



# RCWA

## RUCKUS Certified Wi-Fi Associate Exam



### HIGHLIGHTS

#### How to Register

Register online at the [RUCKUS Certifications Store](#)

#### Passing Score

67% or better

#### Number of Questions

52

#### Exam Duration

2 Hours

#### Proctoring

This exam is **remote proctored**.

See the [What to Expect](#) document for details.

#### Validity Period

The RCWA Certification is valid for a period of three (3) years

#### Retake Policy

Once passed, you may not retake the exam except to recertify.

If failed, you may retake the exam immediately, however, after a second attempt you must wait 14 days. After a third or fourth attempt, you must wait 30 days. No more than 5 retakes are allowed within one year from your first attempt.

### Exam Description

As a RUCKUS Certified Wi-Fi Associate (RCWA), you must be able to design, deploy and manage RUCKUS Wi-Fi solutions in a variety of production environments. This exam assesses your ability to design, configure, administer, troubleshoot and optimize RUCKUS Wi-Fi solutions.

The price for sitting the exam is \$150 USD.

### Ideal Candidate

Before attempting the exam, you should have these critical competencies and experience:

- Basic RF fundamentals and methodologies
- Basic Routing and Switching
- Basic understanding of the IEEE 802.11 standards
- Purpose and methodologies of RF Site Surveys
- Data Networking Services (DHCP/DNS/NAT/Firewall/RADIUS/PoE/NTP/Certificates/LDAP)
- RUCKUS Wi-Fi products and supporting software
- RUCKUS differentiating features and their functions (BeamFlex, ChannelFly)

### Preparatory Courses and Study Materials

RUCKUS provides a variety of free online supporting courses listed on page 3 of this document. The Exam Blueprint starting on page 2 an overview of the topics covered in the exam.

**Be prepared to spend many hours studying these materials!**

### Target Audience

This certification is designed for wireless network designers, installers and administrators, Wi-Fi solutions architects and Wi-Fi support engineers tasked with design, installation, configuration, management, administration and troubleshooting of RUCKUS Wi-Fi deployments.

## Exam Blueprint

The exam blueprint outlines the range of content that may be included in the exam. Not all topics have associated questions. The weight indicates approximately the portion of the exam focused on each section.

You should expect to spend many hours studying this material!

Weight	Section Name & Objectives
12%	<b>Wi-Fi Industry Protocols, Technology and Standards</b> <ul style="list-style-type: none"><li>• 802.11 standards and amendments, frame types and PoE and regulatory domains</li><li>• Basic RF antenna, power, propagation and math concepts</li><li>• RF PHYs and network types</li><li>• WLAN physical and logical components and WLAN optimization</li><li>• WLAN security concepts</li></ul>
12%	<b>RUCKUS Technology and Products</b> <ul style="list-style-type: none"><li>• RUCKUS APs</li><li>• RUCKUS Controllers</li><li>• RUCKUS technologies and features</li><li>• RUCKUS Cloudpath and RUCKUS Analytics</li></ul>
20%	<b>Design and Plan a RUCKUS Wi-Fi Solution</b> <ul style="list-style-type: none"><li>• Overall design requirements for coverage, density, transmit power, AP placement, regulatory and security</li><li>• Design for specific vertical applications: Enterprise / SMB, Hospitality, Education, Large Public Venue, MSP</li><li>• Pre- and Post-deployment site survey</li></ul>
24%	<b>Install and Configure a RUCKUS Wi-Fi Solution</b> <ul style="list-style-type: none"><li>• Initial configuration of APs, WLANs, authentication, security, traffic planes, wired connectivity, mesh</li><li>• Advanced configuration of data tunneling, authentication, fault tolerance, domains, zones and groups, VLAN pools, advanced security, certificates, firewalls, DHCP and NAT</li></ul>
14%	<b>Enhance and Optimize a RUCKUS Wi-Fi Solution</b> <ul style="list-style-type: none"><li>• Apply options: Ethernet port profiles, ChannelFly, BeamFlex+, rogue AP detection, load- and band-balancing, roaming</li><li>• Optimize performance: high-density, Wi-Fi Calling, Rate limiting, QoS</li></ul>
9%	<b>Troubleshoot a RUCKUS Wi-Fi Solution</b> <ul style="list-style-type: none"><li>• Basic troubleshooting approaches and tools, packet capture, spectrum analysis, logs, client drivers</li><li>• Controller troubleshooting: cluster failover, password recovery, licensing, Northbound interface</li><li>• Basic troubleshooting commands: listing WLANs, stations, print syslog, get scg</li><li>• Data and evidence-gathering: snapshots, syslogs, AAA logs, trace, events and alarms</li><li>• Wired / Wireless infrastructure: limits, wired services, design flaws, interference</li></ul>
9%	<b>Administer, Manage and Maintain a RUCKUS Wi-Fi Solution</b> <ul style="list-style-type: none"><li>• User access: external management (RADIUS, LDAP, AD, TACACS), hierarchy, guest and admin users</li><li>• Clusters and redundancy: backup / restore, failover</li><li>• Software and Hardware: upgrades, system upgrades, licensing, ICX Switch management</li></ul>

## Study Materials

The RUCKUS Certified Wi-Fi Associate (RCWA) Exam is a rigorous assessment of your ability to design, configure, manage, optimize and troubleshoot RUCKUS Wi-Fi solutions, covering our full product portfolio across different deployment scenarios. Be prepared to spend up to 100 hours studying. Even if you have extensive field experience, use these study materials to refresh areas that may not be part of your day-to-day work.

