MSG No. 115.284 $P\bar{4}m21'$ [Type II, tetragonal]

Table 1: Wyckoff site: `1a`, site symmetry: `-4m21'`

No.	position	mapping
1	[0, 0, 0]	`[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]`

Table 2: Wyckoff site: `1b`, site symmetry: `-4m21'`

No.	position	mapping
1	$\left[\frac{1}{2}, \frac{1}{2}, 0\right]$	`[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]`

Table 3: Wyckoff site: `1c`, site symmetry: `-4m21'`

No.	position	mapping
1	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	`[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]`

Table 4: Wyckoff site: `1d`, site symmetry: `-4m21'`

No.	position	mapping
1	$\left[0, 0, \frac{1}{2}\right]$	`[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16]`

Table 5: Wyckoff site: `2e`, site symmetry: `2mm.1'`

No.	position	mapping
1	$[0, 0, z]$	`[1,2,7,8,9,10,15,16]`
2	$[0, 0, -z]$	`[3,4,5,6,11,12,13,14]`

Table 6: Wyckoff site: `2f`, site symmetry: `2mm.1'`

No.	position	mapping
1	$\left[\frac{1}{2}, \frac{1}{2}, z\right]$	`[1,2,7,8,9,10,15,16]`
2	$\left[\frac{1}{2}, \frac{1}{2}, -z\right]$	`[3,4,5,6,11,12,13,14]`

Table 7: Wyckoff site: `2g`, site symmetry: `2mm.1'`

No.	position	mapping
1	$\left[0,\ \frac{1}{2},\ z\right]$	`[1,2,7,8,9,10,15,16]`
2	$\left[\frac{1}{2},\ 0,\ -z\right]$	`[3,4,5,6,11,12,13,14]`

Table 8: Wyckoff site: `4h`, site symmetry: `..21'`

No.	position	mapping
1	$[x,\ x,\ 0]$	`[1,3,9,11]`
2	$[-x,\ -x,\ 0]$	`[2,4,10,12]`
3	$[x,\ -x,\ 0]$	`[5,8,13,16]`
4	$[-x,\ x,\ 0]$	`[6,7,14,15]`

Table 9: Wyckoff site: `4i`, site symmetry: `..21'`

No.	position	mapping
1	$\left[x,\ x,\ \frac{1}{2}\right]$	`[1,3,9,11]`
2	$\left[-x,\ -x,\ \frac{1}{2}\right]$	`[2,4,10,12]`
3	$\left[x,\ -x,\ \frac{1}{2}\right]$	`[5,8,13,16]`
4	$\left[-x,\ x,\ \frac{1}{2}\right]$	`[6,7,14,15]`

Table 10: Wyckoff site: `4j`, site symmetry: `.m.1'`

No.	position	mapping
1	$[x,\ 0,\ z]$	`[1,8,9,16]`
2	$[-x,\ 0,\ z]$	`[2,7,10,15]`
3	$[0,\ x,\ -z]$	`[3,6,11,14]`
4	$[0,\ -x,\ -z]$	`[4,5,12,13]`

Table 11: Wyckoff site: `4k`, site symmetry: `.m.1'`

No.	position	mapping
1	$\left[x,\ \frac{1}{2},\ z\right]$	`[1,8,9,16]`
2	$\left[-x,\ \frac{1}{2},\ z\right]$	`[2,7,10,15]`
3	$\left[\frac{1}{2},\ x,\ -z\right]$	`[3,6,11,14]`
4	$\left[\frac{1}{2},\ -x,\ -z\right]$	`[4,5,12,13]`

Table 12: Wyckoff site: `8l`, site symmetry: `11'`

No.	position	mapping
1	$[x,\ y,\ z]$	`[1,9]`
2	$[-x,\ -y,\ z]$	`[2,10]`
3	$[y,\ x,\ -z]$	`[3,11]`
4	$[-y,\ -x,\ -z]$	`[4,12]`
5	$[y,\ -x,\ -z]$	`[5,13]`
6	$[-y,\ x,\ -z]$	`[6,14]`
7	$[-x,\ y,\ z]$	`[7,15]`
8	$[x,\ -y,\ z]$	`[8,16]`