

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                    |                                             |                                                                             |                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
| <b>Test report no.:</b><br><i>Prüfbericht-Nr.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>CN23CZVX 001</b>                                                                                                                                                                                | <b>Order No.:</b><br><i>Auftragsnr.:</i>    | 168436838                                                                   | <b>Page 1 of 28</b><br><i>Seite 1 von 28</i>                                          |  |
| <b>Client reference no.:</b><br><i>Kunden-Referenz-Nr.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                     | N/A                                                                                                                                                                                                | <b>Order date:</b><br><i>Auftragsdatum:</i> | 2023-07-26                                                                  |                                                                                       |  |
| <b>Client:</b><br><i>Auftraggeber:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Changsha Langyuan Electronics Technology Co., Ltd.</b><br>Building A20, Section II, Zhongdian Software Park, No. 18, Jianshan Road, High-tech Development District, Changsha, Hunan, P.R. China |                                             |                                                                             |                                                                                       |  |
| <b>Test item:</b><br><i>Prüfgegenstand:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4K Wireless Conferencing System                                                                                                                                                                    |                                             |                                                                             |                                                                                       |  |
| <b>Identification / Type no.:</b><br><i>Bezeichnung / Typ-Nr.:</i>                                                                                                                                                                                                                                                                                                                                                                                                              | R1C, RX100, RXX1XX (X is a variable, X = A to Z, 0 to 9 or blank)                                                                                                                                  |                                             |                                                                             |                                                                                       |  |
| <b>Order content:</b><br><i>Auftrags-Inhalt:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                | Test Report                                                                                                                                                                                        |                                             |                                                                             |                                                                                       |  |
| <b>Test specification</b><br><i>Prüfgrundlage:</i>                                                                                                                                                                                                                                                                                                                                                                                                                              | CFR47 FCC Part 15: Subpart E Section 15.407                                                                                                                                                        |                                             |                                                                             |                                                                                       |  |
| <b>Date of sample receipt:</b><br><i>Wareneingangsdatum:</i>                                                                                                                                                                                                                                                                                                                                                                                                                    | 2023-07-30                                                                                                                                                                                         | Please refer to Photo Document              |                                                                             |                                                                                       |  |
| <b>Test sample no:</b><br><i>Prüfmuster-Nr.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                | A003521890-003,004<br>A003534880-002                                                                                                                                                               |                                             |                                                                             |                                                                                       |  |
| <b>Testing period:</b><br><i>Prüfzeitraum:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2023-07-30 - 2023-10-08                                                                                                                                                                            |                                             |                                                                             |                                                                                       |  |
| <b>Place of testing:</b><br><i>Ort der Prüfung:</i>                                                                                                                                                                                                                                                                                                                                                                                                                             | Refer to section 2.1                                                                                                                                                                               |                                             |                                                                             |                                                                                       |  |
| <b>Testing laboratory:</b><br><i>Prüflaboratorium:</i>                                                                                                                                                                                                                                                                                                                                                                                                                          | TÜV Rheinland (Shenzhen)<br>Co., Ltd.                                                                                                                                                              |                                             |                                                                             |                                                                                       |  |
| <b>Test result*:</b><br><i>Prüfergebnis*:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                   | Pass                                                                                                                                                                                               |                                             |                                                                             |                                                                                       |  |
| <b>tested by:</b><br><i>geprüft von:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                 |                                             | <b>authorized by:</b><br><i>genehmigt von:</i>                              |  |  |
| <b>Date:</b> 2023-11-21<br><i>Datum:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                        | Signed by: Bell Hu                                                                                                                                                                                 |                                             | <b>Issue date:</b> 2023-11-21<br><i>Ausstellungsdatum:</i>                  | Signed by: Jonathan Li                                                                |  |
| <b>Position / Stellung:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Expert/Sachverständige(r)                                                                                                                                                                          |                                             | <b>Position / Stellung:</b>                                                 | Expert/Sachverständige(r)                                                             |  |
| <b>Other:</b><br><i>Sonstiges:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                              | FCC ID: 2BB9P00002                                                                                                                                                                                 |                                             |                                                                             |                                                                                       |  |
| <b>Condition of the test item at delivery:</b><br><i>Zustand des Prüfgegenstandes bei Anlieferung:</i>                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                    |                                             | Test item complete and undamaged<br>Prüfmuster vollständig und unbeschädigt |                                                                                       |  |
| <p>* Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</p> <p>* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet</p>                                                                                                                                                                             |                                                                                                                                                                                                    |                                             |                                                                             |                                                                                       |  |
| <p><b>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</b></p> <p><i>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</i></p> |                                                                                                                                                                                                    |                                             |                                                                             |                                                                                       |  |

V05

Test report no.: CN23CZVX 001  
Prüfbericht-Nr.:

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**Remarks**  
*Anmerkungen*

- |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</p> <p><i>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</i></p> <p><i>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</i></p>                                                                                                                                                       |
| 2 | <p>As contractually agreed, this document has been signed digitally only. TÜV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TÜV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</p> <p><i>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.</i></p>                                                                                      |
| 3 | <p>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</p> <p><i>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 4 | <p>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</p> <p><i>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</i></p> |

## ***Test Summary***

**5.1.1 ANTENNA REQUIREMENT**

RESULT: Pass

**5.1.2 MAXIMUM CONDUCTED OUTPUT POWER**

RESULT: Pass

**5.1.3 CONDUCTED POWER SPECTRAL DENSITY**

RESULT: Pass

**5.1.4 FREQUENCY STABILITY**

RESULT: Pass

**5.1.5 26dB BANDWIDTH AND 99% BANDWIDTH**

RESULT: Pass

**5.1.6 6dB BANDWIDTH**

RESULT: Pass

**5.1.7 RADIATED SPURIOUS EMISSION**

RESULT: Pass

**5.1.8 DYNAMIC FREQUENCY SELECTION (DFS)**

RESULT: Pass

**5.1.9 CONDUCTED EMISSION ON AC MAINS**

RESULT: Pass

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# 1 General Remarks

## 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of 5GHz Wi-Fi

Appendix B: Photographs of the Test Set-up

## 1.2 TEST METHODOLOGY

KDB 789033 D02 General U-NII Test Procedures New Rules.

