

FCC Test Report (Part 22: FR1 n5A)

Report No.: RFBBQZ-WTW-P20070174-5

FCC ID: PY319400469

Test Model: MR5100

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Test Date: Jul. 07 ~ Jul. 14, 2020

Issued Date: Jul. 14, 2020

Applicant: Netgear, Inc.

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FCC Registration / 788550 / TW0003

Designation Number:



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Release Control Record

Issue No.	Description	Date Issued
RFBBQZ-WTW-P20070174-5	Original release	Jul. 14, 2020

1 Certificate of Conformity

Product: 5G MHS Travel Router

Brand: NETGEAR

Test Model: MR5100

Sample Status: ENGINEERING SAMPLE

Applicant: Netgear, Inc.

Test Date: Jul. 07 ~ Jul. 14, 2020

Standards: FCC Part 22, Subpart H

This report is issued as a supplementary report of RF191031C08-8. This report shall be used combined together with its original report.

Prepared by : Billy Chien , **Date:** Jul. 14, 2020
Polly Chien / Specialist

Approved by : Bruce Chen , **Date:** Jul. 14, 2020
Bruce Chen / Senior Project Engineer

Note: The effective radiated power and radiated spurious emissions test items are performed for the addendum. Refer to original report for the other test data.

2 Summary of Test Results

Applied Standard: FCC Part 22 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 22.913 (a)	Effective radiated power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	N/A	Refer to Note 1
22.913 (d)	Peak To Average Ratio	N/A	Refer to Note 1
2.1055 22.355	Frequency Stability	N/A	Refer to Note 1
2.1049	Occupied Bandwidth	N/A	Refer to Note 1
22.917	Band Edge Measurements	N/A	Refer to Note 1
2.1051 22.917	Conducted Spurious Emissions	N/A	Refer to Note 1
2.1053 22.917	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -34.9dB at 350.10MHz.

N/A: Not Applicable

Note:

1. The effective radiated power and radiated spurious emissions test items are performed for the addendum. Refer to original report for the other test data.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

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

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Dec. 31, 2019	Dec. 30, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 23, 2019	Sep. 22, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSW43	101582	Mar. 31, 2020	Mar. 30, 2021
MXG Vector signal generator Agilent	N5182B	MY53050162	Jan. 14, 2020	Jan. 13, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-158	Nov. 08, 2019	Nov. 07, 2020
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Nov. 11, 2019	Nov. 10, 2020
HORN Antenna ETS	3117	00034128	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 24, 2019	Nov. 23, 2020
Loop Antenna TESEQ	HLA 6121	45745	Jul. 01, 2019	Jun. 30, 2020
			Jul. 06, 2020	Jul. 05, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Jun. 08, 2020	Jun. 07, 2021
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jun. 08, 2020	Jun. 07, 2021
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH4-01	Aug. 20, 2019	Aug. 19, 2020
RF Coaxial Cable EMCI	EMC102-KM-KM-3000	150929	Aug. 20, 2019	Aug. 19, 2020
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Aug. 20, 2019	Aug. 19, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Jun. 08, 2020	Jun. 07, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Jun. 08, 2020	Jun. 07, 2021
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
UXM sub-6G/28G/39G Keysight	E7515B	MY58300759	Apr. 18, 2020	Apr. 17, 2021

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 4.

