# MSG No. 29.106 $P_cca2_1$ [ Type IV, orthorhombic ]

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

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

Table 2: Wyckoff site: `4b`, site symmetry: `..2'`

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

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

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

Table 4: Wyckoff site: `8d`, site symmetry: `1`

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