

SCOPE

Overview

System Configuration

System Calibration

CTIA OTA Test

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- n TS9970 Overview
- n System Configuration
- n System Calibration
- n Test Configurations (CTIA)

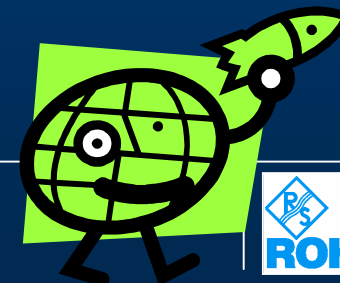


INTRODUCTION

n Test System TS9970

- CTIA Test Plan for MS OTA Performance
- Design testing / Type Approval Testing
- measures the main RF parameters of wireless communication equipment

what RF parameters??



MEASUREMENT PARAMETERS

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n TX TEST SYSTEM

- RF field strength
- EIRP/ERP

n RX TEST SYSTEM

- BER (Bit Error Rate)
- RXLev (Receive Level)



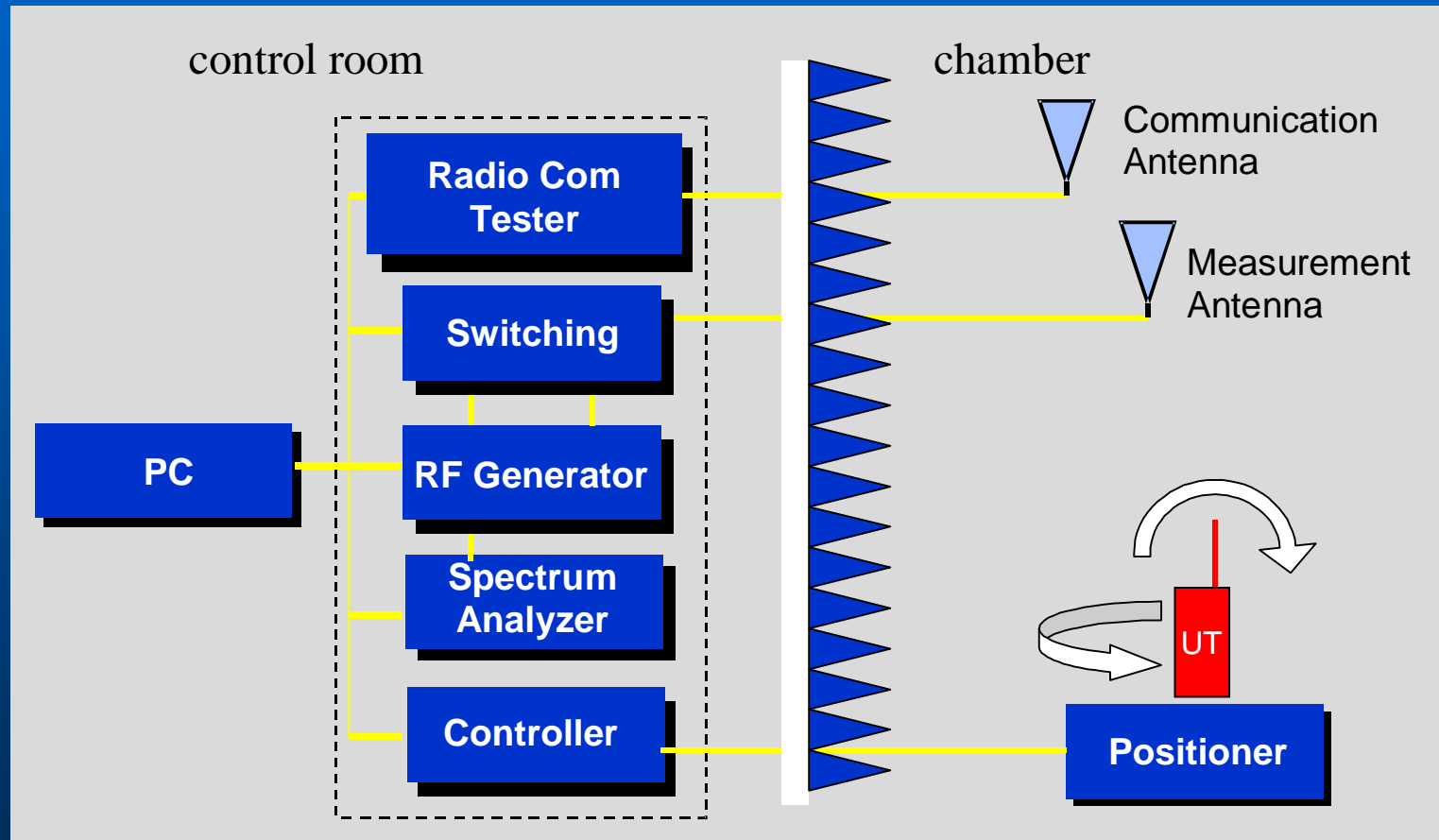
MAIN COMPONENTS

Overview

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MAIN COMPONENTS

