Automated Anechoic Chamber

## Requirements Specification

Revision 1.0

Team: DirecRF

Nathan Biesterfeld, Grace Butler, Jimmy Gammell,

Elena Murray, Peter Shearon, Xingling Yu

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# 1. Introduction

## 1.1 Purpose

## 1.2 Scope

## 1.3 Definitions, Acronyms, and Abbreviations

## 1.4 References

## 1.5 Overview

# 2. Overall Description

## 2.1 Product Perspective

## 2.2 Product Functions

## 2.3 User Characteristic

## 2.4 Design Constraints

## 2.5 Assumptions and Dependencies

# 3. Specific Requirements

## 3.1 Marketing Requirements

1. Product will position antennas in an anechoic chamber to automate RF research.
2. Product will be user friendly.
3. Product will be low cost.
4. Product will be able to test a variety of different antennas.
5. Product will enable different measurement modalities.
6. Product will be easily maintainable.
7. Product is modular and expandable to additional functionality.

## 3.2 Engineering Requirements

|  |  |  |
| --- | --- | --- |
| Marketing Requirements | Engineering Requirement | Justification |
|  | Use an antenna mount that can hold varying types[[1]](#footnote-1) of standard antennas. | The product needs to be able to test a variety of antennas to accommodate the research of our sponsors. |
|  | The actual position of the antenna is within 1 degree of set position. |  |
|  |  |  |
|  | All components must not interfere with accurate RF measurement in 2-20 GHz range. | This range is specified by the design of the anechoic chamber. |

# 4. Use Cases

1. To be specified later. [↑](#footnote-ref-1)