MSG No. 101.180 $P4_2cm1'$ [Type II, tetragonal]

Table 1: Wyckoff site: `2a`, site symmetry: `2.mm1'`

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

Table 2: Wyckoff site: `2b`, site symmetry: `2.mm1'`

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

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

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

Table 4: Wyckoff site: `4d`, site symmetry: `..m1'`

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

Table 5: Wyckoff site: `8e`, site symmetry: `11'`

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

continued ...

Table 5

No.	position	mapping
7	$[-y, -x, z]$	`[7,15]`
8	$[y, x, z]$	`[8,16]`