Overview

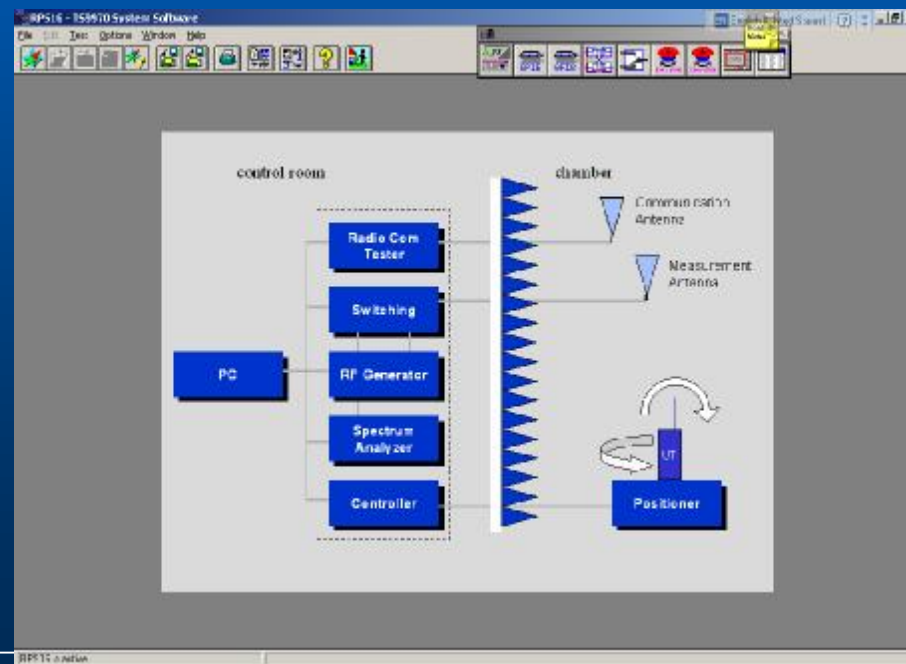
System Configuration

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n System Software

- RPS 16 for RF Performance System



MAIN COMPONENTS

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- n **Communications Tester (CMU)**
 - For communications with the EUT
 - Measurement of BER
 - Measurement of RXLev

MAIN COMPONENTS

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n Signal Generator (SMT06)

- Signal source for calibration

n Spectrum Analyser (FSP7)

- Calibration
- Power Measurement



MAIN COMPONENTS

n RF Step Attenuator (RSP)

- Generating output level for Communications

n Relay Switch Unit (TS-RSP)

- Switches the required signal path to
 - n Comms antenna or
 - n Measurement Antenna (H or V polarisation)

