



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:

Original Report

Product Name:

HyPanel Pro

Report Number: XMDN240219-08385E-RF-02

Report Date: 2025-01-06

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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 WIFI:13.73dBm
Frequency Range:	BLE: 2402-2480MHz Wi-Fi: 2412-2462MHz
Modulation Technique:	BLE: GFSK WIFI: DSSS, OFDM
Antenna Type:	FPC Antenna
★Maximum Antenna Gain:	2 dBi
EUT Received Status:	Good
<i>Note:</i> 1. The Maximum Antenna Gain was declared by manufacturer. 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. 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°C
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

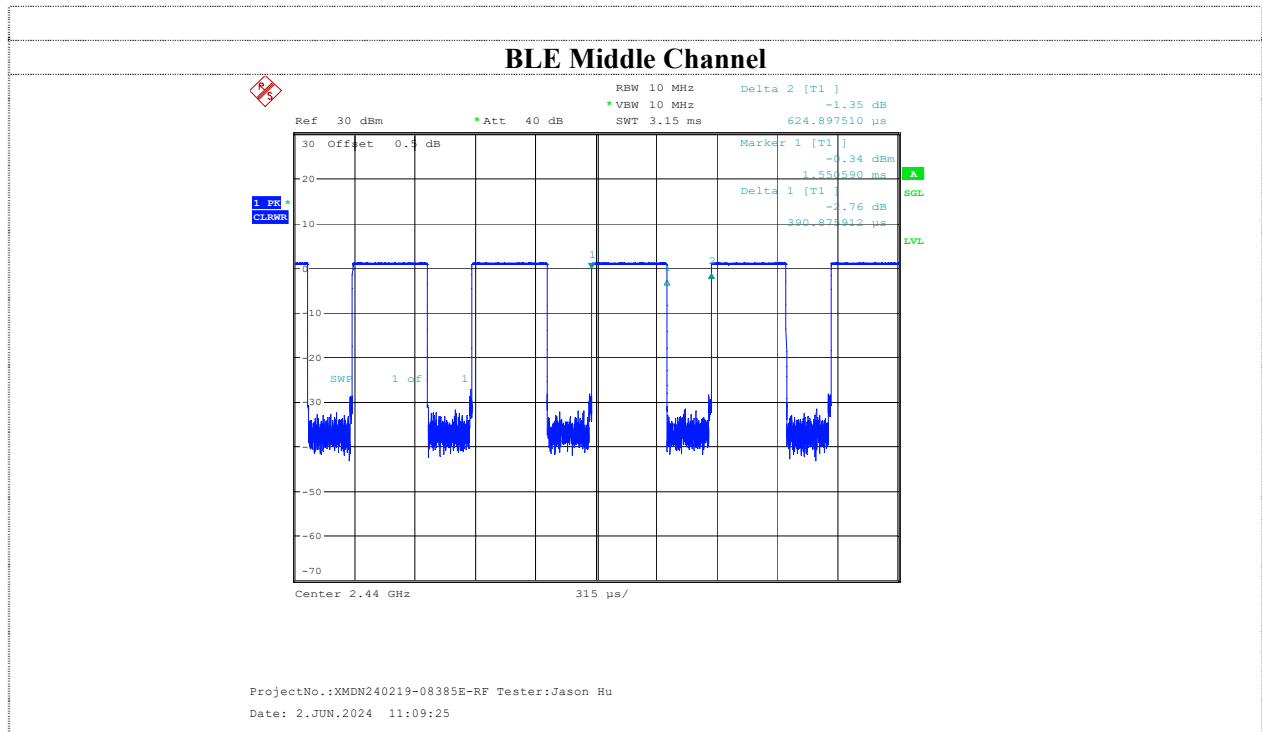
For WIFI

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.

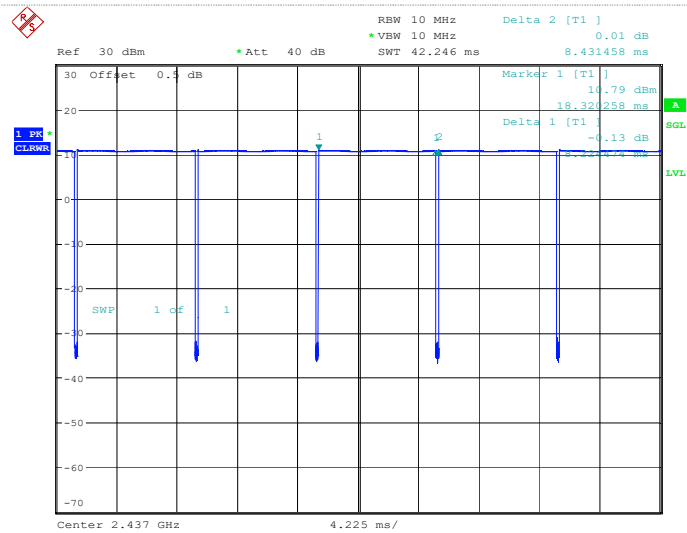
Duty cycle**For BLE:**

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

**For WIFI:**

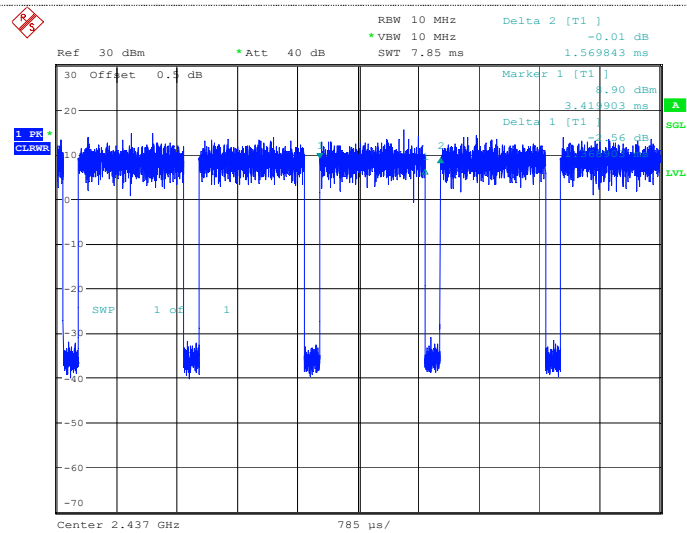
Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	Duty Factor (dB)	VBW Setting (kHz)
802.11b	8.224	8.431	97.54	122	0.11	0.2
802.11g	1.369	1.57	87.20	730	0.59	1
802.11n ht20	1.274	1.474	86.43	785	0.63	1
802.11n ht40	0.635	0.835	76.05	1575	1.19	2

802.11b Middle Channel



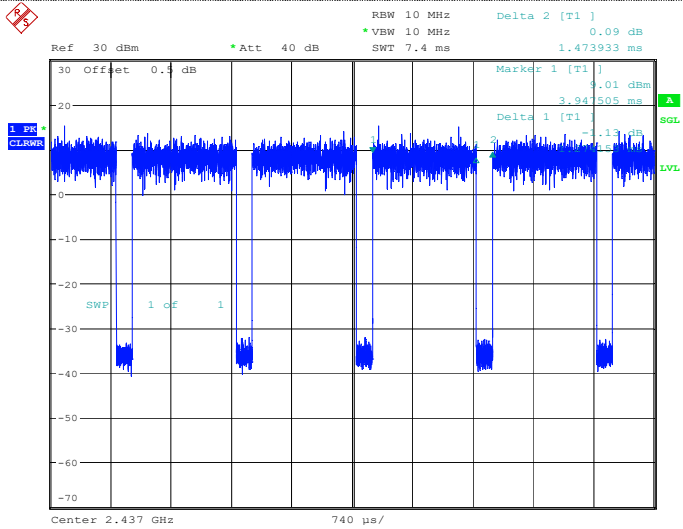
ProjectNo.:XMDN240219-08385E-RF Tester:Jason Hu
Date: 26.JUN.2024 16:17:29

802.11g Middle Channel



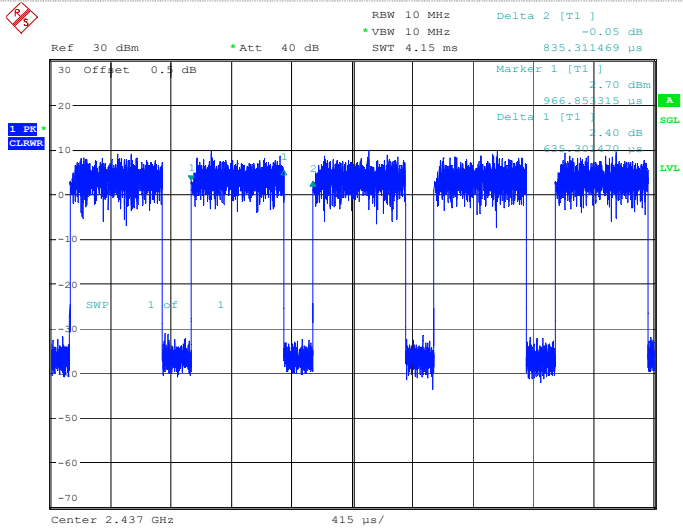
ProjectNo.:XMDN240219-08385E-RF Tester:Jason Hu
Date: 26.JUN.2024 16:18:31

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

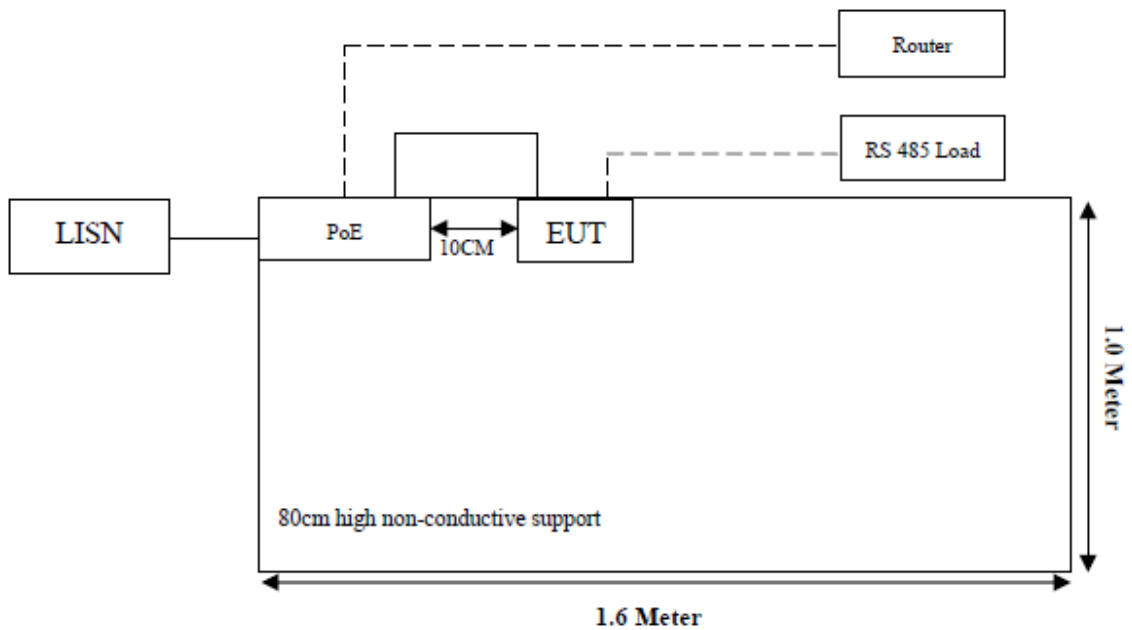
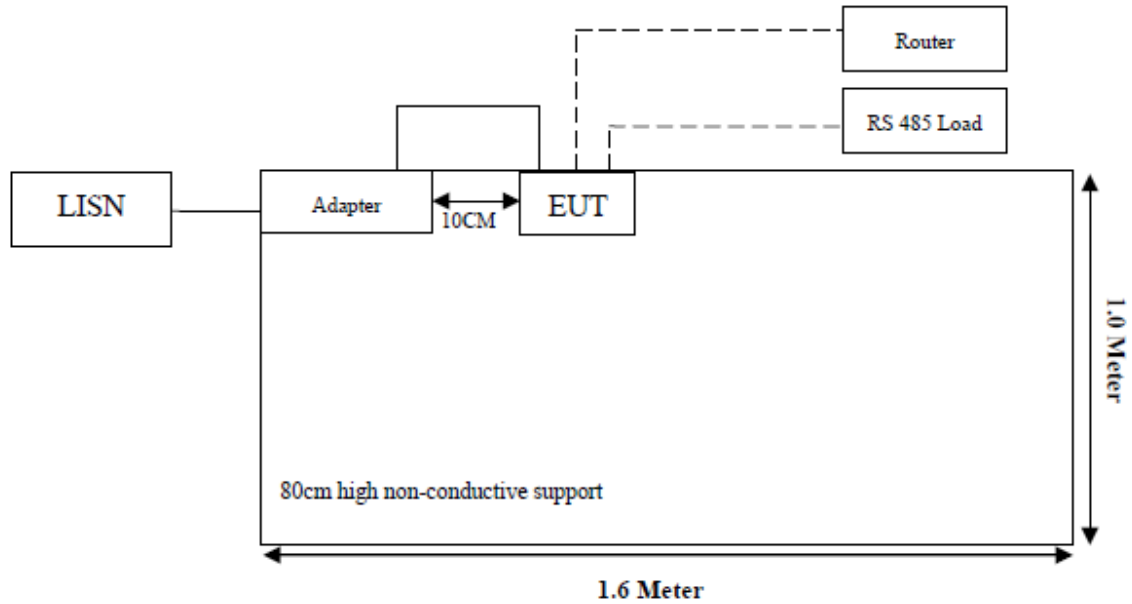
Cable Description	Length (m)	From Port	To
Network cable	2	EUT	Adapter
Network cable	10	EUT	Router
Load cable	10	EUT	RS 485 Load

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

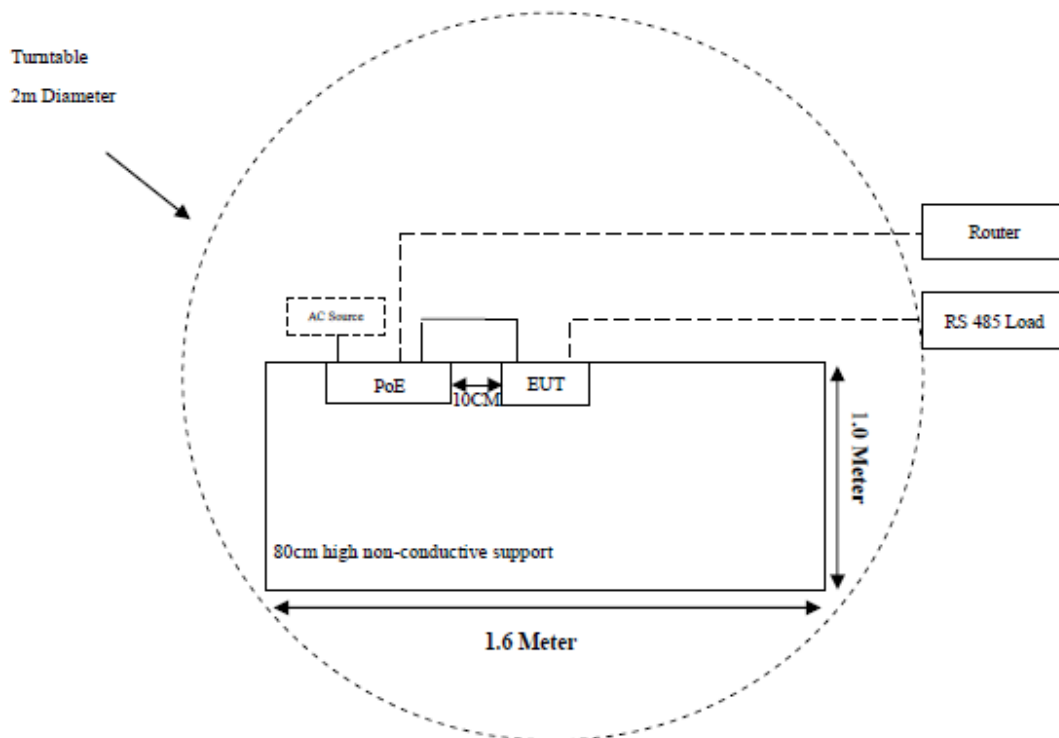
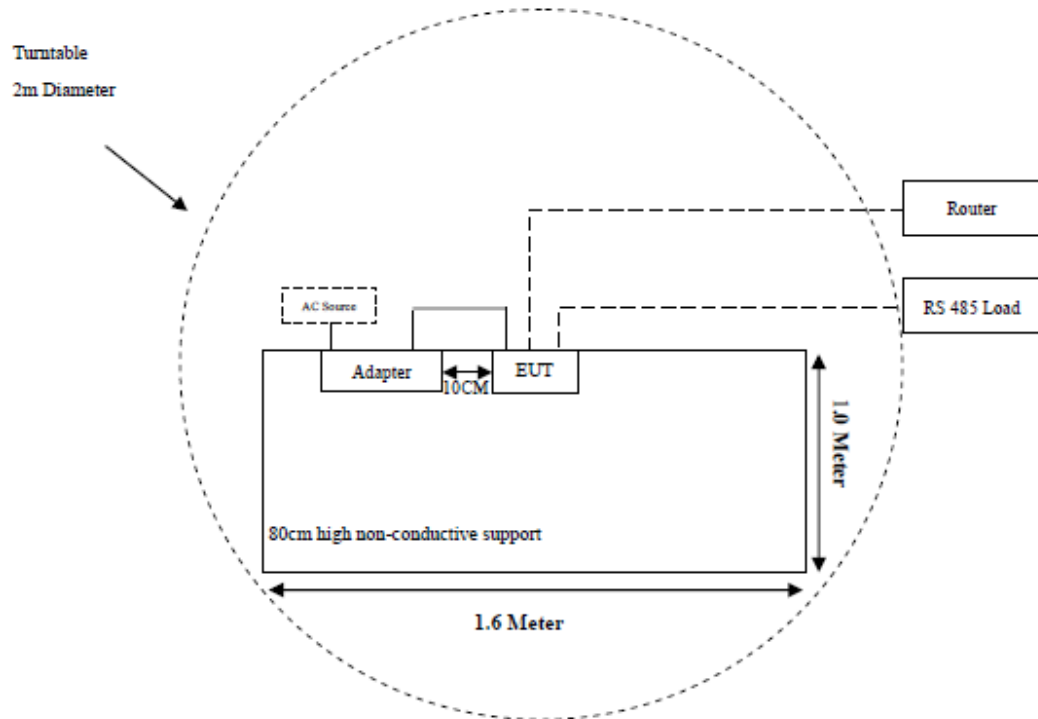
Block Diagram of Test Setup

