TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: **47 CFR FCC Part 27**
47 CFR FCC Part 2

Report No.: RFBCMA-WTW-P23030799-12

FCC ID: RAXTMOG4AR

Product: 5G Gateway

Brand: T-Mobile

Model No.: TMO-G4AR

Received Date: 2023/3/15

Test Date: 2023/5/23

Issued Date: 2023/5/24

Applicant: Arcadyan Technology Corporation

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

Approved by: Jeremy Lin , **Date:** **2023/5/24**

Jeremy Lin / Project Engineer

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Prepared by : Celine Chou / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBCMA-WTW-P23030799-12	Original release.	2023/5/24

1 Certificate

Product:	5G Gateway
Brand:	T-Mobile
Test Model:	TMO-G4AR
Sample Status:	Engineering sample
Applicant:	Arcadyan Technology Corporation
Test Date:	2023/4/10
Standard:	47 CFR FCC Part 27 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 971168 D02 Misc Rev Approv License Devices v02r01

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 27 47 CFR FCC Part 2			
Standard / Clause	Test Item	Result	Remark
FCC 47 CFR Part 2.1046 FCC 47 CFR Part 27.50(h)	Effective Radiated Power and Equivalent Isotropically Radiated Power	Pass	Meet the requirement of limit. Refer to Note 2
FCC 47 CFR Part 2.1047	Modulation Characteristics	N/A	Refer to Note 1
FCC 47 CFR Part 27.50(d)	Peak to Average Ratio	N/A	Refer to Note 1
FCC 47 CFR Part 2.1049	Bandwidth	N/A	Refer to Note 1
FCC 47 CFR Part 2.1051 FCC 47 CFR Part 27.53(m)	Conducted Spurious Emissions	N/A	Refer to Note 1
FCC 47 CFR Part 2.1053 FCC 47 CFR Part 27.53(m)	Radiated Spurious Emissions below 1GHz	Pass	Minimum passing margin is -27.86 dB at 124.09 MHz
FCC 47 CFR Part 2.1053 FCC 47 CFR Part 27.53(m)	Radiated Spurious Emissions above 1GHz	Pass	Minimum passing margin is -24.33 dB at 5072.04 MHz
FCC 47 CFR Part 2.1055 FCC 47 CFR Part 27.54	Frequency Stability	N/A	Refer to Note 1

Note:
1. The only test item of Equivalent Isotropically Radiated Power and Radiated Spurious Emissions test was performed for this report. Other testing data please refer to SGS-CSRC Standards Technical Services (Suzhou) Co., Ltd. Report No.: SEWM2210000205RG02 (5G Module, Brand: Fibocom, Model: FG360-NA, FCC ID: ZMOFG360NA08).
2. The conducted output power was copied from the original module report.
3. 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	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	5G Gateway
Brand	T-Mobile
Test Model	TMO-G4AR
Status of EUT	Engineering sample
Power Supply Rating	20Vdc or 15Vdc or 12Vdc or 9Vdc or 5Vdc (From adapter)

Note:

1. Base on the conducted power and all conducted result no change, the device WWAN conducted data leverage 5G module (Fibocom FG360-NA), and record EIRP in the report with Internal Antenna to prove it not over the limit.
2. EUT Overview

Band / Bandwidth	TX Frequency Range (MHz)	Max. EIRP Power			
		QPSK	16QAM	64QAM	256QAM
SCS: 30 kHz					
n41 (CA n41C) (60MHz + 50MHz)	2526.00-2664.99	610.942mW (27.86dBm)	488.652mW (26.89dBm)	358.922mW (25.55dBm)	248.313mW (23.95dBm)
n41 (CA n41C) (60MHz + 60MHz)	2526.00-2659.98	618.016mW (27.91dBm)	503.501mW (27.02dBm)	374.111mW (25.73dBm)	252.930mW (24.03dBm)
n41 (CA n41C) (80MHz + 40MHz)	2536.02-2670.00	629.506mW (27.99dBm)	519.996mW (27.16dBm)	377.572mW (25.77dBm)	263.027mW (24.20dBm)
n41 (CA n41C) (80MHz + 50MHz)	2536.02-2664.99	630.957mW (28.00dBm)	496.592mW (26.96dBm)	377.572mW (25.77dBm)	257.632mW (24.11dBm)
n41 (CA n41C) (80MHz + 60MHz)	2536.02-2659.98	547.016mW (27.38dBm)	433.511mW (26.37dBm)	348.337mW (25.42dBm)	222.331mW (23.47dBm)
n41 (CA n41C) (80MHz + 80MHz)	2536.02-2649.99	630.957mW (28.00dBm)	497.737mW (26.97dBm)	372.392mW (25.71dBm)	260.016mW (24.15dBm)
n41 (CA n41C) (80MHz + 100MHz)	2536.02-2640.00	654.636mW (28.16dBm)	527.230mW (27.22dBm)	370.681mW (25.69dBm)	266.073mW (24.25dBm)
n41 (CA n41C) (100MHz + 40MHz)	2546.01-2670.00	650.130mW (28.13dBm)	523.600mW (27.19dBm)	368.978mW (25.67dBm)	264.850mW (24.23dBm)
n41 (CA n41C) (100MHz + 50MHz)	2546.01-2664.99	557.186mW (27.46dBm)	447.713mW (26.51dBm)	335.738mW (25.26dBm)	236.048mW (23.73dBm)
n41 (CA n41C) (100MHz + 60MHz)	2546.01-2659.98	574.116mW (27.59dBm)	456.037mW (26.59dBm)	338.844mW (25.30dBm)	229.615mW (23.61dBm)
n41 (CA n41C) (100MHz + 80MHz)	2546.01-2649.99	572.796mW (27.58dBm)	448.745mW (26.52dBm)	335.738mW (25.26dBm)	237.137mW (23.75dBm)
SCS: 15 kHz					
n41 (CA n41C) (100MHz + 80MHz)	2546.01-2649.99	583.445mW (27.66dBm)	463.447mW (26.66dBm)	341.193mW (25.33dBm)	340.408mW (25.32dBm)

3. The EUT uses following accessories.

AC Adapter 1		
Brand	Model	Specification
LUCENT TRANS	1A78	AC Input : 100~240V, 1.2A, 50-60Hz DC Output : 5.0V, 3.0A,15W or 9.0V, 3.0A, 27W or 12.0V, 3.0A, 36W or 15.0V, 3.0A, 45W or 20.0V, 2.25A, 45W DC Output Cable : 1.85 M , non-shielded cable, W/O ferrite core Plug : US
AC Adapter 2		
Brand	Model	Specification
MASS POWER	PD045E-C1C0AVU	AC Input : 100~240V, 1.0A, 50-60Hz DC Output : 5.0V, 3.0A or 9.0V, 3.0A or 12.0V, 3.0A or 15.0V, 3.0A or 20.0V, 2.25A, 45W DC Output Cable : 1.8 M , non-shielded cable, W/O ferrite core Plug : US

*The adapter 1 was chosen for final test.

4. For CA mode configuration, please consult the manufacturer to declare the test mode.
5. The EUT support the following CA Configuration.

