Wi-Fi Test Packages

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Distribution: Customers

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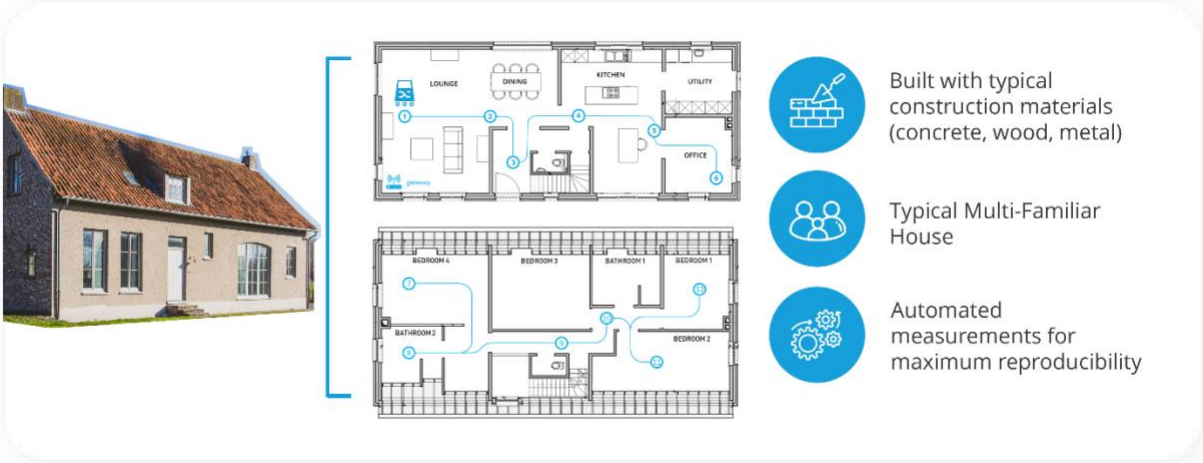
1. Introduction

This document describes the test cases that are part of the Excentis Wi-Fi test packages that are created to validate real user experience in a controlled environment, using our testing tool - ByteBlower + Endpoint.



*The Excentis Wi-Fi Test House where all test cases, described in this document, are executed

The packages are split up into 2 main categories:

- **Standalone Set-up**: designed primarily for benchmarking and validating standalone access points / gateways
- **Mesh Set-up**: designed for multi-AP, Wi-Fi mesh solutions

1.1 Standalone Set-up packages

The following test cases are included in one or more packages and are intended for standalone setups:

- Rate versus location
- Multiclient
- QED
- Neighbor occupancy

- MLO performance *(Wi-Fi7 add-on*)
- MLO interference (*Wi-Fi7 add-on*)
- (L4S) low latency (*Wi-Fi7 add-on*)

All of which will be described further in this document.

1.2 Mesh Set-up packages

For the mesh set-ups, we have the following additional test cases:

- Roaming
- Stability

All of which will be described further in this document.

2. Test Cases

For each test, you will find

- Purpose: An explanation of what the test is and its objective.
- Execution: Instructions on how we run the test.
- Applicability: Guidelines on when we would execute the test.

2.1 Rate versus location

Purpose:

The goal is to find out what Wi-Fi throughput you can expect when moving through the house. You may get good connection when you stand next to your Wi-Fi router, but what if you move away to the kitchen or upstairs in your room?

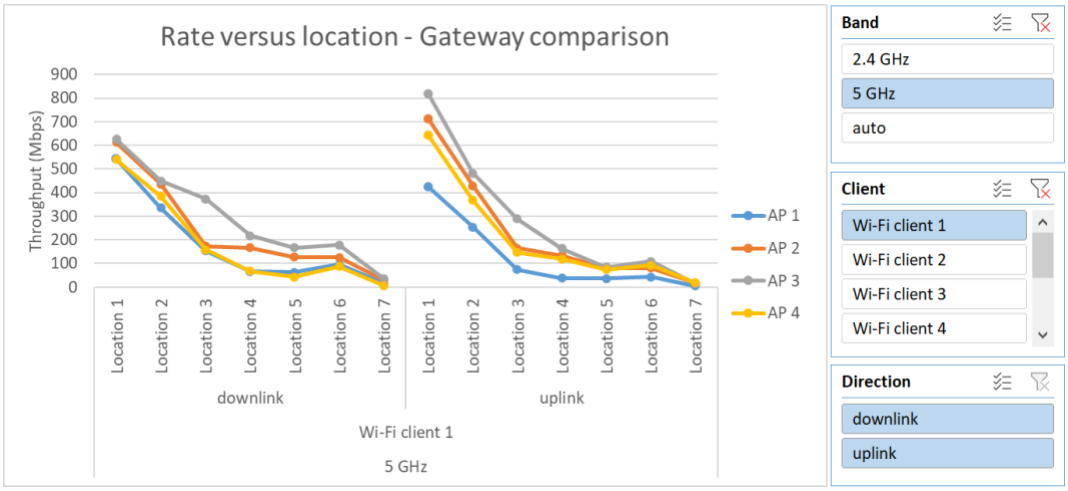
We consistently conduct comparisons between different access points. Rather than simply stating wether an access point performed well or poorly, we rank the submitted products from best to worst.

Execution:

We connect a wireless client (smartphone, laptop, MacBook, iPhone) to the access point and perform throughput tests in multiple rooms in the test house. We repeat this with a variety of different devices to get a representative results set.

We then evaluate key parameters to determine which access point performed the best.

- Which access point offered highest speeds?
- Were there unexpected large fluctuations in the speeds?
- Which access point could reach the most difficult (far-away) places best?



*Example output – rate vs location

- For all Wi-Fi support: Wi-Fi6, 6E, 7
- For all types: standalone and mesh
- For all packages: starter, standard and premium

2.2 Multiclient

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[redacted]

[redacted]

[redacted]

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- [redacted]
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2.3 QED – Quality of Experience Delivered

[redacted]

2.4 Neighbor Occupancy

2.5 Roaming

[redacted]

2.6 Stability

[redacted]

2.7 MLO Performance (*Wi-Fi7 add-on only*)

[redacted]

2.8 MLO Interference (*Wi-Fi7 add-on only*)

[redacted]

2.9 (L4S) low latency (*Wi-Fi7 add-on only*)

[redacted]

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3. Package specifications

	Starter	Standard	Premium
Rate vs location	4 clients	6 clients	9 clients
Multiclient	6 clients	6 clients	6 clients
QED	-	✓	✓
Neighbor occupancy	-	-	✓
	Wi-Fi 7 add-on		
MLO performance	✓	✓	✓
MLO interference	-	-	✓
(L4S) low latency		✓	✓

*Excentis Wi-Fi Packages – details for standalone set-ups

	Starter	Standard	Premium
Rate vs location	4 clients	6 clients	9 clients
Multiclient	8 clients	8 clients	8 clients
QED	-	✓	✓
Neighbor occupancy	-	-	✓
Roaming	✓	✓	✓
Stability	8 hours	8 hours	24 hours
	Wi-Fi 7 add-on		
MLO performance	✓	✓	✓
MLO interference	-	-	✓
(L4S) low latency		✓	✓

*Excentis Wi-Fi Packages – details for mesh set-ups

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