MSG No. 115.287 $P\bar{4}m'2'$ [Type III, tetragonal]

Table 1: Wyckoff site: `1a`, site symmetry: `-4m'2'`

No.	position	mapping
1	$[0, 0, 0]$	`[1,2,3,4,5,6,7,8]`

Table 2: Wyckoff site: `1b`, site symmetry: `-4m'2'`

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

Table 3: Wyckoff site: `1c`, site symmetry: `-4m'2'`

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

Table 4: Wyckoff site: `1d`, site symmetry: `-4m'2'`

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

Table 5: Wyckoff site: `2e`, site symmetry: `2m'm'`.

No.	position	mapping
1	$[0, 0, z]$	`[1,2,7,8]`
2	$[0, 0, -z]$	`[3,4,5,6]`

Table 6: Wyckoff site: `2f`, site symmetry: `2m'm'`.

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

Table 7: Wyckoff site: 2g, site symmetry: 2m'm'.

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

Table 8: Wyckoff site: 4h, site symmetry: ..2'

No.	position	mapping
1	$[x, x, 0]$	[1,5]
2	$[-x, -x, 0]$	[2,6]
3	$[x, -x, 0]$	[3,8]
4	$[-x, x, 0]$	[4,7]

Table 9: Wyckoff site: 4i, site symmetry: ..2'

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

Table 10: Wyckoff site: 4j, site symmetry: .m'.

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

Table 11: Wyckoff site: 4k, site symmetry: .m'.

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

Table 12: Wyckoff site: 8l, site symmetry: 1

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