# TEST REPORT

## CERTIFICATE OF CONFORMITY

| | |
|---|---|
| **Standard:** | **47 CFR FCC Part 15, Subpart E (Section 15.407)** |
| **Report No.:** | RFCDVB-WTW-P25040433-5 |
| **FCC ID:** | QYLBE200NG |
| **Product:** | 2x2 Wi-Fi and BT, M.2 2230 adapter card |
| **Brand:** | Getac |
| **Model No.:** | BE200NGW |
| **Received Date:** | 2025/4/21 |
| **Test Date:** | 2025/5/14 ~ 2025/6/19 |
| **Issued Date:** | 2025/7/9 |
| **Applicant:** | Getac Technology Corporation. |
| **Address:** | 5F., Building A, No. 209, Sec.1, Nangang Rd.,Nangang Dist., Taipei City 115018, Taiwan, R.O.C. |
| **Issued By:** | Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch<br>Lin Kou Laboratories |
| **Lab Address:** | No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan |
| **Test Location:** | No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan |
| **FCC Registration / Designation Number:** | 788550 / TW0003 |

**Approved by:** Jeremy . Lin , **Date:** **2025/7/9**

Jeremy Lin / Project Engineer

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Prepared by : Gina Liu / Specialist

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## Release Control Record

| Issue No. | Description | Date Issued |
|---|---|---|
| RFCDVB-WTW-P25040433-5 | Original release. | 2025/7/9 |

# 1 Certificate

| | |
|---|---|
| **Product:** | 2x2 Wi-Fi and BT, M.2 2230 adapter card |
| **Brand:** | Getac |
| **Test Model:** | BE200NGW |
| **Sample Status:** | Engineering sample |
| **Applicant:** | Getac Technology Corporation. |
| **Test Date:** | 2025/5/14 ~ 2025/6/19 |
| **Standard:** | 47 CFR FCC Part 15, Subpart E (Section 15.407) |
| **Measurement procedure:** | ANSI C63.10-2013<br>KDB 789033 D02 General UNII Test Procedure New Rules v02r01<br>KDB 662911 D01 Multiple Transmitter Output v02r01 |

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

## 2 Summary of Test Results

| 47 CFR FCC Part 15, Subpart E (Section 15.407) | | | |
|---|---|---|---|
| Clause | Test Item | Result | Remark |
| 15.407(a)(2) | 26 dB Bandwidth | N/A | Refer to Note |
| 15.407(a)(1)<br>15.407(a)(2)<br>15.407(a)(3) | RF Output Power | Pass | Meet the requirement of limit. |
| 15.407(a)(1)<br>15.407(a)(2)<br>15.407(a)(3) | Power Spectral Density | N/A | Refer to Note |
| 15.407(e) | 6 dB Bandwidth | N/A | Refer to Note |
| --- | Occupied Bandwidth | N/A | Refer to Note |
| 15.407(b)(9) | AC Power Conducted Emissions | Pass | Minimum passing margin is -16.63 dB at 0.40180 MHz |
| 15.407(b)(9) | Unwanted Emissions below 1 GHz | Pass | Minimum passing margin is -1.7 dB at 792.42 MHz |
| 15.407(b) (1/10)<br>15.407(b) (2/10)<br>15.407(b) (3/10)<br>15.407(b) (4(i)/10) | Unwanted Emissions above 1 GHz | Pass | Minimum passing margin is -8.5 dB at 10400.00 MHz |
| 15.203 | Antenna Requirement | Pass | Antenna connector is MHF-4 not a standard connector. |

Notes:

1. Only test item of RF Output Power, AC Power Conducted Emissions and Unwanted Emissions were performed for this report. Other testing data please refer to module report No.: 230526-08.TR10, 230526-08.TR17 and 230526-08.TR18 (Brand: Intel® BE200NGW, Model: BE200NGW).
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

### 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement | Specification | Expanded Uncertainty (k=2) (±) |
|---|---|---|
| RF Output Power | - | 1.371 dB |
| AC Power Conducted Emissions | 9 kHz ~ 30 MHz | 2.90 dB |
| Unwanted Emissions below 1 GHz | 9 kHz ~ 30 MHz | 2.44 dB |
| | 30 MHz ~ 1 GHz | 2.95 dB |
| Unwanted Emissions above 1 GHz | 1 GHz ~ 18 GHz | 2.26 dB |
| | 18 GHz ~ 40 GHz | 1.94 dB |

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

### 2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

# 3 General Information

## 3.1 General Description of EUT

| | |
|---|---|
| Product | 2x2 Wi-Fi and BT, M.2 2230 adapter card |
| Brand | Getac |
| Test Model | BE200NGW |
| Host Marketing Name (HMN) | V120,V120Y(Y= 10 characters, Y can be 0 to 9, A to Z, a to z, “/”, “\”, “-”, “_” or blank for marketing purpose) |
| Status of EUT | Engineering sample |
| Power Supply Rating | End-product:<br>19.0 Vdc (from adapter)<br>7.74 / 11.61 Vdc (from battery) |
| Modulation Type | 64QAM, 16QAM, QPSK, BPSK for OFDM<br>1024QAM for OFDMA in 11ax mode<br>4096QAM for OFDMA in 11be mode |
| Modulation Technology | OFDM, OFDMA |
| Transfer Rate | Up to 2401.9 Mbps (11ax mode)<br>Up to 2882.4 Mbps (11be mode) |
| Operating Frequency | 5.18 GHz ~ 5.25 GHz<br>5.25 GHz ~ 5.32 GHz<br>5.5 GHz ~ 5.72 GHz<br>5.745 GHz ~ 5.825 GHz |
| Number of Channel | 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20): 25<br>802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40): 12<br>802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80): 6<br>802.11ac (VHT160), 802.11ax (HE160), 802.11be (EHT160): 2 |
| Resource Unit (RU) | Single RU: 26-tone, 52-tone, 106-tone, 242-tone, 484-tone, 996-tone |
| Output Power | 5.18 GHz ~ 5.24 GHz : 43.755 mW (16.41 dBm)<br>5.25 GHz ~ 5.32 GHz : 43.706 mW (16.41 dBm)<br>5.5 GHz ~ 5.72 GHz : 38.463 mW (15.85 dBm)<br>5.745 GHz ~ 5.825 GHz : 37.584 mW (15.75 dBm) |
| EUT Category | Client device |

Note:

1. The EUT is authorized for use in specific End-product. Please refer to below for more details.

| Product | Brand | Model | Difference |
|---|---|---|---|
| Notebook | Getac | V120 | Marketing purpose |
| | | V120Y(Y= 10 characters, Y can be 0 to 9, A to Z, a to z, “/”, “\”, “-”, “_” or blank for marketing purpose) | |

2. The End-product contains following accessory devices.

| Item | Brand | Model | Specification |
|---|---|---|---|
| Battery 1 | Getac | BP2S1P4070P | Power Rating : Rating: 7.74Vdc , 3800mAh, 29.42Wh<br>Typical Capacity: 4070mAh, 31.51Wh |
| Battery 2 | Getac | BP3S1P4070P | Power Rating : Rating: 11.61Vdc , 3800mAh, 44.12Wh<br>Typical Capacity: 4070mAh, 47.26Wh |
| AC Adapter | FSP | FSP065-RBBN3 | AC Input : 100-240 Vac； 50-60 Hz； 1.5 A<br>DC Output : 19.0Vdc； 3.42A, 65.0W<br>DC Output Cable : 1.45M / 1core<br>AC Power Cord : 1.75M |
| Touch Pen | Getac | 340GA8900001 | - |

*After the pretesting, battery 1 mode is found to be the worse case and therefore had been chosen for final test.

