MSG No. 210.54 $F4'_132'$ [Type III, cubic]

Table 1: Wyckoff site: 8a, site symmetry: 23.

No.	position	mapping
1	$[0, 0, 0]$	[1,2,3,4,5,6,7,8,9,10,11,12]
2	$\left[\frac{1}{4}, \frac{1}{4}, \frac{1}{4}\right]$	[13,14,15,16,17,18,19,20,21,22,23,24]
3	$\left[0, \frac{1}{2}, \frac{1}{2}\right]$	[25,26,27,28,29,30,31,32,33,34,35,36]
4	$\left[\frac{1}{4}, \frac{3}{4}, \frac{3}{4}\right]$	[37,38,39,40,41,42,43,44,45,46,47,48]
5	$\left[\frac{1}{2}, 0, \frac{1}{2}\right]$	[49,50,51,52,53,54,55,56,57,58,59,60]
6	$\left[\frac{3}{4}, \frac{1}{4}, \frac{3}{4}\right]$	[61,62,63,64,65,66,67,68,69,70,71,72]
7	$\left[\frac{1}{2}, \frac{1}{2}, 0\right]$	[73,74,75,76,77,78,79,80,81,82,83,84]
8	$\left[\frac{3}{4}, \frac{3}{4}, \frac{1}{4}\right]$	[85,86,87,88,89,90,91,92,93,94,95,96]

Table 2: Wyckoff site: 8b, site symmetry: 23.

No.	position	mapping
1	$\left[\frac{1}{2}, \frac{1}{2}, \frac{1}{2}\right]$	[1,2,3,4,5,6,7,8,9,10,11,12]
2	$\left[\frac{3}{4}, \frac{3}{4}, \frac{3}{4}\right]$	[13,14,15,16,17,18,19,20,21,22,23,24]
3	$\left[\frac{1}{2}, 0, 0\right]$	[25,26,27,28,29,30,31,32,33,34,35,36]
4	$\left[\frac{3}{4}, \frac{1}{4}, \frac{1}{4}\right]$	[37,38,39,40,41,42,43,44,45,46,47,48]
5	$\left[0, \frac{1}{2}, 0\right]$	[49,50,51,52,53,54,55,56,57,58,59,60]
6	$\left[\frac{1}{4}, \frac{3}{4}, \frac{1}{4}\right]$	[61,62,63,64,65,66,67,68,69,70,71,72]
7	$\left[0, 0, \frac{1}{2}\right]$	[73,74,75,76,77,78,79,80,81,82,83,84]
8	$\left[\frac{1}{4}, \frac{1}{4}, \frac{3}{4}\right]$	[85,86,87,88,89,90,91,92,93,94,95,96]

Table 3: Wyckoff site: 16c, site symmetry: .32'

No.	position	mapping
1	$\left[\frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right]$	[1,5,6,20,22,24]
2	$\left[\frac{1}{8}, \frac{7}{8}, \frac{7}{8}\right]$	[2,10,11,40,41,45]
3	$\left[\frac{7}{8}, \frac{1}{8}, \frac{7}{8}\right]$	[3,7,12,61,66,71]
4	$\left[\frac{7}{8}, \frac{7}{8}, \frac{1}{8}\right]$	[4,8,9,86,87,91]
5	$\left[\frac{3}{8}, \frac{1}{8}, \frac{3}{8}\right]$	[13,18,23,51,55,60]
6	$\left[\frac{3}{8}, \frac{3}{8}, \frac{1}{8}\right]$	[14,15,19,76,80,81]
7	$\left[\frac{1}{8}, \frac{3}{8}, \frac{3}{8}\right]$	[16,17,21,26,34,35]
8	$\left[\frac{1}{8}, \frac{5}{8}, \frac{5}{8}\right]$	[25,29,30,44,46,48]
9	$\left[\frac{7}{8}, \frac{5}{8}, \frac{3}{8}\right]$	[27,31,36,85,90,95]
10	$\left[\frac{7}{8}, \frac{3}{8}, \frac{5}{8}\right]$	[28,32,33,62,63,67]
11	$\left[\frac{3}{8}, \frac{5}{8}, \frac{7}{8}\right]$	[37,42,47,75,79,84]
12	$\left[\frac{3}{8}, \frac{7}{8}, \frac{5}{8}\right]$	[38,39,43,52,56,57]
13	$\left[\frac{5}{8}, \frac{1}{8}, \frac{5}{8}\right]$	[49,53,54,68,70,72]
14	$\left[\frac{5}{8}, \frac{7}{8}, \frac{3}{8}\right]$	[50,58,59,88,89,93]
15	$\left[\frac{5}{8}, \frac{3}{8}, \frac{7}{8}\right]$	[64,65,69,74,82,83]

continued ...

