

MSG No. 18.22  $P_B2_12_12$  [ Type IV, orthorhombic ]

Table 1: Wyckoff site: **4a**, site symmetry:  $\dots 2$

No.	position	mapping
1	$[0, 0, z]$	$[1, 4]$
2	$[\frac{1}{2}, \frac{1}{2}, -z]$	$[2, 3]$
3	$[\frac{1}{2}, 0, z + \frac{1}{2}]$	$[5, 8]$
4	$[0, \frac{1}{2}, \frac{1}{2} - z]$	$[6, 7]$

Table 2: Wyckoff site: **4b**, site symmetry:  $2' \dots$

No.	position	mapping
1	$[x, \frac{1}{4}, \frac{3}{4}]$	$[1, 6]$
2	$[x + \frac{1}{2}, \frac{1}{4}, \frac{1}{4}]$	$[2, 5]$
3	$[\frac{1}{2} - x, \frac{3}{4}, \frac{1}{4}]$	$[3, 8]$
4	$[-x, \frac{3}{4}, \frac{3}{4}]$	$[4, 7]$

Table 3: Wyckoff site: **8c**, site symmetry:  $1$

No.	position	mapping
1	$[x, y, z]$	$[1]$
2	$[x + \frac{1}{2}, \frac{1}{2} - y, -z]$	$[2]$
3	$[\frac{1}{2} - x, y + \frac{1}{2}, -z]$	$[3]$
4	$[-x, -y, z]$	$[4]$
5	$[x + \frac{1}{2}, y, z + \frac{1}{2}]$	$[5]$
6	$[x, \frac{1}{2} - y, \frac{1}{2} - z]$	$[6]$
7	$[-x, y + \frac{1}{2}, \frac{1}{2} - z]$	$[7]$
8	$[\frac{1}{2} - x, -y, z + \frac{1}{2}]$	$[8]$