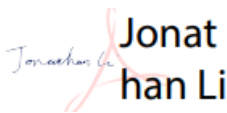


|                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                           |                                                                                           |                                                 |                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Prüfbericht-Nr.:</b><br><i>Test report no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                         | <b>CN22OSX9 003</b>                                                                                       | <b>Auftrags-Nr.:</b><br><i>Order no.:</i>                                                 | <b>168392026</b>                                | <b>Seite 1 von 21</b><br><i>Page 1 of 21</i>                                                               |
| <b>Kunden-Referenz-Nr.:</b><br><i>Client reference no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                | <b>N/A</b>                                                                                                | <b>Auftragsdatum:</b><br><i>Order date:</i>                                               | <b>2022-09-23</b>                               |                                                                                                            |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Infrared Cameras Inc</b><br>2105 West Cardinal Drive Beaumont, Texas, 77705 USA                        |                                                                                           |                                                 |                                                                                                            |
| <b>Prüfgegenstand:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                | Portable Thermal Camera                                                                                   |                                                                                           |                                                 |                                                                                                            |
| <b>Bezeichnung / Typ-Nr.:</b><br><i>Identification / Type no.:</i>                                                                                                                                                                                                                                                                                                                                                                                         | Titan HD, Titan HD P<br>(Trademark: ICI)                                                                  |                                                                                           |                                                 |                                                                                                            |
| <b>Auftrags-Inhalt:</b><br><i>Order content:</i>                                                                                                                                                                                                                                                                                                                                                                                                           | Test Report                                                                                               |                                                                                           |                                                 |                                                                                                            |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                        | CFR47 FCC Part15: Subpart E Section 15.407                                                                |                                                                                           |                                                 |                                                                                                            |
| <b>Wareneingangsdatum:</b><br><i>Date of sample receipt:</i>                                                                                                                                                                                                                                                                                                                                                                                               | 2022-10-13                                                                                                | Please refer to Photo Document                                                            |                                                 |                                                                                                            |
| <b>Prüfmuster-Nr.:</b><br><i>Test sample no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                          | A003352666-001<br>A003363248-001~007                                                                      |                                                                                           |                                                 |                                                                                                            |
| <b>Prüfzeitraum:</b><br><i>Testing period:</i>                                                                                                                                                                                                                                                                                                                                                                                                             | 2022-11-02 - 2022-11-26                                                                                   |                                                                                           |                                                 |                                                                                                            |
| <b>Ort der Prüfung:</b><br><i>Place of testing:</i>                                                                                                                                                                                                                                                                                                                                                                                                        | TÜV Rheinland (Shenzhen)<br>Co., Ltd.                                                                     |                                                                                           |                                                 |                                                                                                            |
| <b>Prüflaboratorium:</b><br><i>Testing laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                                                     | TÜV Rheinland (Shenzhen)<br>Co., Ltd.                                                                     |                                                                                           |                                                 |                                                                                                            |
| <b>Prüfergebnis*:</b><br><i>Test result*:</i>                                                                                                                                                                                                                                                                                                                                                                                                              | Pass                                                                                                      |                                                                                           |                                                 |                                                                                                            |
| <b>geprüft von:</b><br><i>tested by:</i>                                                                                                                                                                                                                                                                                                                                                                                                                   | <br><b>Jonathan Li</b> |                                                                                           | <b>genehmigt von:</b><br><i>authorized by:</i>  | <br><b>Winnie Hou</b> |
| <b>Datum:</b><br><i>Date:</i>                                                                                                                                                                                                                                                                                                                                                                                                                              | 2023-02-02                                                                                                |                                                                                           | <b>Ausstellungsdatum:</b><br><i>Issue date:</i> | 2023-02-02                                                                                                 |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                | Sachverständige(r) / Expert                                                                               |                                                                                           | <b>Stellung / Position:</b>                     | Sachverständige(r) / Expert                                                                                |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  | FCC ID: 2A3PM-TITANHD                                                                                     |                                                                                           |                                                 |                                                                                                            |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br><i>Condition of the test item at delivery:</i>                                                                                                                                                                                                                                                                                                                                                     |                                                                                                           | <b>Prüfmuster vollständig und unbeschädigt</b><br><i>Test item complete and undamaged</i> |                                                 |                                                                                                            |
| * Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft<br>P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet                                                                                                                                                                                                                                    |                                                                                                           |                                                                                           |                                                 |                                                                                                            |
| * Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor<br>P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable 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> |                                                                                                           |                                                                                           |                                                 |                                                                                                            |

