

THE DEPENDENCE OF THE ELECTRIC FIELD ON THE DISTANCE FROM A POINT CHARGE

1. INTRODUCTION

The electric field E of a point charge q is defined as the force F per unit positive test charge q_0 placed at a distance r from the charge. The force is given by Coulomb's law:

$$F = k \frac{q q_0}{r^2}$$
$$E = \frac{F}{q_0} = k \frac{q}{r^2}$$

2. EXPERIMENTAL PROCEDURE

The experiment was conducted using a point charge and a test charge.

