

MSG No. 30.119 $P_{A\bar{n}c2}$ [Type IV, orthorhombic]

Table 1: Wyckoff site: 2a, site symmetry: m'm'2

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

Table 2: Wyckoff site: 2b, site symmetry: m'm'2

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

Table 3: Wyckoff site: 4c, site symmetry: .m'.

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

Table 4: Wyckoff site: 4d, site symmetry: m'..

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

Table 5: Wyckoff site: 4e, site symmetry: m'..

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

Table 6: Wyckoff site: **8f**, site symmetry: **1**

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