

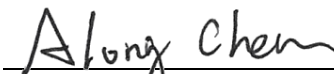
FCC Co-Location Test Report

FCC ID : I88NR7112
Equipment : 5G NR Outdoor Router
Model No. : NR7112
(Please refer to section 1.1.1 for more details)
Brand Name : ZYXEL
(Please refer to section 1.1.1 for more details)
Applicant : Zyxel Communications Corporation
Address : No.2 Industry East RD. IX, Hsinchu Science
Park, Hsinchu 30075, Taiwan, R.O.C
Standard : 47 CFR FCC Part 15.247
47 CFR FCC Part 22 Subpart H
47 CFR FCC Part 24 Subpart E
47 CFR FCC Part 27
Received Date : Dec. 14, 2021
Tested Date : Mar. 03 ~ Mar. 04, 2022

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:



Along Chen / Assistant Manager



Gary Chang / Manager

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Release Record

| Report No. | Version | Description | Issued Date |
|------------|---------|---------------|---------------|
| FR1D1401CO | Rev. 01 | Initial issue | Apr. 15, 2022 |

Summary of Test Results

| Test Items | Measured | Result |
|--------------------|--|--------|
| Radiated Emissions | [dBuV/m at 3m]: 111.31MHz 42.49 (Margin -1.01dB) - QP | Pass |

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

| Brand Name | Model Name | Product Name | Description |
|---|----------------|----------------------|------------------------|
| ZYXEL | NR7112 | 5G NR Outdoor Router | for marketing purpose. |
| Vodafone | MachineLink 5G | 5G NR Outdoor Router | |
| <ul style="list-style-type: none"> ✦ All models are electrically identical, different model names are for marketing purpose. ✦ The above models, model NR7112 was selected as a representative one for the final test and only its data was recorded in this report. | | | |

1.1.2 Specification of the Equipment under Test (EUT)

| WLAN | |
|---------------------|--|
| Operating Frequency | 802.11b/g/n: 2412 MHz – 2462 MHz |
| Modulation Type | 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) |

The device contains a certified module as below information

| | |
|----------------------------|--|
| FCC ID | XMR2020RM502QAE |
| LTE | |
| Operating Frequency | Band 2: 1850 ~ 1910 MHz Band 5: 824 ~ 849 MHz Band 12: 699 ~ 716 MHz Band 17: 704 ~ 716 MHz Band 41: 2496 ~ 2690 MHz Band 66: 1710 ~ 1780 MHz |
| CA | CA_2C, CA_5B, CA_41C, CA_66C |
| Modulation Type | UL & DL up to 256QAM |
| WCDMA | |
| Operating Frequency | Band II: 1850 ~ 1910MHz Band IV: 1710 ~ 1755MHz Band V: 824 ~ 849MHz |
| Modulation Type | UL up to 16QAM, DL up to 64QAM |
| NR 5G | |
| Single Band | n2, n5, n25, n41, n66, n71 |
| Operating Frequency | n2: 1850 ~ 1910 MHz n5: 824 ~ 849 MHz n25: 1850 ~ 1915 MHz n66: 1710 ~ 1780 MHz n41: 2496 ~ 2690 MHz n71: 663 ~ 698MHz |
| Modulation Type | UL & DL up to 256QAM |
| SA UL MIMO Band | n41 |
| HPUE Band | n41 |
| EN-DC Band | DC_5A_n2A / DC_5A_n66A DC_12A_n2A / DC_12A_n66A DC_2A_n5A / DC_2A_n41A DC_66A_n5A / DC_66A_n41A |

1.1.3 Antenna Details

WLAN 2.4G

| Ant. No. | Model | Type | Connector | Gain (dBi) |
|----------|--------|------|-----------|------------|
| 1 | WiFi_0 | PIFA | No | 4.1 |
| 2 | WiFi_1 | PIFA | No | 4 |

LTE

| Ant. No. | Type | Connector | Gain (dBi) | Remark |
|----------|------|-----------|------------|---------|
| 1 | PCB | UFL | 5.5 | Band 2 |
| 2 | | | 5.54 | Band 4 |
| 3 | | | 1.4 | Band 5 |
| 4 | | | 1.4 | Band 12 |
| 5 | | | 1.4 | Band 17 |
| 6 | | | 5.7 | Band 41 |
| 7 | | | 5.54 | Band 66 |

NR 5G

| Ant. No. | Type | Connector | Gain (dBi) | Remark |
|----------|------|-----------|------------|--------|
| 1 | PCB | UFL | 5.5 | n2 |
| 2 | | | 1.4 | n5 |
| 3 | | | 5.5 | n25 |
| 4 | | | 5.7 | n41 |
| 5 | | | 5.54 | n66 |
| 6 | | | 1.4 | n71 |

| Ant. No. | Type | Connector | Gain (dBi) | Remark |
|----------|------|-----------|------------|---------------|
| 1 | PCB | UFL | 5.5 | WCDMA Band II |
| 2 | | | 5.54 | WCDMA Band IV |
| 3 | | | 1.4 | WCDMA Band V |

1.1.4 Power Supply Type of Equipment under Test (EUT)

| | |
|--------------------------|----------------|
| Power Supply Type | 56Vdc from PoE |
|--------------------------|----------------|

1.1.5 Accessories

| Accessories | | |
|-------------|-----------|--|
| No. | Equipment | Description |
| 1 | PoE | Brand: PHIHONG Model: POE16R-1AFG6 Power Rating: I/P: 100-240Vac, 50-60Hz, 0.8A O/P: 56Vdc, 0.275A, 15.4W, 32-44VA |
| 2 | RJ45 | 1.75m non-shielded w/o core |

1.2 The Equipment List

| Test Item | Radiated Emission | | | | |
|--|----------------------------|---------------------------|------------------|------------------|-------------------|
| Test Site | 966 chamber1 / (03CH01-WS) | | | | |
| Tested Date | Mar. 03 ~ Mar. 04, 2022 | | | | |
| Instrument | Brand | Model No. | Serial No. | Calibration Date | Calibration Until |
| Receiver | R&S | ESR3 | 101657 | Mar. 12, 2021 | Mar. 11, 2022 |
| Spectrum Analyzer | R&S | FSV40 | 101063 | Apr. 19, 2021 | Apr. 18, 2022 |
| Loop Antenna | R&S | HFH2-Z2 | 100330 | Nov. 08, 2021 | Nov. 07, 2022 |
| Bilog Antenna | SCHWARZBECK | VULB9168 | VULB9168-522 | Jun. 30, 2021 | Jun. 29, 2022 |
| Horn Antenna 1G-18G | SCHWARZBECK | BBHA 9120 D | BBHA 9120 D 1096 | Dec. 03, 2021 | Dec. 02, 2022 |
| Horn Antenna 18G-40G | SCHWARZBECK | BBHA 9170 | BBHA 9170508 | Jan. 11, 2022 | Jan. 10, 2023 |
| Preamplifier | EMC | EMC02325 | 980225 | Jun. 29, 2021 | Jun. 28, 2022 |
| Preamplifier | Agilent | 83017A | MY39501308 | Sep. 28, 2021 | Sep. 27, 2022 |
| Preamplifier | EMC | EMC184045B | 980192 | Jul. 14, 2021 | Jul. 13, 2022 |
| Loop Antenna Cable | KOAX KABEL | 101354-BW | 101354-BW | Oct. 05, 2021 | Oct. 04, 2022 |
| LF cable 3M | Woken | CFD400NL-LW | CFD400NL-001 | Oct. 05, 2021 | Oct. 04, 2022 |
| LF cable 11M | EMC | EMCCFD400-NW-N W-11000 | 200801 | Oct. 05, 2021 | Oct. 04, 2022 |
| LF cable 1M | EMC | EMCCFD400-NM-N M-1000 | 160502 | Oct. 05, 2021 | Oct. 04, 2022 |
| RF Cable | EMC | EMC104-35M-35M- 8000 | 210920 | Oct. 05, 2021 | Oct. 04, 2022 |
| RF Cable | HUBER+SUHNER | SUCOFLEX104 | MY16019/4 | Oct. 05, 2021 | Oct. 04, 2022 |
| Receiver | R&S | ESR3 | 101657 | Mar. 12, 2021 | Mar. 11, 2022 |
| Measurement Software | AUDIX | e3 | 6.120210g | NA | NA |
| Radio Communication Analyzer | Anritsu | MT8821C | 6262149999 | Sep. 16, 2021 | Sep. 15, 2022 |
| Radio Communication Test Station | Anritsu | MT8000A | 6262148276 | Sep. 16, 2021 | Sep. 15, 2022 |

Note: Calibration Interval of instruments listed above is one year.