Table 3

No.	position	mapping
16	$\left[\frac{5}{8}, \frac{5}{8}, \frac{1}{8}\right]$	[73,77,78,92,94,96]

Table 4: Wyckoff site: 16d, site symmetry: .32'

No.	position	mapping
1	$\left[\frac{5}{8}, \frac{5}{8}, \frac{5}{8}\right]$	[1,5,6,20,22,24]
2	$\left[\frac{5}{8}, \frac{3}{8}, \frac{3}{8}\right]$	[2,10,11,40,41,45]
3	$\left[\frac{3}{8}, \frac{5}{8}, \frac{3}{8}\right]$	[3,7,12,61,66,71]
4	$\left[\frac{3}{8}, \frac{3}{8}, \frac{5}{8}\right]$	[4,8,9,86,87,91]
5	$\left[\frac{7}{8}, \frac{5}{8}, \frac{7}{8}\right]$	[13,18,23,51,55,60]
6	$\left[\frac{7}{8}, \frac{7}{8}, \frac{5}{8}\right]$	[14,15,19,76,80,81]
7	$\left[\frac{5}{8}, \frac{7}{8}, \frac{7}{8}\right]$	[16,17,21,26,34,35]
8	$\left[\frac{5}{8}, \frac{1}{8}, \frac{1}{8}\right]$	[25,29,30,44,46,48]
9	$\left[\frac{3}{8}, \frac{1}{8}, \frac{7}{8}\right]$	[27,31,36,85,90,95]
10	$\left[\frac{3}{8}, \frac{7}{8}, \frac{1}{8}\right]$	[28,32,33,62,63,67]
11	$\left[\frac{7}{8}, \frac{1}{8}, \frac{3}{8}\right]$	[37,42,47,75,79,84]
12	$\left[\frac{7}{8}, \frac{3}{8}, \frac{1}{8}\right]$	[38,39,43,52,56,57]
13	$\left[\frac{1}{8}, \frac{5}{8}, \frac{1}{8}\right]$	[49,53,54,68,70,72]
14	$\left[\frac{1}{8}, \frac{3}{8}, \frac{7}{8}\right]$	[50,58,59,88,89,93]
15	$\left[\frac{1}{8}, \frac{7}{8}, \frac{3}{8}\right]$	[64,65,69,74,82,83]
16	$\left[\frac{1}{8}, \frac{1}{8}, \frac{5}{8}\right]$	[73,77,78,92,94,96]

Table 5: Wyckoff site: 32e, site symmetry: .3.

No.	position	mapping
1	$[x, x, x]$	[1,5,6]
2	$[x, -x, -x]$	[2,10,11]
3	$[-x, x, -x]$	[3,7,12]
4	$[-x, -x, x]$	[4,8,9]
5	$\left[x+\frac{1}{4}, \frac{1}{4}-x, x+\frac{1}{4}\right]$	[13,18,23]
6	$\left[x+\frac{1}{4}, x+\frac{1}{4}, \frac{1}{4}-x\right]$	[14,15,19]
7	$\left[\frac{1}{4}-x, x+\frac{1}{4}, x+\frac{1}{4}\right]$	[16,17,21]
8	$\left[\frac{1}{4}-x, \frac{1}{4}-x, \frac{1}{4}-x\right]$	[20,22,24]
9	$\left[x, x+\frac{1}{2}, x+\frac{1}{2}\right]$	[25,29,30]
10	$\left[x, \frac{1}{2}-x, \frac{1}{2}-x\right]$	[26,34,35]
11	$\left[-x, x+\frac{1}{2}, \frac{1}{2}-x\right]$	[27,31,36]
12	$\left[-x, \frac{1}{2}-x, x+\frac{1}{2}\right]$	[28,32,33]
13	$\left[x+\frac{1}{4}, \frac{3}{4}-x, x+\frac{3}{4}\right]$	[37,42,47]
14	$\left[x+\frac{1}{4}, x+\frac{3}{4}, \frac{3}{4}-x\right]$	[38,39,43]
15	$\left[\frac{1}{4}-x, x+\frac{3}{4}, x+\frac{3}{4}\right]$	[40,41,45]
16	$\left[\frac{1}{4}-x, \frac{3}{4}-x, \frac{3}{4}-x\right]$	[44,46,48]
17	$\left[x+\frac{1}{2}, x, x+\frac{1}{2}\right]$	[49,53,54]

