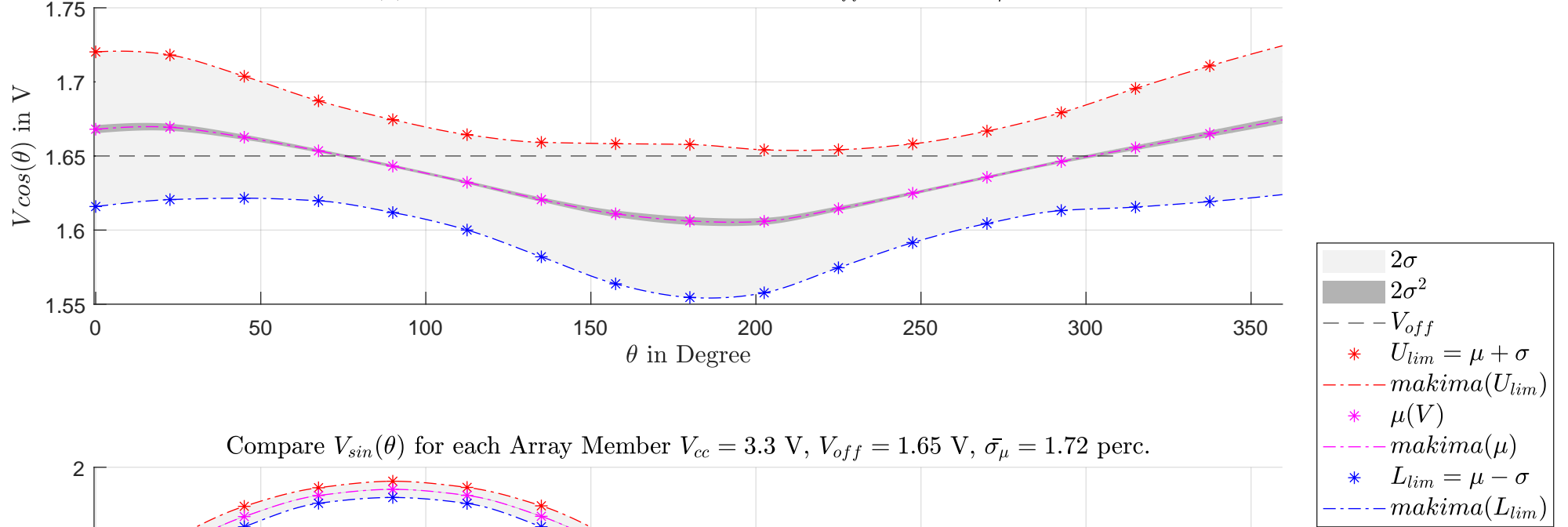


# Sensor Array Simulation

Sensor Array (square) of  $8 \times 8$  sensors, an edge length of 2.0 mm, a rel. pos. to magnet surface of  $(-6.0, 0.0, -7.0)$  in mm, a magnet tilt of  $0.0^\circ$ , a sphere radius of 2.0 mm, a imprinted field strength of 200.0 kA/m at 1.0 mm from sphere surface in z-axis, 16 rotation angles with a step width of  $22.5^\circ$  and a resolution of  $0.5^\circ$ . Visualized is a subset of 16 angles in sample distance of 1 angles. Based on TDK TAS2141 characterization reference Rise.

Compare  $V_{cos}(\theta)$  for each Array Member  $V_{cc} = 3.3$  V,  $V_{off} = 1.65$  V,  $\bar{\sigma}_\mu = 2.47$  perc.



Compare  $V_{sin}(\theta)$  for each Array Member  $V_{cc} = 3.3$  V,  $V_{off} = 1.65$  V,  $\bar{\sigma}_\mu = 1.72$  perc.