Band Configuration
n41C

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 No.	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency range	Antenna Type	Connector Type
WWAN Antenna (Internal)	B71 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	3.17	663-698 MHz	Monopole	ipex(MHF1)
	B71 (Rx) (M1)		RFPCA811609IMMB402_A	3.10	663-698 MHz	Monopole	ipex(MHF1)
	B71 (Rx) (D1)		RFPCA652018IMMB401_A	2.09	663-698 MHz	Monopole	ipex(MHF1)
	B71 (Rx)(D2)		RFFPA656320IMMB401_B	2.01	663-698 MHz	Monopole	ipex(MHF1)
	B12 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	3.34	698-716 MHz	Monopole	ipex(MHF1)
	B12 (Rx) (D2)		RFFPA656320IMMB401_B	2.05	698-716 MHz	Monopole	ipex(MHF1)
	B5 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	1.68	824-849 MHz	Monopole	ipex(MHF1)
	B5 (Rx) (D2)		RFFPA656320IMMB401_B	0.63	824-849 MHz	Monopole	ipex(MHF1)
	B4/B66 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	3.69	1710-1780 MHz	Monopole	ipex(MHF1)
	B4/B66 (TRx) (M1)		RFPCA811609IMMB402_A	5.13	1710-1780 MHz	Monopole	ipex(MHF1)
	B4/B66 (Rx) (D1)		RFPCA652018IMMB401_A	4.26	1710-1780 MHz	Monopole	ipex(MHF1)
	B4/B66 (Rx) (D2)		RFFPA656320IMMB401_B	4.10	1710-1780 MHz	Monopole	ipex(MHF1)
	B2/B25 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	3.33	1850-1915 MHz	Monopole	ipex(MHF1)
	B2/B25 (TRx) (M1)		RFPCA811609IMMB402_A	4.78	1850-1915 MHz	Monopole	ipex(MHF1)
	B2/B25 (Rx) (D1)		RFPCA652018IMMB401_A	3.79	1850-1915 MHz	Monopole	ipex(MHF1)
	B2/B25 (Rx) (D2)		RFFPA656320IMMB401_B	4.11	1850-1915 MHz	Monopole	ipex(MHF1)
	B41 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	2.78	2496-2690 MHz	Monopole	ipex(MHF1)
	B41 (TRx) (M1)		RFPCA811609IMMB402_A	3.02	2496-2690 MHz	Monopole	ipex(MHF1)
	B41 (Rx) (Omni-Antenna HC1O)		RFPCA380906IMMB401_A	4.45	2496-2690 MHz	Dipole	ipex(MHF1)
	B41 (Rx) (Omni-Antenna HC2O)		RFPCA380912IMMB401_A	3.67	2496-2690 MHz	Dipole	ipex(MHF1)
	B41 (Rx) (Semi-Antenna HC1S)		RFPCA474709IMMB401_A	7.59	2496-2690 MHz	Dipole	ipex(MHF1)
	B41 (Rx) (Semi-Antenna HC2S)		RFPCA474709IMMB401_A	7.76	2496-2690 MHz	Dipole	ipex(MHF1)
	B48 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	0.94	3550-3700 MHz	Monopole	ipex(MHF1)
	B48 (TRx) (M1)		RFPCA811609IMMB402_A	1.02	3550-3700 MHz	Monopole	ipex(MHF1)
	B48 (Rx) (Omni-Antenna HC1O)		RFPCA380906IMMB401_A	4.64	3550-3700 MHz	Dipole	ipex(MHF1)
	B48 (Rx) (Omni-Antenna HC2O)		RFPCA380912IMMB401_A	4.03	3550-3700 MHz	Dipole	ipex(MHF1)
	B48 (Rx) (Semi-Antenna HC1S)		RFPCA474709IMMB401_A	7.67	3550-3700 MHz	Dipole	ipex(MHF1)
	B48 (Rx) (Semi-Antenna HC2S)		RFPCA474709IMMB401_A	8.01	3550-3700 MHz	Dipole	ipex(MHF1)
	B77 (TRx) (M2)	PSA	RFPCA811609IMMB403_B	0.84	3300-4200 MHz	Monopole	ipex(MHF1)
	B77(TRx) (M1)		RFPCA811609IMMB402_A	0.91	3300-4200 MHz	Monopole	ipex(MHF1)
	B77 (Rx) (Omni-Antenna HC1O)		RFPCA380906IMMB401_A	4.73	3300-4200 MHz	Dipole	ipex(MHF1)
	B77 (Rx) (Omni-Antenna HC2O)		RFPCA380912IMMB401_A	4.14	3300-4200 MHz	Dipole	ipex(MHF1)
	B77 (Rx) (Semi-Antenna HC1S)		RFPCA474709IMMB401_A	7.98	3300-4200 MHz	Dipole	ipex(MHF1)
	B77 (Rx) (Semi-Antenna HC2S)		RFPCA474709IMMB401_A	8.13	3300-4200 MHz	Dipole	ipex(MHF1)

* 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.
* Only NR n41/48/77 support 2TX/2RX, other bands support 1TX/1RX only.

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. Pre-scan these ways and find the worst case as a representative test condition.
Worst Case:	X-axis/ Y-axis/ Z-axis Worst Condition: Z-axis

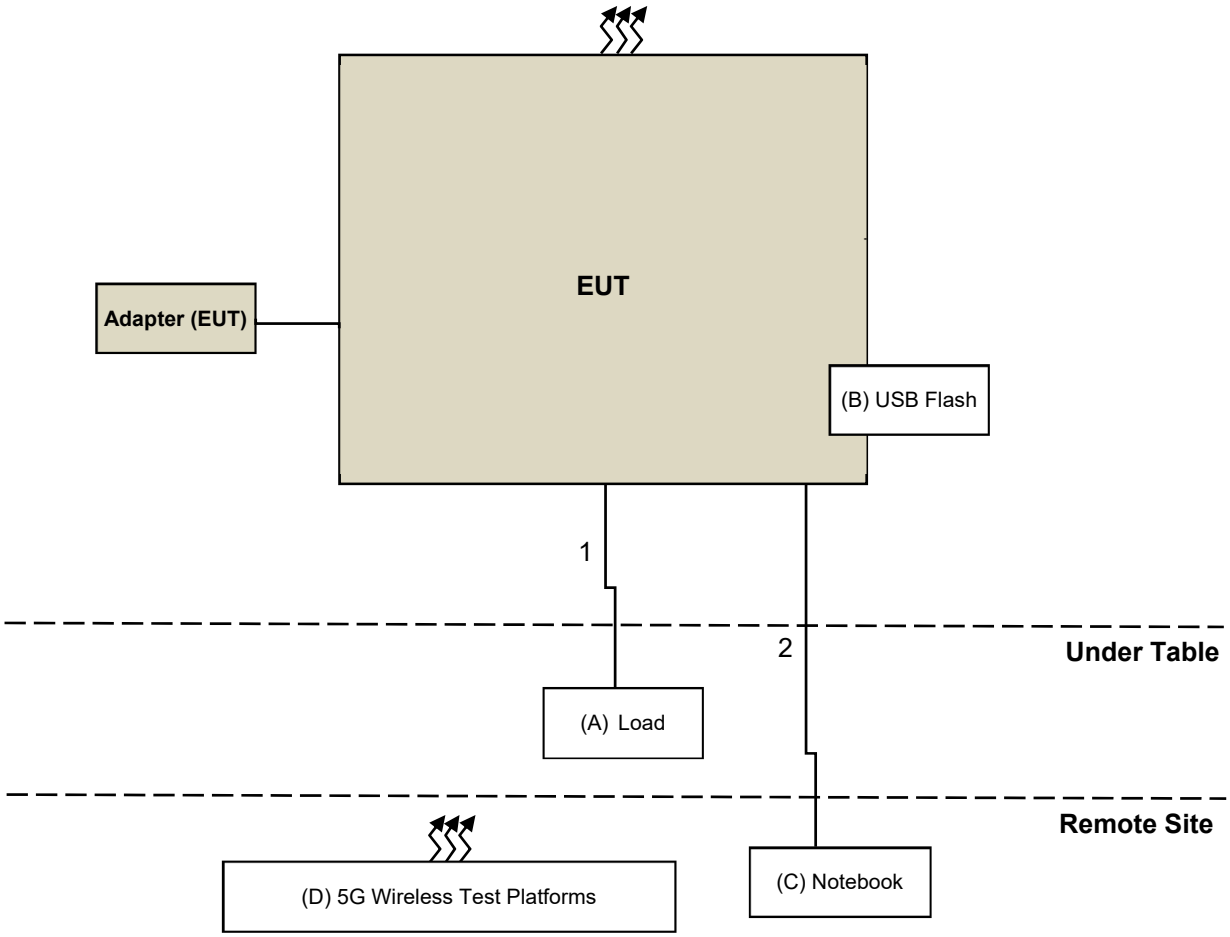
For NR n41 (CA n41C)

