TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 96** **47 CFR FCC Part 2**
Report No.:	RFCDVB-WTW-P24010025-5
FCC ID:	QYLFN990S5
Product:	5G NR Module
Brand:	Getac
Model No.:	FN990A28
Received Date:	2024/1/20
Test Date:	2024/3/8 ~ 2024/5/16
Issued Date:	2024/5/31
Applicant:	Getac Technology Corporation.
Address:	5F., Building A, No. 209, Sec.1, Nangang Rd., Nangang Dist., Taipei City 11568, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Approved by: Jeremy Lin , **Date:** 2024/5/31

Jeremy Lin / Project Engineer

This test report consists of 37 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The test results in the report only apply to the tested sample. The test results in this report are traceable to the national or international standards.

Prepared by : Vera Huang / Specialist

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RFCDVB-WTW-P24010025-5	Original Release	2024/5/31

1 Certificate

Product:	5G NR Module
Brand:	Getac
Test Model:	FN990A28
Sample Status:	Engineering sample
Applicant:	Getac Technology Corporation.
Test Date:	2024/3/8 ~ 2024/5/16
Standard:	47 CFR FCC Part 96
	47 CFR FCC Part 2
Measurement procedure:	ANSI/TIA/EIA-603-E 2016
	ANSI C63.26-2015
	KDB 971168 D01 Power Meas License Digital Systems v03r01
	KDB 940660 D01 Part 96 CBRS Eqpt v03

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

2 Summary of Test Results

Standard / Clause	Test Item	Result	Remark
Part 2.1046 Part 96.41(b)	Maximum EIRP	Pass	Meet the requirement of limit.
Part 2.1047	Modulation Characteristics	N/A	Refer to Note
Part 2.1046 Part 96.41(b)	Maximum Power Spectral Density	N/A	Refer to Note
Part 96.41(g)	Peak to Average Ratio	N/A	Refer to Note
Part 2.1049	Bandwidth	N/A	Refer to Note
Part 2.1051 Part 96.41(e)	Conducted Spurious Emissions	N/A	Refer to Note
Part 2.1053 Part 96.41(e)	Radiated Spurious Emissions below 1GHz	Pass	Minimum passing margin is -13.13 dB at 378.64 MHz
Part 2.1053 Part 96.41(e)	Radiated Spurious Emissions above 1GHz	Pass	Minimum passing margin is -1.90 dB at 7249.98 MHz
Part 2.1055	Frequency Stability	N/A	Refer to Note

Note:

1. Only test item of Equivalent Isotropically Radiated Power and Radiated Spurious Emissions were performed for this report. Other testing data please refer to SPORTON lab report no.: 270608-1 for module (Brand: Telit, Model: FN990A28).
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:

Parameter	Specification	Uncertainty (±)
Radiated Spurious Emissions below 1GHz	9 kHz ~ 30 MHz	3.59 dB
	30 MHz ~ 1 GHz	3.64 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 18 GHz	2.29 dB
	18 GHz ~ 40 GHz	2.29 dB

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

2.2 Supplementary Information

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

3 General Information

3.1 General Description of EUT

Product	5G NR Module
Brand	Getac
Test Model	FN990A28
Status of EUT	Engineering sample
Power Supply Rating	Refer to note

Note:

1. This report is prepared for FCC class II permissive change application. The EUT is authorized for use in specific End-product. Please refer to below for more details.

Product	Brand	Model	Difference
Notebook	Getac	S510	marketing purpose
		S510Y (Y= 10 characters, Y can be 0 to 9, A to Z, a to z, “/”, “\”, “-”, “_” or blank for marketing purpose)	

2. The End-product uses following accessories.

Battery		
Brand	Model	Specification
Getac	BP3S2P3450P-04	Power Rating : Rating: 10.8Vdc , 6600mAh, 72Wh Typical Capacity: 6900mAh, 75Wh
AC Adapter 1		
Brand	Model	Specification
FSP	FSP065-RBBN3	AC Input : 100-240 Vac； 50-60 Hz； 1.5 A DC Output : 19.0Vdc； 3.42A, 65.0W DC Output Cable : 1.45M / 1core AC Power Cord : 1.75M
AC Adapter 2		
Brand	Model	Specification
FSP	FSP090-ABBN3	AC Input : 100-240 Vac； 50-60 Hz； 1.2 A DC Output : 19.0Vdc； 4.74A, 90.0W DC Output Cable : 1.2M / 1 core AC Power Cord : 1.75M
Touch Pen		
Brand	Model	
Getac	340GA8900001	

* After pretesting, Adapter 2 was the worst case and chosen for final test.

