

## WiFi Survey Coverage Summary Report

<b>Customer Account</b>	
<b>Date of Issue</b>	
<b>Email</b>	
<b>Survey Engineer</b>	

### Active Wireless Network

<b>Network (SSID)</b> <i>5Ghz/2Ghz</i>	<b>Channel</b> <i>5Ghz/2Ghz</i>	<b>Frequency</b> <i>5Ghz/2Ghz</i>	<b>Channel Width (Mhz)</b> <i>5Ghz/2Ghz</i>	<b>Interference?</b> <i>5Ghz/2Ghz</i>

### Coverage Survey Results

<b>Location</b>	<b>Coverage Level</b>	<b>Signal Level (dB)</b>	<b>Notes</b>

This test shows the results of a survey conducted at your property and is accurate at the time of the survey.

### Coverage Levels

The above coverage levels are classified as follows:

<b>Excellent</b>	Suitable for all applications including HD media streaming, gaming and video calls
<b>Medium</b>	Good for most applications including basic media streaming
<b>Poor</b>	Unsuitable for media streaming, home working etc. Some level of dropout on some devices.

## Wireless Coverage Survey Explanation

WiFi Coverage is affected by many factors in and around your property as well as the devices you are using, such as phones and laptops.

Here are a few key factors that may help you to get the best from your wireless network:

### 1. Location of Router

Your wireless router transmits and receives information from your wireless devices. Ideally this should be located as near as reasonably possible to the areas in your property where you need WiFi the most. Devices that use media streaming such as Smart TVs tend to be most sensitive to a strong signal.

### 2. Walls and property size

The strength of wireless signals reduces with distance, but is also affected by absorption or reflection in walls. Sometimes this is easy to see, if the property has thick stone walls, but some types of modern insulated plasterboard, foil-backed insulation, or double-glazed windows can also have a significant effect on the wireless signal. If your WiFi network uses the faster 5GHz band (instead of as well as the 2.4GHz band) the effect of walls and distance is far greater. It is generally advised to use the 5GHz band within the same room as the router, as it may not work effectively through walls.

### 3. Type and location of wireless devices

WiFi works across thousands of different types of devices, but they all follow industry standards for communication and security. Where multiple wireless devices are connected to the same router, such as TVs, laptops, and smartphones, they have to communicate with each other to ensure that they all get a share of the WiFi capacity.

By communicating between themselves, WiFi devices can 'agree' whose turn it is to send or receive data from the internet. In some cases, not all WiFi devices can talk to each other, for example where there is a laptop at one end of a property, a router in the middle and smartphone at the other end. In this case, both devices can communicate with the router, but they may not see each other and therefore cannot agree whose turn it is to access the router.

This scenario can have a negative effect on all the devices in the network. Equally, if one wireless device has a very poor signal, but all others are good, the router will spend a disproportionate time re-sending information to the weakest device, reducing the capacity for all others.

### 4. Interference from other sources

Some non WiFi equipment is permitted to transmit data on the 2.4GHz WiFi band and can cause interference or reduced performance on your WiFi network.

This equipment can include baby monitors, DECT cordless phones, Xbox controllers, some alarm and door entry systems and microwave ovens.

## 5. Using wireless extenders and repeaters

Boosting wireless coverage can be achieved by using specialised equipment to add repeaters or extenders. Whilst these can be an effective means of improving coverage, it is vital that they are set up correctly or they can cause lower speeds and reduce reliability.

We offer additional router installations to help to improve coverage and these are proven to be a much more effective means of delivering speeds throughout the property as they are cabled in allowing speeds comparable to the main router.

## 6. Expected speeds

Please keep in mind that the speed of internet access is limited to the speed of your line or subscription package, which will often be different than the WiFi speed. As an example, if you have a 20Mbps internet subscription, you will not be able to download data from the internet faster than this.

Please also note that your internet connection speed is shared between the users and devices connected to your network. Therefore, if say a Playstation game is being updated at the same time as an Apple update and a movie download, they will all share the overall internet capacity at the property and will therefore appear slower than the headline subscription speed.