

Lighthill equation

Equation relating the acoustic noise power N produced by a flowing **fluid** through a conduit:

(1)
$$N = \frac{\rho \cdot D^2 \cdot u^8}{v^5}$$

where

N	acoustic noise power
u	fluid velocity
v	speed of sound in a fluid
ρ	fluid density
D	characteristic linear dimension of the fluid conduit

See also

[Physics](#) / [Mechanics](#) / [Continuum mechanics](#) / [Fluid Mechanics](#) / [Fluid Dynamics](#) / [Fluid Flow](#) / [Pipe Flow](#)

References

 Unknown macro: 'cite-summary'

 Unknown macro: 'single-cite'