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TEST ENVIRONMENT

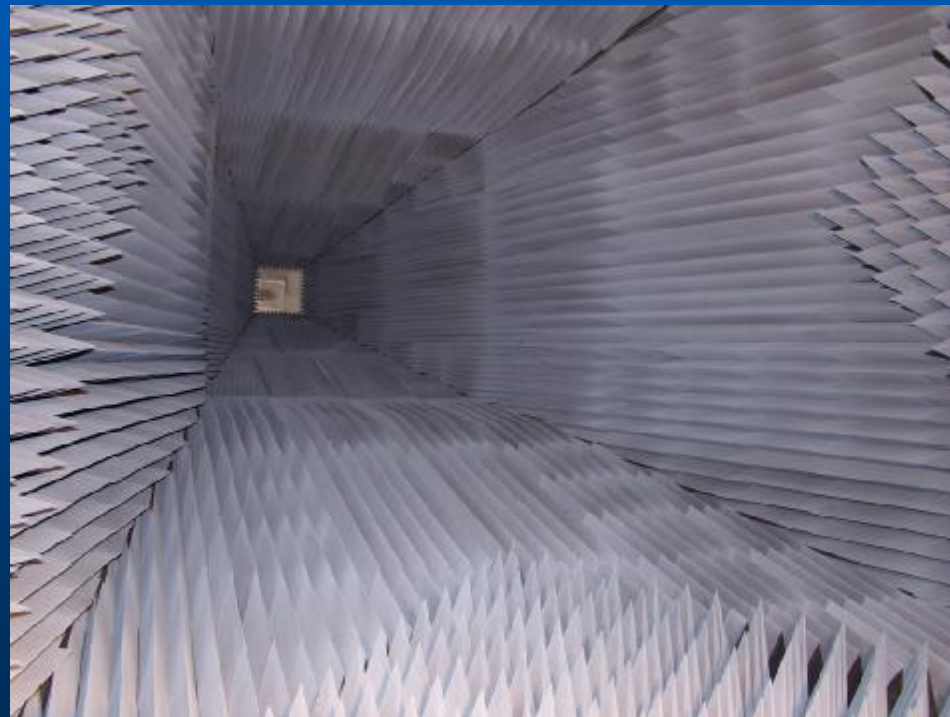
Overview

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n shielded anechoic tapered chamber with low-reflection absorber lining



