In order to find the difference $P_{20} - P_2$, it is necessary to solve the diffusion equation for a pile with finite dimensions taking into account not only the overall cosine variation, but also the individual variation in each cell. Since one must take into account second harmonic terms of the form $\left[3\,(\vec{S}\cdot\vec{r})^2 - k^2\right] f(r)$ in order to obtain any change in the thermal utilization due to the lattice structure, the actual calculation becomes quite complex. Useful answers have been obtained for certain ranges of r_o, r_1, $\varkappa_o$, $\varkappa_1$, σ_{ao}, σ_{al}

The migration length for value of r_o and r_1 now of most interest is given by the equation

$$L^2 = \frac{k}{\varkappa_1{}^2 P_{20}}\left(\frac{1}{P_{20}} - 1\right) - \psi$$

where ψ is a correction term that is from 5 to 20% of the main term.

To show the difference between the new formula and the old $\left[L^2 = (1 - P_{20})\, L_1{}^2\right]$ the following table gives calculated value for spheres with $r_o = 3.00$:

r_1	$L^2 = (1 - P_{20})\, L_1{}^2$	L^2 according to new formula
7.5	234	244
9	341	388
10.5	466	552
12	604	705

Calculations for other values of r_o have yet to be made. A detailed report will shortly be issued about this calculation.