18.68	73.74	
	21201+21375	2550.1	-25.43	44.81	19.38	86.64	
	20850+21021	2519.9	-31.28	44.78	13.50	22.39	V
	21026+21197	2535.0	-31.96	44.09	12.13	16.32	
	21201+21372	2550.1	-31.53	44.72	13.19	20.84	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 38 (CA 38C)							
Channel Bandwidth: 20+20 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	37850+38048	2589.9	-23.18	44.16	20.98	125.31	H
	37901+38099	2595.0	-23.56	44.20	20.64	115.80	
	37952+38150	2600.1	-23.32	44.81	21.49	140.83	
	37850+38048	2589.9	-27.28	44.78	17.50	56.23	V
	37901+38099	2595.0	-27.54	44.09	16.55	45.16	
	37952+38150	2600.1	-27.93	44.72	16.79	47.75	
Channel Bandwidth: 20+20 MHz / 16QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	37850+38048	2589.9	-24.08	44.16	20.08	101.86	H
	37901+38099	2595.0	-24.76	44.20	19.44	87.84	
	37952+38150	2600.1	-24.32	44.81	20.49	111.87	
	37850+38048	2589.9	-28.28	44.78	16.50	44.67	V
	37901+38099	2595.0	-28.64	44.09	15.45	35.06	
	37952+38150	2600.1	-28.93	44.72	15.79	37.93	
Channel Bandwidth: 20+20 MHz / 64QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	37850+38048	2589.9	-25.28	44.16	18.88	77.27	H
	37901+38099	2595.0	-25.66	44.20	18.54	71.40	
	37952+38150	2600.1	-25.32	44.81	19.49	88.86	
	37850+38048	2589.9	-29.48	44.78	15.30	33.88	V
	37901+38099	2595.0	-29.54	44.09	14.55	28.50	
	37952+38150	2600.1	-29.93	44.72	14.79	30.13	
Channel Bandwidth: 20+20 MHz / 256QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	37850+38048	2589.9	-26.48	44.16	17.68	58.61	H
	37901+38099	2595.0	-26.76	44.20	17.44	55.42	
	37952+38150	2600.1	-26.52	44.81	18.29	67.41	
	37850+38048	2589.9	-30.48	44.78	14.30	26.92	V
	37901+38099	2595.0	-30.74	44.09	13.35	21.62	
	37952+38150	2600.1	-31.03	44.72	13.69	23.39	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 41 (CA 41C)							
Channel Bandwidth: 20+20 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39750+39948	2515.9	-22.10	44.16	22.06	160.69	H
	40521+40719	2593.0	-22.33	44.20	21.87	153.71	
	41292+41490	2670.1	-22.32	44.81	22.49	177.30	
	39750+39948	2515.9	-26.46	44.78	18.32	67.92	V
	40521+40719	2593.0	-26.53	44.09	17.56	56.99	
	41292+41490	2670.1	-26.71	44.72	18.01	63.24	
Channel Bandwidth: 20+20 MHz / 16QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39750+39948	2515.9	-22.90	44.16	21.26	133.66	H
	40521+40719	2593.1	-23.53	44.20	20.67	116.60	
	41292+41490	2670.1	-23.52	44.81	21.29	134.49	
	39750+39948	2515.9	-27.56	44.78	17.22	52.72	V
	40521+40719	2593.1	-27.53	44.09	16.56	45.27	
	41292+41490	2670.1	-27.81	44.72	16.91	49.09	
Channel Bandwidth: 20+20 MHz / 64QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39750+39948	2515.9	-23.90	44.16	20.26	106.17	H
	40521+40719	2593.1	-24.73	44.20	19.47	88.45	
	41292+41490	2670.1	-24.62	44.81	20.19	104.40	
	39750+39948	2515.9	-28.76	44.78	16.02	39.99	V
	40521+40719	2593.1	-28.43	44.09	15.66	36.80	
	41292+41490	2670.1	-28.91	44.72	15.81	38.11	
Channel Bandwidth: 20+20 MHz / 256QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39750+39948	2515.9	-24.70	44.16	19.46	88.31	H
	40521+40719	2593.1	-25.83	44.20	18.37	68.66	
	41292+41490	2670.1	-25.72	44.81	19.09	81.04	
	39750+39948	2515.9	-29.56	44.78	15.22	33.27	V
	40521+40719	2593.1	-29.43	44.09	14.66	29.23	
	41292+41490	2670.1	-30.01	44.72	14.71	29.58	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 41 (CA 41C)							
Channel Bandwidth: 20+15 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39750+39921	2514.6	-22.34	44.16	21.82	152.05	H
	40546+40717	2594.2	-22.49	44.20	21.71	148.15	
	41341+41512	2673.7	-22.52	44.81	22.29	169.32	
	39750+39921	2514.6	-26.66	44.78	18.12	64.86	V
	40546+40717	2594.2	-26.69	44.09	17.40	54.93	
	41341+41512	2673.7	-26.91	44.72	17.81	60.39	
Channel Bandwidth: 20+15 MHz / 16QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39750+39921	2514.6	-23.06	44.16	21.10	128.82	H
	40546+40717	2594.2	-23.77	44.20	20.43	110.33	
	41341+41512	2673.7	-23.76	44.81	21.05	127.26	
	39750+39921	2514.6	-27.72	44.78	17.06	50.82	V
	40546+40717	2594.2	-27.77	44.09	16.32	42.84	
	41341+41512	2673.7	-28.05	44.72	16.67	46.45	
Channel Bandwidth: 20+15 MHz / 64QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39750+39921	2514.6	-24.08	44.16	20.08	101.86	H
	40546+40717	2594.2	-24.97	44.20	19.23	83.70	
	41341+41512	2673.7	-24.80	44.81	20.01	100.16	
	39750+39921	2514.6	-28.98	44.78	15.80	38.02	V
	40546+40717	2594.2	-28.61	44.09	15.48	35.30	
	41341+41512	2673.7	-29.13	44.72	15.59	36.22	
Channel Bandwidth: 20+15 MHz / 256QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39750+39921	2514.6	-24.90	44.16	19.26	84.33	H
	40546+40717	2594.2	-26.01	44.20	18.19	65.87	
	41341+41512	2673.7	-25.96	44.81	18.85	76.68	
	39750+39921	2514.6	-29.72	44.78	15.06	32.06	V
	40546+40717	2594.2	-29.59	44.09	14.50	28.17	
