# FCC PART 15.247

## TEST REPORT

For

# AKUVOX (XIAMEN) NETWORKS CO., LTD.

10/F, No.56 Guanri Road, Software Park II, Xiamen 361009, China

## FCC ID: 2AHCR-PG71

| **Report Type:** | **Product Name:** |
|---|---|
| Original Report | HyPanel Pro |

| | |
|---|---|
| **Report Number:** | XMDN240219-08385E-RF-02 |
| **Report Date:** | 2025-01-06 |
| **Reviewed By:** | Ash Lin |
| **Approved By:** | Miles Chen |
| **Prepared By:** | Bay Area Compliance Laboratories Corp. (Xiamen)<br>Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen<br>Tel: +86-592-3200111<br>www.baclcorp.com.cn |

# TABLE OF CONTENTS

# REPORT REVISION HISTORY

| Number of Revisions | Report No. | Version | Issue Date | Description |
|---|---|---|---|---|
| 0 | XMDN240219-08385E-RF-02 | R1V1 | 2025-01-06 | Initial Release |

# GENERAL INFORMATION

## Product Description for Equipment under Test (EUT)

| | |
|---|---|
| Applicant: | AKUVOX (XIAMEN) NETWORKS CO., LTD. |
| Product Name: | HyPanel Pro |
| Tested Model: | PG71 |
| Series Model(s): | PG71N |
| Power Supply: | DC 12V from Adapter or DC 48V from PoE |
| Maximum Conducted Output Power: | BLE 1M: 1.31dBm<br>WIFI:13.73dBm |
| Frequency Range: | BLE: 2402-2480MHz<br>Wi-Fi: 2412-2462MHz |
| Modulation Technique: | BLE: GFSK<br>WIFI: DSSS, OFDM |
| Antenna Type: | FPC Antenna |
| ★Maximum Antenna Gain: | 2 dBi |
| EUT Received Status: | Good |
| *Note:*<br>*1. The Maximum Antenna Gain was declared by manufacturer.*<br>*2. 2. The model difference is PG71 is equipped with a camera and an indicator Led, while PG71N does not. Please refer to declaration letter for more detail.*<br>*3. All measurement and test data in this report was gathered from production sample serial number: XMDN240219-08385E-RF-1(model:PG71), XMDN240219-08385E-RF-2(model:PG71N)(Assigned by the BACL (Xiamen). The EUT supplied by the applicant was received on 2024-05-06)* | |

## Objective

This report is prepared on behalf of *AKUVOX (XIAMEN) NETWORKS CO., LTD.* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission's rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

## Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

And KDB 558074 D01 15.247 Meas Guidance v05r02.

## Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on the Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

## Measurement Uncertainty

| Item | | $U_{lab}$ |
|---|---|---|
| Conducted Emission | 150kHz-30MHz | 2.33 dB |
| Radiated Emission | 9kHz-30MHz | 2.59 dB |
| | 30MHz~200MHz | 4.38 dB |
| | 200MHz~1GHz | 4.50 dB |
| | 1GHz~6GHz | 4.6 dB |
| | 6GHz-18GHz | 5.42 dB |
| | 18GHz~26.5GHz | 5.47 dB |
| Occupied Channel Bandwidth | | 0.053kHz |
| Transmitter Conducted Power(Conducted RF power) | | 0.624 dB |
| Power Spectral Density | | 0.61dB |
| Duty Cycle | | 1% |
| Temperature | | 1℃ |
| Humidity | | 5% |
| Supply voltages | | 0.4% |

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

# SYSTEM TEST CONFIGURATION

## Test Mode and Voltage

| The system was configured for testing in a typical mode (as normally used by a typical user). | |
|---|---|
| **Test mode:** | Test mode 1: Transmitting |
| **Test voltage:** | DC 12V from Adapter or DC 48V from PoE |
| **Remark:** | During all emission tests, the EUT was configured to measure its highest possible emission level and the worst case's test data was presented in this test report. |

Note:
1. Power from adapter and PoE were evaluated in the BLE test results for the AC Line Conducted Emissions Test and Radiation Spurious Emissions Test. The test results showed that PoE had worse emissions in AC Line Conducted Emissions Test and Radiation Spurious Emissions Test. Therefore WIFI only the test results with worst case PoE are reflected in this report.

2. For series model PG71N, Radiated Spurious Emissions below 1GHz and AC line conducted emissions was tested since the hardware difference.

## Description of Test Configuration

For BLE mode, 40 channels are provided to testing:

| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---|---|---|---|
| 0 | 2402 | 20 | 2442 |
| 1 | 2404 | 21 | 2444 |
| 2 | 2406 | 22 | 2446 |
| 3 | 2408 | 23 | 2448 |
| 4 | 2410 | 24 | 2450 |
| 5 | 2412 | 25 | 2452 |
| 6 | 2414 | 26 | 2454 |
| 7 | 2416 | 27 | 2456 |
| 8 | 2418 | 28 | 2458 |
| 9 | 2420 | 29 | 2460 |
| 10 | 2422 | 30 | 2462 |
| 11 | 2424 | 31 | 2464 |
| 12 | 2426 | 32 | 2466 |
| 13 | 2428 | 33 | 2468 |
| 14 | 2430 | 34 | 2470 |
| 15 | 2432 | 35 | 2472 |
| 16 | 2434 | 36 | 2474 |
| 17 | 2436 | 37 | 2476 |
| 18 | 2438 | 38 | 2478 |
| 19 | 2440 | 39 | 2480 |

EUT was tested with Channel 0, 19 and 39.

For 802.11b, 802.11g, 802.11n-HT20, 802.11n-HT40 mode, 11 channels are provided to testing:

| 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 | / | / |

For 802.11b, 802.11g, 802.11n-HT20 mode, EUT was tested with Channel 1, 6 and 11.
For 802.11n-HT40 mode, EUT was tested with Channel 3, 6 and 9.

## Equipment Modifications

No modification was made to the EUT tested.

## ★EUT Exercise Software

BLE & Wi-Fi test in the engineer mode.

RF Test Tool: SecureCRTPortable.exe

The device was tested with the worst case was performed as below:

For BLE

| Test Modes | Power Level Setting | | |
|---|---|---|---|
| | Lowest Channel | Middle Channel | Highest Channel |
| BLE | default | default | default |

For WIFI

| Test Modes | Test Channels | Test Frequency | Data rate | Power Level Setting |
|---|---|---|---|---|
| 802.11b | Lowest | 2412 | 1Mbps | 16 |
| | Middle | 2437 | 1Mbps | 16 |
| | Highest | 2462 | 1Mbps | 16 |
| 802.11g | Lowest | 2412 | 6Mbps | 11 |
| | Middle | 2437 | 6Mbps | 11 |
| | Highest | 2462 | 6Mbps | 11 |
| 802.11n ht20 | Lowest | 2412 | MCS0 | 12 |
| | Middle | 2437 | MCS0 | 12 |
| | Highest | 2462 | MCS0 | 12 |
| 802.11n ht40 | Lowest | 2422 | MCS0 | 11 |
| | Middle | 2437 | MCS0 | 11 |
| | Highest | 2452 | MCS0 | 11 |

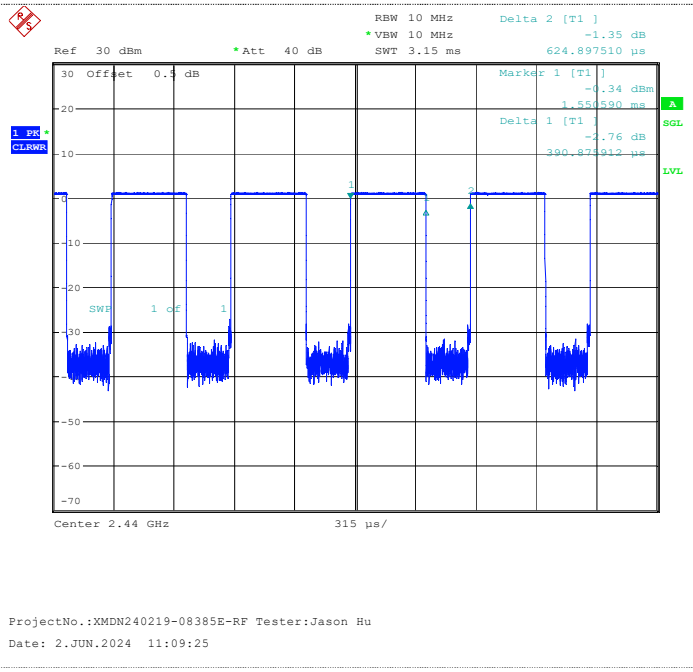
Pre-scan with all the data rates, the above data rate is the worst case for Wi-Fi and BLE test.

## Duty cycle

### For BLE:

| Mode | Test Frequency (MHz) | Ton (ms) | Ton+off (ms) | Duty cycle (%) | 1/T (Hz) | VBW Setting (kHz) |
|---|---|---|---|---|---|---|
| BLE | 2440 | 0.391 | 0.625 | 62.56 | 2558 | 3 |

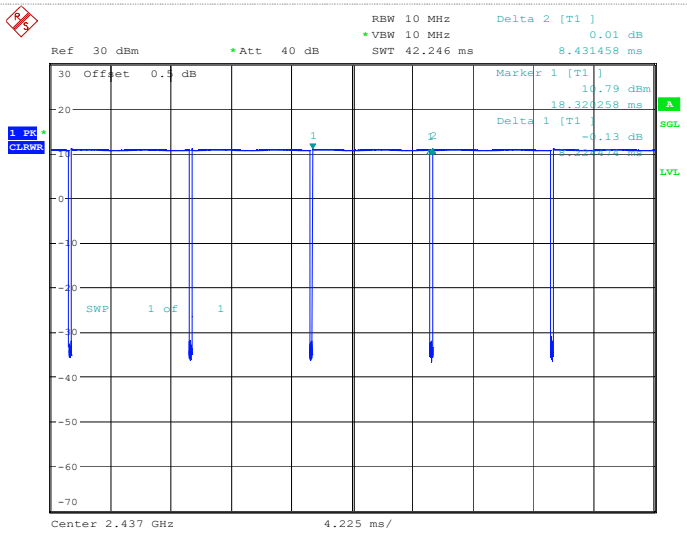
**BLE Middle Channel**




### For WIFI:

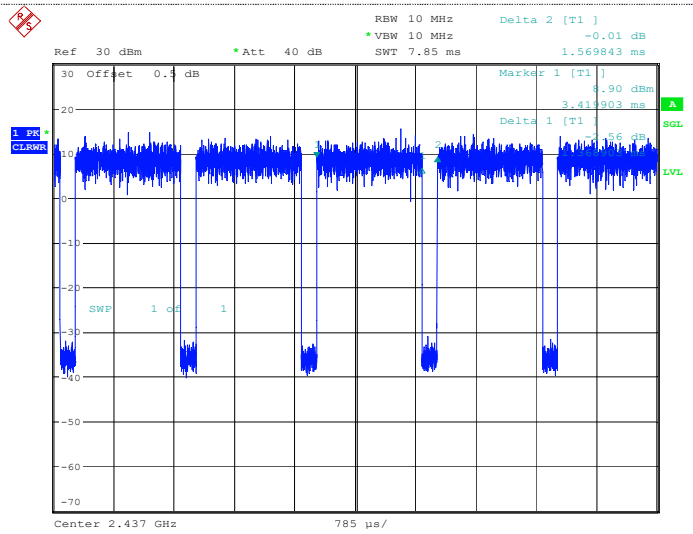
| Modes | Ton (ms) | Ton+off (ms) | Duty cycle (%) | 1/T (Hz) | Duty Factor (dB) | VBW Setting (kHz) |
|---|---|---|---|---|---|---|
| 802.11b | 8.224 | 8.431 | 97.54 | 122 | 0.11 | 0.2 |
| 802.11g | 1.369 | 1.57 | 87.20 | 730 | 0.59 | 1 |
| 802.11n ht20 | 1.274 | 1.474 | 86.43 | 785 | 0.63 | 1 |
| 802.11n ht40 | 0.635 | 0.835 | 76.05 | 1575 | 1.19 | 2 |

## 802.11b Middle Channel



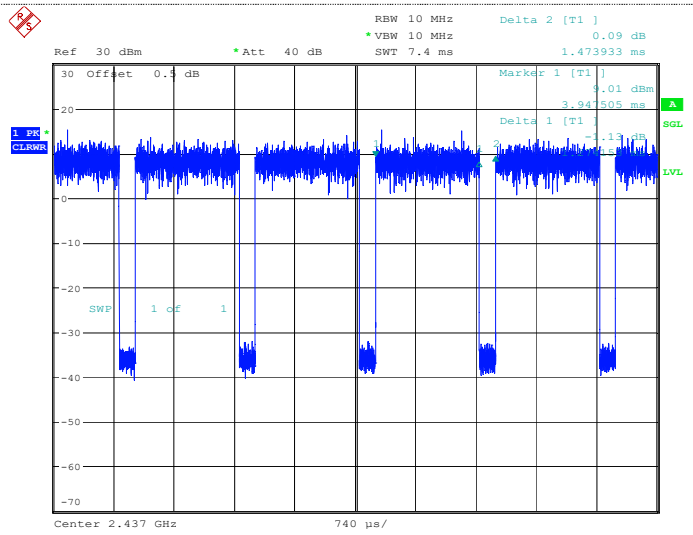

ProjectNo.:XMDN240219-08385E-RF Tester:Jason Hu
Date: 26.JUN.2024 16:17:29

## 802.11g Middle Channel



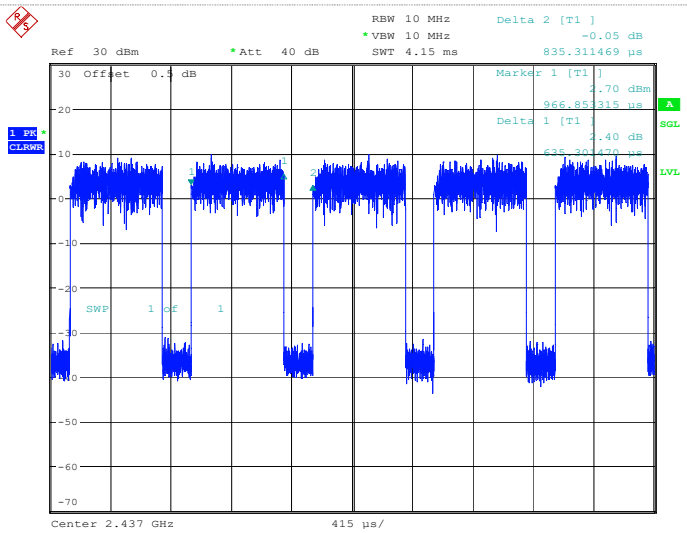

ProjectNo.:XMDN240219-08385E-RF Tester:Jason Hu
Date: 26.JUN.2024 16:18:31

## 802.11n ht20 Middle Channel




ProjectNo.:XMDN240219-08385E-RF Tester:Jason Hu
Date: 26.JUN.2024 16:19:10

## 802.11n ht40 Middle Channel




ProjectNo.:XMDN240219-08385E-RF Tester:Jason Hu
Date: 26.JUN.2024 16:22:41

## Support Equipment List and Details

| Manufacturer | Description | Model | Serial Number |
|---|---|---|---|
| NETGEAR | POE | MSIP-REN-NGR-GS108Ev3 | 3UJD1756006EB |
| SWITCHING ADAPTER | Adapter | FJ-SW126K1201000DU | unknown |
| BACL | RS 485 Load | unknown | unknown |
| Honor | Router | WS831 | W6E7S15B09001200 |

## External I/O Cable

For Adapter

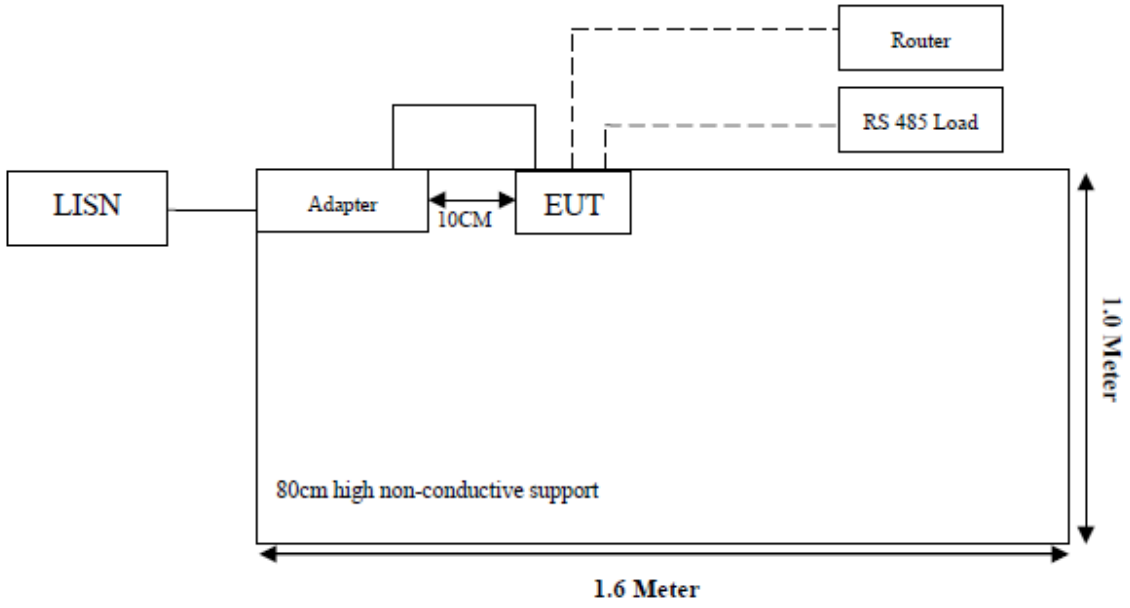
| Cable Description | Length (m) | From Port | To |
|---|---|---|---|
| Network cable | 2 | EUT | Adapter |
| Network cable | 10 | EUT | Router |
| Load cable | 10 | EUT | RS 485 Load |

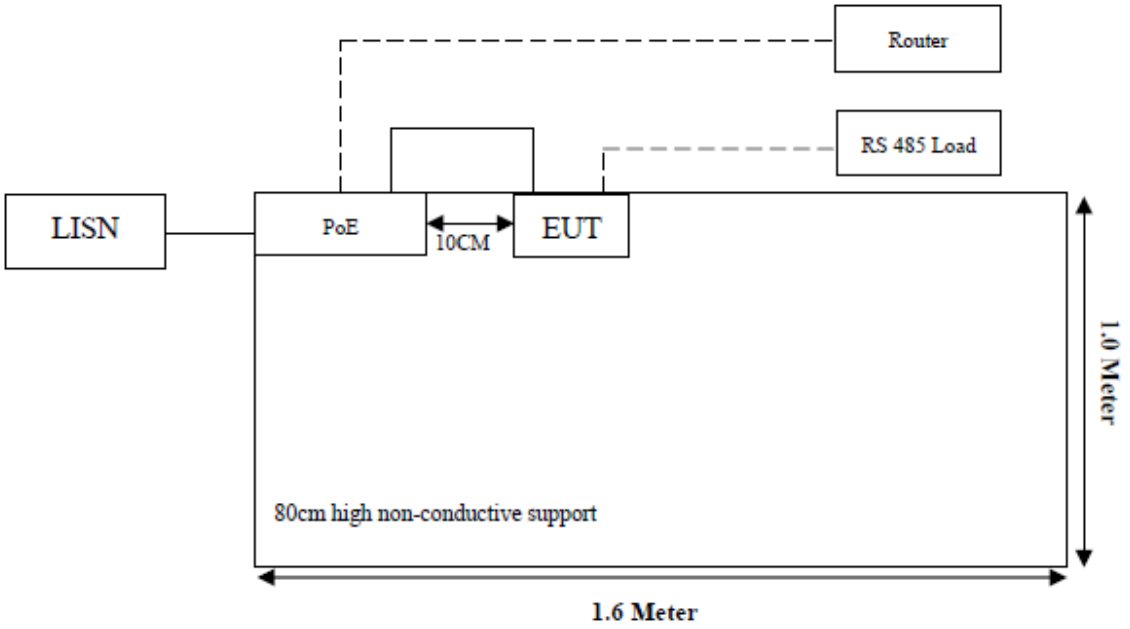
For PoE

| Cable Description | Length (m) | From Port | To |
|---|---|---|---|
| Network cable | 1 | EUT | POE |
| Network cable | 10 | POE | Router |
| Load cable | 10 | EUT | RS 485 Load |

## Block Diagram of Test Setup

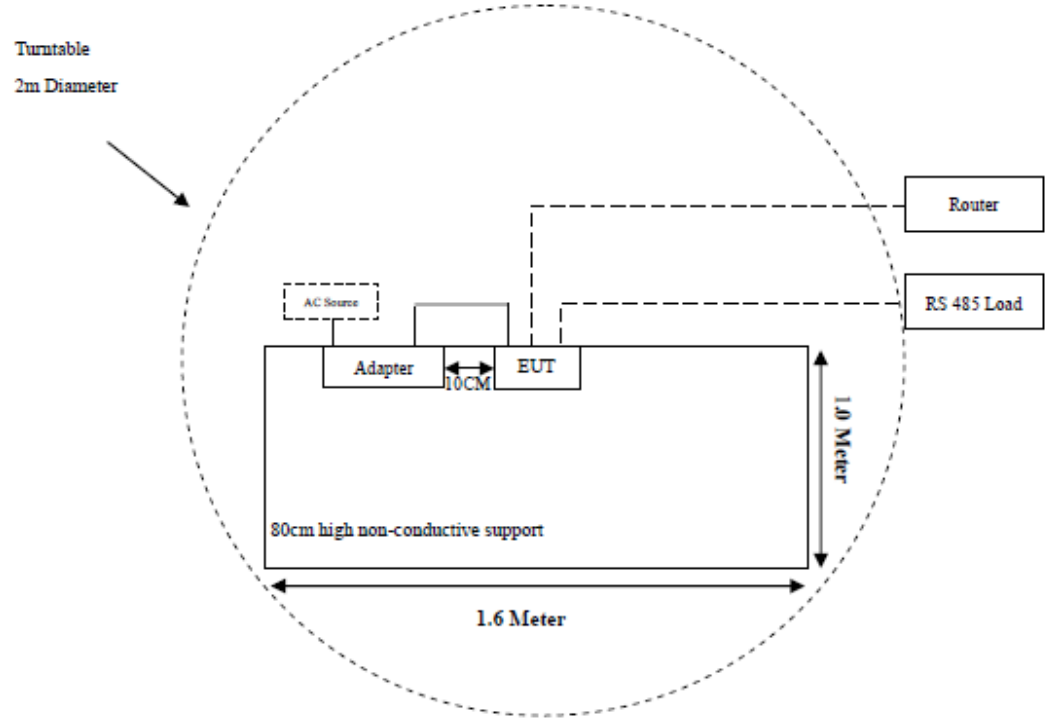
Conducted Emission:

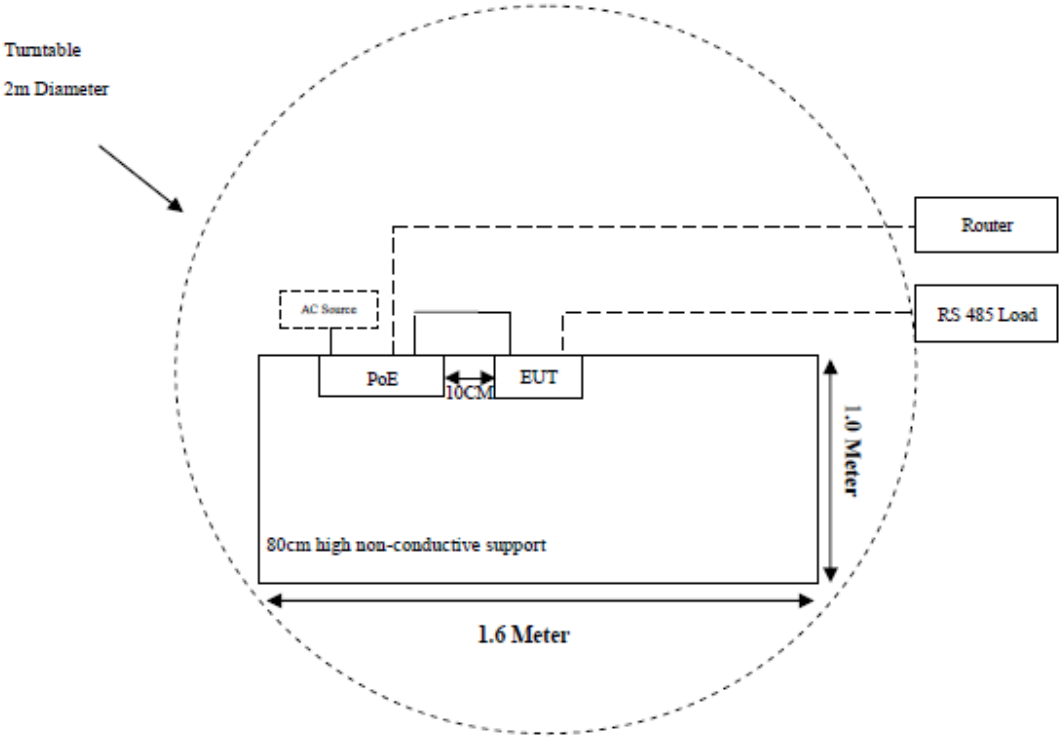


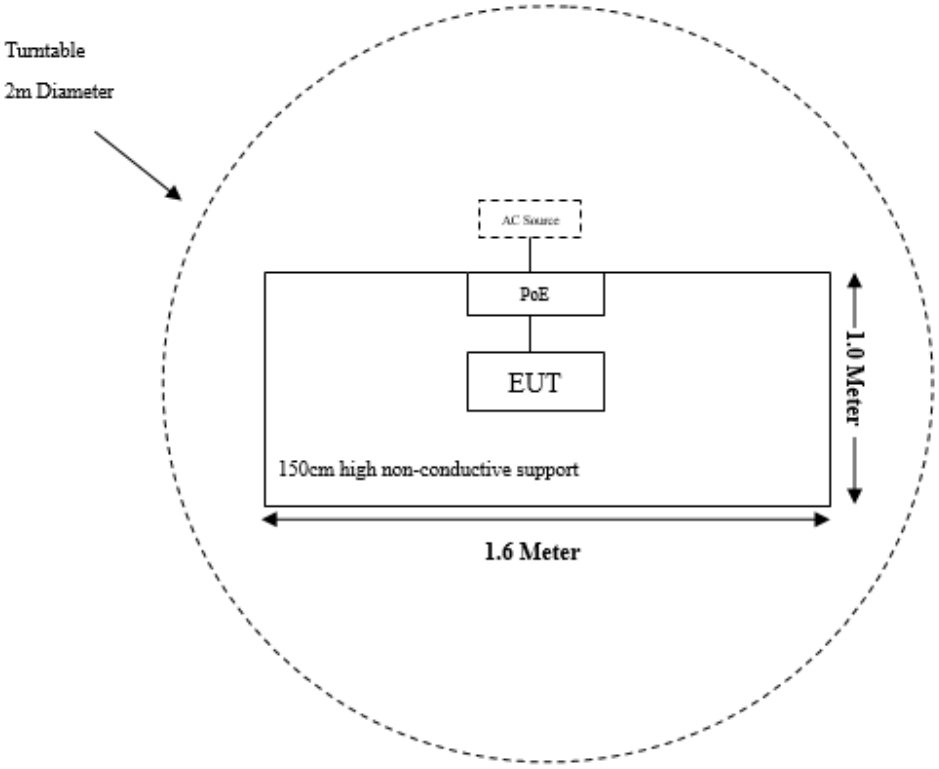
Radiated Emissions:

Below 1GHz



Above 1GHz


Turntable
2m Diameter
AC Source
PoE
EUT
150cm high non-conductive support
1.0 Meter
1.6 Meter

# SUMMARY OF TEST RESULTS

| FCC Rules | Description of Test | Result |
|---|---|---|
| §15.203 | Antenna Requirement | Compliance |
| §15.207 (a) | AC Line Conducted Emissions | Compliance |
| §15.205, §15.209, §15.247(d) | Spurious Emissions | Compliance |
| §15.247 (a)(2) | 6 dB Emission Bandwidth | Compliance |
| §15.247(b)(3) | Maximum Conducted Output Power | Compliance |
| §15.247(d) | 100 kHz Bandwidth of Frequency Band Edge | Compliance |
| §15.247(e) | Power Spectral Density | Compliance |

# TEST EQUIPMENT LIST

| Test Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|---|
| **Conducted Emissions** | | | | | |
| EMI Test Receiver | Rohde & Schwarz | ESR | 103105 | 2024/03/29 | 2025/03/28 |
| LISN | Rohde & Schwarz | ENV216 | 100129 | 2024/03/29 | 2025/03/28 |
| Pulse Limiter | Rohde & Schwarz | ESH3-Z2 | 0357.8810.54 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | XH400T-N-4M | CC001 | 2024/03/29 | 2025/03/28 |
| Test Software | Audix | E3 | 18621a | N/A | N/A |
| **Radiated Emissions Below 1GHz** | | | | | |
| EMI Test Receiver | Rohde & Schwarz | ESR | 103103 | 2024/03/29 | 2025/03/28 |
| Loop Antenna | Rohde & Schwarz | HFH2-Z2 | 830749/001 | 2023/07/27 | 2026/07/26 |
| Antenna | Sunol Sciences | JB6 | A122022-5 | 2023/07/27 | 2026/07/26 |
| Amplifier | Sonoma | 310B | 120903 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | XH400T-N-4M | CC002 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | XH460B-N-2M | CC006 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | XH460B-N-12M | CC007 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | HFH2-CC | 335.3609 | 2024/03/29 | 2025/03/28 |
| Test Software | Audix | E3 | 18621a | N/A | N/A |
| **Radiated Emissions Above 1 GHz** | | | | | |
| Spectrum Analyzer | Rohde & Schwarz | FSV40-N | 102051 | 2024/03/29 | 2025/03/28 |
| Filter Switch Unit | Decentest | DT7220FSU | DS79904 | 2024/02/23 | 2025/02/22 |
| Multiplex Switch Test Control Set | Decentest | DT7220SCU | DS79901 | 2024/02/23 | 2025/02/22 |
| Double Ridge Guide Horn Antenna | A.H.Systems | SAS-571 | 1980 | 2023/07/28 | 2026/07/27 |
| Horn Antenna | EMCO | 3116 | 9407-2232 | 2023/07/31 | 2026/07/30 |
| Horn Antenna | EMCO | 3115 | 9002-3355 | 2024/11/19 | 2027/11/18 |
| Preamplifier | A.H.Systems | PAM-0118P | 489 | 2024/03/29 | 2025/03/28 |
| Preamplifier | A.H.Systems | PAM-1840 | 200 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | XH800A-N-6M | CC003 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | XH800A-N-1M | CC005 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | XH360A-2.92-3M | CC008 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | XINHANGWEIBO | XH360A-2.92-1M | CC009 | 2024/03/29 | 2025/03/28 |
| Test Software | Audix | E3 | 18621a | N/A | N/A |
| **RF Conducted Test** | | | | | |
| Spectrum Analyzer | Rohde & Schwarz | FSU | 100405 | 2024/03/29 | 2025/03/28 |
| Spectrum Analyzer | Rohde & Schwarz | FSV40-N | 102051 | 2024/03/29 | 2025/03/28 |
| Coaxial Cable | N/A | N/A | N/A | Each time | N/A |
| USB Wideband Power Sensor | Boonton | 55318 | 8934 | 2023/09/20 | 2024/09/19 |

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Xiamen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

# FCC §15.203 - ANTENNA REQUIREMENT

## Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.
c. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

## Antenna Connector Construction

The EUT has one FPC antenna arrangement for BLE & WIFI, which was permanently attached and the antenna gain is 2 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

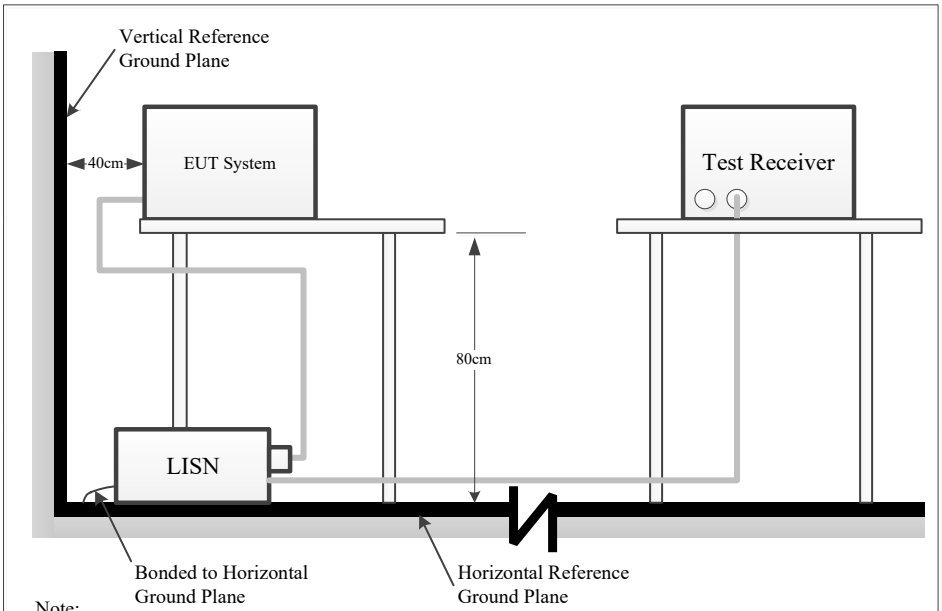
**Result: Compliance**

# FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

## Applicable Standard

FCC§15.207

## EUT Setup




Note:
1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at least 80 cm from other units and oter metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

## EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

| Frequency Range | RBW | VBW | Detector |
|---|---|---|---|
| 150 kHz – 30 MHz | 9 kHz | 30 kHz | QP/AV |

## Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

## Result &Margin Calculation

The Result is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)
Result (dBμV) = Reading (dBμV) + Factor (dB)

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dBμV) –Result (dBμV)

## Test Data

| | |
|---|---|
| **Temperature:** | 19.8℃~22.4℃ |
| **Relative Humidity:** | 41%~56% |
| **ATM Pressure:** | 100.1kPa |
| **Test Date:** | 2024-08-26~2025-01-02 |
| **Test Engineer:** | Spike Gao |

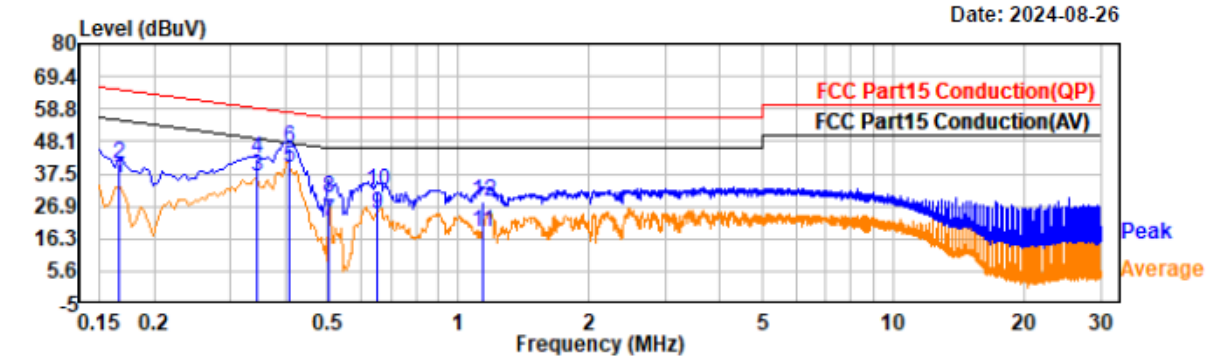
**For BLE:**

*EUT operation mode: Transmitting in BLE middle channel (worst case)*

**EUT Model: PG71**

Project No.: XMDN240219-08385E
Test Mode: BLE 2440
EUT Model: PG71

Temp/Humi/ATM: 22.4℃/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V from PoE

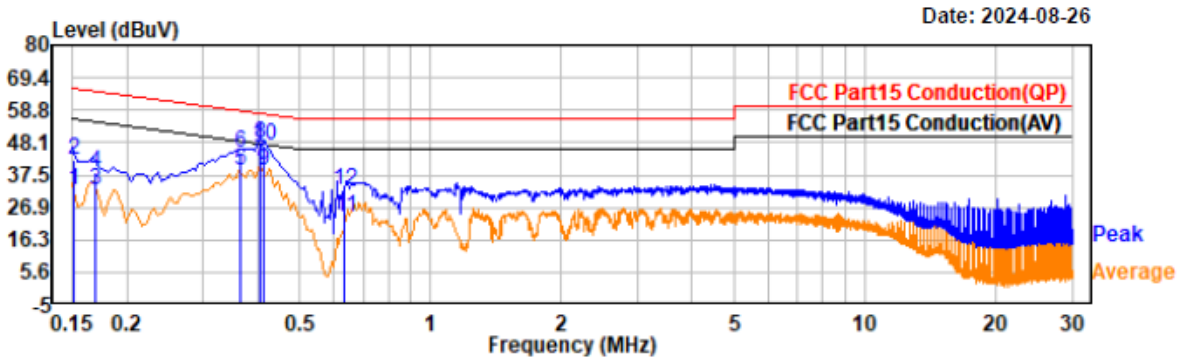



Trace: 1

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.17 | 14.74 | 21.11 | 35.85 | 55.13 | 19.28 | Line | Average |
| 0.17 | 19.84 | 21.11 | 40.95 | 65.13 | 24.18 | Line | QP |
| 0.34 | 15.74 | 20.69 | 36.43 | 49.11 | 12.68 | Line | Average |
| 0.34 | 21.67 | 20.69 | 42.36 | 59.11 | 16.75 | Line | QP |
| 0.41 | 19.13 | 20.50 | 39.63 | 47.68 | 8.05 | Line | Average |
| 0.41 | 25.69 | 20.50 | 46.19 | 57.68 | 11.49 | Line | QP |
| 0.50 | 1.59 | 20.29 | 21.88 | 46.00 | 24.12 | Line | Average |
| 0.50 | 9.55 | 20.29 | 29.84 | 56.00 | 26.16 | Line | QP |
| 0.65 | 3.66 | 20.54 | 24.20 | 46.00 | 21.80 | Line | Average |
| 0.65 | 11.62 | 20.54 | 32.16 | 56.00 | 23.84 | Line | QP |
| 1.14 | -2.51 | 20.69 | 18.18 | 46.00 | 27.82 | Line | Average |
| 1.14 | 7.50 | 20.69 | 28.19 | 56.00 | 27.81 | Line | QP |

Project No.: XMDN240219-08385E
Test Mode: BLE 2440
EUT Model: PG71

Temp/Humi/ATM: 22.4℃/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V from PoE

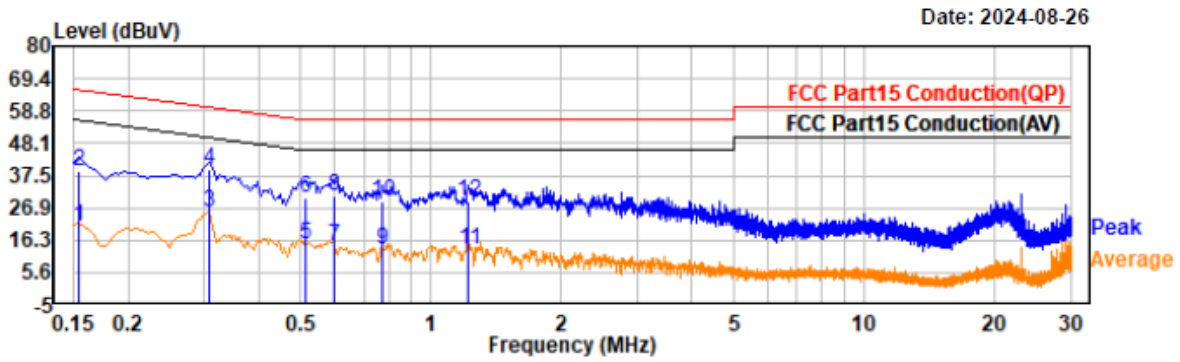



Trace: 1

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.15 | 11.77 | 20.83 | 32.60 | 55.95 | 23.35 | Neutral | Average |
| 0.15 | 21.81 | 20.83 | 42.64 | 65.95 | 23.31 | Neutral | QP |
| 0.17 | 11.49 | 20.93 | 32.42 | 55.00 | 22.58 | Neutral | Average |
| 0.17 | 17.71 | 20.93 | 38.64 | 65.00 | 26.36 | Neutral | QP |
| 0.36 | 18.55 | 20.56 | 39.11 | 48.62 | 9.51 | Neutral | Average |
| 0.36 | 24.33 | 20.56 | 44.89 | 58.62 | 13.73 | Neutral | QP |
| 0.40 | 21.24 | 20.46 | 41.70 | 47.75 | 6.05 | Neutral | Average |
| 0.40 | 27.27 | 20.46 | 47.73 | 57.75 | 10.02 | Neutral | QP |
| 0.41 | 18.24 | 20.45 | 38.69 | 47.57 | 8.88 | Neutral | Average |
| 0.41 | 26.73 | 20.45 | 47.18 | 57.57 | 10.39 | Neutral | QP |
| 0.63 | 3.33 | 20.37 | 23.70 | 46.00 | 22.30 | Neutral | Average |
| 0.63 | 12.30 | 20.37 | 32.67 | 56.00 | 23.33 | Neutral | QP |

Project No.: XMDN240219-08385E
Test Mode: BLE 2440
EUT Model: PG71

Temp/Humi/ATM: 22.4℃/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 12V from Adapter

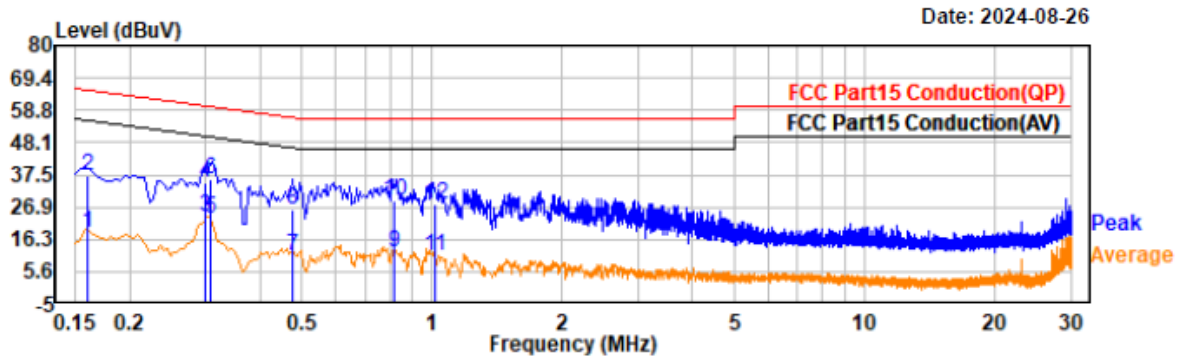



Trace: 1

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.15 | -0.48 | 21.05 | 20.57 | 55.79 | 35.22 | Line | Average |
| 0.15 | 18.03 | 21.05 | 39.08 | 65.79 | 26.71 | Line | QP |
| 0.31 | 4.62 | 20.81 | 25.43 | 50.04 | 24.61 | Line | Average |
| 0.31 | 18.56 | 20.81 | 39.37 | 60.04 | 20.67 | Line | QP |
| 0.51 | -5.66 | 20.31 | 14.65 | 46.00 | 31.35 | Line | Average |
| 0.51 | 9.94 | 20.31 | 30.25 | 56.00 | 25.75 | Line | QP |
| 0.60 | -5.89 | 20.46 | 14.57 | 46.00 | 31.43 | Line | Average |
| 0.60 | 10.03 | 20.46 | 30.49 | 56.00 | 25.51 | Line | QP |
| 0.78 | -7.42 | 20.61 | 13.19 | 46.00 | 32.81 | Line | Average |
| 0.78 | 8.10 | 20.61 | 28.71 | 56.00 | 27.29 | Line | QP |
| 1.22 | -7.31 | 20.74 | 13.43 | 46.00 | 32.57 | Line | Average |
| 1.22 | 7.98 | 20.74 | 28.72 | 56.00 | 27.28 | Line | QP |

Project No.: XMDN240219-08385E
Test Mode: BLE 2440
EUT Model: PG71

Temp/Humi/ATM: 22.4℃/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 12V from Adapter