KDB 905462 D02 UNII DFS Compliance Procedures New Rules.

KDB 905462 D03 Client without DFS New Rules.

KDB 905462 D04 Test Mode New Rules.

KDB 662911 D01 Multiple Transmitter Output

ANSI C63.10:2013: American National Standard for Testing Unlicensed Wireless Devices

## 2 Test Sites

### 2.1 Test Facilities

**TÜV Rheinland (Shenzhen) Co., Ltd.**

No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen 518110, Guangdong, China

FCC Registration No.: 694916

ISED wireless device testing laboratory: 25069

**TÜV Rheinland (Guangdong) Ltd. EMC Laboratory**

No.102, 1F of Southwest and No.205, 2F of West Warehouse Building, No.767 Tianyuan Road, Tianhe District, Guangzhou, Guangdong, P.R.China

FCC Registration No.: CN1207

ISED wireless device testing laboratory: 2932C

Note: Except for AC power-line conducted emissions, all test items performed in TÜV Rheinland (Shenzhen) Co., Ltd.

### 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

| <b>Radio Spectrum Testing (SRD-Tonscend)</b>   |                     |                  |                   |                   |
|------------------------------------------------|---------------------|------------------|-------------------|-------------------|
| <b>Equipment</b>                               | <b>Manufacturer</b> | <b>Model</b>     | <b>Serial No.</b> | <b>Cal. until</b> |
| EXA Signal Analyzer, Multi-touch               | Keysight            | N9010B           | MY60241175        | 10.10.2023        |
| MXG X-Series RF Vector Signal Generator        | Keysight            | N5182B           | MY61250137        | 10.10.2023        |
| EXG X-Series Microwave Analog Signal Generator | Keysight            | N5173B           | MY61250141        | 10.10.2023        |
| DC Power Supply                                | Keysight            | E3642A           | MY61276100        | 10.10.2023        |
| Wireless Connectivity Tester                   | R&S                 | CMW270           | 102505            | 10.10.2023        |
| Power Control Unit                             | Tonscend            | JS0806-4ADC      | N/A               | 10.10.2023        |
| Automation Control Unit                        | Tonscend            | JS0806-2         | 21C8060396        | 10.10.2023        |
| Test Software                                  | Tonscend            | JS1120-3         | N/A               | N/A               |
| Control PC                                     | Lenovo              | TianYi510S-071MB | Y LX23JMF         | N/A               |
| OSP                                            | R&S                 | OSP 150          | 101017            | 2023-11-21        |
| Shielding Room 8#                              | Albatross           | SR8              | APC17151-SR8      | 2024-06-22        |
| <b>Unwanted Emission Testing (TS8996)</b>      |                     |                  |                   |                   |
| <b>Equipment</b>                               | <b>Manufacturer</b> | <b>Model</b>     | <b>Serial No.</b> | <b>Cal. until</b> |
| Signal Generator                               | R&S                 | SMB100A          | 180840            | 25.07.2024        |
| Wideband Radio Communication Tester            | R&S                 | CMW500           | 165339            | 25.07.2024        |
| Signal Analyzer                                | R&S                 | FSV 40           | 101440            | 05.08.2024        |
| System Controller Interface                    | R&S                 | SCI-100          | S10010036         | N/A               |

|                                                      |              |                      |              |            |
|------------------------------------------------------|--------------|----------------------|--------------|------------|
| Filterbank                                           | R&S          | GSM                  | 100811       | 25.07.2024 |
| OSP                                                  | R&S          | OSP 120              | 102041       | N/A        |
| OSP                                                  | R&S          | OSP 150              | 101385       | 21.11.2023 |
| Pre-amplifier                                        | R&S          | SCU08F1              | 08320030     | 25.07.2024 |
| Amplifier                                            | R&S          | SCU-18F              | 180079       | 25.07.2024 |
| Amplifier                                            | R&S          | SCU40A               | 100450       | 25.07.2024 |
| Trilog Broadband Antenna<br>(30 MHz - 7 GHz)         | Schwarzbeck  | VULB 9162            | 192          | 06.08.2024 |
| Double-Ridged Antenna (1 -<br>18 GHz)                | ETS-LINDGREN | 3117                 | 00218719     | 06.08.2024 |
| Wideband Ridged Horn<br>Antenna (12-18 GHz)          | Steatite     | QMS-00208            | 18312        | 06.08.2024 |
| Wideband Ridged Horn<br>Antenna (18-40 GHz)          | Steatite     | QMS-00880            | 19066        | 27.08.2024 |
| Biconical Broadband<br>Antenna<br>(30 MHz - 1 GHz)   | Schwarzbeck  | VUBA 9117            | 357          | 02.08.2024 |
| Double Ridged Broadband<br>Horn Antenna (1 – 18 GHz) | Schwarzbeck  | BBHA 9120 D          | 01760        | 30.07.2024 |
| Broadband Horn Antenna<br>(15 – 40 GHz)              | Schwarzbeck  | BBHA 9170            | 00862        | 02.08.2024 |
| Test software                                        | R&S          | EMC32<br>(V10.50.40) | N/A          | N/A        |
| Control PC                                           | Dell         | OptiPlex 7050        | 36NW9P2      | N/A        |
| 3m Fully Anechoic<br>Chamber                         | Albatross    | FAC-3m               | APC17151-FAC | 22.06.2024 |

| <b>Conducted Emission</b> |                     |                     |                   |                   |
|---------------------------|---------------------|---------------------|-------------------|-------------------|
| <b>Equipment</b>          | <b>Manufacturer</b> | <b>Model No.</b>    | <b>Serial No.</b> | <b>Cal. Until</b> |
| EMI Test Receiver         | Rohde&Schwarz       | ESCI 3              | 100216            | 2024-03-04        |
| Two-Line V-Network        | Rohde&Schwarz       | ENV216              | 100195            | 2024-06-09        |
| EMC32 test software       | R&S                 | EMC32(Ver.10.50.00) | N/A               | N/A               |