3. The EUT supports the following configuration.

5GNR	FCC 5G FR1			ENDC
	Band	SCS	Bandwidth (MHz)	LTE Band
	n48	30kHz	20/40	B2, B5, B13, B66

* The EUT support SA mode and NSA mode, after verification, SA mode was the worst case and chosen for final test.

4. EUT Overview

Band / Bandwidth	TX Frequency Range (MHz)	Max. EIRP Power				
		BPSK	QPSK	16QAM	64QAM	256QAM
SISO						
n48 (Channel Bandwidth 20MHz)	3560.01-3690.00	163.305mW (22.13dBm)	165.959mW (22.20dBm)	132.130mW (21.21dBm)	93.111mW (19.69dBm)	58.345mW (17.66dBm)
n48 (Channel Bandwidth 40MHz)	3570.00-3679.98	167.880mW (22.25dBm)	169.434mW (22.29dBm)	133.045mW (21.24dBm)	95.499mW (19.80dBm)	58.076mW (17.64dBm)
MIMO						
n48 (Channel Bandwidth 20MHz)	3560.01-3690.00	-	106.905mW (20.29dBm)	92.470mW (19.66dBm)	67.920mW (18.32dBm)	34.594mW (15.39dBm)
n48 (Channel Bandwidth 40MHz)	3570.00-3679.98	-	109.648mW (20.40dBm)	94.406mW (19.75dBm)	69.663mW (18.43dBm)	35.563mW (15.51dBm)

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

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna Type	Antenna Connector	Band	Peak Gain (dBi)			
			Main (Ant. 0)	Aux. (Ant. 2)	MIMO1 (Ant. 1)	MIMO2 (Ant. 3)
PIFA	MHF-4	5G NR n48	-	-	2.82	0.85

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

* For MIMO mode, only MIMO1 and MIMO2 antennas are used to transmit. For SISO mode, select maximum gain (MIMO1) for testing.

3.3 Test Mode Applicability and Tested Channel Detail

The EUT is designed to be positioned on the NB Mode only.

SA Mode (SISO)

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	637334 (3560.01 MHz) 641666 (3624.99 MHz) 646000 (3690.00 MHz)	20 MHz	BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	638000 (3570.00 MHz) 641666 (3624.99 MHz) 645332 (3679.98 MHz)	40 MHz	BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
RE Below 1GHz	638000 (3570.00 MHz)	40 MHz	QPSK	1 RB
RE Above 1GHz	637334 (3560.01 MHz) 641666 (3624.99 MHz) 646000 (3690.00 MHz)	20 MHz	QPSK	1 RB
	638000 (3570.00 MHz) 641666 (3624.99 MHz) 645332 (3679.98 MHz)	40 MHz	QPSK	1 RB

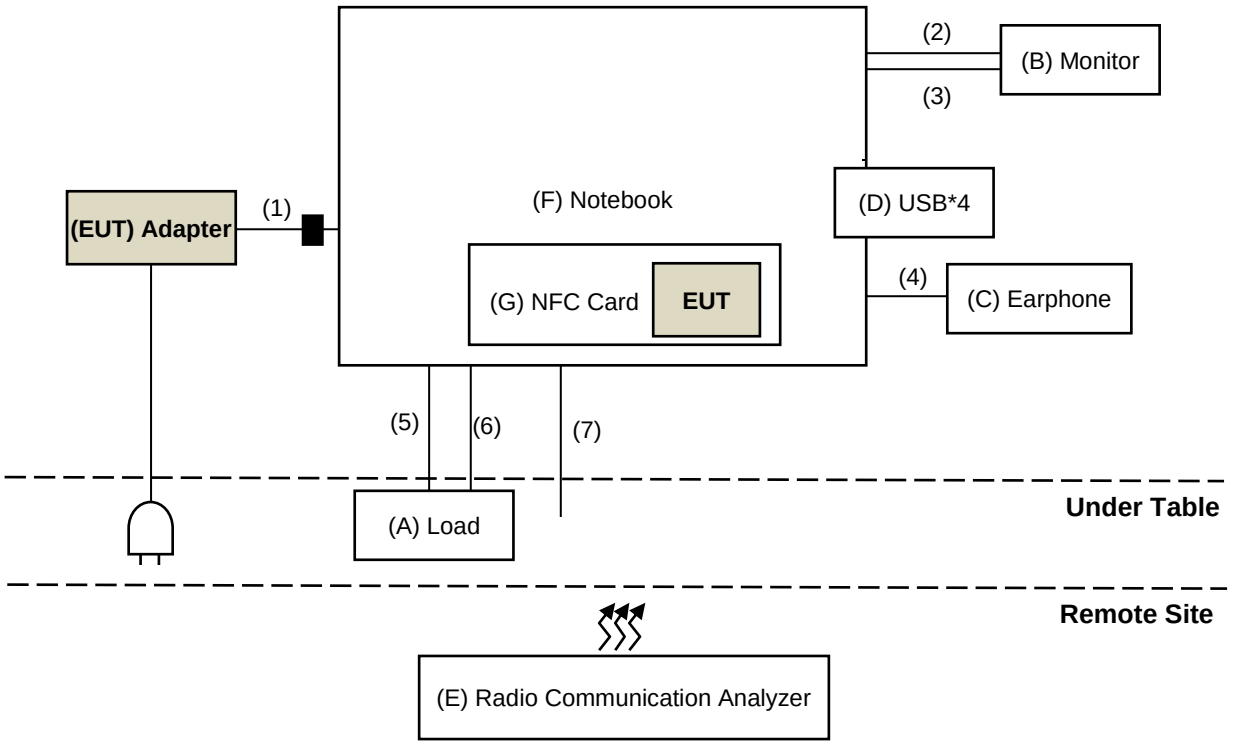
SA Mode (MIMO)

