

Richterite (020) 138 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 0 0]	(0 2 0)	(0 0 1)	9.208	5.056	1.82	90.0	75.0
[1 0 1]	(0 2 0)	(1 1 -1)	9.208	4.870	1.89	74.7	74.7
[1 0 0]	(0 2 0)	(0 2 1)	9.208	4.432	2.08	61.2	75.0
[1 0 2]	(0 2 0)	(2 0 -1)	9.208	4.061	2.27	90.0	50.9
[1 0 -1]	(0 2 0)	(1 1 1)	9.208	3.976	2.32	77.5	51.1
[1 0 1]	(0 2 0)	(-1 -3 1)	9.208	3.900	2.36	50.6	74.7
[1 0 2]	(0 2 0)	(2 2 -1)	9.208	3.716	2.48	66.2	50.9
[1 0 -1]	(0 2 0)	(-1 3 -1)	9.208	3.393	2.71	56.4	51.1
[1 0 2]	(0 2 0)	(2 4 -1)	9.208	3.046	3.02	48.6	50.9
[1 0 1]	(0 2 0)	(-1 -5 1)	9.208	2.976	3.09	36.1	74.7
[1 0 -1]	(0 2 0)	(1 5 1)	9.208	2.731	3.37	42.1	51.1
[2 0 1]	(0 2 0)	(-1 1 2)	9.208	2.591	3.55	81.9	89.8
[1 0 2]	(0 2 0)	(2 6 -1)	9.208	2.449	3.76	37.1	50.9
[1 0 0]	(0 2 0)	(0 2 2)	9.208	2.438	3.78	74.6	75.0
[1 0 1]	(0 2 0)	(1 7 -1)	9.208	2.333	3.95	27.5	74.7
[2 0 -1]	(0 2 0)	(1 1 2)	9.208	2.287	4.03	82.9	61.7
[2 0 3]	(0 2 0)	(3 1 -2)	9.208	2.282	4.03	82.9	61.5
[1 0 1]	(0 2 0)	(2 4 -2)	9.208	2.214	4.16	61.3	74.7
[1 0 -1]	(0 2 0)	(1 7 1)	9.208	2.210	4.17	32.9	51.1
[2 0 -1]	(0 2 0)	(1 3 2)	9.208	2.158	4.27	69.4	61.7
[2 0 3]	(0 2 0)	(-3 -3 2)	9.208	2.154	4.28	69.5	61.5
[2 0 1]	(0 2 0)	(1 5 -2)	9.208	2.133	4.32	54.6	89.8
[1 0 -1]	(0 2 0)	(2 0 2)	9.208	2.036	4.52	90.0	51.1
[2 0 -1]	(0 2 0)	(1 5 2)	9.208	1.954	4.71	58.0	61.7
[1 0 0]	(0 2 0)	(0 6 2)	9.208	1.951	4.72	50.5	75.0
[2 0 3]	(0 2 0)	(3 5 -2)	9.208	1.951	4.72	58.0	61.5
[1 0 1]	(0 2 0)	(1 9 -1)	9.208	1.896	4.86	22.1	74.7
[1 0 -1]	(0 2 0)	(2 4 2)	9.208	1.862	4.94	66.1	51.1
[2 0 1]	(0 2 0)	(-1 -7 2)	9.208	1.855	4.96	45.1	89.8
[1 0 -1]	(0 2 0)	(1 9 1)	9.208	1.828	5.04	26.7	51.1
[3 0 2]	(0 2 0)	(2 0 -3)	9.208	1.737	5.30	90.0	84.7
[2 0 -1]	(0 2 0)	(1 -7 2)	9.208	1.734	5.31	48.8	61.7
[2 0 3]	(0 2 0)	(-3 7 2)	9.208	1.732	5.32	48.8	61.5
[3 0 1]	(0 2 0)	(1 1 -3)	9.208	1.730	5.32	84.6	85.0
[3 0 2]	(0 2 0)	(-2 -2 3)	9.208	1.707	5.39	79.3	84.7
[1 0 2]	(0 2 0)	(-4 -6 2)	9.208	1.694	5.44	56.5	50.9
[1 0 1]	(0 2 0)	(3 -1 -3)	9.208	1.676	5.49	84.8	74.7
[3 0 1]	(0 2 0)	(-1 3 3)	9.208	1.672	5.51	74.2	85.0