1.3 Test Standards

47 CFR FCC Part 15.247
ANSI C63.10-2013
47 CFR FCC Part 22 Subpart H
47 CFR FCC Part 24 Subpart E
47 CFR FCC Part 27
ANSI C63.26-2015

1.4 Reference Guidance

FCC KDB 558074 D01 15.247 Meas Guidance v05r02
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
FCC KDB 412172 D01 Determining ERP and EIRP v01r01
FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
FCC KDB 971168 D02 Misc Rev Approv License Devices v02r01

1.5 Deviation from Test Standard and Measurement Procedure

None

1.6 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

| Measurement Uncertainty | |
|-------------------------------|---------------|
| Parameters | Uncertainty |
| Radiated emission \leq 1GHz | ± 3.41 dB |
| Radiated emission $>$ 1GHz | ± 4.59 dB |

2 Test Configuration

2.1 Testing Facility

| | |
|-----------------------------|--|
| Test Laboratory | International Certification Corporation |
| Test Site | 03CH01-WS |
| Address of Test Site | No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.) |

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

2.2 The Worst Test Modes and Channel Details

| Test item | Modulation Mode |
|---|--|
| Radiated Emissions | Mode 1: WIFI 2.4G 11g ch6 + NR 5G EN-DC n2A ch371500_DC5A ch20525 Mode 2: WIFI 2.4G 11g ch6 + NR 5G EN-DC n5A ch167300_DC66A ch132322 Mode 3: WIFI 2.4G 11g ch6 + NR 5G EN-DC n41A ch534996_DC2A ch18615 Mode 4: WIFI 2.4G I 11g ch6 + NR 5G SA N71 ch133100 Mode 5: WIFI 2.4G 11g ch6 + LTE B12 ch23035 Mode 6: WIFI 2.4G 11g ch6 + LTE B41 HPUE ch39675 |
| NOTE: The selected channel is the maximum power channel of Wi-Fi & LTE, Wi-Fi & NR5G mode. | |

3 Transmitter Test Results

3.1 Unwanted Emissions into Restricted Frequency Bands

3.1.1 Limit of Unwanted Emissions into Restricted Frequency Bands

| Restricted Band Emissions Limit | | | |
|---------------------------------|-----------------------|-------------------------|----------------------|
| Frequency Range (MHz) | Field Strength (uV/m) | Field Strength (dBuV/m) | Measure Distance (m) |
| 0.009~0.490 | 2400/F(kHz) | 48.5 - 13.8 | 300 |
| 0.490~1.705 | 24000/F(kHz) | 33.8 - 23 | 30 |
| 1.705~30.0 | 30 | 29 | 30 |
| 30~88 | 100 | 40 | 3 |
| 88~216 | 150 | 43.5 | 3 |
| 216~960 | 200 | 46 | 3 |
| Above 960 | 500 | 54 | 3 |

Note 1:
Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Note 2:
Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.1.2 Test Procedures

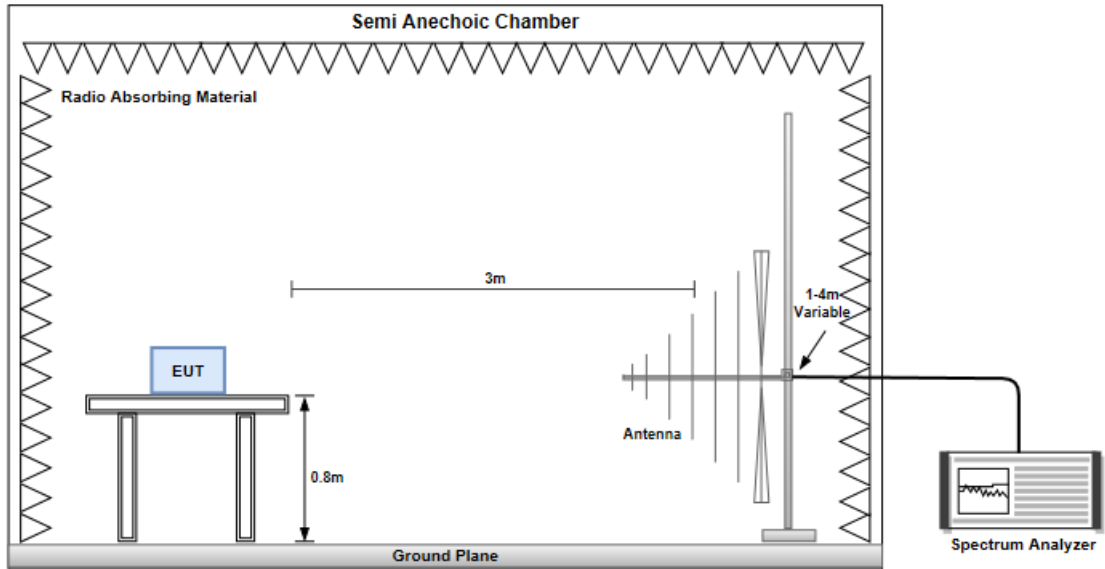
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

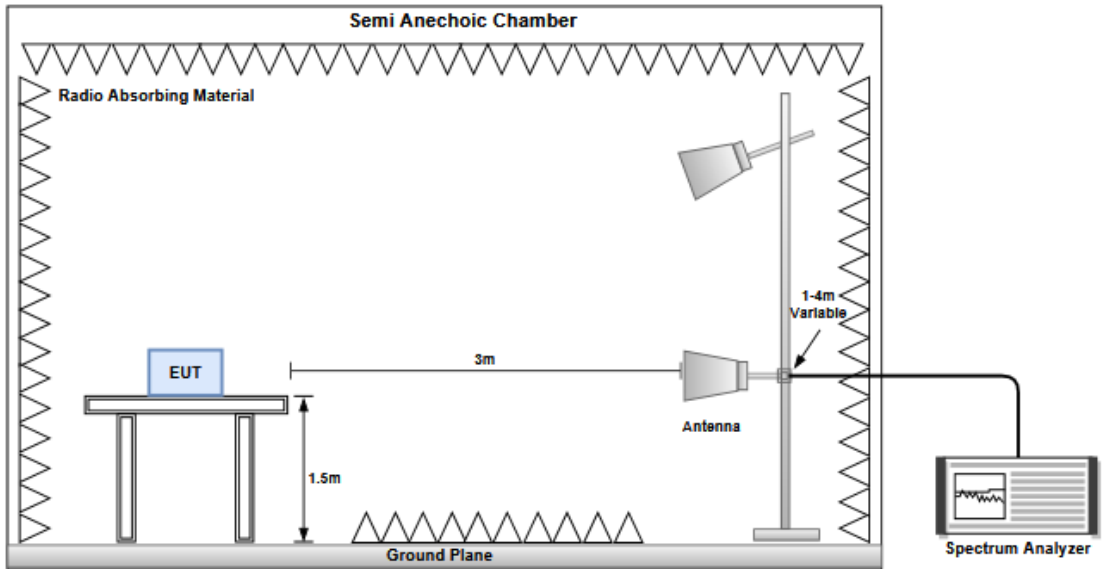
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