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	637334 (3560.01 MHz) 641666 (3624.99 MHz) 646000 (3690.00 MHz)	20 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	638000 (3570.00 MHz) 641666 (3624.99 MHz) 645332 (3679.98 MHz)	40 MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
RE Below 1GHz	638000 (3570.00 MHz)	40 MHz	QPSK	1 RB
RE Above 1GHz	637334 (3560.01 MHz) 641666 (3624.99 MHz) 646000 (3690.00 MHz)	20 MHz	QPSK	1 RB
	638000 (3570.00 MHz) 641666 (3624.99 MHz) 645332 (3679.98 MHz)	40 MHz	QPSK	1 RB

3.4 Test Program Used and Operation Descriptions

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

3.5 Connection Diagram of EUT and Peripheral Devices



3.6 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Load	N/A	N/A	N/A	N/A	Provided by Lab
B	Monitor	ENVISON	TFT22W90PS1	ECRE4JA000764	N/A	Provided by Lab
C	Earphone	APPLE	MB77PFEB	N/A	N/A	Provided by Lab
D	USB*4	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
E	Radio Communication Analyzer	Anritsu	MT8821C	6201462755	N/A	Provided by Lab
F	Notebook	Getac	S510	N/A	N/A	Supplied by applicant
G	NFC Card	TYPE-B	N/A	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	ADAPTER	1	1.2	Y	1	Accessory of EUT
2	HDMI	1	1.8	Y	0	Provided by Lab
3	D-SUB	1	1.8	Y	2	Provided by Lab
4	AUDIO	1	1.2	N	0	Provided by Lab
5	LAN	1	1.5	N	0	Provided by Lab
6	LAN	1	1.5	N	0	Provided by Lab
7	RS232	1	1.5	N	0	Provided by Lab

4 Test Instruments

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

4.1 Maximum EIRP

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
N9030B - PXA Signal Analyzer KEYSIGHT	N9030B	MY57140488	2024/3/6	2025/3/5
Radio Communication Analyzer Anritsu	MT8821C	6201462755	2024/3/13	2025/3/12
Software BV	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2024/5/16

4.2 Radiated Spurious Emissions below 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-155	2023/10/13	2024/10/12
EMI Test Receiver R&S	ESR3	102782	2023/12/7	2024/12/6
Loop Antenna Electro-Metrics	EM-6879	269	2023/9/23	2024/9/22
Loop Antenna TESEQ	HLA 6121	45745	2023/8/8	2024/8/7
Preamplifier Agilent	8447D	2944A10631	2023/5/7	2024/5/6
Preamplifier EMCI	EMC001340	980201	2023/9/27	2024/9/26
RF Coaxial Cable Woken	8D-FB	Cable-CH4-01	2023/7/8	2024/7/7
Signal & Spectrum Analyzer R&S	FSW43	101582	2023/4/13	2024/4/12
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2024/3/9 ~ 2024/3/28

4.3 Radiated Spurious Emissions above 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower inn-co GmbH	MA 4000	010303	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	5	N/A	N/A
EMI Test Receiver R&S	ESR3	102782	2023/12/7	2024/12/6
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-408	2023/11/12	2024/11/11
	BBHA 9170	9170-480	2023/11/12	2024/11/11
		BBHA9170241	2023/10/16	2024/10/15
		BBHA9170243	2023/11/12	2024/11/11
Preamplifier EMCI	EMC 184045	980116	2023/9/27	2024/9/26
Preamplifier Keysight	83017A	MY53270295	2023/5/7	2024/5/6
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	2023/7/8	2024/7/7
	EMC102-KM-KM-3000	150929	2023/7/8	2024/7/7
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03(250724)	2023/5/7	2024/5/6
	Sucoflex 104	MY 13380+295012/04	2023/5/7	2024/5/6
Signal & Spectrum Analyzer R&S	FSW43	101582	2023/4/13	2024/4/12
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Turn Table BV ADT	TT100	TT93021705	N/A	N/A
Turn Table Controller BV ADT	SC100	SC93021705	N/A	N/A

Notes:

1. The test was performed in HY - 966 chamber 3.
2. Tested Date: 2024/3/8 ~ 2024/3/28

5 Limits of Test Items

5.1 Maximum EIRP

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

5.2 Radiated Spurious Emissions below 1GHz

The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz.

