

RF MEASUREMENT REPORT

FCC ID: 2AXJ4XE75V2
Applicant: TP-Link Corporation Limited
Product: AXE5400 Whole Home Mesh Wi-Fi 6E System
Model No.: Deco XE75, Deco XE5300, Deco XE75 Pro
Brand Name: tp-link
FCC Classification: Digital Transmission System (DTS)
FCC Rule Part(s): Part 15 Subpart C (Section 15.247)
Result: Complies
Received Date: 2022-11-30
Test Date: 2022-12-02 ~ 2022-12-20

Reviewed By:

Kevin Guo

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

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Revision History

| Report No. | Version | Description | Issue Date | Note |
|---------------|---------|----------------|------------|-------|
| 2211RSU084-U1 | V01 | Initial Report | 2023-02-06 | Valid |
| | | | | |

Note: This report is prepared for FCC Class II permissive change supplement based on the FCC ID: 2AXJ4XE75V2, original grant date: November 10, 2022, the changes and verified item refer to the section 2.1 of this report.

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1.4. Product Information

| | |
|---|--|
| Product Name | AXE5400 Whole Home Mesh Wi-Fi 6E System |
| Model No. | Deco XE75, Deco XE5300, Deco XE75 Pro |
| Brand Name | tp-link |
| EUT Identification No. | Sample#1-1 (Conducted) Sample#1-2 (Radiated) |
| Wi-Fi Specification | 802.11a/b/g/n/ac/ax |
| Antenna Information | Refer to section 1.7 |
| Accessory | |
| Adapter | MODEL: T120200-2B4 INPUT: 100 - 240V ~ 50/60Hz 0.8A. OUTPUT: 12.0V==2.0A Cable Out: Non-shielding, 1.2m |
| Note: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer. | |

1.5. Radio Specification under Test

| | |
|--------------------|--|
| Frequency Range | 802.11b/g/n-HT20/ax-HE20: 2412 ~ 2462MHz 802.11n-HT40/ax-HE40: 2422 ~ 2452MHz |
| Channel Number | 802.11b/g/n-HT20/ax-HE20: 11 802.11n-HT40/ax-HE40: 7 |
| Type of Modulation | 802.11b: DSSS 802.11g/n: OFDM 802.11ax: OFDMA |
| Data Rate | 802.11b: 1/2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 300Mbps 802.11ax: up to 574Mbps |

1.6. Working Frequencies

802.11b/g/n-HT20/ax-HE20

| Channel | Frequency | Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|---------|-----------|
| 01 | 2412 MHz | 02 | 2417 MHz | 03 | 2422 MHz |
| 04 | 2427 MHz | 05 | 2432 MHz | 06 | 2437 MHz |
| 07 | 2442 MHz | 08 | 2447 MHz | 09 | 2452 MHz |
| 10 | 2457 MHz | 11 | 2462 MHz | -- | -- |

802.11n-HT40/ax-HE40

| Channel | Frequency | Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|---------|-----------|
| 03 | 2422 MHz | 04 | 2427 MHz | 05 | 2432 MHz |
| 06 | 2437 MHz | 07 | 2442 MHz | 08 | 2447 MHz |
| 09 | 2452 MHz | -- | -- | -- | -- |

1.7. Antenna Details

| Antenna Type | Frequency Band (MHz) | Tx Paths | Max Antenna Gain (dBi) | CDD Directional Gain (dBi) | |
|----------------|----------------------|----------|------------------------|----------------------------|---------|
| | | | | For Power | For PSD |
| Dipole Antenna | 2412 ~ 2462 | 2 | 2.00 | 2.00 | 5.01 |
| | 5150 ~ 5350 | 2 | 1.00 | 1.00 | 4.01 |
| | 5725 ~ 5850 | 2 | 1.00 | 1.00 | 4.01 |

Note:

The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

If all antennas have the same gain, G_{ANT} , Directional gain = $G_{ANT} + \text{Array Gain}$, where Array Gain is as follows.

- For power spectral density (PSD) measurements on all devices,
Array Gain = $10 \log (N_{ANT} / N_{SS})$ dB;
- For power measurements on IEEE 802.11 devices,
- Array Gain = 0 dB for $N_{ANT} \leq 4$;

2. Test Configuration

2.1. Test Details for Class II Perssive Change

| C2PC Change List | Verified Test Item | Remark |
|---|---|---|
| Add “Deco XE75 Pro” in model names, the difference with previous models “Deco XE75, Deco XE5300” as follows: <ol style="list-style-type: none"> 1. Ethernet chip is changed. 2. The color and size of RJ45 connector is different. 3. Wi-Fi 5G RF trace is moved. 4. Shielding case of Wi-Fi 2G is different. | Output Power | 1. The output power: one channel of each mode was verified. |
| | General Field Strength (Restricted Bands and Radiated Emission) | 2. Radiated Emission: worst case channel was verified. |