Test Item	Tested Channel	Channel Bandwidth	Modulation	Mode
EIRP	505200 (2526.00MHz) + 516192 (2580.96MHz) 513600 (2568.00MHz) + 524592 (2622.96MHz) 522006 (2610.03MHz) + 532998 (2664.99MHz)	60MHz + 50MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	505200 (2526.00MHz) + 517200 (2586.00MHz) 512598 (2562.99MHz) + 524598 (2622.99MHz) 519996 (2599.98MHz) + 531996 (2659.98MHz)	60MHz + 60MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	507204 (2536.02MHz) + 519168 (2595.84MHz) 514602 (2573.01MHz) + 526566 (2632.83MHz) 522036 (2610.18MHz) + 534000 (2670.00MHz)	80MHz + 40MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	507204 (2536.02MHz) + 520176 (2600.88MHz) 513600 (2568.00MHz) + 526572 (2632.86MHz) 520026 (2600.13MHz) + 532998 (2664.99MHz)	80MHz + 50MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	507204 (2536.02MHz) +521184 (2605.92MHz) 512598 (2562.99MHz) +526578 (2632.89MHz) 518016 (2590.08MHz) +531996 (2659.98MHz)	80MHz + 60MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	507204 (2536.02MHz) +523200 (2616.00MHz) 510600 (2553.00MHz) +526596 (2632.98MHz) 514002 (2570.01MHz) +529998 (2649.99MHz)	80MHz + 80MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	507204 (2536.02MHz) + 525180 (2625.90MHz) 512598 (2562.99MHz) + 526578 (2632.89MHz) 518016 (2590.08MHz) + 528000 (2640.00MHz)	80MHz + 100MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	509202 (2546.01MHz) + 523146 (2615.73MHz) 514602 (2573.01MHz) + 528546 (2642.73MHz) 520056 (2600.28MHz) + 534000 (2670.00MHz)	100MHz + 40MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	509202 (2546.01MHz) + 524154 (2620.77MHz) 513600 (2568.00MHz) + 528552 (2642.76MHz) 518046 (2590.23MHz) + 532998 (2664.99MHz)	100MHz + 50MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	509202 (2546.01MHz) + 525162 (2625.81MHz) 512598 (2562.99MHz) + 528558 (2642.79MHz) 516036 (2580.18MHz) + 531996 (2659.98MHz)	100MHz + 60MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
	509202 (2546.01MHz) +527178 (2635.89MHz) 510600 (2553.00MHz) +528576 (2642.88MHz) 512022 (2560.11MHz) +529998 (2649.99MHz)	100MHz + 80MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB Half RB Full RB
RE Below 1GHz	507204 (2536.02MHz) + 525180 (2625.90MHz)	80MHz + 100MHz	QPSK	1 RB
RE Above 1GHz	507204 (2536.02MHz) + 525180 (2625.90MHz)	80MHz + 100MHz	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	NA	NA	NA	NA	Provided by Lab
B	USB Flash	SanDisk	SDDDC3-032	NA	NA	Provided by Lab
C	Notebook	Lenovo	80Q7	PF0KUGU6	FCC DoC Approveded	Provided by Lab
D	5G Wireless Test Platforms	Keysight	E7515B	NA	NA	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	RJ-45 Cable	1	1.5	No	0	Provided by Lab
2	RJ-45 Cable	1	10	No	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 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	2022/7/27	2023/7/26
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
Radio Communication Analyzer Anritsu	MT8821C	6201462755	2023/3/3	2024/3/2

Notes:

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

4.2 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	2022/7/9	2023/7/8
	EMC102-KM-KM-3000	150929	2022/7/9	2023/7/8
	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	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
Radio Communication Analyzer Anritsu	MT8821C	6201462755	2023/3/3	2024/3/2

Notes:

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

5 Limits of Test Items

5.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

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

5.2 Radiated Spurious Emissions below 1GHz

According to FCC 47 CFR part 27.53(m)(4), 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 –25 dBm.

5.3 Radiated Spurious Emissions above 1GHz

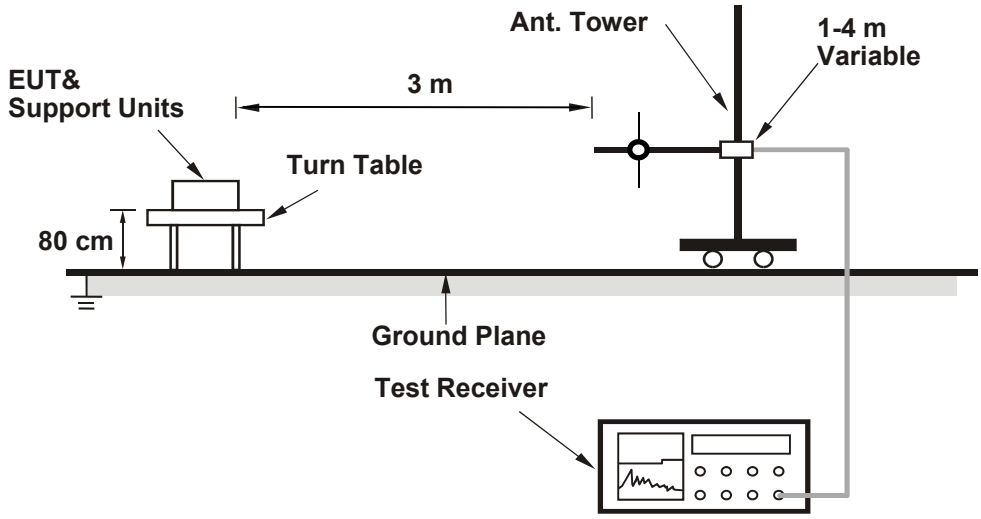
According to FCC 47 CFR part 27.53(m)(4), on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least 55 + 10 log (P) dB. The emission limit equal to –25 dBm.

6 Test Arrangements

6.1 Radiated Spurious Emissions below 1GHz

6.1.1 Test Setup

For radiated emission 30 MHz to 1 GHz



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

6.1.2 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.

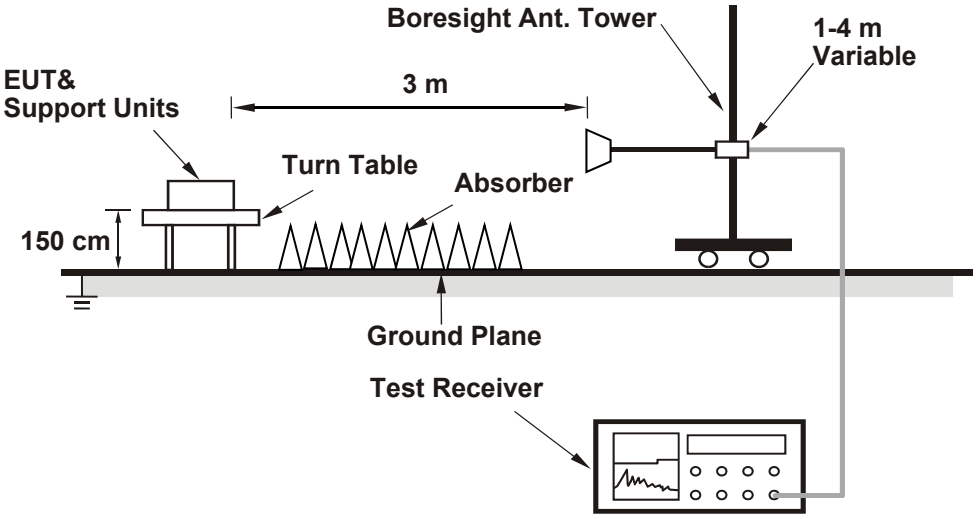
Note:

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

6.2 Radiated Spurious Emissions above 1GHz

6.2.1 Test Setup

For radiated emission above 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 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. Set detector = average.

7 Test Results of Test Item

7.1 Effective Radiated Power and Equivalent Isotropically Radiated Power

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	22°C, 70% RH	Tested By:	James Yang

7.1.1 NR n41 (CA n41C)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	60+50	DFT-QPSK	L	Inner_1RB_Left	24.4	27.42
41-41	30	60+50	DFT-QPSK	L	Inner_1RB_Right	24.47	27.49
41-41	30	60+50	DFT-QPSK	L	Outer_Full	23.73	26.75
41-41	30	60+50	DFT-16QAM	L	Inner_1RB_Left	23.47	26.49
41-41	30	60+50	DFT-16QAM	L	Inner_1RB_Right	23.52	26.54
41-41	30	60+50	DFT-16QAM	L	Outer_Full	22.75	25.77
41-41	30	60+50	DFT-64QAM	L	Inner_1RB_Left	21.66	24.68
41-41	30	60+50	DFT-64QAM	L	Inner_1RB_Right	21.74	24.76
41-41	30	60+50	DFT-64QAM	L	Outer_Full	22.28	25.3
41-41	30	60+50	DFT-256QAM	L	Inner_1RB_Left	20.4	23.42
41-41	30	60+50	DFT-256QAM	L	Inner_1RB_Right	20.49	23.51
41-41	30	60+50	DFT-256QAM	L	Outer_Full	20.11	23.13
41-41	30	60+50	DFT-QPSK	M	Inner_1RB_Left	24.83	27.85
41-41	30	60+50	DFT-QPSK	M	Inner_1RB_Right	24.84	27.86
41-41	30	60+50	DFT-QPSK	M	Outer_Full	23.97	26.99
41-41	30	60+50	DFT-16QAM	M	Inner_1RB_Left	23.77	26.79
41-41	30	60+50	DFT-16QAM	M	Inner_1RB_Right	23.81	26.83
41-41	30	60+50	DFT-16QAM	M	Outer_Full	23	26.02
41-41	30	60+50	DFT-64QAM	M	Inner_1RB_Left	21.95	24.97
41-41	30	60+50	DFT-64QAM	M	Inner_1RB_Right	21.97	24.99
41-41	30	60+50	DFT-64QAM	M	Outer_Full	22.53	25.55
41-41	30	60+50	DFT-256QAM	M	Inner_1RB_Left	20.9	23.92
41-41	30	60+50	DFT-256QAM	M	Inner_1RB_Right	20.93	23.95
41-41	30	60+50	DFT-256QAM	M	Outer_Full	20.51	23.53
41-41	30	60+50	DFT-QPSK	H	Inner_1RB_Left	24.81	27.83
41-41	30	60+50	DFT-QPSK	H	Inner_1RB_Right	24.78	27.8
41-41	30	60+50	DFT-QPSK	H	Outer_Full	24.15	27.17
41-41	30	60+50	DFT-16QAM	H	Inner_1RB_Left	23.87	26.89
41-41	30	60+50	DFT-16QAM	H	Inner_1RB_Right	23.87	26.89
41-41	30	60+50	DFT-16QAM	H	Outer_Full	23.17	26.19
41-41	30	60+50	DFT-64QAM	H	Inner_1RB_Left	22.15	25.17
41-41	30	60+50	DFT-64QAM	H	Inner_1RB_Right	22.02	25.04
41-41	30	60+50	DFT-64QAM	H	Outer_Full	21.6	24.62
41-41	30	60+50	DFT-256QAM	H	Inner_1RB_Left	20.89	23.91
41-41	30	60+50	DFT-256QAM	H	Inner_1RB_Right	20.91	23.93
41-41	30	60+50	DFT-256QAM	H	Outer_Full	20.49	23.51