5.3 Radiated Spurious Emissions above 1GHz

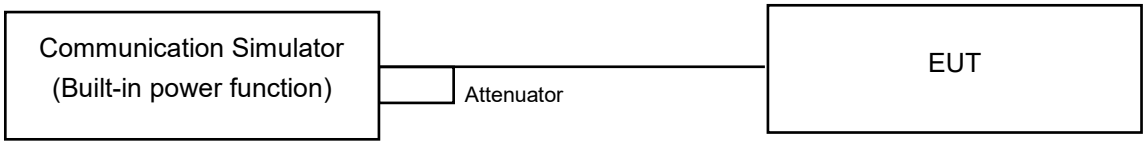
The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz.

6 Test Arrangements

6.1 Maximum EIRP

6.1.1 Test Setup

Conducted Power Measurement:



6.1.2 Test Procedure

Conducted Power Measurement:
The EUT is configured by emulator to set data modulation and maximum power using WWAN technology. The power measurement was performed on emulator and power value was measured from power function on emulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

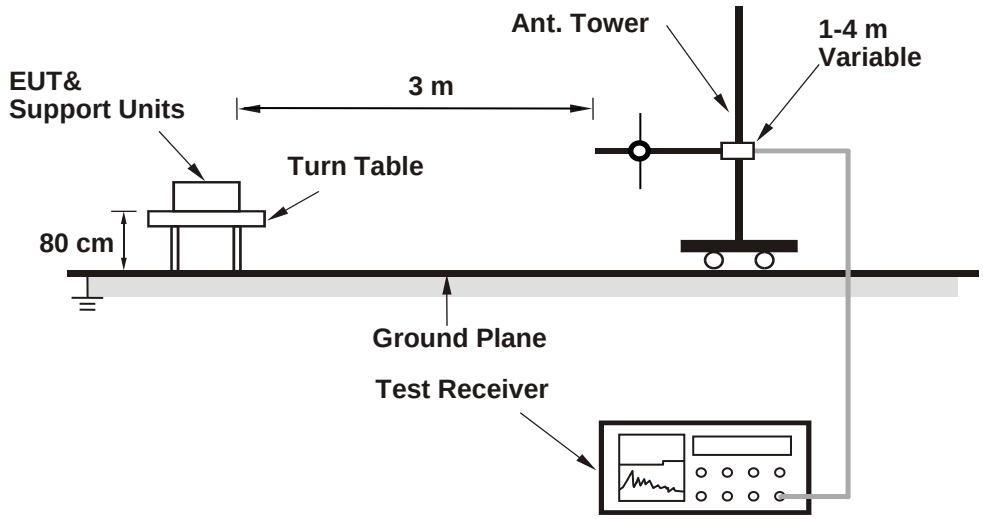
Maximum EIRP / ERP
The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$EIRP = P_{Meas} + G_T$
$ERP = P_{Meas} + G_T - 2.15$
where
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)
P_{Meas} measured transmitter output power or PSD, in dBm or dBW
G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

6.2 Radiated Spurious Emissions below 1GHz

6.2.1 Test Setup

For radiated emission 30 MHz to 1 GHz



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

6.2.2 Test Procedure

The EUT is configured by test software or key-in commands to set data modulation and maximum power using WWAN technology.

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

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

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

d. Following ANSI C63.26 section 5.5 and 5.2.7

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

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

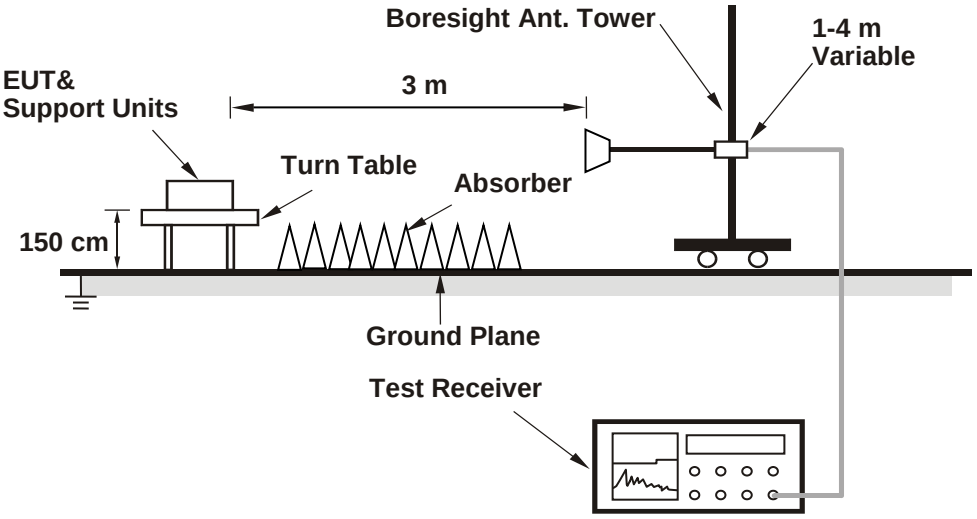
Note:

