



|                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                       |                                                            |                                                                     |                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Prüfbericht-Nr.:</b><br><i>Test report no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                         | CN26ICTC 001                                                                                                                                                                                                                                                                                                                                                          | <b>Auftrags-Nr.:</b><br><i>Order no.:</i>                  | 48308150                                                            | Seite 1 von 22<br>Page 1 of 22                                   |
| <b>Kunden-Referenz-Nr.:</b><br><i>Client reference no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                | N/A                                                                                                                                                                                                                                                                                                                                                                   | <b>Auftragsdatum:</b><br><i>Order date:</i>                | 2026-08-07                                                          |                                                                  |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                     | Microchip Technology Inc.<br>2355 West Chandler Blvd. Chandler, Arizona 85224-6199, United States                                                                                                                                                                                                                                                                     |                                                            |                                                                     |                                                                  |
| <b>Prüfgegenstand:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                | IEEE 802.11 b/g/n SmartConnect IoT Module                                                                                                                                                                                                                                                                                                                             |                                                            |                                                                     |                                                                  |
| <b>Bezeichnung / Typ-Nr.:</b><br><i>Identification / Type no.:</i>                                                                                                                                                                                                                                                                                                                                                                                         | ATWINC1510-MR210PB                                                                                                                                                                                                                                                                                                                                                    |                                                            |                                                                     |                                                                  |
| <b>Auftrags-Inhalt:</b><br><i>Order content:</i>                                                                                                                                                                                                                                                                                                                                                                                                           | FCC Part 15C Test report (WiFi 2.4GHz)                                                                                                                                                                                                                                                                                                                                |                                                            |                                                                     |                                                                  |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                        | FCC 47CFR Part 15: Subpart C Section 15.247                                                                                                                                                                                                                                                                                                                           |                                                            |                                                                     |                                                                  |
| <b>Wareneingangsdatum:</b><br><i>Date of sample receipt:</i>                                                                                                                                                                                                                                                                                                                                                                                               | 2026-08-07                                                                                                                                                                                                                                                                                                                                                            |                                                            |                                                                     |                                                                  |
| <b>Prüfmuster-Nr.:</b><br><i>Test sample no:</i>                                                                                                                                                                                                                                                                                                                                                                                                           | A004358425-005<br>A004358425-007, 008                                                                                                                                                                                                                                                                                                                                 |                                                            |                                                                     |                                                                  |
| <b>Prüfzeitraum:</b><br><i>Testing period:</i>                                                                                                                                                                                                                                                                                                                                                                                                             | 2026-08-17 - 2026-09-10                                                                                                                                                                                                                                                                                                                                               |                                                            |                                                                     |                                                                  |
| <b>Ort der Prüfung:</b><br><i>Place of testing:</i>                                                                                                                                                                                                                                                                                                                                                                                                        | TÜV Rheinland Taiwan Ltd.<br>New Taipei Branch                                                                                                                                                                                                                                                                                                                        |                                                            |                                                                     |                                                                  |
| <b>Prüflaboratorium:</b><br><i>Testing laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                                                     | TÜV Rheinland Taiwan Ltd.<br>Taipei Testing Laboratories                                                                                                                                                                                                                                                                                                              |                                                            |                                                                     |                                                                  |
| <b>Prüfergebnis*:</b><br><i>Test result*:</i>                                                                                                                                                                                                                                                                                                                                                                                                              | Pass                                                                                                                                                                                                                                                                                                                                                                  |                                                            |                                                                     |                                                                  |
| <b>zusammengestellt von:</b><br><i>compiled by:</i>                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                       |                                                            | <b>genehmigt von:</b><br><i>authorized by:</i>                      |                                                                  |
| <b>Datum:</b><br><i>Date:</i> 2026-09-14                                                                                                                                                                                                                                                                                                                                                                                                                   | Ryan Chen                                                                                                                                                                                                                                                                                                                                                             |                                                            | <b>Ausstellungsdatum:</b><br><i>Issue date:</i> 2026-09-14          | Flight Hsieh                                                     |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                | Senior Project Manager                                                                                                                                                                                                                                                                                                                                                |                                                            | <b>Stellung / Position:</b>                                         | Project Engineer                                                 |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  | This report proposes alternative components for C6, C7, C15, C16, C23, C24, and Y1, featuring capacitance changes for C6/C7 (10pF) and a tighter frequency tolerance for Y1 (SIWARD, XTL581150-M197-002). To evaluate these changes, only the Output Power and RSE tests were performed. For the other test results, please refer to the TUV report No. CN2563X5 001. |                                                            |                                                                     |                                                                  |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br><i>Condition of the test item at delivery:</i>                                                                                                                                                                                                                                                                                                                                                     | Prüfmuster vollständig und unbeschädigt<br><i>Test item complete and undamaged</i>                                                                                                                                                                                                                                                                                    |                                                            |                                                                     |                                                                  |
| <b>* Legende:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 = sehr gut<br>P(ass) = entspricht o.g. Prüfgrundlage(n)                                                                                                                                                                                                                                                                                                             | 2 = gut<br>F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | 3 = befriedigend<br>F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | 4 = ausreichend<br>N/A = nicht anwendbar<br>N/T = nicht getestet |
| <b>* Legend:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1 = very good<br>P(ass) = passed a.m. test specification(s)                                                                                                                                                                                                                                                                                                           | 2 = good<br>F(ail) = failed a.m. test specification(s)     | 3 = satisfactory<br>F(ail) = failed a.m. test specification(s)      | 4 = sufficient<br>N/A = not applicable<br>N/T = not tested       |
| <b>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.</b><br><i>This test report only relates to the a. m. 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.</i> |                                                                                                                                                                                                                                                                                                                                                                       |                                                            |                                                                     |                                                                  |