3.1.3 Test Setup

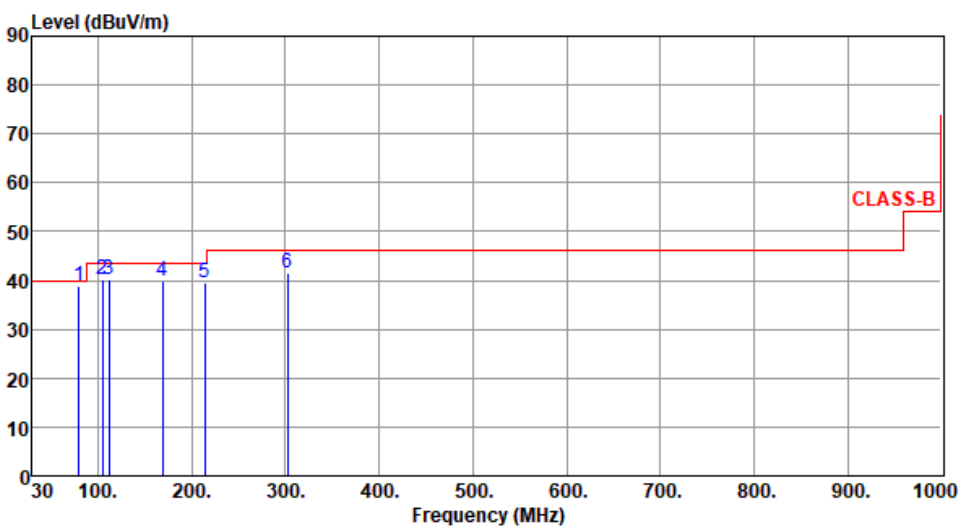
Radiated Emissions below 1 GHz

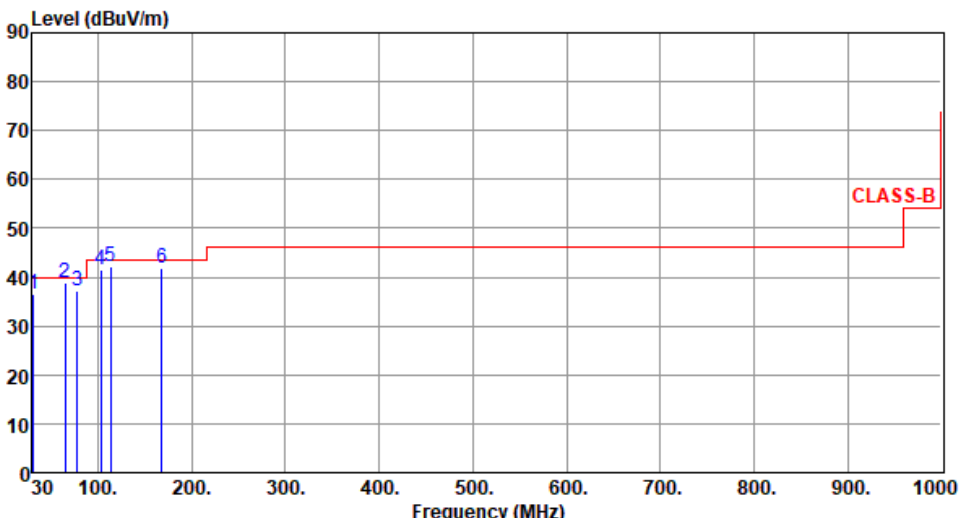


Radiated Emissions above 1 GHz



3.1.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

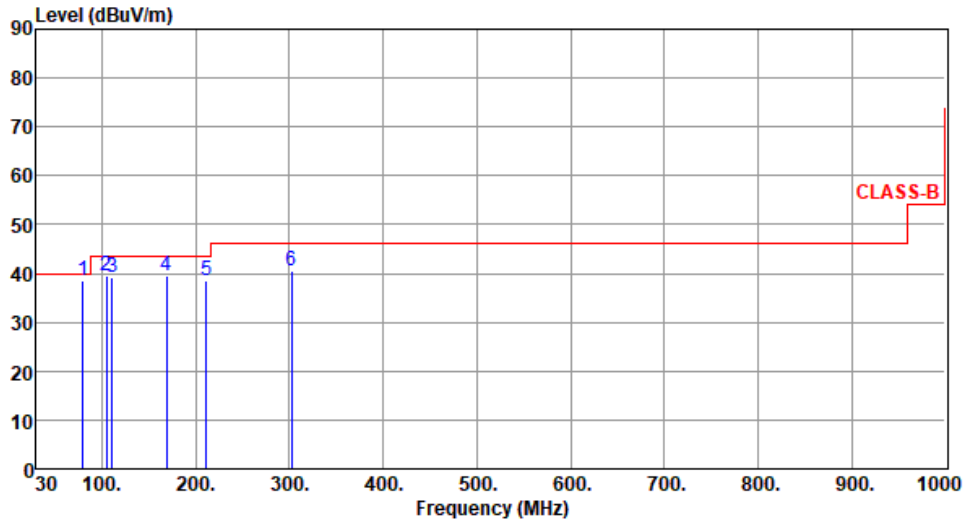
| | | | | | | | | | | |
|--|---|----------|--------------------|--------|---------|----------------|--------|------|-------|--|
| Test Mode | Mode 1: WIFI 2.4G 11g ch6 + NR 5G EN-DC n2A ch371500_DC5A ch20525 | | | | | | | | | |
| Polarization | Horizontal | | | | | | | | | |
| Test By :Aska | | | Temperature(°C):24 | | | Humidity(%):67 | | | | |
|  <p>The graph displays the radiated unwanted emissions level in dBuV/m across a frequency range from 30 MHz to 1000 MHz. A red line indicates the CLASS-B limit, which is constant at 40 dBuV/m from 30 MHz to approximately 950 MHz, then steps up to 50 dBuV/m at 1000 MHz. Six specific peaks are identified and numbered 1 through 6, corresponding to the data in the table below.</p> | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | |
| | | | | | dBuV | | | cm | deg | |
| 1 | 79.68 | 38.95 | 40.00 | -1.05 | 52.27 | -13.32 | QP | 100 | 335 | |
| 2 | 104.78 | 40.03 | 43.50 | -3.47 | 52.44 | -12.41 | QP | 100 | 331 | |
| 3 | 111.65 | 40.16 | 43.50 | -3.34 | 51.72 | -11.56 | QP | 100 | 316 | |
| 4 | 168.93 | 39.75 | 43.50 | -3.75 | 48.70 | -8.95 | QP | 100 | 288 | |
| 5 | 214.30 | 39.58 | 43.50 | -3.92 | 51.52 | -11.94 | Peak | --- | --- | |
| 6 | 302.57 | 41.50 | 46.00 | -4.50 | 49.56 | -8.06 | Peak | --- | --- | |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m). Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.</p> | | | | | | | | | | |

| | | | | | | | | | | | |
|--|---|----------|--------------------|--------|---------|----------------|--------|------|-------|--|--|
| Test Mode | Mode 1: WIFI 2.4G 11g ch6 + NR 5G EN-DC n2A ch371500_DC5A ch20525 | | | | | | | | | | |
| Polarization | Vertical | | | | | | | | | | |
| Test By :Aska | | | Temperature(°C):24 | | | Humidity(%):67 | | | | | |
|  | | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | | |
| | | dBuV/m | dBuV/m | | dBuV | | | cm | deg | | |
| 1 | 30.86 | 36.43 | 40.00 | -3.57 | 46.38 | -9.95 | QP | 100 | 56 | | |
| 2 | 64.56 | 38.78 | 40.00 | -1.22 | 48.57 | -9.79 | QP | 100 | 146 | | |
| 3 | 78.15 | 37.05 | 40.00 | -2.95 | 50.00 | -12.95 | QP | 100 | 131 | | |
| 4 | 102.68 | 41.43 | 43.50 | -2.07 | 54.28 | -12.85 | QP | 100 | 144 | | |
| 5 | 113.56 | 42.21 | 43.50 | -1.29 | 53.52 | -11.31 | QP | 100 | 153 | | |
| 6 | 168.27 | 41.75 | 43.50 | -1.75 | 50.71 | -8.96 | QP | 100 | 122 | | |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

| | |
|---------------------|---|
| Test Mode | Mode 2: WIFI 2.4G 11g ch6 + NR 5G EN-DC n5A ch167300_DC66A ch132322 |
| Polarization | Horizontal |

Test By :Aska Temperature(°C):24 Humidity(%):67



| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|--------|-------------------|----------------------|
| 1 | 79.65 | 38.56 | 40.00 | -1.44 | 51.87 | -13.31 | QP | 100 | 312 |
| 2 | 104.55 | 39.45 | 43.50 | -4.05 | 51.93 | -12.48 | Peak | 100 | 305 |
| 3 | 111.31 | 39.03 | 43.50 | -4.47 | 50.63 | -11.60 | QP | 100 | 326 |
| 4 | 168.51 | 39.54 | 43.50 | -3.96 | 48.50 | -8.96 | QP | 100 | 138 |
| 5 | 211.31 | 38.43 | 43.50 | -5.07 | 50.38 | -11.95 | QP | 100 | 143 |
| 6 | 302.57 | 40.58 | 46.00 | -5.42 | 48.64 | -8.06 | Peak | --- | --- |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

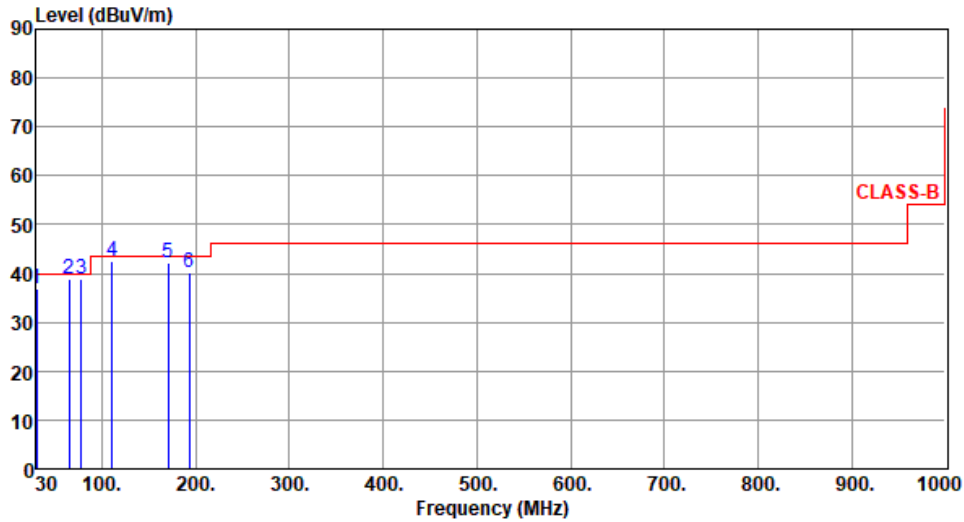
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

| | |
|---------------------|---|
| Test Mode | Mode 2: WIFI 2.4G 11g ch6 + NR 5G EN-DC n5A ch167300_DC66A ch132322 |
| Polarization | Vertical |

Test By :Aska Temperature(°C):24 Humidity(%):67



| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|--------|-------------------|----------------------|
| 1 | 30.53 | 36.72 | 40.00 | -3.28 | 46.66 | -9.94 | QP | 100 | 35 |
| 2 | 64.56 | 38.98 | 40.00 | -1.02 | 48.77 | -9.79 | QP | 100 | 143 |
| 3 | 77.62 | 38.86 | 40.00 | -1.14 | 51.67 | -12.81 | QP | 100 | 165 |
| 4 | 111.31 | 42.49 | 43.50 | -1.01 | 54.09 | -11.60 | QP | 100 | 156 |
| 5 | 170.35 | 42.12 | 43.50 | -1.38 | 51.21 | -9.09 | QP | 100 | 172 |
| 6 | 193.43 | 40.13 | 43.50 | -3.37 | 51.83 | -11.70 | QP | 100 | 125 |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

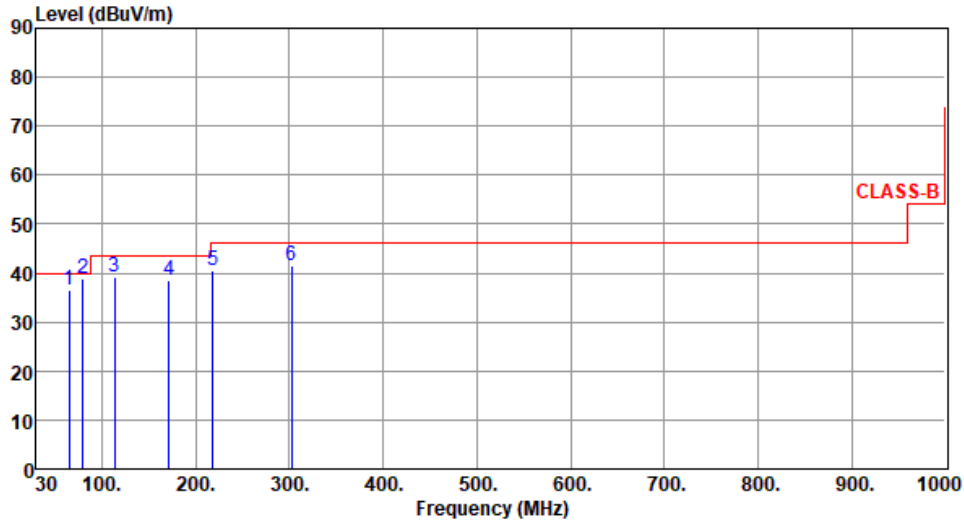
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

| | |
|---------------------|--|
| Test Mode | Mode 3: WIFI 2.4G 11g ch6 + NR 5G EN-DC n41A ch534996_DC2A ch18615 |
| Polarization | Horizontal |