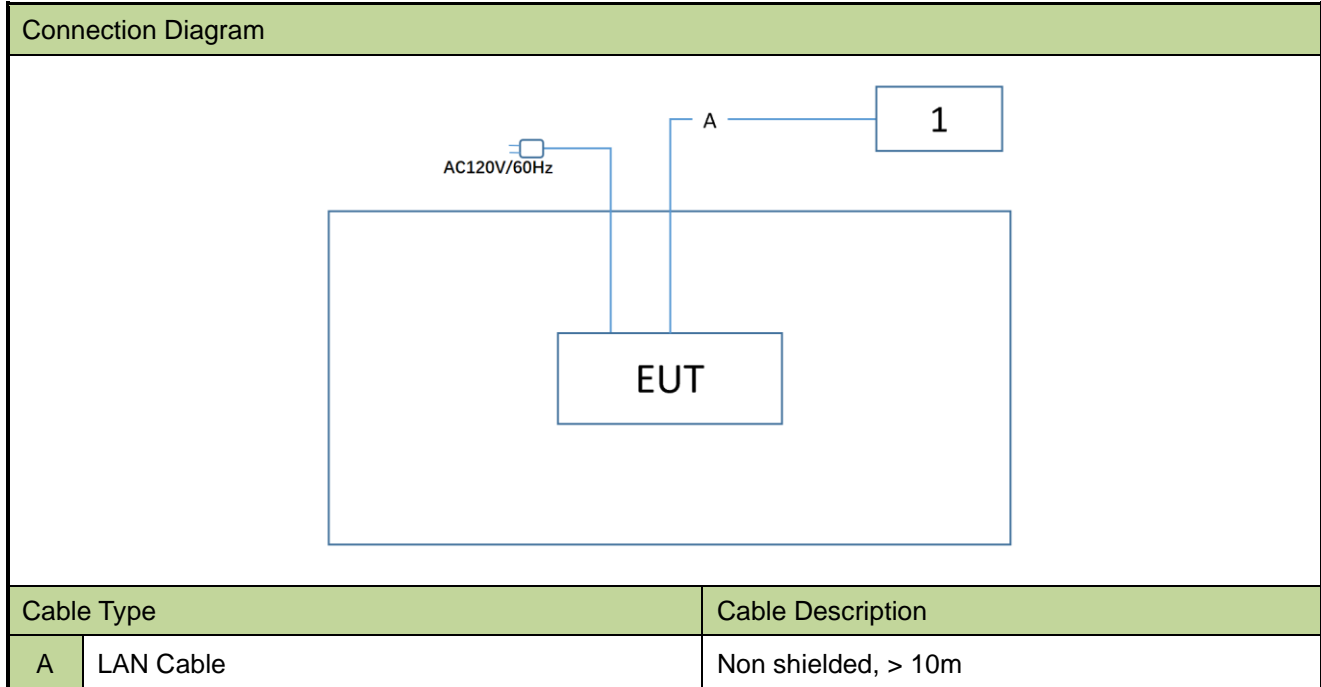
Note: This product is an extension based on the FCC ID: 2AXJ4XE75V2, original grant date: November 10, 2022, the changes and verified item refer to the table as above.

2.2. Test Mode

| CDD Mode |
|---|
| Mode 1: Transmit by 802.11b_N _{SS} =1 (1Mbps) |
| Mode 2: Transmit by 802.11g_N _{SS} =1 (6Mbps) |
| Mode 3: Transmit by 802.11n-HT20_N _{SS} =1 (MCS0) |
| Mode 4: Transmit by 802.11n-HT40_N _{SS} =1 (MCS0) |
| Mode 5: Transmit by 802.11ax-HE20_N _{SS} =1 (MCS0) |
| Mode 6: Transmit by 802.11ax-HE40_N _{SS} =1 (MCS0) |
| Remark: <ol style="list-style-type: none"> 1. For Radiated emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power. 2. For CDD mode, this device supports 2 N_{SS} and power level is the same of spatial multiplexing. The worst case is N_{SS}=1. 3. EUT supports one configuration only in 802.11ax full RU mode. |

2.3. Test System Connection Diagram

The device was tested per the guidance ANSI C63.10: 2013 was used to reference the appropriate EUT setup for radiated emissions testing and AC line conducted testing.



2.4. Test System Details

| Product | Manufacturer | Model No. |
|--------------|--------------|-----------|
| 1 Notebook | Lenovo | E431 |

2.5. Test Software

The test utility software used during testing was “QSPR”, the version is ver5.0-00188.

2.6. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15.247
- KDB 558074 D01v05r02
- KDB 662911 D01v02r01
- ANSI C63.10-2013

2.7. Test Environment Condition

| | |
|---------------------|------------|
| Ambient Temperature | 15 ~ 35°C |
| Relative Humidity | 20 ~ 75%RH |

3. Antenna Requirements

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 antenna of the device is **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The unit complies with the requirement of §15.203.

4. Measuring Instrument

| Instrument | Manufacturer | Model No. | Asset No. | Cali. Interval | Cali. Due Date | Test Site |
|---------------------|--------------|-------------|-------------|----------------|----------------|---------------|
| Horn Antenna | Schwarzbeck | BBHA 9170 | MRTSUE06292 | 1 year | 2023-10-18 | NS-AC1 |
| Anechoic Chamber | BOOMWAVE | NS-AC1 | MRTSUE06496 | 1 year | 2023-07-23 | NS-AC1 |
| Horn Antenna | Schwarzbeck | BBHA 9120D | MRTSUE06572 | 1 year | 2023-04-01 | NS-AC1 |
| TRILOG Antenna | Schwarzbeck | VULB 9162 | MRTSUE06573 | 1 year | 2023-06-21 | NS-AC1 |
| | | | | | | |
| Preamplifier | Schwarzbeck | BBV 9718 | MRTSUE06574 | 1 year | 2023-07-11 | NS-AC1 |
| EMI Test Receiver | R&S | ESR3 | MRTSUE06575 | 1 year | 2023-06-19 | NS-AC1 |
| Preamplifier | EMCI | EMC184045SE | MRTSUE06641 | 1 year | 2023-01-13 | NS-AC1 |
| Thermohygrometer | testo | 608-H1 | MRTSUE11020 | 1 year | 2023-05-15 | NS-AC1 |
| Thermohygrometer | testo | 608-H1 | MRTSUE11104 | 1 year | 2023-05-03 | NS-AC1 |
| Signal Analyzer | Agilent | N9010A | MRTSUE06195 | 1 year | 2023-04-13 | NS-AC1/NS-TR2 |
| Signal Analyzer | Keysight | N9020A | MRTSUE10065 | 1 year | 2023-01-11 | NS-AC1/NS-TR2 |
| USB Power Sensor | Keysight | U2021XA | MRTSUE06581 | 1 year | 2023-07-13 | NS-TR2 |
| Thermohygrometer | DELI | NO.8813 | MRTSUE06783 | 1 year | 2023-04-14 | NS-TR2 |
| Temperature Chamber | OUKE | OK-TH-100C | MRTSUE06899 | 1 year | 2023-07-13 | NS-TR2 |

| Software | Version | Function |
|---------------------|---------|-------------------|
| EMI Software | V3.0.0 | EMI Test Software |
| Agilent Power Panel | V 3.9 | Power |

5. Decision Rules and Measurement Uncertainty

5.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

| |
|--|
| AC Conducted Emission Measurement |
| Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 9kHz~150kHz: 3.74dB 150kHz~30MHz: 3.44dB |
| Radiated Disturbance |
| Measurement Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): Horizontal: 30MHz~300MHz: 5.04dB 300MHz~1GHz: 4.95dB 1GHz~40GHz: 6.40dB Vertical: 30MHz~300MHz: 5.24dB 300MHz~1GHz: 6.03dB 1GHz~40GHz: 6.40dB |
| Spurious Emissions, Conducted |
| Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.78dB |
| Output Power |
| Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 1.13dB |
| Power Spectrum Density |
| Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 1.15dB |
| Occupied Bandwidth |
| Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 0.28% |

6. Test Result

6.1. Summary

| FCC Section(s) | Test Description | Test Condition | Verdict |
|------------------|---|----------------|---------|
| 15.247(b)(3) | Output Power | Conducted | Pass |
| 15.205 15.209 | General Field Strength (Restricted Bands and Radiated Emission) | Radiated | Pass |

Note:

1. The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.

6.2. Output Power Measurement

6.2.1. Test Limit

The maximum output power shall be less 1 Watt (30dBm).