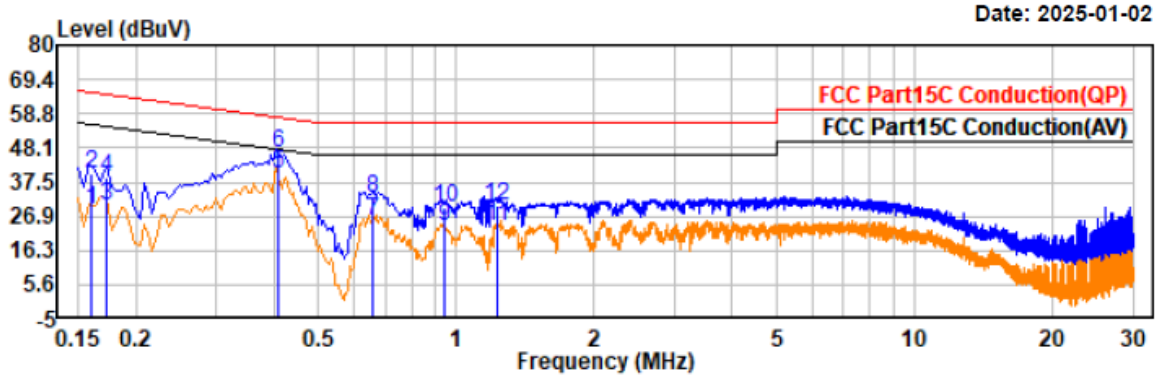

Trace: 1

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.16 | -2.52 | 20.88 | 18.36 | 55.47 | 37.11 | Neutral | Average |
| 0.16 | 16.07 | 20.88 | 36.95 | 65.47 | 28.52 | Neutral | QP |
| 0.30 | 3.26 | 20.73 | 23.99 | 50.25 | 26.26 | Neutral | Average |
| 0.30 | 14.18 | 20.73 | 34.91 | 60.25 | 25.34 | Neutral | QP |
| 0.31 | 2.43 | 20.70 | 23.13 | 49.99 | 26.86 | Neutral | Average |
| 0.31 | 15.30 | 20.70 | 36.00 | 59.99 | 23.99 | Neutral | QP |
| 0.48 | -9.76 | 20.33 | 10.57 | 46.42 | 35.85 | Neutral | Average |
| 0.48 | 5.69 | 20.33 | 26.02 | 56.42 | 30.40 | Neutral | QP |
| 0.82 | -8.72 | 20.54 | 11.82 | 46.00 | 34.18 | Neutral | Average |
| 0.82 | 8.64 | 20.54 | 29.18 | 56.00 | 26.82 | Neutral | QP |
| 1.01 | -10.15 | 20.73 | 10.58 | 46.00 | 35.42 | Neutral | Average |
| 1.01 | 7.08 | 20.73 | 27.81 | 56.00 | 28.19 | Neutral | QP |

**EUT Model: PG71N**

Project No.: XMDN240219-08385E
Test Mode: BLE 2440
EUT Model: PG71N

Temp/Humi/ATM: 19.8℃/41%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V From POE

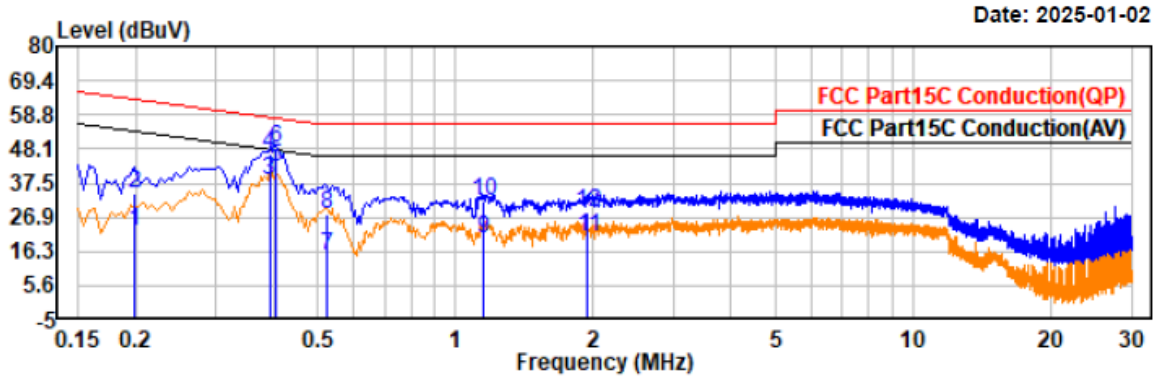



Trace: 1
Condition: QP/AV RBW:9kHz VBW:30kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.16 | 8.14 | 20.85 | 28.99 | 55.47 | 26.48 | Line | Average |
| 0.16 | 19.11 | 20.85 | 39.96 | 65.47 | 25.51 | Line | QP |
| 0.17 | 9.62 | 20.76 | 30.38 | 54.86 | 24.48 | Line | Average |
| 0.17 | 18.19 | 20.76 | 38.95 | 64.86 | 25.91 | Line | QP |
| 0.41 | 19.57 | 20.35 | 39.92 | 47.65 | 7.73 | Line | Average |
| 0.41 | 26.36 | 20.35 | 46.71 | 57.65 | 10.94 | Line | QP |
| 0.66 | 4.96 | 20.46 | 25.42 | 46.00 | 20.58 | Line | Average |
| 0.66 | 12.16 | 20.46 | 32.62 | 56.00 | 23.38 | Line | QP |
| 0.95 | 2.98 | 20.86 | 23.84 | 46.00 | 22.16 | Line | Average |
| 0.95 | 9.01 | 20.86 | 29.87 | 56.00 | 26.13 | Line | QP |
| 1.22 | 2.97 | 20.98 | 23.95 | 46.00 | 22.05 | Line | Average |
| 1.22 | 9.03 | 20.98 | 30.01 | 56.00 | 25.99 | Line | QP |

Project No.: XMDN240219-08385E
Test Mode: BLE 2440
EUT Model: PG71N

Temp/Humi/ATM: 19.8℃/41%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V From POE

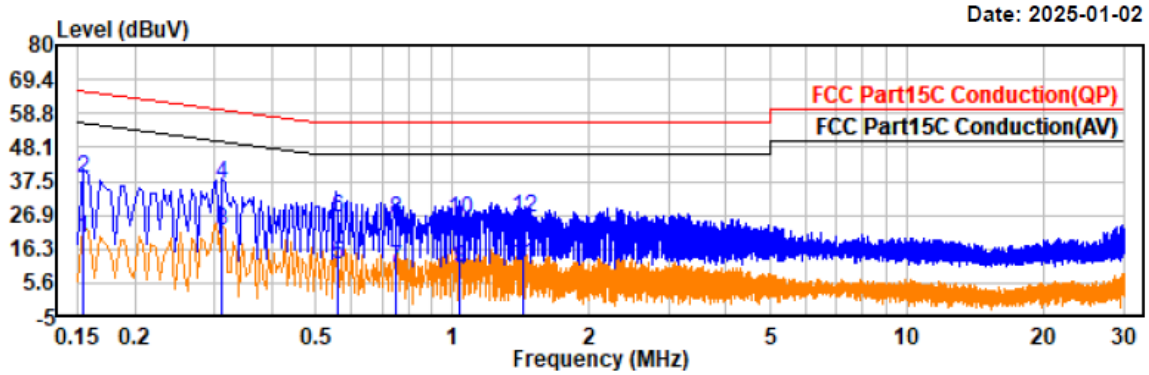



Trace: 1
Condition: QP/AV RBW:9kHz VBW:30kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.20 | 1.77 | 20.67 | 22.44 | 53.63 | 31.19 | Neutral | Average |
| 0.20 | 13.52 | 20.67 | 34.19 | 63.63 | 29.44 | Neutral | QP |
| 0.39 | 17.68 | 20.46 | 38.14 | 48.01 | 9.87 | Neutral | Average |
| 0.39 | 25.89 | 20.46 | 46.35 | 58.01 | 11.66 | Neutral | QP |
| 0.41 | 22.05 | 20.45 | 42.50 | 47.75 | 5.25 | Neutral | Average |
| 0.41 | 28.13 | 20.45 | 48.58 | 57.75 | 9.17 | Neutral | QP |
| 0.52 | -5.41 | 20.38 | 14.97 | 46.00 | 31.03 | Neutral | Average |
| 0.52 | 7.52 | 20.38 | 27.90 | 56.00 | 28.10 | Neutral | QP |
| 1.15 | -0.45 | 20.94 | 20.49 | 46.00 | 25.51 | Neutral | Average |
| 1.15 | 10.82 | 20.94 | 31.76 | 56.00 | 24.24 | Neutral | QP |
| 1.95 | -0.47 | 21.03 | 20.56 | 46.00 | 25.44 | Neutral | Average |
| 1.95 | 7.28 | 21.03 | 28.31 | 56.00 | 27.69 | Neutral | QP |

Project No.: XMDN240219-08385E
Test Mode: BLE 2440
EUT Model: PG71N

Temp/Humi/ATM: 19.8℃/41%/100.1kPa
Tested by: Spike Gao
Power Source: DC 12V From Adapter

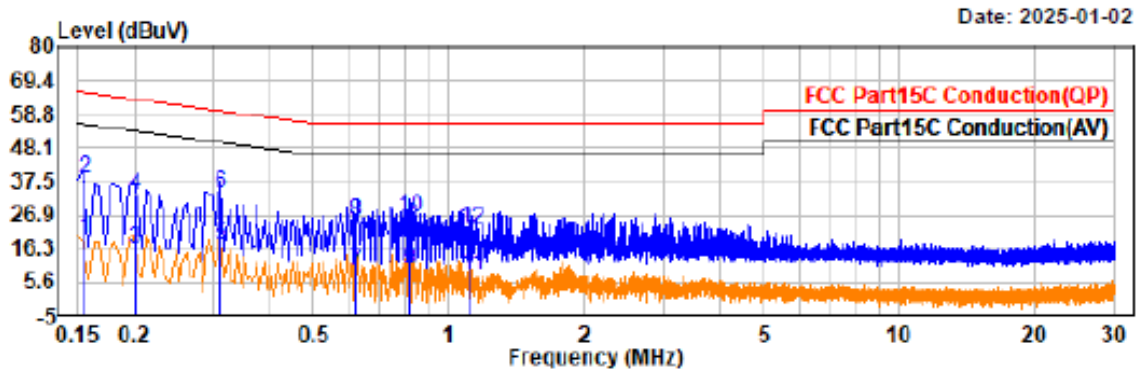



Trace: 1
Condition: QP/AV RBW:9kHz VBW:30kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.15 | -1.23 | 20.90 | 19.67 | 55.81 | 36.14 | Line | Average |
| 0.15 | 17.47 | 20.90 | 38.37 | 65.81 | 27.44 | Line | QP |
| 0.31 | 1.72 | 20.44 | 22.16 | 49.95 | 27.79 | Line | Average |
| 0.31 | 16.16 | 20.44 | 36.60 | 59.95 | 23.35 | Line | QP |
| 0.56 | -9.11 | 20.35 | 11.24 | 46.00 | 34.76 | Line | Average |
| 0.56 | 5.67 | 20.35 | 26.02 | 56.00 | 29.98 | Line | QP |
| 0.75 | -10.27 | 20.59 | 10.32 | 46.00 | 35.68 | Line | Average |
| 0.75 | 5.15 | 20.59 | 25.74 | 56.00 | 30.26 | Line | QP |
| 1.04 | -10.51 | 20.93 | 10.42 | 46.00 | 35.58 | Line | Average |
| 1.04 | 4.53 | 20.93 | 25.46 | 56.00 | 30.54 | Line | QP |
| 1.43 | -9.67 | 21.02 | 11.35 | 46.00 | 34.65 | Line | Average |
| 1.43 | 5.02 | 21.02 | 26.04 | 56.00 | 29.96 | Line | QP |

Project No.: XMDN240219-08385E
Test Mode: BLE 2440
EUT Model: PG71N

Temp/Humi/ATM: 19.8℃/41%/100.1kPa
Tested by: Spike Gao
Power Source: DC 12V From Adapter




Trace: 1
Condition: QP/AV RBW:9kHz VBW:30kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.16 | -1.29 | 20.72 | 19.43 | 55.70 | 36.27 | Neutral | Average |
| 0.16 | 17.50 | 20.72 | 38.22 | 65.70 | 27.48 | Neutral | QP |
| 0.20 | -4.35 | 20.67 | 16.32 | 53.58 | 37.26 | Neutral | Average |
| 0.20 | 12.51 | 20.67 | 33.18 | 63.58 | 30.40 | Neutral | QP |
| 0.31 | -3.26 | 20.53 | 17.27 | 49.91 | 32.64 | Neutral | Average |
| 0.31 | 13.02 | 20.53 | 33.55 | 59.91 | 26.36 | Neutral | QP |
| 0.62 | -11.24 | 20.33 | 9.09 | 46.00 | 36.91 | Neutral | Average |
| 0.62 | 4.31 | 20.33 | 24.64 | 56.00 | 31.36 | Neutral | QP |
| 0.82 | -11.04 | 20.57 | 9.53 | 46.00 | 36.47 | Neutral | Average |
| 0.82 | 5.59 | 20.57 | 26.16 | 56.00 | 29.84 | Neutral | QP |
| 1.12 | -12.89 | 20.94 | 8.05 | 46.00 | 37.95 | Neutral | Average |
| 1.12 | 1.59 | 20.94 | 22.53 | 56.00 | 33.47 | Neutral | QP |

**For Wifi**

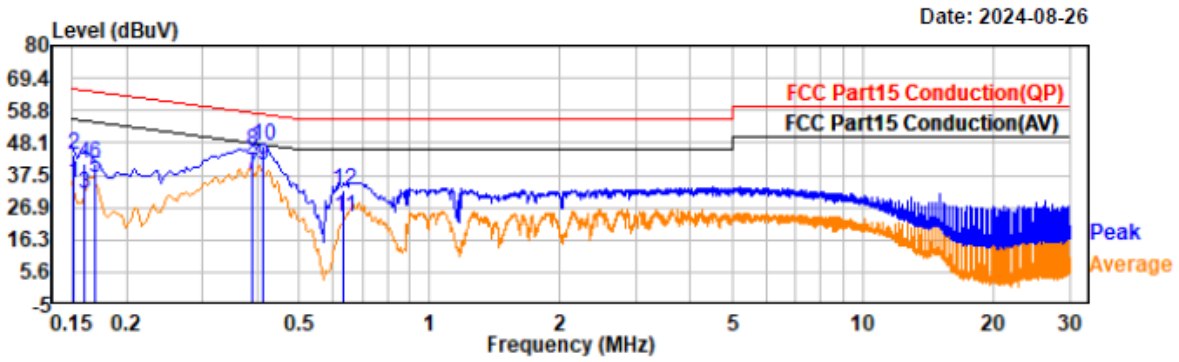
*PoE Power Supply mode was the worst.*

*EUT operation mode: Transmitting in WiFi 11b lowest channel (worst case)*

**EUT Model: PG71**

Project No.: XMDN240219-08385E
Test Mode: 11b 2412
EUT Model: PG71

Temp/Humi/ATM: 22.4℃/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V from PoE

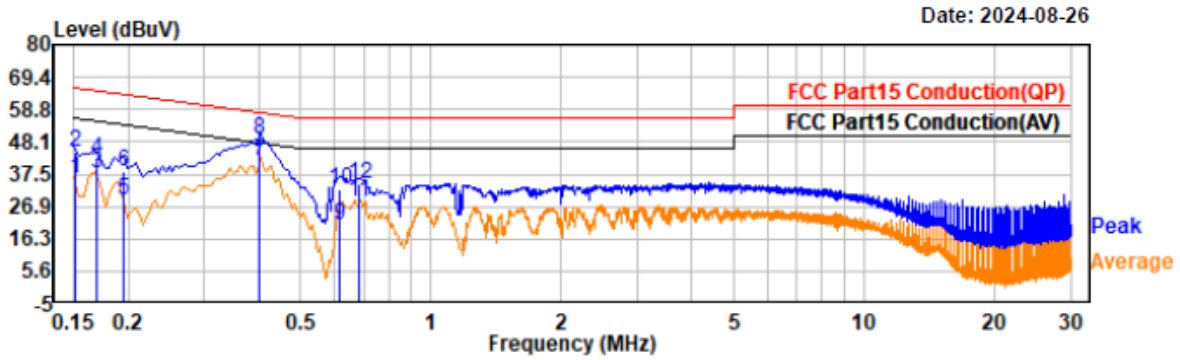



Trace: 1

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.15 | 13.78 | 21.03 | 34.81 | 55.96 | 21.15 | Line | Average |
| 0.15 | 23.38 | 21.03 | 44.41 | 65.96 | 21.55 | Line | QP |
| 0.16 | 10.28 | 21.08 | 31.36 | 55.47 | 24.11 | Line | Average |
| 0.16 | 20.39 | 21.08 | 41.47 | 65.47 | 24.00 | Line | QP |
| 0.17 | 15.25 | 21.13 | 36.38 | 55.00 | 18.62 | Line | Average |
| 0.17 | 20.33 | 21.13 | 41.46 | 65.00 | 23.54 | Line | QP |
| 0.39 | 17.23 | 20.55 | 37.78 | 48.03 | 10.25 | Line | Average |
| 0.39 | 24.82 | 20.55 | 45.37 | 58.03 | 12.66 | Line | QP |
| 0.41 | 19.95 | 20.49 | 40.44 | 47.61 | 7.17 | Line | Average |
| 0.41 | 26.96 | 20.49 | 47.45 | 57.61 | 10.16 | Line | QP |
| 0.63 | 3.37 | 20.51 | 23.88 | 46.00 | 22.12 | Line | Average |
| 0.63 | 12.24 | 20.51 | 32.75 | 56.00 | 23.25 | Line | QP |

Project No.: XMDN240219-08385E
Test Mode: 11b 2412
EUT Model: PG71

Temp/Humi/ATM: 22.4℃/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V from PoE



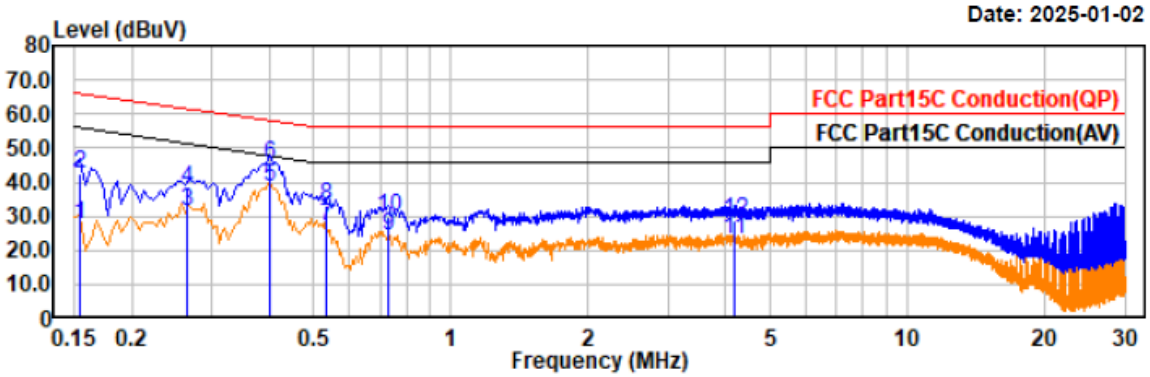

Trace: 1

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.15 | 15.06 | 20.83 | 35.89 | 55.95 | 20.06 | Neutral | Average |
| 0.15 | 24.18 | 20.83 | 45.01 | 65.95 | 20.94 | Neutral | QP |
| 0.17 | 16.58 | 20.93 | 37.51 | 55.01 | 17.50 | Neutral | Average |
| 0.17 | 21.31 | 20.93 | 42.24 | 65.01 | 22.77 | Neutral | QP |
| 0.19 | 7.79 | 21.05 | 28.84 | 53.83 | 24.99 | Neutral | Average |
| 0.19 | 17.16 | 21.05 | 38.21 | 63.83 | 25.62 | Neutral | QP |
| 0.40 | 21.62 | 20.47 | 42.09 | 47.79 | 5.70 | Neutral | Average |
| 0.40 | 28.67 | 20.47 | 49.14 | 57.79 | 8.65 | Neutral | QP |
| 0.61 | 0.71 | 20.36 | 21.07 | 46.00 | 24.93 | Neutral | Average |
| 0.61 | 12.18 | 20.36 | 32.54 | 56.00 | 23.46 | Neutral | QP |
| 0.68 | 8.07 | 20.39 | 28.46 | 46.00 | 17.54 | Neutral | Average |
| 0.68 | 13.92 | 20.39 | 34.31 | 56.00 | 21.69 | Neutral | QP |

**EUT Model: PG71N**

Project No.: XMDN240219-08385E
Test Mode: 11b 2412
EUT Model: PG71N

Temp/Humi/ATM: 19.8℃/41%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V From POE

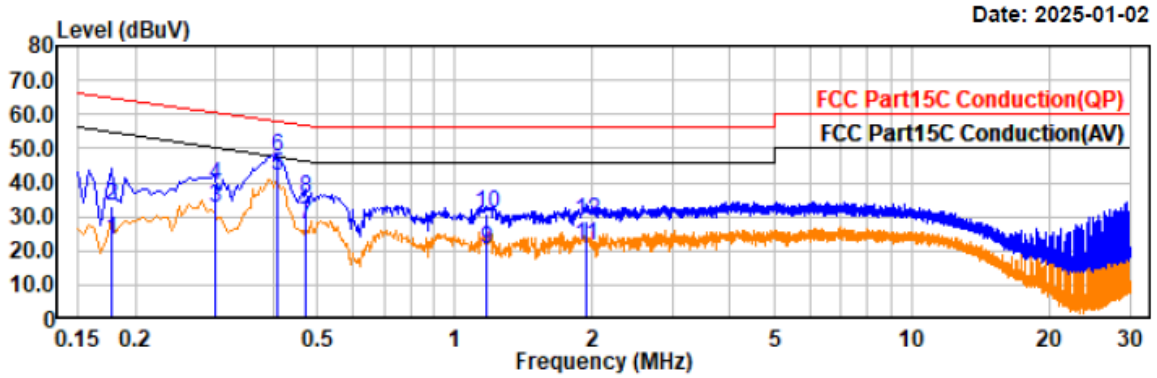



Trace: 1
Condition: QP/AV RBW:9kHz VBW:30kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.15 | 6.46 | 20.89 | 27.35 | 55.77 | 28.42 | Line | Average |
| 0.15 | 21.80 | 20.89 | 42.69 | 65.77 | 23.08 | Line | QP |
| 0.27 | 10.88 | 20.48 | 31.36 | 51.26 | 19.90 | Line | Average |
| 0.27 | 17.81 | 20.48 | 38.29 | 61.26 | 22.97 | Line | QP |
| 0.40 | 18.47 | 20.35 | 38.82 | 47.81 | 8.99 | Line | Average |
| 0.40 | 24.91 | 20.35 | 45.26 | 57.81 | 12.55 | Line | QP |
| 0.53 | 6.48 | 20.33 | 26.81 | 46.00 | 19.19 | Line | Average |
| 0.53 | 12.56 | 20.33 | 32.89 | 56.00 | 23.11 | Line | QP |
| 0.73 | 3.74 | 20.55 | 24.29 | 46.00 | 21.71 | Line | Average |
| 0.73 | 9.10 | 20.55 | 29.65 | 56.00 | 26.35 | Line | QP |
| 4.18 | 2.33 | 20.70 | 23.03 | 46.00 | 22.97 | Line | Average |
| 4.18 | 8.23 | 20.70 | 28.93 | 56.00 | 27.07 | Line | QP |

Project No.: XMDN240219-08385E
Test Mode: 11b 2412
EUT Model: PG71N

Temp/Humi/ATM: 19.8℃/41%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V From POE