3 General Information

3.1 General Description of EUT

Product	5G MHS Travel Router			
Brand	NETGEAR			
Test Model	MR5100			
Sample Status	Engineering Sample			
Power Supply Rating	5 or 9Vdc (adapter) 5Vdc (host equipment) 3.85Vdc (battery)			
Modulation Type	QPSK, 16QAM, 64QAM			
Operating Frequency	NR Band 5 (Channel Bandwidth 5MHz)	826.5~846.5MHz		
	NR Band 5 (Channel Bandwidth 10MHz)	829.0~844.0MHz		
	NR Band 5 (Channel Bandwidth 15MHz)	831.5~841.5MHz		
	NR Band 5 (Channel Bandwidth 20MHz)	834.0~839.0MHz		
Max. ERP Power	1RB	QPSK	16QAM	64QAM
	NR Band 5 (Channel Bandwidth 5MHz)	134.896mW (21.3dBm)	123.027mW (20.9dBm)	97.724mW (19.9dBm)
	NR Band 5 (Channel Bandwidth 10MHz)	128.825mW (21.1dBm)	114.815mW (20.6dBm)	95.499mW (19.8dBm)
	NR Band 5 (Channel Bandwidth 15MHz)	134.896mW (21.3dBm)	120.226mW (20.8dBm)	93.325mW (19.7dBm)
	NR Band 5 (Channel Bandwidth 20MHz)	138.038mW (21.4dBm)	125.893mW (21.0dBm)	93.325mW (19.7dBm)
	Full RB	QPSK	16QAM	64QAM
	NR Band 5 (Channel Bandwidth 5MHz)	107.152mW (20.3dBm)	97.724mW (19.9dBm)	77.625mW (18.9dBm)
	NR Band 5 (Channel Bandwidth 10MHz)	107.152mW (20.3dBm)	95.499mW (19.8dBm)	74.131mW (18.7dBm)
	NR Band 5 (Channel Bandwidth 15MHz)	107.152mW (20.3dBm)	95.499mW (19.8dBm)	75.858mW (18.8dBm)
	NR Band 5 (Channel Bandwidth 20MHz)	107.152mW (20.3dBm)	95.499mW (19.8dBm)	74.131mW (18.7dBm)
Emission Designator		QPSK	16QAM	64QAM
	NR Band 5 (Channel Bandwidth 5MHz)	4M49G7D	4M49D7W	4M49D7W
	NR Band 5 (Channel Bandwidth 10MHz)	8M96G7D	8M96D7W	8M95D7W
	NR Band 5 (Channel Bandwidth 15MHz)	13M5G7D	13M5D7W	13M5D7W
	NR Band 5 (Channel Bandwidth 20MHz)	17M9G7D	17M9D7W	17M9D7W
Antenna Type	Refer to note			
Antenna Connector	Refer to note			
Accessory Device	Adapter x1, battery x1			
Cable Supplied	1m shielded USB cable without core (Brand: NIENYI, model: NYS2371-1)			

Note:

1. This report is prepared for FCC class II permissive change. The difference compared with the original report (BV CPS report no.: RF191031C08-8) is adding a WWAN antenna. The effective radiated power and radiated spurious emissions test items are performed for the addendum. Refer to original report for the other test data.
2. The following antennas were provided to the EUT.

Antenna Type	Monopole	
Antenna Connector	TS-9 plugs	
Antenna Gain (dBi)	NR Band 5	0.54

*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.

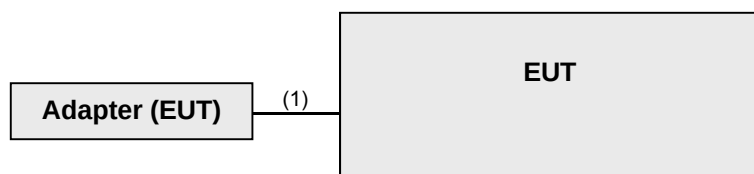
3. The EUT must be supplied with a power adapter or battery as following table:

Items	Brand	Model No.	Spec.
Adapter	NETGEAR	AD2122F20	Input: 100-240Vac~50/60Hz, 0.5A Output: 5Vdc / 2.0A or 9Vdc /1.8A
Battery	NETGEAR	W-20	3.85Vdc, 19.40Wh

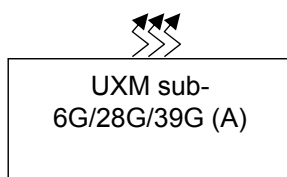
4. The EUT support Bandwidth information

Band	SCS (kHz)	Channel Bandwidth (MHz)			
		5	10	15	20
n2	15	Support	Support	Support	Support
n5	15	Support	Support	Support	Support
n66	15	Support	Support	Support	Support

3.2 Configuration of System under Test



Remote site



3.2.1 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	UXM sub-6G/28G/39G	Keysight	E7515B	MY58300759	NA	-

Note:

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	USB cable	1	1	Y	0	Accessory of EUT

3.3 Test Mode Applicability and Tested Channel Detail

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

NR Band 5

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	165300 to 169300	165300(826.5MHz), 167300(836.5MHz), 169300(846.5MHz)	5MHz	QPSK / 16QAM / 64QAM	1 RB / 0 RB Offset Full RB Offset
		165800 to 168800	165800(829.0MHz), 167300(836.5MHz), 168800(844.0MHz)	10MHz	QPSK / 16QAM / 64QAM	1 RB / 0 RB Offset Full RB Offset
		166300 to 168300	166300(831.5MHz), 167300(836.5MHz), 168300(841.5MHz)	15MHz	QPSK / 16QAM / 64QAM	1 RB / 0 RB Offset Full RB Offset
		166800 to 167800	166800(834.0MHz), 167300(836.5MHz), 167800(839.0MHz)	20MHz	QPSK / 16QAM / 64QAM	1 RB / 0 RB Offset Full RB Offset
-	Radiated Emission Below 1GHz	165300 to 169300	165300(826.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	165300 to 169300	165300(826.5MHz), 167300(836.5MHz), 169300(846.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		165800 to 168800	165800(829.0MHz), 167300(836.5MHz), 168800(844.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
		166800 to 167800	166800(834.0MHz), 167300(836.5MHz), 167800(839.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation. Therefore, only EIRP items had been tested under QPSK, 16QAM and 64QAM mode, the other items were performed under QPSK mode only.