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Test report no.:

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**Anmerkungen**  
**Remarks**

- |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>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.</p> <p>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>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.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2 | <p>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. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: <a href="https://go.tuv.com/digital-signature">go.tuv.com/digital-signature</a></p> <p><i>As contractually agreed, this document has been signed digitally only. TUV 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, TUV 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. For information on verifying the authenticity of our documents, please visit the following website: <a href="https://go.tuv.com/digital-signature">go.tuv.com/digital-signature</a></i></p> |
| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.</p> <p>Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4 | <p>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 115:2023, 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.</p> <p><i>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 115:2023, 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.</i></p>                                                                                                                                                                                                                                                                                         |

## TEST SUMMARY

| Report Section | FCC Clause                  | Test Item                                  | Result |
|----------------|-----------------------------|--------------------------------------------|--------|
| 5.1.1          | 15.247(b) & 15.203          | Antenna Requirement                        | Pass   |
| 5.1.2          | 15.247(b)(3)                | Peak Output Power                          | Pass   |
| 5.1.3          | 15.247(d) & 15.205 & 15.209 | Radiated Spurious Emissions and Band Edges | Pass   |

**Note:** Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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**APPENDIX A - TEST RESULT OF RADIATED EMISSIONS**

**APPENDIX SP - PHOTOGRAPHS OF TEST SETUP**

**APPENDIX EP - PHOTOGRAPHS OF EUT**

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**Test Report No.**

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## HISTORY OF THIS TEST REPORT

| Revision | Description      | Date Issued |
|----------|------------------|-------------|
| R01      | Original Release | 2026-09-14  |

# 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 Result of Radiated Emissions**

**Appendix SP - Photographs of Test Setup**

**Appendix EP - Photographs of EUT**

### Applied Standard and Test Levels

| Radio                                       |
|---------------------------------------------|
| FCC 47CFR Part 15: Subpart C Section 15.247 |
| FCC 47CFR Part 2: Subpart J Section 2.1049  |
| ANSI C63.10-2020                            |
| KDB 558074 D01 15.247 Meas Guidance v05r02  |

## 1.2 Decision Rule of Conformity

The decision rule of conformity of this test report is following the requirements of the requested standard in the quotation, and agreed among testing laboratory and manufacturer (applicant) to exclude the consideration of Measurement Uncertainty, unless it is required by the specific standard.

