

## Digitarium Epsilon System Placement

The diagrams and formulas below will help determine approximately where to position a fixed or portable system in your dome. With a fixed system, you will need to bolt the frame to a solid support in the center of your dome at the appropriate height for projection onto your dome.

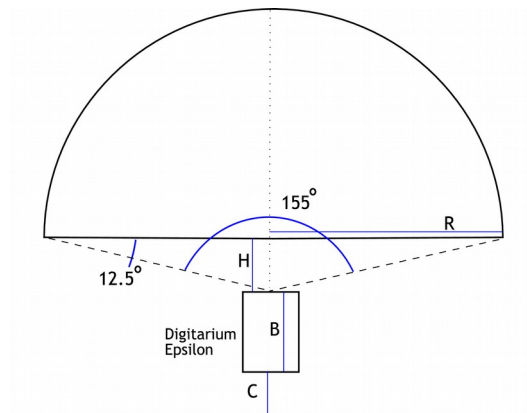
The lens height, B, is approximately 32" (81.3cm) on a fixed system and 33.5" (85cm) on a portable system.

### (A) Full dome coverage (typical fixed usage)

For full dome coverage, the lens is placed below the springline (bottom edge) of the dome:

$$H = R * \tan( 12.5 \text{ degrees} ) = 0.222 * R,$$

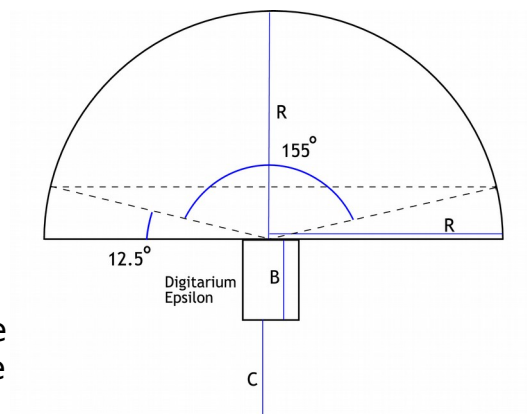
where R is the dome radius.



### (B) Lens at dome center (typical portable usage)

For configuration (B), the lens is simply placed at the springline of the dome.

This configuration is usually seen in portable domes with a typical low springline or where space constraints do not allow configuration (A).



### (C) Truncated projection (180°x155°)

For a truncated (higher resolution) configuration, the north edge of the projection is cut off. In this configuration the lens should be placed at the height of the springline.

