## Kepler Constellation Steerable Beam Coverage Area Over Earth's Surface



Figure 1: Representative figure showing the coverage of the Kepler constellation. Note the circles on the ground show the total steerable coverage area and are not a representation of the actual beam width visible on the ground. The beam width visible on the ground is significantly smaller than the steerable coverage area and is shown in Figure 3.

## Kepler Ku-Band Maximum Single Satellite Steerable Beam Coverage Area



Figure 2: Two-dimensional representation of a single Kepler satellite steerable beam coverage area. Note the shaded circle on the ground represents the total steerable coverage area and does not represent the actual beam width visible on the ground. The beam width visible on the ground is significantly smaller than the steerable coverage area and is shown in Figure 3.

## Kepler Ku-Band Single Satellite Beam Width



Figure 3: Single Kepler satellite half power beam width visible on the ground.

## Kepler Ku-Band Single Satellite Beam Width Steered to 64 Degrees off Boresight



Figure 4: Single Kepler satellite half power beam width visible on the ground when steered to a 64 degree angle off boresight.