These free online resources are provided as materials to assist in your exam preparation.

Online courses are available in [CommScope University](#), and you will need a [MyCommScope account](#) to access these courses.

<p>Supporting Online Courses and Product Documentation</p>	<h3>Online Courses</h3> <ul style="list-style-type: none"><li>• <a href="#">RSP 100- Routing and Switching Protocols</a></li><li>• <a href="#">RWF 100- RUCKUS Wi-Fi Fundamentals Online Course</a></li><li>• <a href="#">RASZA 200- RUCKUS SmartZone 5.2 Online Course</a></li><li>• <a href="#">RWD 200- RUCKUS Wi-Fi Design Online Course</a></li><li>• <a href="#">RWTS 300- RUCKUS Wireless Troubleshooting Online Course</a></li><li>• <a href="#">UNL 200- RUCKUS Unleashed Administrator Online Course</a></li><li>• <a href="#">CLD 200- RUCKUS Cloud Online Course</a></li><li>• <a href="#">CPA 200- RUCKUS Cloudpath Administrator Online Course</a></li><li>• <a href="#">RAA 200- RUCKUS Analytics Administrator Online Course</a></li></ul> <h3>Product Manuals</h3> <ul style="list-style-type: none"><li>• <a href="#">RUCKUS SmartZone 100, SmartZone 144, and Virtual SmartZone-Essentials Administrator Guide, 5.2.2</a></li><li>• <a href="#">RUCKUS SmartZone 300 and Virtual SmartZone-High Scale Administrator Guide, 5.2.2</a></li><li>• <a href="#">RUCKUS Virtual SmartZone Getting Started Guide</a></li><li>• <a href="#">RUCKUS SmartZone Data Plane Configuration Guide</a></li><li>• <a href="#">RUCKUS SmartZone Upgrade Guide, 5.2.2</a></li><li>• <a href="#">RUCKUS SmartZone 100 and Virtual SmartZone-Essentials Command Reference, 5.2.2</a></li><li>• <a href="#">RUCKUS SmartZone 300 and Virtual SmartZone-High-Scale Command Reference Guide, 5.2.2</a></li><li>• <a href="#">RUCKUS Unleashed 200.9 User Guide</a></li><li>• <a href="#">RUCKUS Cloud User Guide, 21.03</a></li></ul>
<p>Other Online Resources:</p>	<ul style="list-style-type: none"><li>• <a href="#">CommScope University &gt; RUCKUS Networking</a></li><li>• <a href="#">CommScope RUCKUS Support Website</a></li><li>• <a href="#">RUCKUS Education YouTube Channel</a></li></ul>

## Practice Questions

The following questions are provided as a rough sample of the types of questions you are likely to face during the exam. An answer key is provided at the end.

1. Which type of RF loss occurs as a wave moves away from the source?
  - A. diffusion
  - B. refraction
  - C. scattering
  - D. attenuation

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2. An engineer needs to provide network connectivity using a wireless bridge between two buildings which are 7km apart with a clear line of sight.  
  
Which three factors must be considered for this deployment? (Choose three)
  - A. Earth bulge
  - B. fade margin
  - C. antenna height
  - D. number of clients
  - E. obstructions to RF
  - F. Free Space Path Loss

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3. Which is an AP placement strategy to improve coverage and reduce contention in a multi-floor Enterprise deployment?
  - A. Locate the APs behind attenuating structures.
  - B. Stagger the APs in each area and across floors.
  - C. Stagger the APs in each area and stack above each other across floors.
  - D. Keep the APs in line in each area and stack above each other across floors.

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4. Which is the default authentication method for a newly configured WLAN in SmartZone and Unleashed?
  - A. Open
  - B. WPA2
  - C. 802.1X EAP
  - D. MAC Address

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5. Which interface on the SmartZone WLAN are clients redirected to for authentication when using a Web Authentication Service?
- A. Data
  - B. Cluster
  - C. Control
  - D. Management
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6. Which SmartZone feature requires background scanning to be enabled?
- A. DFS Channels
  - B. Auto Cell Sizing
  - C. Zero Touch Mesh
  - D. TX Power Adjustment
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7. Which is true for SmartZone SSID Rate Limiting?
- A. It is configured at the Zone level.
  - B. It is only valid for broadcast traffic.
  - C. Multicast rate limiting takes precedence.
  - D. It overrides user traffic profile rate limiting.
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8. Which is the correct method to capture all 5GHz 802.11 Wi-Fi frames transmitted by an AP?
- A. Utilize Port mirroring on the uplink switch port to which the AP is connected.
  - B. Run an iPerf test on a client associated to the AP to a wired device upstream of the AP.
  - C. Execute a wireless packet capture on the AP, selecting 5GHz Capture Interface in SmartZone.
  - D. Run a protocol analyzer on the laptop's built-in WLAN card with the laptop placed near the AP.
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9. Which command will display WLAN name and channel information on any but Unleashed APs?
- A. `get wlanlist`
  - B. `get wlaninfo`
  - C. `show wlanlist`
  - D. `show wlaninfo`
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10. What does a SmartZone Query Response code 503 indicate when analyzing the ICX registration process?
- A. The ICX switch is in the APPROVAL state.
  - B. The content of the SmartZone Query is invalid and cannot be processed.
  - C. The SmartZone has accepted the query and has placed the switch in a PENDING state.
  - D. The SmartZone has reached license capacity for managed switches and cannot accept the new query.
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Answer key: 1: D; 2: B,C,F; 3: B; 4: A; 5: C; 6: B; 7: D; 8: C; 9: B; 10: D