[1 0 0]	(0 2 0)	(0 2 3)	9.208	1.658	5.55	79.6	75.0
[3 0 2]	(0 2 0)	(-2 -4 3)	9.208	1.625	5.66	69.3	84.7
[2 0 1]	(0 2 0)	(-1 -9 2)	9.208	1.612	5.71	38.0	89.8
[3 0 4]	(0 2 0)	(4 0 -3)	9.208	1.589	5.79	90.0	65.6
[3 0 -1]	(0 2 0)	(1 -1 3)	9.208	1.587	5.80	85.1	65.9
[1 0 0]	(0 2 0)	(0 4 -3)	9.208	1.583	5.82	69.9	75.0
[3 0 1]	(0 2 0)	(1 5 -3)	9.208	1.572	5.86	64.7	85.0
[3 0 4]	(0 2 0)	(-4 -2 3)	9.208	1.566	5.88	80.2	65.6
[3 0 -1]	(0 2 0)	(1 3 3)	9.208	1.541	5.97	75.5	65.9
[1 0 1]	(0 2 0)	(-3 -5 3)	9.208	1.531	6.01	65.4	74.7

Richterite (020) 138 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[2 0 -1]	(0 2 0)	(1 9 2)	9.208	1.530	6.02	41.6	61.7
[2 0 3]	(0 2 0)	(-3 -9 2)	9.208	1.529	6.02	41.7	61.5
[1 0 -1]	(0 2 0)	(2 8 2)	9.208	1.525	6.04	48.5	51.1
[3 0 2]	(0 2 0)	(2 6 -3)	9.208	1.512	6.09	60.5	84.7
[3 0 4]	(0 2 0)	(-4 -4 3)	9.208	1.502	6.13	71.0	65.6
[3 0 -2]	(0 2 0)	(2 0 3)	9.208	1.478	6.23	90.0	57.9
[3 0 5]	(0 2 0)	(-5 1 3)	9.208	1.470	6.27	85.4	57.7
[3 0 -1]	(0 2 0)	(1 5 3)	9.208	1.462	6.30	66.6	65.9
[3 0 -2]	(0 2 0)	(2 2 3)	9.208	1.459	6.31	80.9	57.9
[3 0 1]	(0 2 0)	(-1 -7 3)	9.208	1.450	6.35	56.5	85.0
[3 0 5]	(0 2 0)	(5 3 -3)	9.208	1.433	6.42	76.5	57.7
[1 0 1]	(0 2 0)	(-3 -7 3)	9.208	1.418	6.49	57.4	74.7
[3 0 4]	(0 2 0)	(4 6 -3)	9.208	1.411	6.52	62.6	65.6
[3 0 -2]	(0 2 0)	(2 4 3)	9.208	1.407	6.54	72.2	57.9
[3 0 2]	(0 2 0)	(-2 -8 3)	9.208	1.387	6.64	53.0	84.7
[3 0 5]	(0 2 0)	(5 5 -3)	9.208	1.369	6.73	68.2	57.7
[3 0 -1]	(0 2 0)	(1 7 3)	9.208	1.362	6.76	58.8	65.9
[1 0 0]	(0 2 0)	(0 8 3)	9.208	1.360	6.77	53.8	75.0
[1 0 -1]	(0 2 0)	(3 -1 3)	9.208	1.354	6.80	85.8	51.1
[1 0 2]	(0 2 0)	(-6 2 3)	9.208	1.339	6.87	81.6	50.9
[3 0 -2]	(0 2 0)	(2 6 3)	9.208	1.332	6.92	64.3	57.9
[3 0 1]	(0 2 0)	(1 9 -3)	9.208	1.325	6.95	49.7	85.0
[3 0 4]	(0 2 0)	(4 -8 -3)	9.208	1.308	7.04	55.4	65.6
[1 0 2]	(0 2 0)	(6 4 -3)	9.208	1.299	7.09	73.6	50.9
[4 0 1]	(0 2 0)	(1 1 -4)	9.208	1.294	7.12	86.0	82.5
[4 0 3]	(0 2 0)	(-3 -1 4)	9.208	1.293	7.12	86.0	82.2
[3 0 5]	(0 2 0)	(5 7 -3)	9.208	1.286	7.16	60.7	57.7
[1 0 -1]	(0 2 0)	(3 5 3)	9.208	1.274	7.23	69.8	51.1
