

#### A: Experimentation Description

We have need for clear and reliable full constellation GPS signals in-building for testing, verification and development of RF components that acquire L1-Band GPS satellite transmissions.

#### B: Objectives

Reliable GPS signals inside our laboratory, will enable testing and troubleshooting of our service customer's products and enable us to proceed with our own company product R&D. It is unfeasible to place employees nor equipment in our parking lot for testing purposes as to acquire GPS signals from the satellite constellation. This would endanger personnel from traffic, block traffic and expose personnel to dangerous heat conditions here in the Phoenix Arizona desert. Further, placing a GPS receive antenna in the parking lot with said test equipment would permit blocking all lower horizon signals due to surrounding buildings blocking the RF signals.