Conclusion

- Signal strength (RSRP) improves near windows due to reduced wall attenuation.
- Higher-frequency bands (e.g., LTE Band 7 at 2600 MHz) suffer greater indoor penetration losses than lower-frequency bands.
- Signal quality metrics (RSRQ, SINR) are critical for data speed and stability, often more important than raw signal strength.
- Large bandwidth does not ensure high data rates if SINR is poor.
- Indoor radio conditions can lead to unstable throughput even when the device remains connected to LTE.

Overall, the observations confirm that indoor environments significantly degrade cellular performance due to attenuation, interference, and network load, especially at higher carrier frequencies.