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

| Parameter                                              | Uncertainty (k=2)     |
|--------------------------------------------------------|-----------------------|
| RF output power, conducted                             | ± 0.99 dB             |
| Occupied Channel Bandwidth                             | ± 2.08 %              |
| RF power density, conducted                            | ± 0.99 dB             |
| Unwanted Emissions, conducted                          | ± 0.89 dB             |
| All emissions, radiated                                | ±4.17 dB              |
| Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz) | ± 3.70 dB / ± 3.30 dB |

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. File for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen 518110, Guangdong, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

### 3 General Product Information

#### 3.1 Product Function and Intended Use

The Product is 4K Wireless Conferencing System which supports 5GHz Wi-Fi functions.

There are multiple models included in this product, all of them are electrically identical, only named differently for market purpose.

For details refer to the User Manual, Technical Description and Circuit Diagram.

#### 3.2 Ratings and System Details

**Table 2: Technical Specification of EUT**

| General Information of EUT                                                                                                                                                                                                   | Value                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kind of Equipment:                                                                                                                                                                                                           | 4K Wireless Conferencing System                                                                                                                         |
| Type Designation:                                                                                                                                                                                                            | R1C, RX100, RXX1XX (X is a variable, X = A to Z, 0 to 9 or blank)                                                                                       |
| Operating Voltage:                                                                                                                                                                                                           | DC 5V                                                                                                                                                   |
| Testing Voltage:                                                                                                                                                                                                             | DC 5V                                                                                                                                                   |
| Operating Temperature Range:                                                                                                                                                                                                 | 0 °C ~ +40 °C                                                                                                                                           |
| FCC ID:                                                                                                                                                                                                                      | 2BB9P00002                                                                                                                                              |
| <b>Technical Specification of Wi-Fi 802.11 a/n/ac</b>                                                                                                                                                                        |                                                                                                                                                         |
| Operating Frequency:                                                                                                                                                                                                         | 5180-5320MHz, 5500-5720MHz, 5745-5825MHz                                                                                                                |
| Type of Modulation:                                                                                                                                                                                                          | 802.11n/a: BPSK, QPSK, 16QAM, 64QAM<br>802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM                                                                       |
| Protocol:                                                                                                                                                                                                                    | 802.11 a/n20/n40/ac20/ac40/ac80                                                                                                                         |
| Data Rate:                                                                                                                                                                                                                   | 6/9/12/18/24/36/48/54 Mbps for 802.11a<br>MCS0~MCS7 for 802.11n<br>MCS0~MCS9 for 802.11ac<br>(All data rates considered, only the Worst-cases reported) |
| Channel Separation                                                                                                                                                                                                           | 5 MHz                                                                                                                                                   |
| Antenna Type:                                                                                                                                                                                                                | Integral Antenna                                                                                                                                        |
| Number of Antenna:                                                                                                                                                                                                           | 2                                                                                                                                                       |
| Antenna Gain:                                                                                                                                                                                                                | 5.3 dBi Max (As detailed in Antenna spec)                                                                                                               |
| Type of Device                                                                                                                                                                                                               | Slave Device without Radar Detection                                                                                                                    |
| Note:<br>WLAN 5GHz 802.11n/802.11ac.<br>For directional gain:<br>Array Gain = $10 \log(NANT/NSS)$ dBi.<br>So the Directional gain = GANT + $10 \log(NANT)$ dBi<br>(The worst case directional gain will occur when NSS = 1). |                                                                                                                                                         |

**Table 3: RF Channel and Frequency of 5GHz Wi-Fi 802.11 a/n/ac**

| U-NII-1         |                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 20MHz Bandwidth |                 | 40MHz Bandwidth |                 | 80MHz Bandwidth |                 |
| Channel         | Frequency (MHz) | Channel         | Frequency (MHz) | Channel         | Frequency (MHz) |
| 36              | 5180            | 38              | 5190            | 42              | 5210            |
| 40              | 5200            | 46              | 5230            |                 |                 |
| 44              | 5220            |                 |                 |                 |                 |
| 48              | 5240            |                 |                 |                 |                 |

| U-NII-2A        |                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 20MHz Bandwidth |                 | 40MHz Bandwidth |                 | 80MHz Bandwidth |                 |
| Channel         | Frequency (MHz) | Channel         | Frequency (MHz) | Channel         | Frequency (MHz) |
| 52              | 5260            | 54              | 5270            | 58              | 5290            |
| 56              | 5280            | 62              | 5310            |                 |                 |
| 60              | 5300            |                 |                 |                 |                 |
| 64              | 5320            |                 |                 |                 |                 |

| U-NII-2C        |                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 20MHz Bandwidth |                 | 40MHz Bandwidth |                 | 80MHz Bandwidth |                 |
| Channel         | Frequency (MHz) | Channel         | Frequency (MHz) | Channel         | Frequency (MHz) |
| 100             | 5500            | 102             | 5510            | 106             | 5530            |
| 104             | 5520            | 110             | 5550            | 122             | 5610            |
| 108             | 5540            | 118             | 5590            | 138             | 5690            |
| 112             | 5560            | 126             | 5630            |                 |                 |
| 116             | 5580            | 134             | 5670            |                 |                 |
| 120             | 5600            | 142             | 5710            |                 |                 |
| 124             | 5620            |                 |                 |                 |                 |
| 128             | 5640            |                 |                 |                 |                 |
| 132             | 5660            |                 |                 |                 |                 |
| 136             | 5680            |                 |                 |                 |                 |
| 140             | 5700            |                 |                 |                 |                 |
| 144             | 5720            |                 |                 |                 |                 |

| U-NII-3         |                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 20MHz Bandwidth |                 | 40MHz Bandwidth |                 | 80MHz Bandwidth |                 |
| Channel         | Frequency (MHz) | Channel         | Frequency (MHz) | Channel         | Frequency (MHz) |
| 149             | 5745            | 151             | 5755            | 155             | 5775            |
| 153             | 5765            | 159             | 5795            |                 |                 |
| 157             | 5785            |                 |                 |                 |                 |
| 161             | 5805            |                 |                 |                 |                 |
| 165             | 5825            |                 |                 |                 |                 |

### 3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wi-Fi 802.11 a/n/ac wireless transmitting mode
  - 1. Low channel
  - 2. Middle channel
  - 3. High channel
- B. On, Normal operation with Wi-Fi connected.
- C. Off

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- |                              |                         |
|------------------------------|-------------------------|
| - Application Form           | - User Manual           |
| - ID Label and Location Info | - Operation Description |

## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model R1C in this report.