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

### 3.2 Antenna Description of EUT

1. The antenna information is listed as below.

| Antenna | 2.4GHz 2400-2483.5 MHz | 5.2GHz 5150-5250 MHz | 5.3GHz 5250-5350 MHz | 5.6GHz 5470-5725 MHz | 5.8GHz 5725-5850 MHz | 5.9GHz 5850-5895 MHz | 6.2GHz 5925-6425 MHz | 6.5GHz 6425-6525 MHz | 6.7GHz 6525-6875 MHz | 7.0GHz 6875-7125 MHz | Antenna Type | Connector Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Main** | 2.23 | 2.25 | 2.25 | 2.48 | 2.48 | 1.44 | 2.4 | 2.28 | 2.28 | 1.57 | PIFA | MHF-4 |
| **Aux.** | 2.48 | 1.67 | 1.67 | 2.12 | 2.12 | 1.42 | 2.41 | 2.41 | 1.99 | 1.82 | PIFA | MHF-4 |

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

2. The EUT incorporates a MIMO function:

| 5 GHz Band | | |
|---|---|---|
| **Modulation Mode** | **TX & RX Configuration** | |
| **802.11a** | 1TX | 1RX |
| **802.11n (HT20)** | 2TX | 2RX |
| **802.11n (HT40)** | 2TX | 2RX |
| **802.11ac (VHT20)** | 2TX | 2RX |
| **802.11ac (VHT40)** | 2TX | 2RX |
| **802.11ac (VHT80)** | 2TX | 2RX |
| **802.11ac (VHT160)** | 2TX | 2RX |
| **802.11ax (HE20)** | 2TX | 2RX |
| **802.11ax (HE40)** | 2TX | 2RX |
| **802.11ax (HE80)** | 2TX | 2RX |
| **802.11ax (HE160)** | 2TX | 2RX |
| **802.11be (EHT20)** | 2TX | 2RX |
| **802.11be (EHT40)** | 2TX | 2RX |
| **802.11be (EHT80)** | 2TX | 2RX |
| **802.11be (EHT160)** | 2TX | 2RX |
| **802.11ax (RU26/52/106/242/484/996)** | 2TX | 2RX |
| **802.11be (RU26/52/106/242/484/996)** | 2TX | 2RX |

Note:
1. The modulation and bandwidth are similar for 802.11n mode for 20 MHz (40 MHz), 802.11ac mode for 20 MHz (40 MHz, 80 MHz, 160 MHz), 802.11ax mode for 20 MHz (40 MHz, 80 MHz, 160 MHz) and 802.11be mode for 20 MHz (40 MHz, 80 MHz, 160 MHz). Therefore, the investigated worst case is the representative mode in test report.

### 3.3 Channel List

**FOR 5180 ~ 5320 MHz**

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20):

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 36 | 5180 MHz | 52 | 5260 MHz |
| 40 | 5200 MHz | 56 | 5280 MHz |
| 44 | 5220 MHz | 60 | 5300 MHz |
| 48 | 5240 MHz | 64 | 5320 MHz |

4 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40):

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 38 | 5190 MHz | 54 | 5270 MHz |
| 46 | 5230 MHz | 62 | 5310 MHz |

2 channels are provided for 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80):

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 42 | 5210 MHz | 58 | 5290 MHz |

1 straddle channel is provided for 802.11ac (VHT160), 802.11ax (HE160), 802.11be (EHT160):

| Channel | Frequency |
|---|---|
| 50 | 5250 MHz |

**FOR 5500 ~ 5720 MHz**

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20):

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 100 | 5500 MHz | 124 | 5620 MHz |
| 104 | 5520 MHz | 128 | 5640 MHz |
| 108 | 5540 MHz | 132 | 5660 MHz |
| 112 | 5560 MHz | 136 | 5680 MHz |
| 116 | 5580 MHz | 140 | 5700 MHz |
| 120 | 5600 MHz | 144 | 5720 MHz |

6 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40):

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 102 | 5510 MHz | 126 | 5630 MHz |
| 110 | 5550 MHz | 134 | 5670 MHz |
| 118 | 5590 MHz | 142 | 5710 MHz |

3 channels are provided for 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80):

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 106 | 5530 MHz | 138 | 5690 MHz |
| 122 | 5610 MHz | | |

1 channel is provided for 802.11ac (VHT160), 802.11ax (HE160), 802.11be (EHT160):

| Channel | Frequency |
|---|---|
| 114 | 5570 MHz |

**FOR 5745 ~ 5825 MHz:**

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20), 802.11be (EHT20):

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 149 | 5745 MHz | 161 | 5805 MHz |
| 153 | 5765 MHz | 165 | 5825 MHz |
| 157 | 5785 MHz | | |

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40), 802.11be (EHT40):

| Channel | Frequency | Channel | Frequency |
|---|---|---|---|
| 151 | 5755 MHz | 159 | 5795 MHz |

1 channel is provided for 802.11ac (VHT80), 802.11ax (HE80), 802.11be (EHT80):

| Channel | Frequency |
|---|---|
| 155 | 5775 MHz |

### 3.4 Test Mode Applicability and Tested Channel Detail

| | |
|---|---|
| Pre-Scan: | 1. EUT can be used in the following ways: X-axis/ Y-axis/ Z-axis/NB-axis. Pre-scan these ways and find the worst case as a representative test condition. |
| Worst Case: | 1. X-axis/ Y-axis/ Z-axis/NB-axis Worst Condition:X-axis |

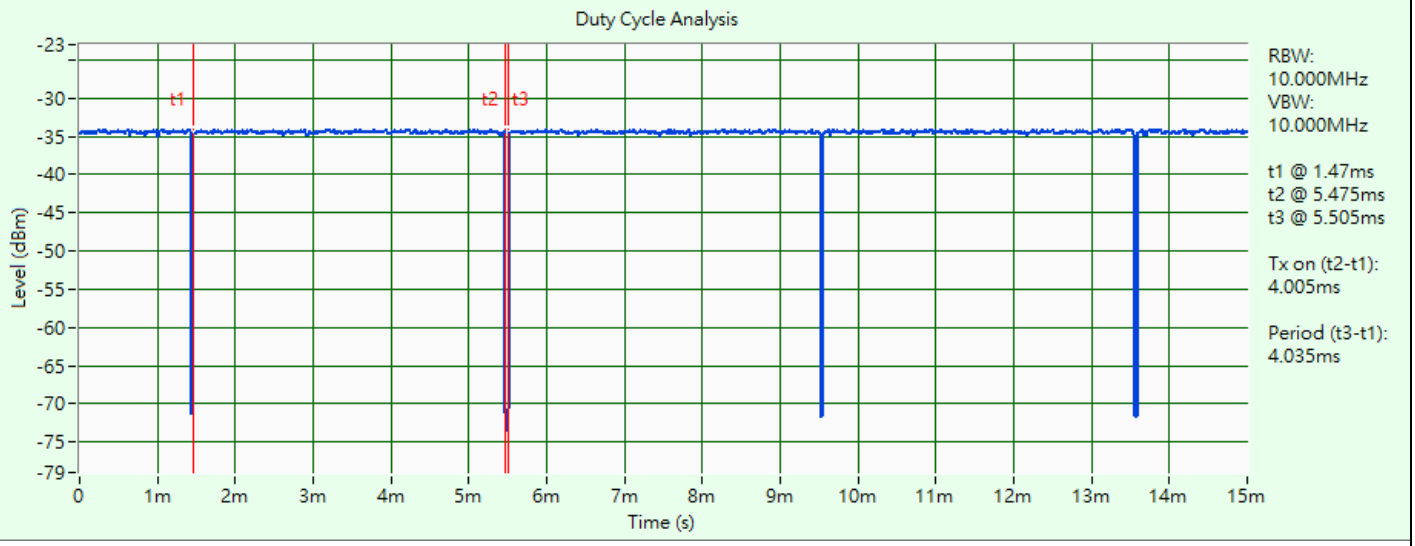
Following channel(s) was (were) selected for the final test as listed below:

| Test Item | Mode | Signal Mode | Tested Channel | Modulation | Data Rate Parameter | RU/MRU Index |
|---|---|---|---|---|---|---|
| RF Output Power | 802.11a | 1TX | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK | 6Mb/s | NA |
| | 802.11be (EHT20) | 1TX | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK | MCS0 | NA |
| | 802.11be (EHT40) | 1TX | 38, 46, 54, 62, 102, 110, 134, 142, 151, 159 | BPSK | MCS0 | NA |
| | 802.11be (EHT80) | 1TX | 42, 58, 106, 122, 138, 155 | BPSK | MCS0 | NA |
| | 802.11be (EHT160) | 1TX | 50, 114 | BPSK | MCS0 | NA |
| | 802.11be (EHT20) 26-tone RU | 1TX | 36, 64, 100, 140, 149 | BPSK | MCS0 | 0, 8, 0, 8, 0 |
| | 802.11be (EHT20) 52-tone RU | 1TX | 36, 64, 100, 140, 149 | BPSK | MCS0 | 37, 40, 37, 40, 37 |
| | 802.11be (EHT20) 106-tone RU | 1TX | 36, 64, 100, 140, 149 | BPSK | MCS0 | 53, 54, 53, 54, 53 |
| | 802.11be (EHT40) 242-tone RU | 1TX | 38, 62, 102, 134, 151 | BPSK | MCS0 | 61, 62, 62, 62, 61 |
| | 802.11be (EHT80) 484-tone RU | 1TX | 42, 58, 106, 155 | BPSK | MCS0 | 65, 66, 65, 65 |
| | 802.11be (EHT160) 996-tone RU | 1TX | 50, 114 | BPSK | MCS0 | 67, S67, 67, S67 |
| | 802.11be (EHT20) | 2TX | 36, 40, 48, 52, 60, 64, 100, 116, 140, 144, 149, 157, 165 | BPSK | MCS0 | NA |
| | 802.11be (EHT40) | 2TX | 38, 46, 54, 62, 102, 110, 134, 142, 151, 159 | BPSK | MCS0 | NA |
| | 802.11be (EHT80) | 2TX | 42, 58, 106, 122, 138, 155 | BPSK | MCS0 | NA |
| | 802.11be (EHT160) | 2TX | 50, 114 | BPSK | MCS0 | NA |
| | 802.11be (EHT20) 26-tone RU | 2TX | 36, 64, 100, 140, 149 | BPSK | MCS0 | 0, 8, 0, 8, 0 |
| | 802.11be (EHT20) 52-tone RU | 2TX | 36, 64, 100, 140, 149 | BPSK | MCS0 | 37, 40, 37, 40, 37 |
| | 802.11be (EHT20) 106-tone RU | 2TX | 36, 64, 100, 140, 149 | BPSK | MCS0 | 53, 54, 53, 54, 53 |
| | 802.11be (EHT40) 242-tone RU | 2TX | 38, 62, 102, 134, 151 | BPSK | MCS0 | 61, 62, 62, 62, 61 |
| | 802.11be (EHT80) 484-tone RU | 2TX | 42, 58, 106, 155 | BPSK | MCS0 | 65, 66, 65, 65 |
| | 802.11be (EHT160) 996-tone RU | 2TX | 50, 114 | BPSK | MCS0 | 67, S67, 67, S67 |