The conducted output power limit specified in paragraph FCC Part 15.247(b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs FCC Part 15.247(b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.2.2. Test Procedure

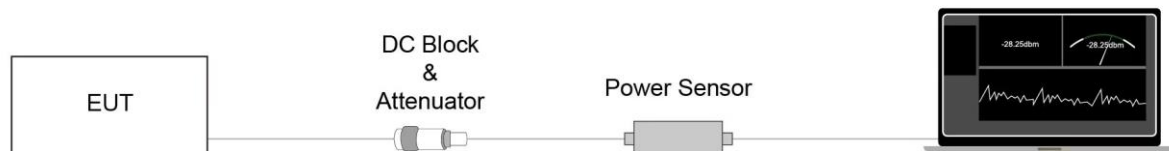
ANSI C63.10 - 2013 - Section 11.9.2.3.2

6.2.3. Test Setting

Average Power Measurement

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

6.2.4. Test Setup



6.2.5. Test Result

Refer to Appendix A.1.

6.3. Radiated Spurious Emission Measurement

6.3.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

| FCC Part 15 Subpart C Paragraph 15.209 | | |
|--|--------------------------|-------------------------------|
| Frequency [MHz] | Field Strength [uV/m] | Measured Distance [Meters] |
| 0.009 - 0.490 | 2400/F (kHz) | 300 |
| 0.490 - 1.705 | 24000/F (kHz) | 30 |
| 1.705 - 30 | 30 | 30 |
| 30 - 88 | 100 | 3 |
| 88 - 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

6.3.2. Test Procedure

ANSI C63.10 - 2013 - Section 11.11 & 11.12

ANSI C63.10 - 2013 - Section 6.3 (General Requirements)

ANSI C63.10 - 2013 - Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 - 2013 - Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 - 2013 - Section 6.6 (Standard test method above 1GHz)

6.3.3. Test Setting

Table 1 - RBW as a function of frequency

| Frequency | RBW |
|---------------|---------------|
| 9 ~ 150 kHz | 200 ~ 300 Hz |
| 0.15 ~ 30 MHz | 9 ~ 10 kHz |
| 30 ~ 1000 MHz | 100 ~ 120 kHz |
| > 1000MHz | 1MHz |

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

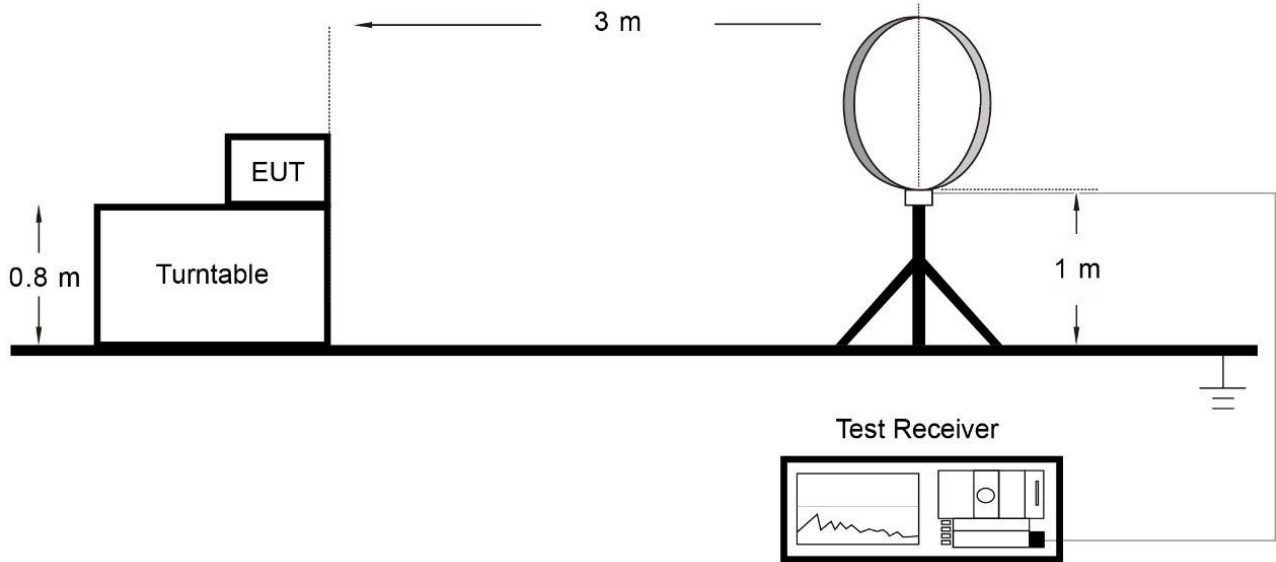
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