### 4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

| Description                     | Manufacturer                                       | Model    | Remark                                                 |
|---------------------------------|----------------------------------------------------|----------|--------------------------------------------------------|
| Laptop                          | Lenovo                                             | T480     | SN: PF-16A6N8                                          |
| Monitor                         | Lenovo                                             | T24s-20  | 1S62A5MCR4CSULA20286                                   |
| Router                          | HUAWEI                                             | WS7200   | L5KEQ20B02002259                                       |
| Adapter                         | SAMSUNG                                            | EP-TA845 | Input: 100-240V AC, 50/60Hz, 1.2A<br>Output: DC 5V, 3A |
| PC                              | Lenovo                                             | T14      | PF-35VTG1                                              |
| Monitor                         | Lenovo                                             | T24s-20  | 1S62A5MCR4CSULA20286                                   |
| 4K Wireless Conferencing System | Changsha Langyuan Electronics Technology Co., Ltd. | M1S      | N/A                                                    |

### 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

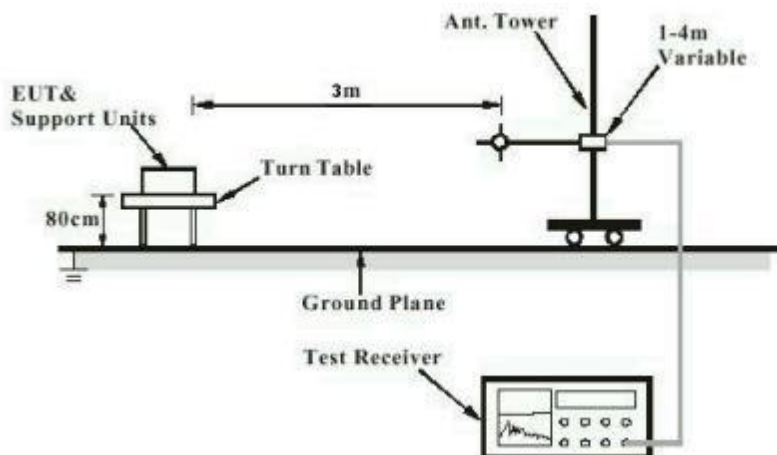
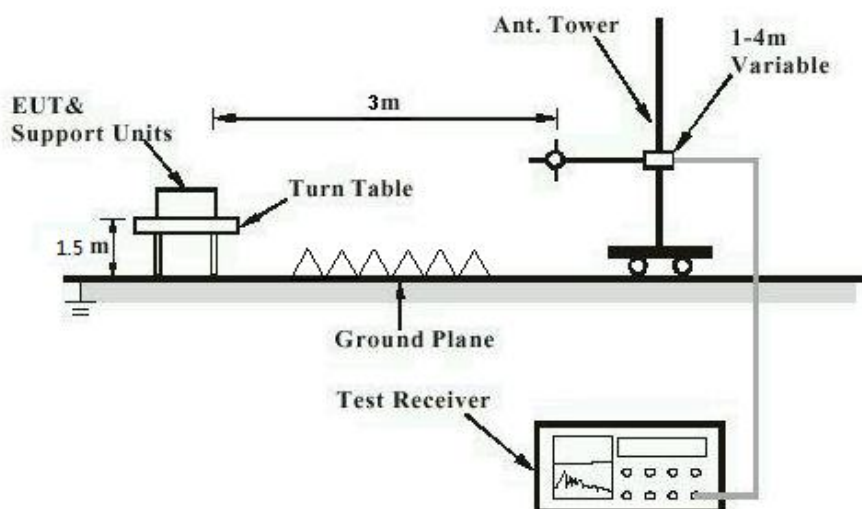
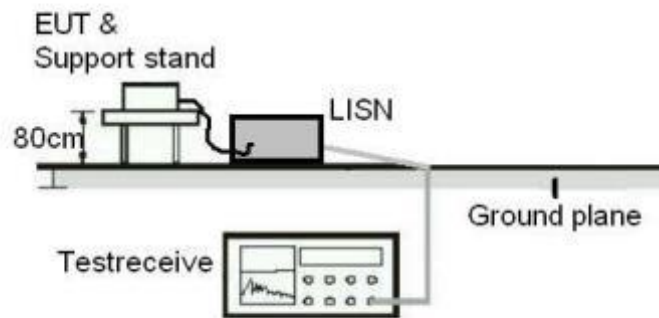


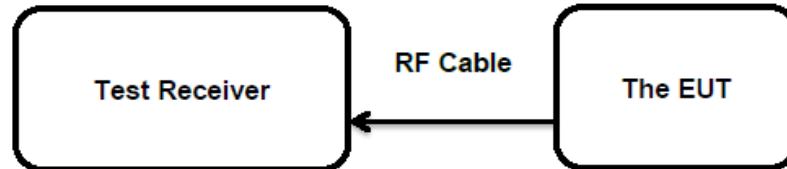
Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