Conducted Emission:

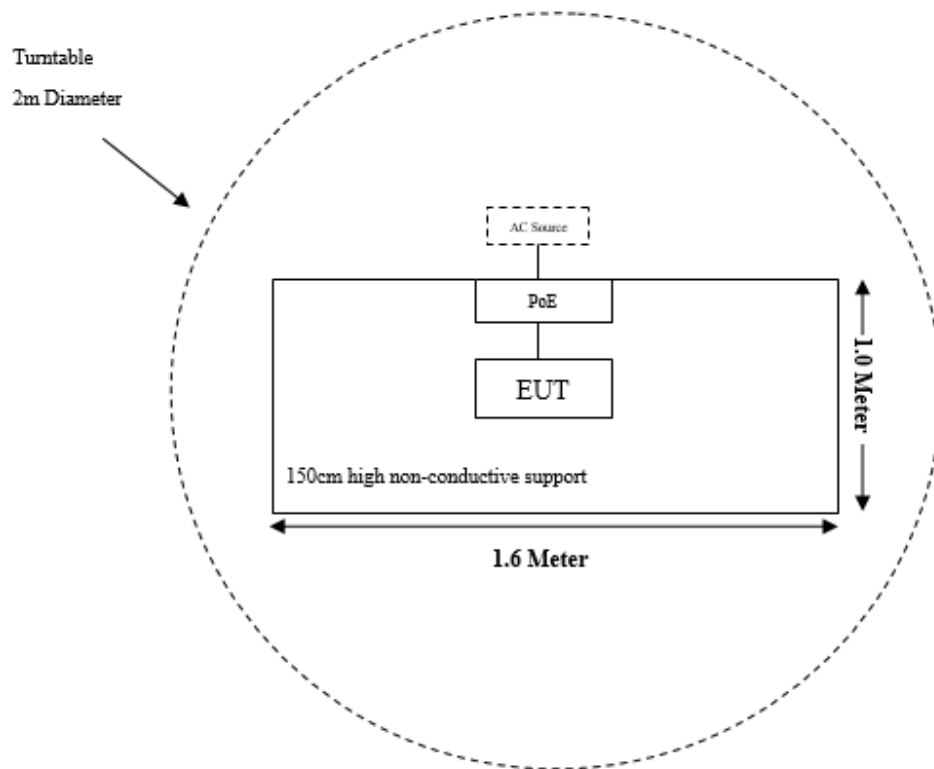


Radiated Emissions:

Below 1GHz



Above 1GHz



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.

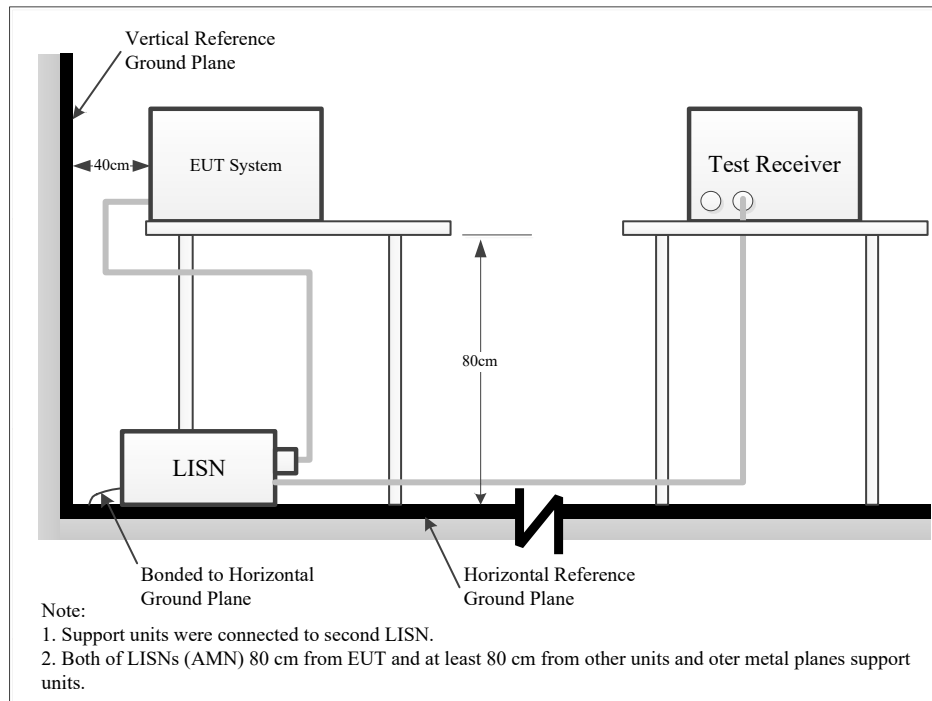
Result: Compliance

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC§15.207

EUT Setup



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:

$$\begin{aligned}\text{Factor (dB)} &= \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)} \\ \text{Result (dB}\mu\text{V)} &= \text{Reading (dB}\mu\text{V)} + \text{Factor (dB)}\end{aligned}$$

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:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V)} - \text{Result (dB}\mu\text{V)}$$

Test Data

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

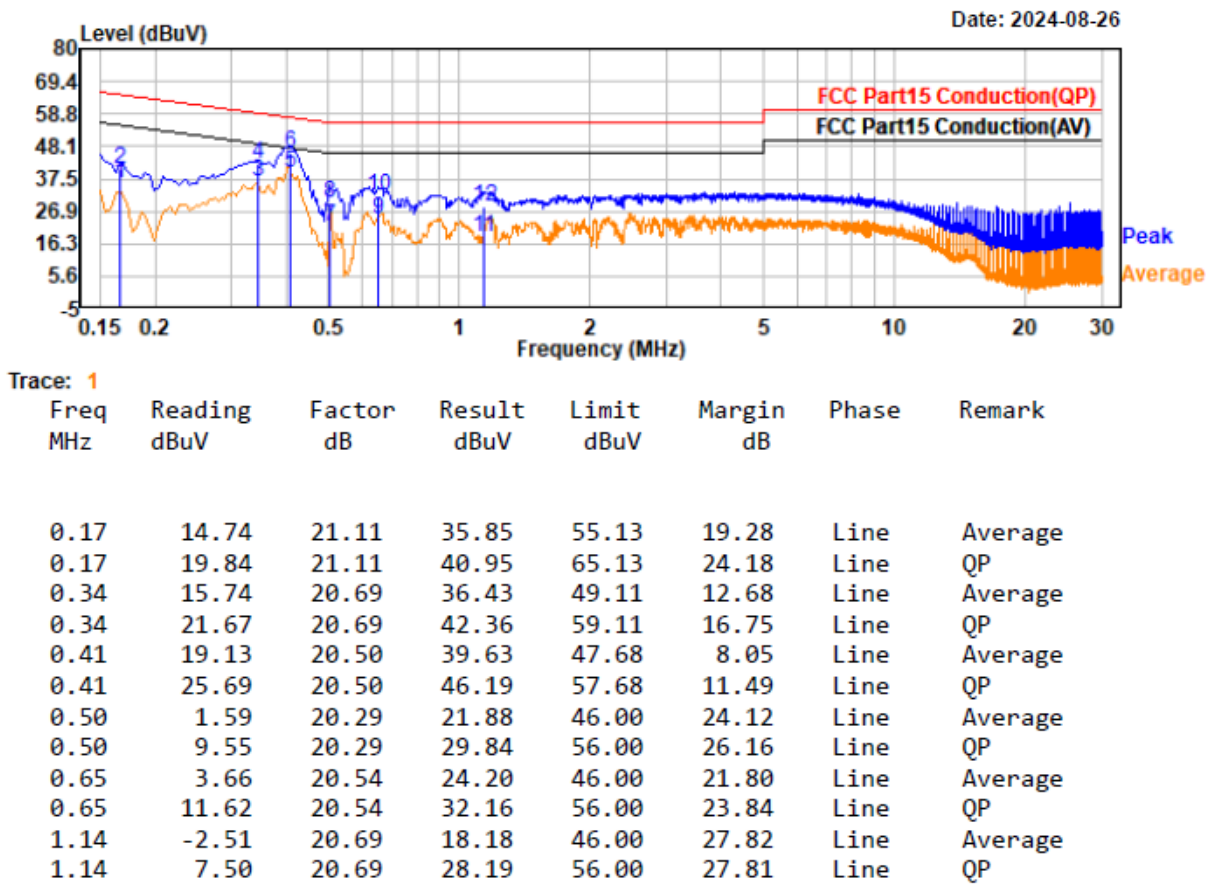
For BLE:

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°C/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V from PoE



Project No.: XMDN240219-08385E

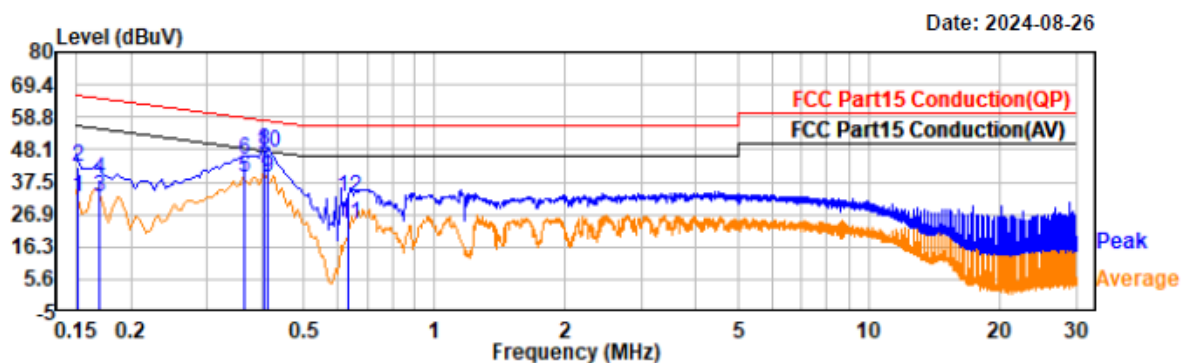
Test Mode: BLE 2440

EUT Model: PG71

Temp/Humi/ATM: 22.4°C/56%/100.1kPa

Tested by: Spike Gao

Power Source: DC 48V from PoE

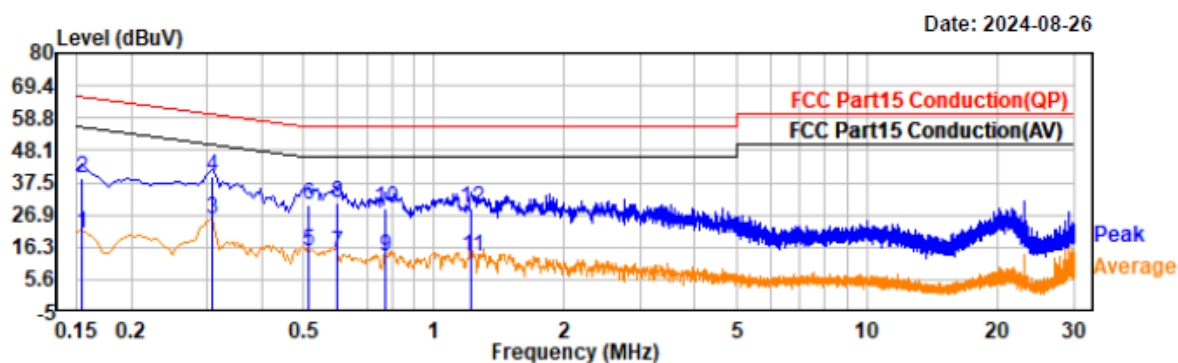


Trace: 1

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°C/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 12V from Adapter

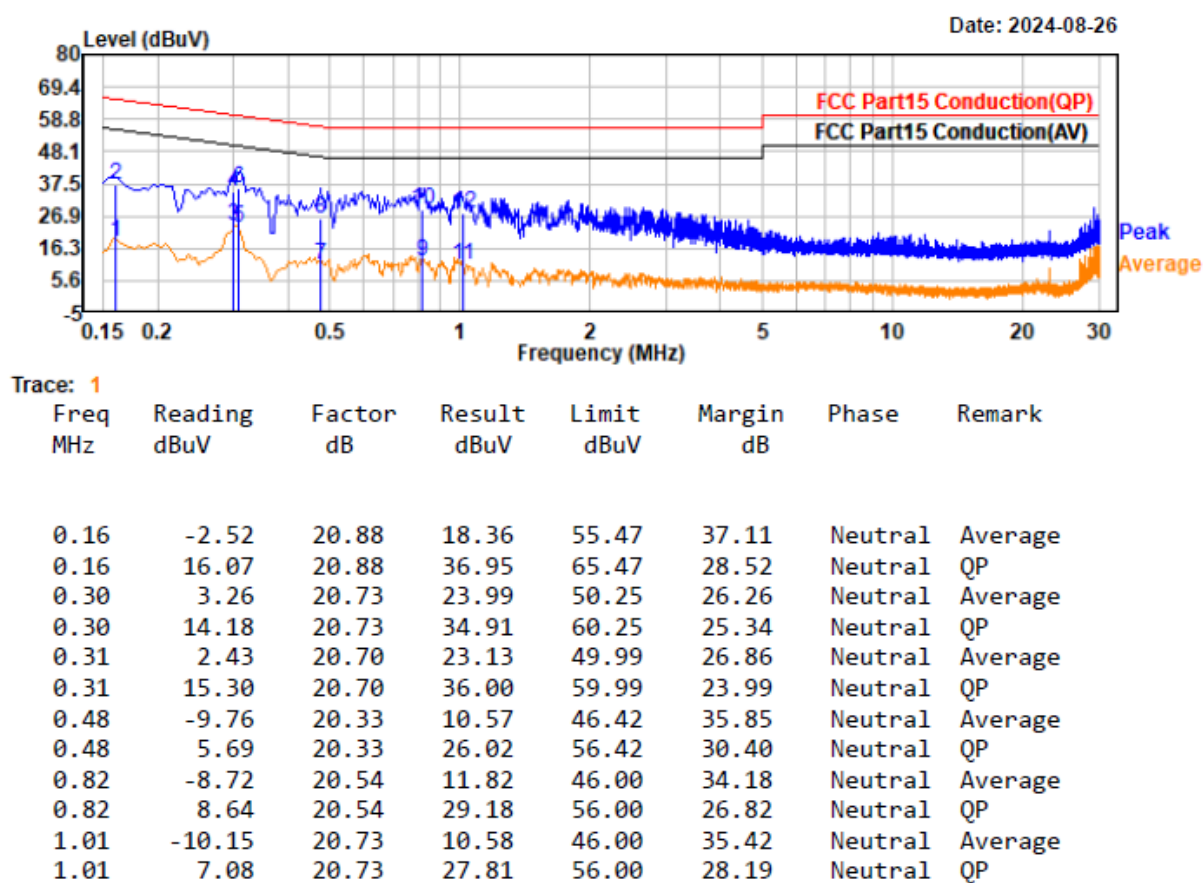


Trace: 1

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

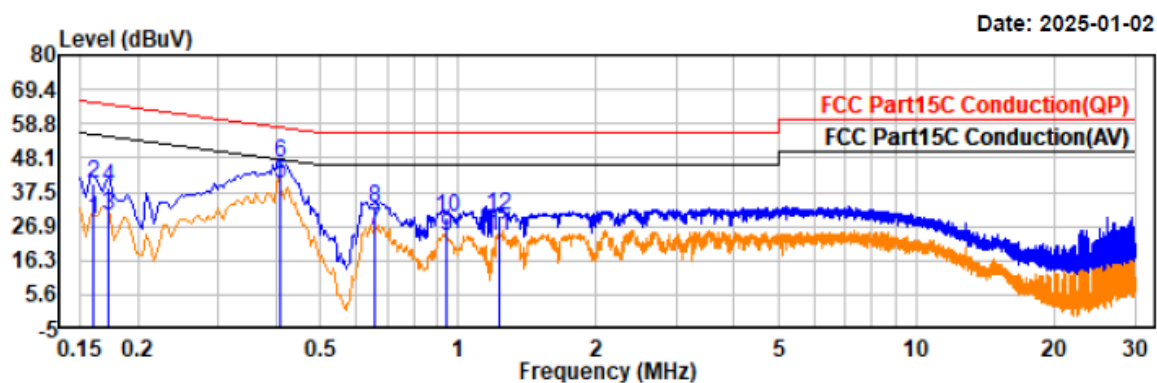
Temp/Humi/ATM: 22.4°C/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 12V from Adapter



