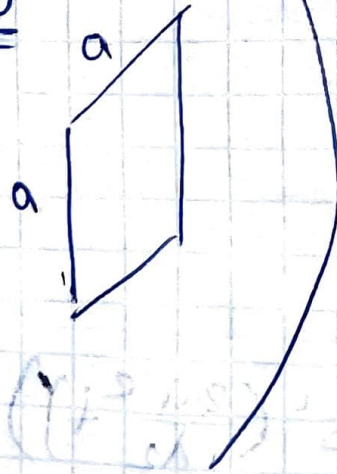


1.10



$$a = 0,1 \text{ m}$$

$$P = 3 \text{ B}$$

S, u, E, P

$$l_1 = 10 \text{ m}$$

$$l_2 = 100 \text{ m}$$

$$S = \frac{P}{Z} \quad W = \frac{S}{c} \quad E = \sqrt{\frac{S}{c\epsilon_0}} = \sqrt{\frac{P}{\epsilon_0 c Z}}$$

$$S = Wc$$

$$P = W(1+R)$$

$$S = c\epsilon_0 E^2$$

$$W = \frac{c\epsilon_0 E^2}{2} + \frac{\mu\mu_0 H^2}{2}$$

$$C_0 = \frac{1}{\sqrt{\epsilon_0 \mu_0}}$$

$$\left\{ \begin{array}{l} \Sigma_0 = a^2 \quad \Sigma_1 = 2\pi r_1^2 \\ \Sigma_2 = 2\pi r_2^2 \end{array} \right.$$

$$n = \sqrt{\epsilon \mu}$$

$$Z = \sqrt{\frac{\mu_0 \mu}{\epsilon_0 \epsilon}}$$

$$E = ZH$$

$$n = \sqrt{\epsilon \mu}$$

$$C = \frac{C_0}{n} = \frac{1}{\sqrt{\epsilon \epsilon_0 \mu \mu_0}}$$

$$S_0 = 300 \frac{BT}{M^2}$$

$$\omega_0 \approx 10^{-6} \frac{Q \times}{M^3}$$

$$E_0 \approx 336,18 \frac{BT}{M}$$

$$\textcircled{1} S = 4,775 \cdot 10^{-3} \frac{BT}{M^2}$$

$$\omega = 115927 \cdot 10^{-11} \frac{Q \times}{M^3}$$

$$E = 1,3411 \cdot \frac{BT}{M}$$

$$P = 1,5922 \cdot 10^{-11} \text{ W}$$