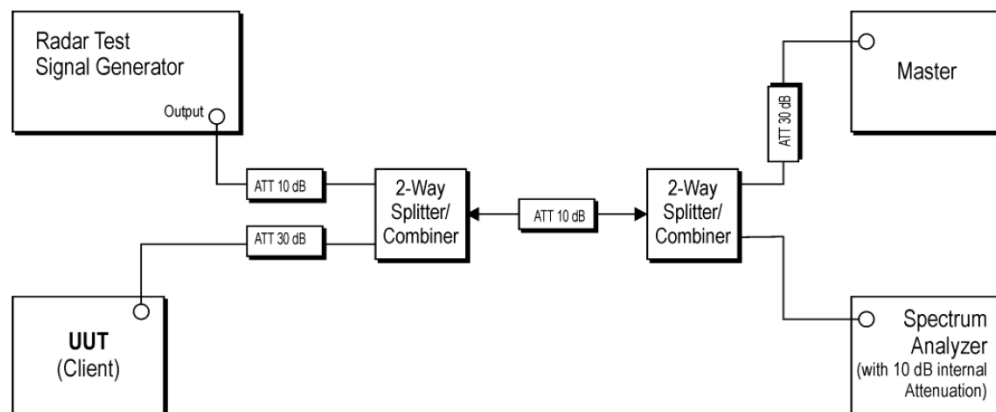
### Diagram of Measurement Configuration for Mains Conduction Measurement



### Diagram of Measurement Configuration for Conducted Transmitter Measurement



### Diagram of Measurement Configuration for Dynamic Frequency Selection (DFS)



## 5 Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

RESULT:

**Pass**

**Test Specification**

Test standard : FCC Part 15.203

The EUT have integral Antennas, the Maximum antenna gain of antenna is 5.3 dBi, and permanently attached, no consideration of replacement.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

## 5.1.2 Maximum Conducted Output Power

**RESULT:****Pass****Test Specification**

|                   |                                                                                                                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test standard     | : FCC Part 15.407(a)(1)&(2)&(4)                                                                                                                                                                                                          |
| Basic standard    | : ANSI C63.10: 2013                                                                                                                                                                                                                      |
| Limits            | : FCC:<br><250mW (23.98dBm) (5150-5250MHz)<br>*<250mW (23.98dBm) (5250-5350MHz, 5470-5725MHz)<br>*250 mW (23.98dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz, where is lesser.<br><1W (30dBm) (5725-5850MHz) |
| Kind of test site | : Shielded Room                                                                                                                                                                                                                          |

**Test Setup**

|                      |                            |
|----------------------|----------------------------|
| Date of testing      | : 2023-08-02 to 2023-10-08 |
| Input voltage        | : DC 5V                    |
| Operation mode       | : A                        |
| Test channel         | : Low / Middle / High      |
| Ambient temperature  | : 24.1 °C                  |
| Relative humidity    | : 61 %                     |
| Atmospheric pressure | : 101 kPa                  |

| TestMode  | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|---------|-------------|------------|---------|
| 11A       | Ant1    | 5180    | 14.52       | ≤23.98     | PASS    |
|           | Ant2    | 5180    | 16.10       | ≤23.98     | PASS    |
|           | Ant1    | 5200    | 14.54       | ≤23.98     | PASS    |
|           | Ant2    | 5200    | 15.69       | ≤23.98     | PASS    |
|           | Ant1    | 5240    | 13.98       | ≤23.98     | PASS    |
|           | Ant2    | 5240    | 15.10       | ≤23.98     | PASS    |
|           | Ant1    | 5260    | 13.24       | ≤23.98     | PASS    |
|           | Ant2    | 5260    | 14.69       | ≤23.98     | PASS    |
|           | Ant1    | 5280    | 13.21       | ≤23.98     | PASS    |
|           | Ant2    | 5280    | 14.72       | ≤23.98     | PASS    |
|           | Ant1    | 5320    | 13.26       | ≤23.98     | PASS    |
|           | Ant2    | 5320    | 14.54       | ≤23.98     | PASS    |
|           | Ant1    | 5500    | 6.39        | ≤23.98     | PASS    |
|           | Ant2    | 5500    | 7.38        | ≤23.98     | PASS    |
|           | Ant1    | 5580    | 9.88        | ≤23.98     | PASS    |
|           | Ant2    | 5580    | 11.08       | ≤23.98     | PASS    |
|           | Ant1    | 5700    | 7.97        | ≤23.98     | PASS    |
|           | Ant2    | 5700    | 10.01       | ≤23.98     | PASS    |
|           | Ant1    | 5720    | 11.24       | ≤23.98     | PASS    |
|           | Ant2    | 5720    | 11.55       | ≤23.98     | PASS    |
|           | Ant1    | 5745    | 12.36       | ≤30.00     | PASS    |
|           | Ant2    | 5745    | 11.68       | ≤30.00     | PASS    |
|           | Ant1    | 5785    | 12.55       | ≤30.00     | PASS    |
|           | Ant2    | 5785    | 11.91       | ≤30.00     | PASS    |
| 11N20MIMO | Ant1    | 5825    | 12.07       | ≤30.00     | PASS    |
|           | Ant2    | 5825    | 12.30       | ≤30.00     | PASS    |
|           | Ant1    | 5180    | 11.54       | ≤23.98     | PASS    |
|           | Ant2    | 5180    | 13.80       | ≤23.98     | PASS    |
|           | total   | 5180    | 15.83       | ≤21.68     | PASS    |
|           | Ant1    | 5200    | 12.17       | ≤23.98     | PASS    |
|           | Ant2    | 5200    | 14.13       | ≤23.98     | PASS    |
|           | total   | 5200    | 16.27       | ≤21.68     | PASS    |
|           | Ant1    | 5240    | 11.44       | ≤23.98     | PASS    |
|           | Ant2    | 5240    | 13.28       | ≤23.98     | PASS    |
|           | total   | 5240    | 15.47       | ≤21.68     | PASS    |
|           | Ant1    | 5260    | 10.66       | ≤23.98     | PASS    |
|           | Ant2    | 5260    | 12.82       | ≤23.98     | PASS    |
|           | total   | 5260    | 14.88       | ≤21.68     | PASS    |
|           | Ant1    | 5280    | 10.87       | ≤23.98     | PASS    |
|           | Ant2    | 5280    | 13.07       | ≤23.98     | PASS    |
|           | total   | 5280    | 15.12       | ≤21.68     | PASS    |
|           | Ant1    | 5320    | 11.21       | ≤23.98     | PASS    |
|           | Ant2    | 5320    | 13.03       | ≤23.98     | PASS    |
|           | total   | 5320    | 15.22       | ≤21.68     | PASS    |
|           | Ant1    | 5500    | 7.52        | ≤23.98     | PASS    |
|           | Ant2    | 5500    | 8.49        | ≤23.98     | PASS    |
|           | total   | 5500    | 11.04       | ≤21.68     | PASS    |
|           | Ant1    | 5580    | 8.81        | ≤23.98     | PASS    |
|           | Ant2    | 5580    | 10.88       | ≤23.98     | PASS    |
|           | total   | 5580    | 12.98       | ≤21.68     | PASS    |
|           | Ant1    | 5700    | 12.61       | ≤23.98     | PASS    |
|           | Ant2    | 5700    | 15.30       | ≤23.98     | PASS    |
|           | total   | 5700    | 17.17       | ≤21.68     | PASS    |
|           | Ant1    | 5720    | 10.00       | ≤23.98     | PASS    |
|           | Ant2    | 5720    | 9.75        | ≤23.98     | PASS    |
|           | total   | 5720    | 12.89       | ≤21.68     | PASS    |
|           | Ant1    | 5745    | 13.40       | ≤30.00     | PASS    |
|           | Ant2    | 5745    | 12.89       | ≤30.00     | PASS    |
|           | total   | 5745    | 16.16       | ≤27.70     | PASS    |
|           | Ant1    | 5785    | 13.37       | ≤30.00     | PASS    |

