

FL ESPORTS CMK87

FL ESPORTS CMK87 Wireless Gaming Keyboard User Manual

Model: CMK87

1. INTRODUCTION

Thank you for choosing the FL ESPORTS CMK87 Wireless Gaming Keyboard. This 87-key TKL layout mechanical keyboard is designed for versatility and performance, featuring three connection modes, hot-swappable switches, and customizable RGB backlighting. This manual provides detailed instructions to help you set up, operate, and maintain your keyboard for an optimal user experience.



Image 1.1: The FL ESPORTS CMK87 Wireless Gaming Keyboard in white, showcasing its 87-key layout and RGB backlighting.

2. PACKAGE CONTENTS

Please verify that all items are present in your package:

- FL ESPORTS CMK87 Wireless Gaming Keyboard

- USB-C to USB-A Cable
- 2.4GHz Wireless Receiver (USB Dongle)
- Keycap Puller
- Switch Puller
- User Manual (this document)

3. SETUP

3.1 Initial Charging

Before first use, it is recommended to fully charge the keyboard. Connect the provided USB-C cable to the keyboard's USB-C port and the other end to a powered USB port (e.g., computer, wall adapter). The keyboard features a built-in 2000mAh battery.

3.2 Connectivity Modes

The CMK87 keyboard supports three connection methods: USB Wired, 2.4GHz Wireless, and Bluetooth 5.0. A switch on the keyboard allows selection between these modes.