	41341+41512	2673.7	-30.21	44.72	14.51	28.25	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 41 (CA 41C)							
Channel Bandwidth: 15+10 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39725+39845	2509.5	-22.58	44.16	21.58	143.88	H
	40571+40691	2594.1	-22.71	44.20	21.49	140.83	
	41417+41537	2678.7	-22.74	44.81	22.07	160.95	
	39725+39845	2509.5	-26.84	44.78	17.94	62.23	V
	40571+40691	2594.1	-26.85	44.09	17.24	52.94	
	41417+41537	2678.7	-27.11	44.72	17.61	57.68	
Channel Bandwidth: 15+10 MHz / 16QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39725+39845	2509.5	-23.22	44.16	20.94	124.17	H
	40571+40691	2594.1	-23.95	44.20	20.25	105.85	
	41417+41537	2678.7	-23.94	44.81	20.87	122.10	
	39725+39845	2509.5	-27.92	44.78	16.86	48.53	V
	40571+40691	2594.1	-28.01	44.09	16.08	40.53	
	41417+41537	2678.7	-28.25	44.72	16.47	44.36	
Channel Bandwidth: 15+10 MHz / 64QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39725+39845	2509.5	-24.24	44.16	19.92	98.17	H
	40571+40691	2594.1	-25.21	44.20	18.99	79.20	
	41417+41537	2678.7	-24.96	44.81	19.85	96.54	
	39725+39845	2509.5	-29.16	44.78	15.62	36.48	V
	40571+40691	2594.1	-28.81	44.09	15.28	33.71	
	41417+41537	2678.7	-29.31	44.72	15.41	34.75	
Channel Bandwidth: 15+10 MHz / 256QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	39725+39845	2509.5	-25.12	44.16	19.04	80.17	H
	40571+40691	2594.1	-26.17	44.20	18.03	63.49	
	41417+41537	2678.7	-26.18	44.81	18.63	72.90	
	39725+39845	2509.5	-29.90	44.78	14.88	30.76	V
	40571+40691	2594.1	-29.81	44.09	14.28	26.78	
	41417+41537	2678.7	-30.43	44.72	14.29	26.85	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 66 (CA 66C)							
Channel Bandwidth: 20+20 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	132072+132270	1729.9	-14.30	36.45	22.15	164.06	H
	132323+132521	1755.0	-14.29	36.80	22.51	178.20	
	132374+132572	1760.1	-14.53	36.94	22.41	174.30	
	132072+132270	1729.9	-19.19	37.28	18.09	64.37	V
	132323+132521	1755.0	-19.42	37.63	18.21	66.22	
	132374+132572	1760.1	-19.33	37.64	18.31	67.76	
Channel Bandwidth: 20+20 MHz / 16QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	132072+132270	1729.9	-15.50	36.45	20.95	124.45	H
	132323+132521	1755.0	-15.29	36.80	21.51	141.55	
	132374+132572	1760.1	-15.73	36.94	21.21	132.22	
	132072+132270	1729.9	-20.39	37.28	16.89	48.83	V
	132323+132521	1755.0	-20.42	37.63	17.21	52.60	
	132374+132572	1760.1	-20.33	37.64	17.31	53.83	
Channel Bandwidth: 20+20 MHz / 64QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	132072+132270	1729.9	-16.50	36.45	19.95	98.86	H
	132323+132521	1755.0	-16.29	36.80	20.51	112.43	
	132374+132572	1760.1	-16.93	36.94	20.01	100.30	
	132072+132270	1729.9	-21.29	37.28	15.99	39.69	V
	132323+132521	1755.0	-21.62	37.63	16.01	39.90	
	132374+132572	1760.1	-21.23	37.64	16.41	43.75	
Channel Bandwidth: 20+20 MHz / 256QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	132072+132270	1729.9	-17.40	36.45	19.05	80.35	H
	132323+132521	1755.0	-17.39	36.80	19.41	87.28	
	132374+132572	1760.1	-17.93	36.94	19.01	79.67	
	132072+132270	1729.9	-22.29	37.28	14.99	31.53	V
	132323+132521	1755.0	-22.82	37.63	14.81	30.27	
	132374+132572	1760.1	-22.33	37.64	15.31	33.96	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 66B (CA 66B)							
Channel Bandwidth: 10+10 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	132022+132121	1720.0	-14.40	36.45	22.05	160.32	H
	132373+132472	1755.1	-14.53	36.80	22.27	168.62	
	132523+132622	1770.1	-14.67	36.94	22.27	168.77	
	132022+132121	1720.0	-19.31	37.28	17.97	62.62	V
	132373+132472	1755.1	-19.66	37.63	17.97	62.66	
	132523+132622	1770.1	-19.45	37.64	18.19	65.92	
Channel Bandwidth: 10+10 MHz / 16QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	132022+132121	1720.0	-15.30	36.45	21.15	130.32	H
	132373+132472	1755.1	-15.63	36.80	21.17	130.89	
	132523+132622	1770.1	-15.87	36.94	21.07	128.03	
	132022+132121	1720.0	-20.21	37.28	17.07	50.90	V
	132373+132472	1755.1	-20.86	37.63	16.77	47.53	
	132523+132622	1770.1	-20.45	37.64	17.19	52.36	
Channel Bandwidth: 10+10 MHz / 64QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	132022+132121	1720.0	-16.30	36.45	20.15	103.51	H
	132373+132472	1755.1	-16.83	36.80	19.97	99.29	
	132523+132622	1770.1	-16.77	36.94	20.17	104.06	
	132022+132121	1720.0	-21.31	37.28	15.97	39.51	V
	132373+132472	1755.1	-21.96	37.63	15.67	36.90	
	132523+132622	1770.1	-21.65	37.64	15.99	39.72	
Channel Bandwidth: 10+10 MHz / 256QAM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (mW)	Polarization (H/V)
X	132022+132121	1720.0	-17.40	36.45	19.05	80.35	H
	132373+132472	1755.1	-18.03	36.80	18.77	75.32	
	132523+132622	1770.1	-17.87	36.94	19.07	80.78	
	132022+132121	1720.0	-22.51	37.28	14.77	29.97	V
	132373+132472	1755.1	-23.16	37.63	14.47	27.99	
	132523+132622	1770.1	-22.45	37.64	15.19	33.04	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