EUT Model: PG71N

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

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



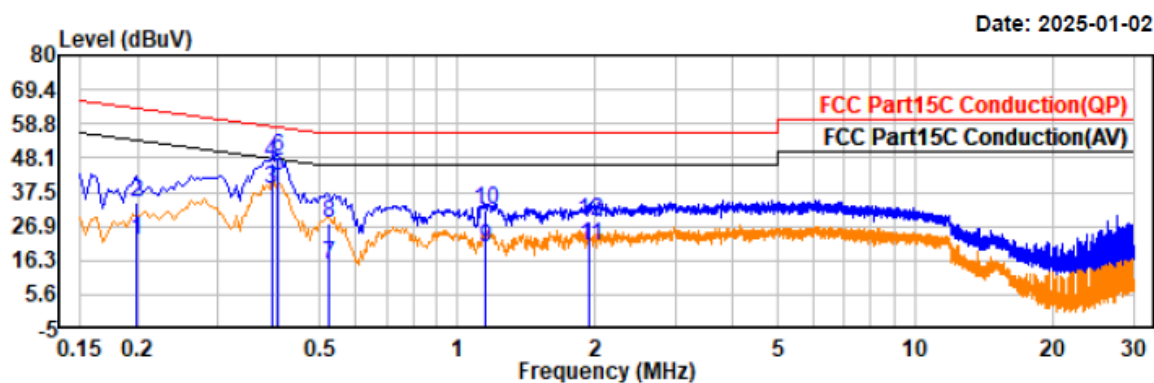
Trace: 1

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°C/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

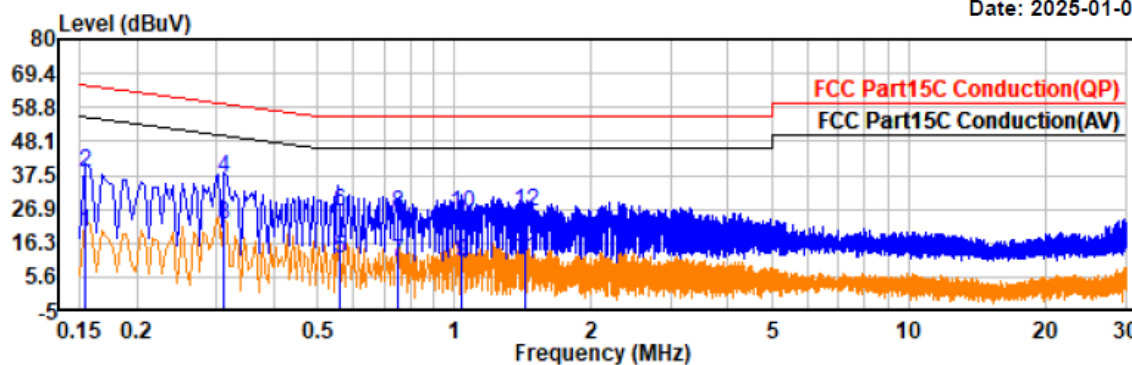
EUT Model: PG71N

Temp/Humi/ATM: 19.8°C/41%/100.1kPa

Tested by: Spike Gao

Power Source: DC 12V From Adapter

Date: 2025-01-02



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

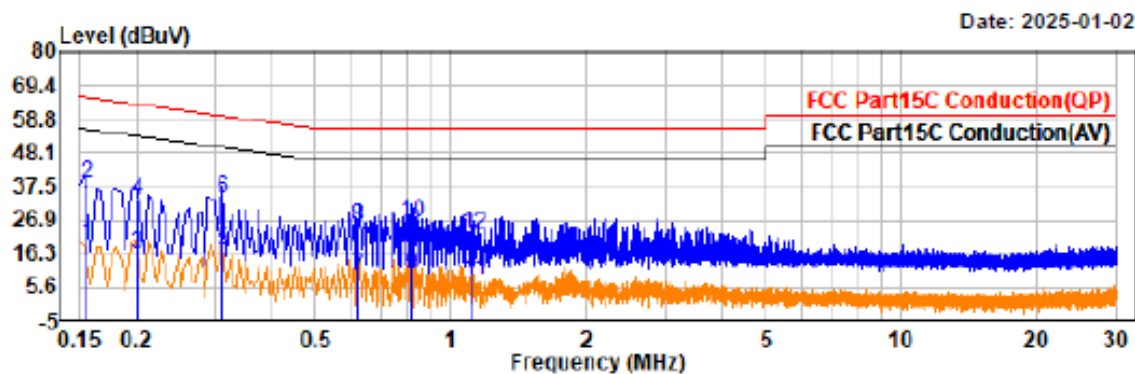
Test Mode: BLE 2440

EUT Model: PG71N

Temp/Humi/ATM: 19.8°C/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

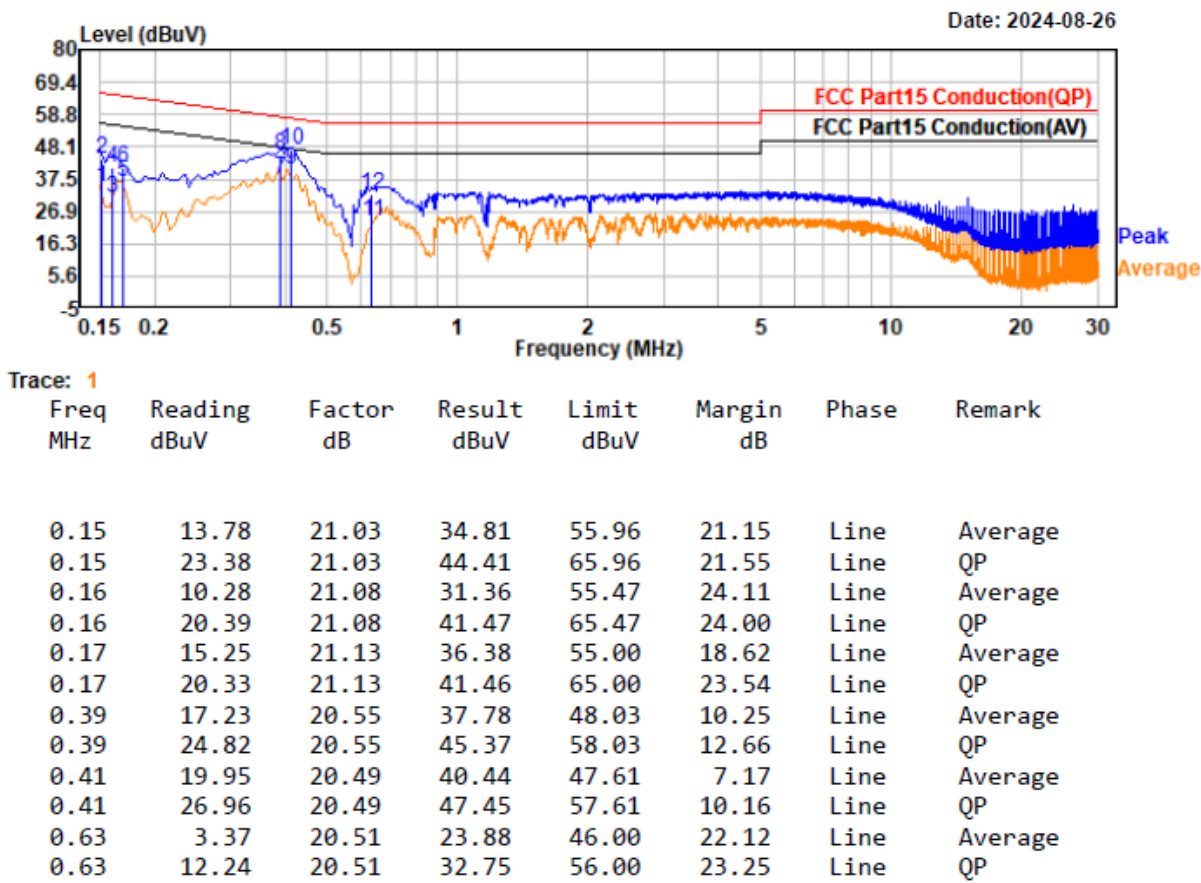
PoE Power Supply mode was the worst.

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

EUT Model: PG71

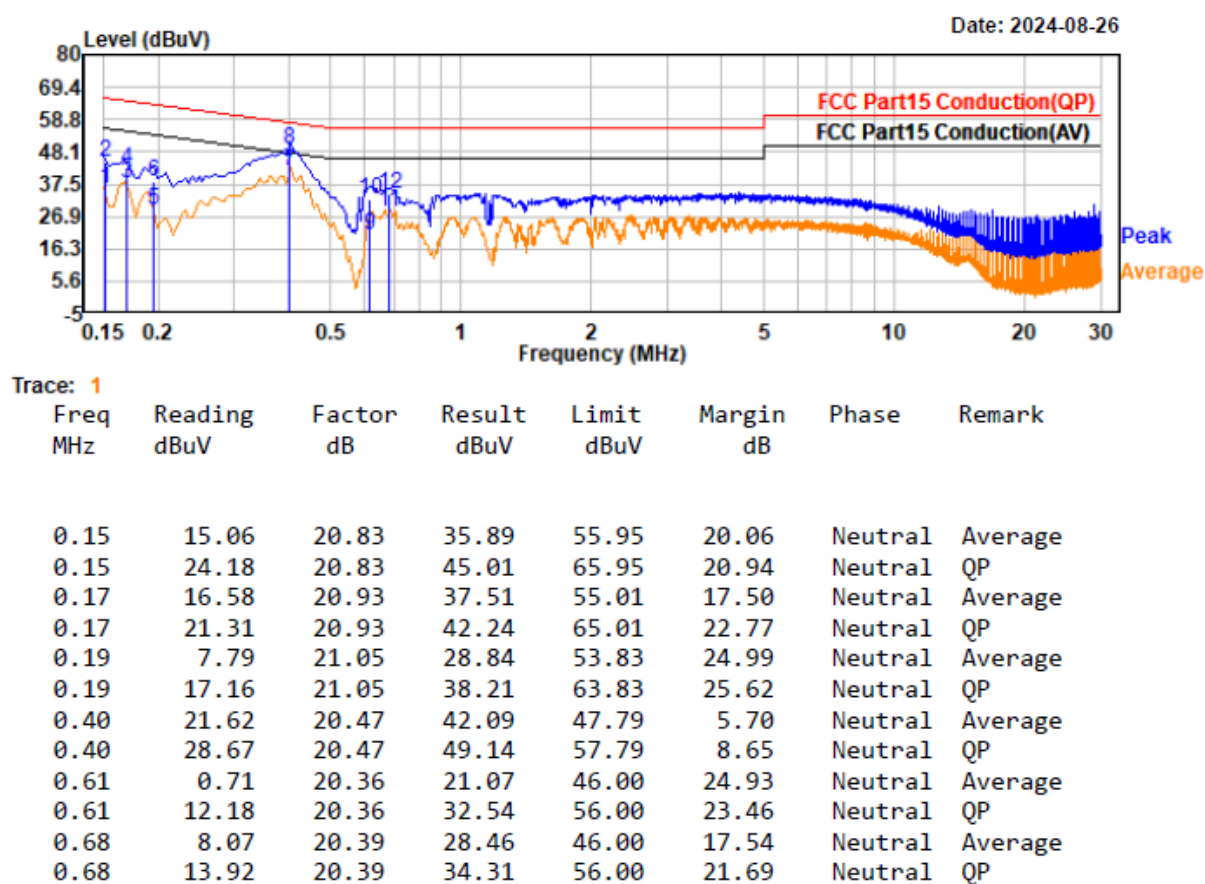
Project No.: XMDN240219-08385E
Test Mode: 11b 2412
EUT Model: PG71

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



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

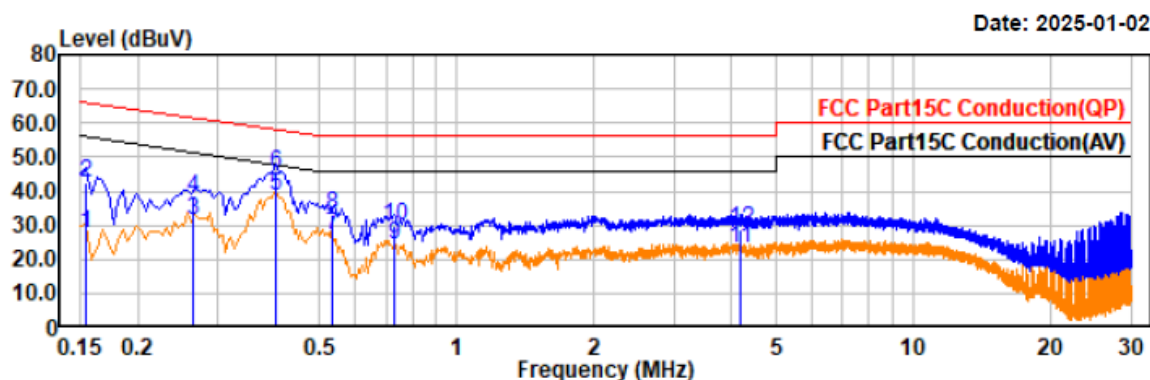
Temp/Humi/ATM: 22.4°C/56%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V from PoE



EUT Model: PG71N

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

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

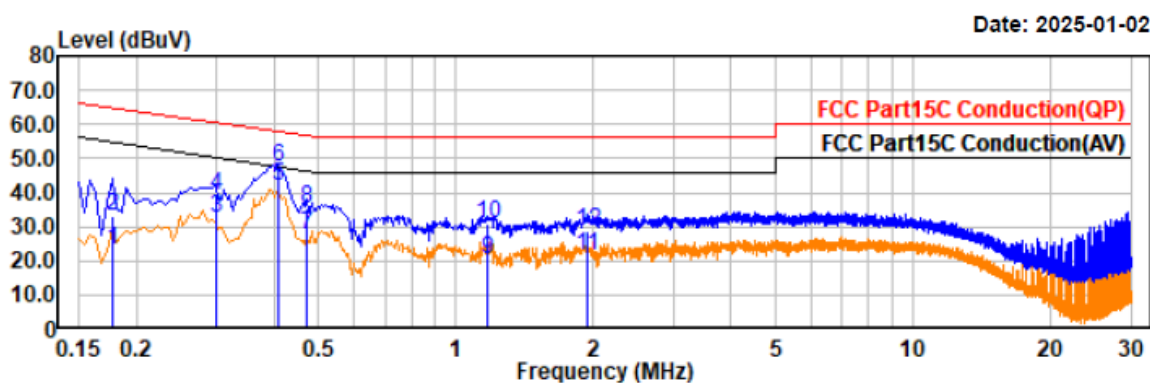
**Trace: 1**

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°C/41%/100.1kPa
Tested by: Spike Gao
Power Source: DC 48V From POE