| Test Item | Mode | Signal Mode | Tested Channel | Modulation | Data Rate Parameter | RU/MRU Index |
|---|---|---|---|---|---|---|
| AC Power Conducted Emissions | 802.11be (EHT20) | 2TX | 40 | BPSK | MCS0 | NA |
| Unwanted Emissions below 1 GHz | 802.11be (EHT20) | 2TX | 40 | BPSK | MCS0 | NA |
| Unwanted Emissions above 1 GHz | 802.11be (EHT20) | 1TX | 40 | BPSK | MCS0 | NA |
| | | 2TX | 40 | BPSK | MCS0 | NA |

### 3.5 Duty Cycle of Test Signal

**802.11be (EHT20):** Duty cycle = 4.005 ms / 4.035 ms x 100% = 99.3%

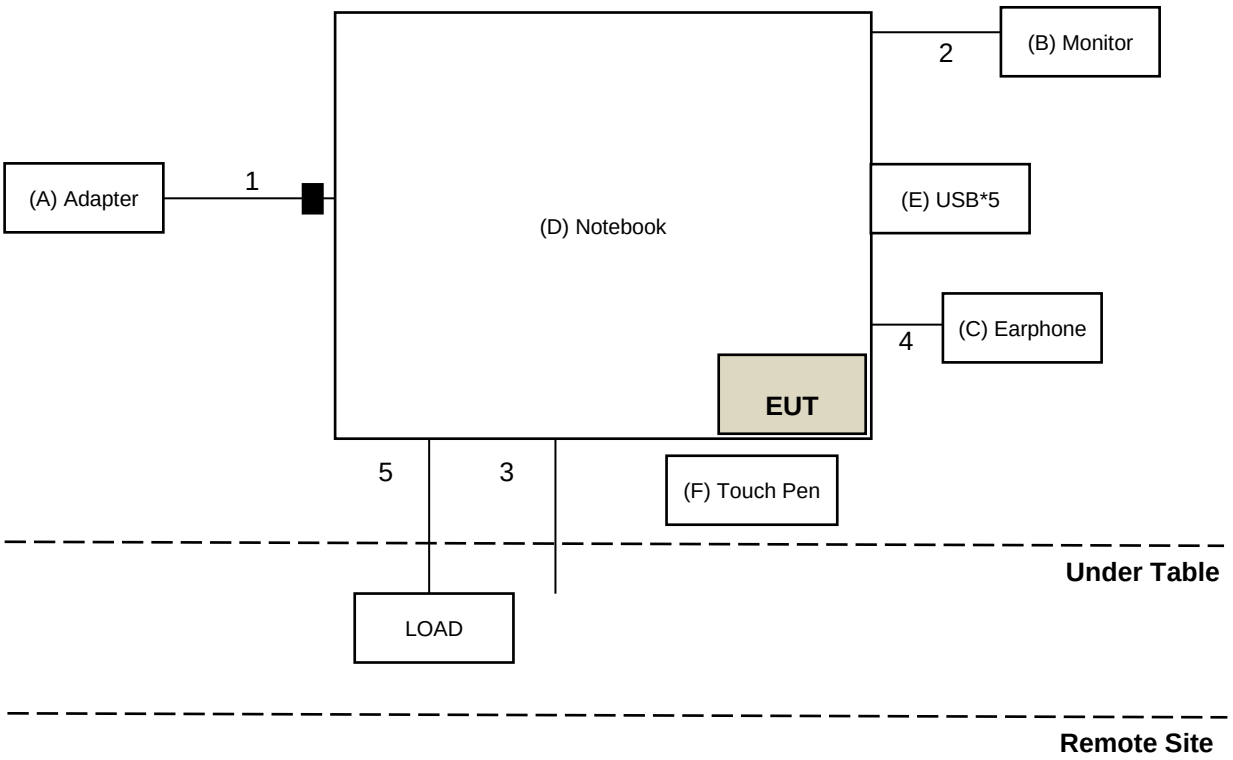



802.11be (EHT20)

### 3.6 Test Program Used and Operation Descriptions

Controlling software DRTU has been activated to set the EUT under transmission condition continuously at specific channel frequency.

### 3.7 Connection Diagram of EUT and Peripheral Devices




### 3.8 Configuration of Peripheral Devices and Cable Connections

| ID | Product | Brand | Model No. | Serial No. | FCC ID | Remarks |
|---|---|---|---|---|---|---|
| A | Adapter | FSP | FSP090-ABBN3 | N/A | N/A | Supplied by applicant |
| B | Monitor | DELL | A14S2421HSXmTW | CN-01KWFW-WSL00-24C-711B | N/A | Provided by Lab |
| C | Earphone | APPLE | MB77PFEB | N/A | N/A | Provided by Lab |
| D | Notebook | Getac | V120 | N/A | N/A | Supplied by applicant |
| E | USB*5 | SanDisk | SDDDC3-032G | N/A | N/A | Provided by Lab |
| F | Touch Pen | Getac | 340GA8900001 | N/A | N/A | Supplied by applicant |

| ID | Cable Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks |
|---|---|---|---|---|---|---|
| 1 | DC Cable | 1 | 1.45 | Y | 1 | Supplied by applicant |
| 2 | HDMI | 1 | 1.8 | Y | 0 | Provided by Lab |
| 3 | RS232 | 1 | 1.5 | N | 0 | Provided by Lab |
| 4 | AUDIO | 1 | 1.2 | N | 0 | Provided by Lab |
| 5 | LAN | 1 | 1.5 | N | 0 | Provided by Lab |

# 4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

## 4.1 RF Output Power

| Description<br>Manufacturer | Model No. | Serial No. | Calibrated Date | Calibrated Until |
|---|---|---|---|---|
| Fixed Attenuator<br>Woken | 00800A1K01A-10 | 00800A1K01A-10-01 | 2025/5/23 | 2026/5/22 |
| Peak Power Analyzer<br>Keysight | 8990B | MY51000485 | 2025/1/20 | 2026/1/19 |
| Signal & Spectrum Analyzer<br>R&S | FSV3044 | 101504 | 2025/6/18 | 2026/6/17 |
| Software<br>BV | ADT_RF Test Software V7.6.5.4 | N/A | N/A | N/A |
| Wideband Power Sensor<br>Keysight | N1923A | MY58020002 | 2025/1/21 | 2026/1/20 |
| | | MY58140009 | 2025/1/21 | 2026/1/20 |

Notes:

1. The test was performed in Oven room.
2. Tested Date: 2025/6/19

## 4.2 AC Power Conducted Emissions

| Description<br>Manufacturer | Model No. | Serial No. | Calibrated Date | Calibrated Until |
|---|---|---|---|---|
| 50 ohm terminal resistance | E1-011279 | 04 | 2024/11/28 | 2025/11/27 |
| | E1-011280 | 05 | 2024/11/28 | 2025/11/27 |
| | E1-011311 | 09 | 2024/11/28 | 2025/11/27 |
| DC-LISN<br>Schwarzbeck | NNBM 8126G | 8126G-069 | 2024/11/5 | 2025/11/4 |
| EMI Test Receiver<br>R&S | ESR3 | 102783 | 2024/12/17 | 2025/12/16 |
| Fixed Attenuator<br>STI | BNC5W10dB | PAD-COND2-01 | 2024/8/25 | 2025/8/24 |
| LISN<br>R&S | ESH2-Z5 | 100100 | 2025/3/5 | 2026/3/4 |
| | ESH3-Z5 | 100312 | 2024/9/9 | 2025/9/8 |
| RF Coaxial Cable<br>Woken | 5D-FB | Cable-cond2-01 | 2024/8/25 | 2025/8/24 |
| Software<br>BVADT | BVADT_Cond_ V7.4.1.0 | N/A | N/A | N/A |
| V-LISN<br>Schwarzbeck | NNBL 8226-2 | 8226-142 | 2024/8/28 | 2025/8/27 |