For LTE Band 66

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

For LTE Band 7, 38, 41

In the FCC 27.53(m) (4)(6), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least $55 + 10 \log (P)$ dB. The emission limit equal to -25dBm .

4.2.2 Test Procedure

- a. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels (low, In the semi-anechoic chamber, EUT placed on the 0.8m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. $\text{EIRP} = \text{Output power level} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$. Correction Factor (includes EIRP and ERP unit conversion factor) = Antenna gain of substitution horn. - Tx cable loss. Measurement method refers to ANSI C63.26 section 5.2.7 & 5.5.
- c. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $\text{E.R.P power} = \text{E.I.R.P power} - 2.15\text{dBi}$.

Note:

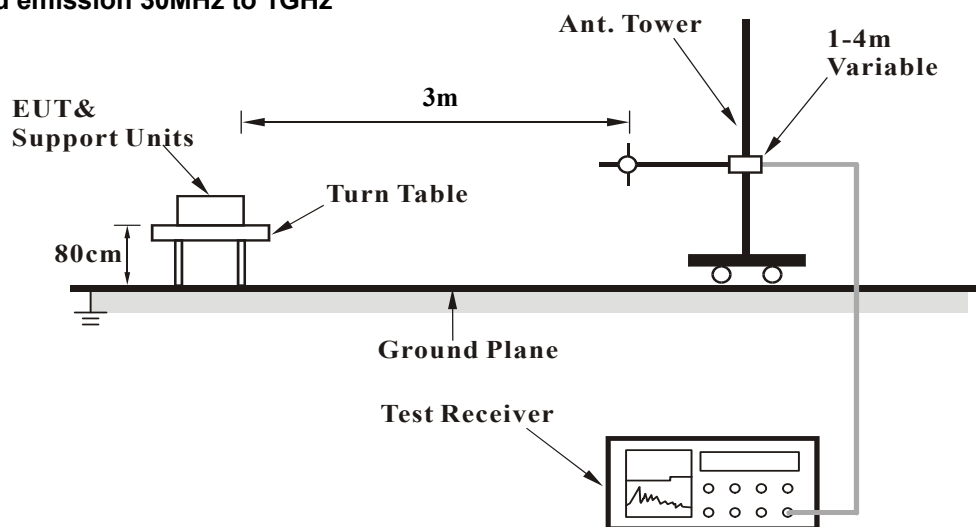
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