Trace: 1
Condition: QP/AV RBW:9kHz VBW:30kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB | Result dBuV | Limit dBuV | Margin dB | Phase | Remark |
|---|---|---|---|---|---|---|---|
| 0.18 | 2.28 | 20.69 | 22.97 | 54.62 | 31.65 | Neutral | Average |
| 0.18 | 12.45 | 20.69 | 33.14 | 64.62 | 31.48 | Neutral | QP |
| 0.30 | 12.00 | 20.55 | 32.55 | 50.27 | 17.72 | Neutral | Average |
| 0.30 | 18.88 | 20.55 | 39.43 | 60.27 | 20.84 | Neutral | QP |
| 0.41 | 21.24 | 20.45 | 41.69 | 47.70 | 6.01 | Neutral | Average |
| 0.41 | 27.25 | 20.45 | 47.70 | 57.70 | 10.00 | Neutral | QP |
| 0.47 | 7.22 | 20.41 | 27.63 | 46.51 | 18.88 | Neutral | Average |
| 0.47 | 15.16 | 20.41 | 35.57 | 56.51 | 20.94 | Neutral | QP |
| 1.17 | -0.53 | 20.94 | 20.41 | 46.00 | 25.59 | Neutral | Average |
| 1.17 | 9.75 | 20.94 | 30.69 | 56.00 | 25.31 | Neutral | QP |
| 1.93 | 0.45 | 21.03 | 21.48 | 46.00 | 24.52 | Neutral | Average |
| 1.93 | 7.57 | 21.03 | 28.60 | 56.00 | 27.40 | Neutral | QP |

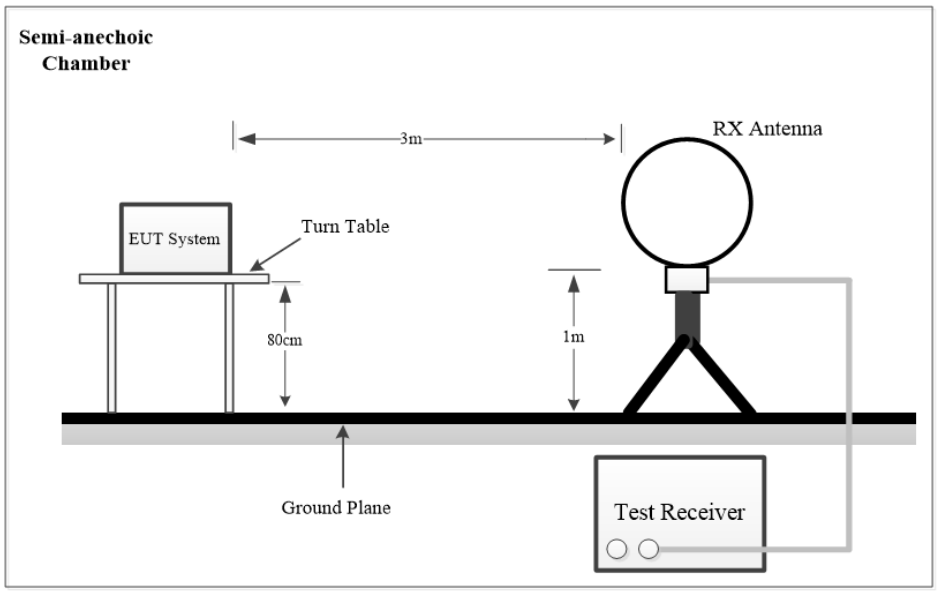
# FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

## Applicable Standard

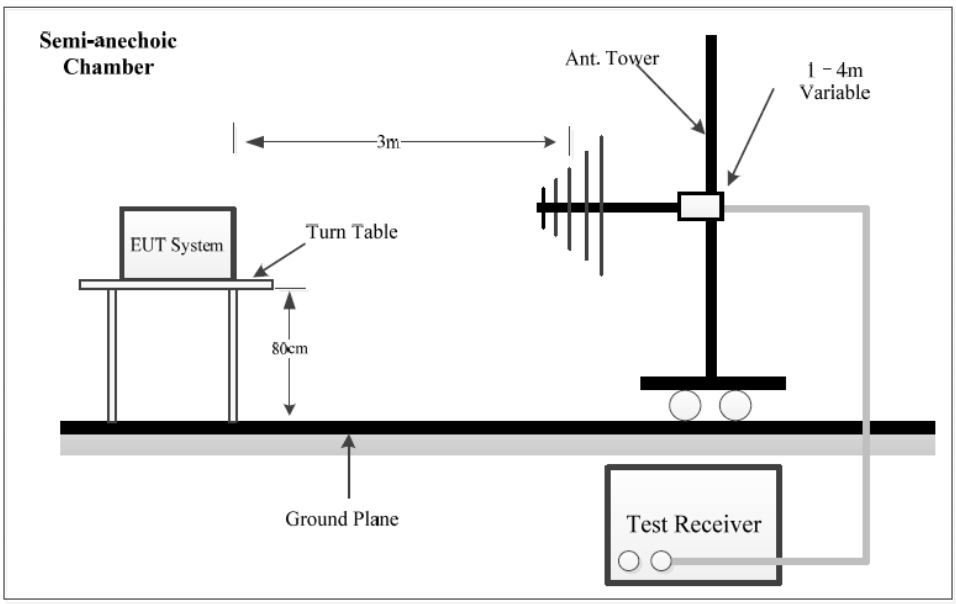
FCC §15.247 (d); §15.209; §15.205;

## EUT Setup

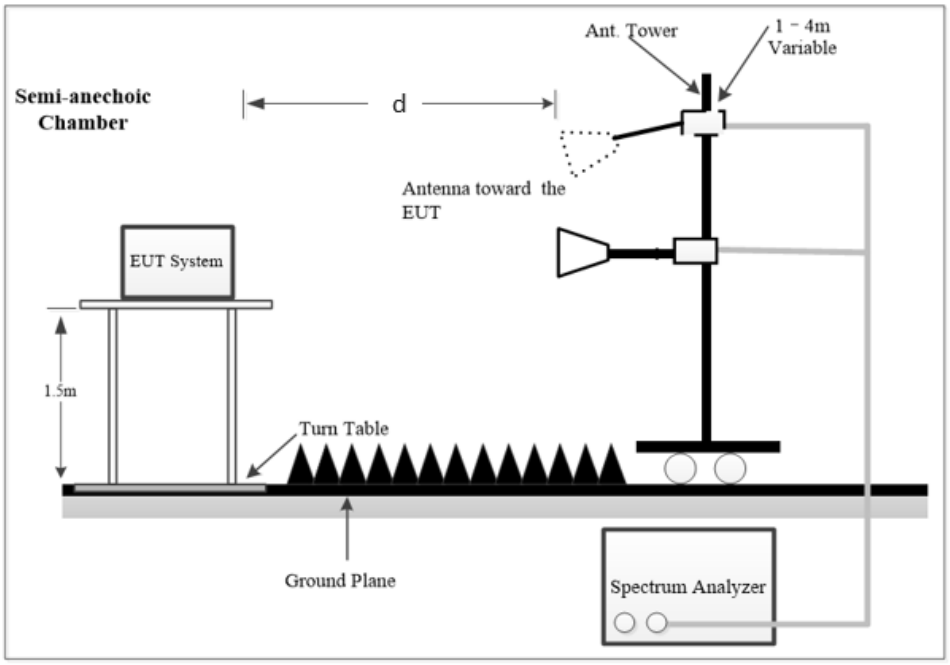
### 9 kHz-30MHz




### Below 1 GHz:



**Above 1GHz:**




The radiated emission tests using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

NOTE: d is testing distance;
For Radiated Emission test (1GHz-18GHz) and Bandedge Emission test, which was performed at 3 m distance.

For Radiated Emission test (18GHz-25GHz), which was performed at 1.0 m distance, according to ANSI C63.10-2013, the test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.0m.
Distance extrapolation Factor =20 log (specific distance [3m]/test distance [1.0m]) dB= 9.54 dB

## EMI Test Receiver Setup

The system was investigated from 9 kHz to 25 GHz.

During the radiated emission test, the EMI test receiver Setup was set with the following configurations:

**Below 1GHz:**

| Frequency Range | RBW | VBW | Measurement |
|---|---|---|---|
| 9 kHz – 150 kHz | 200Hz | 1 kHz | PK |
| | 200Hz | / | QP |
| 150 kHz – 30 MHz | 10 kHz | 30 kHz | PK |
| | 9kHz | / | QP |
| 30 MHz – 1000 MHz | 100 kHz | 300 kHz | PK |
| | 120kHz | / | QP |

**Above 1GHz:**

Pre-scan:

| Duty Cycle | RBW | VBW | Measurement |
|---|---|---|---|
| Any | 1MHz | 3MHz | PK |
| ＞98% | 1MHz | 5kHz | AV |
| ＜98% | 1MHz | ≥1/T, not less than 5kHz | AV |

Final measurement for emission identified during the pre-scan:

| Duty Cycle | RBW | VBW | Measurement |
|---|---|---|---|
| Any | 1MHz | 3MHz | PK |
| ＞98% | 1MHz | 10Hz | AV |
| ＜98% | 1MHz | ≥1/T | AV |

Note: T is minimum transmission duration

## Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

For each measurement antenna alignment, the EUT shall be rotated through 0°to 360°on a turntable. The report shall list the six emissions with the smallest margin relative to the limit, for each of the three antenna orientations (parallel, perpendicular, and ground parallel) unless the margin is greater than 20 dB, then the following statement shall be made: “all emissions were greater than 20 dB below the limit.”

Below 1GHz, if the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 10 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

Above 1GHz, if the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 6 dB below the AV emission limit, there's no need to record the measured AV level of the emissions in the report.

## Result &Margin Calculation

The Result is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

For 9 kHz to 18GHz Radiated emission test
Factor (dB/m) =Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

For 18GHz to 25GHz Radiated emission test and Bandedge emissions test
Factor (dB/m) =Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB) - Extrapolation factor (dB)

Extrapolation factor=9.54dB (distance=1m)

Result (dBμV/m) = Reading (dBμV) + Factor (dB/m)

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dBμV/m) –Result (dBμV/m)

## Test Data

Please refer to the below table and plots.
After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

| **Frequency Range:** | Below 1 GHz | Above 1 GHz |
|---|---|---|
| **Temperature:** | 20.5℃~23.5℃ | 21.7℃~23.5℃ |
| **Relative Humidity:** | 44%~53% | 49%~53% |
| **ATM Pressure:** | 100.1kPa~101kPa | 100.1kPa |
| **Test Date:** | 2024-07-26~2024-12-27 | 2024-08-26~2024-12-04 |
| **Test Engineer:** | Wlif Wu | Wlif Wu |

## 1) 9 kHz~30MHz

**For BLE**

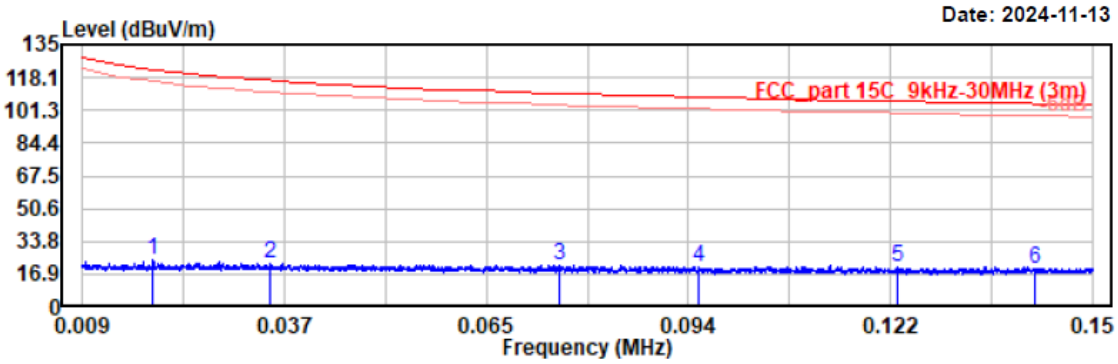
*Pre-scan in parallel, ground-parallel and perpendicular of orientation of loop antenna, parallel is worst case*

*EUT operation mode: Transmitting in BLE middle low channel in parallel (worst case)*

**EUT Model: PG71**

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

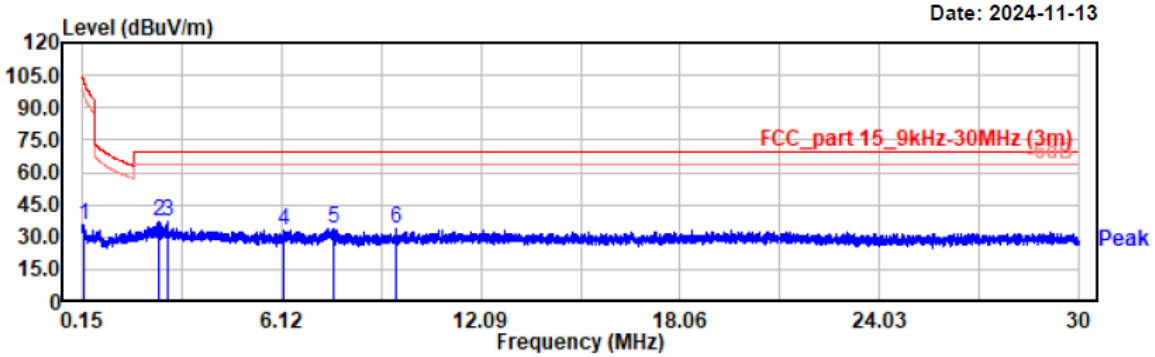
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.019 | 4.67 | 19.78 | 24.45 | 122.09 | 97.64 | Peak |
| 0.035 | 2.27 | 19.91 | 22.18 | 116.68 | 94.50 | Peak |
| 0.075 | 1.50 | 19.76 | 21.26 | 110.05 | 88.79 | Peak |
| 0.095 | 0.51 | 19.77 | 20.28 | 108.05 | 87.77 | Peak |
| 0.123 | 1.22 | 19.73 | 20.95 | 105.82 | 84.87 | Peak |
| 0.142 | -0.07 | 19.73 | 19.66 | 104.56 | 84.90 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

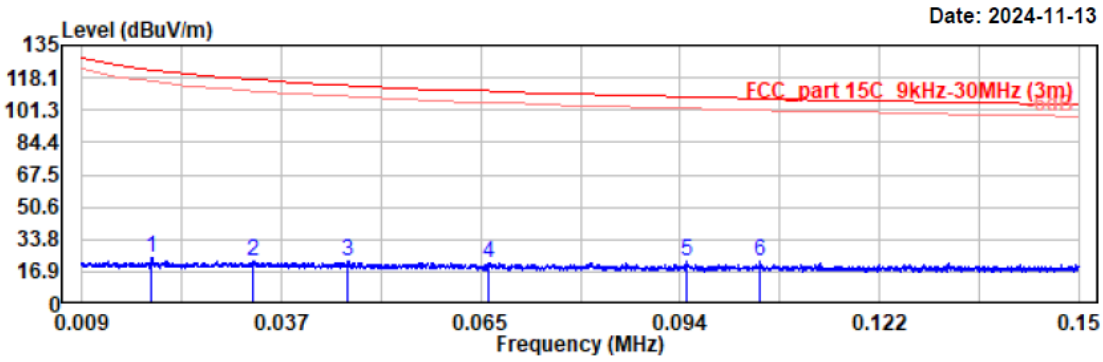
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.195 | 16.24 | 19.72 | 35.96 | 101.81 | 65.85 | Peak |
| 2.431 | 17.39 | 19.69 | 37.08 | 69.54 | 32.46 | Peak |
| 2.708 | 17.44 | 19.77 | 37.21 | 69.54 | 32.33 | Peak |
| 6.177 | 13.42 | 19.78 | 33.20 | 69.54 | 36.34 | Peak |
| 7.684 | 14.13 | 19.68 | 33.81 | 69.54 | 35.73 | Peak |
| 9.535 | 13.86 | 19.70 | 33.56 | 69.54 | 35.98 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

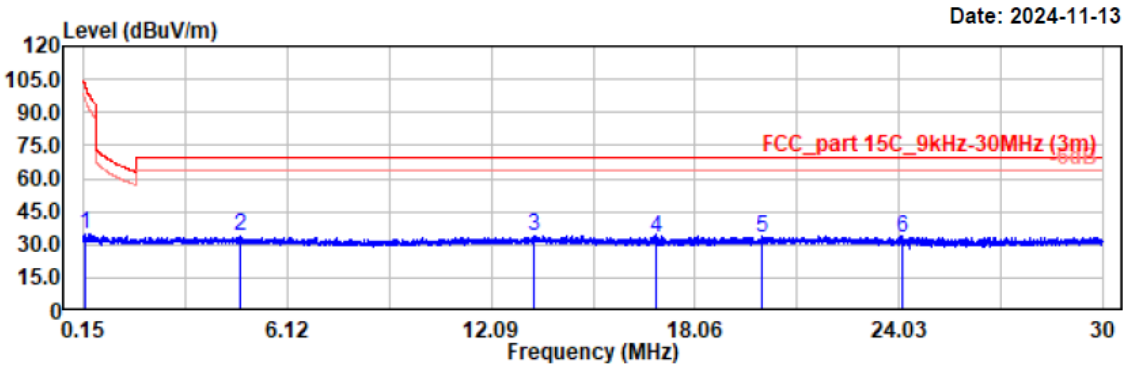
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.019 | 4.20 | 19.78 | 23.98 | 122.09 | 98.11 | Peak |
| 0.033 | 2.49 | 19.91 | 22.40 | 117.20 | 94.80 | Peak |
| 0.047 | 2.27 | 19.91 | 22.18 | 114.25 | 92.07 | Peak |
| 0.067 | 1.79 | 19.84 | 21.63 | 111.15 | 89.52 | Peak |
| 0.095 | 2.20 | 19.77 | 21.97 | 108.10 | 86.13 | Peak |
| 0.105 | 2.57 | 19.73 | 22.30 | 107.19 | 84.89 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter

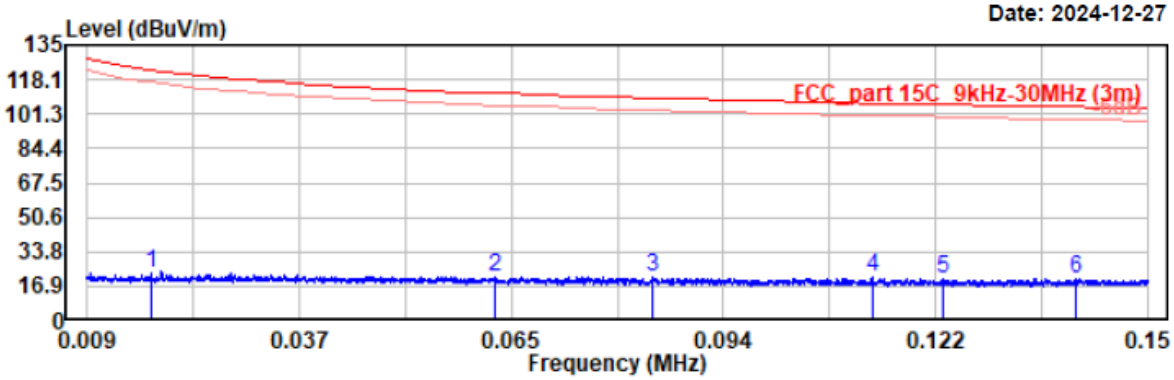



| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.198 | 15.24 | 19.72 | 34.96 | 101.68 | 66.72 | Peak |
| 4.753 | 14.06 | 19.69 | 33.75 | 69.54 | 35.79 | Peak |
| 13.365 | 14.14 | 19.74 | 33.88 | 69.54 | 35.66 | Peak |
| 16.899 | 13.47 | 19.88 | 33.35 | 69.54 | 36.19 | Peak |
| 20.015 | 12.87 | 20.09 | 32.96 | 69.54 | 36.58 | Peak |
| 24.108 | 12.66 | 20.19 | 32.85 | 69.54 | 36.69 | Peak |

**EUT Model: PG71N**

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 22.5℃/44%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

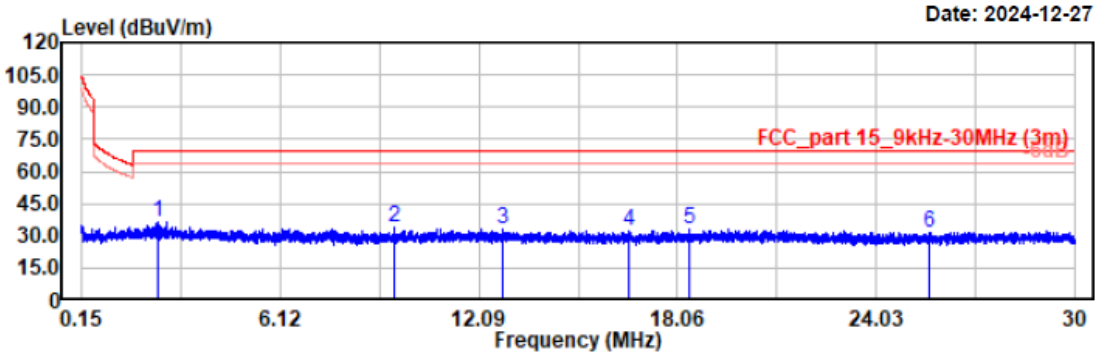



Condition: PK RBW:200Hz VBW:1kHz SWT:auto
QP RBW:200Hz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.018 | 3.20 | 19.74 | 22.94 | 122.75 | 99.81 | Peak |
| 0.063 | 1.84 | 19.88 | 21.72 | 111.58 | 89.86 | Peak |
| 0.084 | 1.46 | 19.75 | 21.21 | 109.10 | 87.89 | Peak |
| 0.113 | 1.37 | 19.73 | 21.10 | 106.51 | 85.41 | Peak |
| 0.123 | 1.22 | 19.73 | 20.95 | 105.82 | 84.87 | Peak |
| 0.140 | 0.92 | 19.73 | 20.65 | 104.66 | 84.01 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 22.5℃/44%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

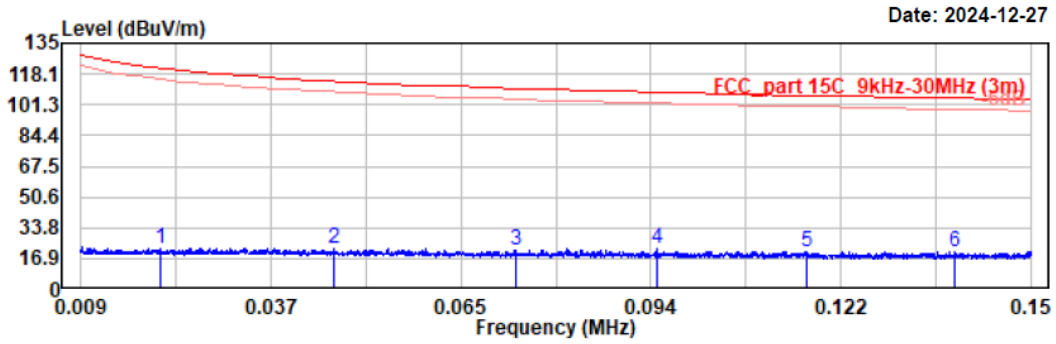



Condition: PK RBW:10kHz VBW:30kHz SWT:auto
QP RBW:9kHz SWT:auto

| Freq | Reading | Factor | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|
| MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | |
| 2.431 | 16.39 | 19.69 | 36.08 | 69.54 | 33.46 | Peak |
| 9.535 | 13.86 | 19.70 | 33.56 | 69.54 | 35.98 | Peak |
| 12.824 | 13.28 | 19.73 | 33.01 | 69.54 | 36.53 | Peak |
| 16.585 | 12.15 | 19.87 | 32.02 | 69.54 | 37.52 | Peak |
| 18.400 | 12.81 | 19.98 | 32.79 | 69.54 | 36.75 | Peak |
| 25.612 | 11.64 | 20.19 | 31.83 | 69.54 | 37.71 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 22.5℃/44%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter

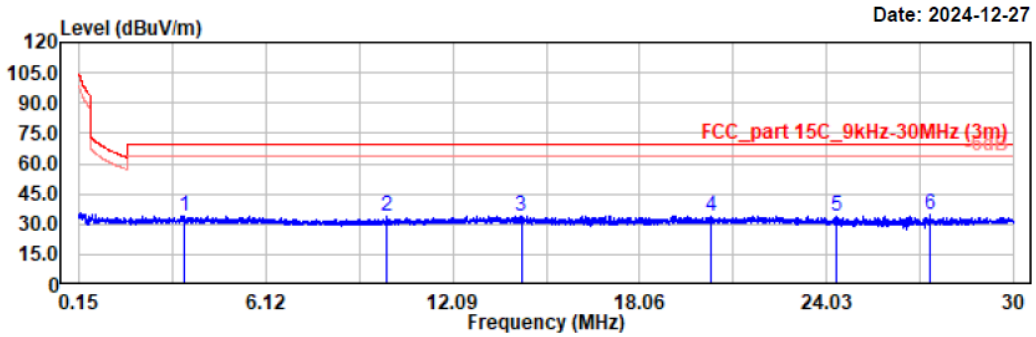



Condition: PK RBW:200Hz VBW:1kHz SWT:auto
QP RBW:200Hz SWT:auto

| Freq | Reading | Factor | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|
| MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | |
| 0.021 | 2.70 | 19.82 | 22.52 | 121.30 | 98.78 | Peak |
| 0.047 | 2.17 | 19.91 | 22.08 | 114.25 | 92.17 | Peak |
| 0.073 | 1.65 | 19.78 | 21.43 | 110.28 | 88.85 | Peak |
| 0.095 | 2.17 | 19.77 | 21.94 | 108.10 | 86.16 | Peak |
| 0.117 | 1.12 | 19.73 | 20.85 | 106.27 | 85.42 | Peak |
| 0.139 | 0.55 | 19.73 | 20.28 | 104.76 | 84.48 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 22.5℃/44%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter




Condition: PK RBW:10kHz VBW:30kHz SWT:auto
QP RBW:9kHz SWT:auto

| Freq | Reading | Factor | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|
| MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | |
| 3.508 | 14.03 | 19.81 | 33.84 | 69.54 | 35.70 | Peak |
| 9.956 | 13.92 | 19.70 | 33.62 | 69.54 | 35.92 | Peak |
| 14.275 | 14.54 | 19.75 | 34.29 | 69.54 | 35.25 | Peak |
| 20.314 | 14.06 | 20.10 | 34.16 | 69.54 | 35.38 | Peak |
| 24.343 | 13.49 | 20.21 | 33.70 | 69.54 | 35.84 | Peak |
| 27.346 | 14.31 | 20.10 | 34.41 | 69.54 | 35.13 | Peak |

**For WiFi**

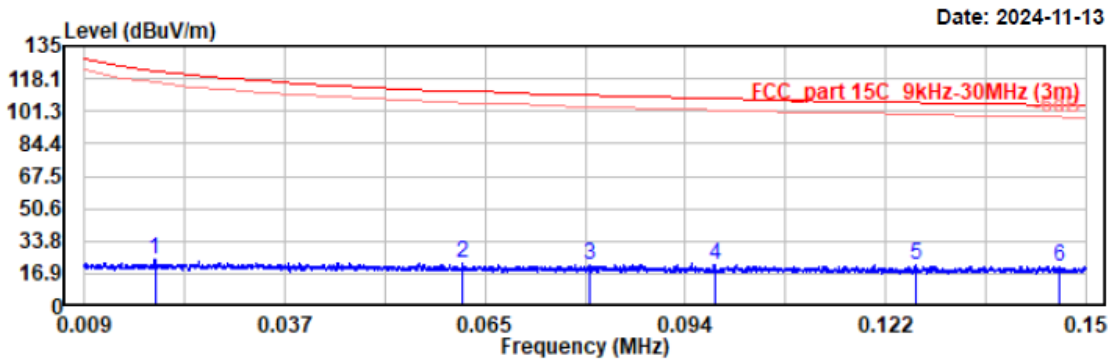
*Pre-scan in parallel, ground-parallel and perpendicular of orientation of loop antenna, parallel is worst case*

*EUT operation mode: Transmitting in WiFi 11b low channel in parallel (worst case)*

**EUT Model: PG71**

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71
Test distance: 3m

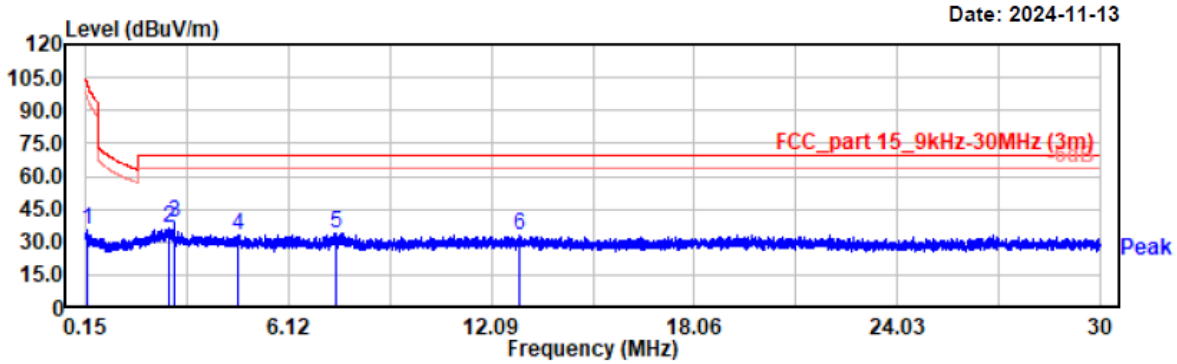
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.019 | 4.38 | 19.78 | 24.16 | 122.06 | 97.90 | Peak |
| 0.062 | 2.48 | 19.89 | 22.37 | 111.73 | 89.36 | Peak |
| 0.080 | 1.58 | 19.71 | 21.29 | 109.53 | 88.24 | Peak |
| 0.098 | 1.56 | 19.75 | 21.31 | 107.81 | 86.50 | Peak |
| 0.126 | 1.75 | 19.73 | 21.48 | 105.59 | 84.11 | Peak |
| 0.146 | 0.69 | 19.73 | 20.42 | 104.30 | 83.88 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71
Test distance: 3m

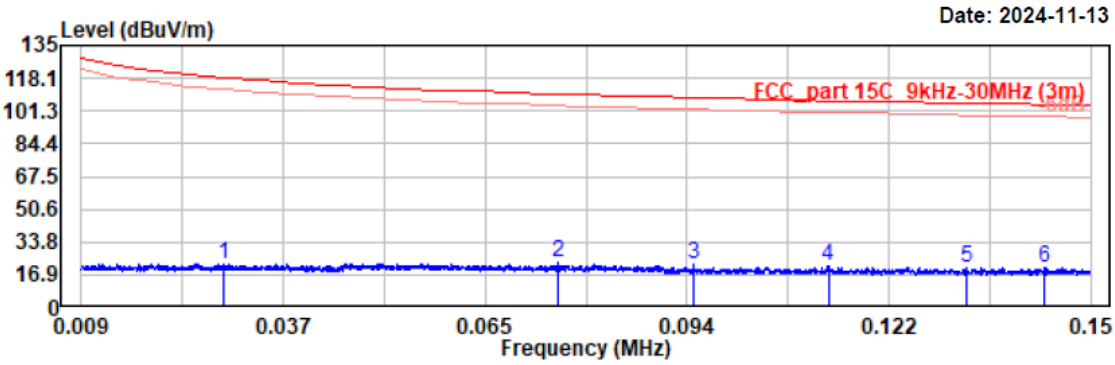
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.189 | 16.24 | 19.72 | 35.96 | 102.08 | 66.12 | Peak |
| 2.586 | 16.29 | 19.74 | 36.03 | 69.54 | 33.51 | Peak |
| 2.774 | 19.31 | 19.79 | 39.10 | 69.54 | 30.44 | Peak |
| 4.633 | 13.56 | 19.71 | 33.27 | 69.54 | 36.27 | Peak |
| 7.520 | 14.48 | 19.68 | 34.16 | 69.54 | 35.38 | Peak |
| 12.920 | 13.44 | 19.74 | 33.18 | 69.54 | 36.36 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71
Test distance: 3m

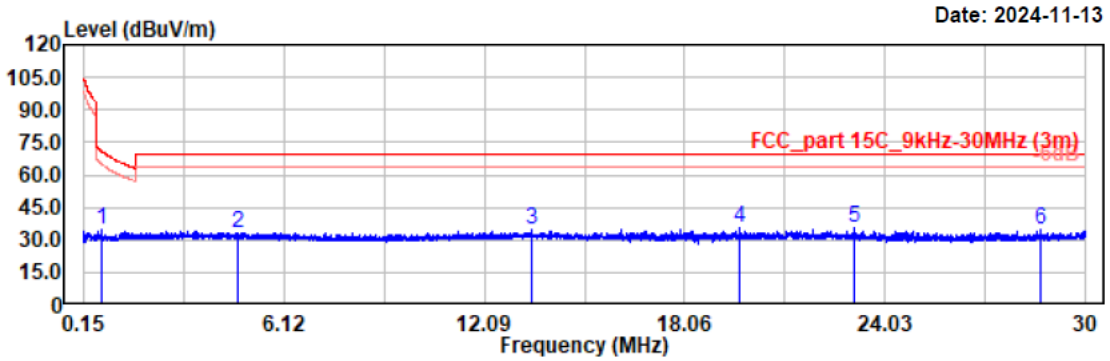
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.029 | 2.51 | 19.90 | 22.41 | 118.37 | 95.96 | Peak |
| 0.076 | 3.79 | 19.75 | 23.54 | 110.04 | 86.50 | Peak |
| 0.095 | 2.24 | 19.77 | 22.01 | 108.10 | 86.09 | Peak |
| 0.113 | 1.74 | 19.73 | 21.47 | 106.52 | 85.05 | Peak |
| 0.133 | 1.05 | 19.73 | 20.78 | 105.16 | 84.38 | Peak |
| 0.144 | 0.63 | 19.73 | 20.36 | 104.46 | 84.10 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter

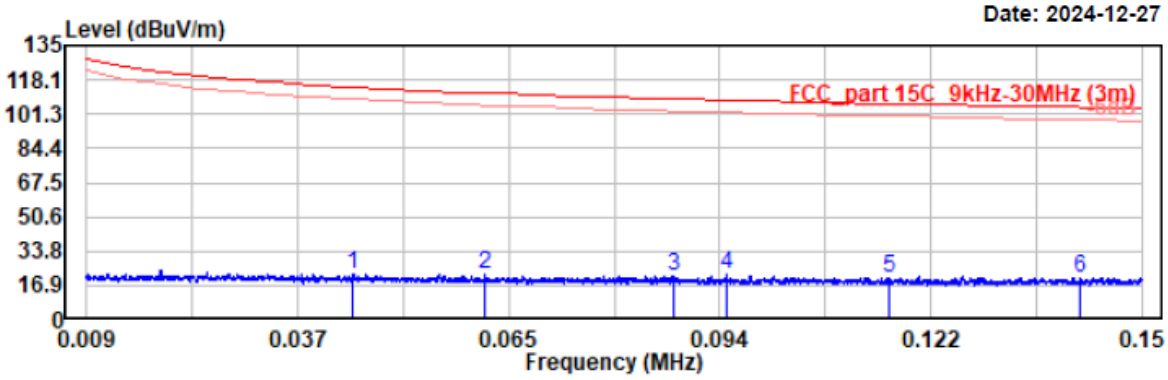



| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.687 | 15.10 | 19.85 | 34.95 | 70.86 | 35.91 | Peak |
| 4.717 | 13.76 | 19.70 | 33.46 | 69.54 | 36.08 | Peak |
| 13.484 | 14.61 | 19.74 | 34.35 | 69.54 | 35.19 | Peak |
| 19.711 | 15.17 | 20.07 | 35.24 | 69.54 | 34.30 | Peak |
| 23.129 | 15.41 | 20.17 | 35.58 | 69.54 | 33.96 | Peak |
| 28.690 | 14.61 | 20.02 | 34.63 | 69.54 | 34.91 | Peak |

**EUT Model: PG71N**

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 22.5℃/44%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

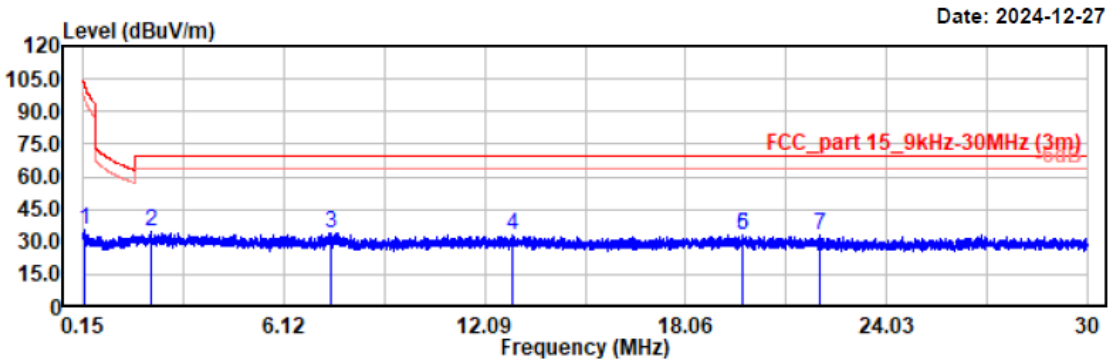



Condition: PK RBW:200Hz VBW:1kHz SWT:auto
QP RBW:200Hz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.045 | 2.65 | 19.91 | 22.56 | 114.61 | 92.05 | Peak |
| 0.062 | 2.48 | 19.89 | 22.37 | 111.73 | 89.36 | Peak |
| 0.087 | 1.54 | 19.78 | 21.32 | 108.77 | 87.45 | Peak |
| 0.094 | 2.96 | 19.78 | 22.74 | 108.10 | 85.36 | Peak |
| 0.116 | 1.03 | 19.73 | 20.76 | 106.31 | 85.55 | Peak |
| 0.142 | 0.70 | 19.73 | 20.43 | 104.58 | 84.15 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 22.5℃/44%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

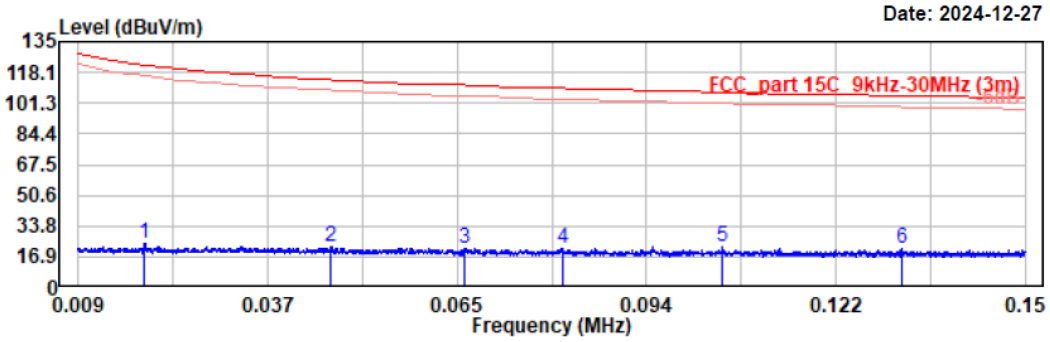



Condition: PK RBW:10kHz VBW:30kHz SWT:auto
QP RBW:9kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Remark |
|---|---|---|---|---|---|---|
| 0.189 | 16.24 | 19.72 | 35.96 | 102.08 | 66.12 | Peak |
| 2.171 | 14.93 | 19.62 | 34.55 | 69.54 | 34.99 | Peak |
| 7.520 | 14.48 | 19.68 | 34.16 | 69.54 | 35.38 | Peak |
| 12.920 | 13.44 | 19.74 | 33.18 | 69.54 | 36.36 | Peak |
| 19.750 | 13.07 | 20.07 | 33.14 | 69.54 | 36.40 | Peak |
| 19.750 | 13.07 | 20.07 | 33.14 | 69.54 | 36.40 | Peak |
| 22.027 | 12.79 | 20.14 | 32.93 | 69.54 | 36.61 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 22.5℃/44%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter

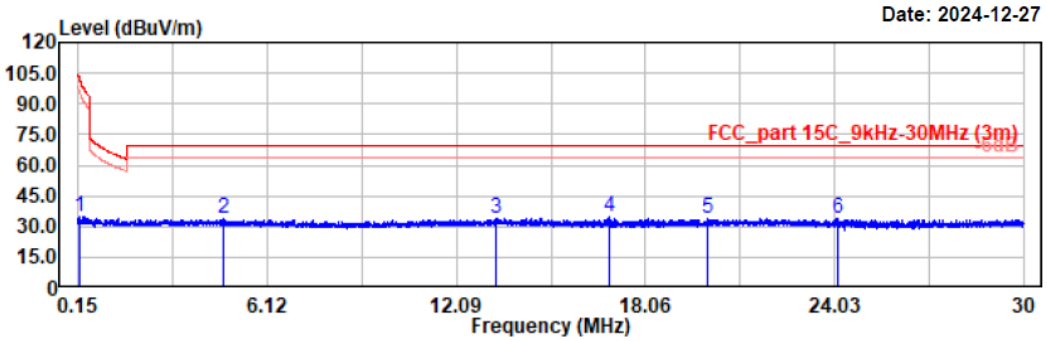



Condition: PK RBW:200Hz VBW:1kHz SWT:auto
QP RBW:200Hz SWT:auto

| Freq | Reading | Factor | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|
| MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | |
| 0.019 | 4.20 | 19.78 | 23.98 | 122.09 | 98.11 | Peak |
| 0.047 | 2.27 | 19.91 | 22.18 | 114.25 | 92.07 | Peak |
| 0.067 | 1.79 | 19.84 | 21.63 | 111.15 | 89.52 | Peak |
| 0.081 | 1.69 | 19.72 | 21.41 | 109.42 | 88.01 | Peak |
| 0.105 | 2.57 | 19.73 | 22.30 | 107.19 | 84.89 | Peak |
| 0.132 | 1.57 | 19.73 | 21.30 | 105.23 | 83.93 | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 22.5℃/44%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter




Condition: PK RBW:10kHz VBW:30kHz SWT:auto
QP RBW:9kHz SWT:auto

| Freq | Reading | Factor | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|
| MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | |
| 0.198 | 15.24 | 19.72 | 34.96 | 101.68 | 66.72 | Peak |
| 4.753 | 14.06 | 19.69 | 33.75 | 69.54 | 35.79 | Peak |
| 13.365 | 14.14 | 19.74 | 33.88 | 69.54 | 35.66 | Peak |
| 16.899 | 14.47 | 19.88 | 34.35 | 69.54 | 35.19 | Peak |
| 20.015 | 13.87 | 20.09 | 33.96 | 69.54 | 35.58 | Peak |
| 24.108 | 13.66 | 20.19 | 33.85 | 69.54 | 35.69 | Peak |

## 2) 30 MHz-1GHz

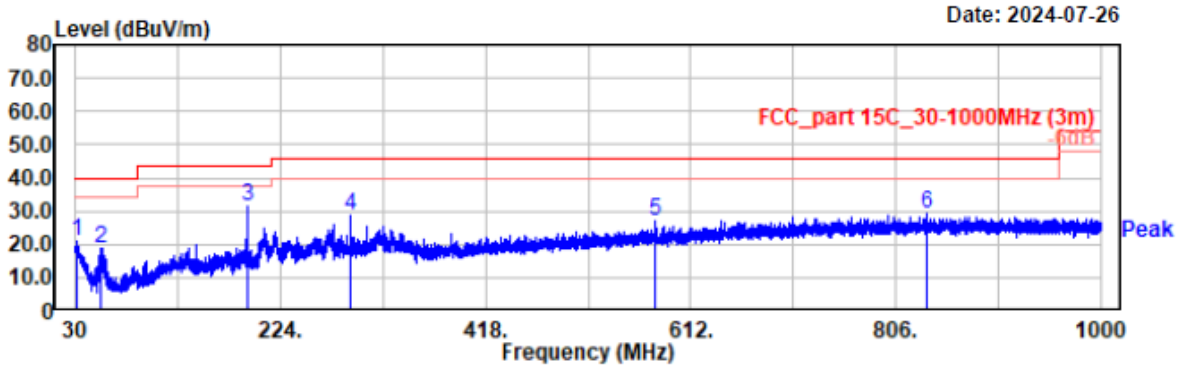
**For BLE**

*EUT operation mode: Transmitting in BLE middle channel in Z-axis of orientation (worst case)*

**EUT Model: PG71**

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

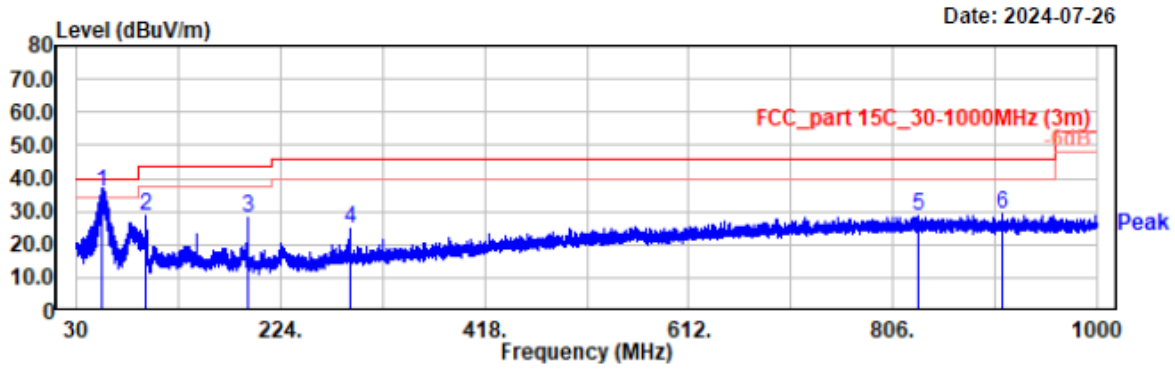
Temp/Humi/ATM: 20.5℃/51%/101kPA
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 31.55 | 27.16 | -6.16 | 21.00 | 40.00 | 19.00 | Horizontal | Peak |
| 54.44 | 36.73 | -17.81 | 18.92 | 40.00 | 21.08 | Horizontal | Peak |
| 192.96 | 43.37 | -12.17 | 31.20 | 43.50 | 12.30 | Horizontal | Peak |
| 289.48 | 37.82 | -9.24 | 28.58 | 46.00 | 17.42 | Horizontal | Peak |
| 578.73 | 29.70 | -2.57 | 27.13 | 46.00 | 18.87 | Horizontal | Peak |
| 835.00 | 27.33 | 1.79 | 29.12 | 46.00 | 16.88 | Horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