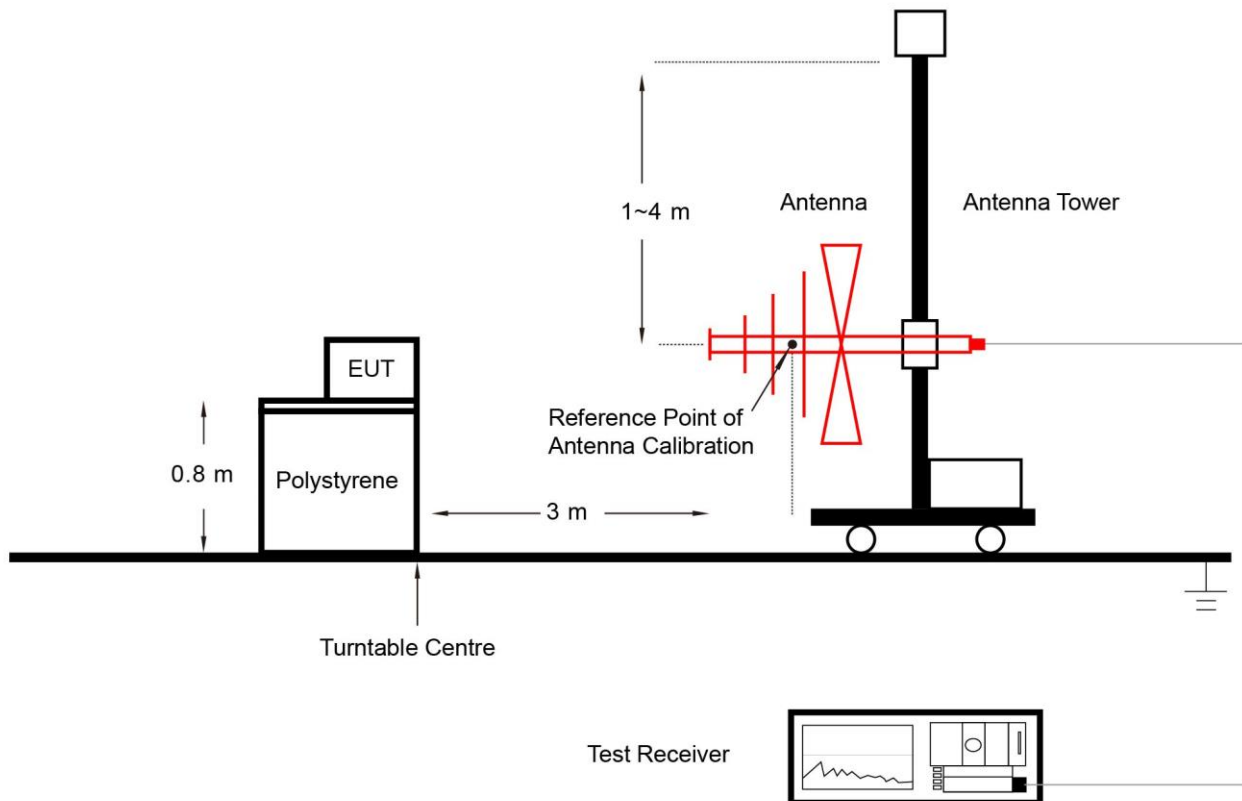
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.3.4. Test Setup

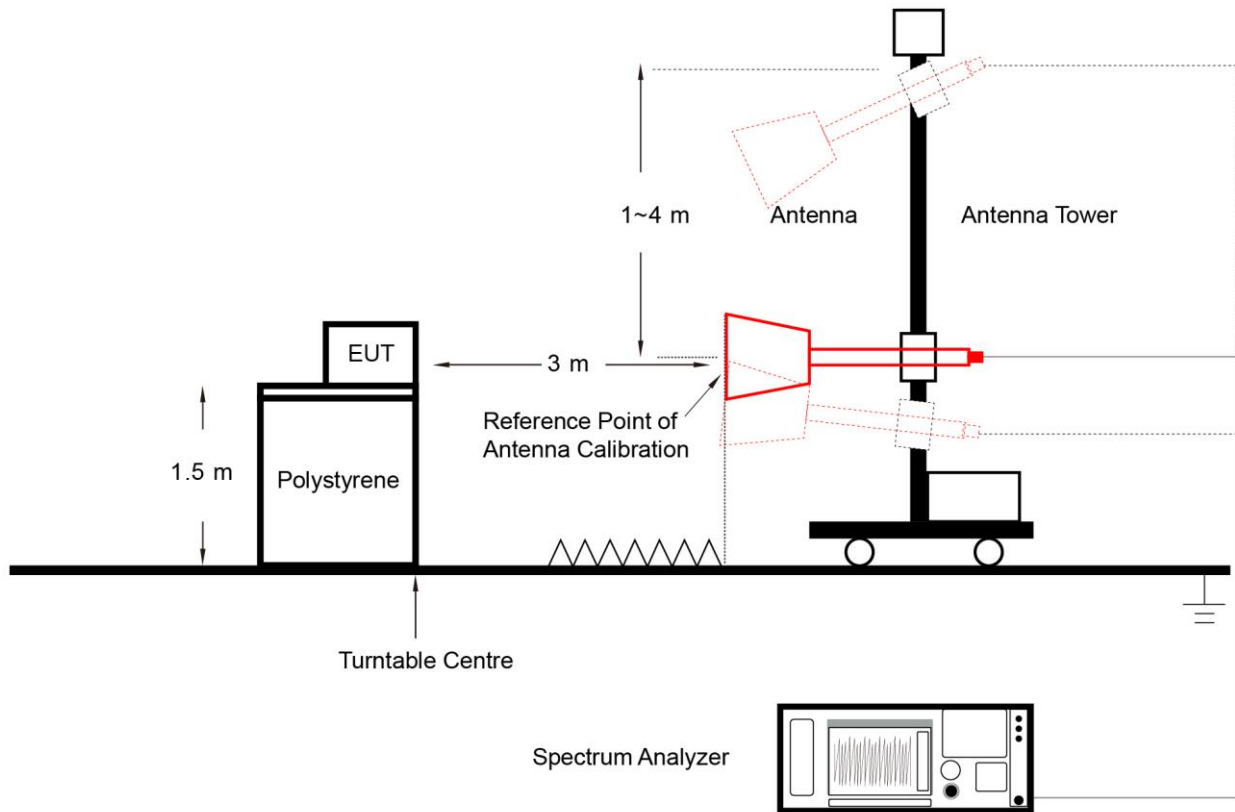
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.3.5. Test Result

Refer to Appendix A.2.

