# MSG No. 95.135 $P4_322$ [ Type I, tetragonal ]

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

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

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

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

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

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

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

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