n Radiated Power Measurements

CTIA OTA Test



SYSTEM CONFIGURATION

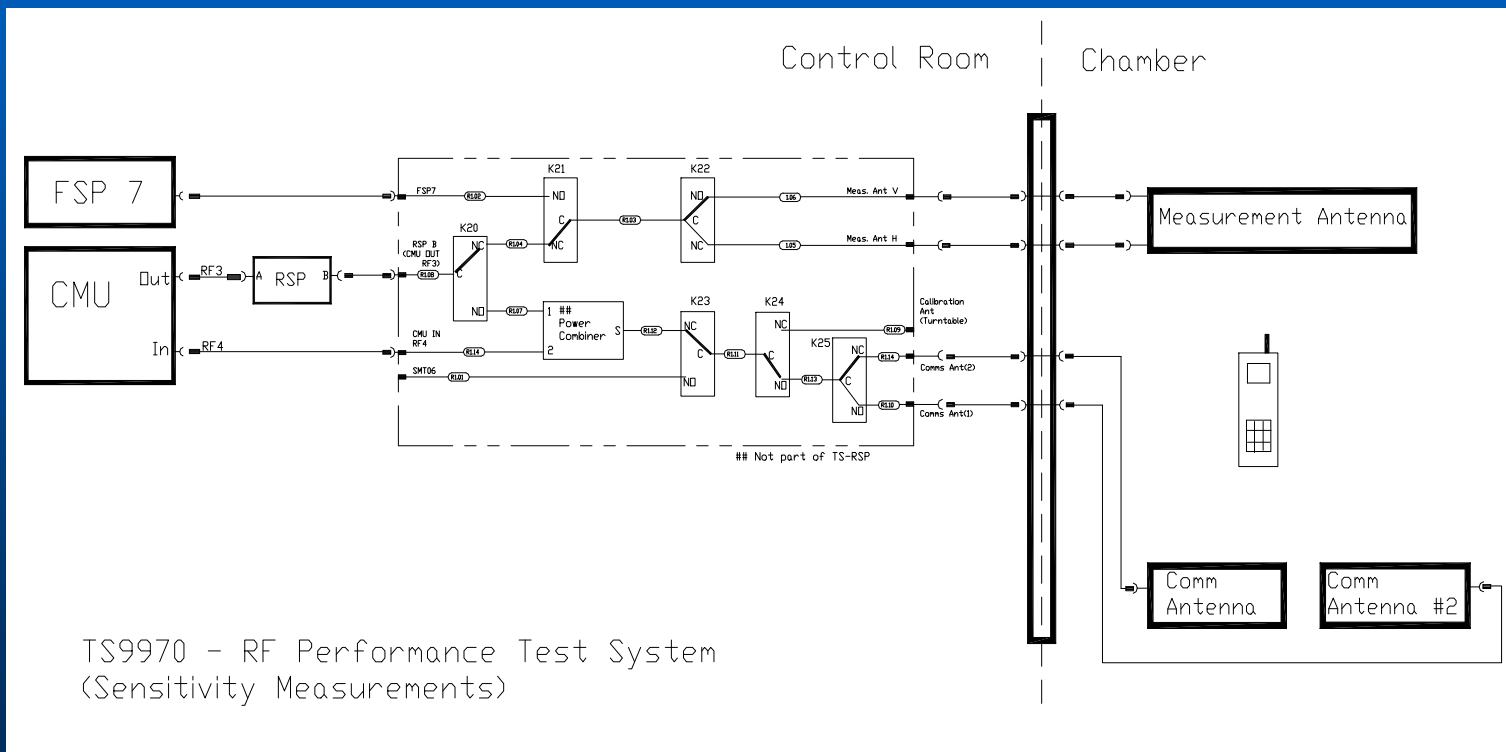
n Sensitivity Measurements

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TEST CONFIGURATION

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CONFIGURATION

