# 5-min script

## Introduction

* Greeting audience
  + Good morning, everyone.
* Introducing the topic
  + Today, We’re going to delve into Visible Light Communication or VLC. It’s a technology that has been gaining traction in the world of wireless communication, enabling visible light to transmit data wirelessly
* Indicating structure
  + We’ll start with a brief overview, then operational principles, evaluation focusing on security and speed, finally, coming up with some conclusions and recommendations
* Indicating time and inviting question
  + I’ll also reserve a few minutes for any questions

## Main body

* Introduction and background information
  + VLC is a subset of optical wireless communication systems where data is transmitted through the modulation of light sources, such as LED or fluorescent lamps. It applied in various domains: smart homes, healthcare and transportation, due to its efficiency, security and eco-friendliness
* Operational principal
  + VLC operates by modulating data onto an optical carrier, transmitting it through visible light, and demodulating it back into electrical signals at the receiving end. LED serves as carriers, with modulators transmitting data to them as digital signals
* Criteria and evaluation
  + Regarding to security. While VLC offers excellent security indoors by transmitting data within the user’s line of sight, security risks persist in public settings. Regarding to speed, VLC enables high-speed data transfer at Gbps-levels; however, distance and environmental conditions could influence data rate
* Potential limitation and solution
  + Despite advantages, VLC has limitations such as security risks in public areas and reduced data rates in certain environments. To maximize performance, further research and more data is needed to address these issues

Conclusion

* In conclusion, VLC offers both advantages and challenges. While it ensures data confidentiality indoors and enables high-speed data transmission, it faces limitation in public settings and certain environmental conditions. To enhance its efficiency and applicability, further research and more data should be conducted.
* Thanks for your attention. Any questions?