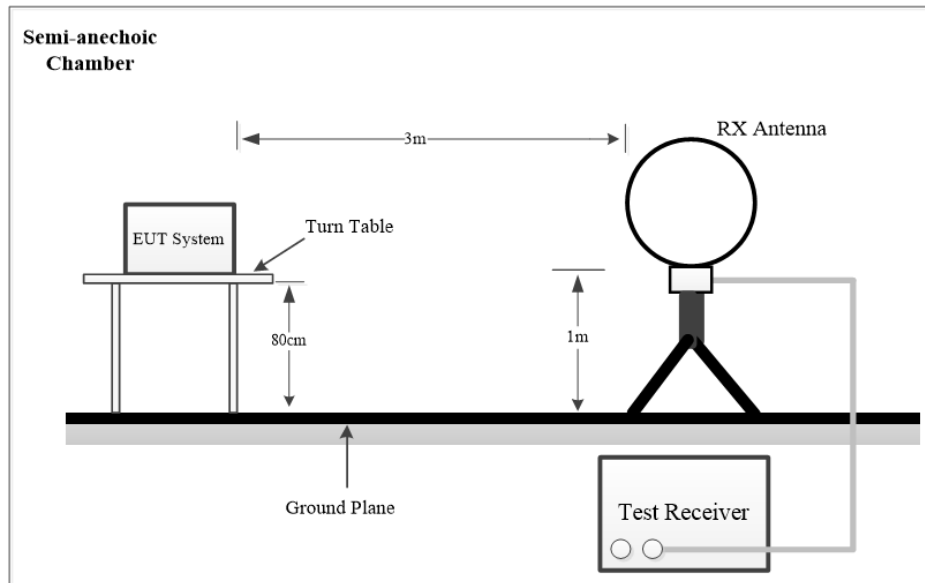
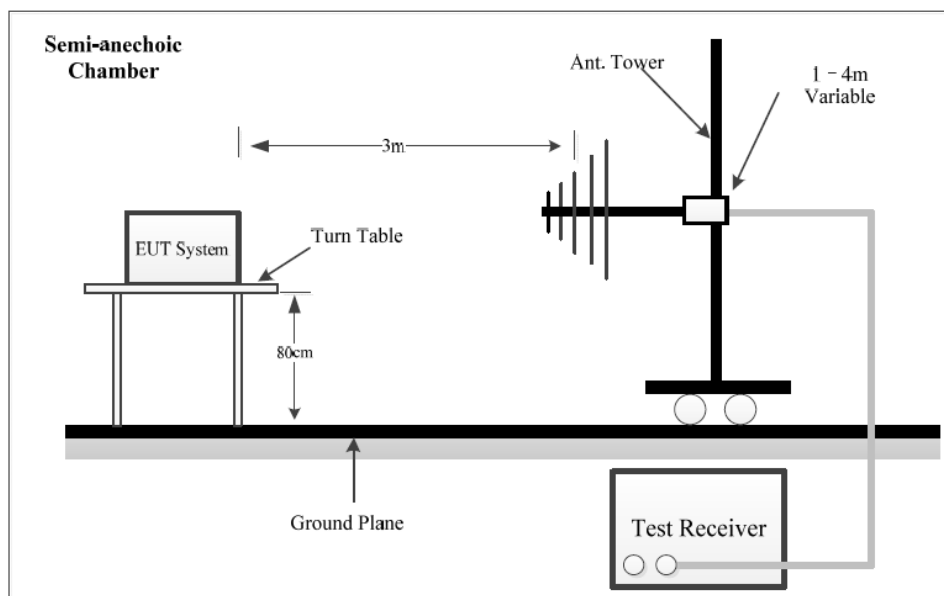
Trace: 1

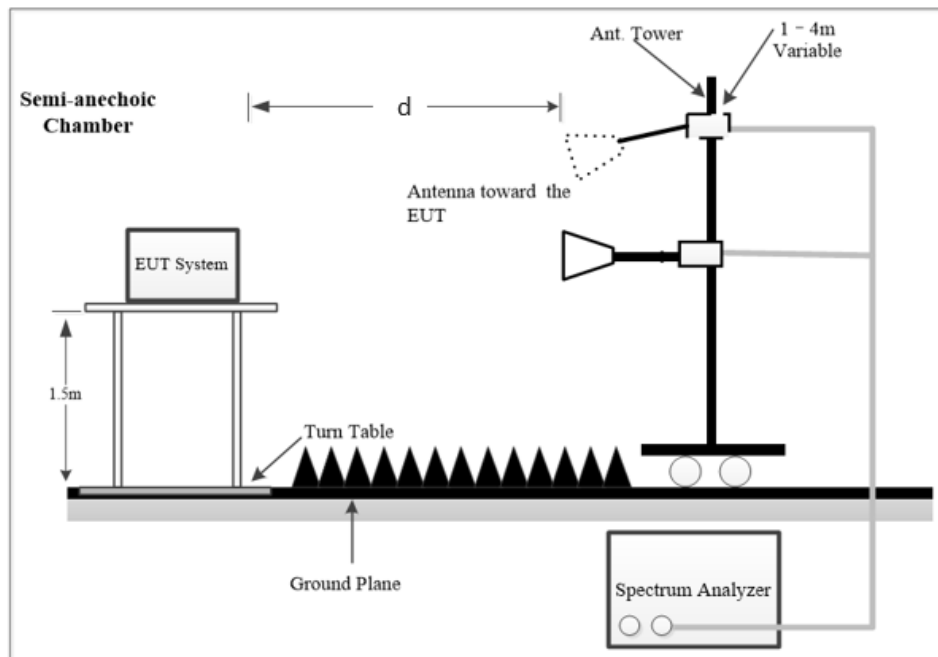
Condition: QP/AV RBW:9kHz VBW:30kHz SWT:auto

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 = $20 \log (\text{specific distance } [3\text{m}] / \text{test distance } [1.0\text{m}]) \text{ dB} = 9.54 \text{ dB}$

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	$\geq 1/T$, 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	$\geq 1/T$	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 (dB μ V/m) = Reading (dB μ V) + 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 (dB μ V/m) – Result (dB μ V/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°C~23.5°C	21.7°C~23.5°C
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

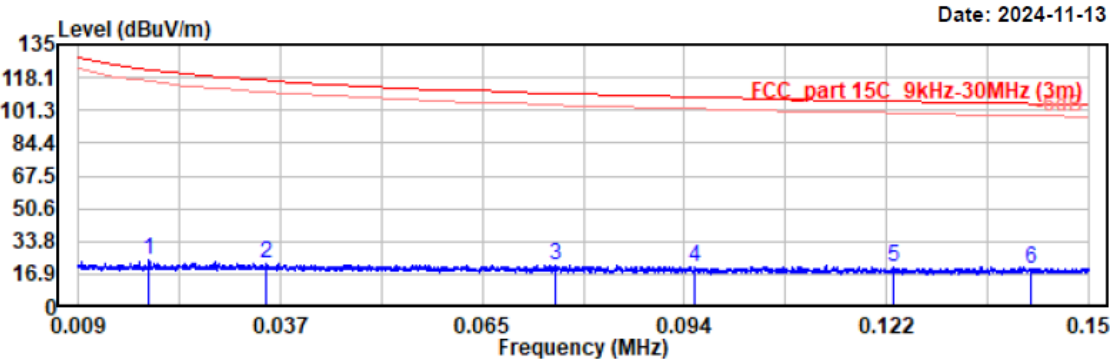
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 23.5°C/53%/100.1kPa

Tested by: Wlif Wu

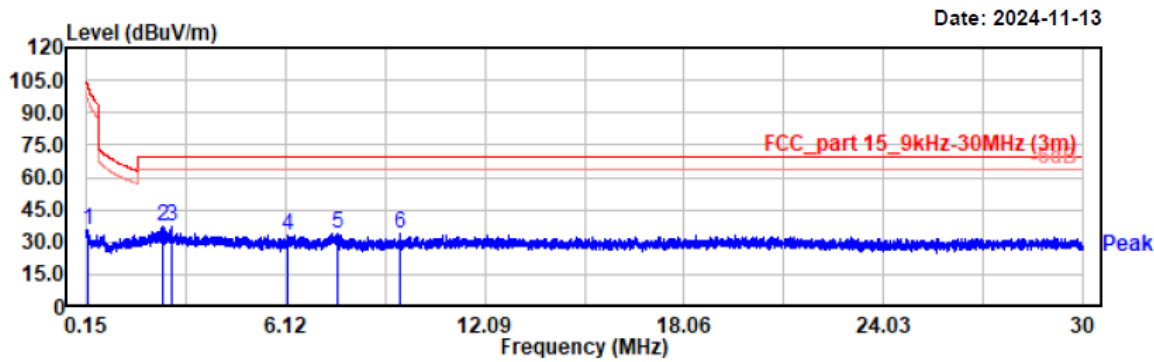
Power Source: DC 48V from PoE



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

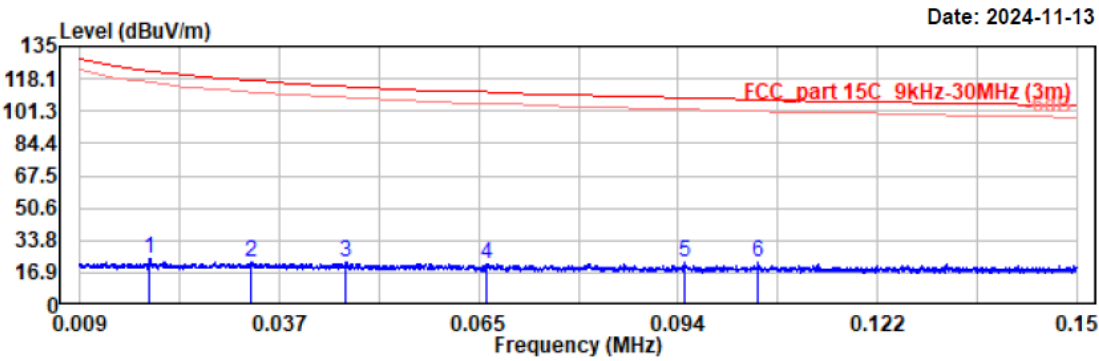
Temp/Humi/ATM: 23.5 C /53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



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

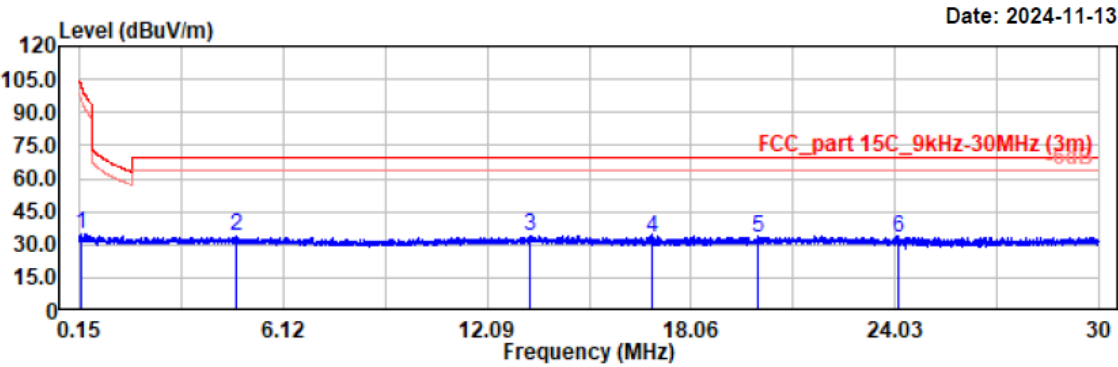
Temp/Humi/ATM: 23.5°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter



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°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter

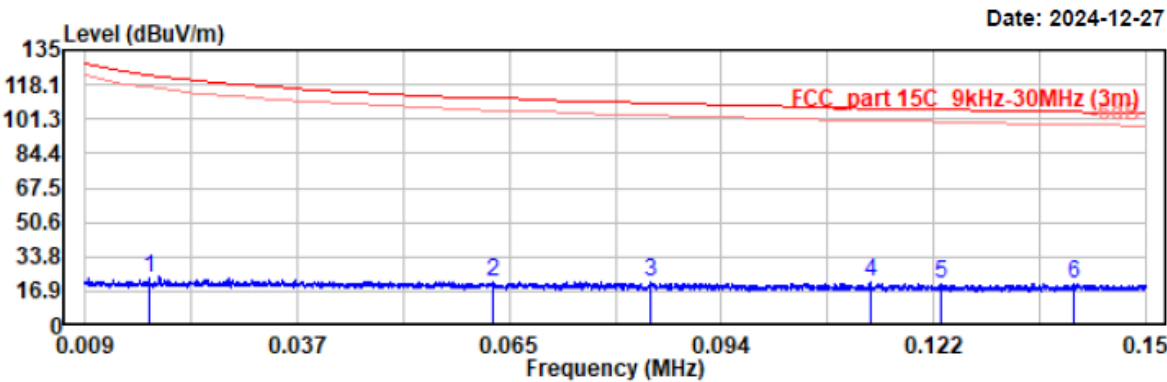


Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.198	15.24	19.72	34.96	101.68	66.72	Peak
4.753	14.06	19.69	33.75	69.54	35.79	Peak
13.365	14.14	19.74	33.88	69.54	35.66	Peak
16.899	13.47	19.88	33.35	69.54	36.19	Peak
20.015	12.87	20.09	32.96	69.54	36.58	Peak
24.108	12.66	20.19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

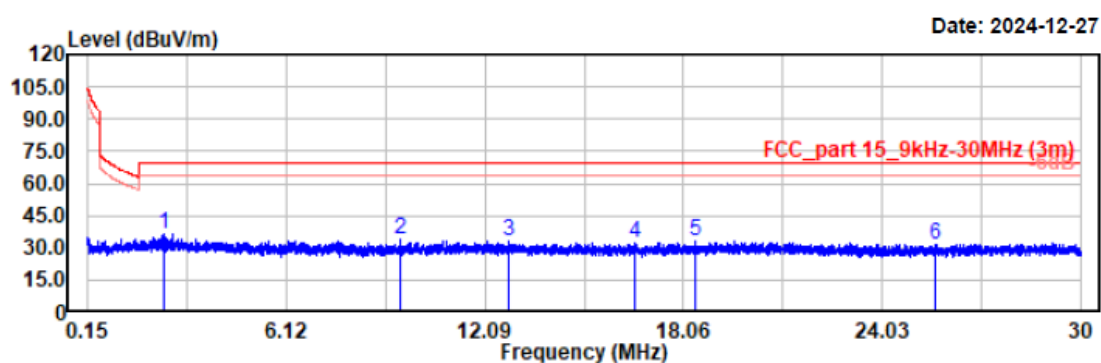


Condition: PK RBW:200Hz VBW:1kHz SWT:auto
QP RBW:200Hz SWT:auto

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 MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
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