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	60+60	DFT-QPSK	L	Inner_1RB_Left	24.34	27.36
41-41	30	60+60	DFT-QPSK	L	Inner_1RB_Right	24.51	27.53
41-41	30	60+60	DFT-QPSK	L	Outer_Full	23.62	26.64
41-41	30	60+60	DFT-16QAM	L	Inner_1RB_Left	23.31	26.33
41-41	30	60+60	DFT-16QAM	L	Inner_1RB_Right	23.5	26.52
41-41	30	60+60	DFT-16QAM	L	Outer_Full	22.58	25.6
41-41	30	60+60	DFT-64QAM	L	Inner_1RB_Left	22.58	25.6
41-41	30	60+60	DFT-64QAM	L	Inner_1RB_Right	22.67	25.69
41-41	30	60+60	DFT-64QAM	L	Outer_Full	22.12	25.14
41-41	30	60+60	DFT-256QAM	L	Inner_1RB_Left	20.45	23.47
41-41	30	60+60	DFT-256QAM	L	Inner_1RB_Right	20.59	23.61
41-41	30	60+60	DFT-256QAM	L	Outer_Full	20.14	23.16
41-41	30	60+60	DFT-QPSK	M	Inner_1RB_Left	24.75	27.77
41-41	30	60+60	DFT-QPSK	M	Inner_1RB_Right	24.89	27.91
41-41	30	60+60	DFT-QPSK	M	Outer_Full	24.13	27.15
41-41	30	60+60	DFT-16QAM	M	Inner_1RB_Left	23.86	26.88
41-41	30	60+60	DFT-16QAM	M	Inner_1RB_Right	24	27.02
41-41	30	60+60	DFT-16QAM	M	Outer_Full	23.13	26.15
41-41	30	60+60	DFT-64QAM	M	Inner_1RB_Left	22.1	25.12
41-41	30	60+60	DFT-64QAM	M	Inner_1RB_Right	22.17	25.19
41-41	30	60+60	DFT-64QAM	M	Outer_Full	22.67	25.69
41-41	30	60+60	DFT-256QAM	M	Inner_1RB_Left	20.81	23.83
41-41	30	60+60	DFT-256QAM	M	Inner_1RB_Right	20.96	23.98
41-41	30	60+60	DFT-256QAM	M	Outer_Full	20.54	23.56
41-41	30	60+60	DFT-QPSK	H	Inner_1RB_Left	24.77	27.79
41-41	30	60+60	DFT-QPSK	H	Inner_1RB_Right	24.87	27.89
41-41	30	60+60	DFT-QPSK	H	Outer_Full	24.17	27.19
41-41	30	60+60	DFT-16QAM	H	Inner_1RB_Left	23.87	26.89
41-41	30	60+60	DFT-16QAM	H	Inner_1RB_Right	23.95	26.97
41-41	30	60+60	DFT-16QAM	H	Outer_Full	23.18	26.2
41-41	30	60+60	DFT-64QAM	H	Inner_1RB_Left	22.08	25.1
41-41	30	60+60	DFT-64QAM	H	Inner_1RB_Right	22.22	25.24
41-41	30	60+60	DFT-64QAM	H	Outer_Full	22.71	25.73
41-41	30	60+60	DFT-256QAM	H	Inner_1RB_Left	20.89	23.91
41-41	30	60+60	DFT-256QAM	H	Inner_1RB_Right	21.01	24.03
41-41	30	60+60	DFT-256QAM	H	Outer_Full	20.56	23.58

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	80+40	DFT-QPSK	L	Inner_1RB_Left	24.35	27.37
41-41	30	80+40	DFT-QPSK	L	Inner_1RB_Right	24.59	27.61
41-41	30	80+40	DFT-QPSK	L	Outer_Full	23.8	26.82
41-41	30	80+40	DFT-16QAM	L	Inner_1RB_Left	23.53	26.55
41-41	30	80+40	DFT-16QAM	L	Inner_1RB_Right	23.75	26.77
41-41	30	80+40	DFT-16QAM	L	Outer_Full	22.65	25.67
41-41	30	80+40	DFT-64QAM	L	Inner_1RB_Left	21.55	24.57
41-41	30	80+40	DFT-64QAM	L	Inner_1RB_Right	21.93	24.95
41-41	30	80+40	DFT-64QAM	L	Outer_Full	22.33	25.35
41-41	30	80+40	DFT-256QAM	L	Inner_1RB_Left	20.43	23.45
41-41	30	80+40	DFT-256QAM	L	Inner_1RB_Right	20.68	23.7
41-41	30	80+40	DFT-256QAM	L	Outer_Full	20.21	23.23
41-41	30	80+40	DFT-QPSK	M	Inner_1RB_Left	24.72	27.74
41-41	30	80+40	DFT-QPSK	M	Inner_1RB_Right	24.97	27.99
41-41	30	80+40	DFT-QPSK	M	Outer_Full	24.18	27.2
41-41	30	80+40	DFT-16QAM	M	Inner_1RB_Left	23.86	26.88
41-41	30	80+40	DFT-16QAM	M	Inner_1RB_Right	24.14	27.16
41-41	30	80+40	DFT-16QAM	M	Outer_Full	23.02	26.04
41-41	30	80+40	DFT-64QAM	M	Inner_1RB_Left	21.88	24.9
41-41	30	80+40	DFT-64QAM	M	Inner_1RB_Right	22.24	25.26
41-41	30	80+40	DFT-64QAM	M	Outer_Full	22.56	25.58
41-41	30	80+40	DFT-256QAM	M	Inner_1RB_Left	20.79	23.81
41-41	30	80+40	DFT-256QAM	M	Inner_1RB_Right	21.18	24.2
41-41	30	80+40	DFT-256QAM	M	Outer_Full	20.76	23.78
41-41	30	80+40	DFT-QPSK	H	Inner_1RB_Left	24.77	27.79
41-41	30	80+40	DFT-QPSK	H	Inner_1RB_Right	24.9	27.92
41-41	30	80+40	DFT-QPSK	H	Outer_Full	24.09	27.11
41-41	30	80+40	DFT-16QAM	H	Inner_1RB_Left	23.76	26.78
41-41	30	80+40	DFT-16QAM	H	Inner_1RB_Right	23.82	26.84
41-41	30	80+40	DFT-16QAM	H	Outer_Full	23.1	26.12
41-41	30	80+40	DFT-64QAM	H	Inner_1RB_Left	21.94	24.96
41-41	30	80+40	DFT-64QAM	H	Inner_1RB_Right	22.17	25.19
41-41	30	80+40	DFT-64QAM	H	Outer_Full	22.75	25.77
41-41	30	80+40	DFT-256QAM	H	Inner_1RB_Left	20.84	23.86
41-41	30	80+40	DFT-256QAM	H	Inner_1RB_Right	20.97	23.99
41-41	30	80+40	DFT-256QAM	H	Outer_Full	20.75	23.77