[4 0 1]	(0 2 0)	(1 3 -4)	9.208	1.269	7.25	78.1	82.5
[4 0 3]	(0 2 0)	(3 3 -4)	9.208	1.268	7.26	78.1	82.2
[2 0 1]	(0 2 0)	(2 4 -4)	9.208	1.259	7.32	74.1	89.8
[3 0 -1]	(0 2 0)	(1 9 3)	9.208	1.257	7.33	52.1	65.9
[1 0 0]	(0 2 0)	(0 2 4)	9.208	1.252	7.35	82.2	75.0
[1 0 1]	(0 2 0)	(4 2 -4)	9.208	1.251	7.36	82.2	74.7
[3 0 -2]	(0 2 0)	(2 8 3)	9.208	1.244	7.40	57.3	57.9
[3 0 -4]	(0 2 0)	(4 0 3)	9.208	1.241	7.42	90.0	45.4
[3 0 -4]	(0 2 0)	(4 2 3)	9.208	1.230	7.48	82.3	45.4
[4 0 1]	(0 2 0)	(-1 -5 4)	9.208	1.224	7.53	70.6	82.5
[4 0 3]	(0 2 0)	(3 5 -4)	9.208	1.223	7.53	70.6	82.2
[3 0 7]	(0 2 0)	(-7 -3 3)	9.208	1.214	7.59	78.6	45.2
[4 0 -1]	(0 2 0)	(1 1 4)	9.208	1.211	7.60	86.2	68.1
[4 0 5]	(0 2 0)	(-5 -1 4)	9.208	1.209	7.62	86.2	67.8
[1 0 -1]	(0 2 0)	(3 7 3)	9.208	1.206	7.63	62.7	51.1
[3 0 5]	(0 2 0)	(-5 -9 3)	9.208	1.196	7.70	54.2	57.7
[4 0 -1]	(0 2 0)	(1 3 4)	9.208	1.191	7.73	78.8	68.1
[4 0 5]	(0 2 0)	(-5 -3 4)	9.208	1.189	7.75	78.8	67.8
[3 0 7]	(0 2 0)	(7 5 -3)	9.208	1.173	7.85	71.4	45.2
[1 0 0]	(0 2 0)	(0 6 4)	9.208	1.169	7.88	67.6	75.0

Richterite (020) 138 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 0 1]	(0 2 0)	(4 6 -4)	9.208	1.167	7.89	67.6	74.7
[1 0 2]	(0 2 0)	(-6 -8 3)	9.208	1.167	7.89	59.5	50.9
[4 0 1]	(0 2 0)	(1 7 -4)	9.208	1.163	7.91	63.8	82.5
[4 0 3]	(0 2 0)	(-3 -7 4)	9.208	1.163	7.92	63.8	82.2
[4 0 -1]	(0 2 0)	(1 5 4)	9.208	1.153	7.99	71.8	68.1
[4 0 5]	(0 2 0)	(5 -5 -4)	9.208	1.151	8.00	71.8	67.8
[3 0 -4]	(0 2 0)	(-4 6 -3)	9.208	1.151	8.00	68.0	45.4
[2 0 3]	(0 2 0)	(6 0 -4)	9.208	1.150	8.01	90.0	61.5
[2 0 1]	(0 2 0)	(2 8 -4)	9.208	1.138	8.09	60.4	89.8
[3 0 7]	(0 2 0)	(7 7 -3)	9.208	1.120	8.22	64.8	45.2
[2 0 -1]	(0 2 0)	(2 4 4)	9.208	1.118	8.24	75.9	61.7
[2 0 3]	(0 2 0)	(6 4 -4)	9.208	1.116	8.25	76.0	61.5
[4 0 -1]	(0 2 0)	(1 7 4)	9.208	1.102	8.35	65.2	68.1
[4 0 5]	(0 2 0)	(5 7 -4)	9.208	1.101	8.37	65.3	67.8
[4 0 1]	(0 2 0)	(-1 -9 4)	9.208	1.096	8.40	57.6	82.5
[4 0 3]	(0 2 0)	(3 9 -4)	9.208	1.095	8.41	57.6	82.2
[3 0 -4]	(0 2 0)	(4 8 3)	9.208	1.093	8.43	61.7	45.4
[4 0 -3]	(0 2 0)	(3 1 4)	9.208	1.084	8.49	86.6	56.1