Notes:

1. The test was performed in HY - Conduction 2.
2. Tested Date: 2025/5/14

### 4.3 Unwanted Emissions below 1 GHz

| Description<br>Manufacturer | Model No. | Serial No. | Calibrated Date | Calibrated Until |
|---|---|---|---|---|
| Antenna Tower &Turn<br>Max-Full | MFA-440H | AT93021705 | N/A | N/A |
| Bi_Log Antenna<br>Schwarzbeck | VULB 9168 | 9168-472 | 2024/10/14 | 2025/10/13 |
| EXA Signal Analyzer<br>Agilent | N9010A | MY52220207 | 2024/12/30 | 2025/12/29 |
| Loop Antenna<br>TESEQ | HLA 6121 | 45745 | 2024/8/21 | 2025/8/20 |
| MXE EMI Receiver<br>Agilent | N9038A | MY51210203 | 2024/8/27 | 2025/8/26 |
| Preamplifier<br>EMCI | EMC 330H | 980112 | 2024/9/24 | 2025/9/23 |
| | EMC001340 | 980201 | 2024/9/24 | 2025/9/23 |
| RF Coaxial Cable<br>Woken | 8D-FB | Cable-Ch10-01 | 2024/9/24 | 2025/9/23 |
| Software<br>BV ADT | ADT_Radiated_<br>V7.6.15.9.5 | N/A | N/A | N/A |
| Turn Table<br>Max-Full | MFT-201SS | N/A | N/A | N/A |
| Turn Table Controller<br>Max-Full | MG-7802 | N/A | N/A | N/A |

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2025/5/27

### 4.4 Unwanted Emissions above 1 GHz

| Description<br>Manufacturer | Model No. | Serial No. | Calibrated Date | Calibrated Until |
|---|---|---|---|---|
| Antenna Tower &Turn<br>Max-Full | MFA-440H | AT93021705 | N/A | N/A |
| Boresight antenna tower fixture<br>BV | BAF-02 | 7 | N/A | N/A |
| EXA Signal Analyzer<br>Agilent | N9010A | MY52220207 | 2024/12/30 | 2025/12/29 |
| Horn Antenna<br>Schwarzbeck | BBHA 9120D | 9120D-969 | 2024/11/10 | 2025/11/9 |
| | BBHA 9170 | 148 | 2024/11/10 | 2025/11/9 |
| MXE EMI Receiver<br>Agilent | N9038A | MY51210203 | 2024/8/27 | 2025/8/26 |
| Preamplifier<br>EMCI | EMC 012645 | 980115 | 2024/9/24 | 2025/9/23 |
| | EMC 184045 | 980116 | 2024/9/24 | 2025/9/23 |
| RF Coaxial Cable<br>EMCI | EMC102-KM-KM-600 | 150928 | 2024/7/6 | 2025/7/5 |
| | EMC102-KM-KM-3000 | 150929 | 2024/7/6 | 2025/7/5 |
| | EMC104-SM-SM-8000+3000 | 171005 | 2024/9/24 | 2025/9/23 |
| RF Coaxial Cable<br>HUBER+SUHNER | SUCOFLEX 104 | EMC104-SM-SM-1000(140807) | 2024/9/24 | 2025/9/23 |
| Software<br>BV ADT | ADT_Radiated_V7.6.15.9.5 | N/A | N/A | N/A |
| Turn Table<br>Max-Full | MFT-201SS | N/A | N/A | N/A |
| Turn Table Controller<br>Max-Full | MG-7802 | N/A | N/A | N/A |

Notes:

1. The test was performed in HY - 966 chamber 5.
2. Tested Date: 2025/5/27 ~ 2025/6/19

# 5 Limits of Test Items

## 5.1 RF Output Power

| Operation Band | EUT Category | Limit |
|---|---|---|
| U-NII-1 | Outdoor Access Point | 1 Watt (30 dBm)<br>(Max. e.i.r.p ≦ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon) |
| | Fixed point-to-point Access Points | 1 Watt (30 dBm) |
| | Indoor Access Point | 1 Watt (30 dBm) |
| | Client devices | 250mW (24 dBm) |

| Operation Band | Limit |
|---|---|
| U-NII-2A | 250 mW (24 dBm) or 11 dBm+10 log B* |
| U-NII-2C | 250 mW (24 dBm) or 11 dBm+10 log B* |
| U-NII-3 | 1 Watt (30 dBm) |

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any $N_{ANT}$;
Array Gain = 5 log($N_{ANT}/N_{SS}$) dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log($N_{ANT}/N_{SS}$) dB.

## 5.2 AC Power Conducted Emissions

| Frequency (MHz) | Conducted Limit (dBuV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15 - 0.5 | 66 - 56 | 56 - 46 |
| 0.50 - 5.0 | 56 | 46 |
| 5.0 - 30.0 | 60 | 50 |

Notes:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

### 5.3 Unwanted Emissions below 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

| Frequencies (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009 ~ 0.490 | 2400/F(kHz) | 300 |
| 0.490 ~ 1.705 | 24000/F(kHz) | 30 |
| 1.705 ~ 30.0 | 30 | 30 |
| 30 ~ 88 | 100 | 3 |
| 88 ~ 216 | 150 | 3 |
| 216 ~ 960 | 200 | 3 |
| Above 960 | 500 | 3 |

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

### 5.4 Unwanted Emissions above 1 GHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

| Frequencies (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| Above 960 | 500 | 3 |

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

| Applicable To | Limit | |
|---|---|---|
| 789033 D02 General UNII Test Procedure New Rules v02r01 | Field Strength at 3 m | |
| | PK: 74 (dBµV/m) | AV: 54 (dBµV/m) |

For transmitters operating in the 5.15-5.25 GHz band:

| Applicable To | EIRP Limit | Equivalent Field Strength at 3 m |
|---|---|---|
| 15.407(b)(1) | PK: -27 (dBm/MHz) | PK: 68.2 (dBµV/m) |

For transmitters operating in the 5.25-5.35 GHz band:

| Applicable To | EIRP Limit | Equivalent Field Strength at 3 m |
|---|---|---|
| 15.407(b)(2) | PK: -27 (dBm/MHz) | PK: 68.2 (dBµV/m) |

For transmitters operating in the 5.47-5.725 GHz band:

| Applicable To | EIRP Limit | Equivalent Field Strength at 3 m |
|---|---|---|
| 15.407(b)(3) | PK: -27 (dBm/MHz) | PK: 68.2 (dBµV/m) |

For transmitters operating in the 5.725-5.850 GHz band:

| Applicable To | EIRP Limit | Equivalent Field Strength at 3 m |
|---|---|---|
| 15.407(b)(4)(i) | PK: -27 (dBm/MHz) *1<br>PK: 10 (dBm/MHz) *2<br>PK: 15.6 (dBm/MHz) *3<br>PK: 27 (dBm/MHz) *4 | PK: 68.2 (dBμV/m) *1<br>PK: 105.2 (dBμV/m) *2<br>PK: 110.8 (dBμV/m) *3<br>PK: 122.2 (dBμV/m) *4 |
| *1 beyond 75 MHz or more above of the band edge.<br>*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.<br>*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.<br>*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. | | |

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

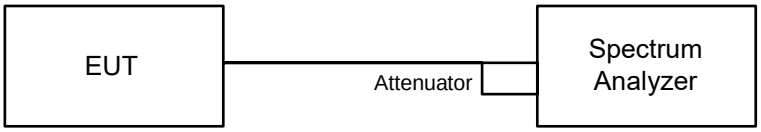
$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts).

# 6 Test Arrangements

## 6.1 RF Output Power

6.1.1 Test Setup


**For channel straddling:**




6.1.2 Test Procedure

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.

