

Figure 34 Standard typical incandescent lamps (230V) with E40, E27, E14, S14s socket.

The filament design is critical in setting up the operating characteristics of the lamp. The length of the filament wire is largely determined by the supply voltage, whilst the thickness of the wire is determined by the operating current of the lamp. The filament is coiled to reduce heat convection to the filling gas. There are various forms of filament coiling with the coiled coil being one of the most common ones (see Figure 35).



Figure 35 A coiled coil filament (enlarged).