2. For radiated emission (above 1GHz), according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5 MHz & highest channel bandwidth for final test. For radiated emissions (below 1 GHz), select the worst radiated emission channel for final testing.

Test Condition:

Test Item	Environmental Conditions	Input Power (system)	Tested By
ERP	25deg. C, 70%RH	120Vac, 60Hz	Luis Lee
Radiated Emission	25deg. C, 70%RH	120Vac, 60Hz	Noah Chang Luis Lee

3.4 EUT Operating Conditions

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

3.5 General Description of Applied Standards and References

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

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 22

ANSI 63.26-2015

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

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-E 2016

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

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

Mobile / Portable station are limited to 7 watts e.r.p.

4.1.2 Test Procedures

EIRP / ERP Measurement:

- All measurements were done at low, middle and high operational frequency range. RBW is 5MHz, 10MHz, 15MHz, 20MHz for NR Mode, and VBW $\geq 3 \times$ RBW.
- Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m(below or equal 1GHz) and/or 1.5m(above 1GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step b. Record the power level of S.G
- $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn.}$ E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15\text{dBi}$.

Where:

$$ERP/EIRP = P_{Meas} + G_T - L_C$$

P_{Meas} : Measure transmitter output power.

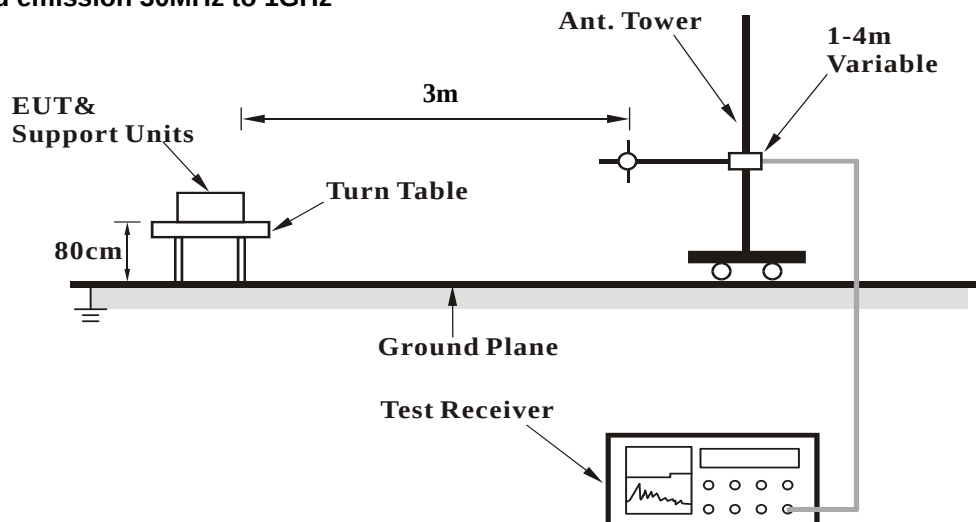
G_T : Gain of the transmitting antenna.

L_C : signal attenuation in the connecting cable between the transmitter and antenna.