## **2. Test Sites**

### **2.1 Test Laboratory**

TÜV Rheinland Taiwan Ltd. Taipei Testing Laboratories

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.  
Taipei City 105  
Taiwan (R.O.C.)

### **2.2 Test Facility**

TÜV Rheinland Taiwan Ltd. Taipei Testing Laboratories

No.458-18, 458-19, Sec. 2, Fenliao Rd., Linkou Dist.,  
New Taipei City 244  
Taiwan (R.O.C.)  
FCC Registration No.: 180491  
ISED Registration No.: 25563

## 2.3 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically in a suitably accredited Calibration Lab. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

All measurement uncertainty values are shown with a coverage factor of  $k=2$  to indicate a 95% level of confidence.

### Emission Measurement Uncertainty

| Parameter                            | Uncertainty   |
|--------------------------------------|---------------|
| Radiated Emission (9 kHz ~ 30 MHz)   | $\pm 1.15$ dB |
| Radiated Emission (30 MHz ~ 200 MHz) | $\pm 1.32$ dB |
| Radiated Emission (200 MHz ~ 1 GHz)  | $\pm 1.31$ dB |
| Radiated Emission (1 GHz ~ 18 GHz)   | $\pm 1.53$ dB |
| Radiated Emission (18 GHz ~ 40 GHz)  | $\pm 2.50$ dB |
| Mains Conducted Emission             | $\pm 1.65$ dB |

### 3. General Product Information

#### 3.1 Product Function and Intended Use

The EUT is a IEEE 802.11 b/g/n SmartConnect IoT Module. It contains a WLAN compatible module enabling the user to communicate data through a Wireless interface.  
For details refer to the User Guide, Data Sheet and Circuit Diagram.

#### 3.2 System Details and Ratings

##### Basic Information of EUT

| Item                        | EUT information                           |
|-----------------------------|-------------------------------------------|
| Kind of Equipment/Test Item | IEEE 802.11 b/g/n SmartConnect IoT Module |
| Type Identification         | ATWINC1510-MR210PB                        |
| FCC ID                      | 2ADHKATWINC1510                           |

##### Technical Specification of EUT

| Item                      | EUT information                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Operating Frequency       | 2412 MHz ~ 2462 MHz                                                                                                              |
| Channel Spacing           | 5 MHz                                                                                                                            |
| Channel Number            | 802.11b/g/n HT20: 11                                                                                                             |
| Data Rate                 | 802.11b: 11.0 / 5.5 / 2.0 / 1.0 Mbps<br>802.11g: 54.0 / 48.0 / 36.0 / 24.0 / 18.0 / 12.0 / 9.0 / 6.0 Mbps<br>802.11n: up to MCS7 |
| Operation Voltage         | 3.0 ~ 4.2 Vdc (Tested at 3.3 Vdc)                                                                                                |
| Modulation                | DSSS (DBPSK, DQPSK, CCK)<br>OFDM (BPSK, QPSK, 16QAM, 64QAM)                                                                      |
| Maximum Output Power (mW) | 802.11b: 100.23<br>802.11g: 199.99<br>802.11n HT20: 201.84                                                                       |
| Antenna Information       | Refer to 5.1.1                                                                                                                   |
| Accessory Device          | Refer to 4.4                                                                                                                     |

### 3.3 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

### 3.4 Submitted Documents

- Circuit Diagram
- Instruction Manual
- Rating Label
- Technical Description

## 4. Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

The test modes were adapted accordingly in reference to the instructions for use.

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output expected by the customer and is going to be fixed on the firmware of the final end product.