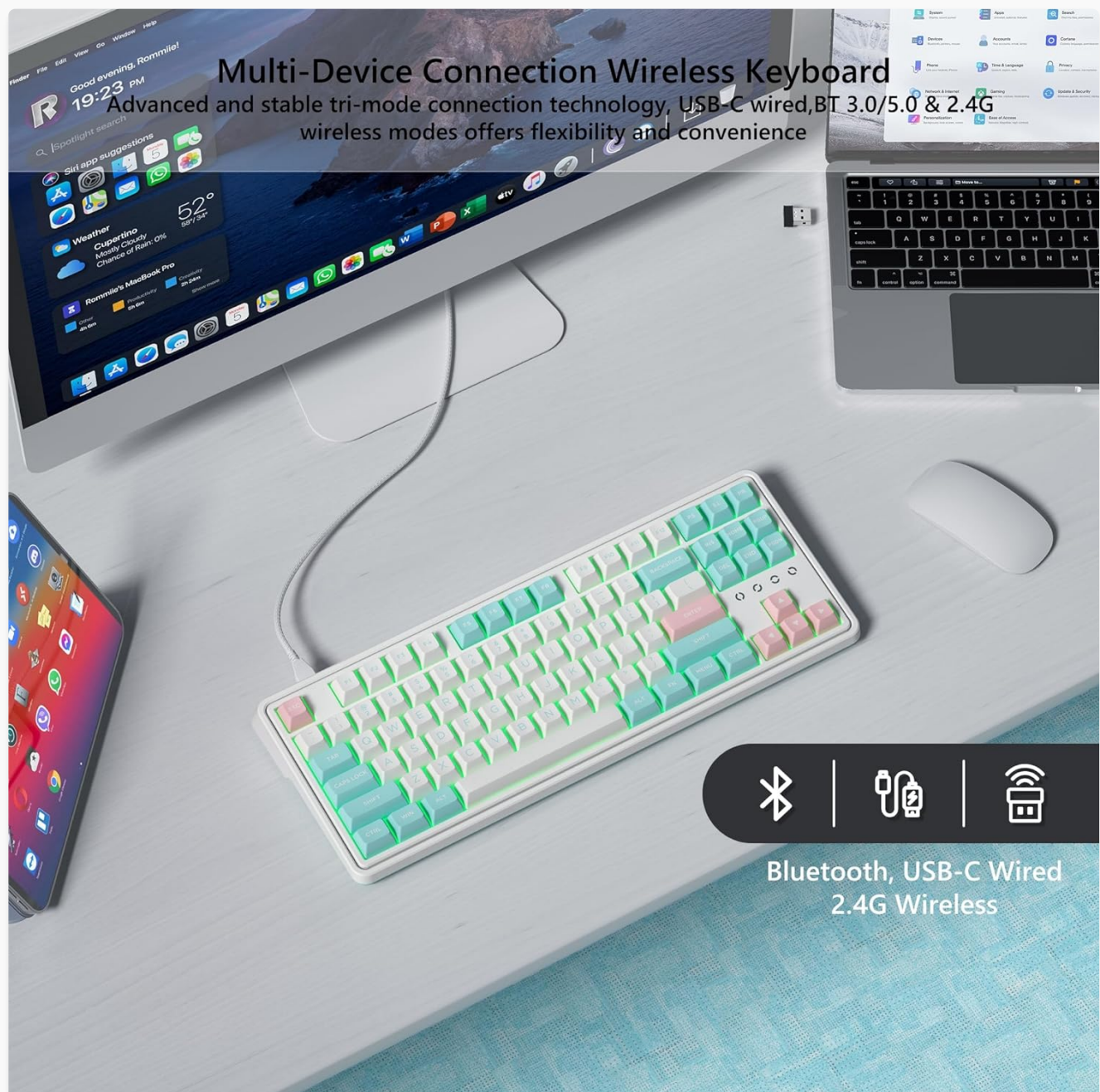


Image 3.1: The FL ESPORTS CMK87 keyboard demonstrating its multi-device connection capabilities, including USB-C wired, 2.4G wireless, and Bluetooth.

3.2.1 USB Wired Mode

1. Connect the USB-C cable to the keyboard's port.
2. Connect the USB-A end to your computer.
3. Ensure the mode switch on the keyboard is set to 'Wired' or the appropriate position (often indicated by a cable icon).
4. The keyboard will be recognized automatically by your system.

3.2.2 2.4GHz Wireless Mode

1. Locate the 2.4GHz wireless receiver (USB dongle).
2. Plug the receiver into an available USB port on your computer.
3. Set the keyboard's mode switch to '2.4G' or the appropriate position (often indicated by a Wi-Fi-like icon).
4. The keyboard should connect automatically.

3.2.3 Bluetooth Mode

1. Set the keyboard's mode switch to 'BT' or the appropriate position (often indicated by a Bluetooth icon).
2. On your device (PC, tablet, PS, Xbox), navigate to Bluetooth settings and enable Bluetooth.
3. The keyboard should appear as 'FL ESPORTS CMK87' or similar in the list of available devices. Select it to pair.
4. Follow any on-screen prompts to complete the pairing process.

3.3 System Compatibility Switch

The keyboard includes a switch to toggle between Windows (WIN) and Mac (MAC) operating system layouts. Ensure this switch is set correctly for your system to ensure proper key functionality.



Image 3.2: Detail of the Mac/Win system compatibility switch located on the keyboard.

4. OPERATING INSTRUCTIONS

4.1 Basic Keyboard Functions

The CMK87 functions as a standard 87-key keyboard. Many advanced features and media controls are accessed via the **Fn** key in combination with other keys. Refer to the keyboard's keycap legends for specific Fn key combinations.

4.2 RGB Lighting Control

The keyboard features 1.68 million customizable RGB backlighting. Lighting effects, brightness, and speed can typically be adjusted using **Fn** key combinations (e.g., **Fn + Ins** for mode, **Fn + Del** for color, **Fn + Arrow keys** for

brightness/speed). For more advanced customization, use the dedicated keyboard software.

4.3 Hot-Swapping Switches and Keycaps

The CMK87 is hot-swappable, allowing you to change switches and keycaps without soldering. This feature enables customization of typing feel and aesthetics.

1. **Removing Keycaps:** Use the provided keycap puller to gently lift keycaps off the switches.
2. **Removing Switches:** Use the provided switch puller to carefully grip and pull the switch vertically out of the PCB.
3. **Installing Switches:** Align the pins of the new 3-pin or 5-pin switch with the holes on the PCB. Press down gently until the switch clicks into place. Ensure pins are not bent.
4. **Installing Keycaps:** Press the new keycap onto the switch stem until it is firmly seated.



Image 4.1: Illustration of the hot-swappable feature, showing switches being removed and installed, along with specifications for Kailh Box Red switches.

4.4 Macro Programming and Software Support

The CMK87 supports macro customization and key function remapping through its dedicated driver software. This

software allows for advanced personalization of your keyboard, including creating complex macros and customizing RGB lighting effects.



Image 4.2: The keyboard's software interface, demonstrating options for macro programming and key customization.

4.5 Battery Status Check

To check the current battery level, press **Fn + Backspace**. The keyboard's lighting may indicate the battery status (e.g., specific key colors or patterns).

Long-Lasting Battery Life

Rechargeable keyboard built-in large capacity battery to provide more power and longer battery life. Keyboard power can be queried by key combination

 100%



2000mAh

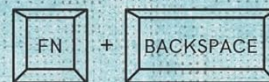


Image 4.3: Visual guide for checking the keyboard's battery level using the Fn + Backspace key combination.