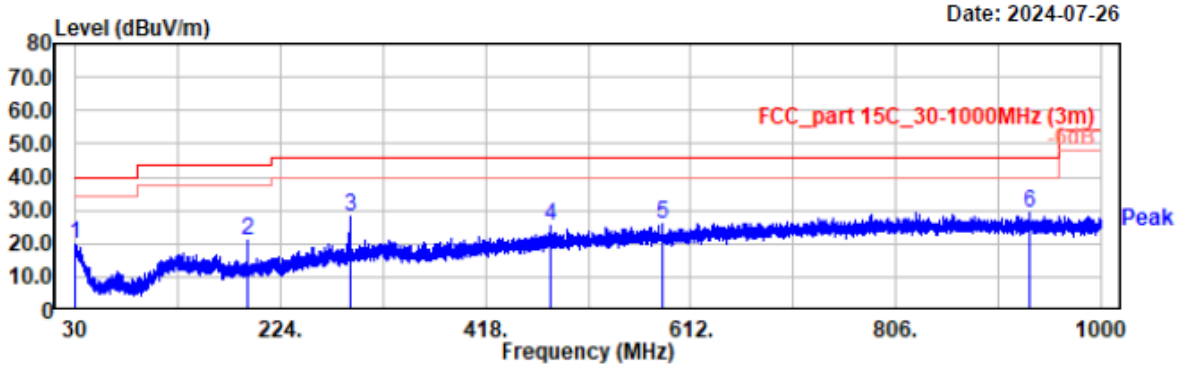
Temp/Humi/ATM: 20.5℃/51%/101kPA
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 54.75 | 53.89 | -17.81 | 36.08 | 40.00 | 3.92 | Vertical | QP |
| 96.45 | 44.47 | -15.94 | 28.53 | 43.50 | 14.97 | Vertical | Peak |
| 192.96 | 40.41 | -12.17 | 28.24 | 43.50 | 15.26 | Vertical | Peak |
| 289.48 | 33.83 | -9.24 | 24.59 | 46.00 | 21.41 | Vertical | Peak |
| 830.83 | 26.78 | 1.77 | 28.55 | 46.00 | 17.45 | Vertical | Peak |
| 910.37 | 26.55 | 2.68 | 29.23 | 46.00 | 16.77 | Vertical | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

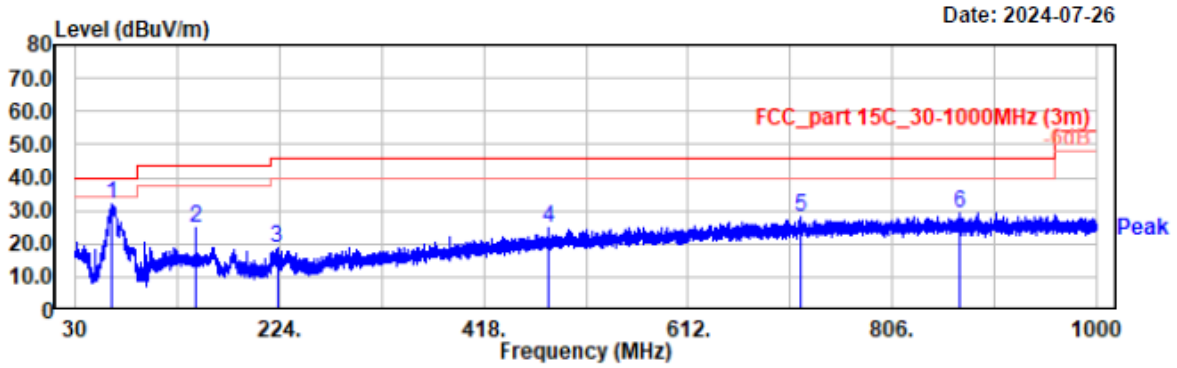
Temp/Humi/ATM: 20.5℃/51%/101kPA
Tested by: Wlif Wu
Power Source: DC 12V from Adapter




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 30.00 | 25.21 | -5.60 | 19.61 | 40.00 | 20.39 | Horizontal | Peak |
| 192.96 | 33.01 | -12.17 | 20.84 | 43.50 | 22.66 | Horizontal | Peak |
| 289.57 | 37.11 | -9.24 | 27.87 | 46.00 | 18.13 | Horizontal | Peak |
| 479.98 | 29.04 | -3.83 | 25.21 | 46.00 | 20.79 | Horizontal | Peak |
| 585.71 | 28.56 | -2.48 | 26.08 | 46.00 | 19.92 | Horizontal | Peak |
| 932.20 | 26.49 | 2.96 | 29.45 | 46.00 | 16.55 | Horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 20.5℃/51%/101kPA
Tested by: Wlif Wu
Power Source: DC 12V from Adapter

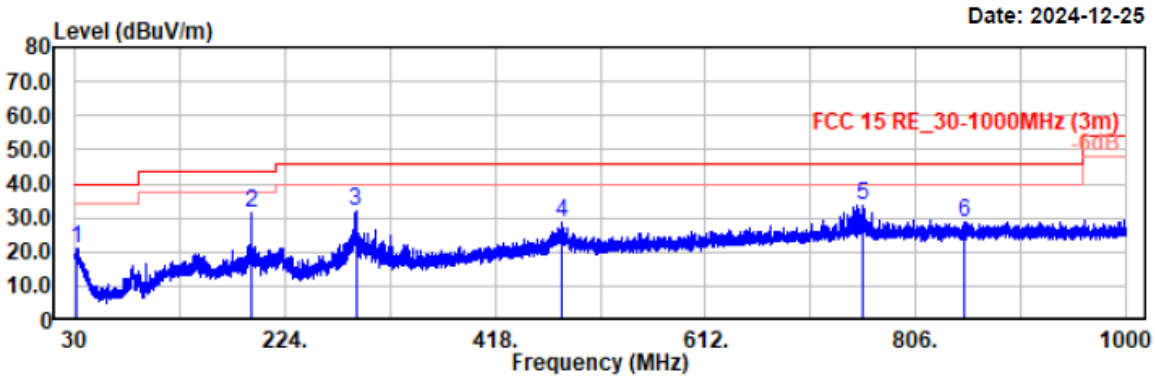



| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 63.76 | 49.29 | -17.35 | 31.94 | 40.00 | 8.06 | Vertical | Peak |
| 144.65 | 35.85 | -10.97 | 24.88 | 43.50 | 18.62 | Vertical | Peak |
| 221.58 | 31.24 | -12.60 | 18.64 | 46.00 | 27.36 | Vertical | Peak |
| 479.98 | 28.66 | -3.83 | 24.83 | 46.00 | 21.17 | Vertical | Peak |
| 719.57 | 28.16 | 0.03 | 28.19 | 46.00 | 17.81 | Vertical | Peak |
| 870.80 | 27.19 | 2.14 | 29.33 | 46.00 | 16.67 | Vertical | Peak |

**EUT Model: PG71N**

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 23.2℃/46%/100.2kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

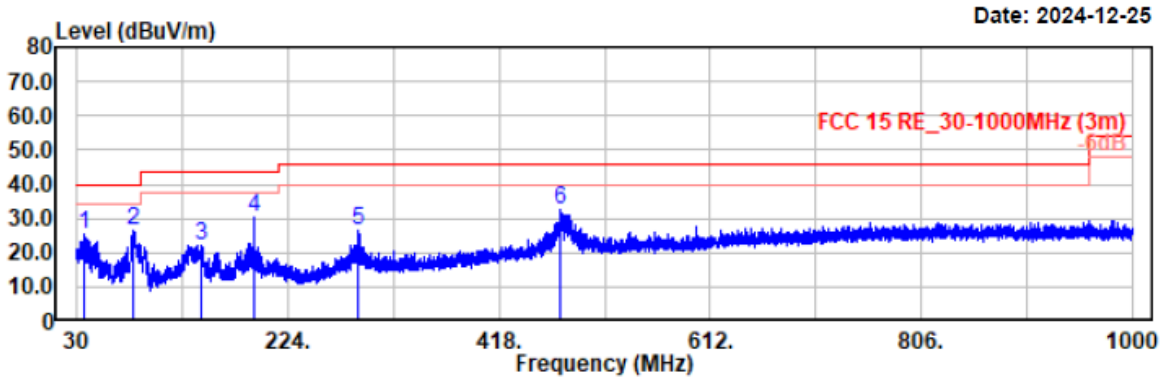



Condition: PK RBW:100kHz VBW:300kHz SWT:auto
QP RBW:120kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 30.78 | 26.68 | -5.79 | 20.89 | 40.00 | 19.11 | Horizontal | Peak |
| 192.67 | 43.49 | -12.17 | 31.32 | 43.50 | 12.18 | Horizontal | Peak |
| 289.28 | 40.99 | -9.24 | 31.75 | 46.00 | 14.25 | Horizontal | Peak |
| 479.98 | 32.44 | -3.83 | 28.61 | 46.00 | 17.39 | Horizontal | Peak |
| 757.99 | 33.09 | 0.54 | 33.63 | 46.00 | 12.37 | Horizontal | Peak |
| 850.81 | 26.88 | 1.94 | 28.82 | 46.00 | 17.18 | Horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 23.2℃/46%/100.2kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

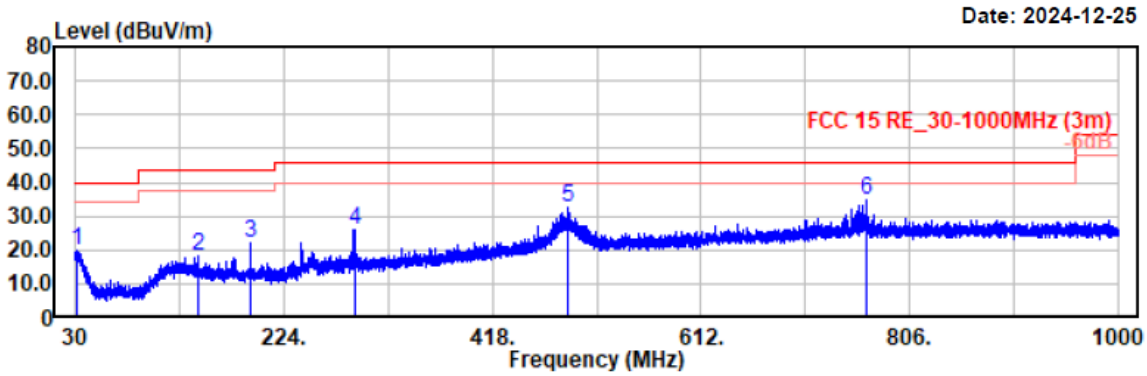



Condition: PK RBW:100kHz VBW:300kHz SWT:auto
QP RBW:120kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 36.69 | 34.68 | -9.26 | 25.42 | 40.00 | 14.58 | Vertical | Peak |
| 82.57 | 43.89 | -17.20 | 26.69 | 40.00 | 13.31 | Vertical | Peak |
| 144.65 | 33.30 | -10.97 | 22.33 | 43.50 | 21.17 | Vertical | Peak |
| 192.77 | 42.30 | -12.17 | 30.13 | 43.50 | 13.37 | Vertical | Peak |
| 288.99 | 35.79 | -9.24 | 26.55 | 46.00 | 19.45 | Vertical | Peak |
| 473.58 | 36.85 | -4.11 | 32.74 | 46.00 | 13.26 | Vertical | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 23.2℃/46%/100.2kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter

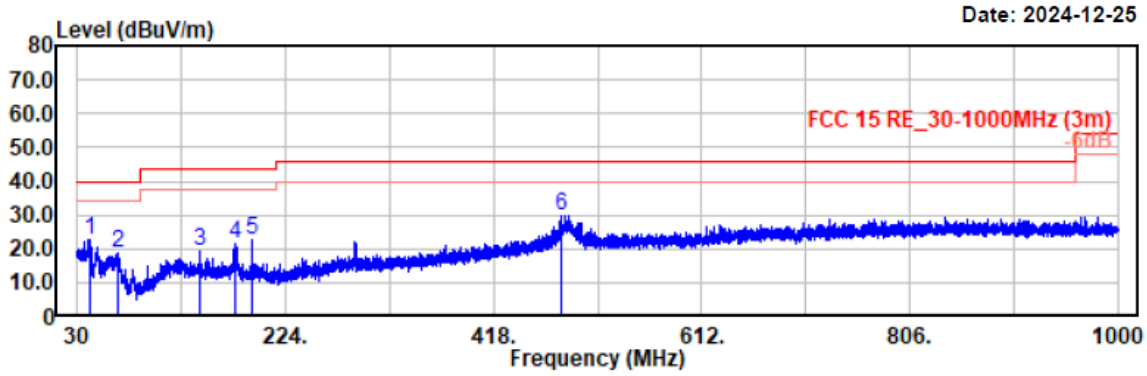



Condition: PK RBW:100kHz VBW:300kHz SWT:auto
QP RBW:120kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 31.16 | 25.97 | -5.94 | 20.03 | 40.00 | 19.97 | Horizontal | Peak |
| 144.65 | 29.06 | -10.97 | 18.09 | 43.50 | 25.41 | Horizontal | Peak |
| 192.96 | 34.34 | -12.17 | 22.17 | 43.50 | 21.33 | Horizontal | Peak |
| 289.48 | 35.15 | -9.24 | 25.91 | 46.00 | 20.09 | Horizontal | Peak |
| 488.33 | 36.02 | -3.65 | 32.37 | 46.00 | 13.63 | Horizontal | Peak |
| 766.04 | 32.94 | 0.74 | 33.68 | 46.00 | 12.32 | Horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 23.2℃/46%/100.2kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter




Condition: PK RBW:100kHz VBW:300kHz SWT:auto
QP RBW:120kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 41.45 | 35.32 | -12.68 | 22.64 | 40.00 | 17.36 | Vertical | Peak |
| 67.15 | 35.81 | -17.12 | 18.69 | 40.00 | 21.31 | Vertical | Peak |
| 144.65 | 30.55 | -10.97 | 19.58 | 43.50 | 23.92 | Vertical | Peak |
| 177.54 | 33.73 | -12.19 | 21.54 | 43.50 | 21.96 | Vertical | Peak |
| 192.96 | 34.85 | -12.17 | 22.68 | 43.50 | 20.82 | Vertical | Peak |
| 480.47 | 33.72 | -3.81 | 29.91 | 46.00 | 16.09 | Vertical | Peak |

**For Wifi**

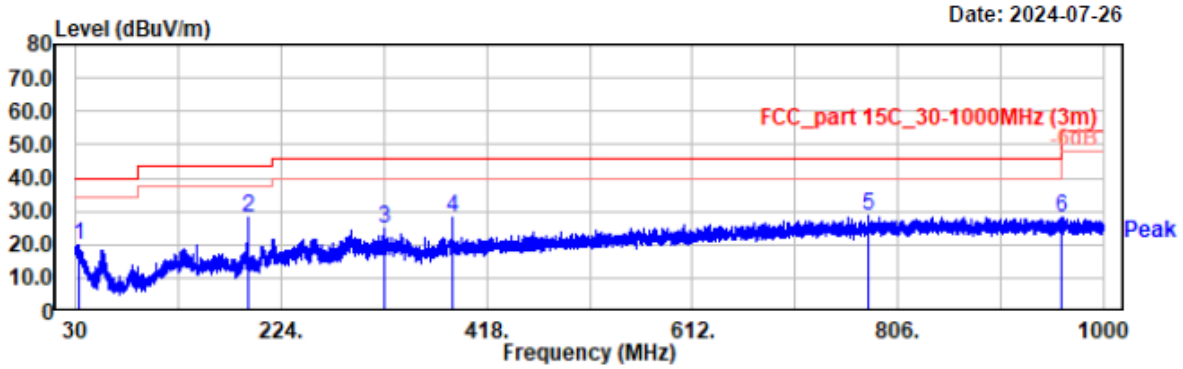
*PoE Power Supply mode was the worst.*

*EUT operation mode: Transmitting in WiFi 11b lowest channel (worst case)*

**EUT Model: PG71**

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71
Test distance: 3m

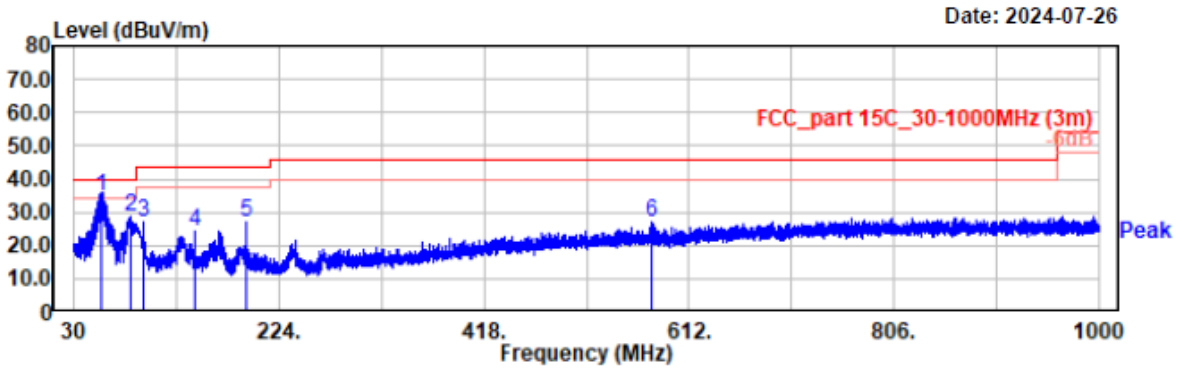
Temp/Humi/ATM: 20.5℃/51%/101kPA
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 33.01 | 26.79 | -6.95 | 19.84 | 40.00 | 20.16 | Horizontal | Peak |
| 192.86 | 40.25 | -12.17 | 28.08 | 43.50 | 15.42 | Horizontal | Peak |
| 321.68 | 33.64 | -8.73 | 24.91 | 46.00 | 21.09 | Horizontal | Peak |
| 385.89 | 35.08 | -6.84 | 28.24 | 46.00 | 17.76 | Horizontal | Peak |
| 778.74 | 27.38 | 1.04 | 28.42 | 46.00 | 17.58 | Horizontal | Peak |
| 960.04 | 24.91 | 3.38 | 28.29 | 54.00 | 25.71 | Horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 20.5℃/51%/101kPA
Tested by: Wlif Wu
Power Source: DC 48V from PoE

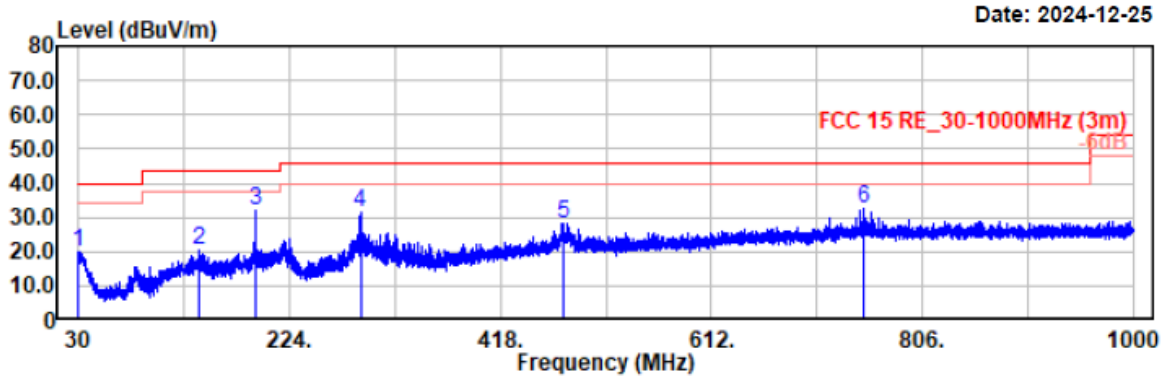



| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 56.29 | 52.75 | -17.74 | 35.01 | 40.00 | 4.99 | Vertical | QP |
| 82.87 | 46.03 | -17.23 | 28.80 | 40.00 | 11.20 | Vertical | Peak |
| 96.45 | 42.99 | -15.94 | 27.05 | 43.50 | 16.45 | Vertical | Peak |
| 144.75 | 35.40 | -10.97 | 24.43 | 43.50 | 19.07 | Vertical | Peak |
| 192.86 | 38.98 | -12.17 | 26.81 | 43.50 | 16.69 | Vertical | Peak |
| 576.89 | 29.53 | -2.55 | 26.98 | 46.00 | 19.02 | Vertical | Peak |

**EUT Model: PG71N**

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 23.2℃/46%/100.2kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

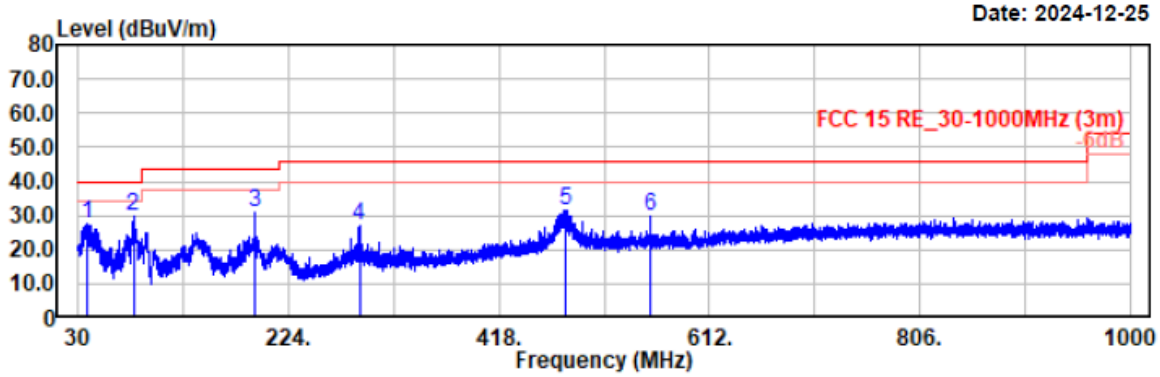



Condition: PK RBW:100kHz VBW:300kHz SWT:auto
QP RBW:120kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 30.29 | 25.82 | -5.68 | 20.14 | 40.00 | 19.86 | Horizontal | Peak |
| 140.68 | 31.21 | -10.77 | 20.44 | 43.50 | 23.06 | Horizontal | Peak |
| 192.77 | 44.03 | -12.17 | 31.86 | 43.50 | 11.64 | Horizontal | Peak |
| 289.28 | 40.54 | -9.24 | 31.30 | 46.00 | 14.70 | Horizontal | Peak |
| 475.72 | 32.13 | -4.03 | 28.10 | 46.00 | 17.90 | Horizontal | Peak |
| 752.17 | 31.78 | 0.52 | 32.30 | 46.00 | 13.70 | Horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11B 2412
EUT Model: PG71N
Test distance: 3m