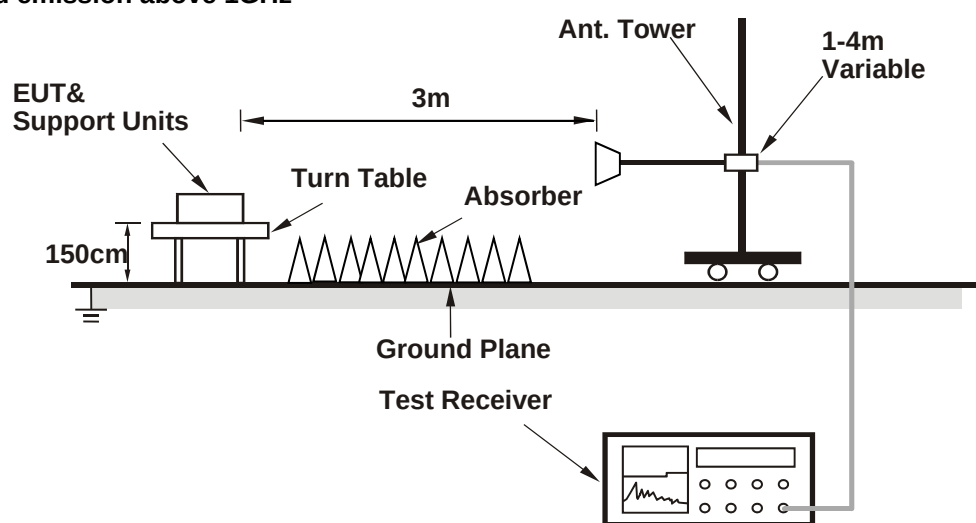
4.1.3 Test Setup

EIRP / ERP Measurement:

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



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

4.1.4 Test Results

ERP Power

1RB

Modulation Type: QPSK

NR Band 5, Channel Bandwidth: 5MHz

Mode		TX channel 165300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-10.2	20.9	0.0	20.9	38.5	-17.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-10.6	21.3	0.0	21.3	38.5	-17.2

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-10.7	20.5	0.2	20.7	38.5	-17.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-10.9	20.9	0.2	21.1	38.5	-17.4

Mode		TX channel 169300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-10.4	20.1	0.4	20.5	38.5	-18.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-10.4	20.8	0.4	21.2	38.5	-17.3

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 10MHz

Mode		TX channel 165800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-10.1	20.9	0.1	21.0	38.5	-17.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-10.8	21.0	0.1	21.1	38.5	-17.4

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-10.6	20.6	0.2	20.8	38.5	-17.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-10.9	20.9	0.2	21.1	38.5	-17.4

Mode		TX channel 168800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-10.3	20.3	0.4	20.7	38.5	-17.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-10.8	20.7	0.4	21.1	38.5	-17.4

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 15MHz

Mode		TX channel 166300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-10.2	20.8	0.1	20.9	38.5	-17.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-10.4	21.2	0.1	21.3	38.5	-17.2

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-10.7	20.5	0.2	20.7	38.5	-17.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-10.8	21.0	0.2	21.2	38.5	-17.3

Mode		TX channel 168300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-10.6	20.2	0.3	20.5	38.5	-18.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-10.7	20.9	0.3	21.2	38.5	-17.3

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 20MHz

Mode		TX channel 166800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-10.6	20.5	0.2	20.7	38.5	-17.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-10.6	21.1	0.2	21.3	38.5	-17.2

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-10.8	20.4	0.2	20.6	38.5	-17.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.0	20.8	0.2	21.0	38.5	-17.5

Mode		TX channel 167800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-10.6	20.3	0.3	20.6	38.5	-17.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-10.6	21.1	0.3	21.4	38.5	-17.1

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

Modulation Type: 16QAM

NR Band 5, Channel Bandwidth: 5MHz

Mode		TX channel 165300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-10.8	20.4	0.0	20.4	38.5	-18.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-11.0	20.9	0.0	20.9	38.5	-17.6

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.1	20.1	0.2	20.3	38.5	-18.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.4	20.4	0.2	20.6	38.5	-17.9

Mode		TX channel 169300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-10.9	19.6	0.4	20.0	38.5	-18.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-10.9	20.3	0.4	20.7	38.5	-17.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 10MHz

Mode		TX channel 165800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-10.8	20.2	0.1	20.3	38.5	-18.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-11.2	20.5	0.1	20.6	38.5	-17.9

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.2	19.9	0.2	20.1	38.5	-18.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.5	20.3	0.2	20.5	38.5	-18.0

Mode		TX channel 168800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-10.9	19.7	0.4	20.1	38.5	-18.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-11.4	20.1	0.4	20.5	38.5	-18.0

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 15MHz

Mode		TX channel 166300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-10.8	20.3	0.1	20.4	38.5	-18.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-10.9	20.7	0.1	20.8	38.5	-17.7

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.2	20.0	0.2	20.2	38.5	-18.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.4	20.4	0.2	20.6	38.5	-17.9

Mode		TX channel 168300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-11.1	19.7	0.3	20.0	38.5	-18.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-11.2	20.4	0.3	20.7	38.5	-17.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 20MHz

Mode		TX channel 166800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-10.8	20.3	0.2	20.5	38.5	-18.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-10.9	20.8	0.2	21.0	38.5	-17.5

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-10.6	20.6	0.2	20.8	38.5	-17.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.1	20.7	0.2	20.9	38.5	-17.6

