TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 96** **47 CFR FCC Part 2**
Report No.:	RFCDVB-WTW-P22080669A-1
FCC ID:	QYLEM9190K
Product:	Wireless Module
Brand:	Getac
Model No.:	EM9190
Received Date:	2023/8/8
Test Date:	2023/8/23
Issued Date:	2023/9/6
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., Kwei Shan Dist., Taoyuan City 33383, TAIWAN
FCC Registration / Designation Number:	788550 / TW0003

Approved by: Jeremy . Lin , **Date:** 2023/9/6

Jeremy Lin / Project Engineer

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Prepared by : Polly Chien / Specialist

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RFCDVB-WTW-P22080669A-1	Original Release	2023/9/6

1 Certificate

Product:	Wireless Module
Brand:	Getac
Test Model:	EM9190
Sample Status:	Identical Prototype
Applicant:	Getac Technology Corporation.
Test Date:	2023/8/23
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

47 CFR FCC Part 96 & Part 2			
Standard / Clause	Test Item	Result	Remark
FCC 47 CFR Part 2.1046 FCC 47 CFR Part 96.41(b)	Maximum EIRP	Pass	Meet the requirement of limit.
FCC 47 CFR Part 2.1047	Modulation Characteristics	N/A	Refer to Note
FCC 47 CFR Part 96.41(g)	Peak to Average Ratio	N/A	Refer to Note
FCC 47 CFR Part 2.1049	Bandwidth	N/A	Refer to Note
FCC 47 CFR Part 2.1051 FCC 47 CFR Part 96.41(e)	Conducted Spurious Emissions	N/A	Refer to Note
FCC 47 CFR Part 2.1053 FCC 47 CFR Part 96.41(e)	Radiated Spurious Emissions below 1GHz	Pass	Minimum passing margin is -1.66 dB at 445.16 MHz
FCC 47 CFR Part 2.1053 FCC 47 CFR Part 96.41(e)	Radiated Spurious Emissions above 1GHz	Pass	Minimum passing margin is -3.04 dB at 73.89.96 MHz
FCC 47 CFR Part 2.1055	Frequency Stability	N/A	Refer to Note

Note:

1. Only test item of Radiated Spurious Emissions tests and EIRP Power were performed for this report. Other testing data please refer to Sporton International (Shenzhen) Inc. report no.: FG1N1001-01_Rev. 01 for module (Brand: Airprime, Model: EM9190). The end-product K120 has enabled the 5GNR n48 by software.
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	Specification	Expanded Uncertainty (k=2) (±)
Radiated Spurious Emissions below 1GHz	9 kHz ~ 30 MHz	2.44 dB
	30 MHz ~ 1 GHz	2.95 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 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	Wireless Module
Brand	Getac
Test Model	EM9190
Status of EUT	Identical Prototype
Power Supply Rating	3.3 Vdc (Host equipment)

Note:

1. The EUT supports the following configuration.

	FCC 5G FR1		
5GNR	Band	SCS	Bandwidth (MHz)
	n48	30kHz	10/20/40

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

2. 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)	
		K120G2-R	

3. 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	-

4. EUT Overview

Band / Bandwidth	TX Frequency Range (MHz)	Max. EIRP Power				
		PI/2 BPSK	QPSK	16QAM	64QAM	256QAM
n48 (Channel Bandwidth 10MHz)	3555.00-3694.98	-	139.637mW (21.45dBm/ channel bandwidth)	121.899mW (20.86dBm/ channel bandwidth)	-	-
n48 (Channel Bandwidth 20MHz)	3560.01-3690.00	-	150.661mW (21.78dBm/ channel bandwidth)	133.660mW (21.26dBm/ channel bandwidth)	-	-
n48 (Channel Bandwidth 40MHz)	3570.00-3679.98	188.365mW (22.75dBm/ channel bandwidth)	183.654mW (22.64dBm/ channel bandwidth)	152.757mW (21.84dBm/ channel bandwidth)	114.551mW (20.59dBm/ channel bandwidth)	123.310mW (20.91dBm/ channel bandwidth)

5. For modulation of CP-OFDM and DFT-s-OFDM, the maximum power of CP-OFDM is lower than DFT-s-OFDM modulation, therefore, we chose higher power(DFT-s-OFDM modulation)to perform test and show in the report.
6. 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		PIFA	
Antenna Connector		Ipex(MHF)	
Item	Band	Ant	Gain (dBi)
5G NR FR1	n48	Man	2.48
		AUX	3.57
	n77 (3450MHz-3550MHz)	Man	4.49
		AUX	4.25
	n77 (3700MHz-3980MHz)	Man	4.49
		AUX	4.25

* Detail antenna specification please refer to antenna datasheet or an antenna gain measurement report.

