$\left\{\begin{array}{l} h+k+l=2n \\ k=2n+1 \end{array}\right.$	$A=-16\cos 2\pi hx \sin 2\pi ky \sin 2\pi lz$ $A=B=0$ if $l=0$	$F(hkl)=F(\bar{h}\bar{k}\bar{l})=F(\bar{h}kl)$ $=-F(h\bar{k}l)=-F(hk\bar{l})$

$$\rho_{xyz}=\frac{8}{V_c}\left\{\sum_0^\infty\sum_0^\infty\sum_0^\infty{}^{k=2n} F(hkl)\cos 2\pi\frac{hx}{a}\cos 2\pi\frac{ky}{b}\cos 2\pi\frac{lz}{c}-\right.$$
$$\left.-\sum_0^\infty\sum_0^\infty\sum_0^\infty{}^{k=2n+1} F(hkl)\cos 2\pi\frac{hx}{a}\sin 2\pi\frac{ky}{b}\sin 2\pi\frac{lz}{c}\right\}$$

Tetragonal bisphenoidal ($\bar{4}$)

S_4^1 —— $P\bar{4}$ ($C\bar{4}$)

$|\, xyz;\ \bar{x}\bar{y}z;\ y\bar{x}\bar{z};\ \bar{y}x\bar{z}.\,|$

$$A=4\cos\pi\left[(h-k)x+(h+k)y\right]\cos\pi\left[(h+k)x-(h-k)y\right]\cos 2\pi lz$$
$$B=-4\sin\pi\left[(h-k)x+(h+k)y\right]\sin\pi\left[(h+k)x-(h-k)y\right]\sin 2\pi lz$$
$$|F(hkl)|=|F(\bar{h}\bar{k}\bar{l})|=|F(hk\bar{l})|\neq|F(\bar{h}kl)|\ ;\quad |F(\bar{h}kl)|=|F(h\bar{k}l)|$$
$$\alpha(hkl)=-\alpha(\bar{h}\bar{k}\bar{l})=-\alpha(hk\bar{l})\neq\pm\alpha(\bar{h}kl)\ ;\quad \alpha(\bar{h}kl)=\alpha(h\bar{k}l)$$

$h=0$	$A=4\cos\pi k(x+y)\cos\pi k(x-y)\cos 2\pi lz$ $B=4\sin\pi k(x+y)\sin\pi k(x-y)\sin 2\pi lz=0$ if $k=0$ or $l=0$
$k=0$	$A=4\cos\pi h(x+y)\cos\pi h(x-y)\cos 2\pi lz$ $B=-4\sin\pi h(x+y)\sin\pi h(x-y)\sin 2\pi lz=0$ if $h=0$ or $l=0$
$l=0$	$A=4\cos\pi\left[(h-k)x+(h+k)y\right]\cos\pi\left[(h+k)x-(h-k)y\right]$ $B=0$
$h=k$	$A=4\cos 2\pi hx\cos 2\pi hy\cos 2\pi lz$ $B=-4\sin 2\pi hx\sin 2\pi hy\sin 2\pi lz=0$ if $h=0$ or $l=0$
$h=-k$	$A=4\cos 2\pi hx\cos 2\pi hy\cos 2\pi lz$ $B=4\sin 2\pi hx\sin 2\pi hy\sin 2\pi lz=0$ if $h=0$ or $l=0$

$$\rho_{xyz}=\frac{4}{V_c}\sum_0^\infty\sum_0^\infty\sum_0^\infty\left\{|F(hkl)|\cos\left(2\pi\frac{hx}{a}+2\pi\frac{ky}{b}\right)\cos\left(2\pi\frac{lz}{c}-\alpha(hkl)\right)+\right.$$
$$\left.+|F(\bar{h}kl)|\cos\left(2\pi\frac{hx}{a}-2\pi\frac{ky}{b}\right)\cos\left(2\pi\frac{lz}{c}-\alpha(\bar{h}kl)\right)\right\}$$

S_4^2 —— $I\bar{4}$ ($F\bar{4}$)

$000,\ \frac{1}{2}\frac{1}{2}\frac{1}{2}+|\, xyz;\ \bar{x}\bar{y}z;\ y\bar{x}\bar{z};\ \bar{y}x\bar{z}.\,|$

$$A=8\cos^2 2\pi\frac{h+k+l}{4}\cos\pi\left[(h-k)x+(h+k)y\right]\cos\pi\left[(h+k)x-(h-k)y\right]\cos 2\pi lz.$$
$$B=-8\cos^2 2\pi\frac{h+k+l}{4}\sin\pi\left[(h-k)x+(h+k)y\right]\sin\pi\left[(h+k)x-(h-k)y\right]\sin 2\pi lz.$$

$h+k+l=2n+1$	$A=B=0$