Mode		TX channel 167800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-11.1	19.8	0.3	20.1	38.5	-18.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-11.3	20.4	0.3	20.7	38.5	-17.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

Modulation Type: 64QAM

NR Band 5, Channel Bandwidth: 5MHz

Mode		TX channel 165300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-11.8	19.4	0.0	19.4	38.5	-19.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-12.0	19.9	0.0	19.9	38.5	-18.6

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.1	19.1	0.2	19.3	38.5	-19.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.4	19.4	0.2	19.6	38.5	-18.9

Mode		TX channel 169300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-11.9	18.6	0.4	19.0	38.5	-19.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-11.9	19.3	0.4	19.7	38.5	-18.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 10MHz

Mode		TX channel 165800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-11.9	19.1	0.1	19.2	38.5	-19.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-12.2	19.6	0.1	19.7	38.5	-18.8

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.2	19.0	0.2	19.2	38.5	-19.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.6	19.2	0.2	19.4	38.5	-19.1

Mode		TX channel 168800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-12.1	18.5	0.4	18.9	38.5	-19.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-12.1	19.4	0.4	19.8	38.5	-18.7

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 15MHz

Mode		TX channel 166300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-11.8	19.3	0.1	19.4	38.5	-19.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-12.1	19.6	0.1	19.7	38.5	-18.8

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.2	19.0	0.2	19.2	38.5	-19.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.4	19.4	0.2	19.6	38.5	-18.9

Mode		TX channel 168300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-12.1	18.7	0.3	19.0	38.5	-19.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-12.2	19.4	0.3	19.7	38.5	-18.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 20MHz

Mode		TX channel 166800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-12.1	19.0	0.2	19.2	38.5	-19.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-12.2	19.5	0.2	19.7	38.5	-18.8

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.2	18.9	0.2	19.1	38.5	-19.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.6	19.2	0.2	19.4	38.5	-19.1

Mode		TX channel 167800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-12.4	18.5	0.3	18.8	38.5	-19.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-12.5	19.2	0.3	19.5	38.5	-19.0

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

Full RB

Modulation Type: QPSK

NR Band 5, Channel Bandwidth: 5MHz

Mode		TX channel 165300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-11.2	19.9	0.0	19.9	38.5	-18.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-11.6	20.3	0.0	20.3	38.5	-18.2

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.7	19.5	0.2	19.7	38.5	-18.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.9	19.9	0.2	20.1	38.5	-18.4

Mode		TX channel 169300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-11.4	19.1	0.4	19.5	38.5	-19.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-11.4	19.8	0.4	20.2	38.5	-18.3

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 10MHz

Mode		TX channel 165800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-11.4	19.6	0.1	19.7	38.5	-18.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-11.7	20.1	0.1	20.2	38.5	-18.3

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.6	19.6	0.2	19.8	38.5	-18.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.8	20.0	0.2	20.2	38.5	-18.3

Mode		TX channel 168800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-11.6	19.0	0.4	19.4	38.5	-19.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-11.6	19.9	0.4	20.3	38.5	-18.2

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 15MHz

Mode		TX channel 166300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-11.2	19.8	0.1	19.9	38.5	-18.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-11.4	20.2	0.1	20.3	38.5	-18.2

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.7	19.5	0.2	19.7	38.5	-18.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.9	19.9	0.2	20.1	38.5	-18.4

Mode		TX channel 168300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-11.6	19.2	0.3	19.5	38.5	-19.0
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-11.7	19.9	0.3	20.2	38.5	-18.3

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 20MHz

Mode		TX channel 166800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-11.6	19.4	0.2	19.6	38.5	-18.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-11.7	20.0	0.2	20.2	38.5	-18.3

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.8	19.4	0.2	19.6	38.5	-18.9
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-11.9	19.9	0.2	20.1	38.5	-18.4

Mode		TX channel 167800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-11.9	19.1	0.3	19.4	38.5	-19.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-11.7	20.0	0.3	20.3	38.5	-18.2

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

Modulation Type: 16QAM

NR Band 5, Channel Bandwidth: 5MHz

Mode		TX channel 165300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-11.8	19.4	0.0	19.4	38.5	-19.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-12.0	19.9	0.0	19.9	38.5	-18.6

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.2	18.9	0.2	19.1	38.5	-19.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.3	19.5	0.2	19.7	38.5	-18.8

Mode		TX channel 169300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-11.9	18.6	0.4	19.0	38.5	-19.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-11.9	19.3	0.4	19.7	38.5	-18.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 10MHz

