Panel, Honeycomb Sandwich, Baffled

The radiation efficiency σrad is

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ka = ω / co  kp = ω / cp  The radiation resistance R is  R = ρc A σrad  Reference  J. Wijker, Random Vibrations in Spacecraft Structure Design, Springer, New York, 2009. Equation (4.144) |  | |  |  | | --- | --- | | ka | Acoustic wave number | | kp | Unloaded panel wave number | | ω | Angular frequency (rad/sec) | | co | Speed of sound in gas | | cp | Bending/Shear phase speed | | ρc | Characteristic impedance of the gas | | A | Panel surface area | |