Parametry wiązki gaussowskiej

$z_0 =$	$\frac{\pi n}{\lambda_0} w_0^2$	$\frac{k}{2} w_0^2$	$\frac{b}{2}$	$\frac{8}{k\theta^2} = \frac{4\lambda_0}{\pi n \theta^2}$
$w_0 =$	$\sqrt{\frac{\lambda_0 z_0}{\pi n}}$	$\sqrt{\frac{2z_0}{k}}$	$\sqrt{\frac{b}{k}}$	$\frac{2\lambda_0}{\pi n \theta}$
$b =$	$\frac{2\pi n}{\lambda_0} w_0^2$	$k w_0^2$	$2 z_0$	$\frac{16}{k\theta^2}$
$k =$	$\frac{2\pi n}{\lambda_0}$	$2\frac{z_0}{w_0^2}$	$\frac{b}{w_0^2}$	$\frac{4}{w_0 \theta}$
$\lambda_0 =$	$\frac{2\pi n}{k}$	$\pi n \frac{w_0^2}{z_0} = 2\pi n \frac{w_0^2}{b}$	$\frac{\theta^2}{4} \pi n z_0$	$\frac{\theta}{2} \pi n w_0$
$\frac{\theta}{2} =$	$\frac{w_0}{z_0}$	$\frac{2}{k w_0} = \frac{\lambda_0}{\pi n w_0}$	$\sqrt{\frac{2}{k z_0}} = \frac{2}{\sqrt{kb}}$	$\sqrt{\frac{\lambda_0}{\pi n z_0}}$

$$k_0 = \frac{k}{n} = \frac{2\pi}{\lambda_0} = \frac{2\pi}{n\lambda} \qquad k = n k_0 = \frac{2\pi}{\lambda} = \frac{2\pi}{\lambda_0} n \quad \lambda = \frac{\lambda_0}{n}$$

$$\omega = 2\pi f = k_0 c = \frac{k}{n} c = k \frac{c}{n} = kv$$