continued ...

Table 5

No.	position	mapping
18	$\left[x+\frac{1}{2},\ -x,\ \frac{1}{2}-x\right]$	[50,58,59]
19	$\left[\frac{1}{2}-x,\ x,\ \frac{1}{2}-x\right]$	[51,55,60]
20	$\left[\frac{1}{2}-x,\ -x,\ x+\frac{1}{2}\right]$	[52,56,57]
21	$\left[x+\frac{3}{4},\ \frac{1}{4}-x,\ x+\frac{3}{4}\right]$	[61,66,71]
22	$\left[x+\frac{3}{4},\ x+\frac{1}{4},\ \frac{3}{4}-x\right]$	[62,63,67]
23	$\left[\frac{3}{4}-x,\ x+\frac{1}{4},\ x+\frac{3}{4}\right]$	[64,65,69]
24	$\left[\frac{3}{4}-x,\ \frac{1}{4}-x,\ \frac{3}{4}-x\right]$	[68,70,72]
25	$\left[x+\frac{1}{2},\ x+\frac{1}{2},\ x\right]$	[73,77,78]
26	$\left[x+\frac{1}{2},\ \frac{1}{2}-x,\ -x\right]$	[74,82,83]
27	$\left[\frac{1}{2}-x,\ x+\frac{1}{2},\ -x\right]$	[75,79,84]
28	$\left[\frac{1}{2}-x,\ \frac{1}{2}-x,\ x\right]$	[76,80,81]
29	$\left[x+\frac{3}{4},\ \frac{3}{4}-x,\ x+\frac{1}{4}\right]$	[85,90,95]
30	$\left[x+\frac{3}{4},\ x+\frac{3}{4},\ \frac{1}{4}-x\right]$	[86,87,91]
31	$\left[\frac{3}{4}-x,\ x+\frac{3}{4},\ x+\frac{1}{4}\right]$	[88,89,93]
32	$\left[\frac{3}{4}-x,\ \frac{3}{4}-x,\ \frac{1}{4}-x\right]$	[92,94,96]

Table 6: Wyckoff site: 48f, site symmetry: 2..