Test By :Aska Temperature(°C):24 Humidity(%):67



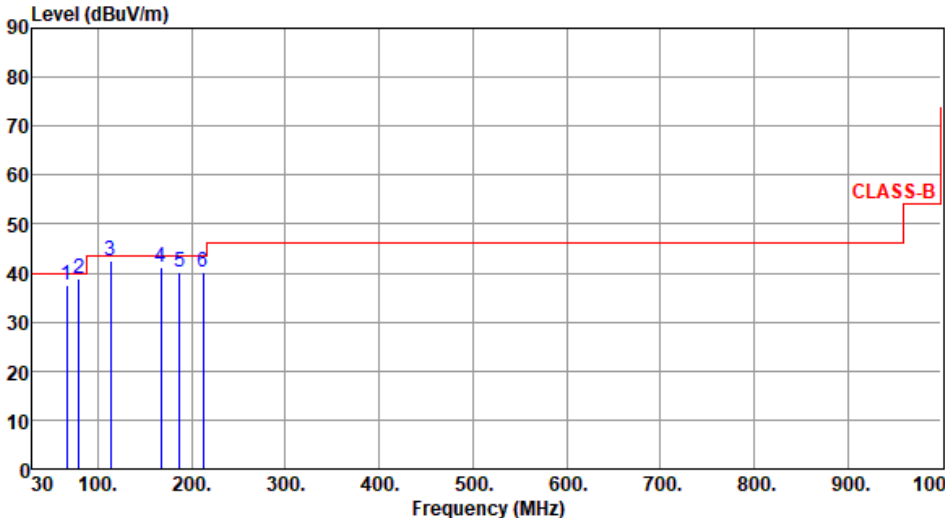
| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|--------|-------------------|----------------------|
| 1 | 64.92 | 36.49 | 40.00 | -3.51 | 46.31 | -9.82 | Peak | --- | --- |
| 2 | 79.62 | 38.95 | 40.00 | -1.05 | 52.26 | -13.31 | QP | 100 | 246 |
| 3 | 113.42 | 39.30 | 43.50 | -4.20 | 50.64 | -11.34 | Peak | --- | --- |
| 4 | 171.36 | 38.65 | 43.50 | -4.85 | 47.80 | -9.15 | QP | 100 | 165 |
| 5 | 218.18 | 40.61 | 46.00 | -5.39 | 52.55 | -11.94 | Peak | --- | --- |
| 6 | 302.57 | 41.47 | 46.00 | -4.53 | 49.53 | -8.06 | Peak | --- | --- |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

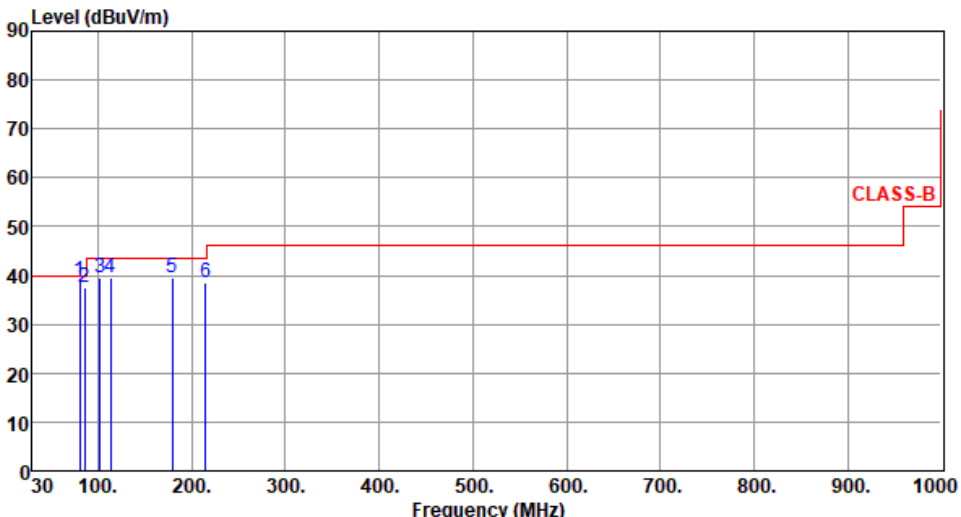
| | | | | | | | | | |
|--|--|-----------------|--------|-------------|---------|--------|--------|------|-------|
| Test Mode | Mode 3: WIFI 2.4G 11g ch6 + NR 5G EN-DC n41A ch534996_DC2A ch18615 | | | | | | | | |
| Polarization | Vertical | | | | | | | | |
| Test By | :Aska | Temperature(°C) | :24 | Humidity(%) | :67 | | | | |
|  | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table |
| | | dBuV/m | | | dBuV | | | cm | deg |
| 1 | 66.35 | 37.46 | 40.00 | -2.54 | 47.72 | -10.26 | QP | 100 | 68 |
| 2 | 79.31 | 38.93 | 40.00 | -1.07 | 52.14 | -13.21 | QP | 100 | 122 |
| 3 | 113.21 | 42.48 | 43.50 | -1.02 | 53.86 | -11.38 | QP | 100 | 105 |
| 4 | 167.53 | 41.21 | 43.50 | -2.29 | 50.17 | -8.96 | QP | 100 | 106 |
| 5 | 187.53 | 40.12 | 43.50 | -3.38 | 51.23 | -11.11 | Peak | 100 | 145 |
| 6 | 212.56 | 40.31 | 43.50 | -3.19 | 52.26 | -11.95 | QP | 100 | 126 |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

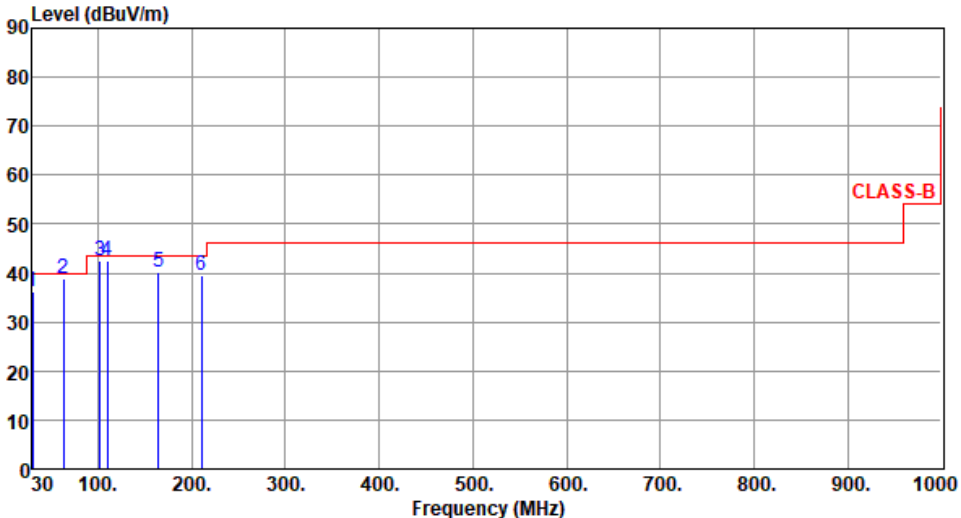
| | | | | | | | | | | |
|--|---|----------|--------------------|--------|---------|----------------|--------|------|-------|--|
| Test Mode | Mode 4: WIFI 2.4G I 11g ch6 + NR 5G SA N71 ch133100 | | | | | | | | | |
| Polarization | Horizontal | | | | | | | | | |
| Test By :Aska | | | Temperature(°C):24 | | | Humidity(%):67 | | | | |
|  | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | |
| | | dBuV/m | | | dBuV | | | cm | deg | |
| 1 | 80.22 | 38.96 | 40.00 | -1.04 | 52.42 | -13.46 | QP | 100 | 322 | |
| 2 | 85.41 | 37.43 | 40.00 | -2.57 | 51.89 | -14.46 | QP | 100 | 320 | |
| 3 | 102.46 | 39.65 | 43.50 | -3.85 | 52.50 | -12.85 | QP | 100 | 286 | |
| 4 | 113.25 | 39.63 | 43.50 | -3.87 | 51.00 | -11.37 | QP | 100 | 276 | |
| 5 | 179.38 | 39.54 | 43.50 | -3.96 | 49.70 | -10.16 | Peak | --- | --- | |
| 6 | 215.27 | 38.39 | 43.50 | -5.11 | 50.33 | -11.94 | Peak | --- | --- | |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