6.4. Radiated Restricted Band Edge Measurement

6.4.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

| Frequency (MHz) | Frequency (MHz) | Frequency (MHz) | Frequency (GHz) |
|----------------------------|-----------------------|--------------------|--------------------|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| ¹ 0.495 - 0.505 | 16.69475 - 16.69525 | 608 - 614 | 5.35 - 5.46 |
| 2.1735 - 2.1905 | 16.80425 - 16.80475 | 960 - 1240 | 7.25 - 7.75 |
| 4.125 - 4.128 | 25.5 - 25.67 | 1300 - 1427 | 8.025 - 8.5 |
| 4.17725 - 4.17775 | 37.5 - 38.25 | 1435 - 1626.5 | 9.0 - 9.2 |
| 4.20725 - 4.20775 | 73 - 74.6 | 1645.5 - 1646.5 | 9.3 - 9.5 |
| 6.215 - 6.218 | 74.8 - 75.2 | 1660 - 1710 | 10.6 - 12.7 |
| 6.26775 - 6.26825 | 108 - 121.94 | 1718.8 - 1722.2 | 13.25 - 13.4 |
| 6.31175 - 6.31225 | 123 - 138 | 2200 - 2300 | 14.47 - 14.5 |
| 8.291 - 8.294 | 149.9 - 150.05 | 2310 - 2390 | 15.35 - 16.2 |
| 8.362 - 8.366 | 156.52475 - 156.52525 | 2483.5 - 2500 | 17.7 - 21.4 |
| 8.37625 - 8.38675 | 156.7 - 156.9 | 2690 - 2900 | 22.01 - 23.12 |
| 8.41425 - 8.41475 | 162.0125 - 167.17 | 3260 - 3267 | 23.6 - 24.0 |
| 12.29 - 12.293 | 167.72 - 173.2 | 3332 - 3339 | 31.2 - 31.8 |
| 12.51975 - 12.52025 | 240 - 285 | 3345.8 - 3358 | 36.43 - 36.5 |
| 12.57675 - 12.57725 | 322 - 335.4 | 3600 - 4400 | (²) |
| 13.36 - 13.41 | -- | -- | -- |

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

| FCC Part 15 Subpart C Paragraph 15.209 | | |
|---|--------------------------|-------------------------------|
| Frequency [MHz] | Field Strength [uV/m] | Measured Distance [Meters] |
| 0.009 - 0.490 | 2400/F (kHz) | 300 |
| 0.490 - 1.705 | 24000/F (kHz) | 30 |
| 1.705 - 30 | 30 | 30 |
| 30 - 88 | 100 | 3 |
| 88 - 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

6.4.2. Test Procedure

ANSI C63.10-2013 Section 6.3 & 6.6 & 11.13

6.4.3. Test Setting

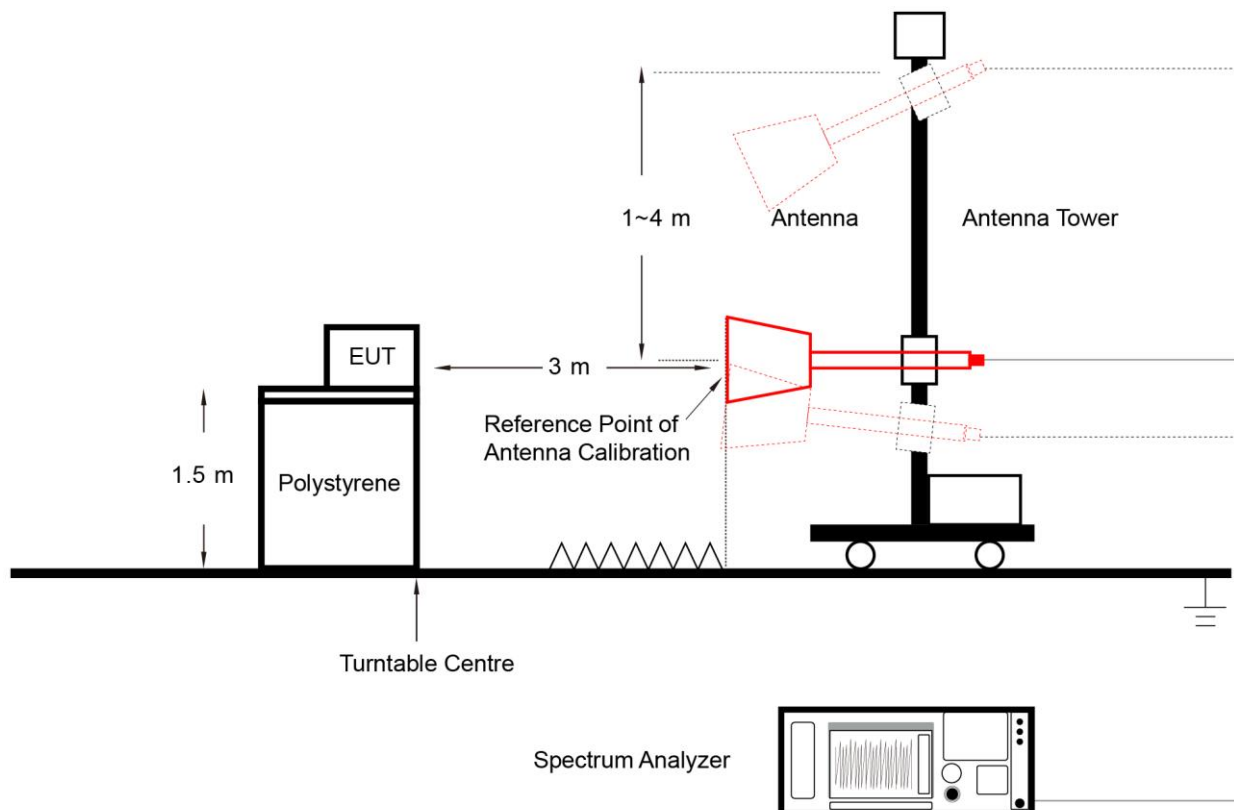
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

6.4.4. Test Setup



6.4.5. Test Result

Refer to Appendix A.3.