No.	position	mapping
1	$[x,\ 0,\ 0]$	[1,2]
2	$[-x,\ 0,\ 0]$	[3,4]
3	$[0,\ x,\ 0]$	[5,12]
4	$[0,\ 0,\ x]$	[6,9]
5	$[0,\ 0,\ -x]$	[7,11]
6	$[0,\ -x,\ 0]$	[8,10]
7	$\left[x+\frac{1}{4},\ \frac{1}{4},\ \frac{1}{4}\right]$	[13,14]
8	$\left[\frac{1}{4},\ \frac{1}{4},\ \frac{1}{4}-x\right]$	[15,24]
9	$\left[\frac{1}{4},\ \frac{1}{4},\ x+\frac{1}{4}\right]$	[16,23]
10	$\left[\frac{1}{4},\ x+\frac{1}{4},\ \frac{1}{4}\right]$	[17,19]
11	$\left[\frac{1}{4},\ \frac{1}{4}-x,\ \frac{1}{4}\right]$	[18,20]
12	$\left[\frac{1}{4}-x,\ \frac{1}{4},\ \frac{1}{4}\right]$	[21,22]
13	$\left[x,\ \frac{1}{2},\ \frac{1}{2}\right]$	[25,26]
14	$\left[-x,\ \frac{1}{2},\ \frac{1}{2}\right]$	[27,28]
15	$\left[0,\ x+\frac{1}{2},\ \frac{1}{2}\right]$	[29,36]
16	$\left[0,\ \frac{1}{2},\ x+\frac{1}{2}\right]$	[30,33]
17	$\left[0,\ \frac{1}{2},\ \frac{1}{2}-x\right]$	[31,35]
18	$\left[0,\ \frac{1}{2}-x,\ \frac{1}{2}\right]$	[32,34]
19	$\left[x+\frac{1}{4},\ \frac{3}{4},\ \frac{3}{4}\right]$	[37,38]
20	$\left[\frac{1}{4},\ \frac{3}{4},\ \frac{3}{4}-x\right]$	[39,48]
21	$\left[\frac{1}{4},\ \frac{3}{4},\ x+\frac{3}{4}\right]$	[40,47]
22	$\left[\frac{1}{4},\ x+\frac{3}{4},\ \frac{3}{4}\right]$	[41,43]
23	$\left[\frac{1}{4},\ \frac{3}{4}-x,\ \frac{3}{4}\right]$	[42,44]
24	$\left[\frac{1}{4}-x,\ \frac{3}{4},\ \frac{3}{4}\right]$	[45,46]
25	$\left[x+\frac{1}{2},\ 0,\ \frac{1}{2}\right]$	[49,50]

continued ...

Table 6

No.	position	mapping
26	$\left[\frac{1}{2}-x,\ 0,\ \frac{1}{2}\right]$	[51,52]
27	$\left[\frac{1}{2},\ x,\ \frac{1}{2}\right]$	[53,60]
28	$\left[\frac{1}{2},\ 0,\ x+\frac{1}{2}\right]$	[54,57]
29	$\left[\frac{1}{2},\ 0,\ \frac{1}{2}-x\right]$	[55,59]
30	$\left[\frac{1}{2},\ -x,\ \frac{1}{2}\right]$	[56,58]
31	$\left[x+\frac{3}{4},\ \frac{1}{4},\ \frac{3}{4}\right]$	[61,62]
32	$\left[\frac{3}{4},\ \frac{1}{4},\ \frac{3}{4}-x\right]$	[63,72]
33	$\left[\frac{3}{4},\ \frac{1}{4},\ x+\frac{3}{4}\right]$	[64,71]
34	$\left[\frac{3}{4},\ x+\frac{1}{4},\ \frac{3}{4}\right]$	[65,67]
35	$\left[\frac{3}{4},\ \frac{1}{4}-x,\ \frac{3}{4}\right]$	[66,68]
36	$\left[\frac{3}{4}-x,\ \frac{1}{4},\ \frac{3}{4}\right]$	[69,70]
37	$\left[x+\frac{1}{2},\ \frac{1}{2},\ 0\right]$	[73,74]
38	$\left[\frac{1}{2}-x,\ \frac{1}{2},\ 0\right]$	[75,76]
39	$\left[\frac{1}{2},\ x+\frac{1}{2},\ 0\right]$	[77,84]
40	$\left[\frac{1}{2},\ \frac{1}{2},\ x\right]$	[78,81]
41	$\left[\frac{1}{2},\ \frac{1}{2},\ -x\right]$	[79,83]
42	$\left[\frac{1}{2},\ \frac{1}{2}-x,\ 0\right]$	[80,82]
43	$\left[x+\frac{3}{4},\ \frac{3}{4},\ \frac{1}{4}\right]$	[85,86]
44	$\left[\frac{3}{4},\ \frac{3}{4},\ \frac{1}{4}-x\right]$	[87,96]
45	$\left[\frac{3}{4},\ \frac{3}{4},\ x+\frac{1}{4}\right]$	[88,95]
46	$\left[\frac{3}{4},\ x+\frac{3}{4},\ \frac{1}{4}\right]$	[89,91]
47	$\left[\frac{3}{4},\ \frac{3}{4}-x,\ \frac{1}{4}\right]$	[90,92]
48	$\left[\frac{3}{4}-x,\ \frac{3}{4},\ \frac{1}{4}\right]$	[93,94]

Table 7: Wyckoff site: 48g, site symmetry: ..2'