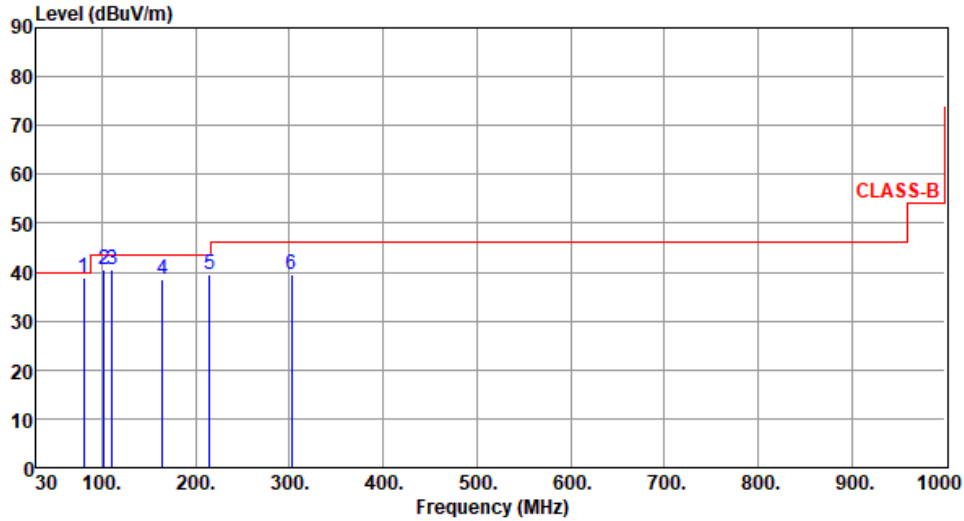
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

| | | | | | | | | | | |
|--|---|----------|--------------------|--------|---------|----------------|--------|------|-------|--|
| Test Mode | Mode 4: WIFI 2.4G I 11g ch6 + NR 5G SA N71 ch133100 | | | | | | | | | |
| Polarization | Vertical | | | | | | | | | |
| Test By :Aska | | | Temperature(°C):24 | | | Humidity(%):67 | | | | |
|  | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | |
| | | dBuV/m | | | dBuV | | | cm | deg | |
| 1 | 30.66 | 36.31 | 40.00 | -3.69 | 46.25 | -9.94 | QP | 100 | 156 | |
| 2 | 63.61 | 38.91 | 40.00 | -1.09 | 48.61 | -9.70 | QP | 100 | 163 | |
| 3 | 102.35 | 42.35 | 43.50 | -1.15 | 55.20 | -12.85 | QP | 100 | 151 | |
| 4 | 110.06 | 42.43 | 43.50 | -1.07 | 54.15 | -11.72 | QP | 100 | 143 | |
| 5 | 164.55 | 40.25 | 43.50 | -3.25 | 49.08 | -8.83 | QP | 100 | 137 | |
| 6 | 210.25 | 39.61 | 43.50 | -3.89 | 51.56 | -11.95 | QP | 100 | 166 | |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m). Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.</p> | | | | | | | | | | |

| | |
|---------------------|---|
| Test Mode | Mode 5: WIFI 2.4G 11g ch6 + LTE B12 ch23035 |
| Polarization | Horizontal |

Test By :Aska Temperature(°C):24 Humidity(%):67



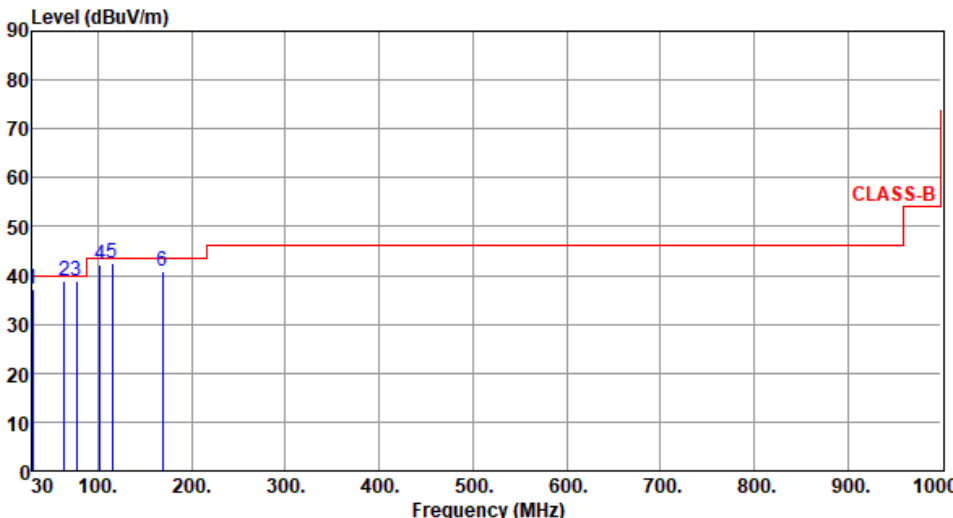
| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|--------|-------------------|----------------------|
| 1 | 80.61 | 38.96 | 40.00 | -1.04 | 52.50 | -13.54 | QP | 100 | 316 |
| 2 | 102.37 | 40.41 | 43.50 | -3.09 | 53.26 | -12.85 | QP | 100 | 305 |
| 3 | 111.31 | 40.53 | 43.50 | -2.97 | 52.13 | -11.60 | QP | 100 | 311 |
| 4 | 164.52 | 38.62 | 43.50 | -4.88 | 47.44 | -8.82 | QP | 100 | 326 |
| 5 | 215.27 | 39.46 | 43.50 | -4.04 | 51.40 | -11.94 | Peak | --- | --- |
| 6 | 302.57 | 39.50 | 46.00 | -6.50 | 47.56 | -8.06 | Peak | --- | --- |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

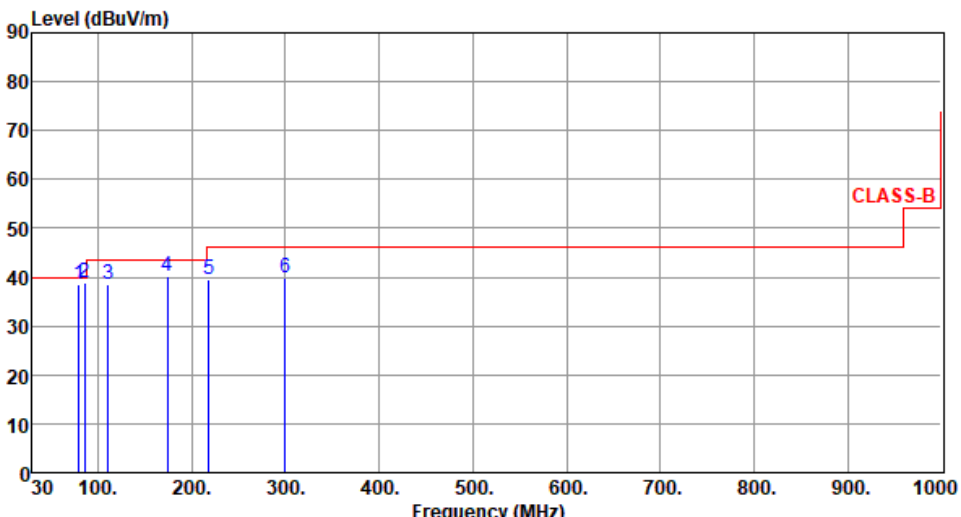
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

| | | | | | | | | | | | |
|--|---|----------|--------------------|--------|---------|----------------|--------|------|-------|--|--|
| Test Mode | Mode 5: WIFI 2.4G 11g ch6 + LTE B12 ch23035 | | | | | | | | | | |
| Polarization | Vertical | | | | | | | | | | |
| Test By :Aska | | | Temperature(°C):24 | | | Humidity(%):67 | | | | | |
|  | | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | | |
| | | dBuV/m | | | dBuV | | | cm | deg | | |
| 1 | 30.75 | 37.25 | 40.00 | -2.75 | 47.20 | -9.95 | QP | 100 | 37 | | |
| 2 | 64.53 | 38.92 | 40.00 | -1.08 | 48.70 | -9.78 | QP | 100 | 162 | | |
| 3 | 77.21 | 38.90 | 40.00 | -1.10 | 51.58 | -12.68 | QP | 100 | 165 | | |
| 4 | 102.55 | 42.24 | 43.50 | -1.26 | 55.09 | -12.85 | QP | 100 | 143 | | |
| 5 | 115.61 | 42.41 | 43.50 | -1.09 | 53.53 | -11.12 | QP | 100 | 153 | | |
| 6 | 168.53 | 40.86 | 43.50 | -2.64 | 49.82 | -8.96 | QP | 100 | 141 | | |

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV) + Factor* (dB/m)
*Factor includes antenna factor , cable loss and amplifier gain
Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).
Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