5. MAINTENANCE

5.1 Cleaning

To maintain your keyboard's appearance and functionality:

- Disconnect the keyboard from your device before cleaning.
- Use a soft, lint-free cloth slightly dampened with water or a mild cleaning solution to wipe the keycaps and chassis.
- For dust and debris between keycaps, use compressed air or a small brush.
- Avoid using harsh chemicals or abrasive materials.

5.2 Switch and Keycap Replacement

As detailed in Section 4.3, the hot-swappable design allows for easy replacement of switches and keycaps. Ensure you use compatible 3-pin or 5-pin mechanical switches and standard MX-style keycaps.

6. TROUBLESHOOTING

If you encounter issues with your FL ESPORTS CMK87 keyboard, please refer to the following common solutions:

- **Keyboard not responding:**
 - Ensure the keyboard is charged. Connect it via USB-C cable.
 - Check the connection mode switch (Wired, 2.4G, BT) and ensure it matches your connection method.
 - For 2.4GHz, ensure the USB dongle is securely plugged in.
 - For Bluetooth, ensure it is paired correctly and your device's Bluetooth is active. Try re-pairing.
 - Try connecting to a different USB port or device.
- **RGB lighting not working:**
 - Ensure the keyboard is powered on.
 - Check if the lighting has been turned off via Fn key combinations.
 - If using software, ensure the lighting settings are correctly configured.
- **Keys not registering or double-typing:**
 - This could indicate a faulty switch. Due to the hot-swappable design, you can replace individual switches. Refer to Section 4.3.
 - Ensure the switch is fully seated in its socket.
- **Bluetooth disconnecting frequently:**
 - Ensure the keyboard is within range of your device.
 - Check for interference from other wireless devices.
 - Ensure the keyboard's battery is sufficiently charged.
 - Try re-pairing the keyboard with your device.
- **Software not detecting keyboard:**
 - Ensure the keyboard is connected via USB wired mode when attempting to use the software.
 - Download the latest version of the software from the official FL ESPORTS website.






7. SPECIFICATIONS


Feature	Specification
Model	CMK87
Layout	87-Key TKL (75%)
Connectivity	2.4G Wireless, Bluetooth 5.0, USB-C Wired
Switches	Pre-lubed Linear Switches (Hot-Swappable 3/5-pin)
Keycaps	Double Shot PBT Keycaps
Backlighting	1.68 Million RGB
Battery Capacity	2000mAh Lithium Polymer
Compatibility	PC (Windows), Mac, Tablet, PS, Xbox
Material	Acrylonitrile Butadiene Styrene (ABS)
Item Weight	3.98 pounds
Package Dimensions	16.3 x 8.15 x 2.05 inches

8. WARRANTY AND SUPPORT

FL ESPORTS products are manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or visit the official FL ESPORTS website. Please retain your proof of purchase for warranty claims.

Related Documents - CMK87

	<p>CMK87 Wired/BT/2.4G Three Mode Keyboard Specification and User Guide</p> <p>Detailed specifications, features, and operating instructions for the CMK87 three-mode mechanical keyboard, covering wired, Bluetooth, and 2.4G wireless connectivity, RGB backlighting, and key combination functions.</p>
	<p>CMK87 Wired/BT/2.4G Three Mode Keyboard Specification and User Guide</p> <p>Detailed specifications, features, and operating instructions for the CMK87 three-mode mechanical keyboard, covering wired, Bluetooth, and 2.4G wireless connectivity, RGB backlighting, and key combination functions.</p>
	<p>FL CMMI Keyboard MK870 User Guide</p> <p>Explore the features and functionalities of the FL CMMI Keyboard MK870 with this comprehensive user guide. Learn about WIN mode, key combinations, and software customization.</p>
	<p>FL ESPORTS GEO75HE Mechanical Keyboard FN Key Combinations and Features</p> <p>Detailed guide to the FN key combinations, system controls, and features of the FL ESPORTS GEO75HE Magnetic Axis Mechanical Keyboard. Learn about backlight settings, system functions, product specifications, and troubleshooting tips.</p>
	<p>FL980 High Performance Mechanical Keyboard: Key Functions and Backlight Control</p> <p>Detailed guide to the key functions and backlight controls for the FL ESPORTS FL980 High Performance Mechanical Keyboard, including Windows and Mac modes.</p>



FL ESPORTS MK750 Mechanical Keyboard User Manual

User manual for the FL ESPORTS MK750 Mechanical Keyboard, detailing features, functions, and specifications for both Windows/Android and iOS/MAC systems.

