

16:53



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## Information

Default Gateway IP	10.214.15.254
DNS Server IP	193.167.78.100 193.167.78.90
External IP	N/A <a href="#">Reload</a>
Default Gateway IPv6	N/A
DNS Server IPv6	N/A
External IPv6	N/A <a href="#">Reload</a>
HTTP Proxy	N/A

## WI-FI INFORMATION

Network Connected	Yes
SSID	Savonia-guest
BSSID	dc:8c:37:0c:f1:ee
Vendor	Cisco Systems, Inc
Security Type	Open
IP Address	10.214.9.112
Subnet Mask	255.255.240.0
IPv6 Addresses	fe80::14b3:4332:82b1:290b / 64

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Info



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## Wi-Fi Network Analysis – Wireless and Radiotechnology Course 2026

### Objective

The objective of this task was to analyze a local Wi-Fi network and understand its configuration, performance parameters, and potential issues using the NET Analyzer mobile application.

### Tool Used

- **NET Analyzer (iOS)**

### Network Overview

- **SSID:** Savonia-guest
- **Network Type:** Wi-Fi
- **Security Type:** Open
- **Vendor:** Cisco Systems, Inc.
- **Connection Status:** Connected

### Router and IP Information

Parameter	Value
IP Address	10.214.9.112
Default Gateway	10.214.15.254
Subnet Mask	255.255.240.0
DNS Servers	193.167.78.100, 193.167.78.90
IPv6 Address	fe80::14b3:4332:82b1:290b /64
BSSID (AP MAC)	dc:8c:37:0c:f1:ee

### Observations

- The device is connected to an **open guest Wi-Fi network**, which may limit security and performance.
- The access point is manufactured by **Cisco**, indicating enterprise-grade infrastructure.
- A private IP address is assigned, typical for internal networks.
- IPv6 is partially available (link-local address).

## **Analysis and Potential Issues**

- **Open security** may reduce protection and allow many users, increasing network load.
- Guest networks are often **bandwidth-limited**, which can affect speed and latency.
- High number of connected users can cause **network congestion**.
- Performance may degrade further away from the access point due to walls and floors.

## **Recommendations**

- Use **secured Wi-Fi (WPA2/WPA3)** instead of open networks when possible.
- Connect to a **5 GHz band** if available to reduce interference.
- Improve access point placement to reduce coverage gaps.
- Limit the number of devices on guest networks.

## **Conclusion**

This Wi-Fi analysis demonstrated how network configuration, security type, and environment influence connectivity and performance. Open guest networks provide convenience but often suffer from congestion and reduced reliability. Proper security, channel management, and access point placement are essential for optimal Wi-Fi performance.