

MSG No. 77.18 P_I4_2 [Type IV, tetragonal]

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

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

Table 2: Wyckoff site: 4b, site symmetry: $2..$

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

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

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