Antenna Datasheet

Section 1 Antenna Specifications

Antenna Type	PCB Loop Antenna
Radiation pattern	Reports section 4
Frequency Range	904MHz ~ 924MHz
Peak gain	-1.58dBi @ 904MHz ~ 924MHz
Antenna Brand Name	Nutek Corpation.
Antenna Manufacturer Company Address	No. 167, Lane 235, Bauchiau Rd., Xindian District, New Taipei City 231028, Taiwan
Antenna Model Name	AU12_Antenna

Assembly Drawing

Section 2 Configuration

Peak gain & Radiation pattern measurements

- Measurement Setup:
  Instruments: Anechoic Chamber, Network Analyzer, Standar Gain Antenna.
- Chamber description:
  The NUTEK anechoic chamber is a far-field measurement system with size of 9m*6m*6m.

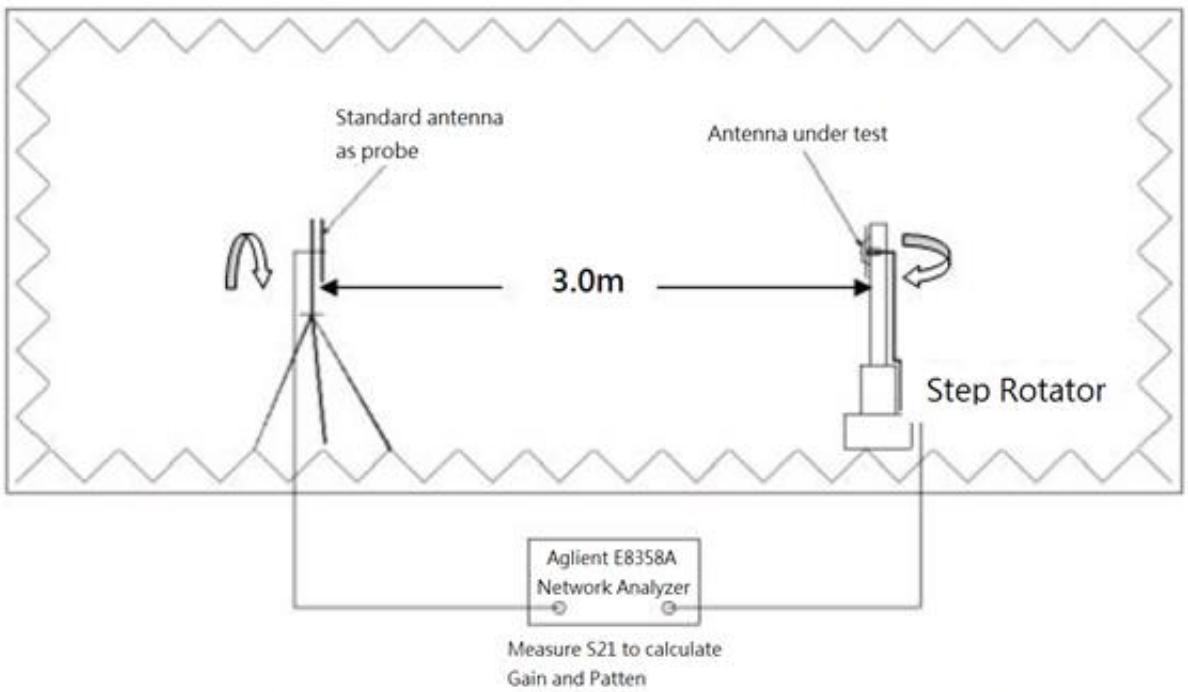

Fig. 1. The interior components of the anechoic chamber.

Fig. 1 shows the interior components of Anechoic chamber and the connection to the network analyzer. The distance between standard antenna as probe and antenna under test (AUT) is 3.0m. The antenna under test is fixed on a step rotator. We can control the rotating angle for accurate measurement.

The probing antenna is the ETS 26MHz ~3000MHz Model (3142C BiConiLog Antenna Model 3142C).

While we measure the radiation patterns by rotating AUT with 360 degrees and repeat again by replacing the AUT with the standard gain antenna under test, we compare both data and

using a formula to obtain the gain of AUT. The standard gain antenna is a gain helical (TI CC-ANTENNA-DK 915MHz #11).

Section 3 Antenna Peak gain

	Antenna					
	Horizontal			Vertical		
Freq(MHz)	904	913.6	923.6	904	913.6	923.6
Gain(dBi)	-1.70	-2.87	-1.58	-11.15	-11.67	-11.15

Section 4 Antenna Radiation Pattern