

MSG No. 15.87 $C2'/c$ [Type III, monoclinic]

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

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

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

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

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

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

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

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

Table 5: Wyckoff site: 4e, site symmetry: $2'$

No.	position	mapping
1	$[0, y, \frac{1}{4}]$	$[1, 3]$
2	$[0, -y, \frac{3}{4}]$	$[2, 4]$

continued ...

Table 5

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

Table 6: Wyckoff site: **8f**, site symmetry: **1**

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