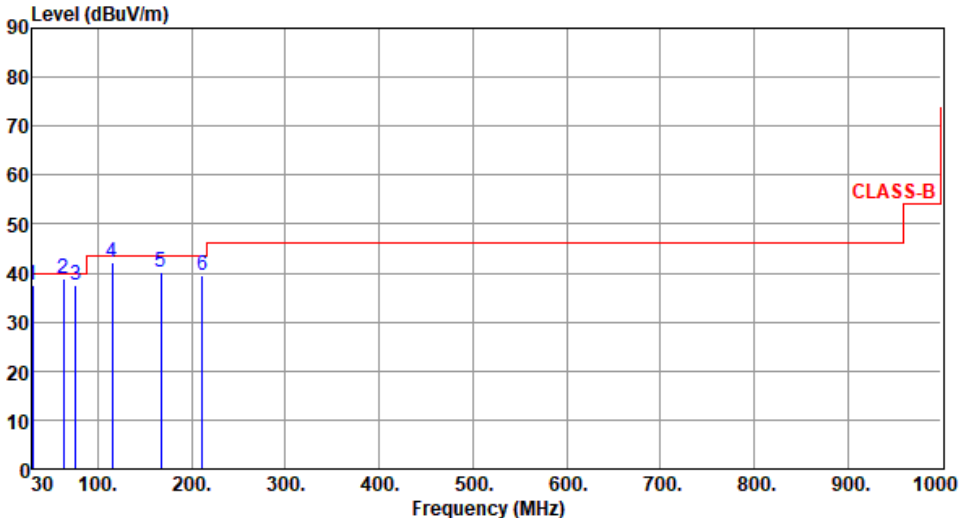
| | | | | | | | | | | | |
|--|--|----------|--------------------|--------|---------|----------------|--------|------|-------|--|--|
| Test Mode | Mode 6: WIFI 2.4G 11g ch6 + LTE B41 HPUE ch39675 | | | | | | | | | | |
| Polarization | Horizontal | | | | | | | | | | |
| Test By :Aska | | | Temperature(°C):24 | | | Humidity(%):67 | | | | | |
|  | | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | | |
| | | dBuV/m | | | dBuV | | | cm | deg | | |
| 1 | 79.86 | 38.41 | 40.00 | -1.59 | 51.79 | -13.38 | QP | 100 | 305 | | |
| 2 | 85.41 | 38.82 | 40.00 | -1.18 | 53.28 | -14.46 | QP | 100 | 318 | | |
| 3 | 111.27 | 38.45 | 43.50 | -5.05 | 50.05 | -11.60 | Peak | --- | --- | | |
| 4 | 174.53 | 40.21 | 43.50 | -3.29 | 49.80 | -9.59 | Peak | --- | --- | | |
| 5 | 218.18 | 39.36 | 46.00 | -6.64 | 51.30 | -11.94 | Peak | --- | --- | | |
| 6 | 299.66 | 39.73 | 46.00 | -6.27 | 47.86 | -8.13 | Peak | --- | --- | | |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

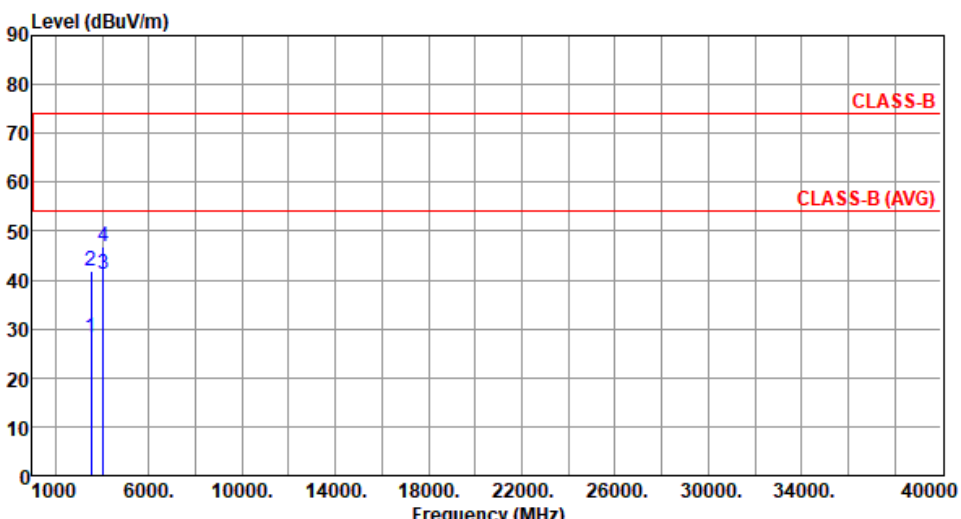
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

| | | | | | | | | | |
|--|--|-----------------|--------|-------------|---------|--------|--------|------|-------|
| Test Mode | Mode 6: WIFI 2.4G 11g ch6 + LTE B41 HPUE ch39675 | | | | | | | | |
| Polarization | Vertical | | | | | | | | |
| Test By | :Aska | Temperature(°C) | :24 | Humidity(%) | :67 | | | | |
|  | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table |
| | | dBuV/m | dBuV/m | dB | dBuV | dB/m | | cm | deg |
| 1 | 30.45 | 37.45 | 40.00 | -2.55 | 47.39 | -9.94 | QP | 100 | 36 |
| 2 | 63.47 | 38.91 | 40.00 | -1.09 | 48.60 | -9.69 | QP | 100 | 128 |
| 3 | 76.28 | 37.41 | 40.00 | -2.59 | 49.74 | -12.33 | QP | 100 | 141 |
| 4 | 115.41 | 42.12 | 43.50 | -1.38 | 53.24 | -11.12 | QP | 100 | 153 |
| 5 | 167.55 | 40.27 | 43.50 | -3.23 | 49.23 | -8.96 | QP | 100 | 143 |
| 6 | 211.05 | 39.43 | 43.50 | -4.07 | 51.38 | -11.95 | QP | 100 | 161 |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

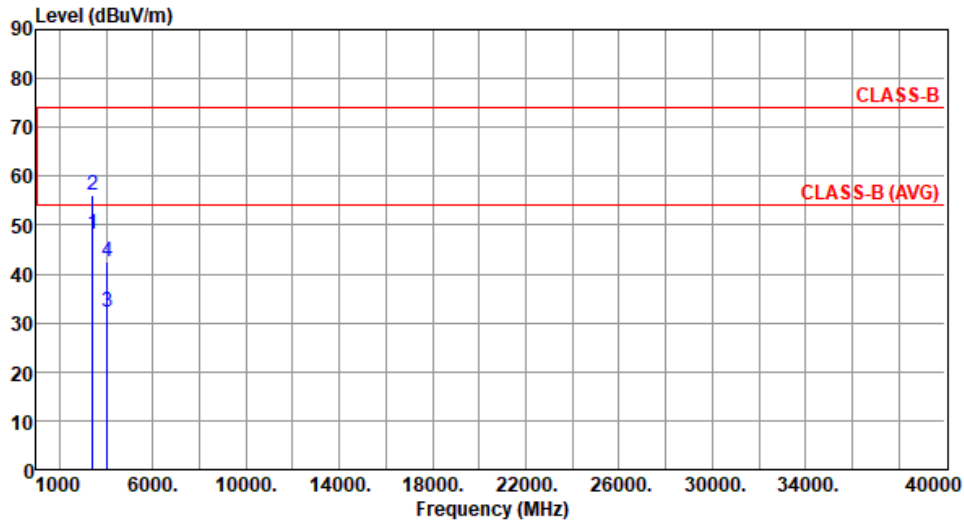
3.1.5 Transmitter Radiated Unwanted Emissions (Above 1GHz)

| | | | | | | | | | | |
|---|---|----------|--------------------|--------|---------|----------------|---------|------|-------|--|
| Test Mode | Mode 1: WIFI 2.4G 11g ch6 + NR 5G EN-DC n2A ch371500_DC5A ch20525 | | | | | | | | | |
| Polarization | Horizontal | | | | | | | | | |
| Test By :Aska Huang | | | Temperature(°C):24 | | | Humidity(%):66 | | | | |
|  | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | |
| | | dBuV/m | dBuV/m | | dBuV | | | cm | deg | |
| 1 | 3530.50 | 28.12 | 54.00 | -25.88 | 28.03 | 0.09 | Average | 100 | 168 | |
| 2 | 3530.50 | 41.81 | 74.00 | -32.19 | 41.72 | 0.09 | Peak | 100 | 168 | |
| 3 | 4037.50 | 41.26 | 54.00 | -12.74 | 39.71 | 1.55 | Average | 100 | 168 | |
| 4 | 4037.50 | 46.68 | 74.00 | -27.32 | 45.13 | 1.55 | Peak | 100 | 168 | |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p> | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|----------|--------------------|--------|---------|----------------|---------|------|-------|--|
| Test Mode | Mode 1: WIFI 2.4G 11g ch6 + NR 5G EN-DC n2A ch371500_DC5A ch20525 | | | | | | | | | |
| Polarization | Vertical | | | | | | | | | |
| Test By :Aska Huang | | | Temperature(°C):24 | | | Humidity(%):66 | | | | |
| | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | |
| | | dBuV/m | dBuV/m | dB | dBuV | dB/m | | cm | deg | |
| 1 | 3530.50 | 28.58 | 54.00 | -25.42 | 28.49 | 0.09 | Average | 100 | 153 | |
| 2 | 3530.50 | 40.57 | 74.00 | -33.43 | 40.48 | 0.09 | Peak | 100 | 153 | |
| 3 | 4037.50 | 40.64 | 54.00 | -13.36 | 39.09 | 1.55 | Average | 100 | 145 | |
| 4 | 4037.50 | 46.98 | 74.00 | -27.02 | 45.43 | 1.55 | Peak | 100 | 145 | |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)</p> <p>*Factor includes antenna factor , cable loss and amplifier gain</p> <p>Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p> | | | | | | | | | | |

| | |
|---------------------|---|
| Test Mode | Mode 2: WIFI 2.4G 11g ch6 + NR 5G EN-DC n5A ch167300_DC66A ch132322 |
| Polarization | Horizontal |

Test By :Aska Huang Temperature(°C):24 Humidity(%):66



| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|---------|-------------------|----------------------|
| 1 | 3418.00 | 48.17 | 54.00 | -5.83 | 48.86 | -0.69 | Average | 100 | 11 |
| 2 | 3418.00 | 56.06 | 74.00 | -17.94 | 56.75 | -0.69 | Peak | 100 | 11 |
| 3 | 4037.50 | 32.31 | 54.00 | -21.69 | 30.76 | 1.55 | Average | 100 | 11 |
| 4 | 4037.50 | 42.52 | 74.00 | -31.48 | 40.97 | 1.55 | Peak | 100 | 11 |