Appendix A – Test Result

A.1 Output Power Test Result

| | | | |
|-----------|------------|---------------|-----------|
| Test Site | NS-TR2 | Test Engineer | Flag Yang |
| Test Date | 2022-12-02 | | |

| Test Mode | Data Rate/ MCS | Channel No. | Freq. (MHz) | Average Power (dBm) | | Total Average Power (dBm) | Limit (dBm) |
|-----------|-------------------|-------------|----------------|------------------------|-------|---------------------------------|----------------|
| | | | | Ant 0 | Ant 1 | | |
| 11b | 1Mbps | 06 | 2437 | 26.21 | 26.07 | 29.15 | ≤ 30.00 |
| 11g | 6Mbps | 06 | 2437 | 25.24 | 25.56 | 28.41 | ≤ 30.00 |
| 11n-HT20 | MCS0 | 06 | 2437 | 26.01 | 26.24 | 29.14 | ≤ 30.00 |
| 11n-HT40 | MCS0 | 06 | 2437 | 24.95 | 25.16 | 28.07 | ≤ 30.00 |
| 11ax-HE20 | MCS0 | 06 | 2437 | 25.75 | 26.36 | 29.08 | ≤ 30.00 |
| 11ax-HE40 | MCS0 | 06 | 2437 | 24.94 | 25.31 | 28.14 | ≤ 30.00 |

Note: Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$.

A.2 Radiated Spurious Emission Test Result

| | | | |
|-----------|---|---------------|-----------|
| Test Site | NS-AC1 | Test Engineer | Flag Yang |
| Test Date | 2022/12/20 | Test Mode: | 802.11b |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

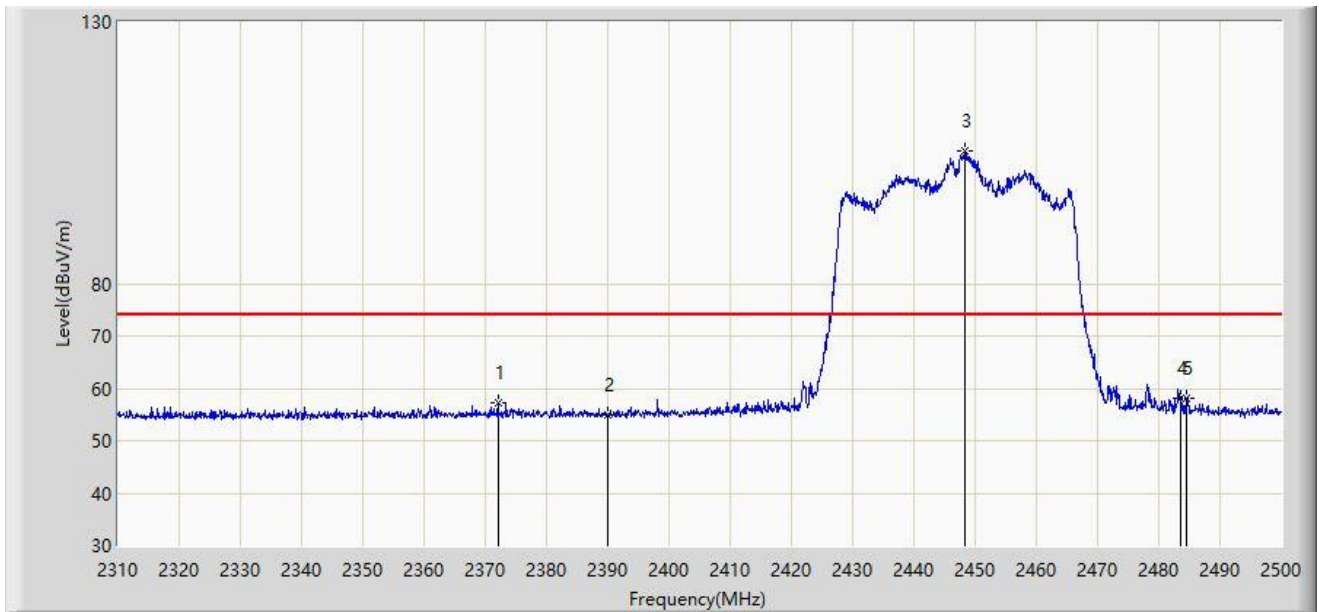
| Test Channel | Frequency (MHz) | Reading Level (dB μ V) | Factor (dB/m) | Measure Level (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Detector | Polarization |
|--------------|-----------------|----------------------------|---------------|------------------------------|----------------------|-------------|----------|--------------|
| 01 | 7239.000 | 41.3 | 9.2 | 50.5 | 74 | -17.745 | Peak | Horizontal |
| | 9644.500 | 48.6 | 11.8 | 60.4 | 74 | -7.872 | Peak | Horizontal |
| | 12066.150 | 35.2 | 15.2 | 50.4 | 54 | -3.591 | Average | Horizontal |
| | 12067.000 | 38.9 | 15.2 | 54.1 | 74 | -19.907 | Peak | Horizontal |
| | 9653.000 | 46.9 | 11.9 | 58.8 | 74 | -9.371 | Peak | Vertical |
| | 12067.000 | 36.7 | 15.2 | 51.9 | 74 | -22.094 | Peak | Vertical |
| | 14472.500 | 37.6 | 18.1 | 55.7 | 74 | -18.285 | Peak | Vertical |
| | 14474.862 | 32.3 | 18.2 | 50.5 | 54 | -3.575 | Average | Vertical |

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

A.3 Radiated Restricted Band Edge Test Result

| | |
|---|--------------------------|
| Site: NS-AC1 | Time: 2022/12/20 - 15:11 |
| Limit: FCC_2.4G_RE(3m) | Engineer: Flag Yang |
| Probe: NS-AC1_BBHA9120D_2111_1-18GHz | Polarity: Horizontal |
| EUT: AXE5400 Whole Home Mesh Wi-Fi 6E System | Power: AC 120V/60Hz |
| Test Mode: Transmit by 802.11ax-HE40 at 2447MHz | |



