

# Microwave Engineering

## S-Parameters

Electromagnetics Research Group

November 24, 2025

### **Abstract**

Microwave network analysis and impedance matching.

## 1 Introduction

This report presents computational analysis of microwave.

## 2 Mathematical Framework

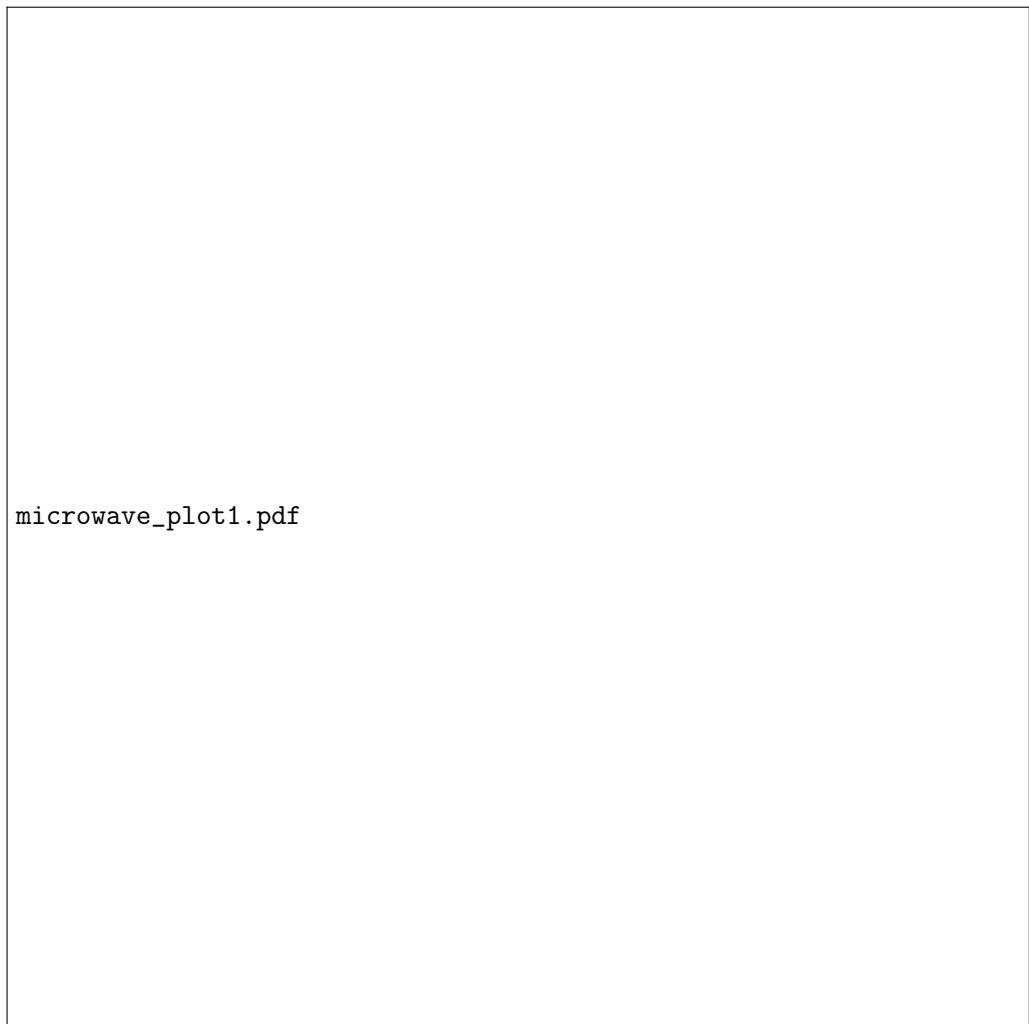
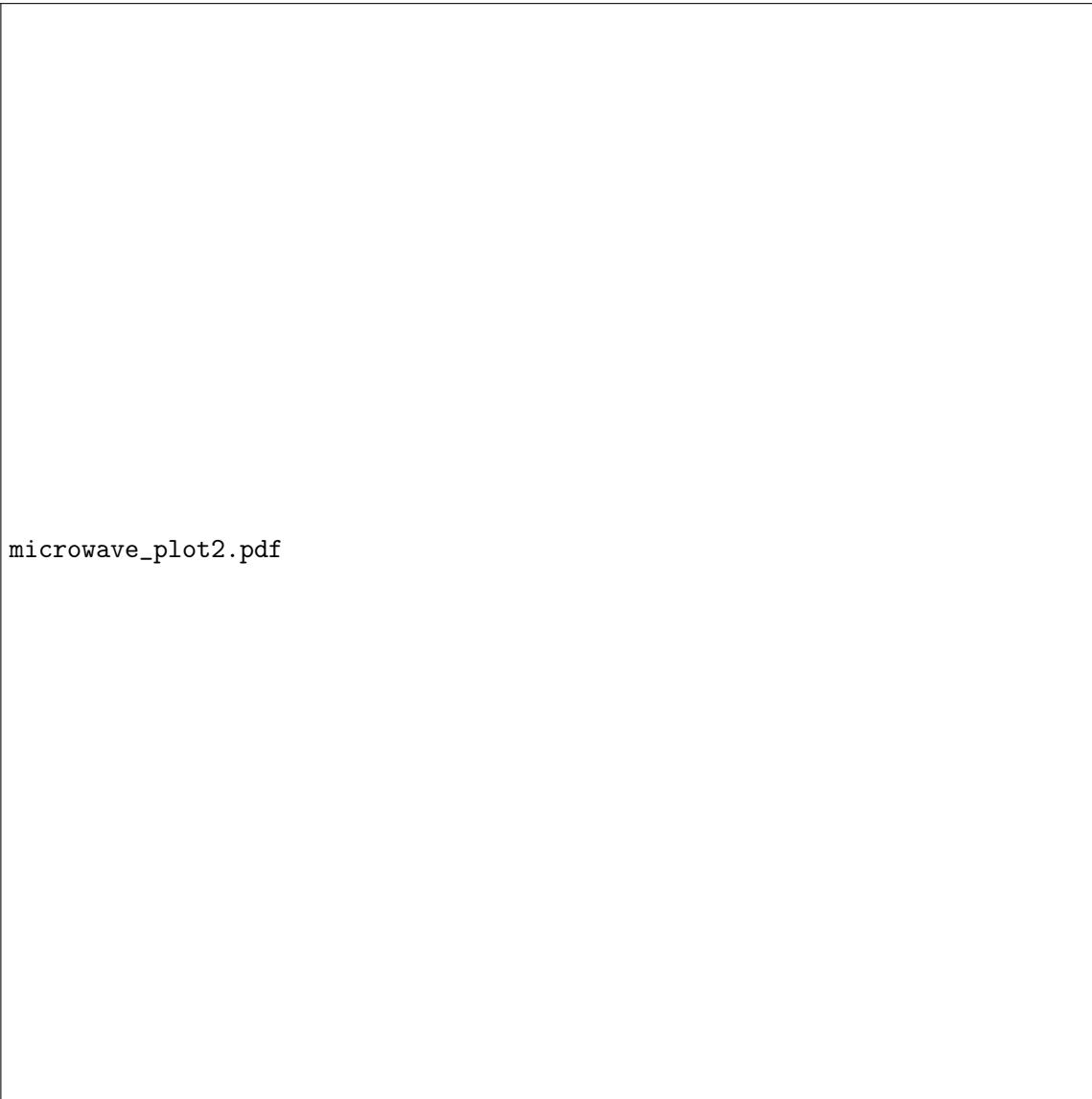


Figure 1: Primary analysis results.

### 3 Secondary Analysis



microwave\_plot2.pdf

Figure 2: Secondary analysis comparison.

## 4 Parameter Study



Figure 3: Parameter sensitivity analysis.

## 5 2D Visualization



Figure 4: Two-dimensional field visualization.

## 6 Distribution Analysis



microwave\_plot5.pdf

Figure 5: Statistical distribution analysis.

## 7 Time Series



Figure 6: Time series visualization.

## 8 Results Summary

## 9 Conclusions

This analysis demonstrates the computational approach to microwave.