3.3 Test Mode Applicability and Tested Channel Detail

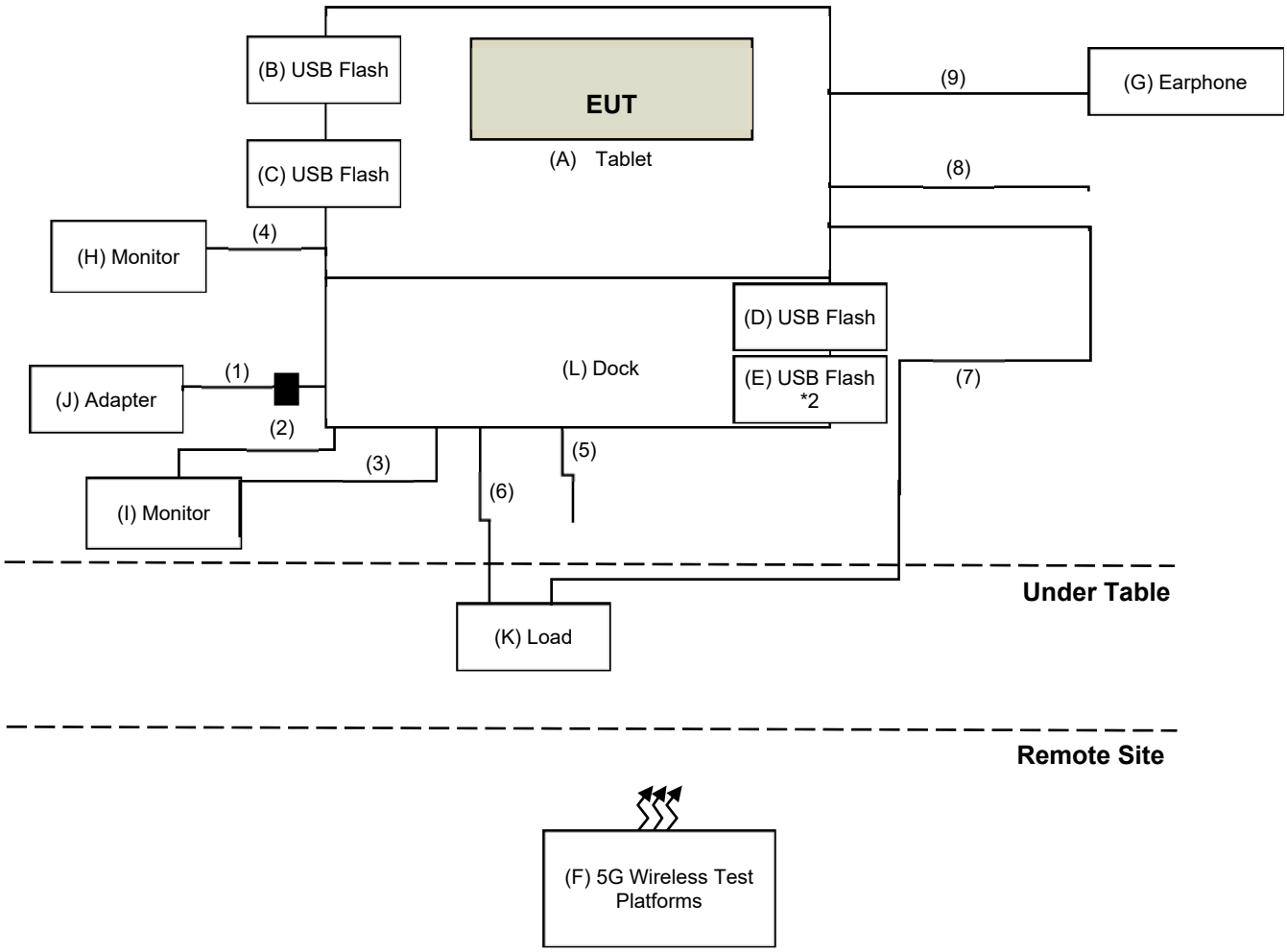
Pre-Scan:	EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis for tablet mode, and NB mode. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	NB mode