- FREE SPACE
- PHANTOM

TEST CONFIGURATION

n FREE SPACE CONFIGURATION

- EUT placed directly placed on the TT

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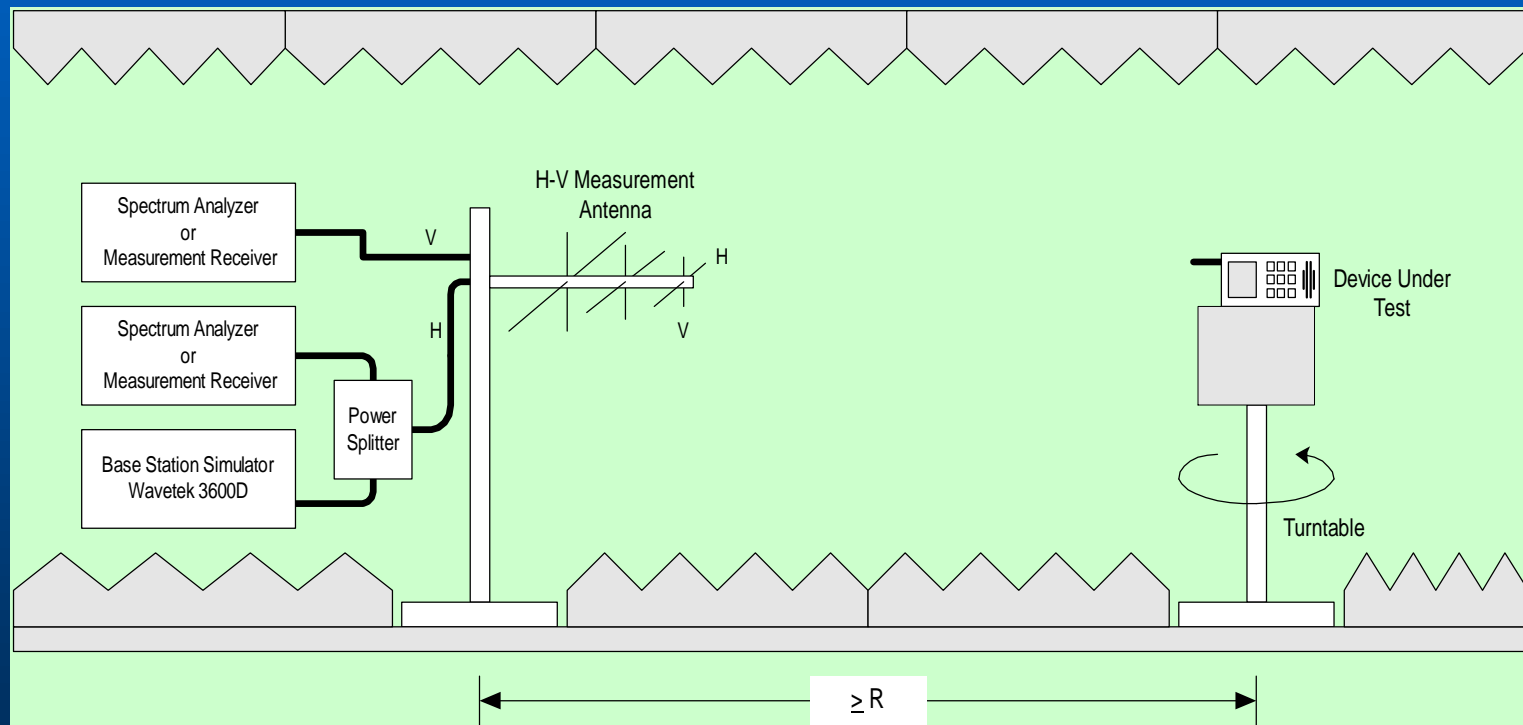
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TEST CONFIGURATION