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	80+50	DFT-QPSK	L	Inner_1RB_Left	24.54	27.56
41-41	30	80+50	DFT-QPSK	L	Inner_1RB_Right	24.82	27.84
41-41	30	80+50	DFT-QPSK	L	Outer_Full	23.78	26.8
41-41	30	80+50	DFT-16QAM	L	Inner_1RB_Left	23.58	26.6
41-41	30	80+50	DFT-16QAM	L	Inner_1RB_Right	23.76	26.78
41-41	30	80+50	DFT-16QAM	L	Outer_Full	22.82	25.84
41-41	30	80+50	DFT-64QAM	L	Inner_1RB_Left	21.74	24.76
41-41	30	80+50	DFT-64QAM	L	Inner_1RB_Right	22.06	25.08
41-41	30	80+50	DFT-64QAM	L	Outer_Full	22.35	25.37
41-41	30	80+50	DFT-256QAM	L	Inner_1RB_Left	20.63	23.65
41-41	30	80+50	DFT-256QAM	L	Inner_1RB_Right	20.96	23.98
41-41	30	80+50	DFT-256QAM	L	Outer_Full	20.34	23.36
41-41	30	80+50	DFT-QPSK	M	Inner_1RB_Left	24.76	27.78
41-41	30	80+50	DFT-QPSK	M	Inner_1RB_Right	24.98	28
41-41	30	80+50	DFT-QPSK	M	Outer_Full	24.07	27.09
41-41	30	80+50	DFT-16QAM	M	Inner_1RB_Left	23.75	26.77
41-41	30	80+50	DFT-16QAM	M	Inner_1RB_Right	23.94	26.96
41-41	30	80+50	DFT-16QAM	M	Outer_Full	23.12	26.14
41-41	30	80+50	DFT-64QAM	M	Inner_1RB_Left	22	25.02
41-41	30	80+50	DFT-64QAM	M	Inner_1RB_Right	22.19	25.21
41-41	30	80+50	DFT-64QAM	M	Outer_Full	22.64	25.66
41-41	30	80+50	DFT-256QAM	M	Inner_1RB_Left	20.88	23.9
41-41	30	80+50	DFT-256QAM	M	Inner_1RB_Right	21.06	24.08
41-41	30	80+50	DFT-256QAM	M	Outer_Full	20.62	23.64
41-41	30	80+50	DFT-QPSK	H	Inner_1RB_Left	24.85	27.87
41-41	30	80+50	DFT-QPSK	H	Inner_1RB_Right	24.95	27.97
41-41	30	80+50	DFT-QPSK	H	Outer_Full	24.11	27.13
41-41	30	80+50	DFT-16QAM	H	Inner_1RB_Left	23.83	26.85
41-41	30	80+50	DFT-16QAM	H	Inner_1RB_Right	23.92	26.94
41-41	30	80+50	DFT-16QAM	H	Outer_Full	23.19	26.21
41-41	30	80+50	DFT-64QAM	H	Inner_1RB_Left	22.06	25.08
41-41	30	80+50	DFT-64QAM	H	Inner_1RB_Right	22.26	25.28
41-41	30	80+50	DFT-64QAM	H	Outer_Full	22.75	25.77
41-41	30	80+50	DFT-256QAM	H	Inner_1RB_Left	20.97	23.99
41-41	30	80+50	DFT-256QAM	H	Inner_1RB_Right	21.09	24.11
41-41	30	80+50	DFT-256QAM	H	Outer_Full	20.61	23.63

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	80+60	DFT-QPSK	L	Inner_1RB_Left	23.91	26.93
41-41	30	80+60	DFT-QPSK	L	Inner_1RB_Right	24.28	27.3
41-41	30	80+60	DFT-QPSK	L	Outer_Full	23.51	26.53
41-41	30	80+60	DFT-16QAM	L	Inner_1RB_Left	22.83	25.85
41-41	30	80+60	DFT-16QAM	L	Inner_1RB_Right	23.19	26.21
41-41	30	80+60	DFT-16QAM	L	Outer_Full	22.54	25.56
41-41	30	80+60	DFT-64QAM	L	Inner_1RB_Left	21.04	24.06
41-41	30	80+60	DFT-64QAM	L	Inner_1RB_Right	21.43	24.45
41-41	30	80+60	DFT-64QAM	L	Outer_Full	22.03	25.05
41-41	30	80+60	DFT-256QAM	L	Inner_1RB_Left	20.02	23.04
41-41	30	80+60	DFT-256QAM	L	Inner_1RB_Right	19.88	22.9
41-41	30	80+60	DFT-256QAM	L	Outer_Full	19.67	22.69
41-41	30	80+60	DFT-QPSK	M	Inner_1RB_Left	24.05	27.07
41-41	30	80+60	DFT-QPSK	M	Inner_1RB_Right	24.36	27.38
41-41	30	80+60	DFT-QPSK	M	Outer_Full	23.97	26.99
41-41	30	80+60	DFT-16QAM	M	Inner_1RB_Left	23.1	26.12
41-41	30	80+60	DFT-16QAM	M	Inner_1RB_Right	23.35	26.37
41-41	30	80+60	DFT-16QAM	M	Outer_Full	22.89	25.91
41-41	30	80+60	DFT-64QAM	M	Inner_1RB_Left	21.24	24.26
41-41	30	80+60	DFT-64QAM	M	Inner_1RB_Right	21.46	24.48
41-41	30	80+60	DFT-64QAM	M	Outer_Full	22.4	25.42
41-41	30	80+60	DFT-256QAM	M	Inner_1RB_Left	20.3	23.32
41-41	30	80+60	DFT-256QAM	M	Inner_1RB_Right	20.38	23.4
41-41	30	80+60	DFT-256QAM	M	Outer_Full	20.4	23.42
41-41	30	80+60	DFT-QPSK	H	Inner_1RB_Left	24.28	27.3
41-41	30	80+60	DFT-QPSK	H	Inner_1RB_Right	24.31	27.33
41-41	30	80+60	DFT-QPSK	H	Outer_Full	23.83	26.85
41-41	30	80+60	DFT-16QAM	H	Inner_1RB_Left	23.25	26.27
41-41	30	80+60	DFT-16QAM	H	Inner_1RB_Right	23.22	26.24
41-41	30	80+60	DFT-16QAM	H	Outer_Full	22.84	25.86
41-41	30	80+60	DFT-64QAM	H	Inner_1RB_Left	21.45	24.47
41-41	30	80+60	DFT-64QAM	H	Inner_1RB_Right	21.5	24.52
41-41	30	80+60	DFT-64QAM	H	Outer_Full	22.32	25.34
41-41	30	80+60	DFT-256QAM	H	Inner_1RB_Left	20.39	23.41
41-41	30	80+60	DFT-256QAM	H	Inner_1RB_Right	20.45	23.47
41-41	30	80+60	DFT-256QAM	H	Outer_Full	20.36	23.38

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	80+80	DFT-QPSK	L	Inner_1RB_Left	24.5	27.52
41-41	30	80+80	DFT-QPSK	L	Inner_1RB_Right	24.97	27.99
41-41	30	80+80	DFT-QPSK	L	Outer_Full	23.85	26.87
41-41	30	80+80	DFT-16QAM	L	Inner_1RB_Left	23.49	26.51
41-41	30	80+80	DFT-16QAM	L	Inner_1RB_Right	23.95	26.97
41-41	30	80+80	DFT-16QAM	L	Outer_Full	22.84	25.86
41-41	30	80+80	DFT-64QAM	L	Inner_1RB_Left	21.71	24.73
41-41	30	80+80	DFT-64QAM	L	Inner_1RB_Right	22.17	25.19
41-41	30	80+80	DFT-64QAM	L	Outer_Full	22.46	25.48
41-41	30	80+80	DFT-256QAM	L	Inner_1RB_Left	20.6	23.62
41-41	30	80+80	DFT-256QAM	L	Inner_1RB_Right	21.08	24.1
41-41	30	80+80	DFT-256QAM	L	Outer_Full	20.47	23.49
41-41	30	80+80	DFT-QPSK	M	Inner_1RB_Left	24.68	27.7
41-41	30	80+80	DFT-QPSK	M	Inner_1RB_Right	24.98	28
41-41	30	80+80	DFT-QPSK	M	Outer_Full	24.08	27.1
41-41	30	80+80	DFT-16QAM	M	Inner_1RB_Left	23.66	26.68
41-41	30	80+80	DFT-16QAM	M	Inner_1RB_Right	23.94	26.96
41-41	30	80+80	DFT-16QAM	M	Outer_Full	23.07	26.09
41-41	30	80+80	DFT-64QAM	M	Inner_1RB_Left	21.84	24.86
41-41	30	80+80	DFT-64QAM	M	Inner_1RB_Right	22.18	25.2
41-41	30	80+80	DFT-64QAM	M	Outer_Full	22.63	25.65
41-41	30	80+80	DFT-256QAM	M	Inner_1RB_Left	20.79	23.81
41-41	30	80+80	DFT-256QAM	M	Inner_1RB_Right	21.13	24.15
41-41	30	80+80	DFT-256QAM	M	Outer_Full	20.61	23.63
41-41	30	80+80	DFT-QPSK	H	Inner_1RB_Left	24.86	27.88
41-41	30	80+80	DFT-QPSK	H	Inner_1RB_Right	24.93	27.95
41-41	30	80+80	DFT-QPSK	H	Outer_Full	24.07	27.09
41-41	30	80+80	DFT-16QAM	H	Inner_1RB_Left	23.79	26.81
41-41	30	80+80	DFT-16QAM	H	Inner_1RB_Right	23.92	26.94
41-41	30	80+80	DFT-16QAM	H	Outer_Full	23.05	26.07
41-41	30	80+80	DFT-64QAM	H	Inner_1RB_Left	22.01	25.03
41-41	30	80+80	DFT-64QAM	H	Inner_1RB_Right	22.21	25.23
41-41	30	80+80	DFT-64QAM	H	Outer_Full	22.69	25.71
41-41	30	80+80	DFT-256QAM	H	Inner_1RB_Left	20.96	23.98
41-41	30	80+80	DFT-256QAM	H	Inner_1RB_Right	21.11	24.13
41-41	30	80+80	DFT-256QAM	H	Outer_Full	20.68	23.7