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	637000 (3555.00 MHz) 641666 (3624.99 MHz) 646332 (3694.98 MHz)	10 MHz	QPSK / 16QAM	1 RB Half RB Full RB
	637334 (3560.01 MHz) 641666 (3624.99 MHz) 646000 (3690.00 MHz)	20 MHz	QPSK / 16QAM	1 RB Half RB Full RB
	638000 (3570.00 MHz) 641666 (3624.99 MHz) 645332 (3679.98 MHz)	40 MHz	PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
RE Below 1GHz	646332 (3694.98 MHz)	10 MHz	QPSK	1 RB
RE Above 1GHz	637000 (3555.00 MHz) 641666 (3624.99 MHz) 646332 (3694.98 MHz)	10 MHz	QPSK	1 RB
	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 5G Wireless Test Platforms 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	Tablet	Getac	K120	N/A	N/A	Provided by applicant
B	USB Flash	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
C	USB Flash	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
D	USB Flash	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
E	USB Flash *2	Transcend	USB 2.0 16GB	N/A	N/A	Provided by Lab
F	5G Wireless Test Platforms	Keysight	E7515B	MY60102114	N/A	Provided by Lab
G	Earphone	APPLE	MB77PFEB	N/A	N/A	Provided by Lab
H	Monitor	DELL	A14S2421HSXmTW	CN-01KWFW-WSL00-24C-711B	N/A	Provided by Lab
I	Monitor	DELL	A14S2421HSXmTW	CN-01KWFW-WSL00-24C-714B	N/A	Provided by Lab
J	Load	N/A	N/A	N/A	N/A	Provided by Lab
K	Adapter	Getac	MTA190474W4	N/A	N/A	Provided by applicant
L	Dock	Getac	K120 Keyboard Dock	N/A	N/A	Provided by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	Power cable	1	1.8	N	1	Provided by applicant Attached on adapter
2	Display cable	1	1.8	Y	0	Provided by Lab
3	HDMI cable	1	1.8	Y	0	Provided by Lab
4	HDMI cable	1	1.8	Y	0	Provided by Lab
5	RS232 cable	1	1.5	N	0	Provided by Lab
6	RJ45 cable	1	1.8	N	0	Provided by Lab
7	RJ45 cable	1	1.8	N	0	Provided by Lab
8	RS232 cable	1	1.5	N	0	Provided by Lab
9	Audio cable	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
PXA Signal Analyzer KEYSIGHT	N9030B	MY57140488	2023/3/6	2024/3/5
5G Wireless Test Platforms Keysight	E7515B	MY60102114	2023/5/18	2024/5/17
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: 2023/8/23

4.2 Radiated Spurious Emissions below 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower &Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Bi_Log Antenna Schwarzbeck	VULB9168	9168-472	2022/10/21	2023/10/20
Loop Antenna EMCI	EM-6879	269	2022/9/19	2023/9/18
Loop Antenna TESEQ	HLA 6121	45745	2023/8/8	2024/8/7
Pre-Ammlifier EMCI	EMC 330H	980112	2022/10/1	2023/9/30
Pre-amplifier EMCI	EMC001340	980201	2022/9/23	2023/9/22
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	2023/1/7	2024/1/6
RF Coaxial Cable WORKEN	8D-FB	Cable-Ch10-01	2022/10/1	2023/9/30
Signal Analyzer Agilent	N9010A	MY52220207	2023/1/3	2024/1/2
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Test Receiver KEYSIGHT	N9038A	MY55420137	2023/5/3	2024/5/2
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A
5G Wireless Test Platforms Keysight	E7515B	MY59321376	2023/03/13	2024/03/12

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2023/8/23

4.3 Radiated Spurious Emissions above 1GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Antenna Tower &Turn Max-Full	MFA-440H	AT93021705	N/A	N/A
Boresight antenna tower fixture BV	BAF-02	7	N/A	N/A
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-969	2022/11/13	2023/11/12
	BBHA 9170	148	2022/11/13	2023/11/12
Pre-Ammlifier EMCI	EMC 184045	980116	2022/10/1	2023/9/30
Pre-Amplifier EMCI	EMC 012645	980115	2022/10/1	2023/9/30
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
	EMC104-SM-SM-8000+3000	171005	2022/10/1	2023/9/30
RF Coaxial Cable HUBER SUHNER	SUCOFLEX 104	EMC104-SM-SM-1000(140807)	2022/10/1	2023/9/30
RF FLITER MICRO-TRONICS	BRM17690	004	2023/1/11	2024/1/10
	BRM50716	060	2023/1/11	2024/1/10
Signal Analyzer Agilent	N9010A	MY52220207	2023/1/3	2024/1/2
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	N/A	N/A	N/A
Test Receiver KEYSIGHT	ESR	101451	2023/3/27	2024/3/26
Turn Table Max-Full	MFT-201SS	N/A	N/A	N/A
Turn Table Controller Max-Full	MG-7802	N/A	N/A	N/A
5G Wireless Test Platforms Keysight	E7515B	MY59321376	2023/03/13	2024/03/12