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

6.3 Radiated Spurious Emissions above 1GHz

6.3.1 Test Setup

For radiated emission above 1 GHz



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

6.3.2 Test Procedure

The EUT is configured by test software or key-in commands to set data modulation and maximum power using WWAN technology.

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

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

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

d. Following ANSI C63.26 section 5.5 and 5.2.7

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

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

Note:

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

7 Test Results of Test Item

7.1 Maximum EIRP

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	22°C, 65% RH	Tested By:	Willy Cheng

7.1.1 NR n48 SCS 30 kHz (SISO)

Conducted Output Power (dBm/10MHz)

NR Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		638000	641666	645332
		Frequence (MHz)		3570	3624.99	3679.98
40M	DFT-S PI/2 BPSK	1	1	19.43	19.41	19.01
40M	DFT-S QPSK	1	1	19.47	19.43	19.07
		1	53	19.45	19.41	19.30
		1	104	19.38	19.36	19.23
		50	0	18.47	18.37	18.19
		50	28	19.46	19.45	19.27
		50	56	18.43	18.35	18.16
		100	0	18.45	18.35	18.35
40M	DFT-S 16QAM	1	1	18.42	18.40	18.05
40M	DFT-S 64QAM	1	1	16.98	16.85	16.81
40M	DFT-S 256QAM	1	1	14.67	14.82	14.70
40M	CP QPSK	1	1	17.97	17.94	17.71

EIRP Power (dBm/10MHz)

Maximum Output Power			
Modulation	Cond. Power (dBm/10MHz)	EIRP (dBm/10MHz)	EIRP Limit (dBm/10MHz)
DFT-S PI/2 BPSK	19.43	22.25	23.0
DFT-S QPSK	19.47	22.29	23.0
DFT-S 16QAM	18.42	21.24	23.0
DFT-S 64QAM	16.98	19.80	23.0
DFT-S 256QAM	14.82	17.64	23.0
CP QPSK	17.97	20.79	23.0

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

Conducted Output Power (dBm/10MHz)

NR Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		637334	641666	646000
		Frequence (MHz)		3560.01	3624.99	3690
20M	DFT-S PI/2 BPSK	1	1	19.31	19.31	18.87
20M	DFT-S QPSK	1	1	19.33	19.30	18.95
		1	26	19.35	19.38	19.25
		1	49	19.32	19.33	19.14
		25	0	18.39	18.29	18.14
		25	13	19.30	19.30	19.20
		25	26	18.31	18.24	18.03
		50	0	18.26	18.34	17.94
20M	DFT-S 16QAM	1	1	18.38	18.39	17.98
20M	DFT-S 64QAM	1	1	16.87	16.83	16.69
20M	DFT-S 256QAM	1	1	14.84	14.82	14.66
20M	CP QPSK	1	1	17.92	17.73	17.63

EIRP Power (dBm/10MHz)

Maximum Output Power			
Modulation	Cond. Power (dBm/10MHz)	EIRP (dBm/10MHz)	EIRP Limit (dBm/10MHz)
DFT-S PI/2 BPSK	19.31	22.13	23.0
DFT-S QPSK	19.38	22.20	23.0
DFT-S 16QAM	18.39	21.21	23.0
DFT-S 64QAM	16.87	19.69	23.0
DFT-S 256QAM	14.84	17.66	23.0
CP QPSK	17.92	20.74	23.0

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

7.1.2 NR n48 SCS 30 kHz (MIMO)

Conducted Output Power (dBm/10MHz)

