













(3)

where  $K(r, r') = \frac{e^{-|r-r'|}}{|r-r'|^2}$



$$K_B^{2d}(r, r') = \int_{-o}^{+o} K(r, r') \cos(r - r', n') dZ = C_B * S_2(\kappa c) \quad (21)$$

( )





The weighted residual method is used in the implementation. The governing equation is weighted over the domain of interest (a boundary element on the surface and a subarea in the region) and the integrated residuals are set to zero, that is:

$$\varepsilon_h = \frac{\tilde{Q}}{\pi R^2 \rho T_w^4} \text{ where}$$

The distribution of the emissive power within the medium is also checked. As compared to the data







36. S.T. Wu, R.E. Ferguson and L.L. Altgilbers, Application of finite-element techniques to the interaction of conduction and radiation in a participating medium', Heat Transfer and Thermal Control, Vol. 78, Progress in Astronautics and Aeronautics, 1980, pp. 61-91



