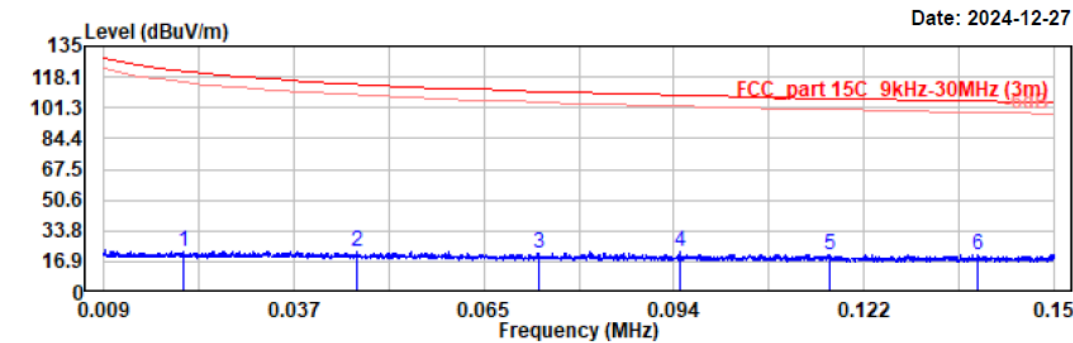
EUT Model: PG71N

Test distance: 3m

Temp/Humi/ATM: 22.5°C/44%/100.1kPa

Tested by: Wlif Wu

Power Source: DC 12V from Adapter

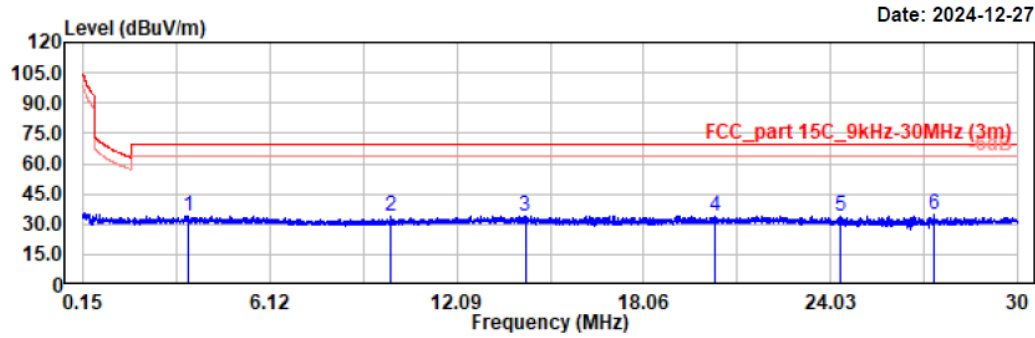


Condition: PK RBW:200Hz VBW:1kHz SWT:auto
QP RBW:200Hz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
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 C /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 MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
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

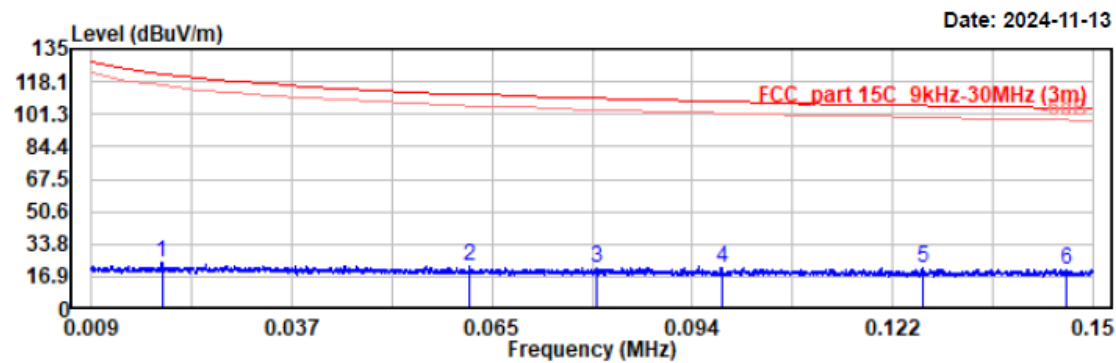
Pre-scan in parallel, ground-parallel and perpendicular of orientation of loop antenna, parallel is worst case

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

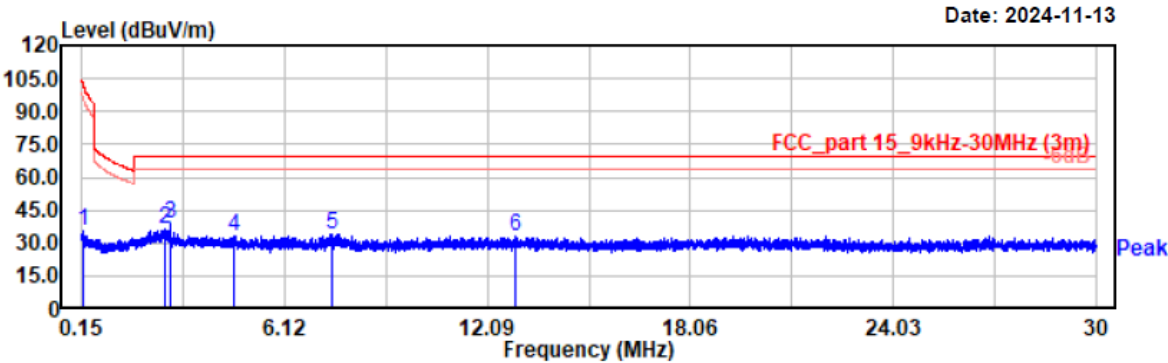
Temp/Humi/ATM: 23.5°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



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

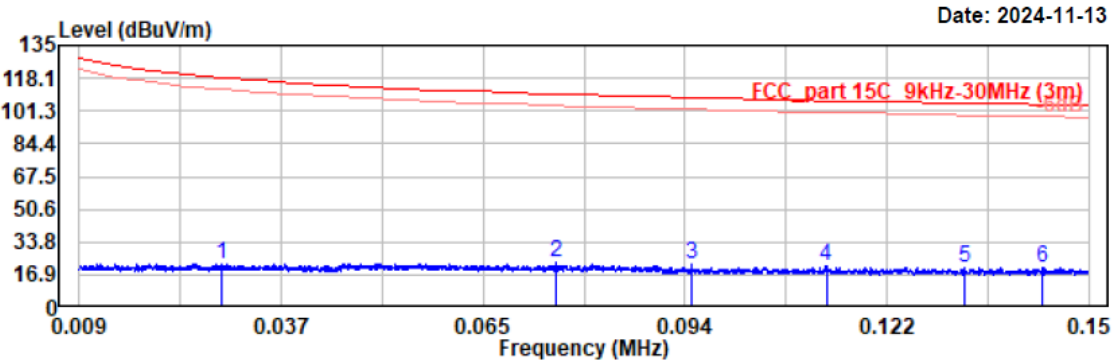
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 23.5°C/53%/100.1kPa

Tested by: Wlif Wu

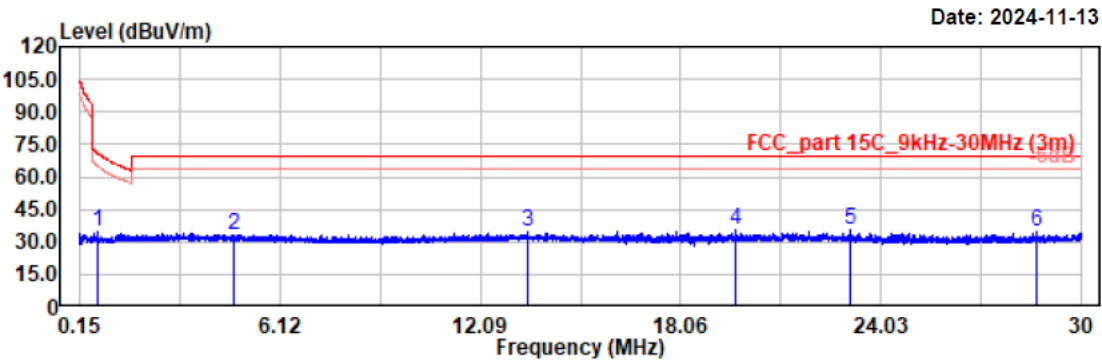
Power Source: DC 12V from Adapter



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°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 12V from Adapter

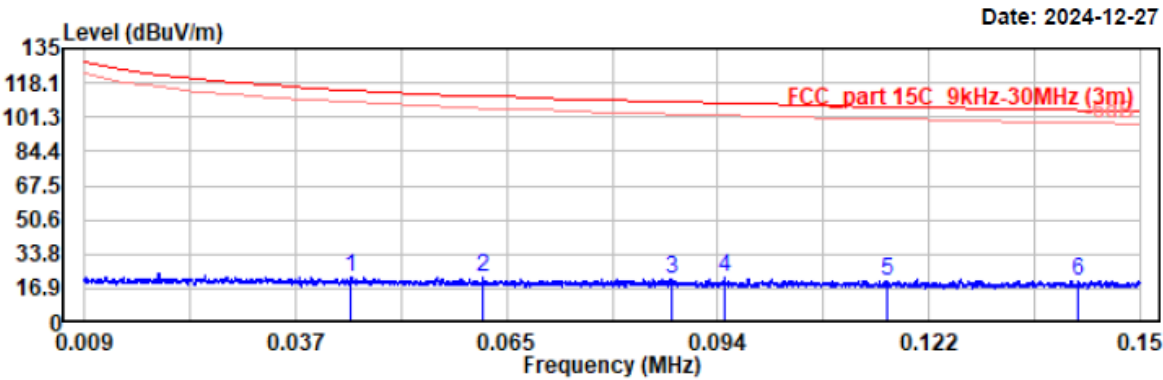


Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Remark
0.687	15.10	19.85	34.95	70.86	35.91	Peak
4.717	13.76	19.70	33.46	69.54	36.08	Peak
13.484	14.61	19.74	34.35	69.54	35.19	Peak
19.711	15.17	20.07	35.24	69.54	34.30	Peak
23.129	15.41	20.17	35.58	69.54	33.96	Peak
28.690	14.61	20.02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

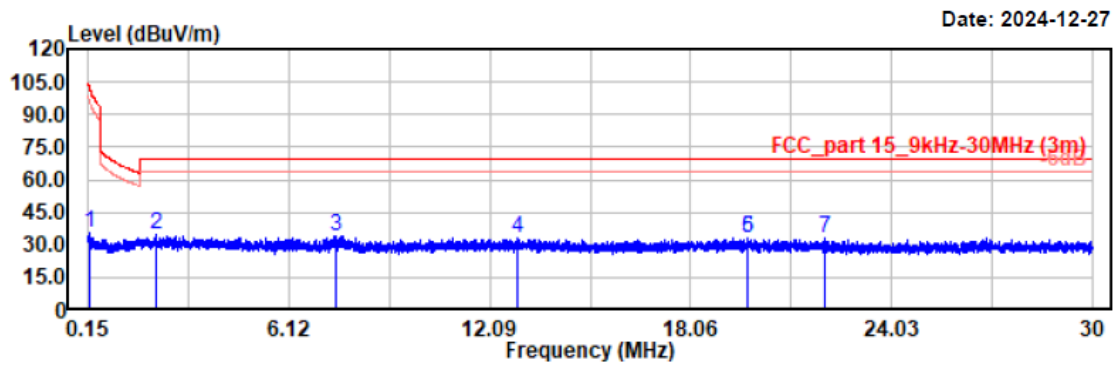


Condition: PK RBW:200Hz VBW:1kHz SWT:auto
QP RBW:200Hz SWT:auto

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

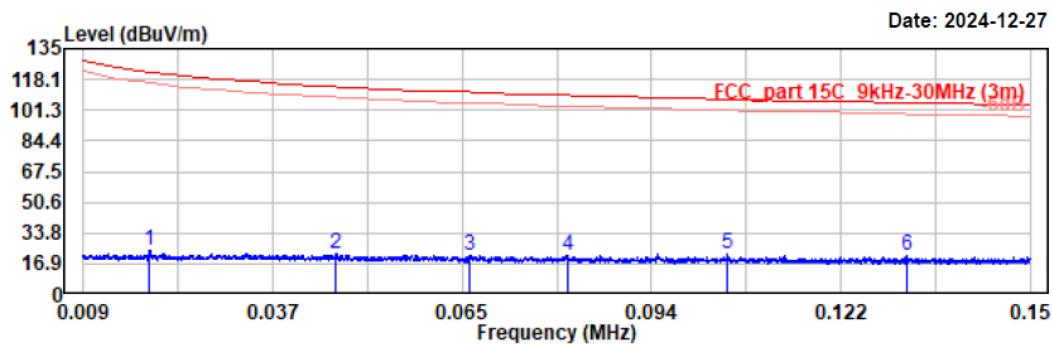
EUT Model: PG71N

Test distance: 3m

Temp/Humi/ATM: 22.5°C/44%/100.1kPa

Tested by: Wlif Wu

Power Source: DC 12V from Adapter



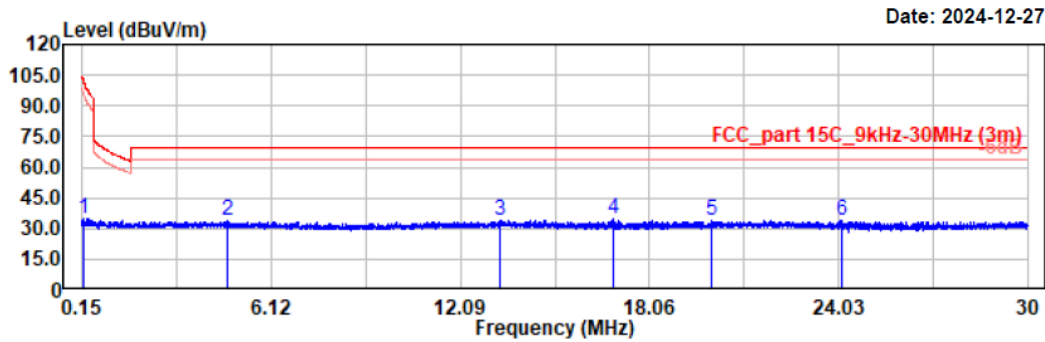
Condition: PK RBW:200Hz VBW:1kHz SWT:auto

QP RBW:200Hz SWT:auto

Freq 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
0.047	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 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	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

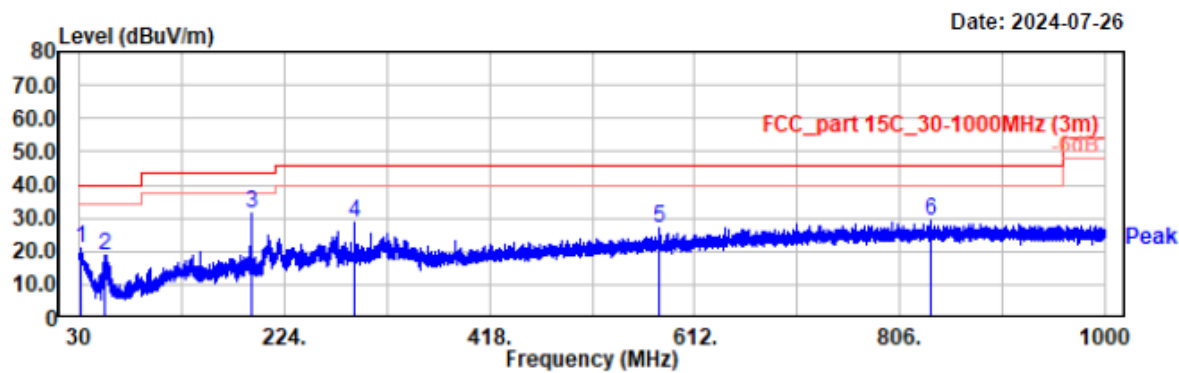
For BLE

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°C/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

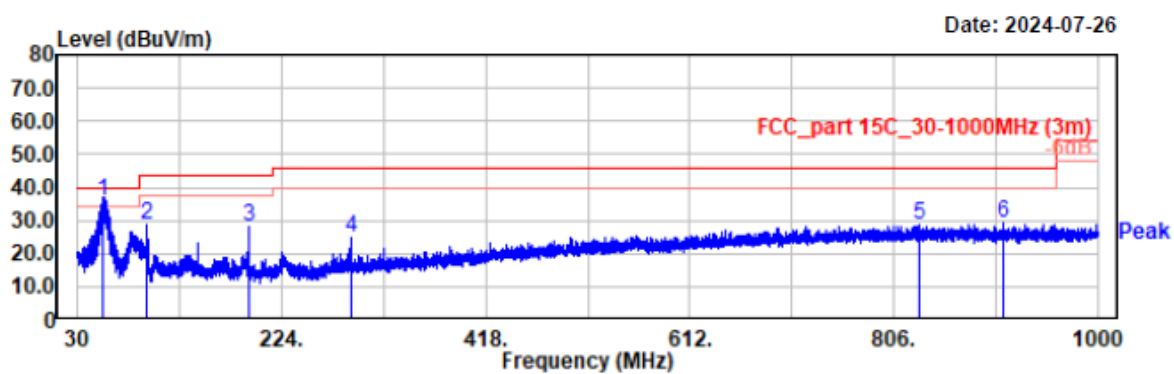
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 20.5°C/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