NR Band 48												
BW	MCS Index	RB Size	RB Offset	Low			Mid			High		
		Channel		638000			641666			645332		
		Frequence (MHz)		3570			3624.99			3679.98		
		TX Chain		TX1	TX2	Total	TX1	TX2	Total	TX1	TX2	Total
40M	CP QPSK	1	1	14.56	14.58	17.58	14.51	14.51	17.52	14.55	14.57	17.57
		1	53	14.53	14.42	17.49	14.45	14.32	17.40	14.43	14.42	17.44
		1	104	14.54	14.47	17.52	14.44	14.42	17.44	14.45	14.42	17.45
		50	0	12.95	12.82	15.90	12.88	12.82	15.86	12.92	12.79	15.87
		50	28	14.49	14.38	17.45	14.39	14.32	17.37	14.44	14.32	17.39
		50	56	12.95	12.81	15.89	12.88	12.78	15.84	12.92	12.78	15.86
		100	0	13.01	12.95	15.99	12.94	12.87	15.92	12.98	12.85	15.93
40M	CP 16QAM	1	1	13.81	14.02	16.93	13.81	14	16.92	13.78	13.93	16.87
40M	CP 64QAM	1	1	12.54	12.66	15.61	12.49	12.65	15.58	12.52	12.63	15.59
40M	CP 256QAM	1	1	9.67	9.68	12.69	9.63	9.68	12.67	9.63	9.65	12.65

EIRP Power (dBm/10MHz)

Maximum Output Power			
Modulation	Cond. Power (dBm/10MHz)	EIRP (dBm/10MHz)	EIRP Limit (dBm/10MHz)
CP QPSK	17.58	20.40	23.0
CP 16QAM	16.93	19.75	23.0
CP 64QAM	15.61	18.43	23.0
CP 256QAM	12.69	15.51	23.0

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

Conducted Output Power (dBm/10MHz)

NR Band 48												
BW	MCS Index	RB Size	RB Offset	Low			Mid			High		
		Channel		637334			641666			646000		
		Frequence (MHz)		3560.01			3624.99			3690		
		TX Chain		TX1	TX2	Total	TX1	TX2	Total	TX1	TX2	Total
20M	CP QPSK	1	1	14.39	14.52	17.47	14.41	14.44	17.44	14.36	14.51	17.45
		1	26	14.38	14.26	17.33	14.38	14.33	17.37	14.39	14.36	17.39
		1	49	14.48	14.35	17.43	14.46	14.38	17.43	14.47	14.37	17.43
		25	0	12.83	12.81	15.83	12.84	12.77	15.82	12.79	12.82	15.82
		25	13	14.39	14.27	17.34	14.32	14.24	17.29	14.42	14.25	17.35
		25	26	12.81	12.71	15.77	12.83	12.69	15.77	12.81	12.77	15.80
		50	0	12.93	12.76	15.86	12.95	12.76	15.87	13.00	12.84	15.93
20M	CP 16QAM	1	1	13.68	13.95	16.83	13.75	13.91	16.84	13.71	13.90	16.82
20M	CP 64QAM	1	1	12.40	12.51	15.47	12.42	12.56	15.50	12.37	12.49	15.44
20M	CP 256QAM	1	1	9.55	9.55	12.56	9.51	9.59	12.56	9.55	9.56	12.57

EIRP Power (dBm/10MHz)

Maximum Output Power			
Modulation	Cond. Power (dBm/10MHz)	EIRP (dBm/10MHz)	EIRP Limit (dBm/10MHz)
CP QPSK	17.47	20.29	23.0
CP 16QAM	16.84	19.66	23.0
CP 64QAM	15.50	18.32	23.0
CP 256QAM	12.57	15.39	23.0

Note: EIRP (dBm) = Cond. Power (dBm) + Antenna Gain (dBi) + Array Gain (if applicable)

7.2 Radiated Spurious Emissions below 1GHz

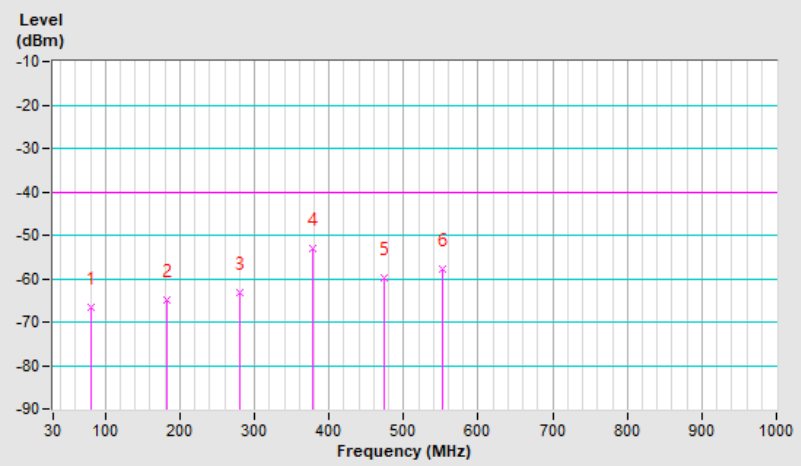
7.2.1 NR n48 (SA)

RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 638000：3570 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	80.61	-66.57	-40.00	-26.57	1.00 H	309	41.98	-108.55
2	181.83	-64.98	-40.00	-24.98	1.00 H	172	40.51	-105.49
3	280.23	-63.35	-40.00	-23.35	1.00 H	19	39.80	-103.15
4	**378.64**	**-53.13**	**-40.00**	**-13.13**	**1.00 H**	**16**	**48.12**	**-101.25**
5	474.23	-59.95	-40.00	-19.95	1.00 H	14	39.62	-99.57
6	551.55	-57.66	-40.00	-17.66	1.00 H	319	40.56	-98.22

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

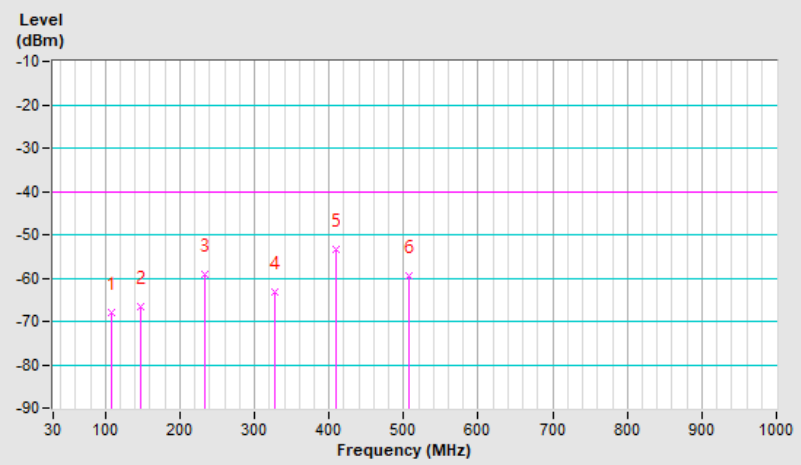


RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 638000：3570 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	108.72	-67.82	-40.00	-27.82	1.50 V	315	39.26	-107.08
2	146.68	-66.71	-40.00	-26.71	1.00 V	172	37.20	-103.91
3	233.84	-59.25	-40.00	-19.25	1.50 V	312	46.42	-105.67
4	326.62	-63.15	-40.00	-23.15	1.00 V	141	38.94	-102.09
5	409.57	-53.28	-40.00	-13.28	1.00 V	19	47.70	-100.98
6	507.97	-59.49	-40.00	-19.49	1.50 V	253	39.46	-98.95

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



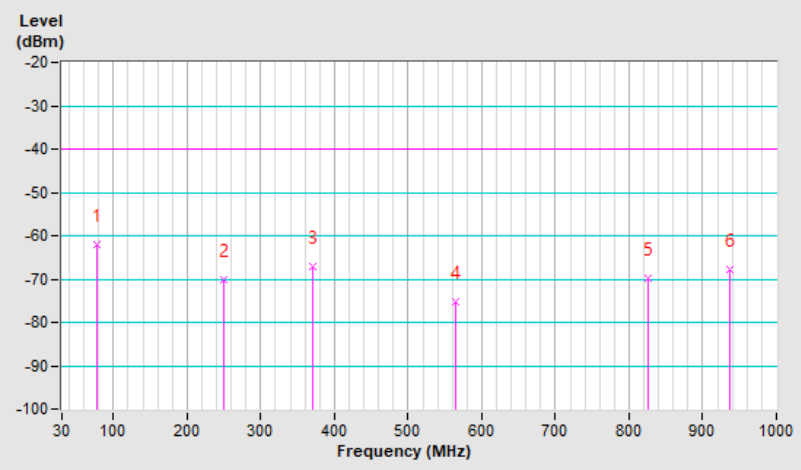
7.2.2 NR n48 (UL-MIMO)

RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 638000：3570 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-62.10	-40.00	-22.10	2.00 H	7	45.52	-107.62
2	250.19	-70.27	-40.00	-30.27	1.00 H	258	34.25	-104.52
3	371.44	-67.09	-40.00	-27.09	1.50 H	272	34.26	-101.35
4	564.47	-75.26	-40.00	-35.26	1.00 H	78	22.65	-97.91
5	826.37	-69.98	-40.00	-29.98	2.00 H	4	22.10	-92.08
6	935.98	-67.92	-40.00	-27.92	2.00 H	159	22.10	-90.02