### 4.2 Carrier Frequency and Channel

802.11b, 802.11g and 802.11n HT20:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---------|-----------------|---------|-----------------|
| 1       | 2412            | 8       | 2447            |
| 2       | 2417            | 9       | 2452            |
| 3       | 2422            | 10      | 2457            |
| 4       | 2427            | 11      | 2462            |
| 5       | 2432            |         |                 |
| 6       | 2437            |         |                 |
| 7       | 2442            |         |                 |

## 4.3 Test Operation and Test Software

Setup for testing: Test samples are provided with a USB interface which makes it possible to control them through a test software installed on a notebook computer.

This software was running on the laptop computer connected to the EUT. It was used to enable the operation modes listed as below.

|               |                  |
|---------------|------------------|
| Test Software | MCHPRT2_v1.7.6.1 |
|---------------|------------------|

The samples were used as follows:

A004358425-005

A004358425-007, 008

| EUT Configure Mode | Applicable To                      |                                         |                                         |                          | Description |
|--------------------|------------------------------------|-----------------------------------------|-----------------------------------------|--------------------------|-------------|
|                    | Antenna Port Conducted Measurement | Radiated Spurious Emissions above 1 GHz | Radiated Spurious Emissions below 1 GHz | Mains Conducted Emission |             |
| -                  | √                                  | √                                       | √                                       | -                        | -           |

Note:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when position on **Z-plane**.
2. "-" means no effect.

### Antenna Port Conducted Measurement

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| EUT Configure Mode | Mode         | Available Channel | Tested Channel | Date Rate (Mbps) |
|--------------------|--------------|-------------------|----------------|------------------|
| Power Only         | 802.11b      | 1 to 11           | 11             | 1.0              |
| Power Only         | 802.11g      | 1 to 11           | 6              | 6.0              |
| Power Only         | 802.11n HT20 | 1 to 11           | 6              | MCS0             |

\*Only the worst-case channel has been evaluated.

### Radiated Spurious Emissions (Above 1 GHz)

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| EUT Configure Mode | Mode         | Available Channel | Tested Channel | Date Rate (Mbps) |
|--------------------|--------------|-------------------|----------------|------------------|
| -                  | 802.11b      | 1 to 11           | 11             | 1.0              |
| -                  | 802.11g      | 1 to 11           | 6              | 6.0              |
| -                  | 802.11n HT20 | 1 to 11           | 6              | MCS0             |

### Radiated Spurious Emissions (Below 1 GHz)

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| EUT Configure Mode | Mode         | Available Channel | Tested Channel | Date Rate (Mbps) |
|--------------------|--------------|-------------------|----------------|------------------|
| -                  | 802.11n HT20 | 1 to 11           | 6              | MCS0             |

**Test Condition**

| Test Item                                  | Ambient Temperature | Relative Humidity | Tested by    |
|--------------------------------------------|---------------------|-------------------|--------------|
| Conducted Measurement<br>(Power Only)      | 22.8-23.6 °C        | 63 %              | Jerome Chang |
| Radiated Spurious Emissions<br>above 1 GHz | 24.5-26.8 °C        | 54-59 %           | Chuan Chu    |
| Radiated Spurious Emissions<br>below 1 GHz | 24.5-26.8 °C        | 54-59 %           | Chuan Chu    |