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	80+100	DFT-QPSK	L	Inner_1RB_Left	24.2	27.22
41-41	30	80+100	DFT-QPSK	L	Inner_1RB_Right	25.14	28.16
41-41	30	80+100	DFT-QPSK	L	Outer_Full	23.97	26.99
41-41	30	80+100	DFT-16QAM	L	Inner_1RB_Left	23.69	26.71
41-41	30	80+100	DFT-16QAM	L	Inner_1RB_Right	24.2	27.22
41-41	30	80+100	DFT-16QAM	L	Outer_Full	21.41	24.43
41-41	30	80+100	DFT-64QAM	L	Inner_1RB_Left	21.32	24.34
41-41	30	80+100	DFT-64QAM	L	Inner_1RB_Right	22.44	25.46
41-41	30	80+100	DFT-64QAM	L	Outer_Full	21.58	24.6
41-41	30	80+100	DFT-256QAM	L	Inner_1RB_Left	20.36	23.38
41-41	30	80+100	DFT-256QAM	L	Inner_1RB_Right	20.8	23.82
41-41	30	80+100	DFT-256QAM	L	Outer_Full	20.42	23.44
41-41	30	80+100	DFT-QPSK	M	Inner_1RB_Left	24.7	27.72
41-41	30	80+100	DFT-QPSK	M	Inner_1RB_Right	25.05	28.07
41-41	30	80+100	DFT-QPSK	M	Outer_Full	24.09	27.11
41-41	30	80+100	DFT-16QAM	M	Inner_1RB_Left	23.65	26.67
41-41	30	80+100	DFT-16QAM	M	Inner_1RB_Right	24.05	27.07
41-41	30	80+100	DFT-16QAM	M	Outer_Full	23.19	26.21
41-41	30	80+100	DFT-64QAM	M	Inner_1RB_Left	21.83	24.85
41-41	30	80+100	DFT-64QAM	M	Inner_1RB_Right	22.25	25.27
41-41	30	80+100	DFT-64QAM	M	Outer_Full	22.67	25.69
41-41	30	80+100	DFT-256QAM	M	Inner_1RB_Left	20.84	23.86
41-41	30	80+100	DFT-256QAM	M	Inner_1RB_Right	21.23	24.25
41-41	30	80+100	DFT-256QAM	M	Outer_Full	20.7	23.72
41-41	30	80+100	DFT-QPSK	H	Inner_1RB_Left	24.88	27.9
41-41	30	80+100	DFT-QPSK	H	Inner_1RB_Right	25.04	28.06
41-41	30	80+100	DFT-QPSK	H	Outer_Full	24.07	27.09
41-41	30	80+100	DFT-16QAM	H	Inner_1RB_Left	23.98	27
41-41	30	80+100	DFT-16QAM	H	Inner_1RB_Right	24.05	27.07
41-41	30	80+100	DFT-16QAM	H	Outer_Full	23.17	26.19
41-41	30	80+100	DFT-64QAM	H	Inner_1RB_Left	22.21	25.23
41-41	30	80+100	DFT-64QAM	H	Inner_1RB_Right	22.42	25.44
41-41	30	80+100	DFT-64QAM	H	Outer_Full	22.54	25.56
41-41	30	80+100	DFT-256QAM	H	Inner_1RB_Left	20.98	24
41-41	30	80+100	DFT-256QAM	H	Inner_1RB_Right	21.2	24.22
41-41	30	80+100	DFT-256QAM	H	Outer_Full	20.56	23.58

Note:
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2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	100+40	DFT-QPSK	L	Inner_1RB_Left	24.17	27.19
41-41	30	100+40	DFT-QPSK	L	Inner_1RB_Right	25.11	28.13
41-41	30	100+40	DFT-QPSK	L	Outer_Full	23.95	26.97
41-41	30	100+40	DFT-16QAM	L	Inner_1RB_Left	23.66	26.68
41-41	30	100+40	DFT-16QAM	L	Inner_1RB_Right	24.17	27.19
41-41	30	100+40	DFT-16QAM	L	Outer_Full	21.39	24.41
41-41	30	100+40	DFT-64QAM	L	Inner_1RB_Left	21.3	24.32
41-41	30	100+40	DFT-64QAM	L	Inner_1RB_Right	22.42	25.44
41-41	30	100+40	DFT-64QAM	L	Outer_Full	21.56	24.58
41-41	30	100+40	DFT-256QAM	L	Inner_1RB_Left	20.34	23.36
41-41	30	100+40	DFT-256QAM	L	Inner_1RB_Right	20.78	23.8
41-41	30	100+40	DFT-256QAM	L	Outer_Full	20.4	23.42
41-41	30	100+40	DFT-QPSK	M	Inner_1RB_Left	24.67	27.69
41-41	30	100+40	DFT-QPSK	M	Inner_1RB_Right	25.03	28.05
41-41	30	100+40	DFT-QPSK	M	Outer_Full	24.07	27.09
41-41	30	100+40	DFT-16QAM	M	Inner_1RB_Left	23.63	26.65
41-41	30	100+40	DFT-16QAM	M	Inner_1RB_Right	24.03	27.05
41-41	30	100+40	DFT-16QAM	M	Outer_Full	23.17	26.19
41-41	30	100+40	DFT-64QAM	M	Inner_1RB_Left	21.81	24.83
41-41	30	100+40	DFT-64QAM	M	Inner_1RB_Right	22.23	25.25
41-41	30	100+40	DFT-64QAM	M	Outer_Full	22.65	25.67
41-41	30	100+40	DFT-256QAM	M	Inner_1RB_Left	20.82	23.84
41-41	30	100+40	DFT-256QAM	M	Inner_1RB_Right	21.21	24.23
41-41	30	100+40	DFT-256QAM	M	Outer_Full	20.68	23.7
41-41	30	100+40	DFT-QPSK	H	Inner_1RB_Left	24.86	27.88
41-41	30	100+40	DFT-QPSK	H	Inner_1RB_Right	25.02	28.04
41-41	30	100+40	DFT-QPSK	H	Outer_Full	24.05	27.07
41-41	30	100+40	DFT-16QAM	H	Inner_1RB_Left	23.96	26.98
41-41	30	100+40	DFT-16QAM	H	Inner_1RB_Right	24.03	27.05
41-41	30	100+40	DFT-16QAM	H	Outer_Full	23.15	26.17
41-41	30	100+40	DFT-64QAM	H	Inner_1RB_Left	22.19	25.21
41-41	30	100+40	DFT-64QAM	H	Inner_1RB_Right	22.4	25.42
41-41	30	100+40	DFT-64QAM	H	Outer_Full	22.52	25.54
41-41	30	100+40	DFT-256QAM	H	Inner_1RB_Left	20.96	23.98
41-41	30	100+40	DFT-256QAM	H	Inner_1RB_Right	21.18	24.2
41-41	30	100+40	DFT-256QAM	H	Outer_Full	20.54	23.56