4.2.3 Deviation from Test Standard

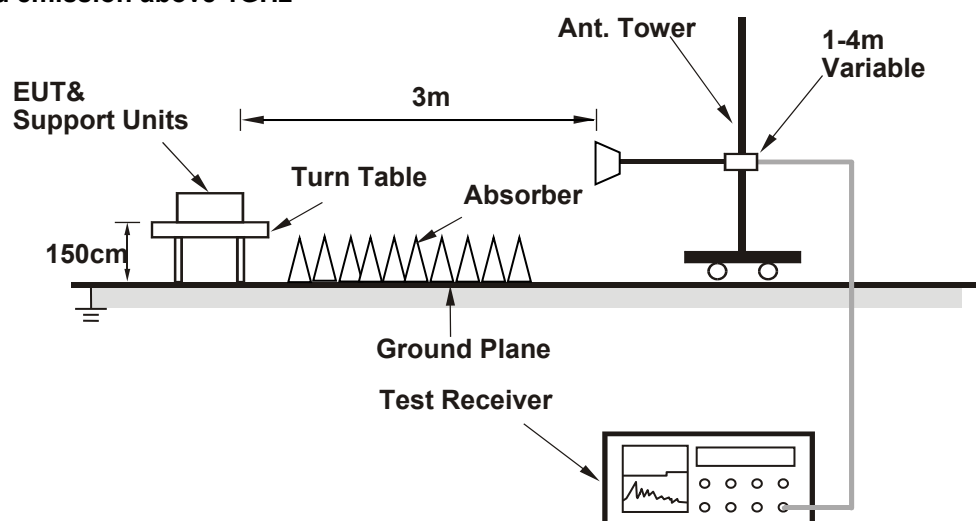
No deviation.

4.2.4 Test Setup

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



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

4.2.5 Test Results

Below 1GHz

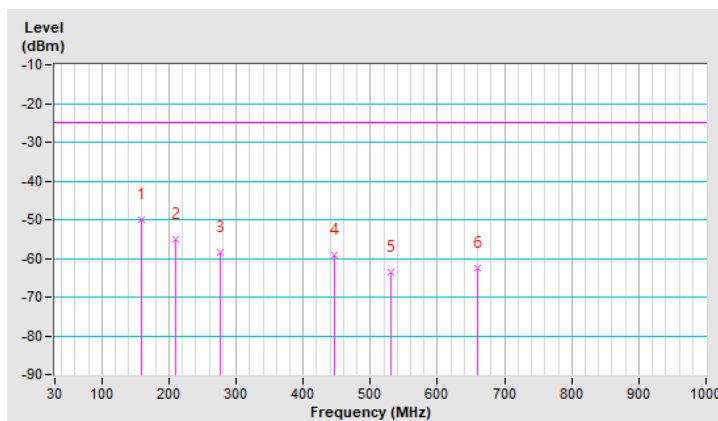
LTE Band 7 (CA 7C)

Mode	TX channel 20850 (2510.0MHz)+ TX channel 21048 (2529.8MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Hans Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	159.98	-50.10	-25.00	-25.10	1.00 H	36	53.80	-103.90
2	209.45	-55.10	-25.00	-30.10	1.50 H	36	51.60	-106.70
3	277.35	-58.40	-25.00	-33.40	1.25 H	253	44.40	-102.80
4	446.13	-59.00	-25.00	-34.00	1.00 H	267	39.90	-98.90
5	530.52	-63.50	-25.00	-38.50	1.50 H	235	33.70	-97.20
6	659.53	-62.60	-25.00	-37.60	1.50 H	210	32.40	-95.00

Remarks:

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

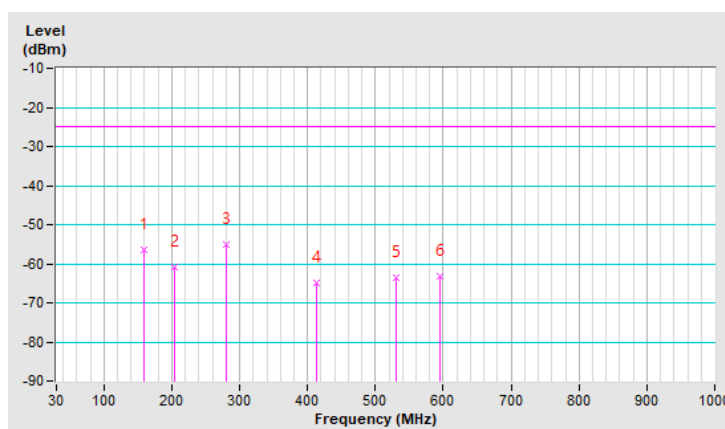


Mode	TX channel 20850 (2510.0MHz)+ TX channel 21048 (2529.8MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Hans Wu		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	159.01	-56.60	-25.00	-31.60	1.25 V	162	47.40	-104.00
2	204.60	-60.90	-25.00	-35.90	1.25 V	195	45.90	-106.80
3	281.23	-55.10	-25.00	-30.10	1.50 V	138	47.60	-102.70
4	414.12	-65.00	-25.00	-40.00	2.00 V	12	35.10	-100.10
5	531.49	-63.60	-25.00	-38.60	1.00 V	208	33.60	-97.20
6	595.51	-63.20	-25.00	-38.20	1.50 V	154	32.60	-95.80

Remarks:

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



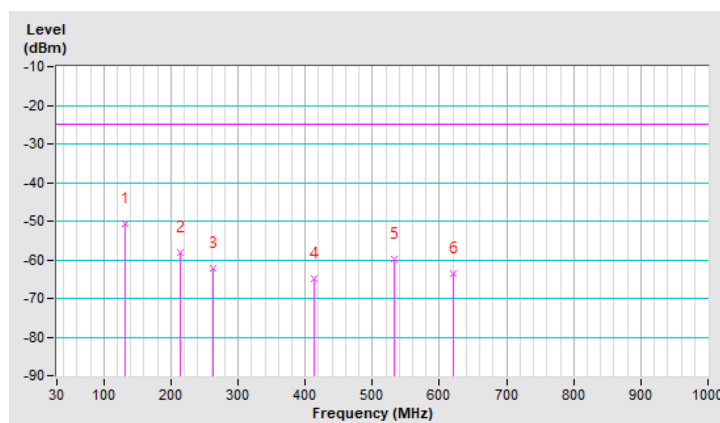
LTE Band 38 (CA 38C)