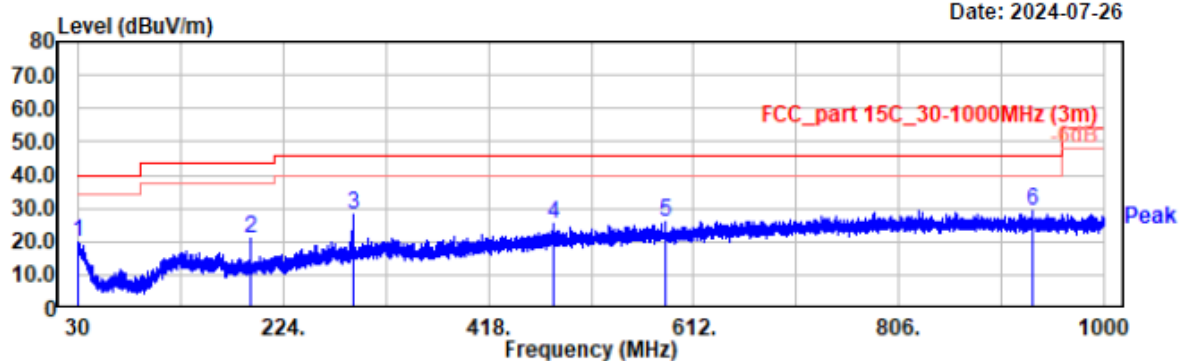
Test distance: 3m

Temp/Humi/ATM: 20.5°C/51%/101kPA

Tested by: Wlif Wu

Power Source: DC 12V from Adapter

Date: 2024-07-26



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

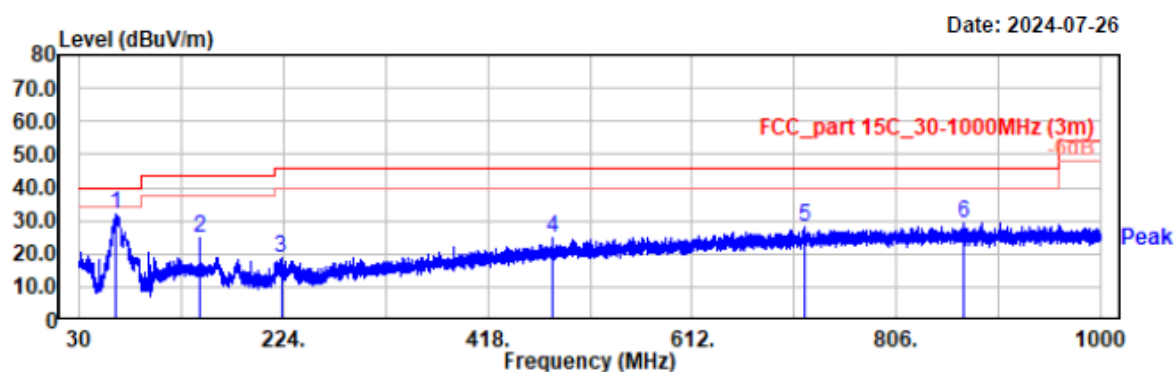
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 20.5°C/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

Temp/Humi/ATM: 23.2°C/46%/100.2kPa

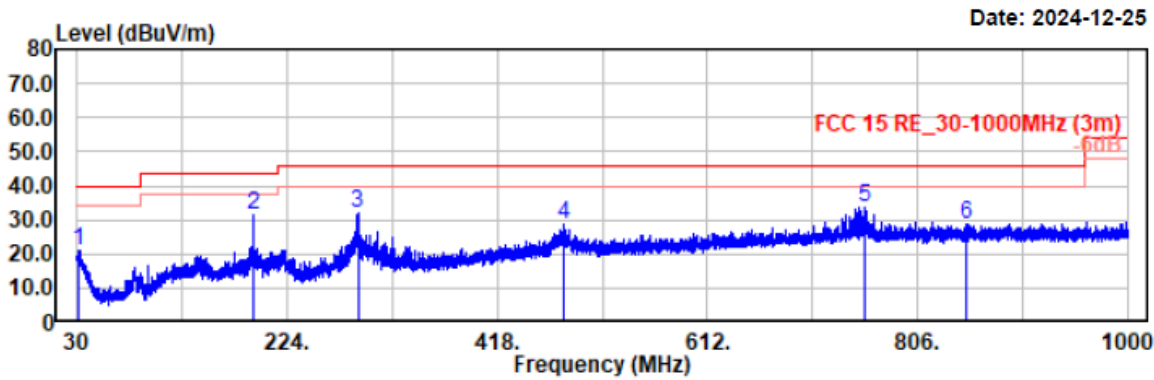
Test Mode: BLE 2440

Tested by: Wlif Wu

EUT Model: PG71N

Power Source: DC 48V from PoE

Test distance: 3m



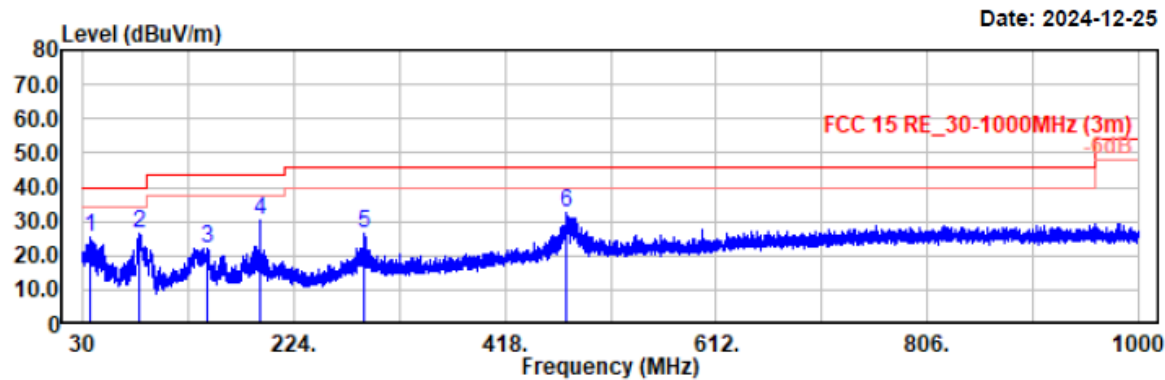
Condition: PK RBW:100kHz VBW:300kHz SWT:auto

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°C/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

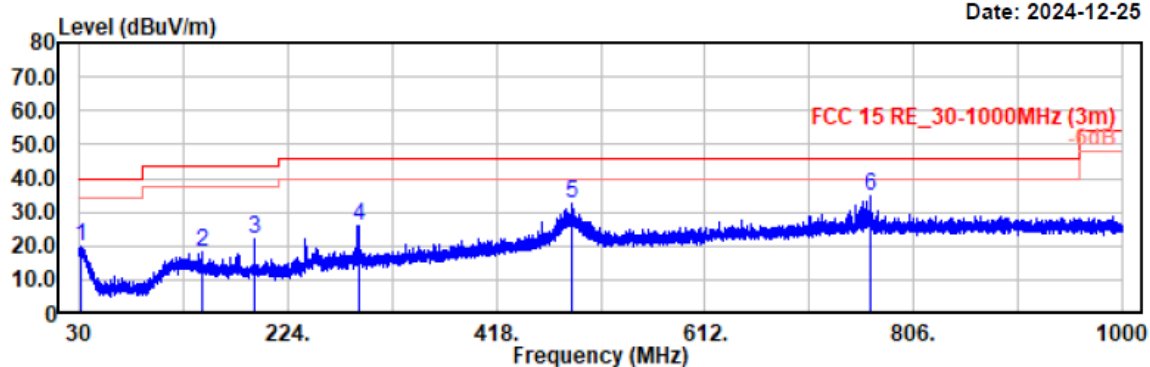
Test distance: 3m

Temp/Humi/ATM: 23.2°C/46%/100.2kPa

Tested by: Wlif Wu

Power Source: DC 12V from Adapter

Date: 2024-12-25



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

Temp/Humi/ATM: 23.2°C/46%/100.2kPa

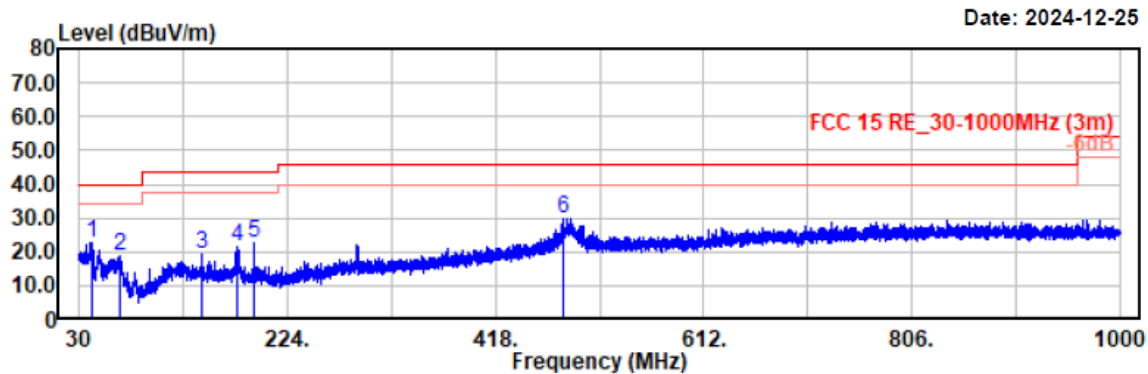
Test Mode: BLE 2440

Tested by: Wlif Wu

EUT Model: PG71N

Power Source: DC 12V from Adapter

Test distance: 3m



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

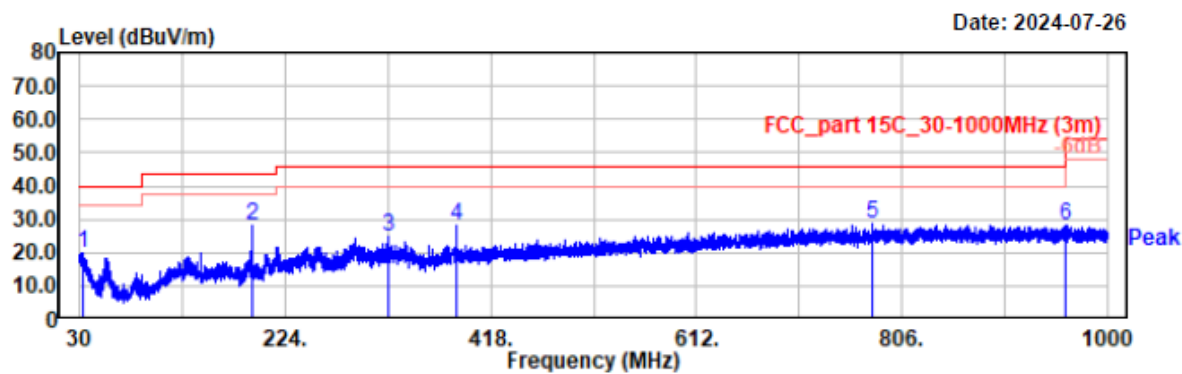
PoE Power Supply mode was the worst.

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°C/51%/101kPA
Tested by: Wlif Wu
Power Source: DC 48V from PoE



Project No.: XMDN240219-08385E-RF

Test Mode: 11B 2412

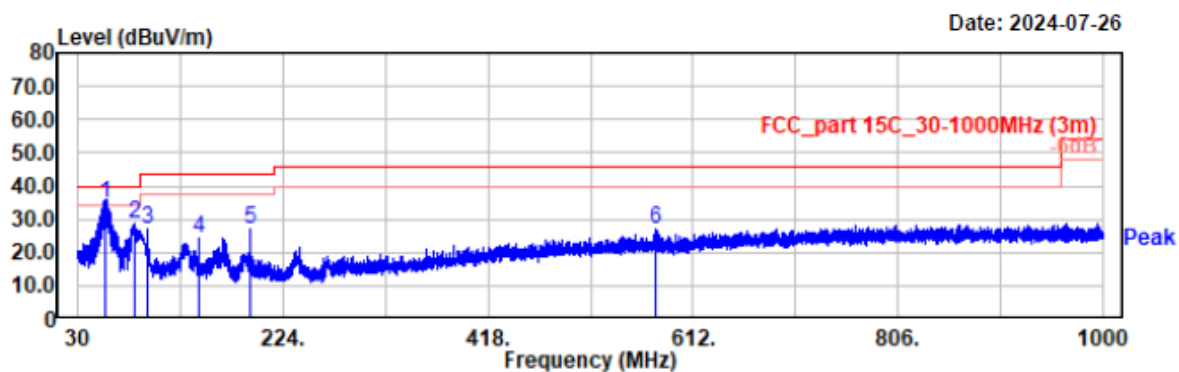
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 20.5°C/51%/101kPA

Tested by: Wlif Wu

Power Source: DC 48V from PoE

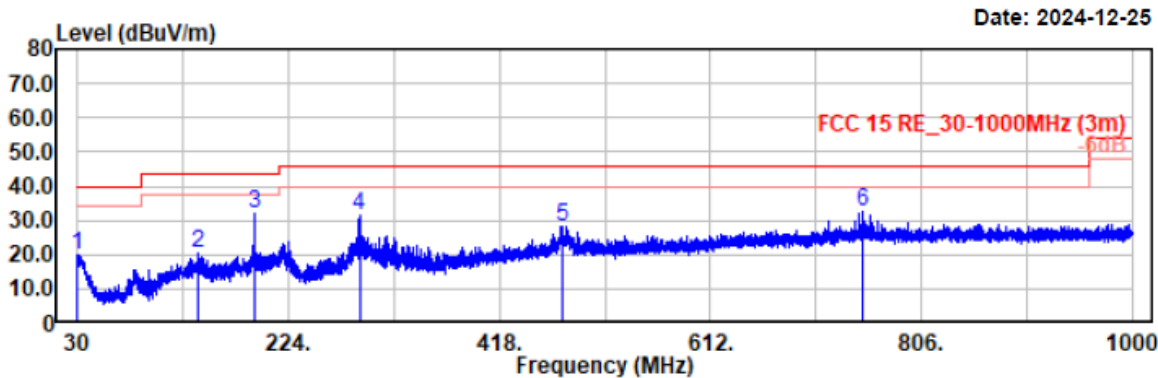


Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
56.29	52.75	-17.74	35.01	40.00	4.99	Vertical	QP
82.87	46.03	-17.23	28.80	40.00	11.20	Vertical	Peak
96.45	42.99	-15.94	27.05	43.50	16.45	Vertical	Peak
144.75	35.40	-10.97	24.43	43.50	19.07	Vertical	Peak
192.86	38.98	-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°C/46%/100.2kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

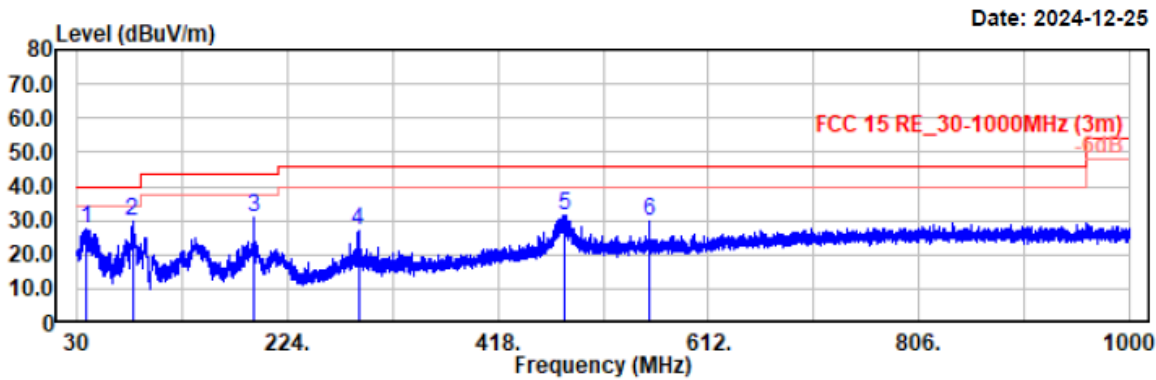


Condition: PK RBW:100kHz VBW:300kHz SWT:auto
QP RBW:120kHz SWT:auto

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°C/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