No.	position	mapping
1	$\left[\frac{1}{8},\ y,\ \frac{1}{4}-y\right]$	[1,22]
2	$\left[\frac{1}{8},\ -y,\ y+\frac{3}{4}\right]$	[2,45]
3	$\left[\frac{7}{8},\ y,\ y+\frac{3}{4}\right]$	[3,61]
4	$\left[\frac{7}{8},\ -y,\ \frac{1}{4}-y\right]$	[4,86]
5	$\left[\frac{1}{4}-y,\ \frac{1}{8},\ y\right]$	[5,20]
6	$\left[y,\ \frac{1}{4}-y,\ \frac{1}{8}\right]$	[6,24]
7	$\left[-y,\ \frac{1}{4}-y,\ \frac{7}{8}\right]$	[7,71]
8	$\left[y+\frac{3}{4},\ \frac{7}{8},\ y\right]$	[8,91]
9	$\left[-y,\ y+\frac{3}{4},\ \frac{1}{8}\right]$	[9,87]
10	$\left[\frac{1}{4}-y,\ \frac{7}{8},\ -y\right]$	[10,41]
11	$\left[y,\ y+\frac{3}{4},\ \frac{7}{8}\right]$	[11,40]
12	$\left[y+\frac{3}{4},\ \frac{1}{8},\ -y\right]$	[12,66]
13	$\left[\frac{3}{8},\ y,\ y+\frac{1}{4}\right]$	[13,51]
14	$\left[\frac{3}{8},\ \frac{1}{2}-y,\ \frac{1}{4}-y\right]$	[14,76]
15	$\left[\frac{1}{2}-y,\ y+\frac{1}{4},\ \frac{1}{8}\right]$	[15,81]
16	$\left[y,\ y+\frac{1}{4},\ \frac{3}{8}\right]$	[16,35]
17	$\left[\frac{1}{4}-y,\ \frac{3}{8},\ \frac{1}{2}-y\right]$	[17,34]

continued ...

Table 7

No.	position	mapping
18	$\left[y+\frac{1}{4},\ \frac{1}{8},\ \frac{1}{2}-y\right]$	[18,60]
19	$\left[y+\frac{1}{4},\ \frac{3}{8},\ y\right]$	[19,80]
20	$\left[\frac{1}{8},\ \frac{1}{2}-y,\ y+\frac{1}{4}\right]$	[21,26]
21	$\left[\frac{1}{2}-y,\ \frac{1}{4}-y,\ \frac{3}{8}\right]$	[23,55]
22	$\left[\frac{1}{8},\ y+\frac{1}{2},\ \frac{3}{4}-y\right]$	[25,46]
23	$\left[\frac{7}{8},\ y+\frac{1}{2},\ y+\frac{1}{4}\right]$	[27,85]
24	$\left[\frac{7}{8},\ \frac{1}{2}-y,\ \frac{3}{4}-y\right]$	[28,62]