[4 0 7]	(0 2 0)	(-7 -1 4)	9.208	1.081	8.52	86.6	55.9
[4 0 -3]	(0 2 0)	(3 3 4)	9.208	1.069	8.61	80.0	56.1
[4 0 7]	(0 2 0)	(-7 -3 4)	9.208	1.067	8.63	80.0	55.9
[3 0 7]	(0 2 0)	(7 9 -3)	9.208	1.059	8.69	58.8	45.2
[4 0 -1]	(0 2 0)	(1 -9 4)	9.208	1.044	8.82	59.3	68.1
[5 0 3]	(0 2 0)	(-3 1 5)	9.208	1.043	8.82	86.8	86.8
[4 0 5]	(0 2 0)	(5 9 -4)	9.208	1.043	8.83	59.4	67.8
[4 0 -3]	(0 2 0)	(3 5 4)	9.208	1.041	8.84	73.6	56.1
[4 0 7]	(0 2 0)	(7 5 -4)	9.208	1.039	8.86	73.6	55.9
[5 0 2]	(0 2 0)	(2 2 -5)	9.208	1.039	8.86	83.5	87.1
[5 0 1]	(0 2 0)	(1 -1 -5)	9.208	1.032	8.92	86.8	80.9
[2 0 -1]	(0 2 0)	(-2 8 -4)	9.208	1.031	8.93	63.4	61.7
[5 0 3]	(0 2 0)	(3 3 -5)	9.208	1.030	8.94	80.3	86.8
[2 0 3]	(0 2 0)	(-6 -8 4)	9.208	1.029	8.95	63.5	61.5
[5 0 4]	(0 2 0)	(4 2 -5)	9.208	1.026	8.97	83.6	80.6
[5 0 2]	(0 2 0)	(2 4 -5)	9.208	1.019	9.03	77.2	87.1
[5 0 1]	(0 2 0)	(-1 -3 5)	9.208	1.019	9.03	80.4	80.9
[1 0 2]	(0 2 0)	(-8 -2 4)	9.208	1.009	9.12	83.7	50.9
[1 0 1]	(0 2 0)	(5 1 -5)	9.208	1.008	9.13	86.9	74.7
[5 0 4]	(0 2 0)	(-4 -4 5)	9.208	1.008	9.14	77.4	80.6
[5 0 3]	(0 2 0)	(3 5 -5)	9.208	1.005	9.16	74.2	86.8
[1 0 0]	(0 2 0)	(0 2 5)	9.208	1.005	9.16	83.7	75.0
[4 0 -3]	(0 2 0)	(3 7 4)	9.208	1.004	9.17	67.6	56.1
[4 0 7]	(0 2 0)	(-7 -7 4)	9.208	1.002	9.19	67.6	55.9

Richterite (110) 362 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 -1 0]	(1 1 0)	(0 0 1)	8.575	5.056	1.70	76.8	82.9
[1 -1 2]	(1 1 0)	(-1 1 1)	8.575	4.870	1.76	84.2	69.3
[1 -1 0]	(1 1 0)	(1 1 -1)	8.575	4.870	1.76	69.7	82.9
[1 -1 2]	(1 1 0)	(0 2 1)	8.575	4.432	1.93	64.9	69.3
[1 -1 2]	(1 1 0)	(2 0 -1)	8.575	4.061	2.11	56.1	69.3
[1 -1 -2]	(1 1 0)	(1 -1 1)	8.575	3.976	2.16	63.7	57.9
[1 -1 0]	(1 1 0)	(1 1 1)	8.575	3.976	2.16	50.0	82.9
[1 -1 -2]	(1 1 0)	(-1 -3 1)	8.575	3.900	2.20	61.6	57.9
[1 -1 4]	(1 1 0)	(2 -2 -1)	8.575	3.716	2.31	71.2	48.6
[1 -1 0]	(1 1 0)	(2 2 -1)	8.575	3.716	2.31	45.7	82.9
[1 -1 4]	(1 1 0)	(0 4 1)	8.575	3.404	2.52	60.1	48.6
[1 -1 2]	(1 1 0)	(1 3 1)	8.575	3.393	2.53	43.9	69.3
[1 -1 -2]	(1 1 0)	(2 0 1)	8.575	3.119	2.75	44.7	57.9
[1 -1 4]	(1 1 0)	(-3 1 1)	8.575	3.067	2.80	51.4	48.6