V05

## ***Test Summary***

**5.1.1 ANTENNA REQUIREMENT**

*RESULT: Pass*

**5.1.2 MAXIMUM PEAK 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*

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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: Photographs of the Test Set-up

Appendix B: Test Results of 5GHz Wi-Fi

## 2 Test Sites

### 2.1 Test Facilities

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

No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China.

FCC Accreditation Designation No.: CN1260

### 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        | 2023-10-10        |
| MXG X-Series RF Vector Signal Generator        | Keysight            | N5182B            | MY61250137        | 2023-10-10        |
| EXG X-Series Microwave Analog Signal Generator | Keysight            | N5173B            | MY61250141        | 2023-10-10        |
| DC power supply                                | Keysight            | E3642A            | MY61276100        | 2023-10-10        |
| Wireless Connectivity Tester                   | R&S                 | CMW270            | 102505            | 2023-10-10        |
| Power Control Unit                             | Tonscend            | JS0806-4ADC       | N/A               | 2023-10-10        |
| Automation Control Unit                        | Tonscend            | JS0806-2          | 21C8060396        | 2023-10-10        |
| Test Software                                  | Tonscend            | JS1120-3          | N/A               | N/A               |
| Control PC                                     | Lenovo              | TianYi510S-071MB  | YLY23JMF          | 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 (TS9975)</b>      |                     |                   |                   |                   |
| <b>Equipment</b>                               | <b>Manufacturer</b> | <b>Model</b>      | <b>Serial No.</b> | <b>Cal. until</b> |
| EMI Test Receiver                              | R&S                 | ESR 7             | 102021            | 2023-08-02        |
| Signal Analyzer                                | R&S                 | FSV 40            | 101439            | 2023-08-01        |
| System Controller Interface                    | R&S                 | SCI-100           | S10010038         | N/A               |
| Filterbank                                     | R&S                 | Wlan              | 100759            | 2023-08-01        |
| OSP                                            | R&S                 | OSP 120           | 102040            | N/A               |
| Pre-amplifier                                  | R&S                 | SCU08F1           | 08320031          | 2023-08-02        |
| Amplifier                                      | R&S                 | SCU-18F           | 180070            | 2023-08-02        |
| Amplifier                                      | R&S                 | SCU40A            | 100475            | 2023-08-02        |
| Trilog Broadband Antenna (30 MHz - 7 GHz)      | Schwarzbeck         | VULB 9162         | 193               | 2024-08-06        |
| Double-Ridged Antenna (1 -18 GHz)              | ETS-LINDGREN        | 3117              | 00218717          | 2024-08-06        |
| Wideband Ridged Horn Antenna (18-40 GHz)       | Steatite            | QMS-00880         | 19067             | 2024-08-27        |
| Active Loop Antenna                            | Schwarzbeck         | FMZB 1513         | 302               | 2023-08-06        |
| Test software                                  | R&S                 | EMC32 (V10.60.10) | N/A               | N/A               |

|                          |           |               |              |            |
|--------------------------|-----------|---------------|--------------|------------|
| Control PC               | Dell      | OptiPlex 7050 | 36NV9P2      | N/A        |
| 3m Semi-Anechoic Chamber | Albatross | SAC-3m        | APC17151-SAC | 2024-06-22 |

## 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         |
| Radiated Emission of Transmitter, valid up to 26.5 GHz | ±4.17 dB          |
| Radiated Emission of Receiver, valid up to 26.5 GHz    | ±4.17 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 Road Middle, Longhua District, 518110, Shenzhen, P. R. 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 EUT is a Portable Thermal Camera, which supports Bluetooth (dual mode), 2.4GHz Wi-Fi 802.11 b/g/n and 5GHz Wi-Fi 802.11a/n/ac wireless technologies.

