

Some Fallible Notes on Broadband Speeds Lamberhurst

These notes are based on personal experience and conversations with BT engineers in the never ending quest to keep our internet access speed up!

Lamberhurst Area – What can be expected?

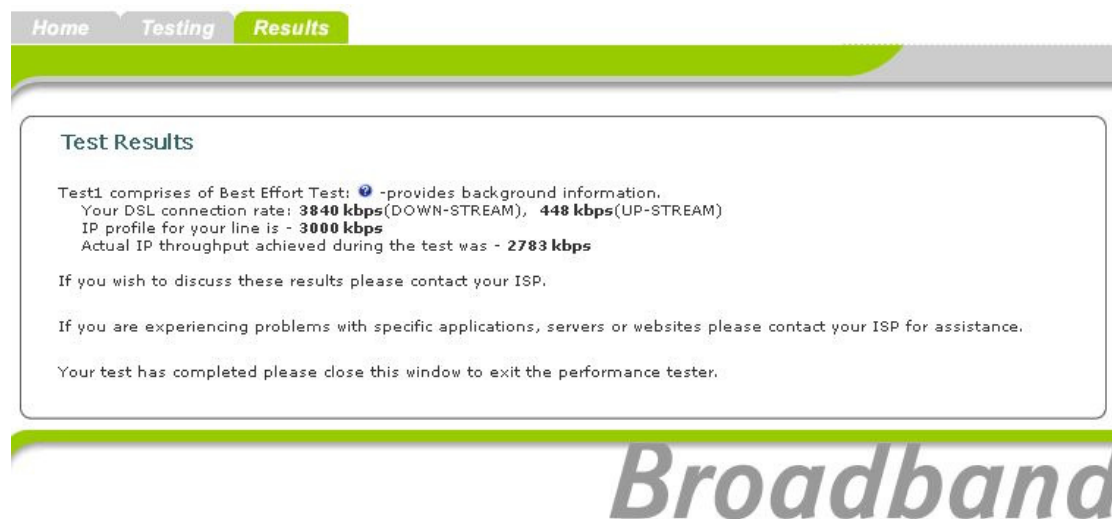
According to BT, the maximum technically possible speed in Lamberhurst village itself is 6.5 Mbps

In Hook Green, the figure is 3.5 Mbps. (Hook Green is further from the exchange so speed is reduced)


These are really theoretical maxima and unlikely to be achieved in practice.

The UK average achieved is around 3-3.5 Mbps – unless you have a superfast fibre optic cable service like Virgin. However, like mains gas, fibre optics are only something to dream of in Lamberhurst! We are stuck with getting our Broadband services down BT's wires and through an ADSL modem or modem/router.

Your own access speed can be most reliably tested by going to www.speedtester.bt.com and following instructions (VERY carefully!). This should be tried 3-4 times at different times of the day. Note all the numbers given in the result. (see screenshot of a test result below).



The screenshot shows the 'Results' tab of the BT Speed Tester. The 'Test Results' section contains the following information:

- Test1 comprises of Best Effort Test:  -provides background information.
- Your DSL connection rate: **3840 kbps**(DOWN-STREAM), **448 kbps**(UP-STREAM)
- IP profile for your line is - **3000 kbps**
- Actual IP throughput achieved during the test was - **2783 kbps**

Below the test results, there are two lines of text:

- If you wish to discuss these results please contact your ISP.
- If you are experiencing problems with specific applications, servers or websites please contact your ISP for assistance.

At the bottom of the results box, it says: Your test has completed please close this window to exit the performance tester.

Below the results box, the word 'Broadband' is written in a large, stylized, grey font.

In Hook Green we actually get around 2.9 Mbps. This compares quite well with national average. Around 3 Mbps is perfectly adequate for most things including streaming music and videos and making Skype calls. If you are a hot online gamer it might be a bit frustrating. Please note, this is ONE installation in Hook Green. It shouldn't be assumed that because we get this speed, everyone in Hook Green will automatically get the same. The same will apply to users in the village itself. Some users will almost certainly getting faster services than others due to circumstances outwith the BT lines and exchange (see below)

It would be useful if people tested their speed as outlined above and reported back with results. Then we can approach BT with actual data to prove/disprove the quality.

If you are willing, could you forward the following results to us at broadlamb@btinternet.com? We will co-ordinate a discussion with BT if it appears that a significant number of villagers are getting a slower than expected service.

