

LANforge Results

[WiFi Reports](#) [WiFi Script Reports](#) [Traffic-Generation Reports](#)

WiFi Related Reports

Executive style test reports

Continuous Rate-vs-Range (release 5.4.7+)

Automated test of throughput and latency over different orientations and attenuations.

[WiFi-7 Rate vs Orientation Upload Report](#)

[WiFi-7 Rate vs Orientation Download Report](#)

Dataplane Throughput Test

Automated test of throughput over different packet sizes, spatial streams, attenuation, rotation and more.

[Example Dataplane Report](#)

Hunt Latency Test

Automated test to find maximum throughput and then test latency at a percentage of that speed.

[Example Hunt Report](#)

Dataplane Throughput vs Orientation

Automated test of throughput over different DUT orientations. Requires turntable. [Example Throughput vs Orientation](#)

WiFi Receiver Sensitivity

Automated test that tests receiver sensitivity at different encoding rates, NSS, attenuation, rotation and more. [Example Receiver Sensitivity Report](#)

WiFi Rate vs Range

Automated throughput test at different RF signal levels. Good for testing rate control algorithms. [Example Rate vs Range Report](#)

WiFi Capacity Test

Automated test with increasing amounts of stations to see how well the Access Point scales. [Example WiFi Capacity Report](#)

Port Reset Test

Automated test that brings WiFi stations or other ports up and down. This is a good stability test of the management and authentication layers. [Example Port Report](#)

Roaming Performance

Automated station directed roaming, including 802.11k/v/r support. [Example Roam Report](#)

AP-Auto Automated Tests

A series of automated tests for AP testing, similar to TR-398, but requiring less equipment and no need for extra software license. Many tests have built-in pass/fail reporting.

- **Basic Client Connectivity:** Bring up many stations, report connect time.
- **Throughput vs Packet Size:** Hunt to find the best throughput at different packet sizes.
- **Dual-Band Performance:** Test performance on both bands concurrently to make sure DUT can handle the load.
- **Capacity:** Report throughput with different numbers of stations.

- **Stability:** Generate traffic on all stations, while periodically resetting the stations. Good for finding stability bugs. [Example Stability report](#).
- **Long Term:** Start throughput test on one or more stations and monitor it while it runs.

Example AP-Auto Report

Automated TR-398 Issue 2+ Test

A series of automated tests for AP testing. Requires turntable, attenuators and LANforge systems to run a complete set of tests. A subset of the tests can be run with less equipment, including over-the-air tests.

- 6.1.1 RX Sensitivity at different angles and encodings.
- 6.2.1 Max Connection 32 station throughput
- 6.2.2 Max TCP Throughput
- 6.2.3 Airtime Fairness
- 6.2.4 Dual Band Throughput
- 6.2.5 TCP Bi-directional Throughput
- 6.2.6 Latency under Load Test
- 6.2.7 Quality of Service
- 6.3.1 Rate vs Range
- 6.3.2 Spatial Consistency
- 6.3.3 Peak Performance
- 6.4.1 Multiple Stations Performance
- 6.4.2 Multiple Association Stability
- 6.4.3 Downlink MU-MIMO, implemented but need example reports. Requires that AP must be able to disable/enable MU-MIMO.
- 6.4.4 Multicast Multi-Station
- 6.5.1 Long Term Stability.
- 6.5.2 AP Coexistence
- 6.5.3 Automatic channel selection.
- 8.1.1 Mesh Roam
- 8.2.1 Mesh Backhaul Rate vs Range
- 8.2.2 2-hop Mesh Backhaul Rate vs Range

Automated Mesh Test

A series of automated tests for AP mesh testing. Requires attenuators and RF chambers to run a complete set of tests. Includes automated mobility along pre-defined and random paths, MCS, RSSI, throughput and other results. [Example Mesh Report](#)

Packet Captures

Create wifi monitor interfaces and launch Wireshark with the click of a button, and run automated diagnostics script on packet capture files.

VOIP/Video Quality

Real Application Performance

Spreadsheet (XLSX) and Similar Reports

WiFi ToS Testing

Automated test of performance of different ToS (BK, BE, VI, VO) data streams. Spreadsheet report shows detailed latency reports to show how better ToS gives better performance. [Example Xlsx ToS Report](#)

Non-WiFi Traffic Generation Reports

10g Dataplane traffic Test

Automated test of performance of different packet sizes on a 10G network. [Example 10g Dataplane Report](#)

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