Wi-Fi CERTIFIED™ Certificate

This certificate lists the features that have successfully completed Wi-Fi Alliance interoperability testing. Learn more: www.wi-fi.org/certification/programs

Certification ID: WFA127748

Product Info

Date of Certification	December 5, 2023
Company	Cisco Systems
Product Name	Cisco Catalyst 9800-L Wireless Controller and Cisco CW9163E AP
Product Model Variant	Cisco IOS XE: 17.14
Model Number	C9800-L and CW9163E
Category	Routers
Sub-category	Enterprise/Service Provider Access Point, Switch/Controller or Router

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Network management	WMM® WMM®-Power Save Wi-Fi Agile Multiband™
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2022-12 WPA3™-Personal 2022-06 Wi-Fi Enhanced Open™ 2021-01
Wi-Fi (MAC/PHY)	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities 6 GHz Spectrum Capabilities Spectrum & Regulatory Wi-Fi CERTIFIED 6® Release 2 Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n

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Wi-Fi Components

Wi-Fi Component Operating System

Linux, Version: 17.14

Wi-Fi Component Firmware

17.14

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 GHz	2	2
5 GHz	2	2
6 GHz	2	2

Certifications

2.4 GHz Spectrum Capabilities

20 MHz Channel Width in 2.4 GHz

5 GHz Spectrum Capabilities

20 MHz Channel Width in 5 GHz
40 MHz Channel Width in 5 GHz
80 MHz Channel Width in 5 GHz

6 GHz Spectrum Capabilities

Standard power operation
20 MHz Channel Width in 6 GHz
40 MHz Channel Width in 6 GHz
80 MHz Channel Width in 6 GHz
160 MHz Channel Width in 6 GHz

Protected Management Frames

Spectrum & Regulatory

802.11d

Spectrum & Regulatory (continued)

802.11h

WMM®

WMM®-Power Save

Legacy Power Save
Unschedule auto PS

WPA2™-Enterprise 2018-04

EAP methods

WPA2™-Personal 2021-01

WPA3™-Enterprise 2022-12

EAP methods
192-bit security
Fast Transition OTA on WPA3-Enterprise
Fast Transition OTA on WPA3-Enterprise transition mode

WPA3™-Enterprise 2022-12 (continued)

Fast Transition OTDS on WPA3-Enterprise

WPA3™-Personal 2022-06

Fast Transition OTA on WPA3-Personal
Fast Transition OTA on WPA3-Personal transition mode
Fast Transition OTDS on WPA3-Personal

Wi-Fi Agile Multiband™

Automatically populate BSS Transition candidate list
Fast Transition OTA on WPA2-Enterprise
Fast Transition OTA on WPA2-Personal

Wi-Fi CERTIFIED 6® Release 2

A-MPDU with A-MSDU
Beamforming sounding
BSRP Trigger frame
Compressed Block Ack Rx (buffer size 256)
Compressed Block Ack Tx (buffer size 256)
DL MU-MIMO
DL OFDMA
Individual Target Wake Time
LDPC Rx
LDPC Tx
MCS 8-9 Rx
MCS 8-9 Tx
MCS 10-11 Rx
MCS 10-11 Tx
MU EDCA Parameter Set element
MU-BAR Trigger frame
MU-RTS Trigger frame
Operating mode subfield in A-Control field

Wi-Fi CERTIFIED 6® Release 2 (continued)

Operating mode indication
Operating mode UL MU Rx
SU beamformer
SU-MIMO
UL OFDMA
Wi-Fi 6E
    Co-located BSS
Wi-Fi 6 Release 2 features
    UL MU Control
    UL Extended Range
    Target Wake Time information frames
    Extended sleep

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU
DL MU-MIMO
Extended 5 GHz Channel Support
LDPC Rx
LDPC Tx
MCS 8-9 Rx
RTS with BW Signaling
Short Guard Interval
STBC
SU beamformer

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

Wi-Fi CERTIFIED™ n (continued)

A-MPDU Tx

OBSS on Extension Channel

Short Guard Interval

STBC

Wi-Fi Enhanced Open™ 2021-01