$$E(\omega - x) e^{j\omega t} = |E(\omega - x)| e^{j\phi(\omega - x)} = j\omega t$$

$$E(\omega - x) e^{j\omega t} = |E(\omega - x)| e^{j\phi(\omega - x)} = j\omega t$$

$$S(\omega) = |E(\omega) + |E(\omega - x)| e^{j\omega t}|^{2}$$

$$= (E(\omega) (\omega s(\phi \omega))^{2} + (E(\omega) sin(\phi \omega)))^{2} + |E(\omega - x)| (\omega s(\phi(\omega - x)) + \omega t))^{2}$$

$$+ (E(\omega - x))^{2} sin(\phi(\omega - x) + \omega t))^{2} + 2E(\omega) (\omega \phi \omega E(\omega - x)) (\omega s(\phi(\omega - x) + \omega t))$$

$$+ 2E(\omega) sin(\phi(\omega - x) + \omega t))^{2} + 2E(\omega) (\omega \phi \omega E(\omega - x)) (\omega s(\phi(\omega - x) + \omega t))$$

$$= |E(\omega)|^{2} + |E(\omega - x)|^{2} + 2|E(\omega)||E(\omega - x)| (\omega s(\phi(\omega) - \phi(\omega - x) + \omega t))$$

$$= |E(\omega)|^{2} + |E(\omega - x)|^{2} + |E(\omega - x)|^{2} + |E(\omega)||E(\omega - x)| (\omega s(\phi(\omega - x) + \omega t))$$

$$= |E(\omega)|^{2} + |E(\omega - x)|^{2} + |E(\omega)||E(\omega - x)| e^{j(\phi(\omega - x) + \omega t)}$$

$$= |E(\omega)|^{2} + |E(\omega - x)|^{2} + |E(\omega)||E(\omega - x)| e^{j(\phi(\omega - x) + \omega t)}$$

= I (w) pc + I (w) Ace + I (w) 4, e -jwT