Millions of people filter through airport security check points in the United States every year. These security checks, in response to the post 9/11 and 2009 “Underwear Bomber” terrorist threats, have become increasingly burdensome to the general public due to the wide spread deployment of "enhanced screening systems." The enhanced screening systems that have generated the most controversy are the passenger "full-body scanners." These systems enable airport security personnel to effectively detect contraband (often concealed under clothing) without the physical contact necessitated by a strip search. The two types of full-body scanners (also known as Advanced Imaging Technology systems) used in airports in the United States and around the world are referred to as backscatter technology units and millimeter-wave technology units. Although their respective radiation emissions vary, both scanners serve the same purpose; that is, the detection of concealed metallic and non-metallic threats in the form of liquids, gels, plastics, etc. Although enhanced screening systems were deployed to further public safety efforts, they have also generated wide spread public concerns. Specifically, these concerns address the potential of adverse health and privacy issues that may result from continued public exposure to full-body scanner systems.