The EUT can't work when it charging.

The both models are identical for the marketing 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                                                                                                                                                                                                                     |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name:                                         | Portable Thermal Camera                                                                                                                                                                                                   |
| Model No.:                                            | Titan HD, Titan HD P                                                                                                                                                                                                      |
| Trademark:                                            | ICI                                                                                                                                                                                                                       |
| FCC ID:                                               | 2A3PM-TITANHD                                                                                                                                                                                                             |
| Operating Voltage:                                    | DC 5V, 2.0A (Charged by USB port)<br>DC 3.8V, 9000mAh (supplied by lithium-ion rechargeable battery)                                                                                                                      |
| Testing Voltage:                                      | Fully charged battery                                                                                                                                                                                                     |
| Operating Temperature Range:                          | -15 °C ~ 50 °C                                                                                                                                                                                                            |
| <b>Technical Specification of Wi-Fi 802.11 a/n/ac</b> |                                                                                                                                                                                                                           |
| Operating Frequency:                                  | 5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz                                                                                                                                                                    |
| Type of Modulation:                                   | OFDM(BPSK/QPSK/16QAM/64QAM/256QAM)                                                                                                                                                                                        |
| Channel Number:                                       | 5150-5250MHz, 7CHs, 802.11 a/n20/n40/ac20/ac40/ac80<br>5250-5350MHz, 7CHs, 802.11 a/n20/n40/ac20/ac40/ac80<br>5470-5725MHz, 16CHs, 802.11 a/n20/n40/ac20/ac40/ac80<br>5725-5850MHz, 8CHs, 802.11 a/n20/n40/ac20/ac40/ac80 |
| Channel Separation:                                   | 5 MHz                                                                                                                                                                                                                     |
| Device type:                                          | Slave                                                                                                                                                                                                                     |
| Antenna Type:                                         | Two Integral Antennas                                                                                                                                                                                                     |
| Antenna Number:                                       | 1Tx1Rx for SISO mode (ANT0 or ANT1), 2Tx2Rx for MIMO mode                                                                                                                                                                 |
| Antenna Gain of 5GHz Wi-Fi:                           | 4.87 dBi for ANT0 Max.<br>4.56 dBi for ANT1 Max.                                                                                                                                                                          |

**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            | 134             | 5670            | 138             | 5690            |
| 112             | 5560            | 142             | 5710            |                 |                 |
| 116             | 5580            |                 |                 |                 |                 |
| 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. Off

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- Application Form
- ID Label and Location Info
- User Manual

## 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 Titan HD in this report.

### 4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

| Description | Manufacturer | Model | S/N       |
|-------------|--------------|-------|-----------|
| Laptop      | Lenovo       | T480  | PF-16A6N8 |

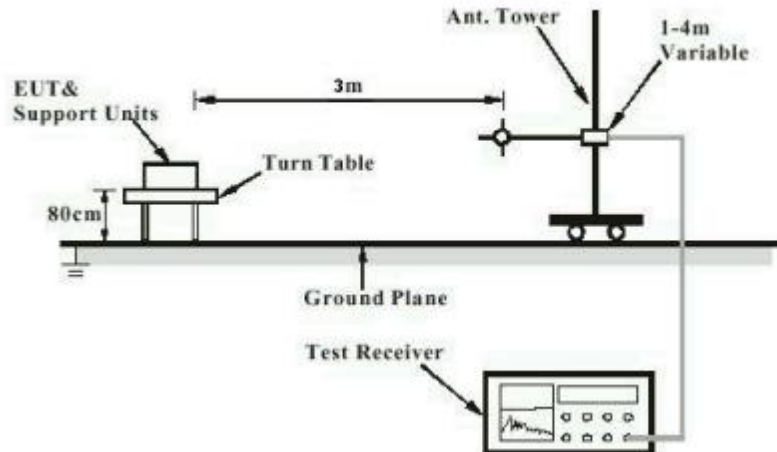
### 4.4 Countermeasures to Achieve EMC Compliance