Temp/Humi/ATM: 23.2℃/46%/100.2kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




Condition: PK RBW:100kHz VBW:300kHz SWT:auto
QP RBW:120kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 37.95 | 37.61 | -10.24 | 27.37 | 40.00 | 12.63 | Vertical | Peak |
| 80.93 | 46.97 | -17.06 | 29.91 | 40.00 | 10.09 | Vertical | Peak |
| 192.77 | 42.91 | -12.17 | 30.74 | 43.50 | 12.76 | Vertical | Peak |
| 289.28 | 36.29 | -9.24 | 27.05 | 46.00 | 18.95 | Vertical | Peak |
| 479.98 | 35.41 | -3.83 | 31.58 | 46.00 | 14.42 | Vertical | Peak |
| 556.81 | 32.29 | -2.62 | 29.67 | 46.00 | 16.33 | Vertical | Peak |

### 3) 1GHz~18GHz

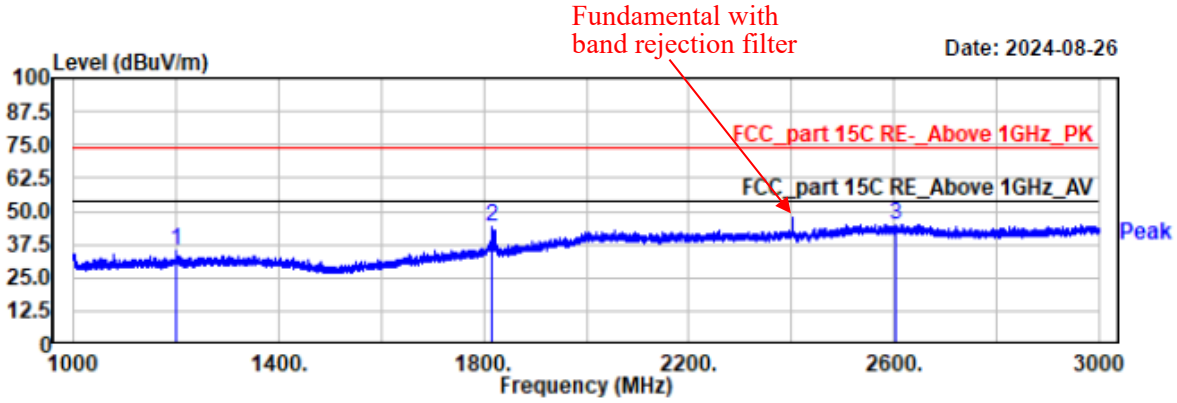
**For BLE**

*EUT operation mode: Transmitting in BLE low channel*

**EUT Model: PG71**

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2402
EUT Model: PG71
Test distance: 3m

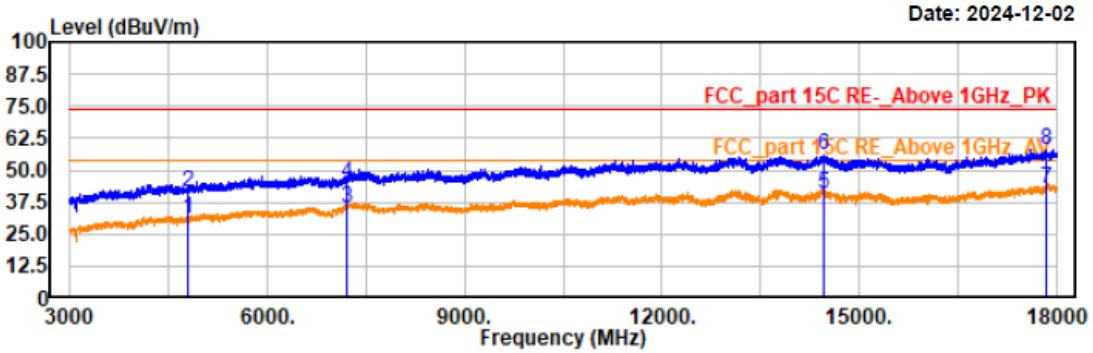
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1200.00 | 51.05 | -16.05 | 35.00 | 74.00 | 39.00 | horizontal | Peak |
| 1817.20 | 55.54 | -11.47 | 44.07 | 74.00 | 29.93 | horizontal | Peak |
| 2602.80 | 48.35 | -3.31 | 45.04 | 74.00 | 28.96 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2402
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

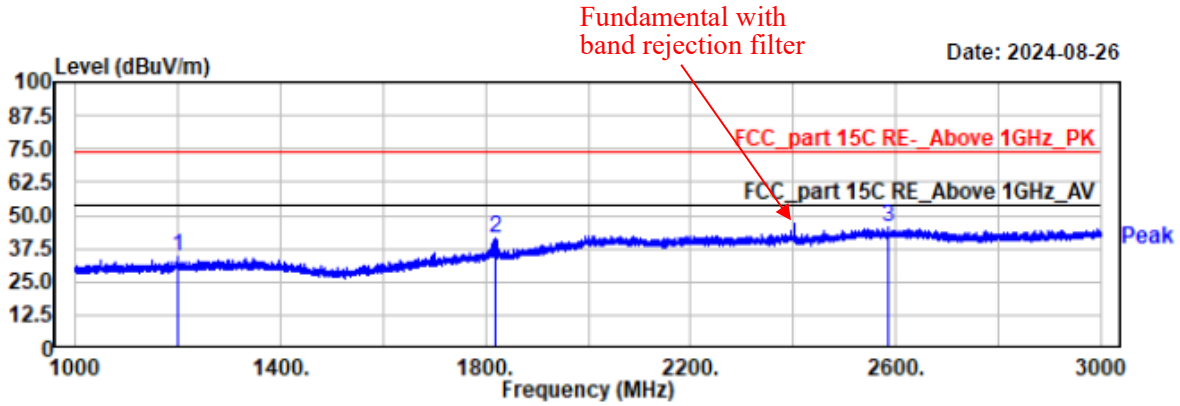



Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 4804.50 | 35.26 | -4.45 | 30.81 | 54.00 | 23.19 | horizontal | Average |
| 4804.50 | 46.15 | -4.45 | 41.70 | 74.00 | 32.30 | horizontal | Peak |
| 7206.00 | 36.87 | -1.73 | 35.14 | 54.00 | 18.86 | horizontal | Average |
| 7206.00 | 46.35 | -1.73 | 44.62 | 74.00 | 29.38 | horizontal | Peak |
| 14461.50 | 35.42 | 5.04 | 40.46 | 54.00 | 13.54 | horizontal | Average |
| 14461.50 | 50.81 | 5.04 | 55.85 | 74.00 | 18.15 | horizontal | Peak |
| 17847.00 | 35.58 | 7.41 | 42.99 | 54.00 | 11.01 | horizontal | Average |
| 17847.00 | 50.34 | 7.41 | 57.75 | 74.00 | 16.25 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2402
EUT Model: PG71
Test distance: 3m

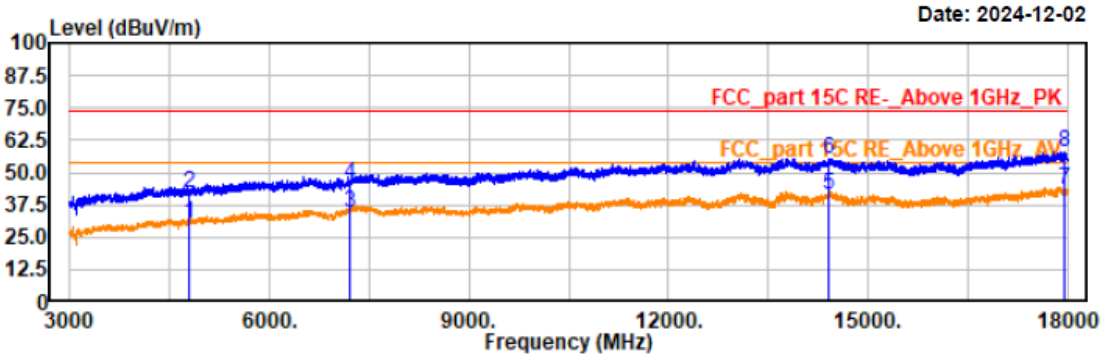
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1200.20 | 50.66 | -16.05 | 34.61 | 74.00 | 39.39 | vertical | Peak |
| 1818.40 | 52.83 | -11.47 | 41.36 | 74.00 | 32.64 | vertical | Peak |
| 2584.80 | 48.79 | -3.35 | 45.44 | 74.00 | 28.56 | vertical | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2402
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



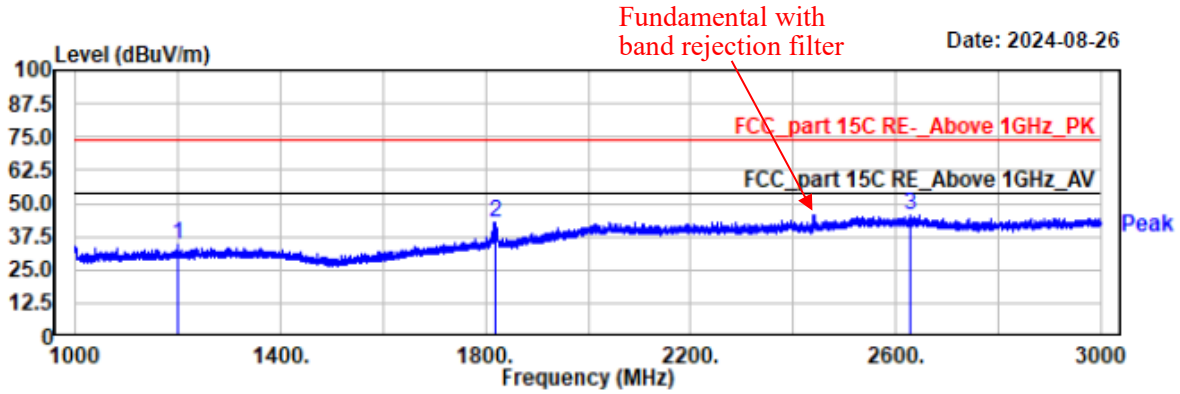

Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 4804.50 | 34.50 | -4.45 | 30.05 | 54.00 | 23.95 | vertical | Average |
| 4804.50 | 46.77 | -4.45 | 42.32 | 74.00 | 31.68 | vertical | Peak |
| 7206.00 | 36.49 | -1.73 | 34.76 | 54.00 | 19.24 | vertical | Average |
| 7206.00 | 47.12 | -1.73 | 45.39 | 74.00 | 28.61 | vertical | Peak |
| 14403.00 | 36.07 | 5.14 | 41.21 | 54.00 | 12.79 | vertical | Average |
| 14403.00 | 50.10 | 5.14 | 55.24 | 74.00 | 18.76 | vertical | Peak |
| 17950.50 | 35.89 | 7.67 | 43.56 | 54.00 | 10.44 | vertical | Average |
| 17950.50 | 50.13 | 7.67 | 57.80 | 74.00 | 16.20 | vertical | Peak |

*EUT operation mode: Transmitting in BLE middle channel*

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

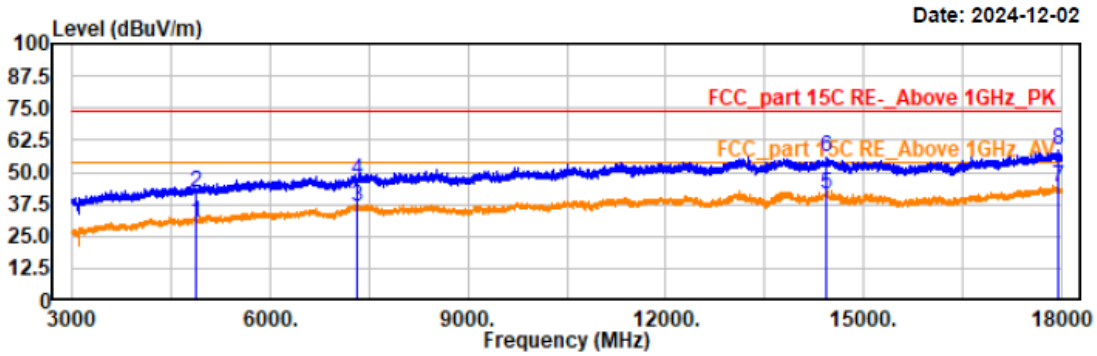
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1200.00 | 50.75 | -16.05 | 34.70 | 74.00 | 39.30 | horizontal | Peak |
| 1818.00 | 54.50 | -11.47 | 43.03 | 74.00 | 30.97 | horizontal | Peak |
| 2628.80 | 48.95 | -3.34 | 45.61 | 74.00 | 28.39 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

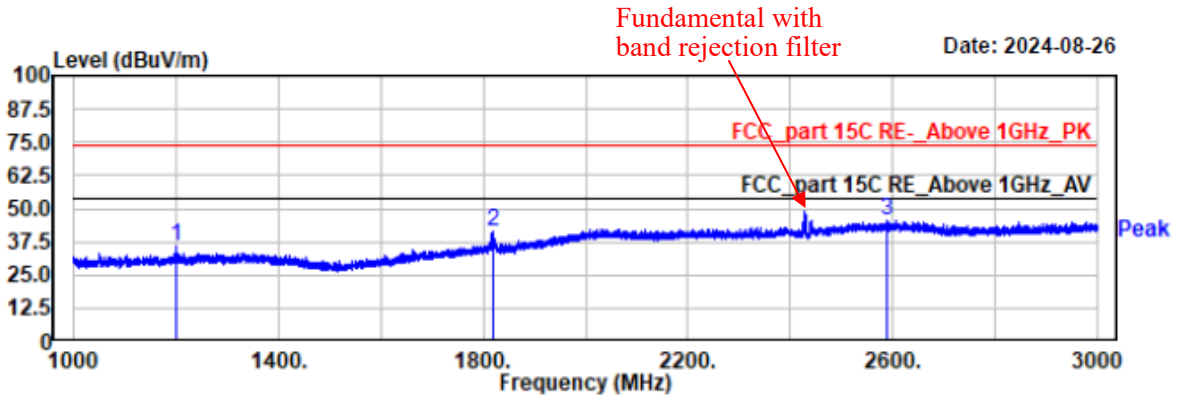



Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 4879.50 | 34.80 | -4.25 | 30.55 | 54.00 | 23.45 | horizontal | Average |
| 4879.50 | 46.15 | -4.25 | 41.90 | 74.00 | 32.10 | horizontal | Peak |
| 7320.00 | 38.11 | -1.61 | 36.50 | 54.00 | 17.50 | horizontal | Average |
| 7320.00 | 48.26 | -1.61 | 46.65 | 74.00 | 27.35 | horizontal | Peak |
| 14434.50 | 36.11 | 5.09 | 41.20 | 54.00 | 12.80 | horizontal | Average |
| 14434.50 | 50.50 | 5.09 | 55.59 | 74.00 | 18.41 | horizontal | Peak |
| 17961.00 | 36.68 | 7.68 | 44.36 | 54.00 | 9.64 | horizontal | Average |
| 17961.00 | 50.66 | 7.68 | 58.34 | 74.00 | 15.66 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

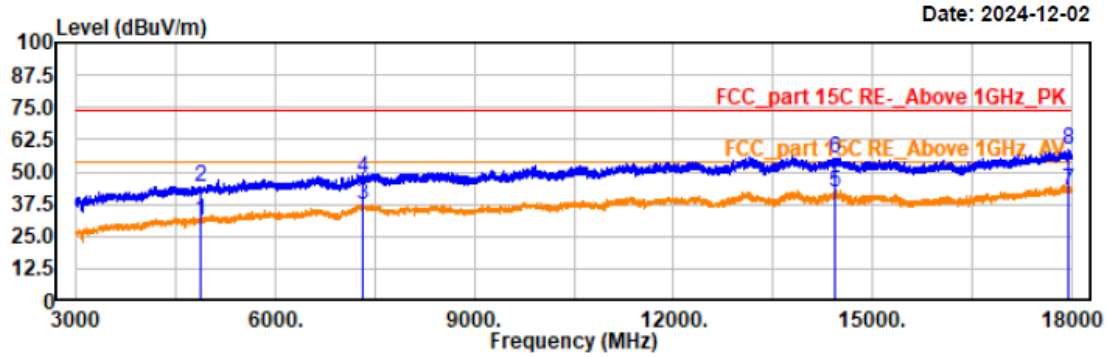
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1200.00 | 51.61 | -16.05 | 35.56 | 74.00 | 38.44 | vertical | Peak |
| 1818.00 | 52.60 | -11.47 | 41.13 | 74.00 | 32.87 | vertical | Peak |
| 2587.80 | 49.00 | -3.34 | 45.66 | 74.00 | 28.34 | vertical | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2440
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



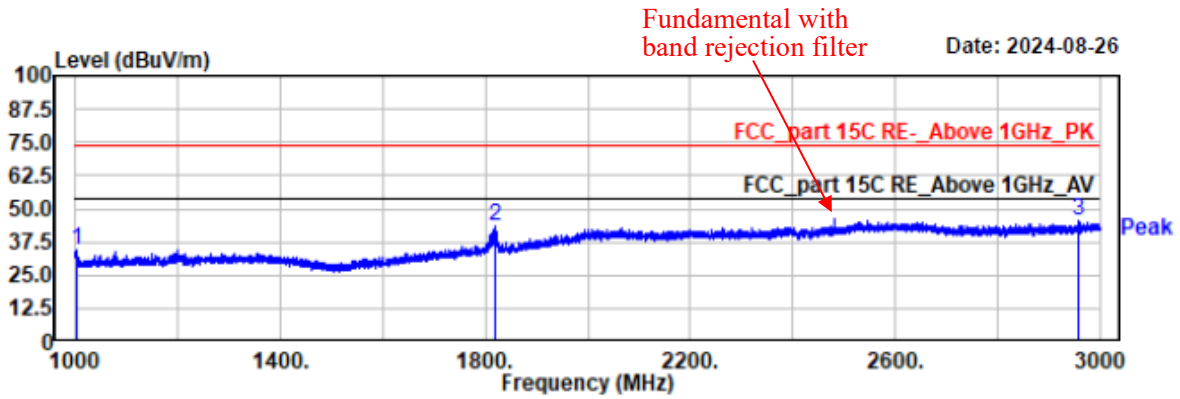

Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq | Reading | Factor | Result | Limit | Margin | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | | |
| 4879.50 | 35.56 | -4.25 | 31.31 | 54.00 | 22.69 | vertical | Average |
| 4879.50 | 48.13 | -4.25 | 43.88 | 74.00 | 30.12 | vertical | Peak |
| 7320.00 | 38.56 | -1.61 | 36.95 | 54.00 | 17.05 | vertical | Average |
| 7320.00 | 48.86 | -1.61 | 47.25 | 74.00 | 26.75 | vertical | Peak |
| 14446.50 | 37.20 | 5.06 | 42.26 | 54.00 | 11.74 | vertical | Average |
| 14446.50 | 50.43 | 5.06 | 55.49 | 74.00 | 18.51 | vertical | Peak |
| 17941.50 | 35.29 | 7.65 | 42.94 | 54.00 | 11.06 | vertical | Average |
| 17941.50 | 51.22 | 7.65 | 58.87 | 74.00 | 15.13 | vertical | Peak |

*EUT operation mode: Transmitting in BLE high channel*

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2480
EUT Model: PG71
Test distance: 3m

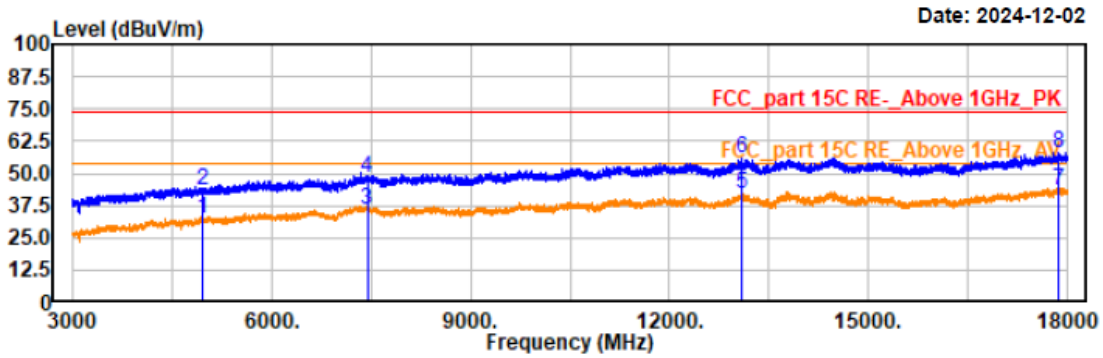
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1001.40 | 51.75 | -17.24 | 34.51 | 74.00 | 39.49 | horizontal | Peak |
| 1818.60 | 54.75 | -11.47 | 43.28 | 74.00 | 30.72 | horizontal | Peak |
| 2959.40 | 49.85 | -4.17 | 45.68 | 74.00 | 28.32 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2480
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

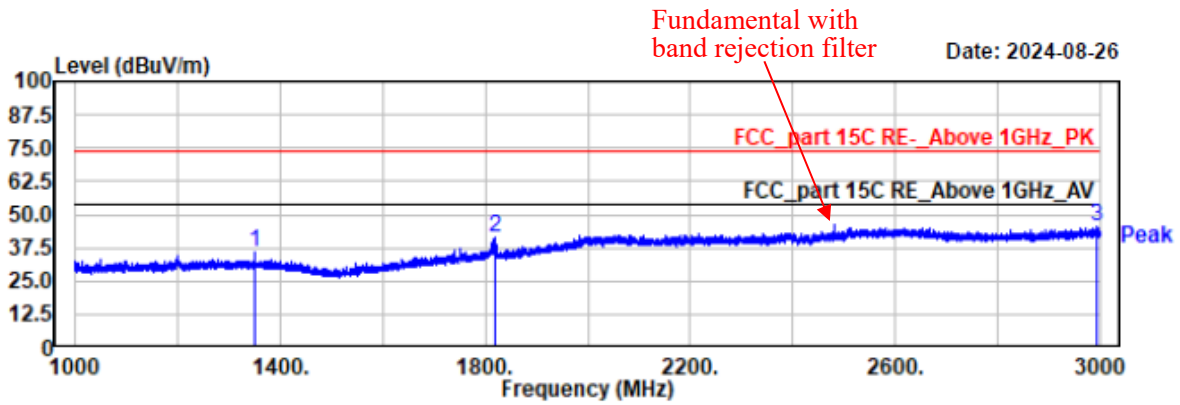



Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 4960.50 | 36.44 | -4.01 | 32.43 | 54.00 | 21.57 | horizontal | Average |
| 4960.50 | 47.50 | -4.01 | 43.49 | 74.00 | 30.51 | horizontal | Peak |
| 7440.00 | 37.20 | -1.59 | 35.61 | 54.00 | 18.39 | horizontal | Average |
| 7440.00 | 49.53 | -1.59 | 47.94 | 74.00 | 26.06 | horizontal | Peak |
| 13095.00 | 36.99 | 5.07 | 42.06 | 54.00 | 11.94 | horizontal | Average |
| 13095.00 | 50.66 | 5.07 | 55.73 | 74.00 | 18.27 | horizontal | Peak |
| 17875.50 | 35.72 | 7.50 | 43.22 | 54.00 | 10.78 | horizontal | Average |
| 17875.50 | 50.67 | 7.50 | 58.17 | 74.00 | 15.83 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2480
EUT Model: PG71
Test distance: 3m