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2023/8/23

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

Power of any emissions outside the Fundamental	Limit
Within 0-10MHz above the Assigned Channel	-13 dBm/MHz
Within 0-10MHz below the Assigned Channel	
Greater than 10MHz above the Assigned Channel	-25 dBm/MHz
Greater than 10MHz below the Assigned Channel	
Power of any emission below 3530MHz	-40 dBm/MHz
Power of any emission above 3720MHz	

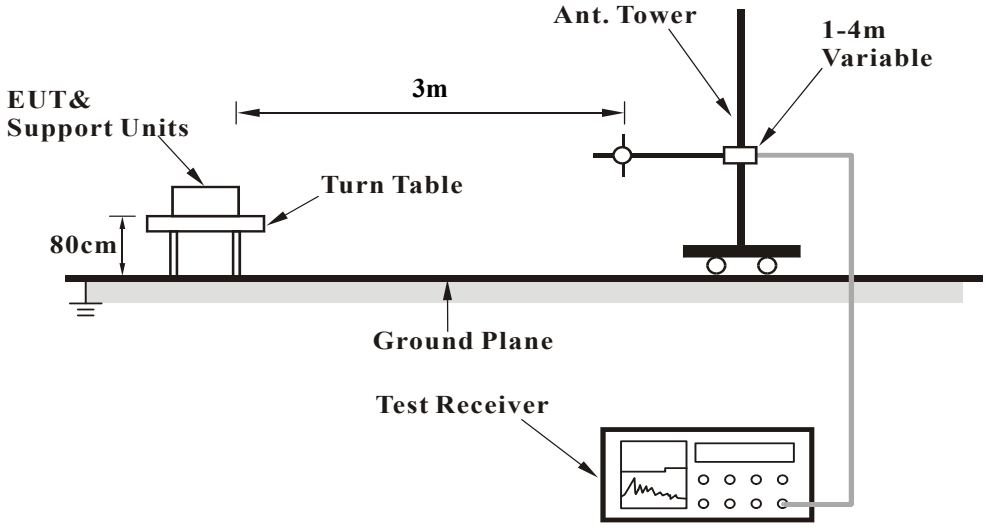
5.3 Radiated Spurious Emissions above 1GHz

Power of any emissions outside the Fundamental	Limit
Within 0-10MHz above the Assigned Channel	-13 dBm/MHz
Within 0-10MHz below the Assigned Channel	
Greater than 10MHz above the Assigned Channel	-25 dBm/MHz
Greater than 10MHz below the Assigned Channel	
Power of any emission below 3530MHz	-40 dBm/MHz
Power of any emission above 3720MHz	