Mode	TX channel 37952 (2590.2MHz)+ TX channel 38150 (2610.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	131.85	-50.60	-25.00	-25.60	1.50 H	179	54.90	-105.50
2	213.33	-58.10	-25.00	-33.10	1.25 H	59	48.40	-106.50
3	262.80	-62.10	-25.00	-37.10	1.25 H	127	41.60	-103.70
4	413.15	-64.90	-25.00	-39.90	1.50 H	169	35.20	-100.10
5	532.46	-59.90	-25.00	-34.90	1.00 H	183	37.30	-97.20
6	619.76	-63.70	-25.00	-38.70	1.00 H	174	31.70	-95.40

Remarks:

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

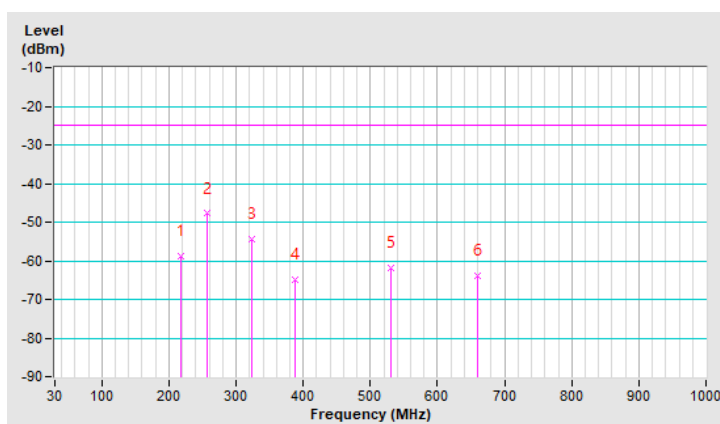


Mode	TX channel 37952 (2590.2MHz)+ TX channel 38150 (2610.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	217.21	-58.70	-25.00	-33.70	1.00 V	304	47.70	-106.40
2	256.98	-47.80	-25.00	-22.80	1.00 V	96	56.30	-104.10
3	322.94	-54.50	-25.00	-29.50	1.50 V	129	47.10	-101.60
4	386.96	-64.90	-25.00	-39.90	1.50 V	5	35.70	-100.60
5	530.52	-62.00	-25.00	-37.00	2.00 V	173	35.20	-97.20
6	660.50	-63.80	-25.00	-38.80	1.50 V	186	31.20	-95.00

Remarks:

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



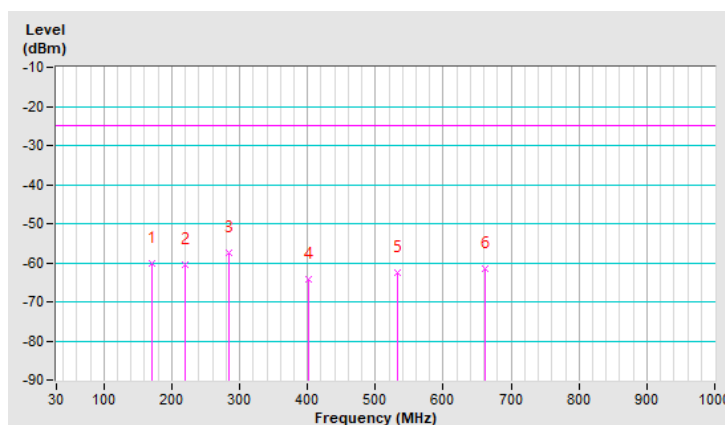
LTE Band 41 (CA 41C)

Mode	TX channel 39750 (2506.0MHz)+ TX channel 39948 (2525.8MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	171.62	-60.00	-25.00	-35.00	1.25 H	195	44.50	-104.50
2	220.12	-60.60	-25.00	-35.60	1.50 H	5	45.80	-106.40
3	284.14	-57.50	-25.00	-32.50	1.25 H	62	45.10	-102.60
4	402.48	-64.40	-25.00	-39.40	1.25 H	316	35.80	-100.20
5	532.46	-62.70	-25.00	-37.70	1.50 H	167	34.50	-97.20
6	662.44	-61.40	-25.00	-36.40	1.00 H	185	33.60	-95.00

Remarks:

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

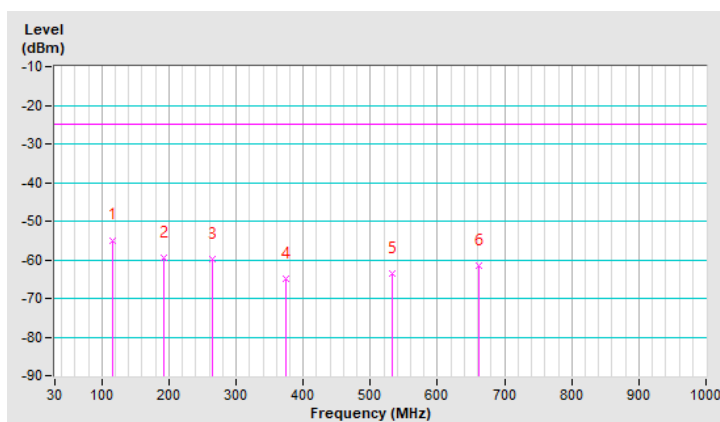


Mode	TX channel 41292 (2660.2MHz)+ TX channel 41490 (2680.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	116.33	-54.90	-25.00	-29.90	1.50 V	29	52.10	-107.00
2	191.99	-59.60	-25.00	-34.60	1.25 V	123	47.10	-106.70
3	264.74	-59.80	-25.00	-34.80	1.50 V	123	43.80	-103.60
4	374.35	-64.90	-25.00	-39.90	1.25 V	56	36.00	-100.90
5	533.43	-63.40	-25.00	-38.40	1.00 V	205	33.80	-97.20
6	662.44	-61.60	-25.00	-36.60	1.50 V	172	33.40	-95.00

Remarks:

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



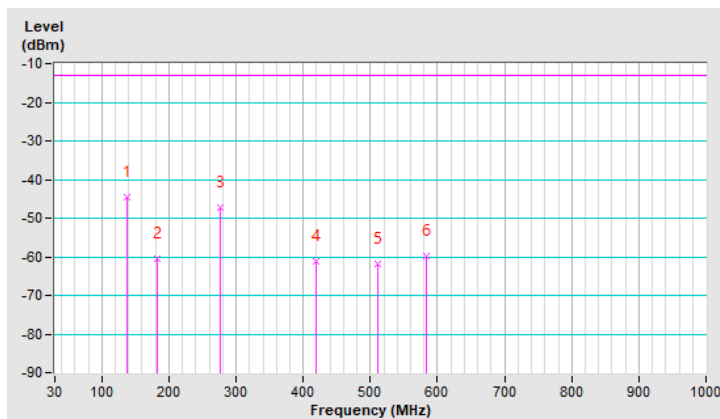
LTE Band 66 (CA 66C)

Mode	TX channel 132374 (1750.2MHz)+ TX channel 132572 (1770.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	136.70	-44.60	-13.00	-31.60	1.50 H	138	60.40	-105.00
2	183.26	-60.60	-13.00	-47.60	1.00 H	91	45.30	-105.90
3	276.38	-47.40	-13.00	-34.40	1.25 H	138	55.50	-102.90
4	419.94	-61.20	-13.00	-48.20	1.50 H	138	38.50	-99.70
5	511.12	-62.00	-13.00	-49.00	1.00 H	138	35.50	-97.50
6	583.87	-59.90	-13.00	-46.90	1.50 H	138	36.20	-96.10

Remarks:

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

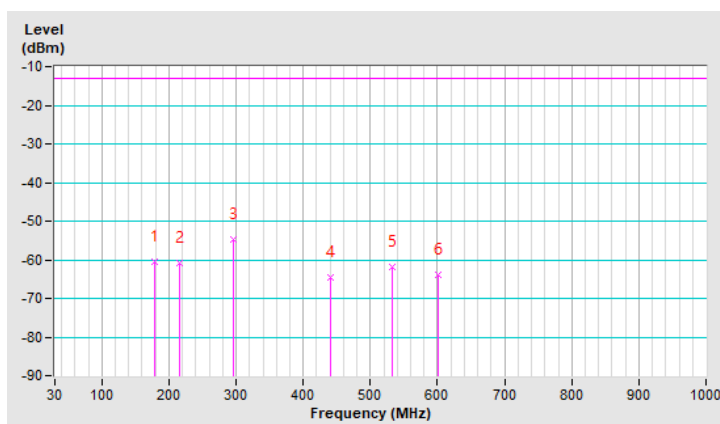


Mode	TX channel 132374 (1750.2MHz)+ TX channel 132572 (1770.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	178.41	-60.50	-13.00	-47.50	1.25 V	253	44.70	-105.20
2	215.27	-60.70	-13.00	-47.70	1.50 V	7	45.80	-106.50
3	295.78	-54.80	-13.00	-41.80	1.25 V	144	47.60	-102.40
4	440.31	-64.70	-13.00	-51.70	1.00 V	234	34.30	-99.00
5	532.46	-62.00	-13.00	-49.00	1.00 V	159	35.20	-97.20
6	601.33	-64.00	-13.00	-51.00	1.50 V	171	31.70	-95.70

Remarks:

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



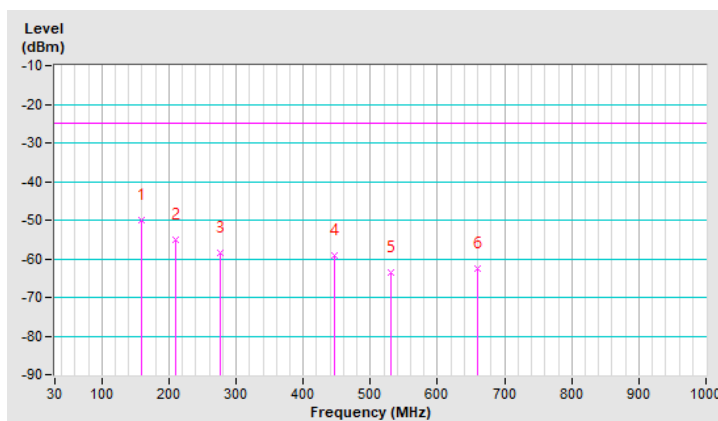
LTE Band 66 (CA 66B)

