MSG No. 99.165 $P4'm'm$ [Type III, tetragonal]

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

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

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

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

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

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

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

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

Table 5: Wyckoff site: `4e`, 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 6: Wyckoff site: `4f`, 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 7: Wyckoff site: `8g`, 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]`