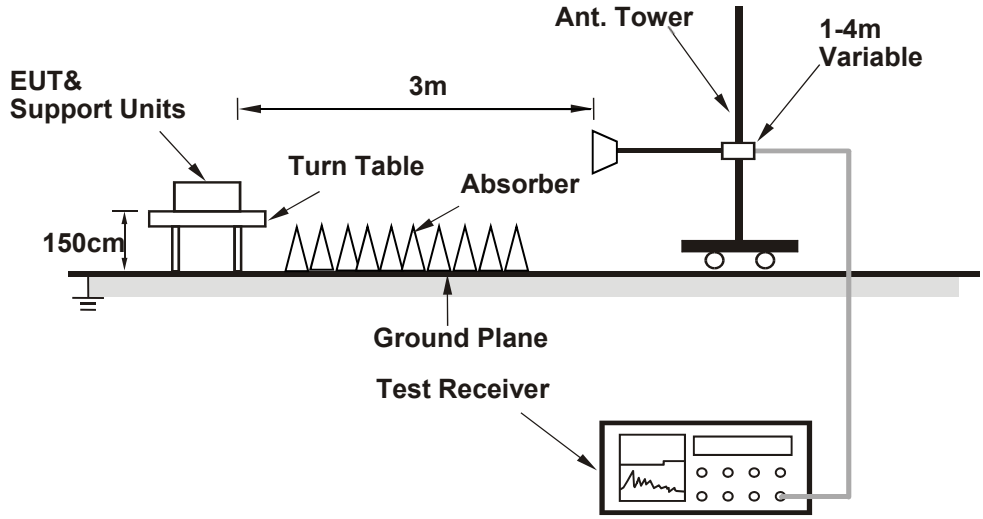
6 Test Arrangements

6.1 Maximum EIRP

6.1.1 Test Setup



For radiated emission above 1GHz



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

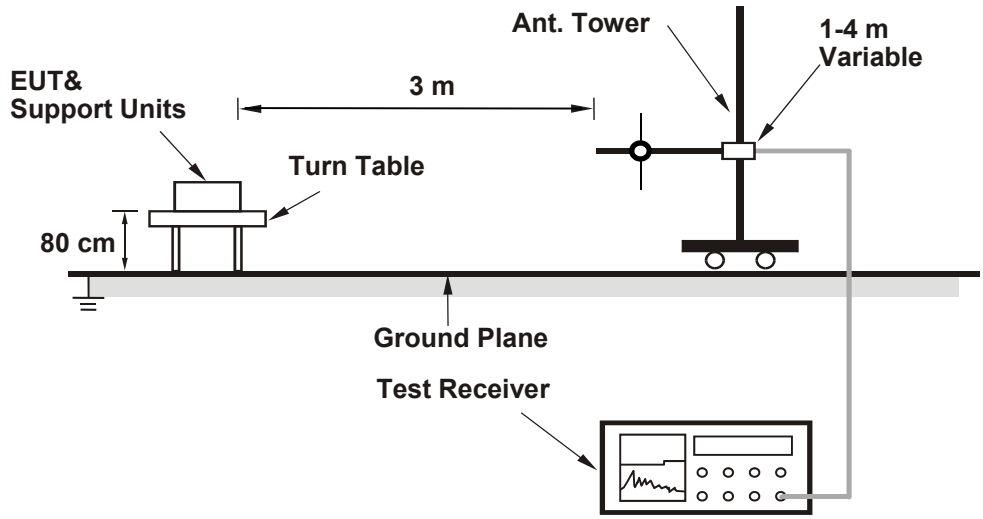
6.1.2 Test Procedure

a. Set span to at least 1.5 times the OBW.
b. Set RBW = 1-5% of the OBW, not to exceed 1 MHz.
c. Set VBW ≥ 3 × RBW.
d. Set number of points in sweep ≥ 2 × span / RBW.
e. Sweep time = auto-couple.
f. Detector = RMS (power averaging).
g. If the EUT can be configured to transmit continuously (i.e., burst duty cycle ≥ 98%), then set the trigger to free run.
h. If the EUT cannot be configured to transmit continuously (i.e., burst duty cycle < 98 %), then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Ensure that the sweep time is less than or equal to the transmission burst duration.
i. Trace average at least 100 traces in power averaging (i.e., RMS) mode.
j. Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band or channel power measurement function, with the band/channel limits set equal to the OBW band edges. If the instrument does not have a band or channel power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
k. For per 10MHz method, channel power integrating bandwidth 10MHz is used for bandwidth 10M, 20M and 40M. For full power method, channel power integrating bandwidth 10MHz is used for bandwidth 10M, integrating bandwidth 20MHz is used for bandwidth 20M, integrating bandwidth 40MHz is used for bandwidth 40M.
l. Substitution method is used for E.I.R.P measurement. 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.
m. EIRP = Output power level of S.G – TX cable loss + 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 power = E.I.R.P power - 2.15 dB. Correction Factor (includes EIRP and ERP unit conversion factor) = Antenna gain of substitution horn. – Tx cable loss.
n. Measurement method refers to ANSI C63.26 section 5.2.7 & 5.2.4.

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 emulator 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 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.

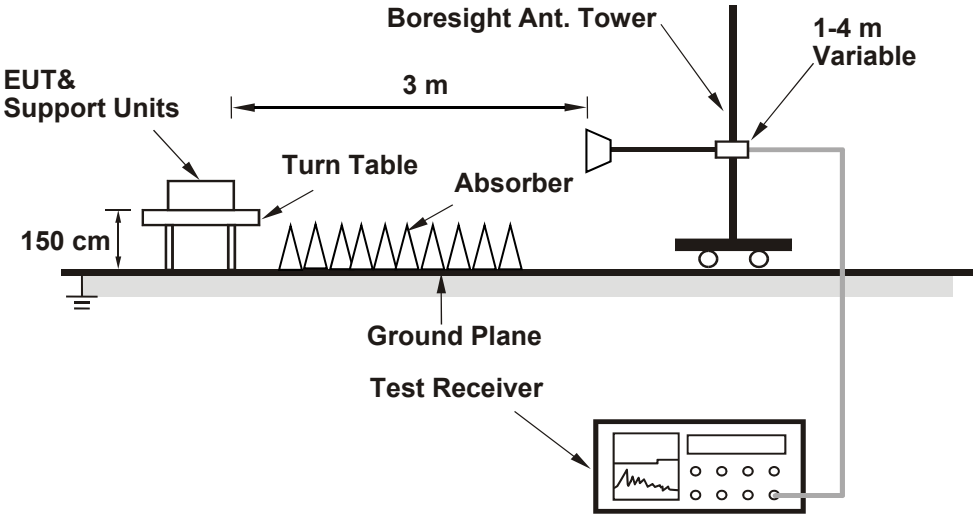
Note:

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

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 emulator 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 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.

7 Test Results of Test Item

7.1 Maximum EIRP

Input Power:	3.3Vdc	Environmental Conditions:	21°C, 70% RH	Tested By:	Vincent Chen

7.1.1 NR n48 SCS 30 kHz

Modulation Type: $\pi/2$ BPSK

NR Band 48, Channel Bandwidth 40MHz

Mode	TX channel 638000, 641666, 645332							
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	22.61	23.00	-0.39	1.63 H	286	81.72	-59.11
2	3624.99	22.75	23.00	-0.25	1.52 H	277	81.83	-59.08
3	3679.98	22.70	23.00	-0.30	1.56 H	267	81.64	-58.94
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	21.56	23.00	-1.44	2.52 V	163	80.67	-59.11
2	3624.99	21.67	23.00	-1.33	2.23 V	174	80.75	-59.08
3	3679.98	21.63	23.00	-1.37	2.35 V	142	80.57	-58.94

Remarks:

1. EIRP(dBm/40MHz) = 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.

Modulation Type: QPSK

NR Band 48, Channel Bandwidth 10MHz

Mode		TX channel 637000, 641666, 646332						
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	21.12	23.00	-1.88	1.59 H	73	80.20	-59.08
2	3624.99	21.35	23.00	-1.65	1.52 H	67	80.43	-59.08
3	3694.98	21.45	23.00	-1.55	1.46 H	95	80.37	-58.92
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	20.09	23.00	-2.91	1.29 V	3	79.17	-59.08
2	3624.99	20.57	23.00	-2.43	1.35 V	23	79.65	-59.08
3	3694.98	20.49	23.00	-2.51	1.30 V	41	79.41	-58.92

Remarks:

1. EIRP(dBm/10MHz) = 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.

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	21.52	23.00	-1.48	1.63 H	245	80.62	-59.10
2	3624.99	21.78	23.00	-1.22	1.52 H	234	80.86	-59.08
3	3690.00	21.77	23.00	-1.23	1.38 H	116	80.70	-58.93
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	20.62	23.00	-2.38	2.32 V	157	79.72	-59.10
2	3624.99	20.74	23.00	-2.26	2.74 V	114	79.82	-59.08
3	3690.00	20.68	23.00	-2.32	2.58 V	103	79.61	-58.93

Remarks:

1. EIRP(dBm/20MHz) = 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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	22.41	23.00	-0.59	1.52 H	274	81.52	-59.11
2	3624.99	22.64	23.00	-0.36	1.35 H	360	81.72	-59.08
3	3679.98	22.48	23.00	-0.52	1.15 H	230	81.42	-58.94
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	21.41	23.00	-1.59	2.42 V	178	80.52	-59.11
2	3624.99	21.57	23.00	-1.43	2.41 V	163	80.65	-59.08
3	3679.98	21.48	23.00	-1.52	1.38 V	204	80.42	-58.94

Remarks:

1. EIRP(dBm/40MHz) = 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.

Modulation Type: 16QAM

NR Band 48, Channel Bandwidth 10MHz

Mode		TX channel 637000, 641666, 646332						
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	20.59	23.00	-2.41	1.65 H	103	79.67	-59.08
2	3624.99	20.81	23.00	-2.19	1.74 H	100	79.89	-59.08
3	3694.98	20.86	23.00	-2.14	1.35 H	105	79.78	-58.92
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	19.27	23.00	-3.73	1.35 V	23	78.35	-59.08
2	3624.99	19.48	23.00	-3.52	1.23 V	13	78.56	-59.08
3	3694.98	19.50	23.00	-3.50	1.11 V	25	78.42	-58.92

Remarks:

1. EIRP(dBm/10MHz) = 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.

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	21.13	23.00	-1.87	1.54 H	223	80.23	-59.10
2	3624.99	21.26	23.00	-1.74	1.67 H	253	80.34	-59.08
3	3690.00	21.09	23.00	-1.91	1.14 H	236	80.02	-58.93
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	20.13	23.00	-2.87	1.87 V	223	79.23	-59.10
2	3624.99	20.24	23.00	-2.76	2.46 V	123	79.32	-59.08
3	3690.00	20.20	23.00	-2.80	2.25 V	174	79.13	-58.93

Remarks:

1. EIRP(dBm/20MHz) = 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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	21.67	23.00	-1.33	1.42 H	223	80.78	-59.11
2	3624.99	21.84	23.00	-1.16	1.48 H	220	80.92	-59.08
3	3679.98	21.67	23.00	-1.33	1.52 H	269	80.61	-58.94
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	21.02	23.00	-1.98	2.32 V	164	80.13	-59.11
2	3624.99	21.18	23.00	-1.82	1.65 V	227	80.26	-59.08
3	3679.98	21.16	23.00	-1.84	1.78 V	203	80.10	-58.94

Remarks:

1. EIRP(dBm/40MHz) = 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.

Modulation Type: 64QAM

NR Band 48, Channel Bandwidth 40MHz

Mode	TX channel 638000, 641666, 645332							
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	20.30	23.00	-2.70	1.35 H	265	79.41	-59.11
2	3624.99	20.59	23.00	-2.41	1.27 H	225	79.67	-59.08
3	3679.98	20.38	23.00	-2.62	1.12 H	268	79.32	-58.94
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	19.74	23.00	-3.26	2.35 V	152	78.85	-59.11
2	3624.99	19.85	23.00	-3.15	2.41 V	163	78.93	-59.08
3	3679.98	19.73	23.00	-3.27	2.87 V	325	78.67	-58.94

Remarks:

1. EIRP(dBm/40MHz) = 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.

Modulation Type: 256QAM

NR Band 48, Channel Bandwidth 40MHz

Mode	TX channel 638000, 641666, 645332							
Antenna Polarity & Test Distance: Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	20.84	23.00	-2.16	1.23 H	225	79.95	-59.11
2	3624.99	20.91	23.00	-2.09	1.65 H	238	79.99	-59.08
3	3679.98	20.78	23.00	-2.22	1.53 H	222	79.72	-58.94
Antenna Polarity & Test Distance: Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	19.42	23.00	-3.58	2.53 V	174	78.53	-59.11
2	3624.99	19.57	23.00	-3.43	2.87 V	196	78.65	-59.08
3	3679.98	19.52	23.00	-3.48	2.38 V	105	78.46	-58.94

Remarks:

1. EIRP(dBm/40MHz) = 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.

7.2 Radiated Spurious Emissions below 1GHz

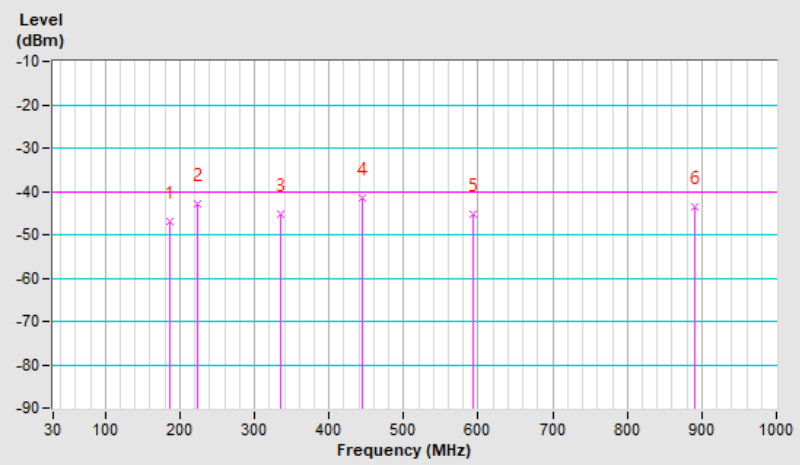
7.2.1 NR n48 SCS 30 kHz

RF Mode	NR n48 Channel Bandwidth: 10MHz	Channel	CH 646332：3694.98 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Vincent Chen	Environmental Conditions	21°C, 70% RH

