

MSG No. 76.12  $P_I4_1$  [ Type IV, tetragonal ]

Table 1: Wyckoff site: **4a**, site symmetry:  $2'..$

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

Table 2: Wyckoff site: **8b**, site symmetry: **1**

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