**For channel straddling:**

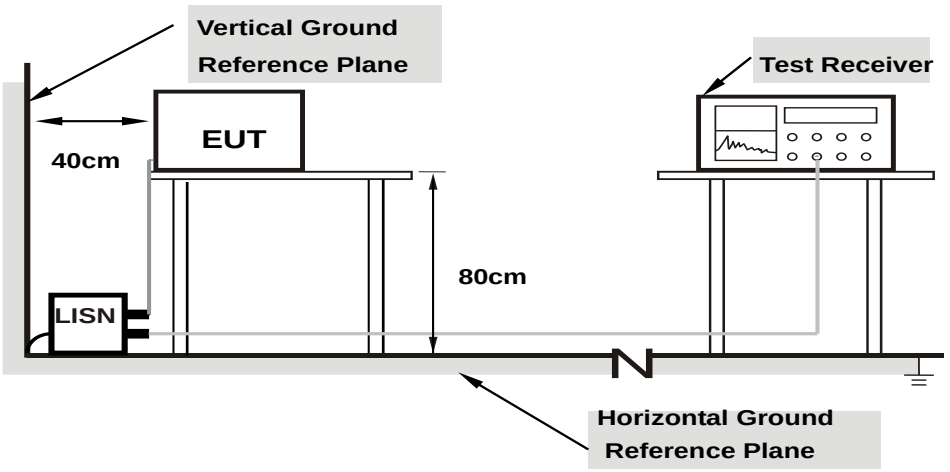
Method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
b. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
c. Sweep points ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)Sweep time = auto, trigger set to “free run”.
d. Trace average at least 100 traces in power averaging mode.
e. Record the max value and add 10 log (1/duty cycle).

Note: When measuring straddle channel power, use compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument’s band power measurement function, with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.

## 6.2 AC Power Conducted Emissions

### 6.2.1 Test Setup




**Note: 1.Support units were connected to second LISN.**

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

### 6.2.2 Test Procedure

a. The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

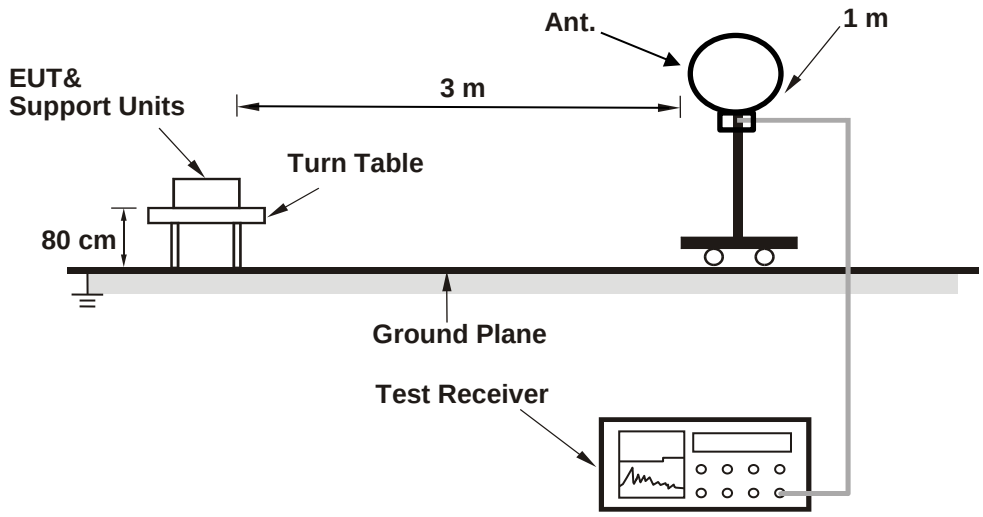
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

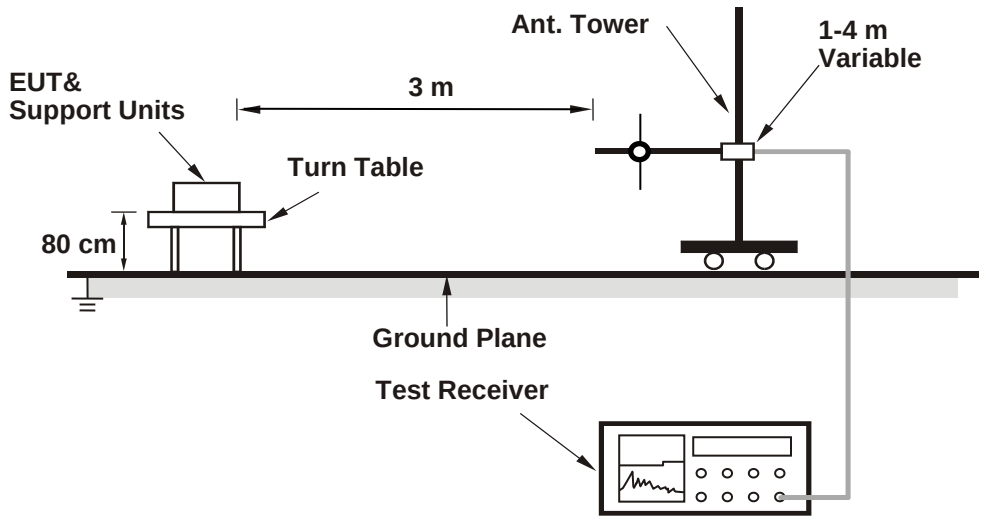
## 6.3 Unwanted Emissions below 1 GHz

### 6.3.1 Test Setup

**For Radiated emission below 30 MHz**




**For Radiated emission above 30 MHz**




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

6.3.2 Test Procedure

**For Radiated emission below 30 MHz**

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

**For Radiated emission above 30 MHz**

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

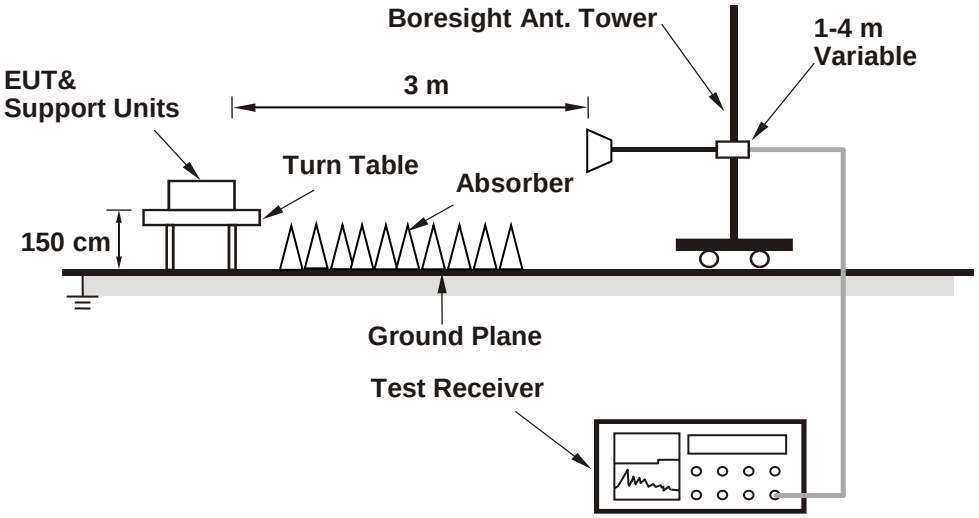
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

## 6.4 Unwanted Emissions above 1 GHz

6.4.1 Test Setup




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

6.4.2 Test Procedure

a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Notes:

1. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
2. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10 Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1 GHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

# 7 Test Results of Test Item

## 7.1 RF Output Power

| Input Power: | 7.74 Vdc | Environmental Conditions: | 25°C, 60% RH | Tested By: | Wayne Lin |
|---|---|---|---|---|---|

**1TX**

**802.11a**

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 36 | 5180 | 42.756 | 16.31 | 24 | Pass |
| 40 | 5200 | 42.855 | 16.32 | 24 | Pass |
| 48 | 5240 | 42.756 | 16.31 | 24 | Pass |
| 52 | 5260 | 42.756 | 16.31 | 24 | Pass |
| 60 | 5300 | 43.351 | 16.37 | 24 | Pass |
| 64 | 5320 | 43.351 | 16.37 | 24 | Pass |
| 100 | 5500 | 30.761 | 14.88 | 24 | Pass |
| 116 | 5580 | 30.269 | 14.81 | 24 | Pass |
| 140 | 5700 | 30.339 | 14.82 | 24 | Pass |
| 149 | 5745 | 36.983 | 15.68 | 30 | Pass |
| 157 | 5785 | 36.475 | 15.62 | 30 | Pass |
| 165 | 5825 | 36.898 | 15.67 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

## 802.11be (EHT20)

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 36 | 5180 | 43.251 | 16.36 | 24 | Pass |
| 40 | 5200 | 43.752 | 16.41 | 24 | Pass |
| 48 | 5240 | 42.954 | 16.33 | 24 | Pass |
| 52 | 5260 | 43.451 | 16.38 | 24 | Pass |
| 60 | 5300 | 43.251 | 16.36 | 24 | Pass |
| 64 | 5320 | 43.152 | 16.35 | 24 | Pass |
| 100 | 5500 | 30.62 | 14.86 | 24 | Pass |
| 116 | 5580 | 30.409 | 14.83 | 24 | Pass |
| 140 | 5700 | 30.409 | 14.83 | 24 | Pass |
| 144 | 5720 | 30.62 | 14.86 | 24 | Pass |
| 149 | 5745 | 36.898 | 15.67 | 30 | Pass |
| 157 | 5785 | 36.813 | 15.66 | 30 | Pass |
| 165 | 5825 | 37.584 | 15.75 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