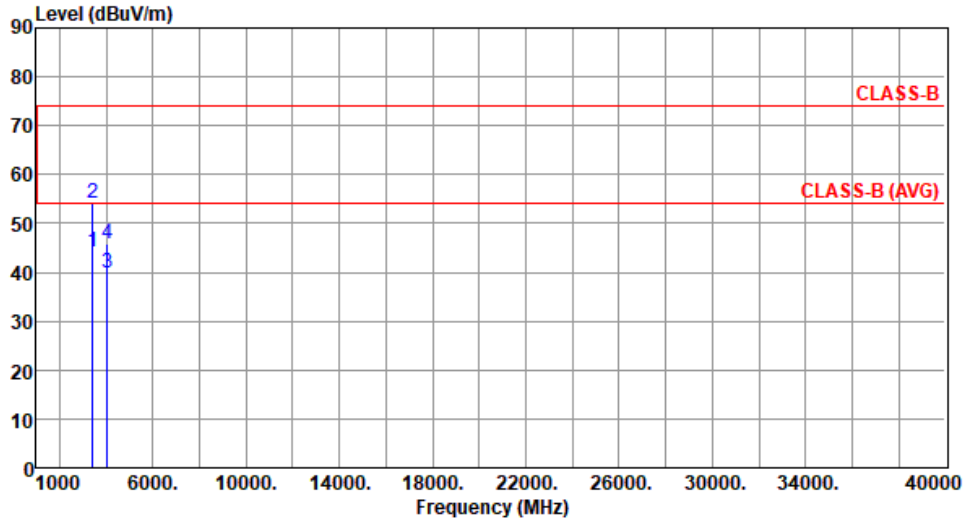
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

| | |
|---------------------|---|
| Test Mode | Mode 2: WIFI 2.4G 11g ch6 + NR 5G EN-DC n5A ch167300_DC66A ch132322 |
| Polarization | Vertical |

Test By :Aska Huang Temperature(°C):24 Humidity(%):66



| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|---------|-------------------|----------------------|
| 1 | 3418.00 | 44.33 | 54.00 | -9.67 | 45.02 | -0.69 | Average | 160 | 221 |
| 2 | 3418.00 | 54.16 | 74.00 | -19.84 | 54.85 | -0.69 | Peak | 160 | 221 |
| 3 | 4037.50 | 39.84 | 54.00 | -14.16 | 38.29 | 1.55 | Average | 100 | 134 |
| 4 | 4037.50 | 45.94 | 74.00 | -28.06 | 44.39 | 1.55 | Peak | 100 | 134 |

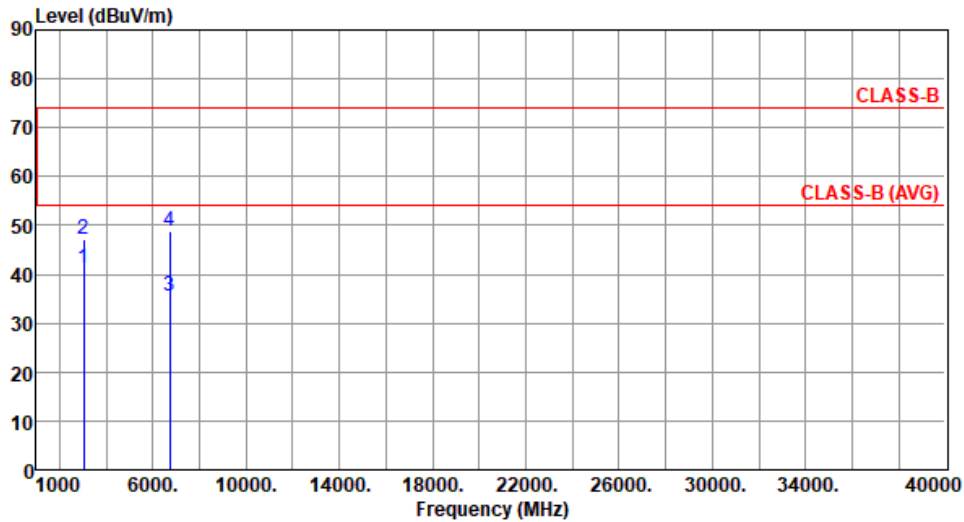
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

| | |
|---------------------|--|
| Test Mode | Mode 3: WIFI 2.4G 11g ch6 + NR 5G EN-DC n41A ch534996_DC2A ch18615 |
| Polarization | Horizontal |

Test By :Aska Huang Temperature(°C):24 Humidity(%):66



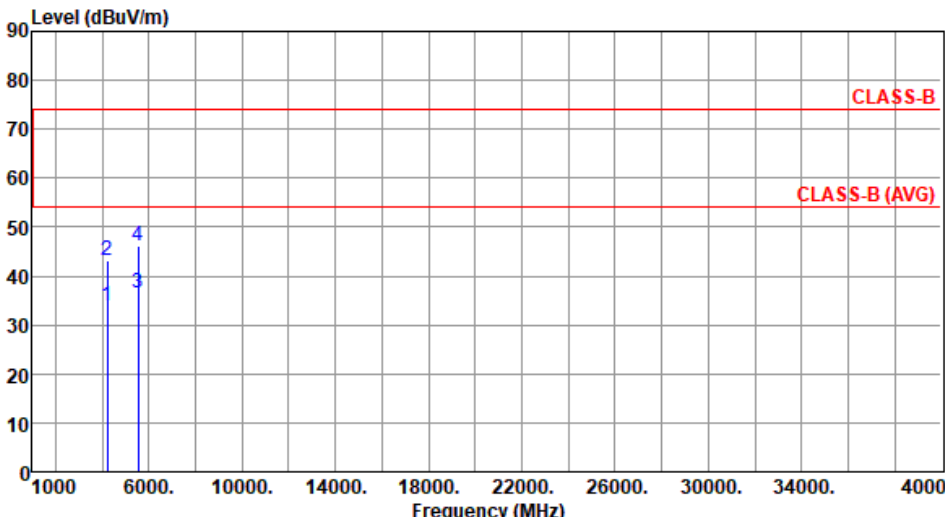
| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|---------|-------------------|----------------------|
| 1 | 3022.00 | 41.18 | 54.00 | -12.82 | 41.98 | -0.80 | Average | 100 | 165 |
| 2 | 3022.00 | 47.13 | 74.00 | -26.87 | 47.93 | -0.80 | Peak | 100 | 165 |
| 3 | 6725.50 | 35.65 | 54.00 | -18.35 | 28.29 | 7.36 | Average | 100 | 156 |
| 4 | 6725.50 | 48.89 | 74.00 | -25.11 | 41.53 | 7.36 | Peak | 100 | 156 |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

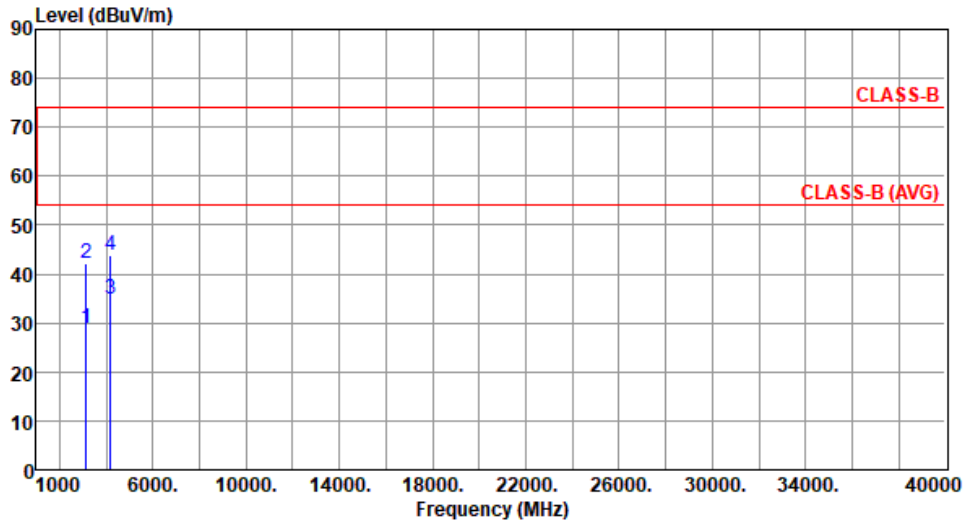
| | | | | | | | | | | |
|---|--|----------|--------------------|--------|---------|-----------------|---------|------|-------|--|
| Test Mode | Mode 3: WIFI 2.4G 11g ch6 + NR 5G EN-DC n41A ch534996_DC2A ch18615 | | | | | | | | | |
| Polarization | Vertical | | | | | | | | | |
| Test By :Aska Huang | | | Temperature(°C):24 | | | Humidity(%) :66 | | | | |
| | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | |
| | | dBuV/m | | | dBuV | | | cm | deg | |
| 1 | 3022.00 | 34.45 | 54.00 | -19.55 | 35.25 | -0.80 | Average | 100 | 215 | |
| 2 | 3022.00 | 45.04 | 74.00 | -28.96 | 45.84 | -0.80 | Peak | 100 | 215 | |
| 3 | 6725.50 | 39.42 | 54.00 | -14.58 | 32.06 | 7.36 | Average | 100 | 214 | |
| 4 | 6725.50 | 48.83 | 74.00 | -25.17 | 41.47 | 7.36 | Peak | 100 | 214 | |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p> | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|----------|--------------------|--------|---------|----------------|---------|------|-------|--|
| Test Mode | Mode 4: WIFI 2.4G I 11g ch6 + NR 5G SA N71 ch133100 | | | | | | | | | |
| Polarization | Horizontal | | | | | | | | | |
| Test By :Aska Huang | | | Temperature(°C):24 | | | Humidity(%):66 | | | | |
|  | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | |
| | | dBuV/m | | | dBuV | | | cm | deg | |
| 1 | 4208.50 | 33.76 | 54.00 | -20.24 | 31.58 | 2.18 | Average | 100 | 169 | |
| 2 | 4208.50 | 43.13 | 74.00 | -30.87 | 40.95 | 2.18 | Peak | 100 | 169 | |
| 3 | 5539.50 | 36.59 | 54.00 | -17.41 | 31.89 | 4.70 | Average | 100 | 166 | |
| 4 | 5539.50 | 46.15 | 74.00 | -27.85 | 41.45 | 4.70 | Peak | 100 | 166 | |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p> | | | | | | | | | | |