Mode	TX channel 132373 (1750.1MHz)+ TX channel 132472 (1760.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	159.98	-50.10	-25.00	-25.10	1.00 H	36	53.80	-103.90
2	209.45	-55.10	-25.00	-30.10	1.50 H	36	51.60	-106.70
3	277.35	-58.40	-25.00	-33.40	1.25 H	253	44.40	-102.80
4	446.13	-59.00	-25.00	-34.00	1.00 H	267	39.90	-98.90
5	530.52	-63.50	-25.00	-38.50	1.50 H	235	33.70	-97.20
6	659.53	-62.60	-25.00	-37.60	1.50 H	210	32.40	-95.00

Remarks:

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

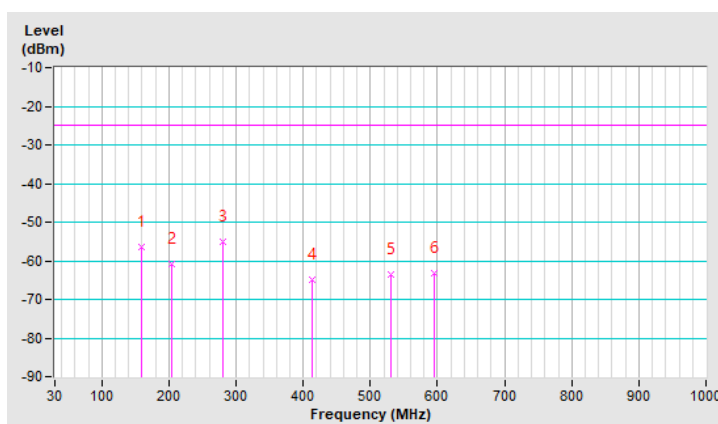


Mode	TX channel 132373 (1750.1MHz)+ TX channel 132472 (1760.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	159.01	-56.60	-25.00	-31.60	1.25 V	162	47.40	-104.00
2	204.60	-60.90	-25.00	-35.90	1.25 V	195	45.90	-106.80
3	281.23	-55.10	-25.00	-30.10	1.50 V	138	47.60	-102.70
4	414.12	-65.00	-25.00	-40.00	2.00 V	12	35.10	-100.10
5	531.49	-63.60	-25.00	-38.60	1.00 V	208	33.60	-97.20
6	595.51	-63.20	-25.00	-38.20	1.50 V	154	32.60	-95.80

Remarks:

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



Above 1GHz
LTE Band 7 (CA 7C)

Mode	TX channel 20850 (2510.0MHz)+ TX channel 21048 (2529.8MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Hans Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5020.00	-47.23	-25.00	-22.23	2.18 H	99	40.71	-87.94
2	5059.60	-46.61	-25.00	-21.61	1.75 H	200	41.02	-87.63
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5020.00	-47.60	-25.00	-22.60	1.62 V	184	40.34	-87.94
2	5059.60	-46.30	-25.00	-21.30	1.61 V	180	41.33	-87.63

Remarks:

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

Mode	TX channel 21001 (2525.1MHz)+ TX channel 21199 (2544.9MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Hans Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5050.20	-47.64	-25.00	-22.64	1.83 H	179	39.94	-87.58
2	5089.80	-47.22	-25.00	-22.22	1.52 H	30	40.56	-87.78
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5050.20	-47.47	-25.00	-22.47	2.15 V	356	40.11	-87.58
2	5089.80	-46.43	-25.00	-21.43	1.94 V	2	41.35	-87.78

Remarks:

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

Mode	TX channel 21152 (2540.2MHz)+ TX channel 21350 (2560.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Hans Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5080.40	-47.46	-25.00	-22.46	1.64 H	110	40.27	-87.73
2	5120.00	-47.41	-25.00	-22.41	1.61 H	99	40.49	-87.90
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5080.40	-47.15	-25.00	-22.15	2.23 V	0	40.58	-87.73
2	5120.00	-48.22	-25.00	-23.22	2.06 V	344	39.68	-87.90

Remarks:

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

LTE Band 38 (CA 38C)

Mode	TX channel 37850 (2580.0MHz)+ TX channel 38048 (2599.8MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5160.00	-44.75	-25.00	-19.75	3.60 H	72	43.23	-87.98
2	5199.60	-44.81	-25.00	-19.81	3.58 H	77	43.15	-87.96
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5160.00	-45.76	-25.00	-20.76	1.89 V	14	42.22	-87.98
2	5199.60	-45.99	-25.00	-20.99	1.94 V	17	41.97	-87.96

Remarks:

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

Mode	TX channel 37901 (2585.1MHz)+ TX channel 38099 (2604.9MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5170.20	-45.63	-25.00	-20.63	3.66 H	70	42.35	-87.98
2	5209.80	-46.02	-25.00	-21.02	3.55 H	72	41.95	-87.97
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5170.20	-45.73	-25.00	-20.73	1.92 V	15	42.25	-87.98
2	5209.80	-45.94	-25.00	-20.94	1.84 V	14	42.03	-87.97