## 802.11be (EHT40)

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 38 | 5190 | 42.954 | 16.33 | 24 | Pass |
| 46 | 5230 | 42.855 | 16.32 | 24 | Pass |
| 54 | 5270 | 42.954 | 16.33 | 24 | Pass |
| 62 | 5310 | 43.451 | 16.38 | 24 | Pass |
| 102 | 5510 | 30.69 | 14.87 | 24 | Pass |
| 110 | 5550 | 30.409 | 14.83 | 24 | Pass |
| 134 | 5670 | 30.832 | 14.89 | 24 | Pass |
| 142 | 5710 | 30.549 | 14.85 | 24 | Pass |
| 151 | 5755 | 36.898 | 15.67 | 30 | Pass |
| 159 | 5795 | 36.559 | 15.63 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT80)

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 42 | 5210 | 43.152 | 16.35 | 24 | Pass |
| 58 | 5290 | 43.251 | 16.36 | 24 | Pass |
| 106 | 5530 | 30.339 | 14.82 | 24 | Pass |
| 122 | 5610 | 30.339 | 14.82 | 24 | Pass |
| 138 | 5690 | 30.269 | 14.81 | 24 | Pass |
| 155 | 5775 | 36.475 | 15.62 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT160)

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 50 | 5250 | 42.756 | 16.31 | 24 | Pass |
| 114 | 5570 | 33.189 | 15.21 | 24 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT20) 26-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 36 | 5180 | 21.777 | 13.38 | 24 | Pass |
| 64 | 5320 | 21.281 | 13.28 | 24 | Pass |
| 100 | 5500 | 14.962 | 11.75 | 24 | Pass |
| 140 | 5700 | 21.038 | 13.23 | 24 | Pass |
| 149 | 5745 | 36.308 | 15.60 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT20) 52-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 36 | 5180 | 42.462 | 16.28 | 24 | Pass |
| 64 | 5320 | 42.267 | 16.26 | 24 | Pass |
| 100 | 5500 | 30.269 | 14.81 | 24 | Pass |
| 140 | 5700 | 30.2 | 14.80 | 24 | Pass |
| 149 | 5745 | 36.308 | 15.60 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT20) 106-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 36 | 5180 | 42.855 | 16.32 | 24 | Pass |
| 64 | 5320 | 37.325 | 15.72 | 24 | Pass |
| 100 | 5500 | 30.409 | 14.83 | 24 | Pass |
| 140 | 5700 | 30.269 | 14.81 | 24 | Pass |
| 149 | 5745 | 36.475 | 15.62 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT40) 242-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 38 | 5190 | 42.56 | 16.29 | 24 | Pass |
| 62 | 5310 | 43.152 | 16.35 | 24 | Pass |
| 102 | 5510 | 30.409 | 14.83 | 24 | Pass |
| 134 | 5670 | 30.479 | 14.84 | 24 | Pass |
| 151 | 5755 | 36.475 | 15.62 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT80) 484-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 42 | 5210 | 42.658 | 16.30 | 24 | Pass |
| 58 | 5290 | 42.56 | 16.29 | 24 | Pass |
| 106 | 5530 | 29.923 | 14.76 | 24 | Pass |
| 155 | 5775 | 36.141 | 15.58 | 30 | Pass |

Notes:

1. For U-NII-1, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
2. For U-NII-2A, the antenna gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2C, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-3, the antenna gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT160) 996-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (mW) | Average Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|
| 50 | 5250 | 42.462 | 16.28 | 24 | Pass |
| 114 | 5570 | 32.961 | 15.18 | 24 | Pass |

## 2TX

### 802.11be (EHT20)

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 36 | 5180 | 13.36 | 13.38 | 43.454 | 16.38 | 24 | Pass |
| 40 | 5200 | 13.41 | 13.39 | 43.755 | 16.41 | 24 | Pass |
| 48 | 5240 | 13.36 | 13.31 | 43.106 | 16.35 | 24 | Pass |
| 52 | 5260 | 13.32 | 13.39 | 43.306 | 16.37 | 24 | Pass |
| 60 | 5300 | 13.38 | 13.41 | 43.705 | 16.41 | 24 | Pass |
| 64 | 5320 | 13.36 | 13.43 | 43.706 | 16.41 | 24 | Pass |
| 100 | 5500 | 12.81 | 12.87 | 38.463 | 15.85 | 24 | Pass |
| 116 | 5580 | 12.76 | 12.91 | 38.423 | 15.85 | 24 | Pass |
| 140 | 5700 | 12.76 | 12.77 | 37.803 | 15.78 | 24 | Pass |
| 144 | 5720 | 12.81 | 12.86 | 38.418 | 15.85 | 24 | Pass |
| 149 | 5745 | 12.16 | 12.26 | 33.27 | 15.22 | 30 | Pass |
| 157 | 5785 | 12.16 | 12.18 | 32.963 | 15.18 | 30 | Pass |
| 165 | 5825 | 12.11 | 12.12 | 32.548 | 15.13 | 30 | Pass |

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT40)

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 38 | 5190 | 13.35 | 13.36 | 43.304 | 16.37 | 24 | Pass |
| 46 | 5230 | 13.36 | 13.35 | 43.304 | 16.37 | 24 | Pass |
| 54 | 5270 | 13.31 | 13.33 | 42.957 | 16.33 | 24 | Pass |
| 62 | 5310 | 13.38 | 13.38 | 43.554 | 16.39 | 24 | Pass |
| 102 | 5510 | 12.82 | 12.78 | 38.11 | 15.81 | 24 | Pass |
| 110 | 5550 | 12.82 | 12.81 | 38.241 | 15.83 | 24 | Pass |
| 134 | 5670 | 12.77 | 12.79 | 37.934 | 15.79 | 24 | Pass |
| 142 | 5710 | 12.86 | 12.78 | 38.287 | 15.83 | 24 | Pass |
| 151 | 5755 | 12.18 | 12.25 | 33.308 | 15.23 | 30 | Pass |
| 159 | 5795 | 12.17 | 12.15 | 32.888 | 15.17 | 30 | Pass |

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT80)

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 42 | 5210 | 13.37 | 13.33 | 43.255 | 16.36 | 24 | Pass |
| 58 | 5290 | 13.35 | 13.38 | 43.404 | 16.38 | 24 | Pass |
| 106 | 5530 | 12.82 | 12.82 | 38.285 | 15.83 | 24 | Pass |
| 122 | 5610 | 12.83 | 12.78 | 38.154 | 15.82 | 24 | Pass |
| 138 | 5690 | 12.81 | 12.83 | 38.285 | 15.83 | 24 | Pass |
| 155 | 5775 | 12.18 | 12.18 | 33.039 | 15.19 | 30 | Pass |

Notes:

2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT160)

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 50 | 5250 | 13.38 | 13.36 | 43.454 | 16.38 | 24 | Pass |
| 114 | 5570 | 12.78 | 12.82 | 38.11 | 15.81 | 24 | Pass |

Notes:

2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT20) 26-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 36 | 5180 | 9.97 | 10.10 | 20.164 | 13.05 | 24 | Pass |
| 64 | 5320 | 9.72 | 9.68 | 18.665 | 12.71 | 24 | Pass |
| 100 | 5500 | 9.86 | 9.78 | 19.189 | 12.83 | 24 | Pass |
| 140 | 5700 | 9.91 | 9.78 | 19.301 | 12.86 | 24 | Pass |
| 149 | 5745 | 12.09 | 12.21 | 32.815 | 15.16 | 30 | Pass |

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT20) 52-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 36 | 5180 | 12.97 | 12.86 | 39.135 | 15.93 | 24 | Pass |
| 64 | 5320 | 12.85 | 12.69 | 37.853 | 15.78 | 24 | Pass |
| 100 | 5500 | 12.66 | 12.76 | 37.33 | 15.72 | 24 | Pass |
| 140 | 5700 | 12.72 | 12.51 | 36.531 | 15.63 | 24 | Pass |
| 149 | 5745 | 12.10 | 12.21 | 32.852 | 15.17 | 30 | Pass |

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT20) 106-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 36 | 5180 | 13.32 | 13.34 | 43.056 | 16.34 | 24 | Pass |
| 64 | 5320 | 13.32 | 13.40 | 43.356 | 16.37 | 24 | Pass |
| 100 | 5500 | 12.76 | 12.83 | 38.067 | 15.81 | 24 | Pass |
| 140 | 5700 | 12.73 | 12.75 | 37.586 | 15.75 | 24 | Pass |
| 149 | 5745 | 12.13 | 12.22 | 33.003 | 15.19 | 30 | Pass |