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

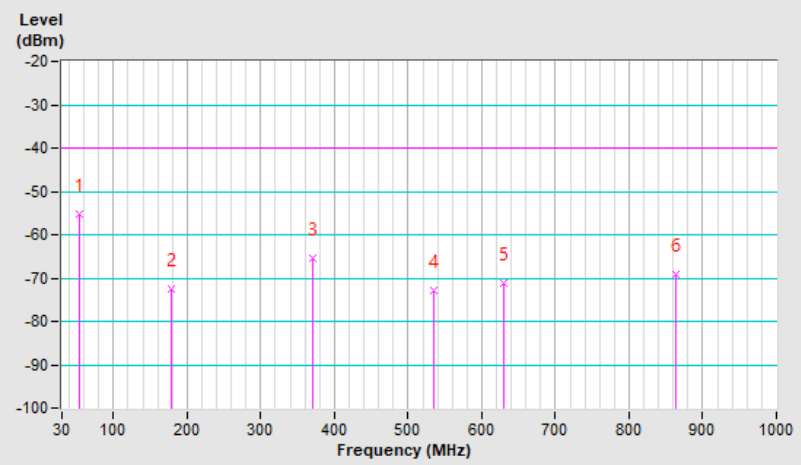


RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 638000：3570 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-55.27	-40.00	-15.27	2.00 V	141	48.70	-103.97
2	178.41	-72.69	-40.00	-32.69	1.00 V	103	32.33	-105.02
3	370.47	-65.37	-40.00	-25.37	1.50 V	136	35.99	-101.36
4	535.37	-72.83	-40.00	-32.83	1.00 V	119	25.73	-98.56
5	629.46	-71.25	-40.00	-31.25	1.50 V	2	24.69	-95.94
6	864.20	-69.11	-40.00	-29.11	2.00 V	81	22.52	-91.63

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) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.3 Radiated Spurious Emissions above 1GHz

7.3.1 NR n48 (SA)

RF Mode	NR n48 Channel Bandwidth: 20MHz	Channel	CH 637334：3560.01 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7120.02	-43.09	-40.00	-3.09	2.18 H	198	35.31	-78.40
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7120.02	-43.65	-40.00	-3.65	1.38 V	62	34.75	-78.40

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 20MHz	Channel	CH 641666：3624.99 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7249.98	-42.61	-40.00	-2.61	2.11 H	196	35.37	-77.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7249.98	-43.54	-40.00	-3.54	1.32 V	59	34.44	-77.98

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 20MHz	Channel	CH 646000：3690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7380.00	-42.29	-40.00	-2.29	2.17 H	196	35.33	-77.62
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7380.00	-42.97	-40.00	-2.97	1.34 V	61	34.65	-77.62

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 638000：3570 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7140.00	-42.50	-40.00	-2.50	2.16 H	198	35.50	-78.00
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7140.00	-43.53	-40.00	-3.53	1.30 V	58	34.47	-78.00

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 641666：3624.99 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	**7249.98**	**-41.90**	**-40.00**	**-1.90**	**2.18 H**	**203**	**36.08**	**-77.98**
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7249.98	-43.17	-40.00	-3.17	1.32 V	58	34.81	-77.98

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 645332：3679.98 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7359.96	-42.03	-40.00	-2.03	2.11 H	196	35.78	-77.81
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7359.96	-43.09	-40.00	-3.09	1.32 V	55	34.72	-77.81

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.

7.3.2 NR n48 (UL-MIMO)

RF Mode	NR n48 Channel Bandwidth: 20MHz	Channel	CH 637334：3560.01 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7120.02	-43.54	-40.00	-3.54	2.11 H	191	34.86	-78.40
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7120.02	-44.17	-40.00	-4.17	1.24 V	55	34.23	-78.40

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 20MHz	Channel	CH 641666：3624.99 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7249.98	-43.14	-40.00	-3.14	2.13 H	192	34.84	-77.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7249.98	-44.02	-40.00	-4.02	1.36 V	62	33.96	-77.98

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 20MHz	Channel	CH 646000：3690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7380.00	-42.80	-40.00	-2.80	2.15 H	195	34.82	-77.62
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7380.00	-43.50	-40.00	-3.50	1.25 V	59	34.12	-77.62

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 638000：3570 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7140.00	-43.07	-40.00	-3.07	2.12 H	193	34.93	-78.00
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7140.00	-44.05	-40.00	-4.05	1.22 V	43	33.95	-78.00

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 641666：3624.99 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7249.98	-42.41	-40.00	-2.41	2.13 H	195	35.57	-77.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7249.98	-43.66	-40.00	-3.66	1.25 V	49	34.32	-77.98

Remarks:

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

RF Mode	NR n48 Channel Bandwidth: 40MHz	Channel	CH 645332：3679.98 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	Environmental Conditions	23°C, 67% RH
Tested By	Luis Lee		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7359.96	-42.54	-40.00	-2.54	2.16 H	188	35.27	-77.81
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7359.96	-43.56	-40.00	-3.56	1.31 V	48	34.25	-77.81

Remarks:

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

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

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

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

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

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

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

--- END ---