## 4.4 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

**Accessory of EUT**

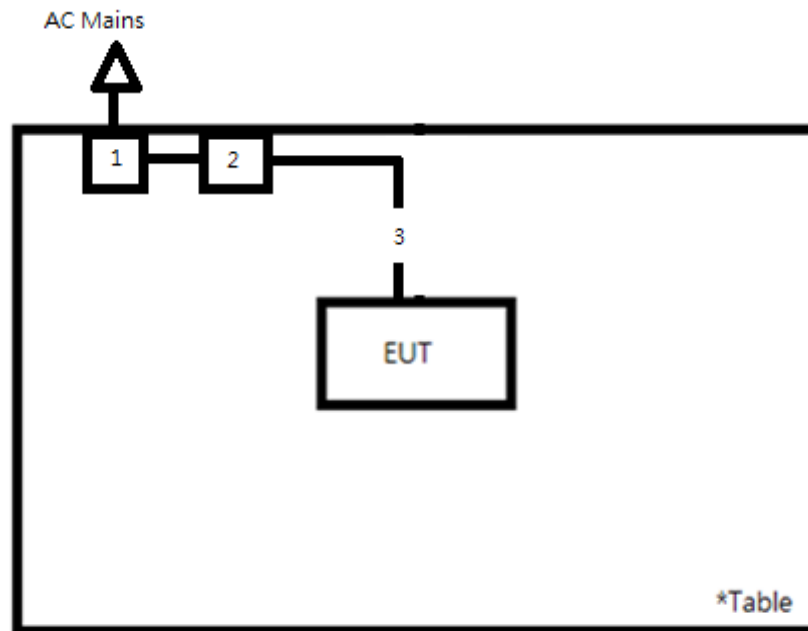
None.

**Support Unit**

| Support Unit |              |          |             |           |          |                    |             |                |
|--------------|--------------|----------|-------------|-----------|----------|--------------------|-------------|----------------|
| No           | Description  | Brand    | Model       | S/N       | Shielded | Ferrite Core (Qty) | Length (cm) | Remark         |
| 1            | Adapter      | Lenovo   | ADLX65NCC3A | -         | -        | -                  | 155         | Radiated Test  |
| 2            | Notebook     | Lenovo   | 81BL        | MP1DCD6Y  | -        | -                  | -           |                |
| 3            | USB Cable    | TUV      | TUV-01      |           | -        | -                  | 180         |                |
| -            | Notebook     | Lenovo   | 81BL        | MP1DCD6Y  | -        | -                  | -           | Conducted Test |
| -            | Power Supply | GWINSTEK | GPS-3303    | GEU915620 | -        | -                  | -           |                |

## 4.5 Test Setup Diagram

<Radiated Spurious Emissions Mode>



## 5. Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

**Requirement** Use of approved antennas only

According to the manufacturer declaration, the EUT has an antenna with a directional gain of -0.3 dBi. The antenna is a PCB antenna with no possibility of replacement with a non-approved antenna by the end-user. Therefore, the EUT is considered to comply with this provision.

Refer to EUT photo for details.

## 5.1.2 Peak Output Power

**Limit** 1 watt (30 dBm)

**Kind of Test Site** Shielded room

### Test Setup



### Test Instruments

| Kind of Equipment | Manufacturer | Type    | S/N     | Calibration Date | Calibration Due Date | Test Date  |            |
|-------------------|--------------|---------|---------|------------------|----------------------|------------|------------|
|                   |              |         |         |                  |                      | From       | Until      |
| Power Meter       | Anritsu      | ML2495A | 1901008 | 2026/02/24       | 2027/02/23           | 2026/08/17 | 2026/08/17 |
| Power Sensor      | Anritsu      | MA2411B | 1725269 | 2026/02/24       | 2027/02/23           | 2026/08/17 | 2026/08/17 |