25	$\left[\frac{1}{4}-y,\ \frac{5}{8},\ y+\frac{1}{2}\right]$	[29,44]
26	$\left[y,\ \frac{3}{4}-y,\ \frac{5}{8}\right]$	[30,48]
27	$\left[-y,\ \frac{3}{4}-y,\ \frac{3}{8}\right]$	[31,95]
28	$\left[y+\frac{3}{4},\ \frac{3}{8},\ y+\frac{1}{2}\right]$	[32,67]
29	$\left[-y,\ y+\frac{1}{4},\ \frac{5}{8}\right]$	[33,63]
30	$\left[y+\frac{3}{4},\ \frac{5}{8},\ \frac{1}{2}-y\right]$	[36,90]
31	$\left[\frac{3}{8},\ y+\frac{1}{2},\ y+\frac{3}{4}\right]$	[37,75]
32	$\left[\frac{3}{8},\ -y,\ \frac{3}{4}-y\right]$	[38,52]
33	$\left[\frac{1}{2}-y,\ y+\frac{3}{4},\ \frac{5}{8}\right]$	[39,57]
34	$\left[y+\frac{1}{4},\ \frac{5}{8},\ -y\right]$	[42,84]
35	$\left[y+\frac{1}{4},\ \frac{7}{8},\ y+\frac{1}{2}\right]$	[43,56]
36	$\left[\frac{1}{2}-y,\ \frac{3}{4}-y,\ \frac{7}{8}\right]$	[47,79]
37	$\left[\frac{5}{8},\ y,\ \frac{3}{4}-y\right]$	[49,70]
38	$\left[\frac{5}{8},\ -y,\ y+\frac{1}{4}\right]$	[50,93]
39	$\left[\frac{3}{4}-y,\ \frac{1}{8},\ y+\frac{1}{2}\right]$	[53,68]
40	$\left[y+\frac{1}{2},\ \frac{1}{4}-y,\ \frac{5}{8}\right]$	[54,72]
41	$\left[\frac{3}{4}-y,\ \frac{7}{8},\ \frac{1}{2}-y\right]$	[58,89]
42	$\left[y+\frac{1}{2},\ y+\frac{3}{4},\ \frac{3}{8}\right]$	[59,88]
43	$\left[y+\frac{1}{2},\ y+\frac{1}{4},\ \frac{7}{8}\right]$	[64,83]
44	$\left[\frac{3}{4}-y,\ \frac{3}{8},\ -y\right]$	[65,82]
45	$\left[\frac{5}{8},\ \frac{1}{2}-y,\ y+\frac{3}{4}\right]$	[69,74]
46	$\left[\frac{5}{8},\ y+\frac{1}{2},\ \frac{1}{4}-y\right]$	[73,94]
47	$\left[\frac{3}{4}-y,\ \frac{5}{8},\ y\right]$	[77,92]
48	$\left[y+\frac{1}{2},\ \frac{3}{4}-y,\ \frac{1}{8}\right]$	[78,96]