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

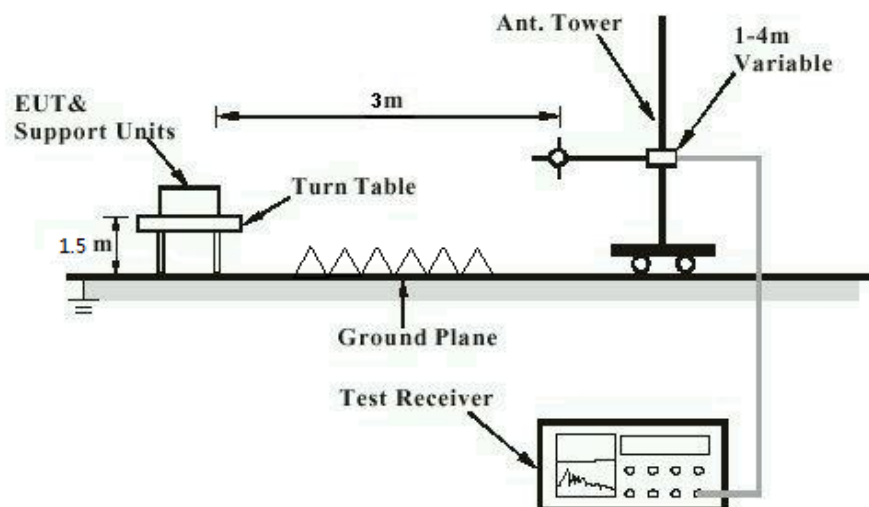
No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

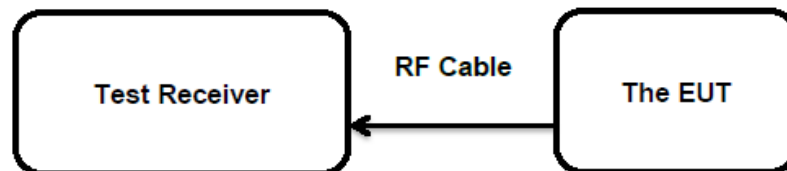
**Diagram of Measurement Configuration for Radiation Test (Below 1GHz)**



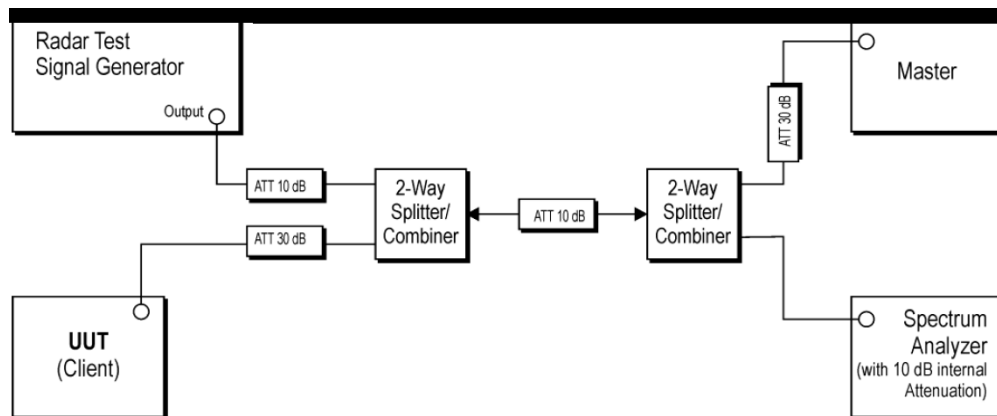
**Diagram of Measurement Configuration for Radiation Test (Above 1GHz)**