Remarks:

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

Mode	TX channel 37952 (2590.2MHz)+ TX channel 38150 (2610.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5180.40	-45.41	-25.00	-20.41	3.65 H	76	42.56	-87.97
2	5220.00	-46.00	-25.00	-21.00	3.57 H	74	41.99	-87.99
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5180.40	-44.61	-25.00	-19.61	1.88 V	15	43.36	-87.97
2	5220.00	-45.02	-25.00	-20.02	1.99 V	20	42.97	-87.99

Remarks:

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

LTE Band 41 (CA 41C)

Mode	TX channel 39750 (2506.0MHz)+ TX channel 39948 (2525.8MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5012.00	-46.16	-25.00	-21.16	2.40 H	19	41.87	-88.03
2	5051.60	-45.36	-25.00	-20.36	2.44 H	28	42.23	-87.59
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5012.00	-46.47	-25.00	-21.47	1.38 V	232	41.56	-88.03
2	5051.60	-45.76	-25.00	-20.76	1.33 V	240	41.83	-87.59

Remarks:

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

Mode	TX channel 40521 (2583.1MHz)+ TX channel 40719 (2602.9MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5166.20	-46.10	-25.00	-21.10	2.44 H	23	41.88	-87.98
2	5205.80	-45.82	-25.00	-20.82	2.45 H	27	42.15	-87.97
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5166.20	-46.43	-25.00	-21.43	1.36 V	237	41.55	-87.98
2	5205.80	-46.01	-25.00	-21.01	1.35 V	242	41.96	-87.97

Remarks:

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

Mode	TX channel 41292 (2660.2MHz)+ TX channel 41490 (2680.0MHz)	Frequency Range	1GHz ~ 27GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5205.80	-45.99	-25.00	-20.99	2.45 H	19	41.98	-87.97
2	5360.00	-46.26	-25.00	-21.26	2.41 H	20	42.03	-88.29
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5205.80	-46.01	-25.00	-21.01	1.35 V	242	41.96	-87.97
2	5360.00	-46.31	-25.00	-21.31	1.42 V	230	41.98	-88.29

Remarks:

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

LTE Band 66 (CA 66C)

Mode	TX channel 132072 (1720.0MHz)+ TX channel 132270 (1739.8MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-47.73	-13.00	-34.73	2.32 H	154	45.38	-93.11
2	3479.60	-46.86	-13.00	-33.86	2.42 H	158	45.88	-92.74
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-48.75	-13.00	-35.75	1.55 V	196	44.36	-93.11
2	3479.60	-47.11	-13.00	-34.11	1.68 V	197	45.63	-92.74

Remarks:

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

Mode	TX channel 132323 (1745.1MHz)+ TX channel 132521 (1764.9MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.20	-46.97	-13.00	-33.97	2.35 H	157	45.66	-92.63
2	3529.80	-46.76	-13.00	-33.76	2.38 H	162	45.53	-92.29
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.20	-47.66	-13.00	-34.66	1.59 V	195	44.97	-92.63
2	3529.80	-46.97	-13.00	-33.97	1.62 V	197	45.32	-92.29

Remarks:

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

Mode	TX channel 132374 (1750.2MHz)+ TX channel 132572 (1770.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3500.40	-46.66	-13.00	-33.66	2.39 H	152	45.86	-92.52
2	3540.00	-46.44	-13.00	-33.44	2.40 H	159	45.76	-92.20
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3500.40	-46.84	-13.00	-33.84	1.57 V	195	45.68	-92.52
2	3540.00	-46.51	-13.00	-33.51	1.60 V	186	45.69	-92.20

Remarks:

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

LTE Band 66 (CA 66B)

Mode	TX channel 132022 (1715.0MHz)+ TX channel 132121 (1724.9MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3430.00	-49.65	-13.00	-36.65	2.27 H	255	43.48	-93.13
2	3449.80	-49.68	-13.00	-36.68	2.25 H	257	43.38	-93.06
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3430.00	-50.36	-13.00	-37.36	1.89 V	99	42.77	-93.13
2	3449.80	-50.33	-13.00	-37.33	1.96 V	97	42.73	-93.06

Remarks:

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

Mode	TX channel 132373 (1750.1MHz)+ TX channel 132472 (1760.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3500.20	-48.39	-13.00	-35.39	2.22 H	255	44.13	-92.52
2	3520.00	-48.04	-13.00	-35.04	2.28 H	258	44.32	-92.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3500.20	-48.94	-13.00	-35.94	1.89 V	100	43.58	-92.52
2	3520.00	-48.78	-13.00	-35.78	1.91 V	102	43.58	-92.36

Remarks:

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

Mode	TX channel 132523 (1765.1MHz)+ TX channel 132622 (1775.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3530.20	-49.10	-13.00	-36.10	2.31 H	257	43.18	-92.28
2	3550.00	-48.78	-13.00	-35.78	2.20 H	256	43.35	-92.13
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3530.20	-48.98	-13.00	-35.98	1.91 V	100	43.30	-92.28
2	3550.00	-49.18	-13.00	-36.18	1.90 V	98	42.95	-92.13

Remarks:

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

5 Pictures of Test Arrangements

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

Appendix – Information of the Testing Laboratories

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

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

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