

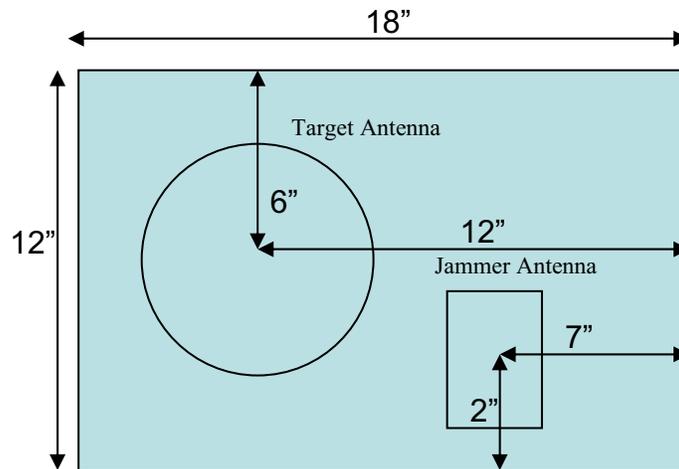
Q-1. In order to properly design the specular materials for the side walls, floor and ceiling of the chamber it is imperative that the source antenna gain, beam width and pattern characteristics be known

A-1. There are two antenna sources within the 18" X 12" square area on the far wall. One antenna is the Target source and the other is the Jammer source.

- Target antenna - The current source antenna in the chamber is a NURAD antenna, part number 296-10801. The gain at 8GHZ is 22dBi (increasing monotonically with frequency) to 29dBi at 18 GHz. The beamwidth is 10.8° at 8GHZ.
- Jammer antenna - The current jammer antenna in the chamber at the lower frequencies is a Narda standard gain model 641. The calculated gain from the dimensions is 13.3 dBi at 7.05 GHZ. The calculated 3dB beamwidth is 23.3° x 32.0°.

Q-2. In addition to the source antenna characteristics the exact proximity to the sidewalls, floor and ceiling must be known. In amendment 2 of the specification it is stated that the source antenna moves in a "square area 18" wide x 12" high located on the centerline of the back wall". During the site visit it was seen that the antenna is located on the center of the height of the back wall but was not located in the center of the back wall width. What is the location of the center of the source antenna with respect to the width of the chamber back wall?

A-2. The antennas mentioned above are located on the drawing below:



Q-3. Question 4 asked at the site visit specifically references "shielding test" which is a measurement of the chambers ability to keep extraneous energy from entering the chamber and possibly effecting the measurements in the "Quiet Zone" of the chamber. The requirement for the testing of the quiet zone is noted under the section titled "Quiet Zone Reflectivity" which implies the measurement of the Quiet Zone Reflectivity performance as normally tested utilizing the Free Space VSWR measurement procedure. Is this the intent of the measurements to be performed?

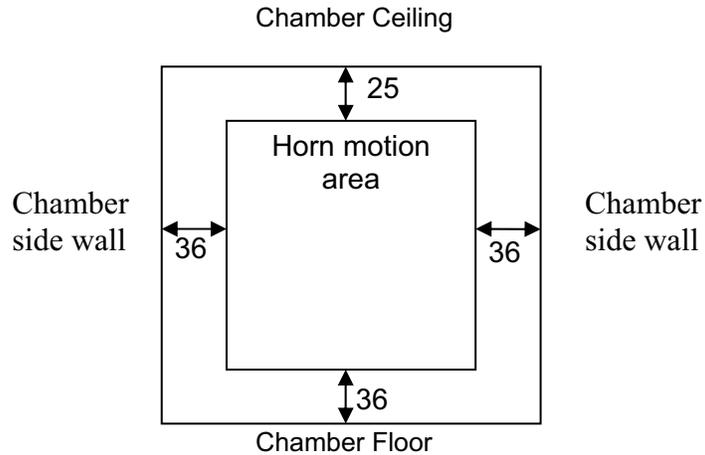
A-3 The intent of the quiet zone measurements is to probe the quiet zone to ensure the levels of radiation are within the requirements. No shielding test is required.

Q-4. It is not clear from the chamber drawings provided how close to the sidewalls, floor, and ceiling that the source antenna moves. Though during the site visit we had the opportunity to measure items in the chamber the antenna probe device was not active to allow for the exact determination of the antennas proximity to the chamber surface areas.

A-4. No question asked?? See Question # 5, below.

Q-5. Without the antenna probe device being active at the site visit the full motion of the probe antenna was not evident. The simple question is: How close to the chamber surfaces does the source antenna travel?

A-5. The traveling antenna moves in the area shown below. The antenna is a Scientific Atlanta, model 12-7.0.



Q-6. In answer 13 the government is directing disposal of the old absorbers in a landfill does this mean that the government does not consider these materials to be hazardous materials?

A-6. We did not address the hazardous issue directly. The contractors in attendance at the site visit were in agreement that they had never considered the material to be hazardous in the past and had always disposed of it in a landfill. The Government's only requirement is that we do not want it burned. It needs to be disposed of in a landfill.

Q-7. Is the purpose of this refurbishment to upgrade performance of the chamber or is it intended to re-create and maintain the existing performance of the chamber?

A-7. The chamber upper frequency limit is being extended from 18GHz to 94 GHz as stated in the requirement.