**Diagram of Measurement Configuration for 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

According to the manufacturer declared, the EUT have two Integral antennas, the directional gain of antenna is 3.41 dBi for ANT0 / ANT1, and the antenna connector is designed with permanent attachment and 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 Peak Conducted Output Power

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

|                   |                                                                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test standard     | : FCC Part 15.407(a)(1)&(2)&(4)                                                                                                                                                                                           |
| Basic standard    | : ANSI C63.10: 2013                                                                                                                                                                                                       |
| Limits            | : <250mW (24dBm) (5150-5250MHz)<br>* <250mW (24dBm) (5250-5350MHz, 5470-5725MHz)<br>* 250 mW (24dBm) 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      | : 2022-11-02 to 2022-11-15 |
| Input voltage        | : Fully charged battery    |
| Operation mode       | : A                        |
| Test channel         | : Low / Middle / High      |
| Ambient temperature  | : 23.5 °C                  |
| Relative humidity    | : 64 %                     |
| Atmospheric pressure | : 101 kPa                  |

For the measurement records, refer to the appendix B.

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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<br>KDB 789033 D02 v01r03                                           |
| Limits            | : <11dBm/MHz (5150-5250MHz 5250-5350MHz, 5470-5725MHz)<br><30dBm/500KHz (5725-5850MHz) |
| Kind of test site | : Shielded Room                                                                        |

**Test Setup**

|                      |                            |
|----------------------|----------------------------|
| Date of testing      | : 2022-11-02 to 2022-11-15 |
| Input voltage        | : Fully charged battery    |
| Operation mode       | : A                        |
| Test channel         | : Low / Middle / High      |
| Ambient temperature  | : 23.5 °C                  |
| Relative humidity    | : 64 %                     |
| Atmospheric pressure | : 101 kPa                  |

For the measurement records, refer to the appendix B.

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### 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      | : 2022-11-02 to 2022-11-15 |
| Input voltage        | : Fully charged battery    |
| Operation mode       | : A                        |
| Test channel         | : Low / Middle / High      |
| Ambient temperature  | : 23.5 °C                  |
| Relative humidity    | : 64 %                     |
| Atmospheric pressure | : 101 kPa                  |

For the measurement records, refer to the appendix B.

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### 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 : 2022-11-02 to 2022-11-15  
Input voltage : Fully charged battery  
Operation mode : A  
Test channel : Low / Middle / High  
Ambient temperature : 23.5 °C  
Relative humidity : 64 %  
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix B.

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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      | : 2022-11-02 to 2022-11-15 |
| Input voltage        | : Fully charged battery    |
| Operation mode       | : A                        |
| Test channel         | : Low / Middle / High      |
| Ambient temperature  | : 23.5 °C                  |
| Relative humidity    | : 64 %                     |
| Atmospheric pressure | : 101 kPa                  |

For the measurement records, refer to the appendix B.

### 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<br>KDB 789033 D02 v01r03                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Limits            | : <ul style="list-style-type: none"><li>• 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.</li><li>• 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.</li><li>• 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.<br/>Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.</li><li>• 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.<br/>Restricted Bands meet the requirement of 15.209 limit</li></ul> |
| Kind of test site | : 3m Semi-anechoic Chamber                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Test Setup**

|                      |                            |
|----------------------|----------------------------|
| Date of testing      | : 2022-11-22 to 2022-11-25 |
| Input voltage        | : Fully charged battery    |
| 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 B.

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### 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  
Channel Move Time: Within 10 seconds.  
Channel Closing Transmission Time: 200ms+aggregate of  
60ms over remaining 10s period;  
Non-Occupancy Period: at least 30 minutes.  
Kind of test site : Shielded Room

**Test Setup**

Date of testing : 2022-11-26  
Input voltage : Fully charged battery  
Operation mode : A  
Test channel : CH 58, CH 106  
Ambient temperature : 23.5 °C  
Relative humidity : 64 %  
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix B.

## 6 Photographs of the Test Set-Up

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

## 7 List of Tables

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