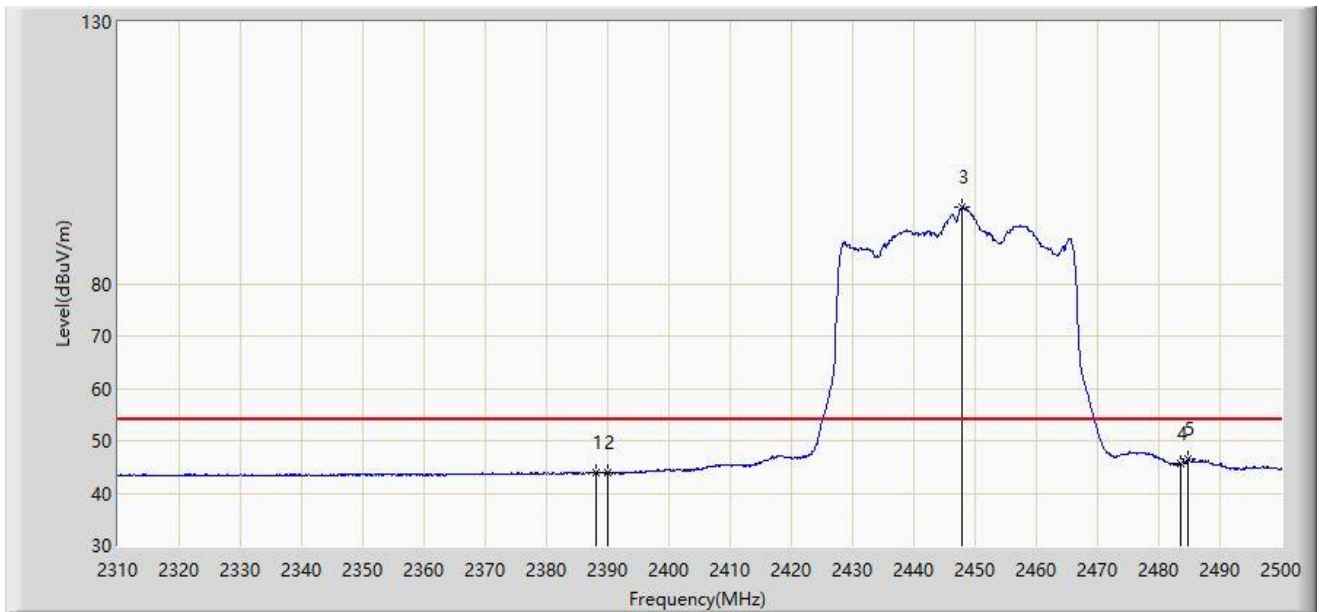
| No | Mark | Frequency (MHz) | Measure Level (dB μ V/m) | Reading Level (dB μ V) | Margin (dB) | Limit (dB μ V/m) | Factor (dB/m) | Type |
|----|------|-----------------|------------------------------|----------------------------|-------------|----------------------|---------------|------|
| 1 | | 2372.035 | 57.339 | 26.434 | -16.661 | 74.000 | 30.905 | PK |
| 2 | | 2390.000 | 54.886 | 24.063 | -19.114 | 74.000 | 30.823 | PK |
| 3 | | 2448.415 | 105.338 | 74.513 | N/A | N/A | 30.825 | PK |
| 4 | | 2483.500 | 58.039 | 27.304 | -15.961 | 74.000 | 30.734 | PK |
| 5 | * | 2484.420 | 58.114 | 27.379 | -15.886 | 74.000 | 30.735 | PK |

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

| | |
|---|--------------------------|
| Site: NS-AC1 | Time: 2022/12/20 - 15:22 |
| Limit: FCC_2.4G_RE(3m) | Engineer: Flag Yang |
| Probe: NS-AC1_BBHA9120D_2111_1-18GHz | Polarity: Horizontal |
| EUT: AXE5400 Whole Home Mesh Wi-Fi 6E System | Power: AC 120V/60Hz |
| Test Mode: Transmit by 802.11ax-HE40 at 2447MHz | |



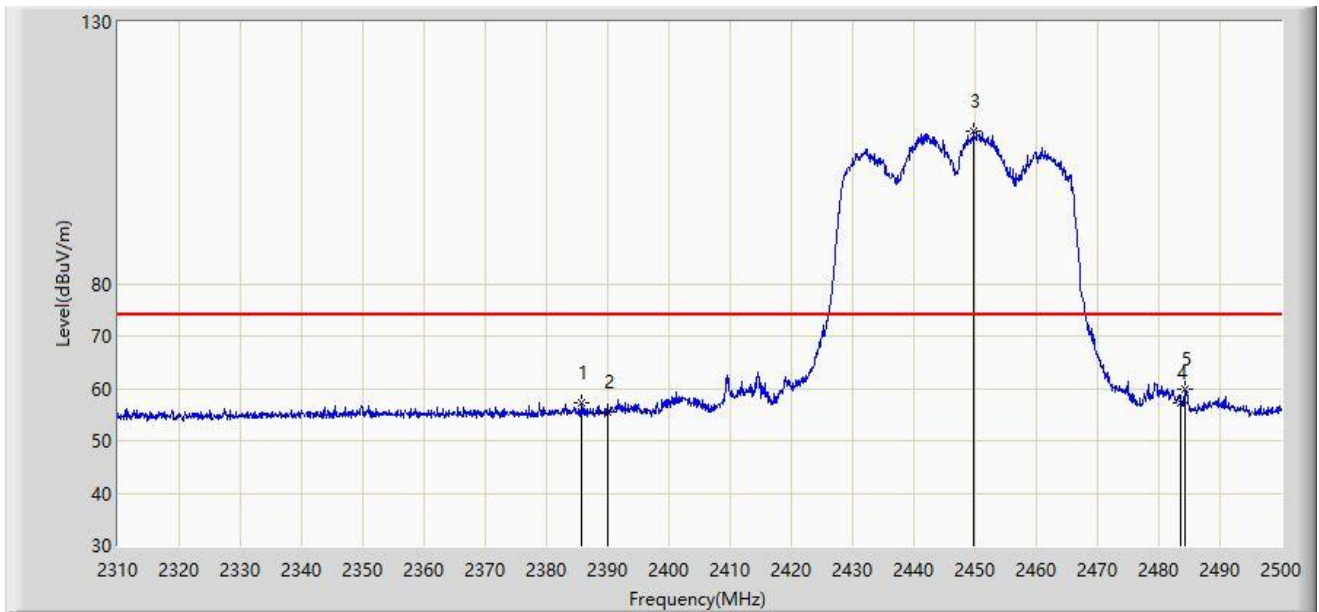
| No | Mark | Frequency (MHz) | Measure Level (dB μ V/m) | Reading Level (dB μ V) | Margin (dB) | Limit (dB μ V/m) | Factor (dB/m) | Type |
|----|------|-----------------|------------------------------|----------------------------|-------------|----------------------|---------------|------|
| 1 | | 2388.090 | 44.013 | 13.173 | -9.987 | 54.000 | 30.840 | AV |
| 2 | | 2390.000 | 43.861 | 13.038 | -10.139 | 54.000 | 30.823 | AV |
| 3 | | 2447.845 | 94.667 | 63.843 | N/A | N/A | 30.823 | AV |
| 4 | | 2483.500 | 45.757 | 15.022 | -8.243 | 54.000 | 30.734 | AV |
| 5 | * | 2484.800 | 46.413 | 15.678 | -7.587 | 54.000 | 30.736 | AV |

