

MSG No. 18.20 $P_b2_12_12$ [Type IV, orthorhombic]

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

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

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

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

Table 3: Wyckoff site: 4c, site symmetry: $..2'$

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

Table 4: Wyckoff site: 4d, site symmetry: $..2$

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

Table 5: Wyckoff site: 8e, site symmetry: 1

No.	position	mapping
1	$[x, y, z]$	[1]
2	$[x + \frac{1}{2}, \frac{1}{2} - y, -z]$	[2]

continued ...

Table 5

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