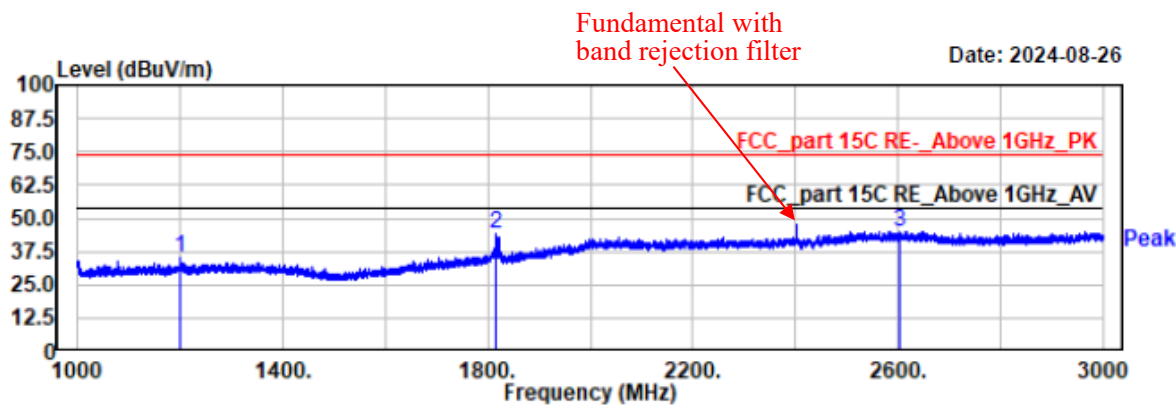
For BLE

EUT operation mode: Transmitting in BLE low channel

EUT Model: PG71

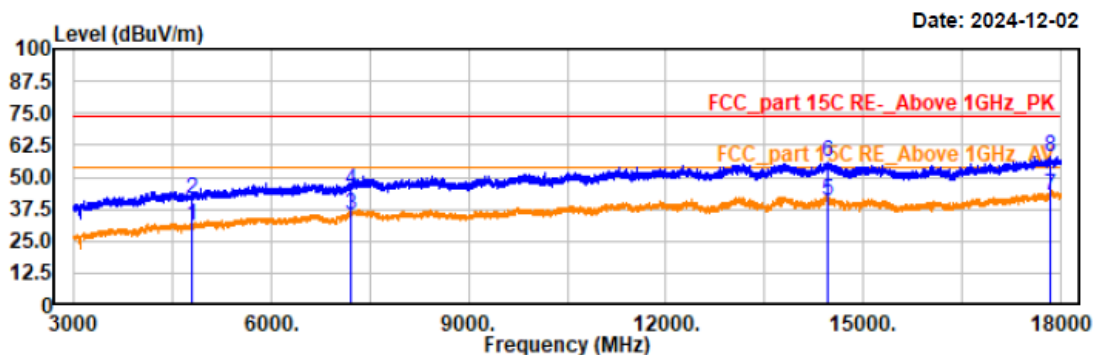
Project No.: XMDN240219-08385E-RF
Test Mode: BLE 2402
EUT Model: PG71
Test distance: 3m

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



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

Temp/Humi/ATM: 23.1°C/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

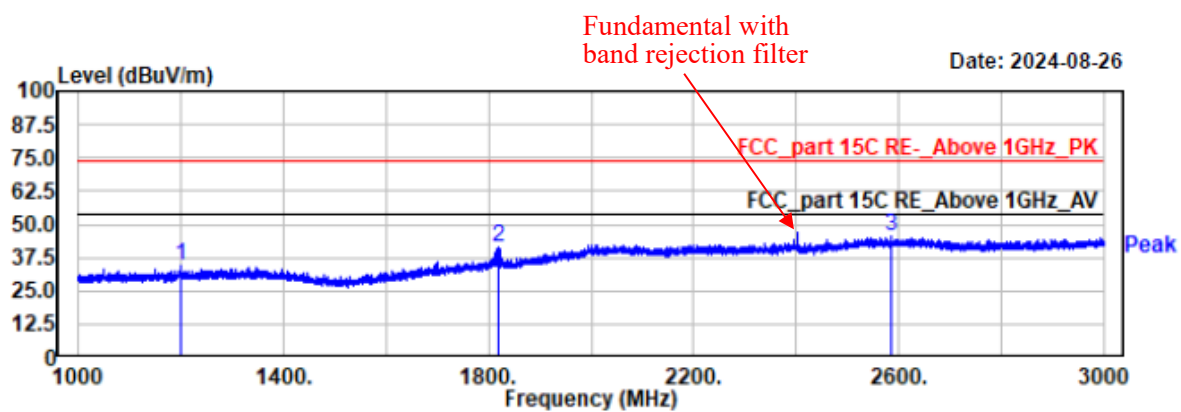
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 23.5°C/53%/100.1kPa

Tested by: Wlif Wu

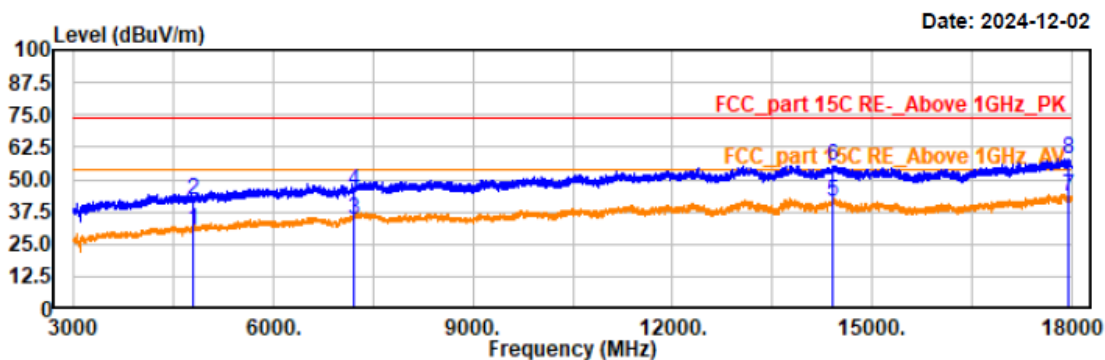
Power Source: DC 48V from PoE



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°C/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

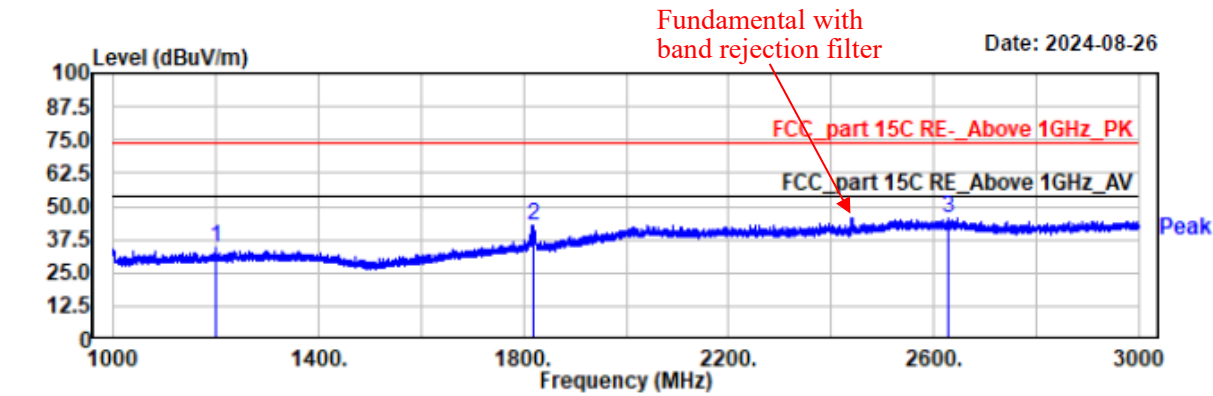
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 23.5°C/53%/100.1kPa

Tested by: Wlif Wu

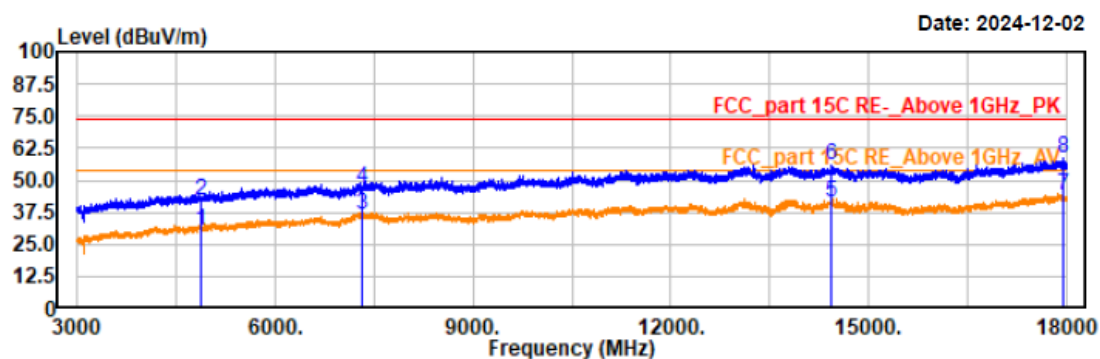
Power Source: DC 48V from PoE



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°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



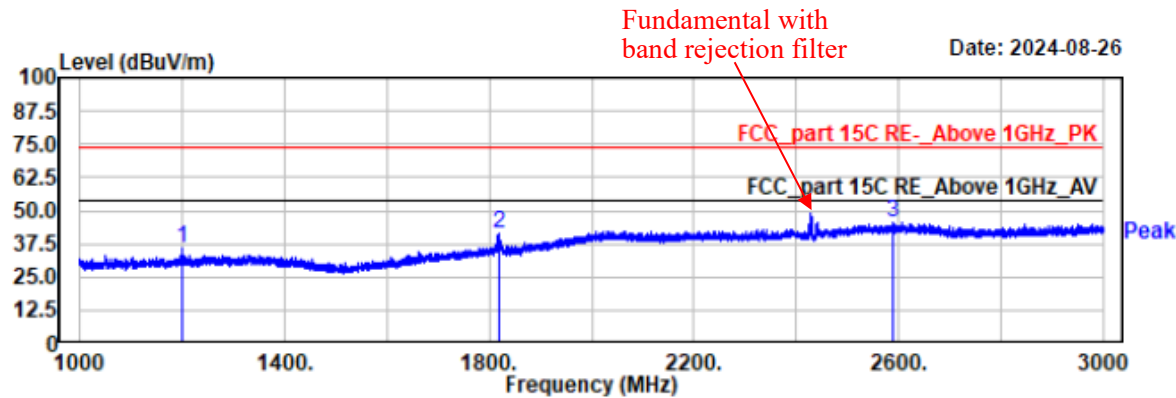
Trace: 1

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

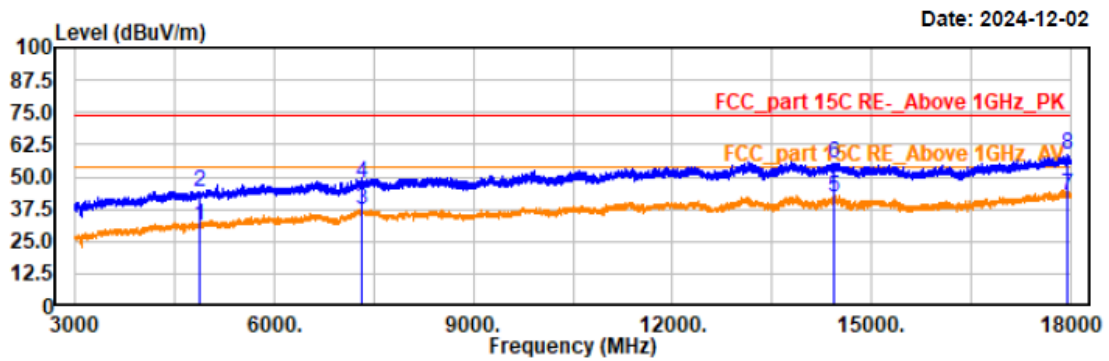
Temp/Humi/ATM: 23.5°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



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°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



Trace: 1

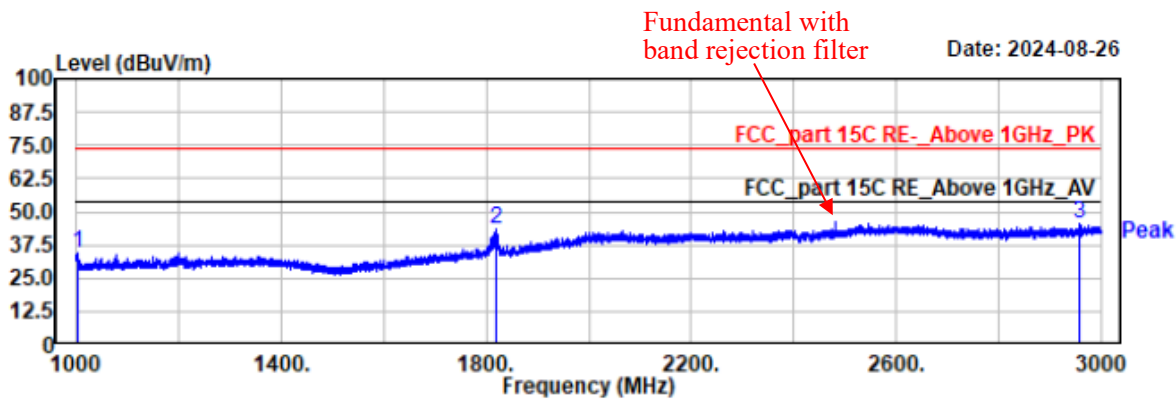
Condition: PK RBW:1MHz VBW:3MHz SWT:auto
AV RBW:1MHz VBW:5kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
4879.50	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°C/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

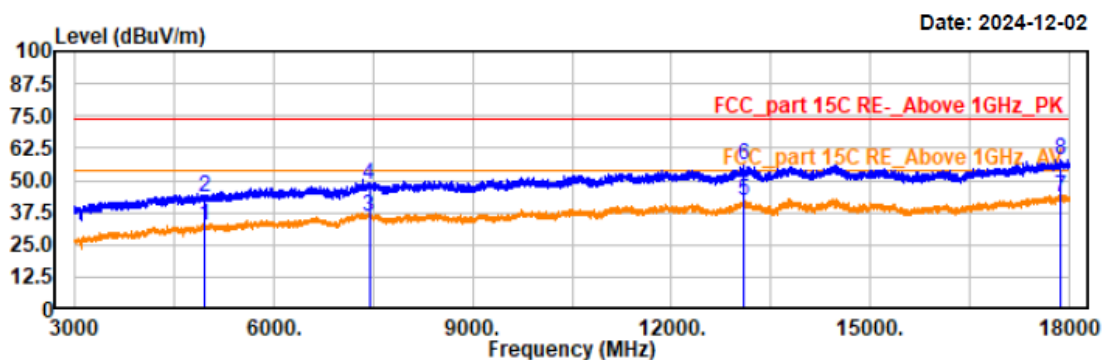
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 23.1°C/53%/100.1kPa

Tested by: Wlif Wu

Power Source: DC 48V from PoE



Trace: 1

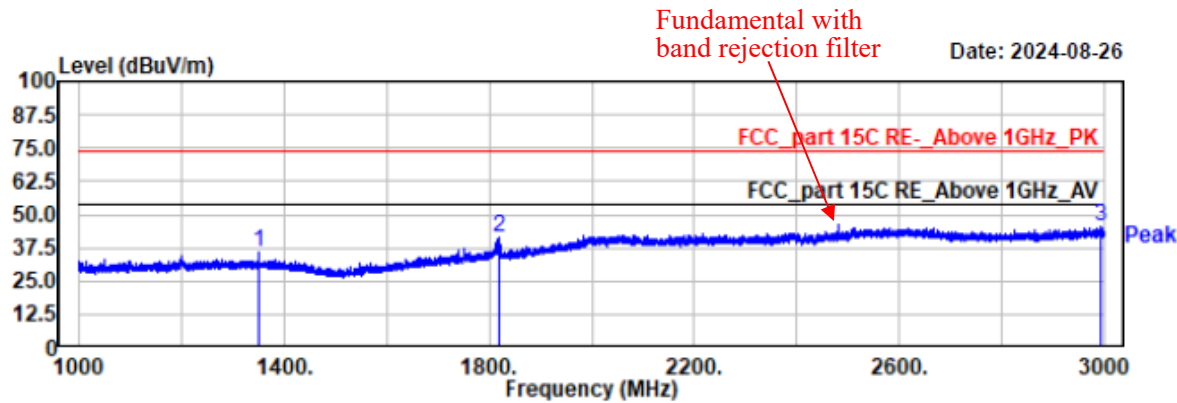
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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