Note:
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Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	100+50	DFT-QPSK	L	Inner_1RB_Left	24.4	27.42
41-41	30	100+50	DFT-QPSK	L	Inner_1RB_Right	24.43	27.45
41-41	30	100+50	DFT-QPSK	L	Outer_Full	23.61	26.63
41-41	30	100+50	DFT-16QAM	L	Inner_1RB_Left	23.32	26.34
41-41	30	100+50	DFT-16QAM	L	Inner_1RB_Right	23.39	26.41
41-41	30	100+50	DFT-16QAM	L	Outer_Full	22.62	25.64
41-41	30	100+50	DFT-64QAM	L	Inner_1RB_Left	21.55	24.57
41-41	30	100+50	DFT-64QAM	L	Inner_1RB_Right	21.59	24.61
41-41	30	100+50	DFT-64QAM	L	Outer_Full	22.18	25.2
41-41	30	100+50	DFT-256QAM	L	Inner_1RB_Left	20.49	23.51
41-41	30	100+50	DFT-256QAM	L	Inner_1RB_Right	20.5	23.52
41-41	30	100+50	DFT-256QAM	L	Outer_Full	20.71	23.73
41-41	30	100+50	DFT-QPSK	M	Inner_1RB_Left	24.44	27.46
41-41	30	100+50	DFT-QPSK	M	Inner_1RB_Right	24.43	27.45
41-41	30	100+50	DFT-QPSK	M	Outer_Full	23.71	26.73
41-41	30	100+50	DFT-16QAM	M	Inner_1RB_Left	23.47	26.49
41-41	30	100+50	DFT-16QAM	M	Inner_1RB_Right	23.49	26.51
41-41	30	100+50	DFT-16QAM	M	Outer_Full	22.74	25.76
41-41	30	100+50	DFT-64QAM	M	Inner_1RB_Left	21.7	24.72
41-41	30	100+50	DFT-64QAM	M	Inner_1RB_Right	21.72	24.74
41-41	30	100+50	DFT-64QAM	M	Outer_Full	22.24	25.26
41-41	30	100+50	DFT-256QAM	M	Inner_1RB_Left	20.65	23.67
41-41	30	100+50	DFT-256QAM	M	Inner_1RB_Right	20.63	23.65
41-41	30	100+50	DFT-256QAM	M	Outer_Full	20.25	23.27
41-41	30	100+50	DFT-QPSK	H	Inner_1RB_Left	24.25	27.27
41-41	30	100+50	DFT-QPSK	H	Inner_1RB_Right	24.31	27.33
41-41	30	100+50	DFT-QPSK	H	Outer_Full	23.44	26.46
41-41	30	100+50	DFT-16QAM	H	Inner_1RB_Left	23.24	26.26
41-41	30	100+50	DFT-16QAM	H	Inner_1RB_Right	23.31	26.33
41-41	30	100+50	DFT-16QAM	H	Outer_Full	22.5	25.52
41-41	30	100+50	DFT-64QAM	H	Inner_1RB_Left	21.43	24.45
41-41	30	100+50	DFT-64QAM	H	Inner_1RB_Right	21.5	24.52
41-41	30	100+50	DFT-64QAM	H	Outer_Full	22	25.02
41-41	30	100+50	DFT-256QAM	H	Inner_1RB_Left	20.36	23.38
41-41	30	100+50	DFT-256QAM	H	Inner_1RB_Right	20.43	23.45
41-41	30	100+50	DFT-256QAM	H	Outer_Full	19.99	23.01

Note:
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Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	100+60	DFT-QPSK	L	Inner_1RB_Left	24.42	27.44
41-41	30	100+60	DFT-QPSK	L	Inner_1RB_Right	24.57	27.59
41-41	30	100+60	DFT-QPSK	L	Outer_Full	23.6	26.62
41-41	30	100+60	DFT-16QAM	L	Inner_1RB_Left	23.46	26.48
41-41	30	100+60	DFT-16QAM	L	Inner_1RB_Right	23.57	26.59
41-41	30	100+60	DFT-16QAM	L	Outer_Full	22.69	25.71
41-41	30	100+60	DFT-64QAM	L	Inner_1RB_Left	21.63	24.65
41-41	30	100+60	DFT-64QAM	L	Inner_1RB_Right	21.77	24.79
41-41	30	100+60	DFT-64QAM	L	Outer_Full	22.19	25.21
41-41	30	100+60	DFT-256QAM	L	Inner_1RB_Left	20.5	23.52
41-41	30	100+60	DFT-256QAM	L	Inner_1RB_Right	20.59	23.61
41-41	30	100+60	DFT-256QAM	L	Outer_Full	20.2	23.22
41-41	30	100+60	DFT-QPSK	M	Inner_1RB_Left	24.44	27.46
41-41	30	100+60	DFT-QPSK	M	Inner_1RB_Right	24.49	27.51
41-41	30	100+60	DFT-QPSK	M	Outer_Full	23.65	26.67
41-41	30	100+60	DFT-16QAM	M	Inner_1RB_Left	23.43	26.45
41-41	30	100+60	DFT-16QAM	M	Inner_1RB_Right	23.48	26.5
41-41	30	100+60	DFT-16QAM	M	Outer_Full	22.68	25.7
41-41	30	100+60	DFT-64QAM	M	Inner_1RB_Left	21.62	24.64
41-41	30	100+60	DFT-64QAM	M	Inner_1RB_Right	21.66	24.68
41-41	30	100+60	DFT-64QAM	M	Outer_Full	22.28	25.3
41-41	30	100+60	DFT-256QAM	M	Inner_1RB_Left	20.53	23.55
41-41	30	100+60	DFT-256QAM	M	Inner_1RB_Right	20.42	23.44
41-41	30	100+60	DFT-256QAM	M	Outer_Full	20.33	23.35
41-41	30	100+60	DFT-QPSK	H	Inner_1RB_Left	24.28	27.3
41-41	30	100+60	DFT-QPSK	H	Inner_1RB_Right	24.41	27.43
41-41	30	100+60	DFT-QPSK	H	Outer_Full	23.45	26.47
41-41	30	100+60	DFT-16QAM	H	Inner_1RB_Left	23.23	26.25
41-41	30	100+60	DFT-16QAM	H	Inner_1RB_Right	23.38	26.4
41-41	30	100+60	DFT-16QAM	H	Outer_Full	22.49	25.51
41-41	30	100+60	DFT-64QAM	H	Inner_1RB_Left	21.42	24.44
41-41	30	100+60	DFT-64QAM	H	Inner_1RB_Right	21.59	24.61
41-41	30	100+60	DFT-64QAM	H	Outer_Full	22.07	25.09
41-41	30	100+60	DFT-256QAM	H	Inner_1RB_Left	20.34	23.36
41-41	30	100+60	DFT-256QAM	H	Inner_1RB_Right	19.53	22.55
41-41	30	100+60	DFT-256QAM	H	Outer_Full	20.12	23.14

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	30	100+80	DFT-QPSK	L	Inner_1RB_Left	24.38	27.4
41-41	30	100+80	DFT-QPSK	L	Inner_1RB_Right	24.56	27.58
41-41	30	100+80	DFT-QPSK	L	Outer_Full	23.64	26.66
41-41	30	100+80	DFT-16QAM	L	Inner_1RB_Left	23.28	26.3
41-41	30	100+80	DFT-16QAM	L	Inner_1RB_Right	23.48	26.5
41-41	30	100+80	DFT-16QAM	L	Outer_Full	22.69	25.71
41-41	30	100+80	DFT-64QAM	L	Inner_1RB_Left	21.53	24.55
41-41	30	100+80	DFT-64QAM	L	Inner_1RB_Right	21.75	24.77
41-41	30	100+80	DFT-64QAM	L	Outer_Full	22.18	25.2
41-41	30	100+80	DFT-256QAM	L	Inner_1RB_Left	20.45	23.47
41-41	30	100+80	DFT-256QAM	L	Inner_1RB_Right	20.73	23.75
41-41	30	100+80	DFT-256QAM	L	Outer_Full	20.24	23.26
41-41	30	100+80	DFT-QPSK	M	Inner_1RB_Left	24.48	27.5
41-41	30	100+80	DFT-QPSK	M	Inner_1RB_Right	24.51	27.53
41-41	30	100+80	DFT-QPSK	M	Outer_Full	23.66	26.68
41-41	30	100+80	DFT-16QAM	M	Inner_1RB_Left	23.46	26.48
41-41	30	100+80	DFT-16QAM	M	Inner_1RB_Right	23.5	26.52
41-41	30	100+80	DFT-16QAM	M	Outer_Full	22.7	25.72
41-41	30	100+80	DFT-64QAM	M	Inner_1RB_Left	21.6	24.62
41-41	30	100+80	DFT-64QAM	M	Inner_1RB_Right	21.75	24.77
41-41	30	100+80	DFT-64QAM	M	Outer_Full	22.24	25.26
41-41	30	100+80	DFT-256QAM	M	Inner_1RB_Left	20.54	23.56
41-41	30	100+80	DFT-256QAM	M	Inner_1RB_Right	20.61	23.63
41-41	30	100+80	DFT-256QAM	M	Outer_Full	20.25	23.27
41-41	30	100+80	DFT-QPSK	H	Inner_1RB_Left	24.31	27.33
41-41	30	100+80	DFT-QPSK	H	Inner_1RB_Right	24.49	27.51
41-41	30	100+80	DFT-QPSK	H	Outer_Full	23.52	26.54
41-41	30	100+80	DFT-16QAM	H	Inner_1RB_Left	23.34	26.36
41-41	30	100+80	DFT-16QAM	H	Inner_1RB_Right	23.45	26.47
41-41	30	100+80	DFT-16QAM	H	Outer_Full	22.5	25.52
41-41	30	100+80	DFT-64QAM	H	Inner_1RB_Left	21.56	24.58
41-41	30	100+80	DFT-64QAM	H	Inner_1RB_Right	20.14	23.16
41-41	30	100+80	DFT-64QAM	H	Outer_Full	22.14	25.16
41-41	30	100+80	DFT-256QAM	H	Inner_1RB_Left	20.44	23.46
41-41	30	100+80	DFT-256QAM	H	Inner_1RB_Right	20.56	23.58
41-41	30	100+80	DFT-256QAM	H	Outer_Full	20.11	23.13