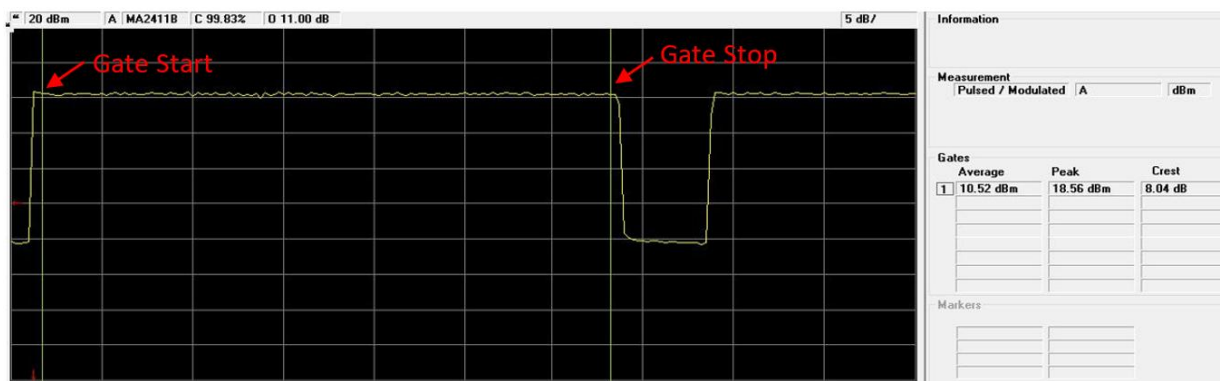
### Test Procedures

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

Gate Setup:

1. Select the [Gates] tab in the software.
2. Check the box (e.g., Gate 1) to display it on the trace.
3. Set Gate Position
  - Drag the gate line with the mouse to the desired point on the waveform, or
  - Enter Values using the [Set] button and input start/stop times.
4. Switch to the next measurement channel and repeat the same gate setup procedure.
5. The instrument calculates average/peak power only within the defined gate interval.



**Test Result****Peak Output Power**

| Mode         | Channel | Channel Frequency (MHz) | Peak Output Power |        | Limit (dBm) |
|--------------|---------|-------------------------|-------------------|--------|-------------|
|              |         |                         | (dBm)             | (mW)   |             |
| 802.11b      | 11      | 2462                    | 20.01             | 100.23 | 30          |
| 802.11g      | 6       | 2437                    | 23.01             | 199.99 | 30          |
| 802.11n HT20 | 6       | 2437                    | 23.05             | 201.84 | 30          |

**Average Power**

| Mode         | Channel | Channel Frequency (MHz) | Average Power |       |
|--------------|---------|-------------------------|---------------|-------|
|              |         |                         | (dBm)         | (mW)  |
| 802.11b      | 11      | 2462                    | 17.48         | 55.98 |
| 802.11g      | 6       | 2437                    | 15.42         | 34.83 |
| 802.11n HT20 | 6       | 2437                    | 15.55         | 35.89 |

### 5.1.3 Radiated Spurious Emissions and Band Edges

#### Limit

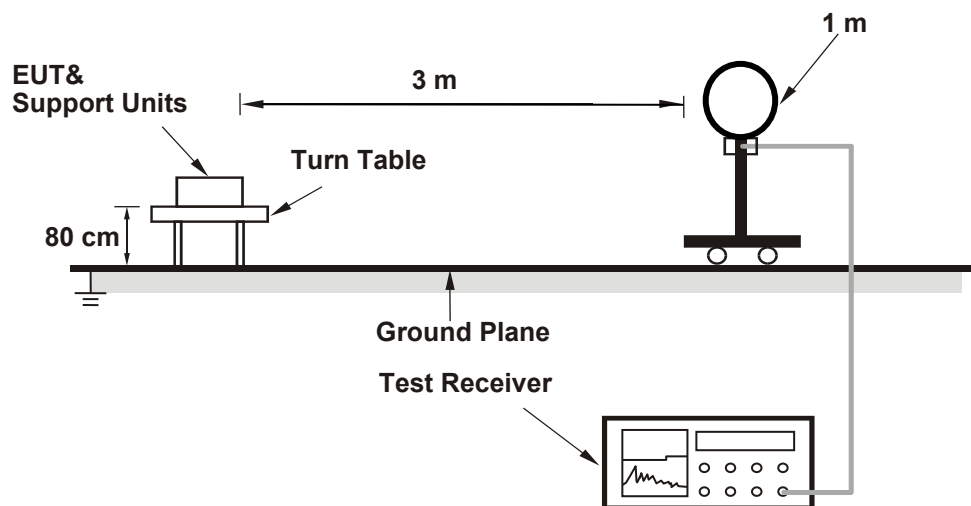
Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emission limits specified in §15.209(a).