|            |       |      |       |        |      |
|------------|-------|------|-------|--------|------|
|            | Ant2  | 5785 | 12.98 | ≤30.00 | PASS |
|            | total | 5785 | 16.19 | ≤27.70 | PASS |
|            | Ant1  | 5825 | 13.03 | ≤30.00 | PASS |
|            | Ant2  | 5825 | 13.33 | ≤30.00 | PASS |
|            | total | 5825 | 16.19 | ≤27.70 | PASS |
| 11N40MIMO  | Ant1  | 5190 | 12.19 | ≤23.98 | PASS |
|            | Ant2  | 5190 | 14.23 | ≤23.98 | PASS |
|            | total | 5190 | 16.34 | ≤21.68 | PASS |
|            | Ant1  | 5230 | 12.14 | ≤23.98 | PASS |
|            | Ant2  | 5230 | 13.61 | ≤23.98 | PASS |
|            | total | 5230 | 15.95 | ≤21.68 | PASS |
|            | Ant1  | 5270 | 11.27 | ≤23.98 | PASS |
|            | Ant2  | 5270 | 13.18 | ≤23.98 | PASS |
|            | total | 5270 | 15.34 | ≤21.68 | PASS |
|            | Ant1  | 5310 | 8.95  | ≤23.98 | PASS |
|            | Ant2  | 5310 | 10.87 | ≤23.98 | PASS |
|            | total | 5310 | 13.03 | ≤21.68 | PASS |
|            | Ant1  | 5510 | 3.23  | ≤23.98 | PASS |
|            | Ant2  | 5510 | 4.55  | ≤23.98 | PASS |
|            | total | 5510 | 6.95  | ≤21.68 | PASS |
|            | Ant1  | 5550 | 9.23  | ≤23.98 | PASS |
|            | Ant2  | 5550 | 10.09 | ≤23.98 | PASS |
|            | total | 5550 | 12.69 | ≤21.68 | PASS |
|            | Ant1  | 5670 | 8.12  | ≤23.98 | PASS |
|            | Ant2  | 5670 | 8.88  | ≤23.98 | PASS |
|            | total | 5670 | 11.53 | ≤21.68 | PASS |
|            | Ant1  | 5710 | 11.71 | ≤23.98 | PASS |
|            | Ant2  | 5710 | 11.96 | ≤23.98 | PASS |
|            | total | 5710 | 14.85 | ≤21.68 | PASS |
|            | Ant1  | 5755 | 11.73 | ≤30.00 | PASS |
|            | Ant2  | 5755 | 10.86 | ≤30.00 | PASS |
|            | total | 5755 | 14.33 | ≤27.70 | PASS |
|            | Ant1  | 5795 | 11.28 | ≤30.00 | PASS |
|            | Ant2  | 5795 | 11.00 | ≤30.00 | PASS |
|            | total | 5795 | 14.15 | ≤27.70 | PASS |
| 11AC20MIMO | Ant1  | 5180 | 11.80 | ≤23.98 | PASS |
|            | Ant2  | 5180 | 14.45 | ≤23.98 | PASS |
|            | total | 5180 | 16.33 | ≤21.68 | PASS |
|            | Ant1  | 5200 | 11.81 | ≤23.98 | PASS |
|            | Ant2  | 5200 | 14.63 | ≤23.98 | PASS |
|            | total | 5200 | 16.46 | ≤21.68 | PASS |
|            | Ant1  | 5240 | 11.46 | ≤23.98 | PASS |
|            | Ant2  | 5240 | 13.11 | ≤23.98 | PASS |
|            | total | 5240 | 15.37 | ≤21.68 | PASS |
|            | Ant1  | 5260 | 10.84 | ≤23.98 | PASS |
|            | Ant2  | 5260 | 13.17 | ≤23.98 | PASS |
|            | total | 5260 | 15.17 | ≤21.68 | PASS |
|            | Ant1  | 5280 | 10.83 | ≤23.98 | PASS |
|            | Ant2  | 5280 | 13.09 | ≤23.98 | PASS |
|            | total | 5280 | 15.12 | ≤21.68 | PASS |
|            | Ant1  | 5320 | 11.93 | ≤23.98 | PASS |
|            | Ant2  | 5320 | 13.20 | ≤23.98 | PASS |
|            | total | 5320 | 15.62 | ≤21.68 | PASS |
|            | Ant1  | 5500 | 7.41  | ≤23.98 | PASS |
|            | Ant2  | 5500 | 9.00  | ≤23.98 | PASS |
|            | total | 5500 | 11.29 | ≤21.68 | PASS |
|            | Ant1  | 5580 | 8.83  | ≤23.98 | PASS |
|            | Ant2  | 5580 | 10.92 | ≤23.98 | PASS |
|            | total | 5580 | 13.01 | ≤21.68 | PASS |
|            | Ant1  | 5700 | 7.09  | ≤23.98 | PASS |
|            | Ant2  | 5700 | 9.78  | ≤23.98 | PASS |
|            | total | 5700 | 11.65 | ≤21.68 | PASS |

