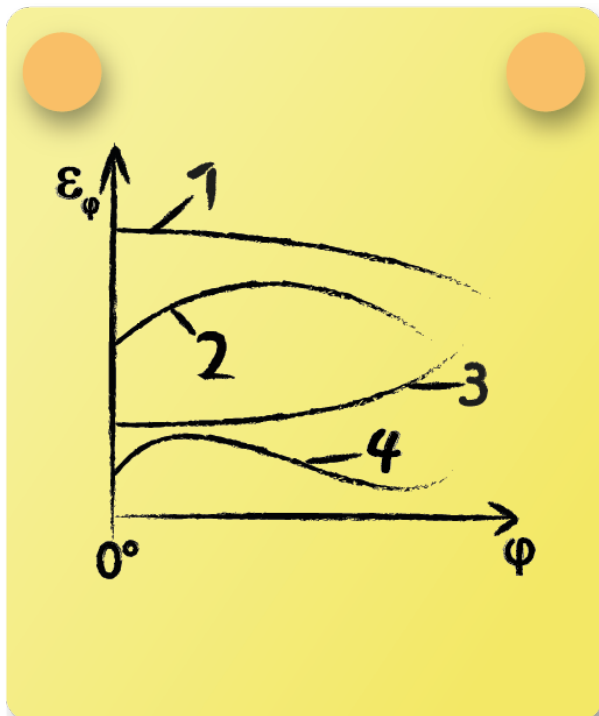


## Fundamentals: Task 15



In contrast to ideal black or grey bodies, real bodies do not emit in a diffuse manner. The emission coefficient shows an angle dependency which is plotted in this diagram. Two graphs represent characteristic behaviors for electrically conductive and non conductive materials. The emissivity is further influenced by the surface's structure (polished, anodized, etc.).



### 1 Electrically Non Conductive Material:

For electrically non conductive materials the emission coefficient is almost constant in a range around  $0^\circ$  and decreases at higher angles.



### 3 Electrically Conductive Material:

Electrically conductive materials show the contrary tendency: the emission coefficient increases at higher angles.