Emissions radiated outside the restricted and authorized frequency bands must either comply with the radiated emission limits specified for the restricted bands or in §15.247(d).

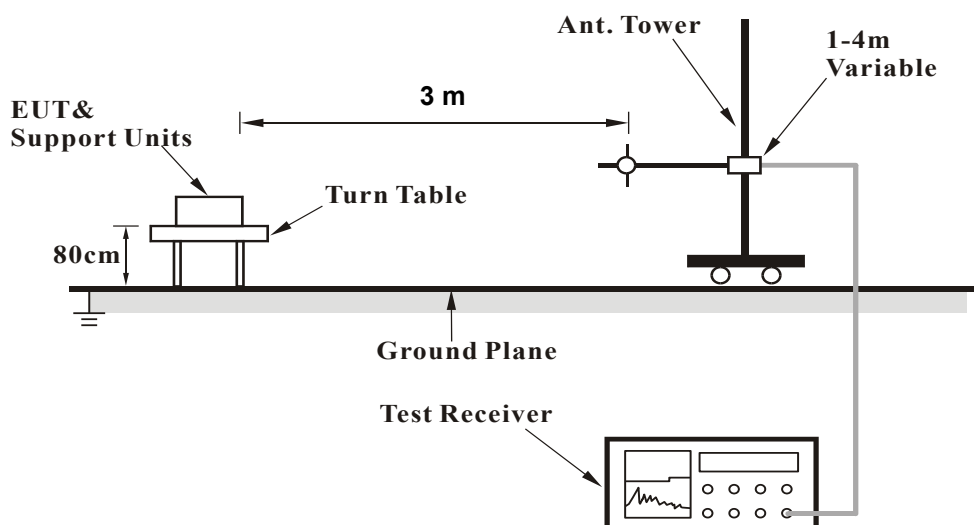
**Kind of Test Site** 3m Semi-Anechoic Chamber