[1 -1 2]	(1 1 0)	(3 1 -1)	8.575	3.067	2.80	38.8	69.3
[1 -1 -2]	(1 1 0)	(-2 -4 1)	8.575	3.046	2.82	43.4	57.9
[1 -1 0]	(1 1 0)	(2 2 1)	8.575	2.954	2.90	34.7	82.9
[1 -1 4]	(1 1 0)	(1 5 1)	8.575	2.731	3.14	44.1	48.6
[1 -1 1]	(1 1 0)	(1 -1 -2)	8.575	2.591	3.31	86.4	82.8
[1 -1 0]	(1 1 0)	(1 1 -2)	8.575	2.591	3.31	86.1	82.9
[1 -1 2]	(1 1 0)	(2 4 1)	8.575	2.582	3.32	31.8	69.3
[1 -1 1]	(1 1 0)	(-2 0 2)	8.575	2.525	3.40	76.5	82.8
[1 -1 4]	(1 1 0)	(4 0 -1)	8.575	2.444	3.51	38.5	48.6
[1 -1 -1]	(1 1 0)	(0 2 -2)	8.575	2.438	3.52	84.4	69.4
[1 -1 1]	(1 1 0)	(0 2 2)	8.575	2.438	3.52	69.9	82.8
[1 -1 -2]	(1 1 0)	(3 1 1)	8.575	2.429	3.53	33.2	57.9
[1 -1 2]	(1 1 0)	(-1 3 2)	8.575	2.407	3.56	79.6	69.3
[1 -1 -1]	(1 1 0)	(1 3 -2)	8.575	2.407	3.56	79.3	69.4
[1 -1 -2]	(1 1 0)	(-3 -5 1)	8.575	2.377	3.61	32.4	57.9
[1 -1 2]	(1 1 0)	(4 2 -1)	8.575	2.363	3.63	28.9	69.3
[1 -1 -1]	(1 1 0)	(-1 1 -2)	8.575	2.287	3.75	69.0	69.4
[1 -1 0]	(1 1 0)	(1 1 2)	8.575	2.287	3.75	61.7	82.9
[1 -1 2]	(1 1 0)	(3 -1 -2)	8.575	2.282	3.76	68.8	69.3
[1 -1 1]	(1 1 0)	(-3 -1 2)	8.575	2.282	3.76	61.5	82.8
[1 -1 0]	(1 1 0)	(3 3 1)	8.575	2.275	3.77	26.0	82.9
[1 -1 3]	(1 1 0)	(-2 4 2)	8.575	2.214	3.87	88.9	57.8
[1 -1 -1]	(1 1 0)	(-2 -4 2)	8.575	2.214	3.87	64.7	69.4
[1 -1 4]	(1 1 0)	(2 6 1)	8.575	2.188	3.92	33.9	48.6
[1 -1 0]	(1 1 0)	(4 4 -1)	8.575	2.159	3.97	24.6	82.9
[1 -1 -2]	(1 1 0)	(-1 3 -2)	8.575	2.158	3.97	76.8	57.9
[1 -1 1]	(1 1 0)	(1 3 2)	8.575	2.158	3.97	56.2	82.8
[1 -1 3]	(1 1 0)	(3 -3 -2)	8.575	2.154	3.98	76.6	57.8
[1 -1 0]	(1 1 0)	(-3 -3 2)	8.575	2.154	3.98	56.0	82.9
[1 -1 3]	(1 1 0)	(-1 5 2)	8.575	2.133	4.02	74.5	57.8
[1 -1 -2]	(1 1 0)	(-1 -5 2)	8.575	2.133	4.02	74.2	57.9
[1 -1 2]	(1 1 0)	(3 5 1)	8.575	2.040	4.20	24.6	69.3
[1 -1 -1]	(1 1 0)	(2 0 2)	8.575	2.036	4.21	56.2	69.4
[1 -1 1]	(1 1 0)	(4 2 -2)	8.575	1.983	4.32	49.8	82.8

Richterite (110) 362 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 -1 4]	(1 1 0)	(5 1 -1)	8.575	1.978	4.34	30.3	48.6
[1 -1 -3]	(1 1 0)	(-1 5 -2)	8.575	1.954	4.39	83.8	48.7
[1 -1 2]	(1 1 0)	(1 5 2)	8.575	1.954	4.39	53.0	69.3
