

MSG No. 24.53  $I2_12_12_1$  [ Type I, orthorhombic ]

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

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

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

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

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

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

Table 4: Wyckoff site: **8d**, site symmetry:  $1$

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