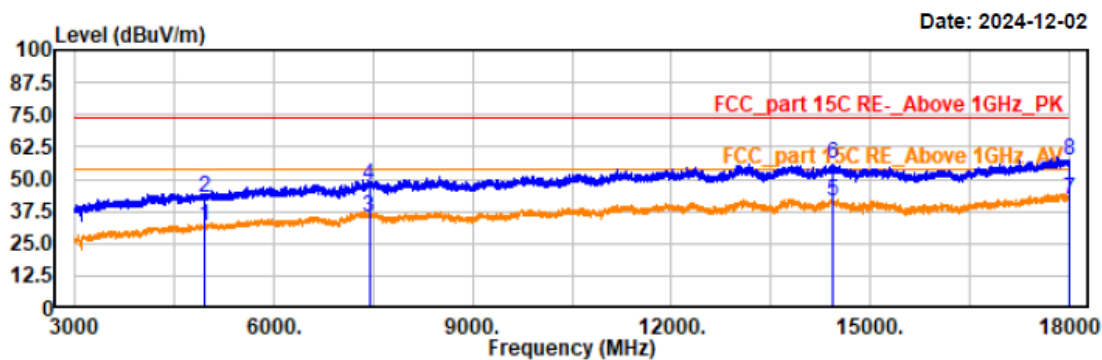
Temp/Humi/ATM: 23.5°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



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°C/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

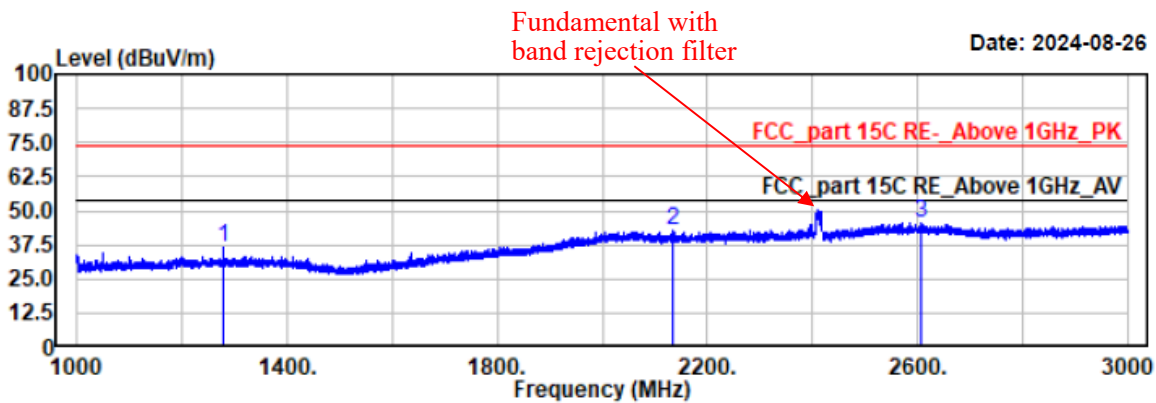
For WIFI:

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°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE

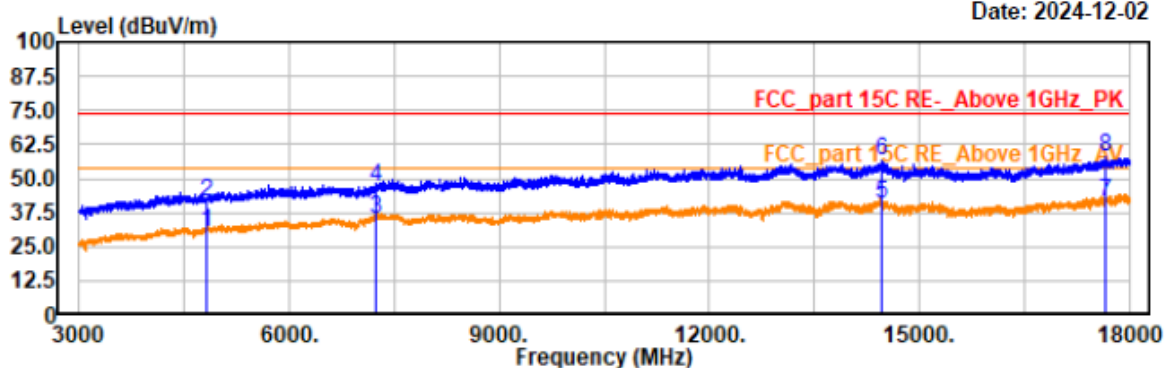


Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
1279.80	52.18	-15.51	36.67	74.00	37.33	horizontal	Peak
2136.00	49.18	-6.73	42.45	74.00	31.55	horizontal	Peak
2606.60	49.10	-3.30	45.80	74.00	28.20	horizontal	Peak

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

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

Date: 2024-12-02



Trace: 1

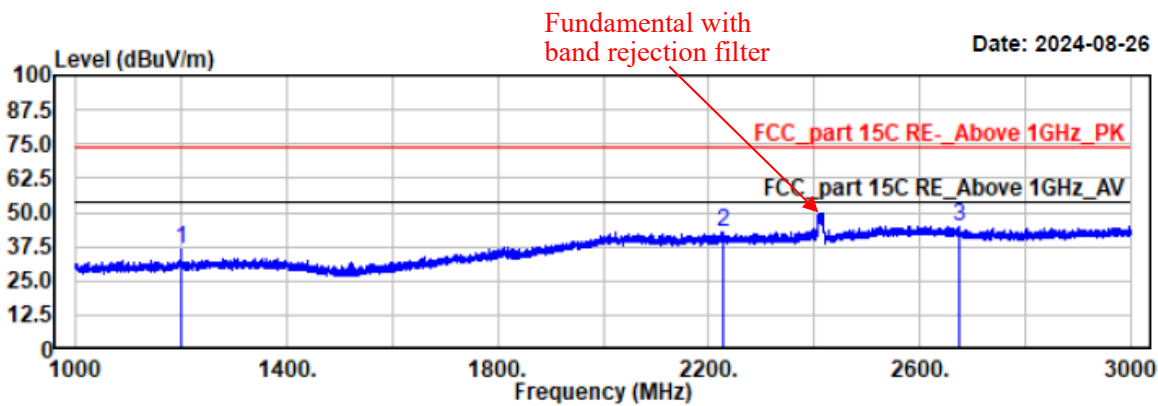
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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

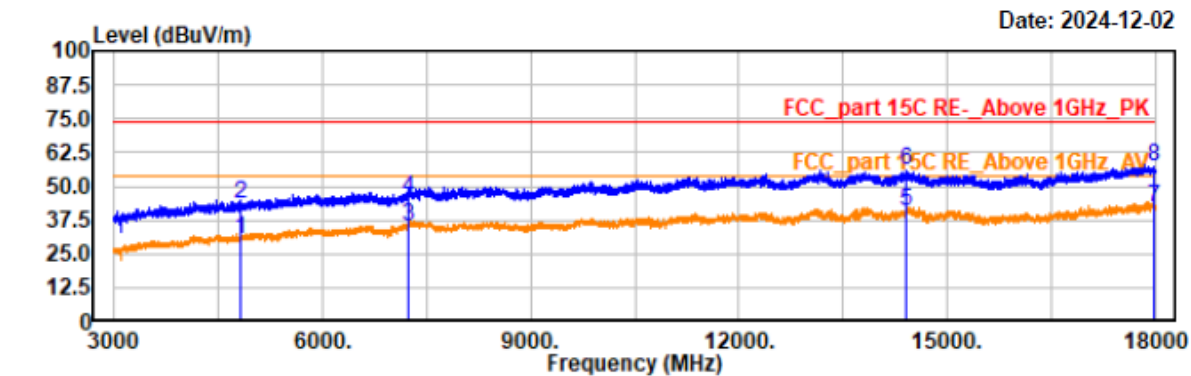
Temp/Humi/ATM: 23.5°C/53%/100.1kPa
Tested by: Wlif Wu
Power Source: DC 48V from PoE



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°C/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	34.75	-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

Temp/Humi/ATM: 23.5°C/53%/100.1kPa

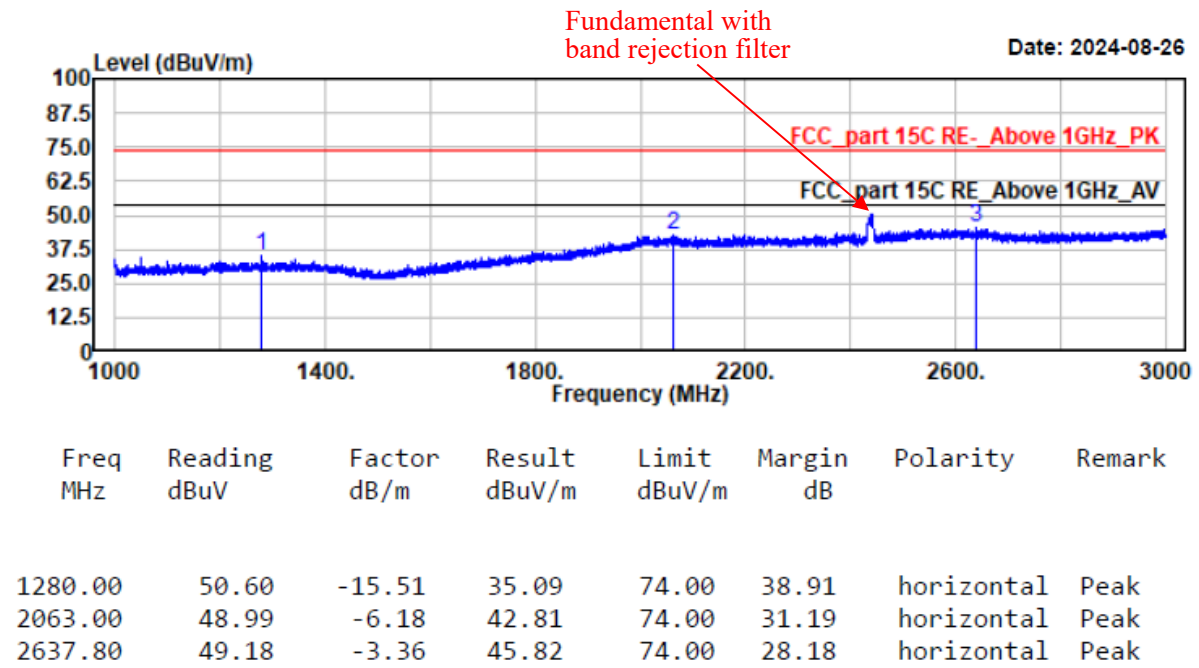
Test Mode: 11b-2437

Tested by: Wlif Wu

EUT Model: PG71

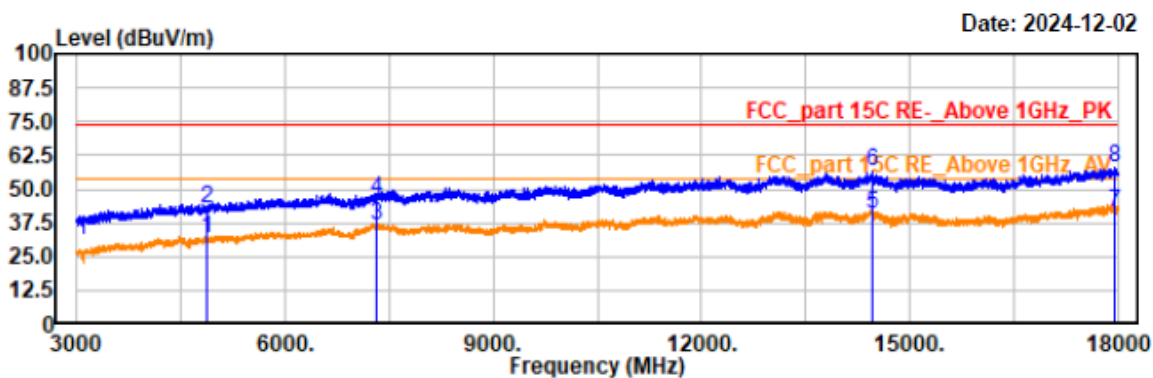
Power Source: DC 48V from PoE

Test distance: 3m



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

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



Trace: 1

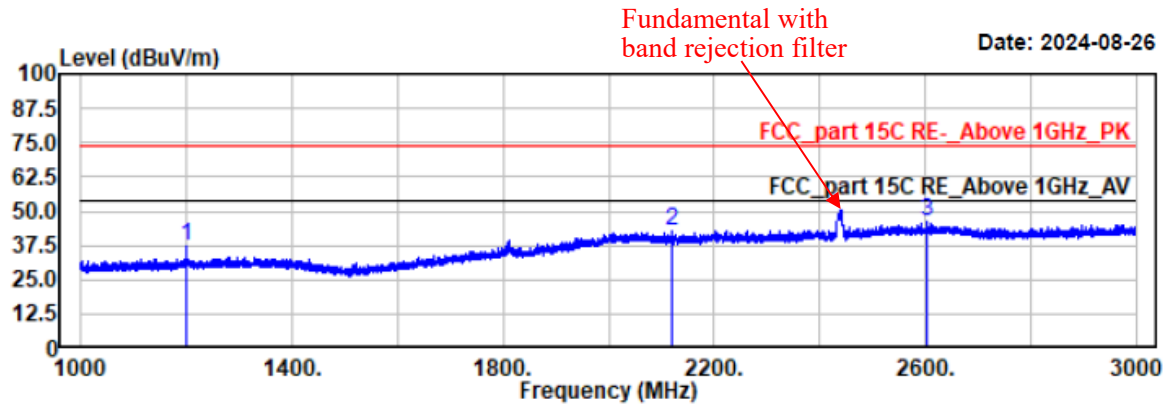
Condition: PK RBW:1MHz VBW:3MHz SWT:auto

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	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°C/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

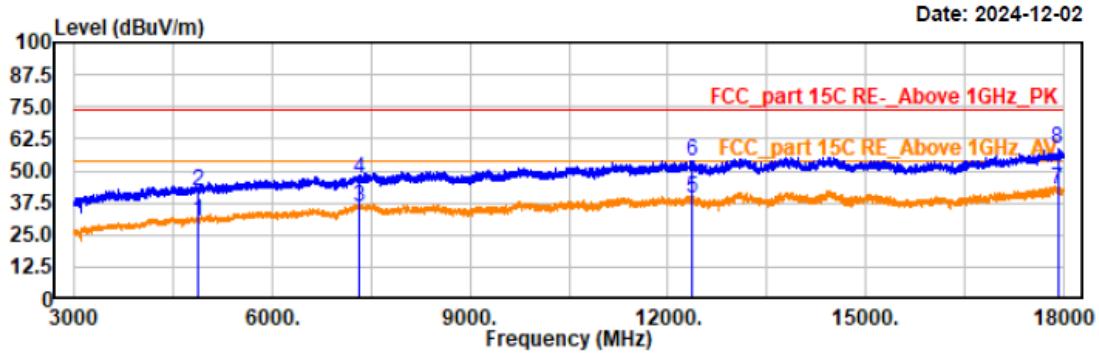
EUT Model: PG71

Test distance: 3m

Temp/Humi/ATM: 23.1°C/53%/100.1kPa

Tested by: Wlif Wu

Power Source: DC 48V from PoE



Trace: 1

Condition: PK RBW:1MHz VBW:3MHz SWT:auto

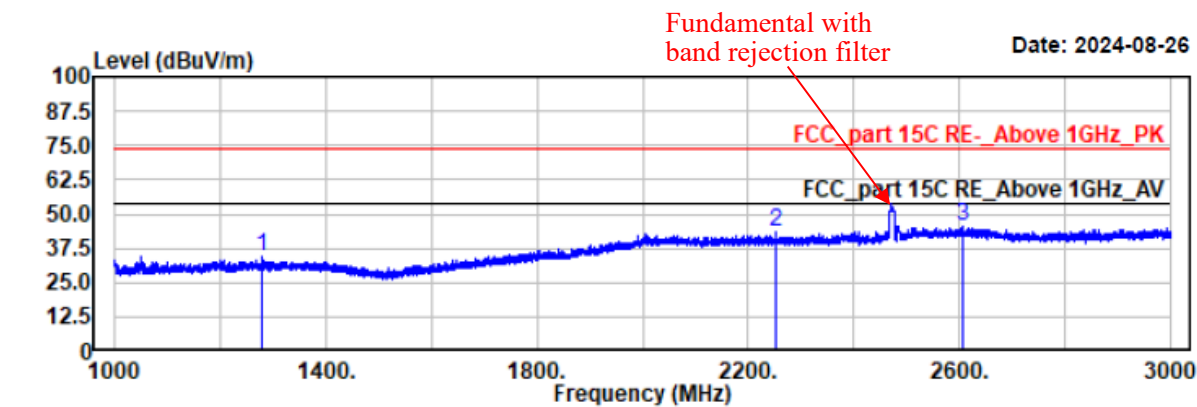
AV RBW:1MHz VBW:5kHz SWT:auto

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°C/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