Name (optional):

ISP Provider: (e.g. BT, Sky, Tiscali etc.)

Contract rate: (e.g. up to 8Mbps etc)

Modem/Router type: (e.g. BT Home Hub, Netgear DG 8340 etc.)

BT Speedtester results (for 3-4 separate tests at different times of day)

DSL Connection rates:

DOWNSTREAM: _____ kbps

UPSTREAM: _____ kbps

IP Profile for your line: _____ kbps

Actual Output achieved during test: _____ kbps

Things You Can Do Yourself To Improve Your Own Service

Before you call your ISP to report slow speed, it's worth checking some things at home. Remember – if your ISP organises a BT engineer to visit your home and he/she finds the problem is in your own wiring/setup, you could be charged a hefty fee for the call-out.

Are you subscribing to a high-speed service? Most providers now supply an “up to 8 Mbps” (sometimes even higher). This means that, if the telephone system (both BT and in your house) is capable of supporting that speed, then you may (occasionally) get close to it. However if you have an old contract (maybe it is only an “up to 2 Mbps” one) this would hit its speed limit before reaching the level we believe is possible in Lamberhurst. Worth checking.

There's not much point in villagers asking (and paying?) for anything more than the “up to 8 Mbps” service given the limits on our exchange.

Speed is also dependent on distance from the exchange, the quality of cabling in the house and what kind of filter is fitted on the main BT point in the house.

Location of modem/router. A lot is made of the problems associated with running the modem/router at the end of a long extension cable from the main BT socket. BT helpline staff will always ask how far the router is from the main socket if you complain about speed and, if you say it's at the end of a long extension, they will ask you to test it with the router directly connected at the main socket. The maximum BT-recommended length for an extension to the modem/router seems to be about 4 metres and it should be high quality copper cable – not aluminium or similar.

If you can fit your modem/router directly at the main socket, at least that will eliminate any ‘in-house’ cable issues. Obviously this can be difficult, depending on the location of your socket. It may just not be convenient. However, increasing numbers of people use wireless modem/routers or hubs now so that should mean it is easier to plug it into the main socket and still have your PC located where you want it in the house.

Having said that, we actually have our modem at the end of 15 metre extension and we still get a reasonable service! This is however with good quality copper cable.

Check the main BT point. If it is a 'split' plate, then it is a NTE5 socket. Providing it does NOT say 'OPENREACH' on the top of the socket (see second picture) then you can fit a BT iPlate which provides additional filtering and can increase the speed very significantly



If your socket says 'openreach' on it (see below) then it is a relatively new one and will already have the filter fitted internally.



If your socket is not 'split' (ie no horizontal line across the middle) then it is an old fashioned socket and should be replaced with the new NTE5 socket by BT – which will, of course, have the filter already installed. Check with BT to see how much this will cost!

If you have a split socket but not with 'openreach' on it, then you can buy an iPlate off BT or on the internet (price varies from about £5 to £12, depending on where you order it from). This should speed things up considerably but BT are at pains to point out that they don't guarantee anything.

Fitting an iPlate is a piece of cake – no electrical expertise is required, just two screws to remove, plug in the iPlate and screw back in with the two longer screws provided.

It takes up to 3 days for the speed to 'ramp' up to the maximum after fitting the plate so don't expect instantaneous results! This is because the BT system increases speed in small increments and checks for line stability before increasing again.

If you use a wireless router how many PC's are simultaneously using it? If its multiple and one user is busy downloading 6 weeks-worth of 'Strictly Come Dancing' on BBC i-player, then other users, just trying to check a train time, may find their service has slowed to a snail's pace. Probably better to do the big downloads at night.

Another, easily curable cause of poor speed is switching the Broadband modem/router on and off every time you start your computer and close it down. It should be left on all the time if possible. If it is switched on and off a lot then the BT system will read it as a line connection that keeps 'dropping' and will slow the connection down in an effort to make it more stable. It doesn't consume much power to keep it running all the time

You might even check to see if all the wireless users connected to your router are ones that you would expect to see..... particularly if you are running your wireless network unsecured by a password. If you see a computer on the network that you don't recognise then it means you aren't secure or if you are, that your router password has been compromised. Look in your router instructions to see how to make the network secure and/or change the password. If your router was supplied by your service provider then it was almost certainly security secured when it was installed.