

MSG No. 81.34  $P\bar{4}1'$  [ Type II, tetragonal ]

Table 1: Wyckoff site: 1a, site symmetry:  $-4..1'$

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

Table 2: Wyckoff site: 1b, site symmetry:  $-4..1'$

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

Table 3: Wyckoff site: 1c, site symmetry:  $-4..1'$

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

Table 4: Wyckoff site: 1d, site symmetry:  $-4..1'$

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

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

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

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

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

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

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

Table 8: Wyckoff site: 4h, site symmetry: 11'

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