|            |       |      |       |        |      |
|------------|-------|------|-------|--------|------|
|            | Ant1  | 5720 | 10.99 | ≤23.98 | PASS |
|            | Ant2  | 5720 | 11.07 | ≤23.98 | PASS |
|            | total | 5720 | 14.04 | ≤21.68 | PASS |
|            | Ant1  | 5745 | 11.15 | ≤30.00 | PASS |
|            | Ant2  | 5745 | 10.54 | ≤30.00 | PASS |
|            | total | 5745 | 13.87 | ≤27.70 | PASS |
|            | Ant1  | 5785 | 10.97 | ≤30.00 | PASS |
|            | Ant2  | 5785 | 10.97 | ≤30.00 | PASS |
|            | total | 5785 | 13.98 | ≤27.70 | PASS |
|            | Ant1  | 5825 | 10.54 | ≤30.00 | PASS |
|            | Ant2  | 5825 | 11.36 | ≤30.00 | PASS |
|            | total | 5825 | 13.98 | ≤27.70 | PASS |
| 11AC40MIMO | Ant1  | 5190 | 12.24 | ≤23.98 | PASS |
|            | Ant2  | 5190 | 14.62 | ≤23.98 | PASS |
|            | total | 5190 | 16.60 | ≤21.68 | PASS |
|            | Ant1  | 5230 | 12.23 | ≤23.98 | PASS |
|            | Ant2  | 5230 | 13.68 | ≤23.98 | PASS |
|            | total | 5230 | 16.03 | ≤21.68 | PASS |
|            | Ant1  | 5270 | 11.71 | ≤23.98 | PASS |
|            | Ant2  | 5270 | 13.46 | ≤23.98 | PASS |
|            | total | 5270 | 15.68 | ≤21.68 | PASS |
|            | Ant1  | 5310 | 9.40  | ≤23.98 | PASS |
|            | Ant2  | 5310 | 11.52 | ≤23.98 | PASS |
|            | total | 5310 | 13.60 | ≤21.68 | PASS |
|            | Ant1  | 5510 | 3.17  | ≤23.98 | PASS |
|            | Ant2  | 5510 | 4.42  | ≤23.98 | PASS |
|            | total | 5510 | 6.85  | ≤21.68 | PASS |
|            | Ant1  | 5550 | 9.26  | ≤23.98 | PASS |
|            | Ant2  | 5550 | 10.15 | ≤23.98 | PASS |
|            | total | 5550 | 12.74 | ≤21.68 | PASS |
|            | Ant1  | 5670 | 8.18  | ≤23.98 | PASS |
|            | Ant2  | 5670 | 8.92  | ≤23.98 | PASS |
|            | total | 5670 | 11.58 | ≤21.68 | PASS |
|            | Ant1  | 5710 | 11.55 | ≤23.98 | PASS |
|            | Ant2  | 5710 | 11.63 | ≤23.98 | PASS |
|            | total | 5710 | 14.60 | ≤21.68 | PASS |
|            | Ant1  | 5755 | 11.27 | ≤30.00 | PASS |
|            | Ant2  | 5755 | 10.89 | ≤30.00 | PASS |
|            | total | 5755 | 14.09 | ≤27.70 | PASS |
|            | Ant1  | 5795 | 11.21 | ≤30.00 | PASS |
|            | Ant2  | 5795 | 11.17 | ≤30.00 | PASS |
|            | total | 5795 | 14.20 | ≤27.70 | PASS |
| 11AC80MIMO | Ant1  | 5210 | 13.02 | ≤23.98 | PASS |
|            | Ant2  | 5210 | 14.32 | ≤23.98 | PASS |
|            | total | 5210 | 16.73 | ≤21.68 | PASS |
|            | Ant1  | 5290 | 11.85 | ≤23.98 | PASS |
|            | Ant2  | 5290 | 14.14 | ≤23.98 | PASS |
|            | total | 5290 | 16.15 | ≤21.68 | PASS |
|            | Ant1  | 5530 | 4.98  | ≤23.98 | PASS |
|            | Ant2  | 5530 | 5.38  | ≤23.98 | PASS |
|            | total | 5530 | 8.19  | ≤21.68 | PASS |
|            | Ant1  | 5610 | 6.91  | ≤23.98 | PASS |
|            | Ant2  | 5610 | 6.62  | ≤23.98 | PASS |
|            | total | 5610 | 9.78  | ≤21.68 | PASS |
|            | Ant1  | 5690 | 15.65 | ≤23.98 | PASS |
|            | Ant2  | 5690 | 14.72 | ≤23.98 | PASS |
|            | total | 5690 | 18.22 | ≤21.68 | PASS |
|            | Ant1  | 5775 | 10.91 | ≤30.00 | PASS |
|            | Ant2  | 5775 | 11.91 | ≤30.00 | PASS |
|            | total | 5775 | 14.45 | ≤27.70 | PASS |

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\*For the WLAN 5GHz 802.11n/802.11ac/802.11ax, the directional gain is 8.3dBi for MIMO mode, thus the power limit should be reduced by 2.3dB.