Documents - FL ESPORTS – CMK87

DONGGUAN FL ESPORTS ELECTRONICS CO., LTD.

Mar.07, 2022

Office of Engineering Technology
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046
USA


Subject: Explanation of differences between product types

FCC ID : 2A4V8-CMK87
Model Number: CMK87, CMK87 SAM, CMK87 CPM
To Whom It May Concern:

We, The DONGGUAN FL ESPORTS ELECTRONICS CO., LTD. hereby declare that the models are identical except the model names and the color of appearance.

Except for the different above, no other modification is performed.

Sincerely,

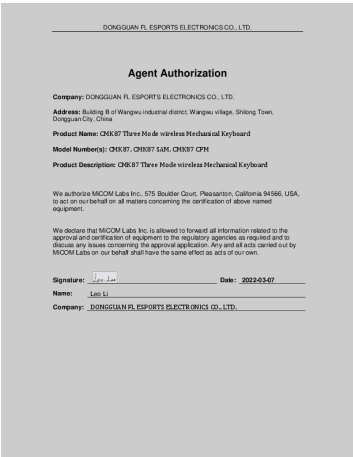
Signature: 

DONGGUAN FL ESPORTS ELECTRONICS CO., LTD.
Contact person: Leo Li

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Three Mode wireless Mechanical Keyboard 2A4V8 2A4V8CMK87 cmk87
DONGGUAN FL ESPORTS ELECTRONICS CO., LTD. Mar.07, 2022 Office of
Engineering Technology Federal Communications Commission 7435 Oakland Mills
Road Columbia, MD 21046 USA Subject: Explanation of differences between product
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To Whom It...

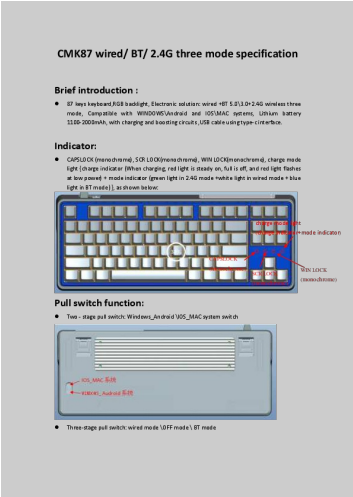
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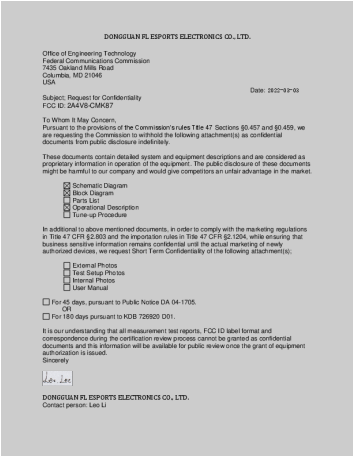
PLEASE PRINT ON COMPANY LETTERHEAD MiCOM Labs Inc QMS Agent Authorization Rev 1 0
DONGGUAN FL ESPORTS ELECTRONICS CO LTD CMK87 Three Mode wireless Mechanical Keyboard
2A4V8 2A4V8CMK87 cmk87
DONGGUAN FL ESPORTS ELECTRONICS CO., LTD. Agent Authorization
Company: DONGGUAN FL ESPORTS ELECTRONICS CO., LTD. Address: Building
B of Wangwu industrial district, Wangwu village, Shilong Town, Dongguan City, China
Product Name: **CMK87** Three Mode wireless Mechanical Keyboard Model Number s :
CMK87, ...

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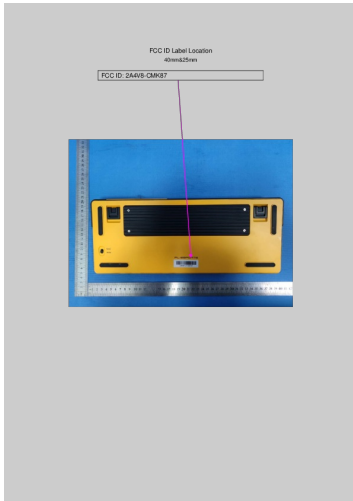
[pdf] CMK87 Wired/BT/2.4G Three Mode Keyboard Specification and User Guide

Detailed specifications, features, and operating instructions for the CMK87 three-mode mechanical keyboard, covering wired, Bluetooth, and 2.4G wireless connectivity, RGB backlighting, and key combination functions.
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[pdf] Confidentiality Request Letter