[1 -1 -3]	(1 1 0)	(0 -6 2)	8.575	1.951	4.39	83.1	48.7
[1 -1 3]	(1 1 0)	(0 6 2)	8.575	1.951	4.39	61.8	57.8
[1 -1 4]	(1 1 0)	(-3 5 2)	8.575	1.951	4.40	83.6	48.6
[1 -1 -1]	(1 1 0)	(3 5 -2)	8.575	1.951	4.40	52.8	69.4
[1 -1 -2]	(1 1 0)	(4 2 1)	8.575	1.948	4.40	26.1	57.9
[1 -1 -2]	(1 1 0)	(4 6 -1)	8.575	1.912	4.48	25.6	57.9
[1 -1 2]	(1 1 0)	(5 3 -1)	8.575	1.893	4.53	22.7	69.3
[1 -1 -3]	(1 1 0)	(-2 4 -2)	8.575	1.862	4.61	71.3	48.7
[1 -1 1]	(1 1 0)	(2 4 2)	8.575	1.862	4.61	45.8	82.8
[1 -1 4]	(1 1 0)	(-1 7 2)	8.575	1.855	4.62	70.9	48.6
[1 -1 -3]	(1 1 0)	(-1 -7 2)	8.575	1.855	4.62	70.7	48.7
[1 -1 0]	(1 1 0)	(4 4 1)	8.575	1.829	4.69	20.6	82.9
[1 -1 4]	(1 1 0)	(3 7 1)	8.575	1.793	4.78	27.2	48.6
[1 -1 -2]	(1 1 0)	(3 -1 2)	8.575	1.772	4.84	53.1	57.9
[1 -1 -1]	(1 1 0)	(3 1 2)	8.575	1.772	4.84	46.3	69.4
[1 -1 3]	(1 1 0)	(5 -1 -2)	8.575	1.767	4.85	53.0	57.8
[1 -1 2]	(1 1 0)	(-5 -1 2)	8.575	1.767	4.85	46.2	69.3
[1 -1 0]	(1 1 0)	(5 5 -1)	8.575	1.750	4.90	19.7	82.9
[3 -3 2]	(1 1 0)	(-2 0 3)	8.575	1.737	4.94	85.3	87.5
[1 -1 3]	(1 1 0)	(1 7 2)	8.575	1.734	4.95	51.5	57.8
[1 -1 -2]	(1 1 0)	(-3 -7 2)	8.575	1.732	4.95	51.4	57.9
[1 -1 0]	(1 1 0)	(-1 -1 3)	8.575	1.730	4.96	88.1	82.9
[3 -3 2]	(1 1 0)	(1 -1 -3)	8.575	1.730	4.96	83.1	87.5
[1 -1 -3]	(1 1 0)	(3 -3 2)	8.575	1.710	5.02	60.4	48.7
[1 -1 0]	(1 1 0)	(3 3 2)	8.575	1.710	5.02	41.2	82.9
[3 -3 4]	(1 1 0)	(-2 2 3)	8.575	1.707	5.02	89.7	78.1
[1 -1 0]	(1 1 0)	(-2 -2 3)	8.575	1.707	5.02	80.4	82.9
[1 -1 4]	(1 1 0)	(5 -3 -2)	8.575	1.705	5.03	60.3	48.6
[1 -1 1]	(1 1 0)	(-5 -3 2)	8.575	1.705	5.03	41.1	82.8
[1 -1 -1]	(1 1 0)	(-4 -6 2)	8.575	1.694	5.06	43.7	69.4
[3 -3 4]	(1 1 0)	(-3 1 3)	8.575	1.676	5.12	79.1	78.1
[3 -3 2]	(1 1 0)	(3 1 -3)	8.575	1.676	5.12	74.1	87.5
[3 -3 -2]	(1 1 0)	(-1 -3 3)	8.575	1.672	5.13	87.0	73.7
[3 -3 4]	(1 1 0)	(-1 3 3)	8.575	1.672	5.13	78.4	78.1
[1 -1 2]	(1 1 0)	(4 6 1)	8.575	1.672	5.13	20.0	69.3
[3 -3 -2]	(1 1 0)	(0 -2 3)	8.575	1.658	5.17	81.9	73.7
[3 -3 2]	(1 1 0)	(0 2 3)	8.575	1.658	5.17	72.0	87.5
[1 -1 4]	(1 1 0)	(6 2 -1)	8.575	1.642	5.22	24.7	48.6
[1 -1 2]	(1 1 0)	(2 -4 -3)	8.575	1.625	5.28	85.0	69.3
