

Key Terms

electric field a field that tells us the force per unit charge at all locations in space around a charge distribution

electromagnetic radiation (EMR) radiant energy that consists of oscillating electric and magnetic fields

illuminance number of lumens per square meter, given in units of lux (lx)

interference increased or decreased light intensity caused by the phase differences between waves

lumens unit of measure for luminous flux

luminous flux rate at which light is radiated from a source

lux unit of measure for illuminance

magnetic field the directional lines around a magnetic material that indicates the direction and magnitude of the magnetic force

Maxwell's equations equations that describe the interrelationship between electric and magnetic fields, and how these fields combine to form electromagnetic radiation

polarized light light whose electric field component vibrates in a specific plane