| | | | | | | | | | |
|---|---|--------------------|--------|--------|----------------|--------|---------|------|-------|
| Test Mode | Mode 4: WIFI 2.4G I 11g ch6 + NR 5G SA N71 ch133100 | | | | | | | | |
| Polarization | Vertical | | | | | | | | |
| Test By :Aska Huang | | Temperature(°C):24 | | | Humidity(%):66 | | | | |
| | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table |
| | | dBuV/m | | | dBuV | | | cm | deg |
| 1 | 4208.50 | 37.84 | 54.00 | -16.16 | 35.66 | 2.18 | Average | 100 | 137 |
| 2 | 4208.50 | 47.16 | 74.00 | -26.84 | 44.98 | 2.18 | Peak | 100 | 137 |
| 3 | 5539.50 | 41.56 | 54.00 | -12.44 | 36.86 | 4.70 | Average | 100 | 137 |
| 4 | 5539.50 | 48.25 | 74.00 | -25.75 | 43.55 | 4.70 | Peak | 100 | 137 |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)</p> <p>*Factor includes antenna factor , cable loss and amplifier gain</p> <p>Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p> | | | | | | | | | |

| | |
|---------------------|---|
| Test Mode | Mode 5: WIFI 2.4G 11g ch6 + LTE B12 ch23035 |
| Polarization | Horizontal |

Test By :Aska Huang Temperature(°C):24 Humidity(%):66



| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|---------|-------------------|----------------------|
| 1 | 3138.50 | 28.88 | 54.00 | -25.12 | 28.91 | -0.03 | Average | 100 | 191 |
| 2 | 3138.50 | 42.07 | 74.00 | -31.93 | 42.10 | -0.03 | Peak | 100 | 191 |
| 3 | 4172.50 | 34.89 | 54.00 | -19.11 | 32.81 | 2.08 | Average | 100 | 166 |
| 4 | 4172.50 | 43.78 | 74.00 | -30.22 | 41.70 | 2.08 | Peak | 100 | 166 |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

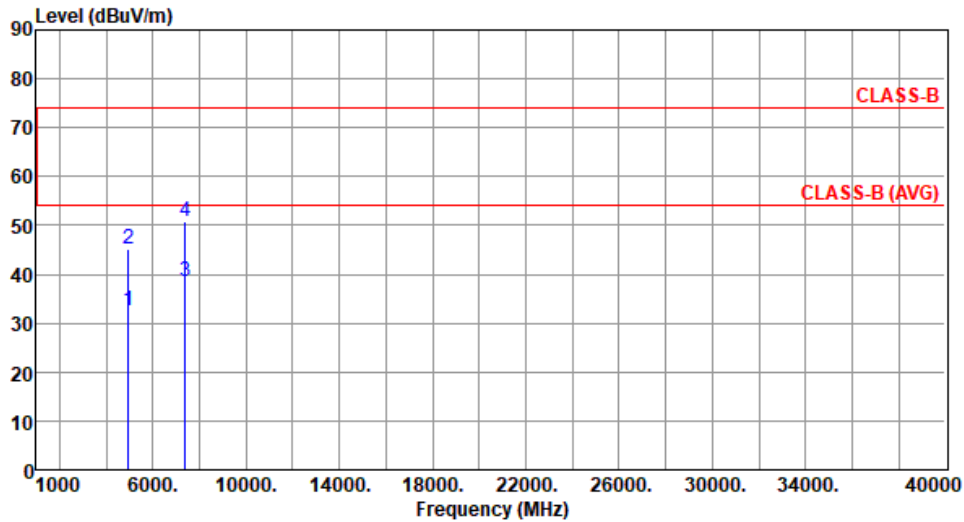
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

| | | | | | | | | | | |
|---|---|----------|--------------------|--------|---------|-----------------|---------|------|-------|--|
| Test Mode | Mode 5: WIFI 2.4G 11g ch6 + LTE B12 ch23035 | | | | | | | | | |
| Polarization | Vertical | | | | | | | | | |
| Test By :Aska Huang | | | Temperature(°C):24 | | | Humidity(%) :66 | | | | |
| | | | | | | | | | | |
| | Freq. | Emission | Limit | Margin | SA | Factor | Remark | ANT | Turn | |
| | MHz | level | dBuV/m | dB | reading | dB/m | | High | Table | |
| | | dBuV/m | | | dBuV | | | cm | deg | |
| 1 | 3138.50 | 28.60 | 54.00 | -25.40 | 28.63 | -0.03 | Average | 100 | 235 | |
| 2 | 3138.50 | 41.73 | 74.00 | -32.27 | 41.76 | -0.03 | Peak | 100 | 235 | |
| 3 | 4172.50 | 32.21 | 54.00 | -21.79 | 30.13 | 2.08 | Average | 100 | 223 | |
| 4 | 4172.50 | 43.54 | 74.00 | -30.46 | 41.46 | 2.08 | Peak | 100 | 223 | |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p> | | | | | | | | | | |

| | |
|---------------------|--|
| Test Mode | Mode 6: WIFI 2.4G 11g ch6 + LTE B41 HPUE ch39675 |
| Polarization | Horizontal |

Test By :Aska Huang Temperature(°C):24 Humidity(%):66

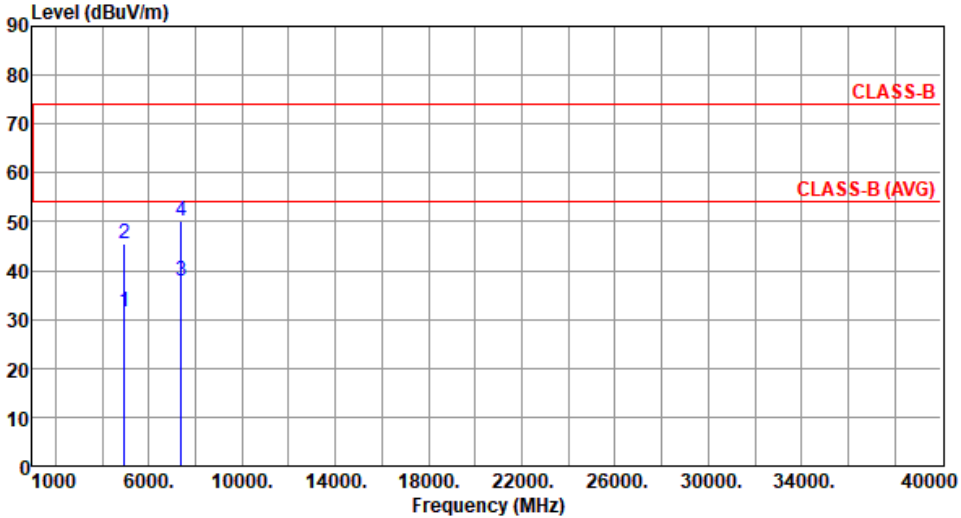


| | Freq. MHz | Emission level dBuV/m | Limit dBuV/m | Margin dB | SA reading dBuV | Factor dB/m | Remark | ANT High cm | Turn Table deg |
|---|--------------|-----------------------------|-----------------|--------------|-----------------------|----------------|---------|-------------------|----------------------|
| 1 | 4935.50 | 32.61 | 54.00 | -21.39 | 28.57 | 4.04 | Average | 100 | 186 |
| 2 | 4935.50 | 45.27 | 74.00 | -28.73 | 41.23 | 4.04 | Peak | 100 | 186 |
| 3 | 7372.50 | 38.52 | 54.00 | -15.48 | 29.27 | 9.25 | Average | 100 | 158 |
| 4 | 7372.50 | 50.93 | 74.00 | -23.07 | 41.68 | 9.25 | Peak | 100 | 158 |

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

| | | | | | | | | | |
|---|--|-----------------|--------|-------------|------------|--------|---------|----------|------------|
| Test Mode | Mode 6: WIFI 2.4G 11g ch6 + LTE B41 HPUE ch39675 | | | | | | | | |
| Polarization | Vertical | | | | | | | | |
| Test By | :Aska Huang | Temperature(°C) | :24 | Humidity(%) | :66 | | | | |
|  | | | | | | | | | |
| | Freq. | Emission level | Limit | Margin | SA reading | Factor | Remark | ANT High | Turn Table |
| | MHz | dBuV/m | dBuV/m | dB | dBuV | dB/m | | cm | deg |
| 1 | 4935.50 | 31.47 | 54.00 | -22.53 | 27.43 | 4.04 | Average | 100 | 168 |
| 2 | 4935.50 | 45.36 | 74.00 | -28.64 | 41.32 | 4.04 | Peak | 100 | 168 |
| 3 | 7372.50 | 37.80 | 54.00 | -16.20 | 28.55 | 9.25 | Average | 100 | 175 |
| 4 | 7372.50 | 50.22 | 74.00 | -23.78 | 40.97 | 9.25 | Peak | 100 | 175 |
| <p>Note 1: Emission Level (dBuV/m) = SA Reading (dBuV) + Factor* (dB/m) *Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).</p> | | | | | | | | | |

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

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