Mode		TX channel 165800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-11.8	19.2	0.1	19.3	38.5	-19.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-12.1	19.7	0.1	19.8	38.5	-18.7

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.2	18.9	0.2	19.1	38.5	-19.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.5	19.3	0.2	19.5	38.5	-19.0

Mode		TX channel 168800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-11.9	18.7	0.4	19.1	38.5	-19.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-12.4	19.1	0.4	19.5	38.5	-19.0

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 15MHz

Mode		TX channel 166300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-11.8	19.3	0.1	19.4	38.5	-19.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-11.9	19.7	0.1	19.8	38.5	-18.7

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.2	19.0	0.2	19.2	38.5	-19.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.4	19.4	0.2	19.6	38.5	-18.9

Mode		TX channel 168300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-12.1	18.7	0.3	19.0	38.5	-19.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-12.2	19.4	0.3	19.7	38.5	-18.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 20MHz

Mode		TX channel 166800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-12.1	19.0	0.2	19.2	38.5	-19.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-12.2	19.5	0.2	19.7	38.5	-18.8

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.2	18.9	0.2	19.1	38.5	-19.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-12.3	19.5	0.2	19.7	38.5	-18.8

Mode		TX channel 167800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-12.4	18.6	0.3	18.9	38.5	-19.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-12.2	19.5	0.3	19.8	38.5	-18.7

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

Modulation Type: 64QAM

NR Band 5, Channel Bandwidth: 5MHz

Mode		TX channel 165300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-12.8	18.4	0.0	18.4	38.5	-20.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	826.50	-13.0	18.9	0.0	18.9	38.5	-19.6

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-13.2	18.0	0.2	18.2	38.5	-20.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-13.5	18.3	0.2	18.5	38.5	-20.0

Mode		TX channel 169300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-12.9	17.6	0.4	18.0	38.5	-20.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	846.50	-12.9	18.3	0.4	18.7	38.5	-19.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 10MHz

Mode		TX channel 165800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-12.8	18.2	0.1	18.3	38.5	-20.2
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	829.00	-13.2	18.6	0.1	18.7	38.5	-19.8

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-13.4	17.8	0.2	18.0	38.5	-20.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-13.8	18.0	0.2	18.2	38.5	-20.3

Mode		TX channel 168800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-13.2	17.4	0.4	17.8	38.5	-20.7
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	844.00	-13.4	18.1	0.4	18.5	38.5	-20.0

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 15MHz

Mode		TX channel 166300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-12.8	18.3	0.1	18.4	38.5	-20.1
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	831.50	-12.9	18.7	0.1	18.8	38.5	-19.7

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-13.2	18.0	0.2	18.2	38.5	-20.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-13.4	18.4	0.2	18.6	38.5	-19.9

Mode		TX channel 168300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-13.1	17.7	0.3	18.0	38.5	-20.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	841.50	-13.2	18.4	0.3	18.7	38.5	-19.8

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

NR Band 5, Channel Bandwidth: 20MHz

Mode		TX channel 166800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-13.1	17.9	0.2	18.1	38.5	-20.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	834.00	-13.2	18.5	0.2	18.7	38.5	-19.8

Mode		TX channel 167300					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-13.4	17.8	0.2	18.0	38.5	-20.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	836.50	-13.7	18.1	0.2	18.3	38.5	-20.2

Mode		TX channel 167800					
Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-13.4	17.6	0.3	17.9	38.5	-20.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	839.00	-13.4	18.3	0.3	18.6	38.5	-19.9

Note: ERP (dBm) = S.G Power Value (dBm) + Correction Factor (dB).

4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm .

4.2.2 Test Procedure

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- c. $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $\text{E.R.P power} = \text{E.I.R.P power} - 2.15\text{dBi}$.

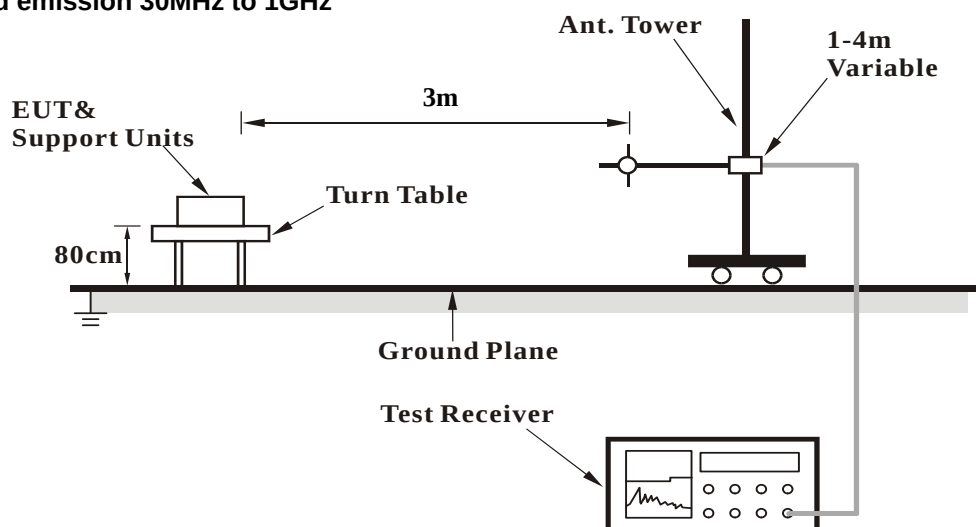
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

