Bat-Centric Model
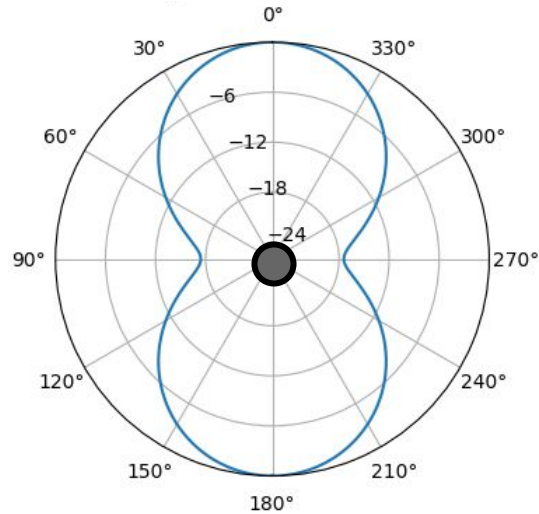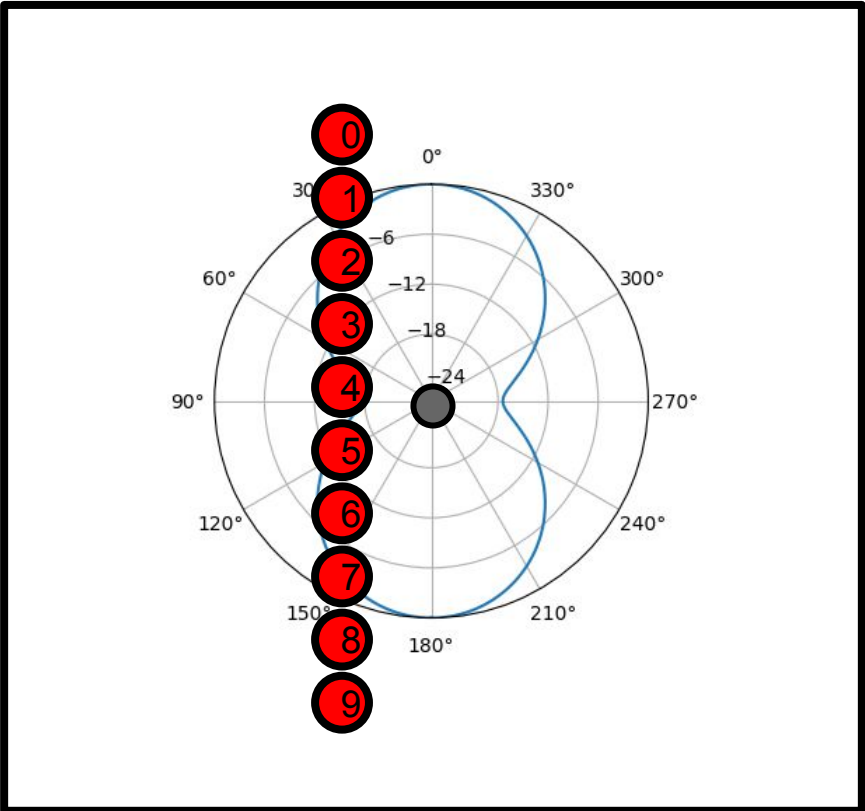
Bat:
- 60kHz
- a = 3mm
- SPL 110dB

Microphone

If we filled the entire black box with microphones, we would get the acoustic field around the bat

Bat-Centric Model

Bat:
- 60kHz
- a = 3mm
- SPL 110dB

Microphone position at t = 0

If we only take the microphones shown, we get what the microphones would hear with time as a bat moves like below

Microphone-Centric Model

Bat:
- 60kHz
- a = 3mm
- SPL 110dB

Microphone

Need:
- Bearing of microphone to bat at all positions of flight path