Fiona Ffuellenbach FCC Short Long Term Confidentiality Request Rev4 1 DONGGUAN FL ESPORTS
ELECTRONICS CO LTD CMK87 Three Mode wireless Mechanical Keyboard 2A4V8 2A4V8CMK87
cmk87
DONGGUAN FL ESPORTS ELECTRONICS CO., LTD. Office of Engineering
Technology Federal Communications Commission 7435 Oakland Mills Road
Columbia, MD 21046 USA Subject; Request for Confidentiality FCC ID:
2A4V8-**CMK87** Date: 2022-03-03 To Whom It May Concern, Pursuant to the
provisions of the Commissio...
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[\[pdf\]](#) Label

USER Label and Location DONGGUAN FL ESPORTS ELECTRONICS CO LTD CMK87 Three Mode wireless Mechanical Keyboard 2A4V8 2A4V8CMK87 cmk87

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[\[pdf\]](#) Test Report

Test Report DONGGUAN FL ESPORTS ELECTRONICS CO LTD CMK87 Three Mode wireless Mechanical Keyboard 2A4V8 2A4V8CMK87 cmk87

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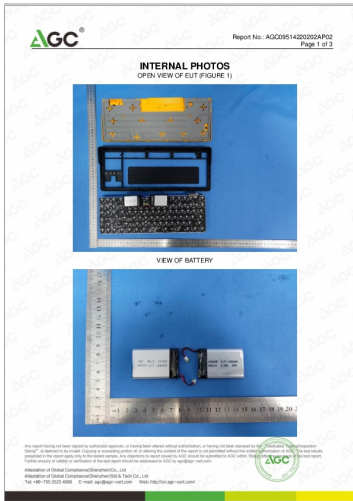


[\[pdf\]](#) Product Photos

Administrator External Photos DONGGUAN FL ESPORTS ELECTRONICS CO LTD CMK87 Three Mode wireless Mechanical Keyboard 2A4V8 2A4V8CMK87 cmk87

Report No.: AGC09514220202AP02 Page 1 of 4 EXTERNAL PHOTOS All VIEW OF EUT TOP VIEW OF EUT Report No.: AGC09514220202AP02 Page 2 of 4 BOTTOM VIEW OF EUT FRONT VIEW OF EUT Report No.: AGC09514220202AP02 Page 3 of 4 BACK VIEW OF EUT LEFT VIEW OF EUT Report No.: AGC09514220202AP02 Page 4 of 4 RIG...

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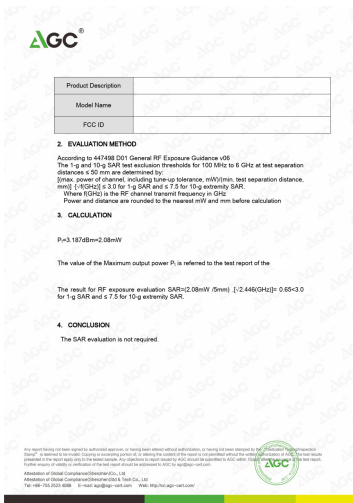


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Administrator Internal Photos DONGGUAN FL ESPORTS ELECTRONICS CO LTD CMK87 Three Mode wireless Mechanical Keyboard 2A4V8 2A4V8CMK87 cmk87

Report No.: AGC09514220202AP02 Page 1 of 3 INTERNAL PHOTOS OPEN VIEW OF EUT FIGURE 1 VIEW OF BATTERY Report No.: AGC09514220202AP02 Page 2 of 3 INTERNAL VIEW OF EUT FIGURE 1 INTERNAL VIEW OF EUT FIGURE 2 Report No.: AGC09514220202AP02 Page 3 of 3 INTERNAL VIEW OF EUT FIGURE 3 Antenna ***...

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[\[pdf\]](#) SAR Rating

USER RF Exposure DONGGUAN FL ESPORTS ELECTRONICS CO LTD CMK87 Three Mode wireless Mechanical Keyboard 2A4V8 2A4V8CMK87 cmk87

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[\[pdf\]](#) Product Photos

Administrator Test Setup Photos DONGGUAN FL ESPORTS ELECTRONICS CO LTD CMK87 Three Mode wireless Mechanical Keyboard 2A4V8 2A4V8CMK87 cmk87

Report No.: AGC09514220202AP01 Page 1 of 2 TEST SETUP PHOTOS RADIATED EMISSION TEST SETUP BELOW 1GHz RADIATED EMISSION TEST SETUP ABOVE 1GHz Report No.: AGC09514220202AP01 Page 2 of 2 AC POWER LINE CONDUCTED TEST SETUP RF CONDUCTED TEST SETUP

*****End of Report**...

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