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

| | |
|---|--------------------------|
| Site: NS-AC1 | Time: 2022/12/20 - 15:27 |
| Limit: FCC_2.4G_RE(3m) | Engineer: Flag Yang |
| Probe: NS-AC1_BBHA9120D_2111_1-18GHz | Polarity: Vertical |
| EUT: AXE5400 Whole Home Mesh Wi-Fi 6E System | Power: AC 120V/60Hz |
| Test Mode: Transmit by 802.11ax-HE40 at 2447MHz | |



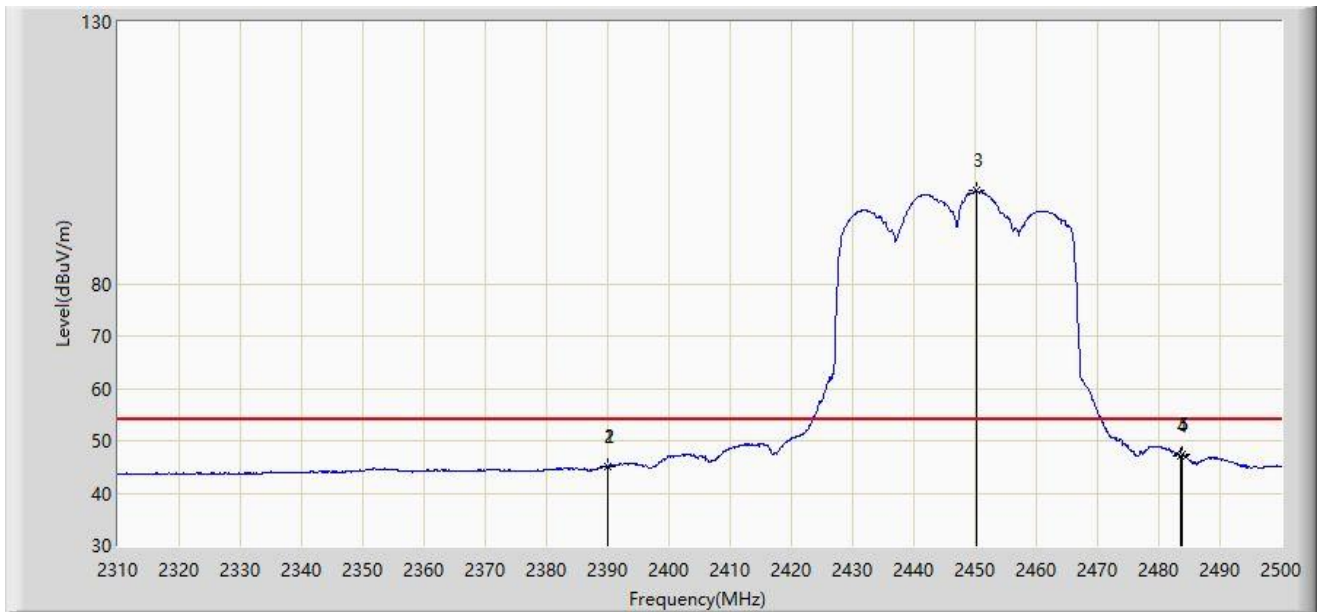
| No | Mark | Frequency (MHz) | Measure Level (dBμV/m) | Reading Level (dBμV) | Margin (dB) | Limit (dBμV/m) | Factor (dB/m) | Type |
|----|------|-----------------|------------------------|----------------------|-------------|----------------|---------------|------|
| 1 | | 2385.620 | 57.216 | 26.354 | -16.784 | 74.000 | 30.862 | PK |
| 2 | | 2390.000 | 55.466 | 24.643 | -18.534 | 74.000 | 30.823 | PK |
| 3 | | 2449.745 | 109.183 | 78.356 | N/A | N/A | 30.828 | PK |
| 4 | | 2483.500 | 57.335 | 26.600 | -16.665 | 74.000 | 30.734 | PK |
| 5 | * | 2484.325 | 59.975 | 29.240 | -14.025 | 74.000 | 30.735 | PK |

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

| | |
|---|--------------------------|
| Site: NS-AC1 | Time: 2022/12/20 - 15:29 |
| Limit: FCC_2.4G_RE(3m) | Engineer: Flag Yang |
| Probe: NS-AC1_BBHA9120D_2111_1-18GHz | Polarity: Vertical |
| EUT: AXE5400 Whole Home Mesh Wi-Fi 6E System | Power: AC 120V/60Hz |
| Test Mode: Transmit by 802.11ax-HE40 at 2447MHz | |



| No | Mark | Frequency (MHz) | Measure Level (dB μ V/m) | Reading Level (dB μ V) | Margin (dB) | Limit (dB μ V/m) | Factor (dB/m) | Type |
|----|------|-----------------|------------------------------|----------------------------|-------------|----------------------|---------------|------|
| 1 | | 2389.990 | 45.169 | 14.346 | -8.831 | 54.000 | 30.823 | AV |
| 2 | | 2390.000 | 45.164 | 14.341 | -8.836 | 54.000 | 30.823 | AV |
| 3 | | 2450.220 | 97.795 | 66.967 | N/A | N/A | 30.828 | AV |
| 4 | | 2483.500 | 47.170 | 16.435 | -6.830 | 54.000 | 30.734 | AV |
| 5 | * | 2483.755 | 47.347 | 16.612 | -6.653 | 54.000 | 30.735 | AV |

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Appendix B – Test Setup Photograph

Refer to “2211RSU084-UT” file.

Appendix C – EUT Photograph

Refer to “2211RSU084-UE” file.

_____ The End _____