Table 8: Wyckoff site: 96h, site symmetry: 1

No.	position	mapping
1	$[x,\ y,\ z]$	[1]
2	$[x,\ -y,\ -z]$	[2]
3	$[-x,\ y,\ -z]$	[3]
4	$[-x,\ -y,\ z]$	[4]
5	$[z,\ x,\ y]$	[5]
6	$[y,\ z,\ x]$	[6]
7	$[-y,\ z,\ -x]$	[7]
8	$[-z,\ -x,\ y]$	[8]
9	$[-y,\ -z,\ x]$	[9]

continued ...

Table 8

No.	position	mapping
10	$[z, -x, -y]$	[10]
11	$[y, -z, -x]$	[11]
12	$[-z, x, -y]$	[12]
13	$\left[x+\frac{1}{4}, \frac{1}{4}-z, y+\frac{1}{4}\right]$	[13]
14	$\left[x+\frac{1}{4}, z+\frac{1}{4}, \frac{1}{4}-y\right]$	[14]
15	$\left[z+\frac{1}{4}, y+\frac{1}{4}, \frac{1}{4}-x\right]$	[15]
16	$\left[\frac{1}{4}-z, y+\frac{1}{4}, x+\frac{1}{4}\right]$	[16]
17	$\left[\frac{1}{4}-y, x+\frac{1}{4}, z+\frac{1}{4}\right]$	[17]
18	$\left[y+\frac{1}{4}, \frac{1}{4}-x, z+\frac{1}{4}\right]$	[18]
19	$\left[y+\frac{1}{4}, x+\frac{1}{4}, \frac{1}{4}-z\right]$	[19]
20	$\left[\frac{1}{4}-y, \frac{1}{4}-x, \frac{1}{4}-z\right]$	[20]
21	$\left[\frac{1}{4}-x, z+\frac{1}{4}, y+\frac{1}{4}\right]$	[21]
22	$\left[\frac{1}{4}-x, \frac{1}{4}-z, \frac{1}{4}-y\right]$	[22]
23	$\left[z+\frac{1}{4}, \frac{1}{4}-y, x+\frac{1}{4}\right]$	[23]
24	$\left[\frac{1}{4}-z, \frac{1}{4}-y, \frac{1}{4}-x\right]$	[24]
25	$\left[x, y+\frac{1}{2}, z+\frac{1}{2}\right]$	[25]
26	$\left[x, \frac{1}{2}-y, \frac{1}{2}-z\right]$	[26]
27	$\left[-x, y+\frac{1}{2}, \frac{1}{2}-z\right]$	[27]
28	$\left[-x, \frac{1}{2}-y, z+\frac{1}{2}\right]$	[28]
29	$\left[z, x+\frac{1}{2}, y+\frac{1}{2}\right]$	[29]
30	$\left[y, z+\frac{1}{2}, x+\frac{1}{2}\right]$	[30]
31	$\left[-y, z+\frac{1}{2}, \frac{1}{2}-x\right]$	[31]
32	$\left[-z, \frac{1}{2}-x, y+\frac{1}{2}\right]$	[32]
33	$\left[-y, \frac{1}{2}-z, x+\frac{1}{2}\right]$	[33]
34	$\left[z, \frac{1}{2}-x, \frac{1}{2}-y\right]$	[34]
35	$\left[y, \frac{1}{2}-z, \frac{1}{2}-x\right]$	[35]
36	$\left[-z, x+\frac{1}{2}, \frac{1}{2}-y\right]$	[36]
37	$\left[x+\frac{1}{4}, \frac{3}{4}-z, y+\frac{3}{4}\right]$	[37]
38	$\left[x+\frac{1}{4}, z+\frac{3}{4}, \frac{3}{4}-y\right]$	[38]
39	$\left[z+\frac{1}{4}, y+\frac{3}{4}, \frac{3}{4}-x\right]$	[39]
40	$\left[\frac{1}{4}-z, y+\frac{3}{4}, x+\frac{3}{4}\right]$	[40]
41	$\left[\frac{1}{4}-y, x+\frac{3}{4}, z+\frac{3}{4}\right]$	[41]
42	$\left[y+\frac{1}{4}, \frac{3}{4}-x, z+\frac{3}{4}\right]$	[42]
43	$\left[y+\frac{1}{4}, x+\frac{3}{4}, \frac{3}{4}-z\right]$	[43]
44	$\left[\frac{1}{4}-y, \frac{3}{4}-x, \frac{3}{4}-z\right]$	[44]
45	$\left[\frac{1}{4}-x, z+\frac{3}{4}, y+\frac{3}{4}\right]$	[45]
46	$\left[\frac{1}{4}-x, \frac{3}{4}-z, \frac{3}{4}-y\right]$	[46]
47	$\left[z+\frac{1}{4}, \frac{3}{4}-y, x+\frac{3}{4}\right]$	[47]
48	$\left[\frac{1}{4}-z, \frac{3}{4}-y, \frac{3}{4}-x\right]$	[48]
49	$\left[x+\frac{1}{2}, y, z+\frac{1}{2}\right]$	[49]
50	$\left[x+\frac{1}{2}, -y, \frac{1}{2}-z\right]$	[50]
51	$\left[\frac{1}{2}-x, y, \frac{1}{2}-z\right]$	[51]
52	$\left[\frac{1}{2}-x, -y, z+\frac{1}{2}\right]$	[52]
53	$\left[z+\frac{1}{2}, x, y+\frac{1}{2}\right]$	[53]
54	$\left[y+\frac{1}{2}, z, x+\frac{1}{2}\right]$	[54]
55	$\left[\frac{1}{2}-y, z, \frac{1}{2}-x\right]$	[55]
56	$\left[\frac{1}{2}-z, -x, y+\frac{1}{2}\right]$	[56]

continued ...