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	186.17	-47.10	-40.00	-7.10	2.00 H	161	62.87	-109.97
2	224.00	-42.88	-40.00	-2.88	1.00 H	150	68.29	-111.17
3	334.58	-45.30	-40.00	-5.30	1.50 H	174	60.93	-106.23
4	**445.16**	**-41.66**	**-40.00**	**-1.66**	**1.00 H**	**178**	**61.78**	**-103.44**
5	593.57	-45.10	-40.00	-5.10	2.00 H	132	55.66	-100.76
6	891.36	-43.70	-40.00	-3.70	2.00 H	215	52.67	-96.37

Remarks:

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

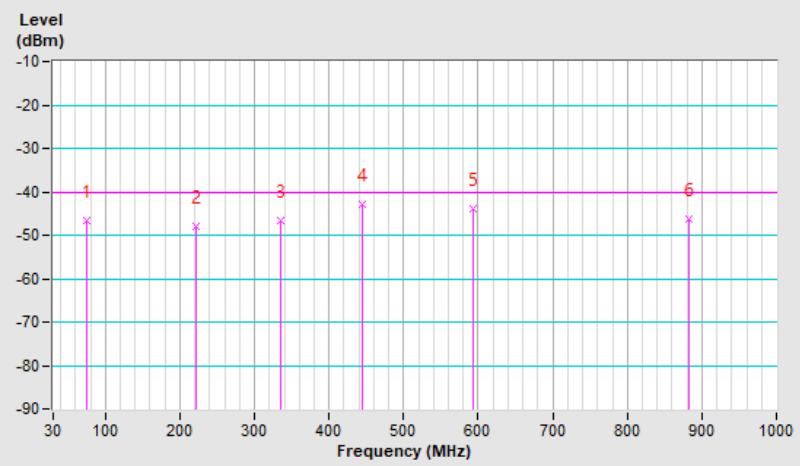


RF Mode	NR n48 Channel Bandwidth: 10MHz	Channel	CH 646332：3694.98 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Vincent Chen	Environmental Conditions	21°C, 70% RH

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	74.62	-46.70	-40.00	-6.70	1.50 V	246	63.87	-110.57
2	221.09	-47.86	-40.00	-7.86	1.00 V	191	63.25	-111.11
3	335.55	-46.50	-40.00	-6.50	2.00 V	224	59.72	-106.22
4	445.16	-42.82	-40.00	-2.82	1.00 V	202	60.62	-103.44
5	593.57	-43.80	-40.00	-3.80	1.50 V	189	56.96	-100.76
6	882.63	-46.40	-40.00	-6.40	2.00 V	234	50.09	-96.49

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 9kHz~30MHz: 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 SCS 30 kHz

RF Mode	NR n48 Channel Bandwidth: 10MHz	Channel	CH 637000：3555 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	7110.00	-43.89	-40.00	-3.89	1.58 H	297	54.36	-98.25
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	7110.00	-44.83	-40.00	-4.83	1.66 V	262	53.42	-98.25

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: 10MHz	Channel	CH 641666：3624.99 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	-43.46	-40.00	-3.46	1.41 H	108	54.60	-98.06
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	-44.80	-40.00	-4.80	2.71 V	55	53.26	-98.06

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) + 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: 10MHz	Channel	CH 646332：3694.98 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	**7389.96**	**-43.04**	**-40.00**	**-3.04**	**1.91 H**	**287**	**54.72**	**-97.76**
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	7389.96	-44.24	-40.00	-4.24	2.21 V	88	53.52	-97.76

Remarks:

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

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)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	-43.79	-40.00	-3.79	1.58 H	146	54.45	-98.24
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	-44.36	-40.00	-4.36	1.14 V	51	53.88	-98.24

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 640000：3624.99 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	-43.29	-40.00	-3.29	1.52 H	77	54.77	-98.06
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	-44.64	-40.00	-4.64	2.63 V	308	53.42	-98.06

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) + 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 642666：3690 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	-43.43	-40.00	-3.43	2.25 H	113	54.33	-97.76
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	-44.47	-40.00	-4.47	2.57 V	354	53.29	-97.76

Remarks:

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

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)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	-43.58	-40.00	-3.58	1.87 H	232	54.67	-98.25
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	-44.57	-40.00	-4.57	2.16 V	194	53.68	-98.25

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 640000：3624.99 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	-43.25	-40.00	-3.25	2.09 H	55	54.81	-98.06
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	-44.49	-40.00	-4.49	1.12 V	189	53.57	-98.06

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) + 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 642000：3679.98 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Tested By	Thomas Cheng	Environmental Conditions	21°C, 71% RH

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	-43.15	-40.00	-3.15	1.52 H	171	54.62	-97.77
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	-44.03	-40.00	-4.03	1.96 V	245	53.74	-97.77

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.

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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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