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT40) 242-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 38 | 5190 | 13.31 | 13.32 | 42.907 | 16.33 | 24 | Pass |
| 62 | 5310 | 13.34 | 13.35 | 43.205 | 16.36 | 24 | Pass |
| 102 | 5510 | 12.78 | 12.74 | 37.76 | 15.77 | 24 | Pass |
| 134 | 5670 | 12.73 | 12.76 | 37.63 | 15.76 | 24 | Pass |
| 151 | 5755 | 12.15 | 12.21 | 33.04 | 15.19 | 30 | Pass |

Notes:

2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT80) 484-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 42 | 5210 | 13.32 | 13.30 | 42.858 | 16.32 | 24 | Pass |
| 58 | 5290 | 13.31 | 13.33 | 42.957 | 16.33 | 24 | Pass |
| 106 | 5530 | 12.78 | 12.74 | 37.76 | 15.77 | 24 | Pass |
| 155 | 5775 | 12.15 | 12.16 | 32.85 | 15.17 | 30 | Pass |

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.
5. For U-NII-3, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

### 802.11be (EHT160) 996-tone RU

| Chan. | Chan. Freq. (MHz) | Average Power (dBm) | | Total Power (mW) | Total Power (dBm) | Power Limit (dBm) | Test Result |
|---|---|---|---|---|---|---|---|
| | | Chain 0 | Chain 1 | | | | |
| 50 | 5250 | 13.32 | 13.31 | 42.907 | 16.33 | 24 | Pass |
| 114 | 5570 | 12.75 | 12.80 | 37.891 | 15.79 | 24 | Pass |

Notes:

1. Directional gain is the maximum gain of antennas.
2. For U-NII-1, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
3. For U-NII-2A, the maximum gain is 2.25 dBi <= 6 dBi, so the output power limit shall not be reduced.
4. For U-NII-2C, the maximum gain is 2.48 dBi <= 6 dBi, so the output power limit shall not be reduced.

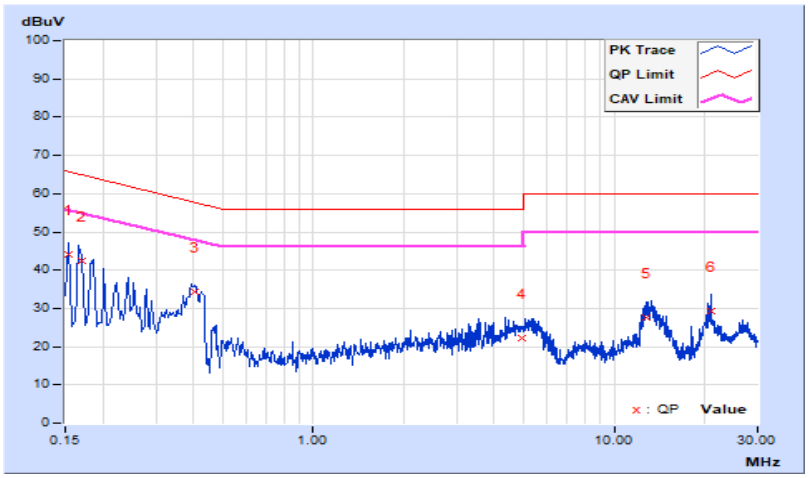
## 7.2 AC Power Conducted Emissions

| | | | |
|---|---|---|---|
| **RF Mode** | 802.11be (EHT20) | **Channel** | CH 40：5200 MHz |
| **Frequency Range** | 150 kHz ~ 30 MHz | **Detector Function & Resolution Bandwidth** | Quasi-Peak (QP) / Average (AV), 9 kHz |
| **Input Power** | 120 Vac, 60 Hz | **Environmental Conditions** | 23 °C, 71% RH |
| **Tested By** | Thomas Cheng | | |

| Phase Of Power : Line (L) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **No** | **Frequency (MHz)** | **Correction Factor (dB)** | **Reading Value (dBuV)** | | **Emission Level (dBuV)** | | **Limit (dBuV)** | | **Margin (dB)** | |
| | | | **Q.P.** | **AV.** | **Q.P.** | **AV.** | **Q.P.** | **AV.** | **Q.P.** | **AV.** |
| 1 | 0.15400 | 10.25 | 33.94 | 18.49 | 44.19 | 28.74 | 65.78 | 55.78 | -21.59 | -27.04 |
| 2 | 0.17000 | 10.25 | 32.06 | 15.60 | 42.31 | 25.85 | 64.96 | 54.96 | -22.65 | -29.11 |
| 3 | 0.40499 | 10.29 | 23.98 | 15.46 | 34.27 | 25.75 | 57.75 | 47.75 | -23.48 | -22.00 |
| 4 | 4.94200 | 10.42 | 11.75 | 5.81 | 22.17 | 16.23 | 56.00 | 46.00 | -33.83 | -29.77 |
| 5 | 12.88200 | 10.49 | 17.18 | 8.83 | 27.67 | 19.32 | 60.00 | 50.00 | -32.33 | -30.68 |
| 6 | 20.94200 | 10.62 | 18.77 | 7.80 | 29.39 | 18.42 | 60.00 | 50.00 | -30.61 | -31.58 |

**Remarks:**

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

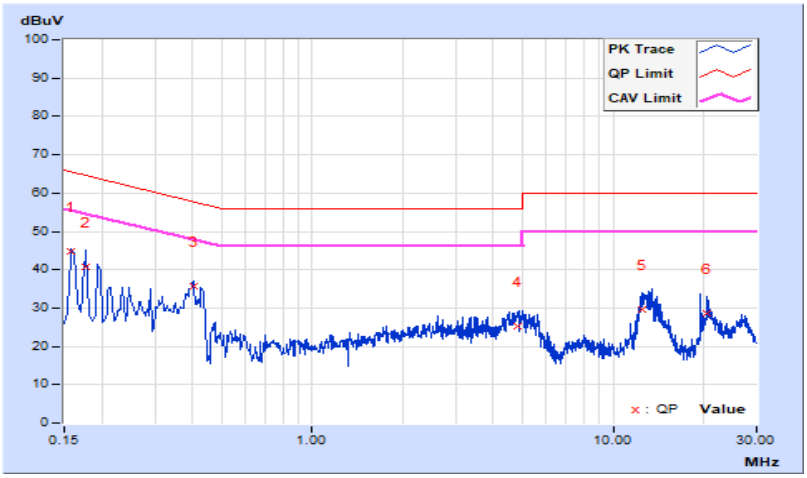


| | | | |
|---|---|---|---|
| **RF Mode** | 802.11be (EHT20) | **Channel** | CH 40：5200 MHz |
| **Frequency Range** | 150 kHz ~ 30 MHz | **Detector Function & Resolution Bandwidth** | Quasi-Peak (QP) / Average (AV), 9 kHz |
| **Input Power** | 120 Vac, 60 Hz | **Environmental Conditions** | 23 °C, 71% RH |
| **Tested By** | Thomas Cheng | | |

| Phase Of Power : Neutral (N) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **No** | **Frequency (MHz)** | **Correction Factor (dB)** | **Reading Value (dBuV)** | | **Emission Level (dBuV)** | | **Limit (dBuV)** | | **Margin (dB)** | |
| | | | **Q.P.** | **AV.** | **Q.P.** | **AV.** | **Q.P.** | **AV.** | **Q.P.** | **AV.** |
| 1 | 0.15800 | 10.30 | 34.37 | 20.48 | 44.67 | 30.78 | 65.57 | 55.57 | -20.90 | -24.79 |
| 2 | 0.17800 | 10.30 | 30.48 | 16.52 | 40.78 | 26.82 | 64.58 | 54.58 | -23.80 | -27.76 |
| **3** | **0.40180** | **10.32** | **25.50** | **20.87** | **35.82** | **31.19** | **57.82** | **47.82** | **-22.00** | **-16.63** |
| 4 | 4.78600 | 10.48 | 14.69 | 7.52 | 25.17 | 18.00 | 56.00 | 46.00 | -30.83 | -28.00 |
| 5 | 12.55000 | 10.62 | 18.94 | 9.63 | 29.56 | 20.25 | 60.00 | 50.00 | -30.44 | -29.75 |
| 6 | 20.42600 | 10.83 | 17.64 | 7.59 | 28.47 | 18.42 | 60.00 | 50.00 | -31.53 | -31.58 |