Table 8

No.	position	mapping
57	$\left[\frac{1}{2}-y,\,-z,\,x+\frac{1}{2}\right]$	[57]
58	$\left[z+\frac{1}{2},\,-x,\,\frac{1}{2}-y\right]$	[58]
59	$\left[y+\frac{1}{2},\,-z,\,\frac{1}{2}-x\right]$	[59]
60	$\left[\frac{1}{2}-z,\,x,\,\frac{1}{2}-y\right]$	[60]
61	$\left[x+\frac{3}{4},\,\frac{1}{4}-z,\,y+\frac{3}{4}\right]$	[61]
62	$\left[x+\frac{3}{4},\,z+\frac{1}{4},\,\frac{3}{4}-y\right]$	[62]
63	$\left[z+\frac{3}{4},\,y+\frac{1}{4},\,\frac{3}{4}-x\right]$	[63]
64	$\left[\frac{3}{4}-z,\,y+\frac{1}{4},\,x+\frac{3}{4}\right]$	[64]
65	$\left[\frac{3}{4}-y,\,x+\frac{1}{4},\,z+\frac{3}{4}\right]$	[65]
66	$\left[y+\frac{3}{4},\,\frac{1}{4}-x,\,z+\frac{3}{4}\right]$	[66]
67	$\left[y+\frac{3}{4},\,x+\frac{1}{4},\,\frac{3}{4}-z\right]$	[67]
68	$\left[\frac{3}{4}-y,\,\frac{1}{4}-x,\,\frac{3}{4}-z\right]$	[68]
69	$\left[\frac{3}{4}-x,\,z+\frac{1}{4},\,y+\frac{3}{4}\right]$	[69]
70	$\left[\frac{3}{4}-x,\,\frac{1}{4}-z,\,\frac{3}{4}-y\right]$	[70]
71	$\left[z+\frac{3}{4},\,\frac{1}{4}-y,\,x+\frac{3}{4}\right]$	[71]
72	$\left[\frac{3}{4}-z,\,\frac{1}{4}-y,\,\frac{3}{4}-x\right]$	[72]
73	$\left[x+\frac{1}{2},\,y+\frac{1}{2},\,z\right]$	[73]
74	$\left[x+\frac{1}{2},\,\frac{1}{2}-y,\,-z\right]$	[74]
75	$\left[\frac{1}{2}-x,\,y+\frac{1}{2},\,-z\right]$	[75]
76	$\left[\frac{1}{2}-x,\,\frac{1}{2}-y,\,z\right]$	[76]
77	$\left[z+\frac{1}{2},\,x+\frac{1}{2},\,y\right]$	[77]
78	$\left[y+\frac{1}{2},\,z+\frac{1}{2},\,x\right]$	[78]
79	$\left[\frac{1}{2}-y,\,z+\frac{1}{2},\,-x\right]$	[79]
80	$\left[\frac{1}{2}-z,\,\frac{1}{2}-x,\,y\right]$	[80]
81	$\left[\frac{1}{2}-y,\,\frac{1}{2}-z,\,x\right]$	[81]
82	$\left[z+\frac{1}{2},\,\frac{1}{2}-x,\,-y\right]$	[82]
83	$\left[y+\frac{1}{2},\,\frac{1}{2}-z,\,-x\right]$	[83]
84	$\left[\frac{1}{2}-z,\,x+\frac{1}{2},\,-y\right]$	[84]
85	$\left[x+\frac{3}{4},\,\frac{3}{4}-z,\,y+\frac{1}{4}\right]$	[85]
86	$\left[x+\frac{3}{4},\,z+\frac{3}{4},\,\frac{1}{4}-y\right]$	[86]
87	$\left[z+\frac{3}{4},\,y+\frac{3}{4},\,\frac{1}{4}-x\right]$	[87]
88	$\left[\frac{3}{4}-z,\,y+\frac{3}{4},\,x+\frac{1}{4}\right]$	[88]
89	$\left[\frac{3}{4}-y,\,x+\frac{3}{4},\,z+\frac{1}{4}\right]$	[89]
90	$\left[y+\frac{3}{4},\,\frac{3}{4}-x,\,z+\frac{1}{4}\right]$	[90]
91	$\left[y+\frac{3}{4},\,x+\frac{3}{4},\,\frac{1}{4}-z\right]$	[91]
92	$\left[\frac{3}{4}-y,\,\frac{3}{4}-x,\,\frac{1}{4}-z\right]$	[92]
93	$\left[\frac{3}{4}-x,\,z+\frac{3}{4},\,y+\frac{1}{4}\right]$	[93]
94	$\left[\frac{3}{4}-x,\,\frac{3}{4}-z,\,\frac{1}{4}-y\right]$	[94]
95	$\left[z+\frac{3}{4},\,\frac{3}{4}-y,\,x+\frac{1}{4}\right]$	[95]
96	$\left[\frac{3}{4}-z,\,\frac{3}{4}-y,\,\frac{1}{4}-x\right]$	[96]