#### Test Setup

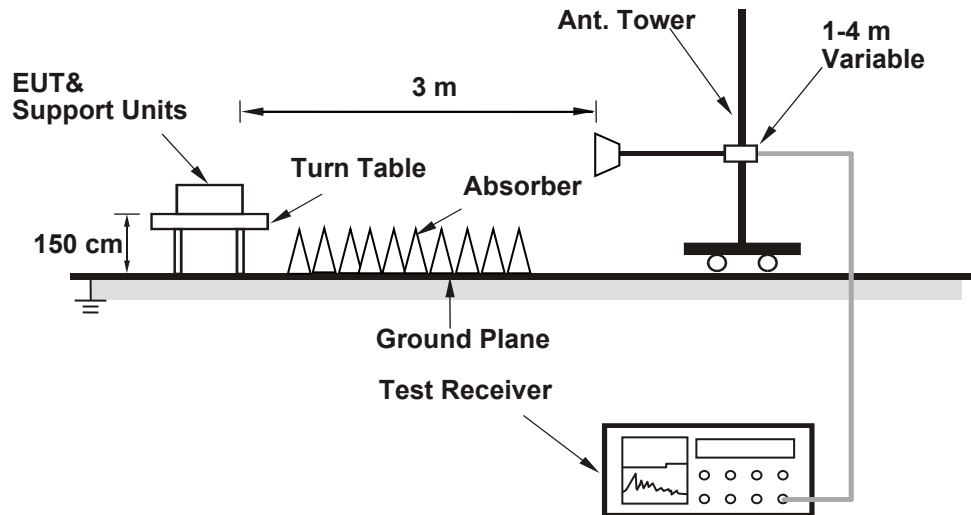
##### <Radiated Emissions below 30 MHz>



##### <Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emissions above 1 GHz>



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

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**Test Instruments**

Test Date: 2026/08/18 ~ 2026/09/10

| Kind of Equipment   | Manufacturer | Type                | S/N             | Calibration Date | Calibration Due Date |
|---------------------|--------------|---------------------|-----------------|------------------|----------------------|
| Above 1 GHz         |              |                     |                 |                  |                      |
| Signal Analyzer     | R&S          | FSV40               | 101508          | 2026/04/28       | 2027/04/27           |
| Horn Antenna        | ETS-Lindgren | 3117                | 00218930        | 2025/12/11       | 2026/12/10           |
| Amplifier           | EM           | EM01G18GA           | 060967          | 2026/03/31       | 2027/03/30           |
| HF-AMP + AC source  | EMCI         | EMC184045SE         | 980657          | 2026/02/06       | 2027/02/05           |
| Horn Antenna        | SCHWARZBECK  | BBHA 9170           | 00887           | 2026/03/26       | 2027/03/25           |
| RF Cable            | EM           | EM102A              | EM102A-KMKM-700 | 2026/05/08       | 2027/05/07           |
| Microwave Cable     | HUBER+SUHNER | SUCOFLEX 102EA      | 800901/2EA      | 2025/10/23       | 2026/10/22           |
| Microwave Cable     | HUBER+SUHNER | SUCOFLEX 102EA      | 801027/2EA      | 2025/10/23       | 2026/10/22           |
| 3G High Pass Filter | Warison      | WFIL-H3000-12000F   | WRP19FWC2B2     | 2026/06/01       | 2027/05/31           |
| 7G High Pass Filter | EMCI         | HPF0718             | G001            | 2026/04/10       | 2027/04/09           |
| Test Software       | Audix E3     | 15914a_20191106_tuv | PK-001087       | N/A              | N/A                  |
| 30 MHz 1 GHz        |              |                     |                 |                  |                      |
| Receiver            | R&S          | ESR7                | 102108          | 2026/07/02       | 2027/07/01           |
| Bilog Antenna       | SCHWARZBECK  | VULB-9168           | 00951           | 2026/05/11       | 2027/05/10           |
| LF-AMP              | Agilent      | 8447D               | 2944A107722     | 2026/03/19       | 2027/03/18           |
| Microwave Cable     | HUBER+SUHNER | SUCOFLEX 104EA      | 800056/4EA      | 2026/03/20       | 2027/03/19           |
| Microwave Cable     | HUBER+SUHNER | SUCOFLEX 104        | 804680/4        | 2026/03/20       | 2027/03/19           |
| Microwave Cable     | HUBER+SUHNER | SUCOFLEX 104        | MY37202/4       | 2026/03/20       | 2027/03/19           |
| Test Software       | Audix E3     | 15914a_20191106_tuv | PK-001087       | N/A              | N/A                  |
| Below 30 MHz        |              |                     |                 |                  |                      |
| Receiver            | R&S          | ESR7                | 102108          | 2026/07/02       | 2027/07/01           |
| Loop Antenna        | SCHWARZBECK  | FMZB 1519B          | 00215           | 2025/12/16       | 2026/12/15           |
| Microwave Cable     | HUBER+SUHNER | SUCOFLEX 104EA      | 800056/4EA      | 2026/03/20       | 2027/03/19           |
| Microwave Cable     | HUBER+SUHNER | SUCOFLEX 104        | 804680/4        | 2026/03/20       | 2027/03/19           |
| Test Software       | Audix E3     | 15914a_20191106_tuv | PK-001087       | N/A              | N/A                  |

**Test Procedures****For Radiated Emissions below 30 MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel (OPEN), perpendicular (CLOSE), and ground-parallel (GROUND) orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

**Note:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

**For Radiated Emissions above 30 MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

**Note:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle  $< 98\%$ ) or 10 Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1 GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The Radiated Emissions testing was performed in the X(E1), Y(H) and Z(E2) axis orientation. The worst-case Axis orientation is recorded in this test report.
6. The emission levels of other frequencies (including the 10th harmonic of the highest fundamental frequency) are very lower than the limit and are not shown in the test report.

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#### Test Results

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier (dB)

Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Please refer to Appendix A.

Note: The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated at least 20 dB below the permissible value to be reported.