4.2.3 Deviation from Test Standard

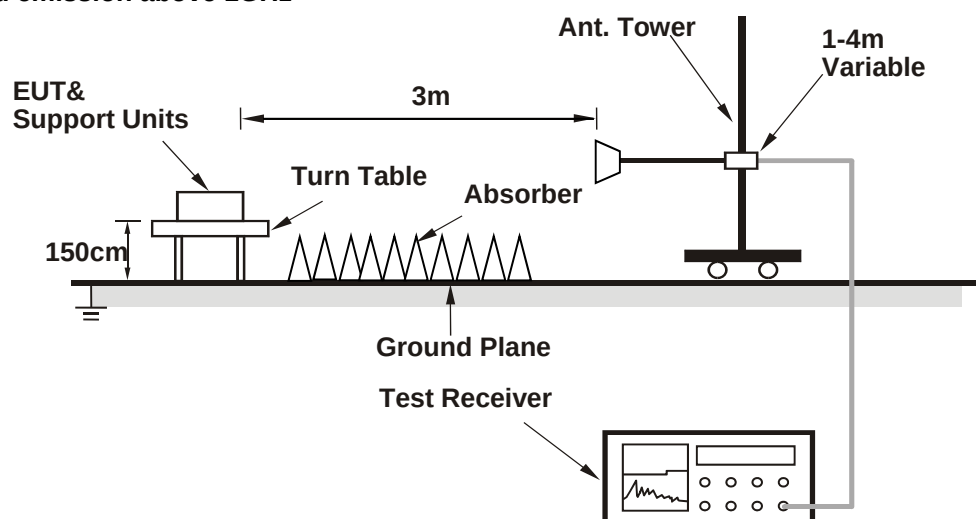
No deviation.

4.2.4 Test Setup

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



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

4.2.5 Test Results

Below 1GHz

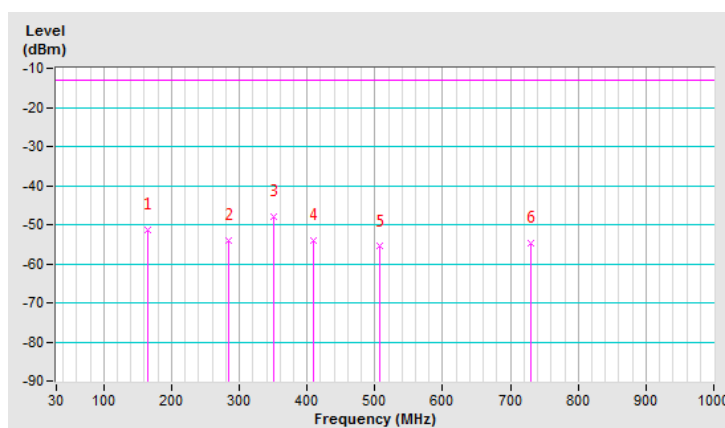
NR Band 5, Channel Bandwidth: 5MHz

Mode	TX channel 165300 (826.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Luis Lee		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	165.80	-43.1	-50.3	-1.1	-51.4	-13.0	-38.4
2	284.14	-48.5	-53.8	-0.2	-54.0	-13.0	-41.0
3	350.10	-42.5	-45.0	-2.9	-47.9	-13.0	-34.9
4	410.24	-51.0	-51.2	-2.9	-54.1	-13.0	-41.1
5	507.24	-52.4	-53.3	-2.3	-55.6	-13.0	-42.6
6	730.34	-55.8	-58.3	3.7	-54.6	-13.0	-41.6