n FREE SPACE CONFIGURATION



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n PHANTOM

- EUT placed against a simulated head / head & torso phantom, with phantom on the TT.
- Left / right Ear



TEST CONFIGURATION

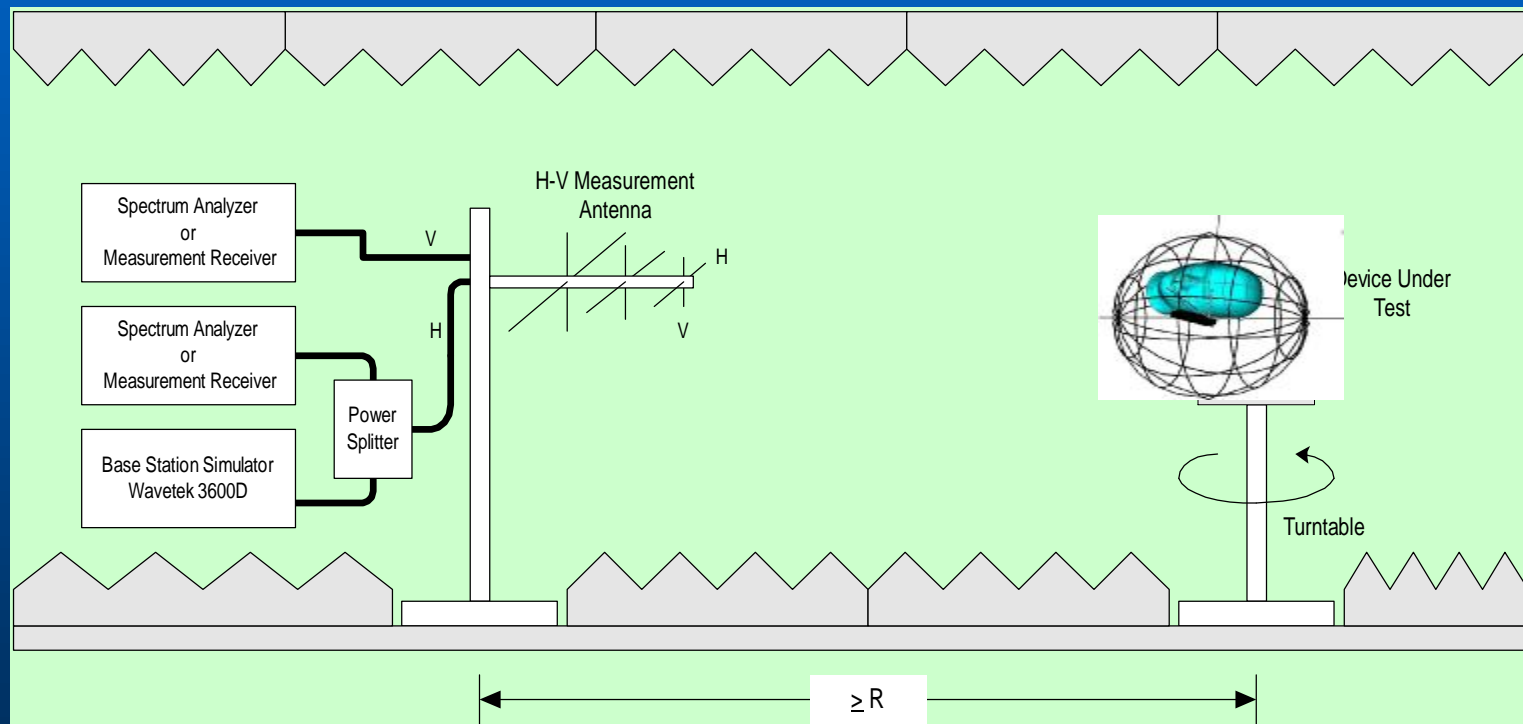
n PHANTOM

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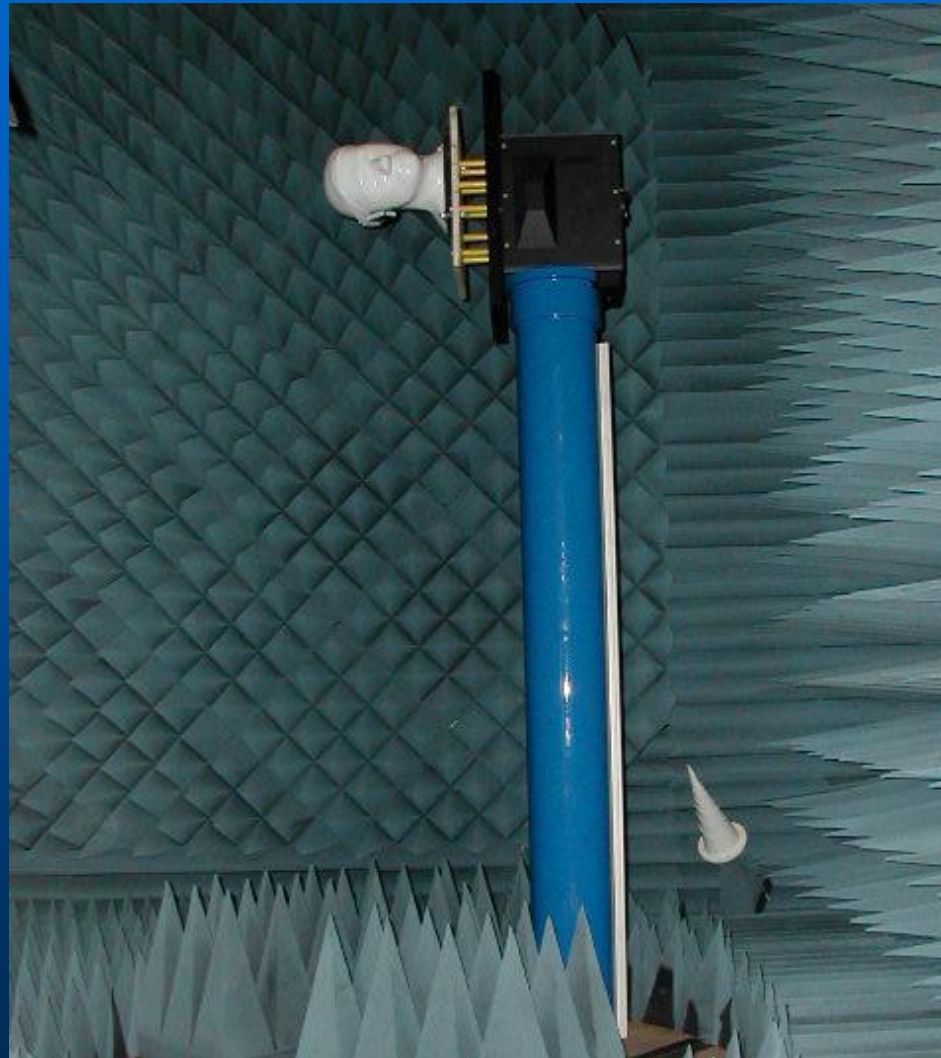
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What do you want to know more about.....

Overview

System Configuration

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- ü TS9970 Overview

- ü System & Test configurations (CTIA)

- n CTIA Standards

- n Software Operation

- n Antenna Measurement



Thank you!