**Remarks:**

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



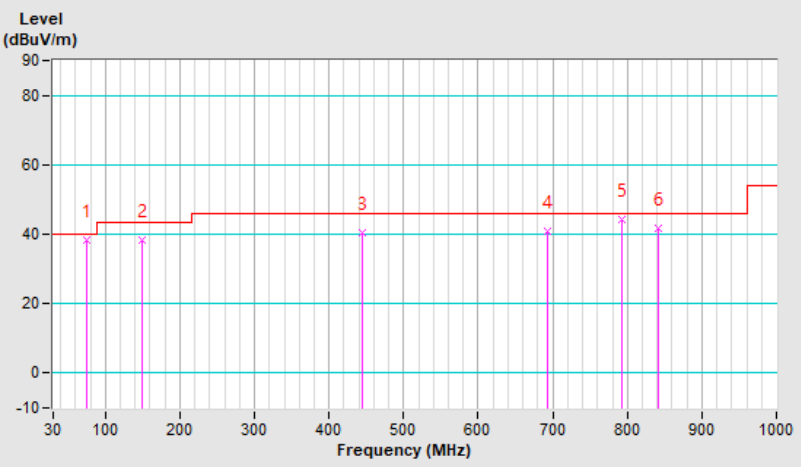
### 7.3 Unwanted Emissions below 1 GHz

| | | | |
|---|---|---|---|
| **RF Mode** | 802.11be (EHT20) | **Channel** | CH 40：5200 MHz |
| **Frequency Range** | 30 MHz ~ 1 GHz | **Detector Function & Bandwidth** | QP: RB=120 kHz, DET=Quasi-Peak |
| **Input Power** | 120 Vac, 60 Hz | **Environmental Conditions** | 23 °C, 65% RH |
| **Tested By** | Thomas Cheng | | |

| Antenna Polarity & Test Distance : Horizontal at 3 m | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **No** | **Frequency (MHz)** | **Emission Level (dBuV/m)** | **Limit (dBuV/m)** | **Margin (dB)** | **Antenna Height (m)** | **Table Angle (Degree)** | **Raw Value (dBuV)** | **Correction Factor (dB/m)** |
| 1 | 74.62 | 38.1 QP | 40.0 | -1.9 | 2.00 H | 255 | 53.7 | -15.6 |
| 2 | 148.34 | 38.2 QP | 43.5 | -5.3 | 2.00 H | 265 | 50.5 | -12.3 |
| 3 | 445.16 | 40.4 QP | 46.0 | -5.6 | 2.00 H | 188 | 48.1 | -7.7 |
| 4 | 693.48 | 40.9 QP | 46.0 | -5.1 | 1.00 H | 144 | 43.8 | -2.9 |
| **5** | **792.42** | **44.3 QP** | **46.0** | **-1.7** | **1.00 H** | **56** | **45.1** | **-0.8** |
| 6 | 841.89 | 41.5 QP | 46.0 | -4.5 | 1.00 H | 218 | 42.0 | -0.5 |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

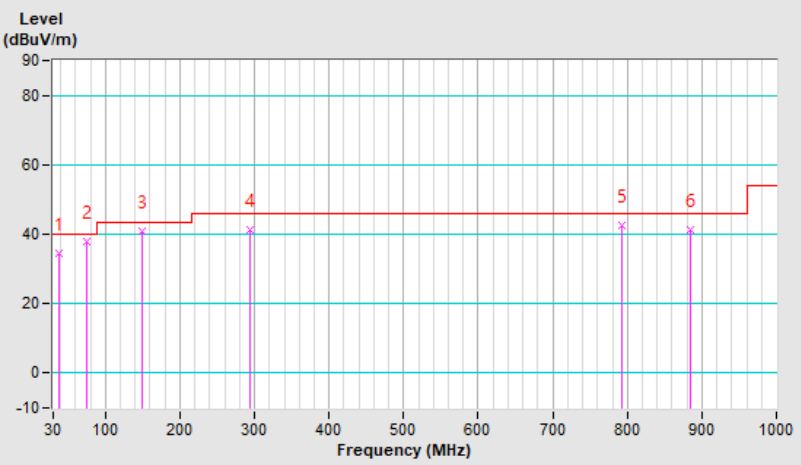


| | | | |
|---|---|---|---|
| **RF Mode** | 802.11be (EHT20) | **Channel** | CH 40：5200 MHz |
| **Frequency Range** | 30 MHz ~ 1 GHz | **Detector Function & Bandwidth** | QP: RB=120 kHz, DET=Quasi-Peak |
| **Input Power** | 120 Vac, 60 Hz | **Environmental Conditions** | 23 °C, 65% RH |
| **Tested By** | Thomas Cheng | | |

| Antenna Polarity & Test Distance : Vertical at 3 m | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **No** | **Frequency (MHz)** | **Emission Level (dBuV/m)** | **Limit (dBuV/m)** | **Margin (dB)** | **Antenna Height (m)** | **Table Angle (Degree)** | **Raw Value (dBuV)** | **Correction Factor (dB/m)** |
| 1 | 38.73 | 34.4 QP | 40.0 | -5.6 | 1.00 V | 278 | 47.0 | -12.6 |
| 2 | 74.62 | 37.8 QP | 40.0 | -2.2 | 1.00 V | 221 | 53.4 | -15.6 |
| 3 | 149.31 | 40.8 QP | 43.5 | -2.7 | 1.00 V | 252 | 53.0 | -12.2 |
| 4 | 294.81 | 41.1 QP | 46.0 | -4.9 | 1.00 V | 213 | 52.9 | -11.8 |
| 5 | 792.42 | 42.5 QP | 46.0 | -3.5 | 1.99 V | 340 | 43.3 | -0.8 |
| 6 | 885.54 | 41.1 QP | 46.0 | -4.9 | 1.00 V | 327 | 41.6 | -0.5 |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



## 7.4 Unwanted Emissions above 1 GHz

### 1TX

| | | | |
|---|---|---|---|
| **RF Mode** | 802.11be (EHT20) | **Channel** | CH 40：5200 MHz |
| **Frequency Range** | 1 GHz ~ 40 GHz | **Detector Function & Bandwidth** | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=RMS |
| **Input Power** | 120 Vac, 60 Hz | **Environmental Conditions** | 23 °C, 65% RH |
| **Tested By** | Thomas Cheng | | |

| Antenna Polarity & Test Distance : Horizontal at 3 m | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **No** | **Frequency (MHz)** | **Emission Level (dBuV/m)** | **Limit (dBuV/m)** | **Margin (dB)** | **Antenna Height (m)** | **Table Angle (Degree)** | **Raw Value (dBuV)** | **Correction Factor (dB/m)** |
| 1 | *5200.00 | 111.0 PK | | | 1.14 H | 311 | 69.6 | 41.4 |
| 2 | *5200.00 | 98.5 AV | | | 1.14 H | 311 | 57.1 | 41.4 |
| **3** | **#10400.00** | **59.7 PK** | **68.2** | **-8.5** | **1.88 H** | **252** | **46.9** | **12.8** |
| **Antenna Polarity & Test Distance : Vertical at 3 m** | | | | | | | | |
| **No** | **Frequency (MHz)** | **Emission Level (dBuV/m)** | **Limit (dBuV/m)** | **Margin (dB)** | **Antenna Height (m)** | **Table Angle (Degree)** | **Raw Value (dBuV)** | **Correction Factor (dB/m)** |
| 1 | *5200.00 | 107.1 PK | | | 2.68 V | 181 | 65.7 | 41.4 |
| 2 | *5200.00 | 94.5 AV | | | 2.68 V | 181 | 53.1 | 41.4 |
| 3 | #10400.00 | 59.5 PK | 68.2 | -8.7 | 2.01 V | 152 | 46.7 | 12.8 |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

## 2TX

| RF Mode | 802.11be (EHT20) | Channel | CH 40：5200 MHz |
|---|---|---|---|
| Frequency Range | 1 GHz ~ 40 GHz | Detector Function & Bandwidth | PK: RB=1 MHz, VB=3 MHz, DET=Peak<br>AV: RB=1 MHz, VB=10 Hz, DET=RMS |
| Input Power | 120 Vac, 60 Hz | Environmental Conditions | 23 °C, 65% RH |
| Tested By | Thomas Cheng | | |

| Antenna Polarity & Test Distance : Horizontal at 3 m | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1 | *5200.00 | 111.1 PK | | | 2.33 H | 241 | 69.7 | 41.4 |
| 2 | *5200.00 | 98.6 AV | | | 2.33 H | 241 | 57.2 | 41.4 |
| 3 | #10400.00 | 59.2 PK | 68.2 | -9.0 | 2.26 H | 127 | 46.4 | 12.8 |
| **Antenna Polarity & Test Distance : Vertical at 3 m** | | | | | | | | |
| No | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1 | *5200.00 | 107.1 PK | | | 2.59 V | 184 | 65.7 | 41.4 |
| 2 | *5200.00 | 94.6 AV | | | 2.59 V | 184 | 53.2 | 41.4 |
| 3 | #10400.00 | 59.0 PK | 68.2 | -9.2 | 2.24 V | 143 | 46.2 | 12.8 |

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency, the limit was restricted at the RF Output Power.
6. " # ": The radiated frequency is out of the restricted band.

## 8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

# 9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following: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The address and road map of all our labs can be found in our web site also.

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