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

Band	SCS	Bandwidth	Modulation	Channel	RB Configuration	Conducted Output Power (dBm)	EIRP Power (dBm)
41-41	15	100+80	DFT-QPSK	L	Inner_1RB_Left	24.45	27.47
41-41	15	100+80	DFT-QPSK	L	Inner_1RB_Right	24.64	27.66
41-41	15	100+80	DFT-QPSK	L	Outer_Full	23.67	26.69
41-41	15	100+80	DFT-16QAM	L	Inner_1RB_Left	23.43	26.45
41-41	15	100+80	DFT-16QAM	L	Inner_1RB_Right	23.61	26.63
41-41	15	100+80	DFT-16QAM	L	Outer_Full	22.71	25.73
41-41	15	100+80	DFT-64QAM	L	Inner_1RB_Left	21.61	24.63
41-41	15	100+80	DFT-64QAM	L	Inner_1RB_Right	21.81	24.83
41-41	15	100+80	DFT-64QAM	L	Outer_Full	22.27	25.29
41-41	15	100+80	DFT-256QAM	L	Inner_1RB_Left	22.3	25.32
41-41	15	100+80	DFT-256QAM	L	Inner_1RB_Right	20.78	23.8
41-41	15	100+80	DFT-256QAM	L	Outer_Full	20.33	23.35
41-41	15	100+80	DFT-QPSK	M	Inner_1RB_Left	24.48	27.5
41-41	15	100+80	DFT-QPSK	M	Inner_1RB_Right	24.59	27.61
41-41	15	100+80	DFT-QPSK	M	Outer_Full	23.76	26.78
41-41	15	100+80	DFT-16QAM	M	Inner_1RB_Left	23.51	26.53
41-41	15	100+80	DFT-16QAM	M	Inner_1RB_Right	23.64	26.66
41-41	15	100+80	DFT-16QAM	M	Outer_Full	22.72	25.74
41-41	15	100+80	DFT-64QAM	M	Inner_1RB_Left	21.61	24.63
41-41	15	100+80	DFT-64QAM	M	Inner_1RB_Right	21.75	24.77
41-41	15	100+80	DFT-64QAM	M	Outer_Full	22.31	25.33
41-41	15	100+80	DFT-256QAM	M	Inner_1RB_Left	20.61	23.63
41-41	15	100+80	DFT-256QAM	M	Inner_1RB_Right	20.7	23.72
41-41	15	100+80	DFT-256QAM	M	Outer_Full	20.26	23.28
41-41	15	100+80	DFT-QPSK	H	Inner_1RB_Left	24.4	27.42
41-41	15	100+80	DFT-QPSK	H	Inner_1RB_Right	24.52	27.54
41-41	15	100+80	DFT-QPSK	H	Outer_Full	23.52	26.54
41-41	15	100+80	DFT-16QAM	H	Inner_1RB_Left	23.4	26.42
41-41	15	100+80	DFT-16QAM	H	Inner_1RB_Right	23.48	26.5
41-41	15	100+80	DFT-16QAM	H	Outer_Full	22.59	25.61
41-41	15	100+80	DFT-64QAM	H	Inner_1RB_Left	21.58	24.6
41-41	15	100+80	DFT-64QAM	H	Inner_1RB_Right	21.71	24.73
41-41	15	100+80	DFT-64QAM	H	Outer_Full	22.07	25.09
41-41	15	100+80	DFT-256QAM	H	Inner_1RB_Left	20.54	23.56
41-41	15	100+80	DFT-256QAM	H	Inner_1RB_Right	20.63	23.65
41-41	15	100+80	DFT-256QAM	H	Outer_Full	20.1	23.12

Note:
1. The conducted output power was copied from the original module report.
2. EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

7.2 Radiated Spurious Emissions below 1GHz

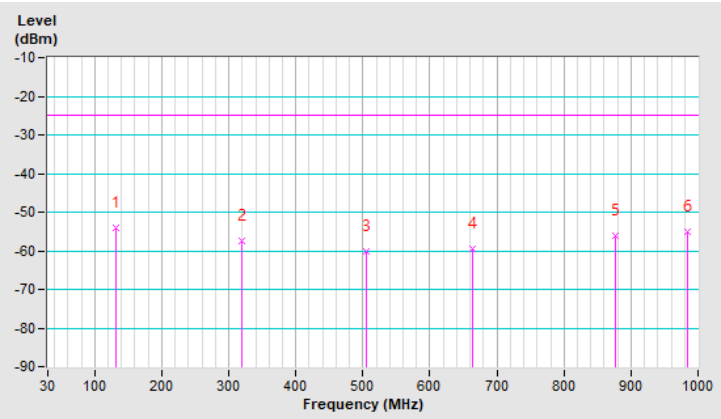
7.2.1 NR n41 (CA n41C)

RF Mode	NR n41 (CA n41C) Channel Bandwidth: 80MHz + 100MHz	**Channel**	CH 507204 (2536.02MHz) + 525180 (2625.90MHz)
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 67% RH
Tested By	Vincent Chen		

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	130.88	-53.94	-25.00	-28.94	2.00 H	213	54.72	-108.66
2	319.06	-57.48	-25.00	-32.48	1.00 H	13	49.07	-106.55
3	504.33	-60.06	-25.00	-35.06	1.50 H	215	41.96	-102.02
4	664.38	-59.34	-25.00	-34.34	1.50 H	188	40.15	-99.49
5	875.84	-55.96	-25.00	-30.96	1.00 H	307	40.64	-96.60
6	983.51	-55.15	-25.00	-30.15	1.00 H	108	40.11	-95.26

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 EIRP levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

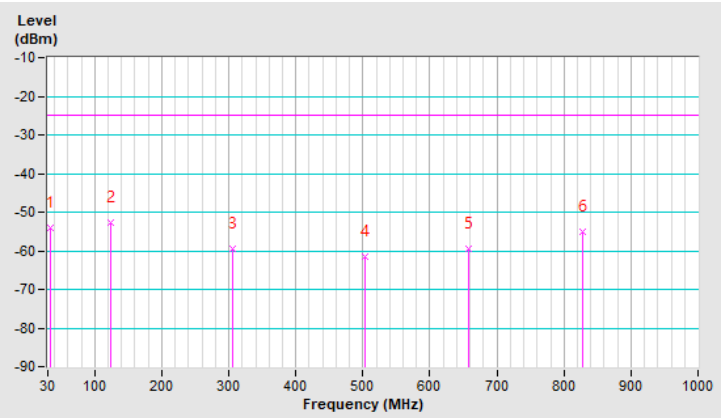


RF Mode	NR n41 (CA n41C) Channel Bandwidth: 80MHz + 100MHz	**Channel**	CH 507204 (2536.02MHz) + 525180 (2625.90MHz)
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 67% RH
Tested By	Vincent Chen		

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	33.88	-53.91	-25.00	-28.91	2.00 V	191	54.09	-108.00
2	**124.09**	**-52.86**	**-25.00**	**-27.86**	**1.00 V**	**90**	**56.35**	**-109.21**
3	305.48	-59.42	-25.00	-34.42	1.50 V	159	47.48	-106.90
4	502.39	-61.54	-25.00	-36.54	1.50 V	266	40.55	-102.09
5	658.56	-59.36	-25.00	-34.36	1.00 V	103	40.23	-99.59
6	827.34	-55.18	-25.00	-30.18	2.00 V	187	41.58	-96.76

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 of frequency range 30 MHz ~ 1 GHz.
5. The EIRP levels were very low against the limit of frequency range 9 kHz ~ 30 MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



7.3 Radiated Spurious Emissions above 1GHz

7.3.1 NR n41 (CA n41C)

RF Mode	NR n41 (CA n41C) Channel Bandwidth: 80MHz + 100MHz	**Channel**	CH 507204 (2536.02MHz) + 525180 (2625.90MHz)
Frequency Range	1 GHz ~ 27 GHz	**Detector Function & Bandwidth**	1 MHz/3 MHz (RMS)
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	20°C, 67% RH
Tested By	Vincent Chen		

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	5072.04	-50.51	-25.00	-25.51	2.41 H	165	53.15	-103.66
2	5251.80	-50.70	-25.00	-25.70	1.96 H	205	53.37	-104.07
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	**5072.04**	**-49.33**	**-25.00**	**-24.33**	**1.67 V**	**252**	**54.33**	**-103.66**
2	5251.80	-49.63	-25.00	-24.63	1.77 V	196	54.44	-104.07

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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