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

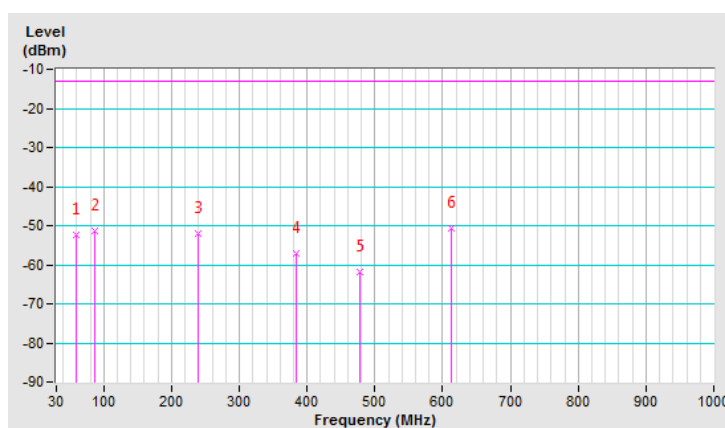


Mode	TX channel 165300 (826.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Luis Lee		

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	59.10	-43.0	-44.6	-7.8	-52.4	-13.0	-39.4
2	86.26	-44.6	-46.1	-5.2	-51.3	-13.0	-38.3
3	239.52	-49.6	-50.7	-1.3	-52.0	-13.0	-39.0
4	383.08	-53.6	-54.4	-2.7	-57.1	-13.0	-44.1
5	478.14	-58.8	-59.3	-2.6	-61.9	-13.0	-48.9
6	612.00	-53.2	-53.5	2.8	-50.7	-13.0	-37.7

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).



Above 1GHz

NR Band 5, Channel Bandwidth: 5MHz

Mode	TX channel 165300 (826.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1653.00	-59.9	-63.1	5.5	-57.6	-13.0	-44.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1653.00	-57.0	-58.0	5.5	-52.5	-13.0	-39.5

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 167300 (836.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-60.2	-63.3	5.5	-57.8	-13.0	-44.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-56.9	-57.6	5.5	-52.1	-13.0	-39.1

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 169300 (846.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1693.00	-60.2	-63.1	5.6	-57.5	-13.0	-44.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1693.00	-57.2	-57.8	5.6	-52.2	-13.0	-39.2

Remarks:

1. $ERP (dBm) = S.G \text{ Value (dBm)} + \text{Correction Factor (dB)}$.
2. $\text{Correction Factor (dB)} = \text{Substitution Antenna Gain (dB)} + \text{Cable Loss (dB)}$.

NR Band 5, Channel Bandwidth: 10MHz

Mode	TX channel 165800 (829.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1658.00	-60.9	-64.0	5.5	-58.5	-13.0	-45.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1658.00	-56.2	-57.2	5.5	-51.7	-13.0	-38.7

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 167300 (836.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-60.0	-63.0	5.5	-57.5	-13.0	-44.5
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-57.1	-57.9	5.5	-52.4	-13.0	-39.4

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 168800 (844.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1688.00	-60.2	-63.1	5.5	-57.6	-13.0	-44.6
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1688.00	-57.0	-57.5	5.5	-52.0	-13.0	-39.0

Remarks:

1. $ERP\ (dBm) = S.G\ Value\ (dBm) + Correction\ Factor\ (dB)$.
2. $Correction\ Factor\ (dB) = Substitution\ Antenna\ Gain\ (dB) + Cable\ Loss\ (dB)$.

NR Band 5, Channel Bandwidth: 20MHz

Mode	TX channel 166800 (834.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1668.00	-59.8	-62.9	5.6	-57.3	-13.0	-44.3
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1668.00	-57.6	-58.6	5.6	-53.0	-13.0	-40.0

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 167300 (836.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-60.2	-63.3	5.5	-57.8	-13.0	-44.8
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1673.00	-57.1	-57.9	5.5	-52.4	-13.0	-39.4

Remarks:

1. ERP (dBm) = S.G Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

Mode	TX channel 167800 (839.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	25deg. C, 70%RH	Input Power	120Vac, 60Hz
Tested By	Noah Chang		

Antenna Polarity & Test Distance: Horizontal at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1678.00	-60.9	-63.9	5.5	-58.4	-13.0	-45.4
Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	1678.00	-57.5	-58.3	5.5	-52.8	-13.0	-39.8

Remarks:

1. $ERP\ (dBm) = S.G\ Value\ (dBm) + Correction\ Factor\ (dB)$.
2. $Correction\ Factor\ (dB) = Substitution\ Antenna\ Gain\ (dB) + Cable\ Loss\ (dB)$.

5 Pictures of Test Arrangements

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

Appendix – Information of the Testing Laboratories

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

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

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