The Duty Cycle Factor is compensated in the tables.

TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW(27dBm) in DFS bands.

Both SISO and MIMO tested, only the higher power mode MIMO reported.

Antenna gain(G): 5.3 dBi

e.i.r.p.=P(Average power)+ G (directional gain)

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### 5.1.3 Conducted Power Spectral Density

**RESULT:****Pass****Test Specification**

Test standard : FCC part 15.407(a)  
Basic standard : ANSI C63.10: 2013  
KDB 789033 D02 v01r03  
Limits : FCC:  
<11dBm/MHz (5150-5250MHz 5250-5350MHz, 5470-5725MHz)  
<30dBm/500KHz (5725-5850MHz)  
Kind of test site : Shielded Room

**Test Setup**

Date of testing : 2023-08-02 to 2023-10-08  
Input voltage : DC 5V  
Operation mode : A  
Test channel : Low / Middle / High  
Ambient temperature : 24.1 °C  
Relative humidity : 61 %  
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

### 5.1.4 Frequency Stability

**RESULT:**

**Pass**

**Test Specification**

|                   |                         |
|-------------------|-------------------------|
| Test standard     | : FCC Part 15.407(g)    |
| Basic standard    | : ANSI C63.10: 2013     |
| Limits            | : Within assigned bands |
| Kind of test site | : Shielded Room         |

**Test Setup**

|                      |                            |
|----------------------|----------------------------|
| Date of testing      | : 2023-08-02 to 2023-09-03 |
| Input voltage        | : DC 5V                    |
| Operation mode       | : A                        |
| Test channel         | : Low / Middle / High      |
| Ambient temperature  | : 24.1 °C                  |
| Relative humidity    | : 61 %                     |
| Atmospheric pressure | : 101 kPa                  |

For the measurement records, refer to the appendix A.

**5.1.5 26dB Bandwidth and 99% Bandwidth****RESULT:****Pass****Test Specification**

|                   |                      |
|-------------------|----------------------|
| Test standard     | : FCC Part 15.407(e) |
| Basic standard    | : ANSI C63.10: 2013  |
| Limits            | : N/A                |
| Kind of test site | : Shielded Room      |

**Test Setup**

|                      |                            |
|----------------------|----------------------------|
| Date of testing      | : 2023-08-02 to 2023-10-08 |
| Input voltage        | : DC 5V                    |
| Operation mode       | : A                        |
| Test channel         | : Low / Middle / High      |
| Ambient temperature  | : 24.1 °C                  |
| Relative humidity    | : 61 %                     |
| Atmospheric pressure | : 101 kPa                  |

For the measurement records, refer to the appendix A.

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### 5.1.6 6dB Bandwidth

**RESULT:**

**Pass**

#### Test Specification

Test standard : FCC Part 15.407(e)  
Basic standard : ANSI C63.10: 2013  
Limits : At least 500KHz (5725-5850MHz)  
Kind of test site : Shielded Room

#### Test Setup

Date of testing : 2023-08-02 to 2023-09-03  
Input voltage : DC 5V  
Operation mode : A  
Test channel : Low / Middle / High  
Ambient temperature : 24.1 °C  
Relative humidity : 61 %  
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

### 5.1.7 Radiated Spurious Emission

**RESULT:****Pass****Test Specification**

Test standard : FCC Part 15.407(b) & FCC Part 15.205 & FCC Part 15.209  
Basic standard : ANSI C63.10: 2013  
KDB 789033 D02 v01r03

Limits : 

- For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.  
Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.
- For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Kind of test site : 3m Semi-anechoic Chamber

**Test Setup**

Date of testing : 2023-08-02 to 2023-09-03  
Input voltage : DC 5V  
Operation mode : A  
Test channel : Low / Middle / High  
Ambient temperature : Refer to test result  
Relative humidity : Refer to test result  
Atmospheric pressure : 101 kPa

**Remark:**

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A.

### 5.1.8 Dynamic Frequency Selection (DFS)

**RESULT:****Pass****Test Specification**

|                   |                                                                                                                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test standard     | : FCC Part 15.407(h)                                                                                                                                                                                         |
| Basic standard    | : ANSI C63.10: 2013                                                                                                                                                                                          |
| Limits            | : 5250-5350MHz, 5470-5725MHz<br>Channel Move Time: Within 10 seconds.<br>Channel Closing Transmission Time: 200ms+aggregate of 60ms over remaining 10s period;<br>Non-Occupancy Period: at least 30 minutes. |
| Kind of test site | : Shielded Room                                                                                                                                                                                              |

**Test Setup**

|                      |                            |
|----------------------|----------------------------|
| Date of testing      | : 2023-08-02 to 2023-09-03 |
| Input voltage        | : DC 5V                    |
| Operation mode       | : A                        |
| Test channel         | : CH 58, CH 106            |
| Ambient temperature  | : 24.1 °C                  |
| Relative humidity    | : 61 %                     |
| Atmospheric pressure | : 101 kPa                  |

For the measurement records, refer to the appendix A.

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### 5.1.9 Conducted Emission on AC Mains

**RESULT:****Pass****Test Specification**

|                   |                                         |
|-------------------|-----------------------------------------|
| Test standard     | : FCC Part 15.207(a)                    |
| Basic standard    | : ANSI C63.10: 2013                     |
| Frequency range   | : 0.15 – 30MHz                          |
| Limits            | : FCC Part 15.207(a)<br>RSS-Gen Table 4 |
| Kind of test site | : Shielded Room                         |

**Test Setup**

|                      |                            |
|----------------------|----------------------------|
| Date of testing      | : 2023-08-02 to 2023-09-03 |
| Input voltage        | : DC 5V via AC/DC Adapter  |
| Operation mode       | : B                        |
| Earthing             | : Not connected            |
| Ambient temperature  | : 23.2 °C                  |
| Relative humidity    | : 50.6 %                   |
| Atmospheric pressure | : 101 kPa                  |

For the measurement records, refer to the appendix A.

## 6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

## 7 List of Tables

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