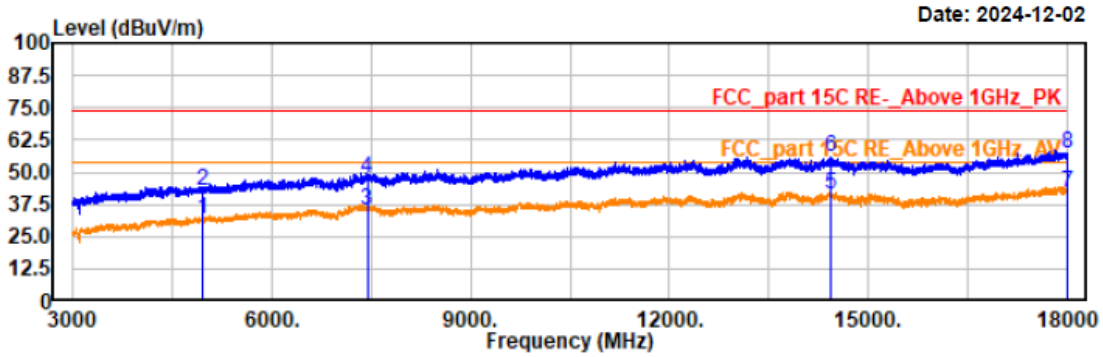
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1350.20 | 51.19 | -15.43 | 35.76 | 74.00 | 38.24 | vertical | Peak |
| 1818.80 | 52.63 | -11.46 | 41.17 | 74.00 | 32.83 | vertical | Peak |
| 2995.20 | 49.73 | -4.04 | 45.69 | 74.00 | 28.31 | vertical | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2480
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 4960.50 | 35.54 | -4.01 | 31.53 | 54.00 | 22.47 | vertical | Average |
| 4960.50 | 46.55 | -4.01 | 42.54 | 74.00 | 31.46 | vertical | Peak |
| 7440.00 | 36.72 | -1.59 | 35.13 | 54.00 | 18.87 | vertical | Average |
| 7440.00 | 48.94 | -1.59 | 47.35 | 74.00 | 26.65 | vertical | Peak |
| 14445.00 | 36.57 | 5.07 | 41.64 | 54.00 | 12.36 | vertical | Average |
| 14445.00 | 51.12 | 5.07 | 56.19 | 74.00 | 17.81 | vertical | Peak |
| 17994.00 | 34.48 | 7.72 | 42.20 | 54.00 | 11.80 | vertical | Average |
| 17994.00 | 49.43 | 7.72 | 57.15 | 74.00 | 16.85 | vertical | Peak |

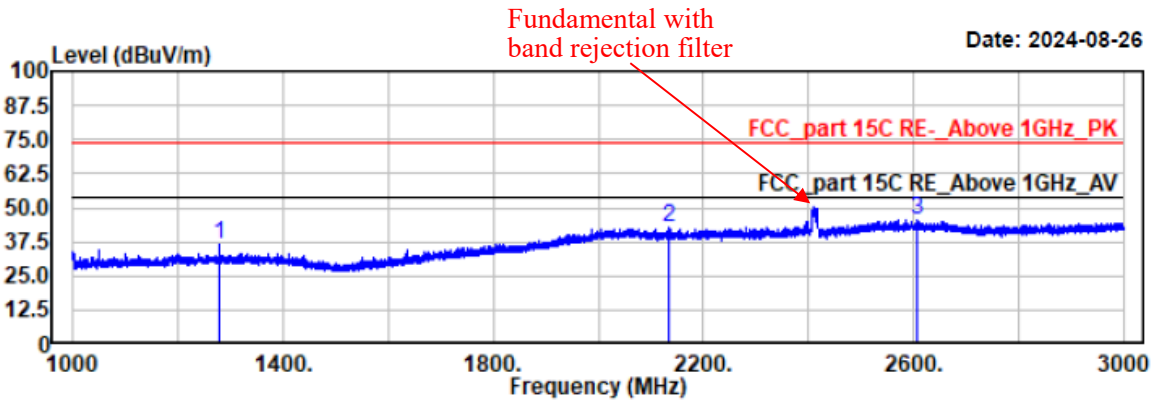
**For WIFI:**

*EUT operation mode: Transmitting in Wifi 802.11b low channel*

**EUT Model: PG71**

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2412
EUT Model: PG71
Test distance: 3m

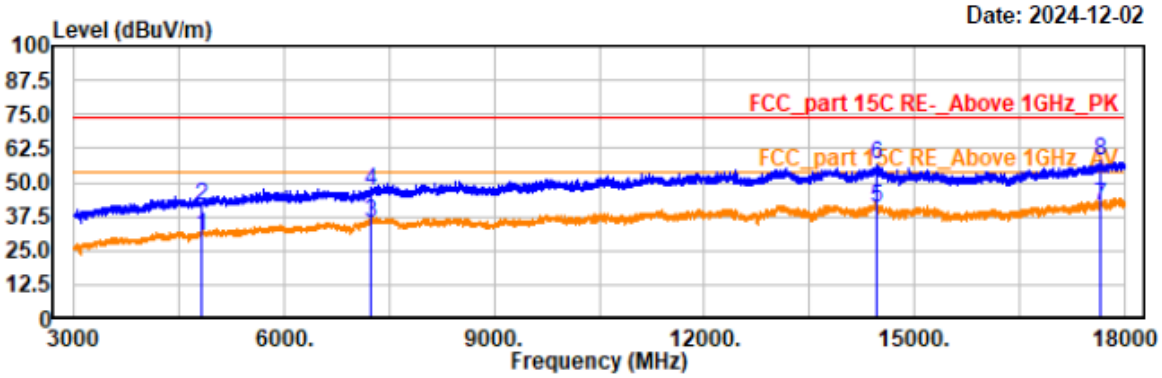
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1279.80 | 52.18 | -15.51 | 36.67 | 74.00 | 37.33 | horizontal | Peak |
| 2136.00 | 49.18 | -6.73 | 42.45 | 74.00 | 31.55 | horizontal | Peak |
| 2606.60 | 49.10 | -3.30 | 45.80 | 74.00 | 28.20 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2412
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

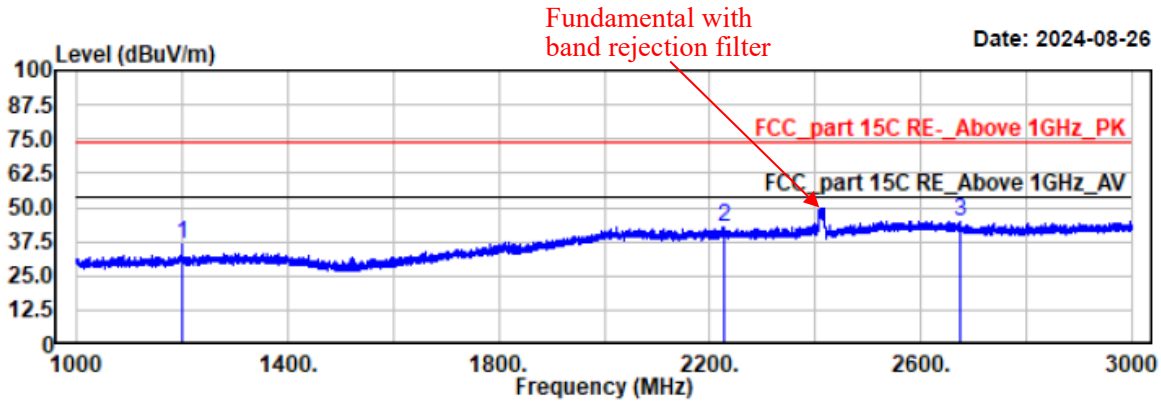



Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 4824.00 | 34.97 | -4.39 | 30.58 | 54.00 | 23.42 | horizontal | Average |
| 4824.00 | 46.06 | -4.39 | 41.67 | 74.00 | 32.33 | horizontal | Peak |
| 7236.00 | 37.13 | -1.70 | 35.43 | 54.00 | 18.57 | horizontal | Average |
| 7236.00 | 48.45 | -1.70 | 46.75 | 74.00 | 27.25 | horizontal | Peak |
| 14454.00 | 35.50 | 5.06 | 40.56 | 54.00 | 13.44 | horizontal | Average |
| 14454.00 | 51.50 | 5.06 | 56.56 | 74.00 | 17.44 | horizontal | Peak |
| 17668.50 | 34.40 | 6.81 | 41.21 | 54.00 | 12.79 | horizontal | Average |
| 17668.50 | 51.04 | 6.81 | 57.85 | 74.00 | 16.15 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2412
EUT Model: PG71
Test distance: 3m

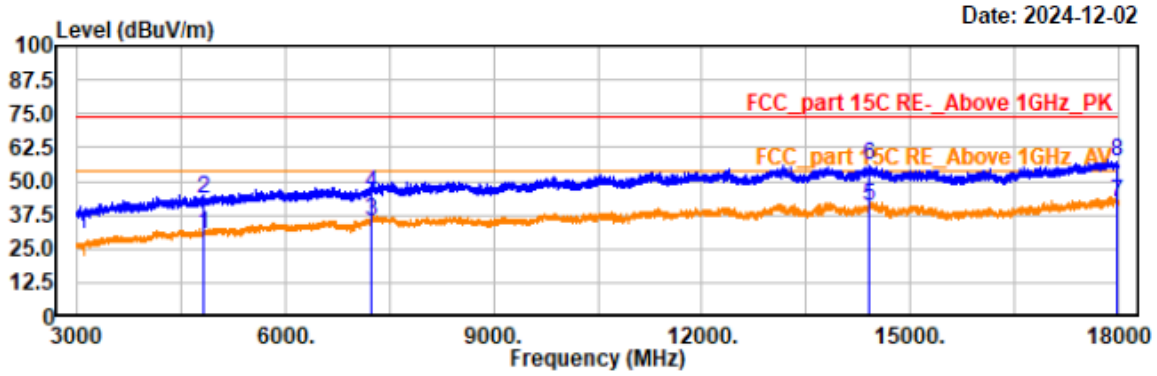
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1200.00 | 52.59 | -16.05 | 36.54 | 74.00 | 37.46 | vertical | Peak |
| 2227.20 | 49.20 | -6.25 | 42.95 | 74.00 | 31.05 | vertical | Peak |
| 2676.00 | 49.10 | -4.04 | 45.06 | 74.00 | 28.94 | vertical | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2412
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



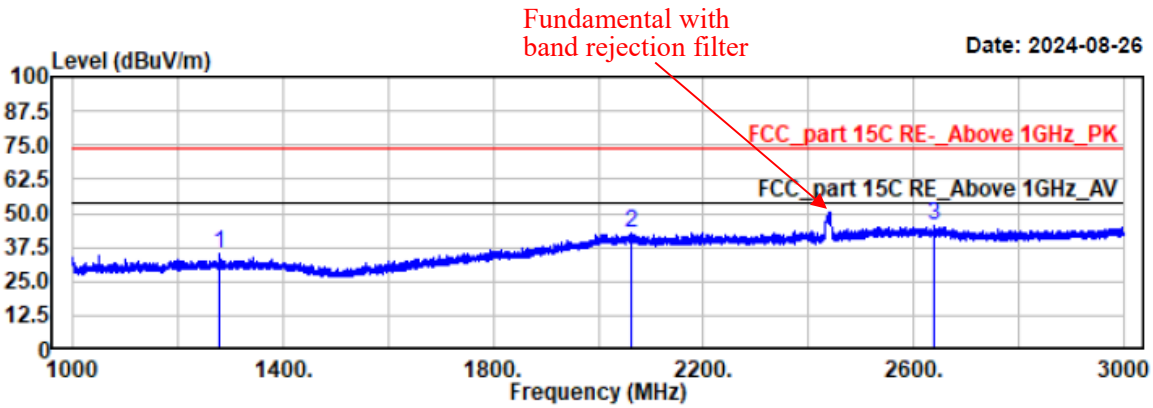

Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq | Reading | Factor | Result | Limit | Margin | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | | |
| 4824.00 | 34.75 | -4.39 | 30.36 | 54.00 | 23.64 | vertical | Average |
| 4824.00 | 47.90 | -4.39 | 43.51 | 74.00 | 30.49 | vertical | Peak |
| 7236.00 | 36.82 | -1.70 | 35.12 | 54.00 | 18.88 | vertical | Average |
| 7236.00 | 47.00 | -1.70 | 45.30 | 74.00 | 28.70 | vertical | Peak |
| 14418.00 | 35.39 | 5.11 | 40.50 | 54.00 | 13.50 | vertical | Average |
| 14418.00 | 50.50 | 5.11 | 55.61 | 74.00 | 18.39 | vertical | Peak |
| 17967.00 | 34.04 | 7.69 | 41.73 | 54.00 | 12.27 | vertical | Average |
| 17967.00 | 49.79 | 7.69 | 57.48 | 74.00 | 16.52 | vertical | Peak |

*EUT operation mode: Transmitting in Wifi 802.11b middle channel*

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2437
EUT Model: PG71
Test distance: 3m

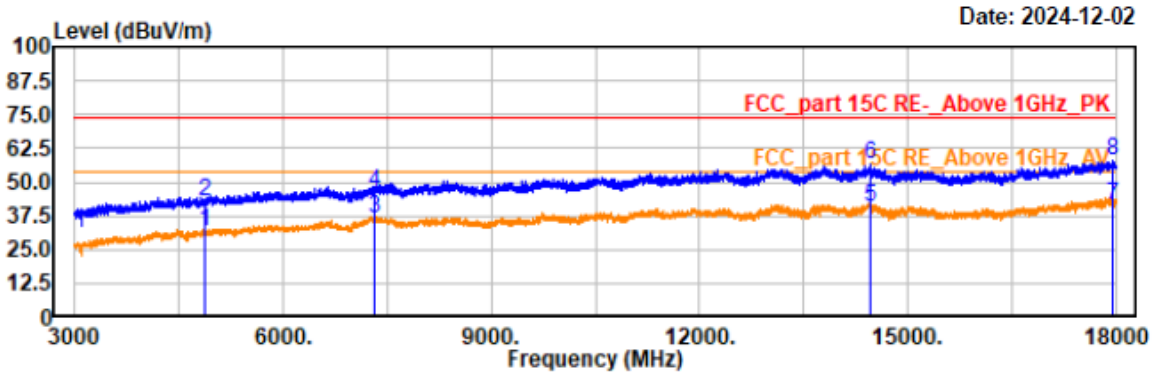
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1280.00 | 50.60 | -15.51 | 35.09 | 74.00 | 38.91 | horizontal | Peak |
| 2063.00 | 48.99 | -6.18 | 42.81 | 74.00 | 31.19 | horizontal | Peak |
| 2637.80 | 49.18 | -3.36 | 45.82 | 74.00 | 28.18 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2437
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

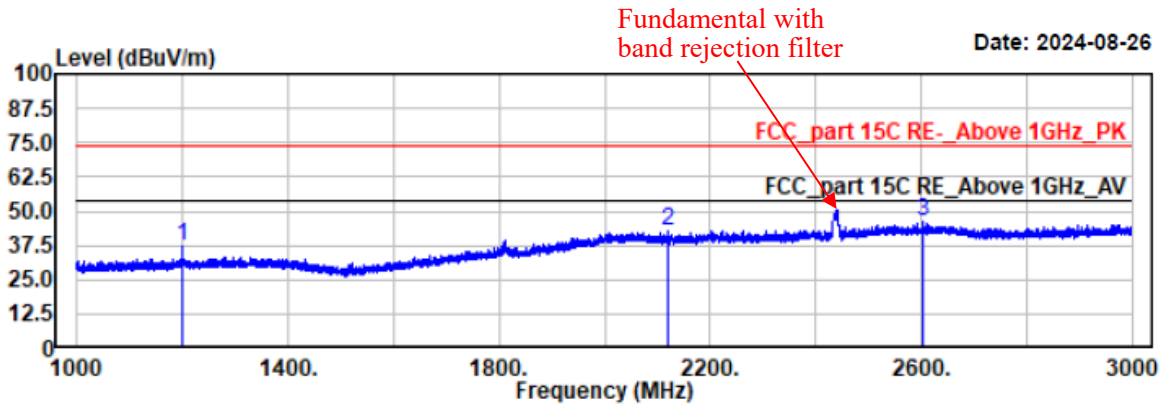



Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq | Reading | Factor | Result | Limit | Margin | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | | |
| 4873.50 | 36.05 | -4.26 | 31.79 | 54.00 | 22.21 | horizontal | Average |
| 4873.50 | 46.74 | -4.26 | 42.48 | 74.00 | 31.52 | horizontal | Peak |
| 7311.00 | 38.47 | -1.63 | 36.84 | 54.00 | 17.16 | horizontal | Average |
| 7311.00 | 48.14 | -1.63 | 46.51 | 74.00 | 27.49 | horizontal | Peak |
| 14454.00 | 35.81 | 5.06 | 40.87 | 54.00 | 13.13 | horizontal | Average |
| 14454.00 | 51.69 | 5.06 | 56.75 | 74.00 | 17.25 | horizontal | Peak |
| 17940.00 | 34.03 | 7.65 | 41.68 | 54.00 | 12.32 | horizontal | Average |
| 17940.00 | 50.30 | 7.65 | 57.95 | 74.00 | 16.05 | horizontal | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2437
EUT Model: PG71
Test distance: 3m

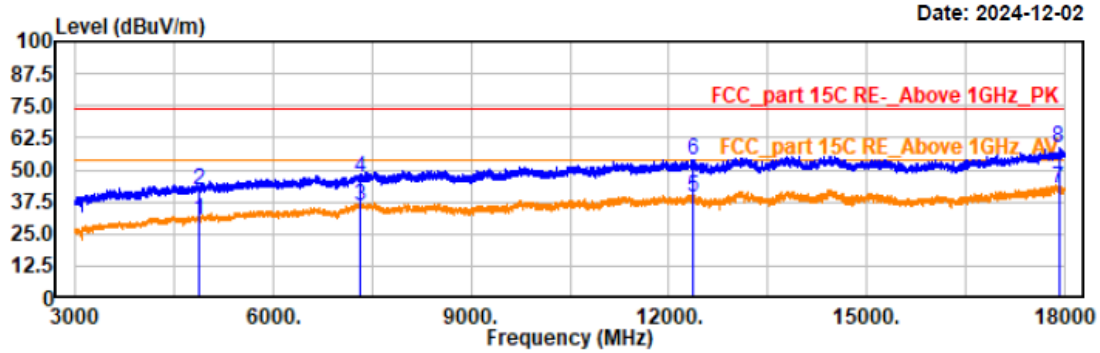
Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1199.60 | 53.15 | -16.05 | 37.10 | 74.00 | 36.90 | vertical | Peak |
| 2120.40 | 49.34 | -6.73 | 42.61 | 74.00 | 31.39 | vertical | Peak |
| 2605.00 | 49.43 | -3.31 | 46.12 | 74.00 | 27.88 | vertical | Peak |

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2437
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.1℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



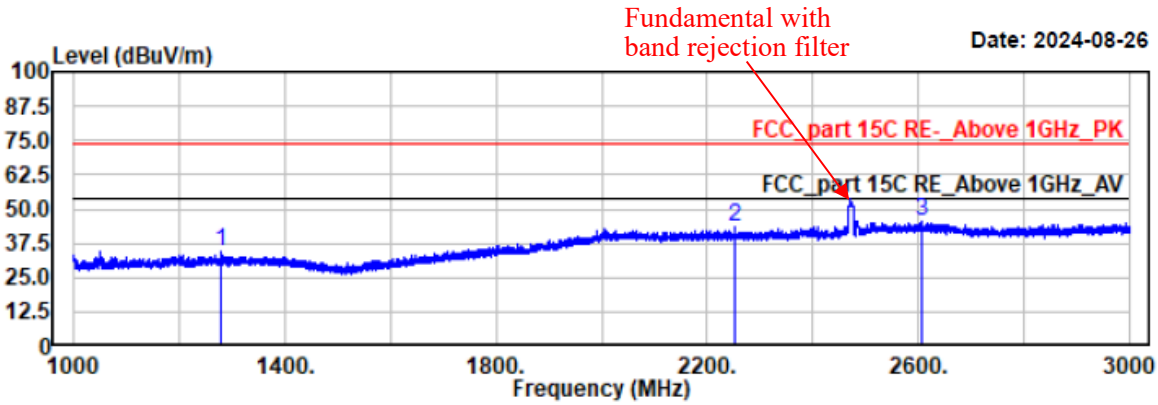

Trace: 1
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 4873.50 | 34.36 | -4.26 | 30.10 | 54.00 | 23.90 | vertical | Average |
| 4873.50 | 46.47 | -4.26 | 42.21 | 74.00 | 31.79 | vertical | Peak |
| 7311.00 | 37.68 | -1.63 | 36.05 | 54.00 | 17.95 | vertical | Average |
| 7311.00 | 48.71 | -1.63 | 47.08 | 74.00 | 26.92 | vertical | Peak |
| 12369.00 | 35.40 | 3.69 | 39.09 | 54.00 | 14.91 | vertical | Average |
| 12369.00 | 50.44 | 3.69 | 54.13 | 74.00 | 19.87 | vertical | Peak |
| 17911.50 | 35.04 | 7.60 | 42.64 | 54.00 | 11.36 | vertical | Average |
| 17911.50 | 50.69 | 7.60 | 58.29 | 74.00 | 15.71 | vertical | Peak |

*EUT operation mode: Transmitting in Wifi 802.11b high channel*

Project No.: XMDN240219-08385E-RF
Test Mode: 11b-2462
EUT Model: PG71
Test distance: 3m

Temp/Humi/ATM: 23.5℃/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE




| Freq MHz | Reading dBuV | Factor dB/m | Result dBuV/m | Limit dBuV/m | Margin dB | Polarity | Remark |
|---|---|---|---|---|---|---|---|
| 1280.00 | 49.93 | -15.51 | 34.42 | 74.00 | 39.58 | horizontal | Peak |
| 2251.40 | 49.66 | -6.25 | 43.41 | 74.00 | 30.59 | horizontal | Peak |
| 2606.40 | 49.08 | -3.30 | 45.78 | 74.00 | 28.22 | horizontal | Peak |