[3 -3 -2]	(1 1 0)	(2 4 -3)	8.575	1.625	5.28	76.1	73.7
[1 -1 -2]	(1 1 0)	(5 3 1)	8.575	1.612	5.32	21.3	57.9
[1 -1 1]	(1 1 0)	(3 5 2)	8.575	1.603	5.35	38.1	82.8
[1 -1 0]	(1 1 0)	(5 5 -2)	8.575	1.599	5.36	38.0	82.9
[3 -3 4]	(1 1 0)	(-4 0 3)	8.575	1.589	5.40	68.6	78.1
[1 -1 -2]	(1 1 0)	(5 7 -1)	8.575	1.587	5.40	21.0	57.9

Richterite (110) 362 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[3 -3 -2]	(1 1 0)	(-1 1 -3)	8.575	1.587	5.40	71.3	73.7
[1 -1 0]	(1 1 0)	(1 1 3)	8.575	1.587	5.40	66.4	82.9
[3 -3 -4]	(1 1 0)	(0 4 -3)	8.575	1.583	5.42	86.9	65.3
[3 -3 4]	(1 1 0)	(0 4 3)	8.575	1.583	5.42	68.0	78.1
[3 -3 -4]	(1 1 0)	(-1 -5 3)	8.575	1.572	5.46	82.6	65.3
[1 -1 2]	(1 1 0)	(-1 5 3)	8.575	1.572	5.46	74.4	69.3
[1 -1 2]	(1 1 0)	(-6 -4 1)	8.575	1.569	5.47	18.7	69.3
[1 -1 2]	(1 1 0)	(4 -2 -3)	8.575	1.566	5.48	73.7	69.3
[3 -3 2]	(1 1 0)	(-4 -2 3)	8.575	1.566	5.48	64.0	87.5
[3 -3 -4]	(1 1 0)	(1 -3 3)	8.575	1.541	5.56	76.5	65.3
[3 -3 2]	(1 1 0)	(1 3 3)	8.575	1.541	5.56	62.2	87.5
[1 -1 -3]	(1 1 0)	(4 -2 2)	8.575	1.538	5.58	51.5	48.7
[1 -1 -1]	(1 1 0)	(4 2 2)	8.575	1.538	5.58	38.9	69.4
[3 -3 8]	(1 1 0)	(3 -5 -3)	8.575	1.531	5.60	89.0	61.4
[3 -3 -2]	(1 1 0)	(-3 -5 3)	8.575	1.531	5.60	66.1	73.7
[1 -1 4]	(1 1 0)	(1 9 2)	8.575	1.530	5.60	51.2	48.6
[1 -1 -3]	(1 1 0)	(-3 -9 2)	8.575	1.529	5.61	51.1	48.7
[1 -1 3]	(1 1 0)	(2 8 2)	8.575	1.525	5.62	43.5	57.8
[1 -1 0]	(1 1 0)	(5 5 1)	8.575	1.522	5.63	17.0	82.9
[3 -3 8]	(1 1 0)	(2 -6 -3)	8.575	1.512	5.67	80.9	61.4
[3 -3 -4]	(1 1 0)	(2 6 -3)	8.575	1.512	5.67	72.5	65.3
[1 -1 4]	(1 1 0)	(4 8 1)	8.575	1.507	5.69	22.6	48.6
[3 -3 8]	(1 1 0)	(-4 4 3)	8.575	1.502	5.71	78.9	61.4
[1 -1 0]	(1 1 0)	(4 4 -3)	8.575	1.502	5.71	60.2	82.9
[3 -3 -2]	(1 1 0)	(2 0 3)	8.575	1.478	5.80	61.9	73.7
[1 -1 2]	(1 1 0)	(3 7 2)	8.575	1.474	5.82	37.0	69.3
[1 -1 1]	(1 1 0)	(6 4 -2)	8.575	1.474	5.82	34.6	82.8
[1 -1 -1]	(1 1 0)	(-5 -7 2)	8.575	1.472	5.83	36.9	69.4
[1 -1 2]	(1 1 0)	(5 -1 -3)	8.575	1.470	5.84	64.2	69.3
[3 -3 4]	(1 1 0)	(-5 -1 3)	8.575	1.470	5.84	59.4	78.1
[1 -1 0]	(1 1 0)	(6 6 -1)	8.575	1.466	5.85	16.4	82.9
[1 -1 -2]	(1 1 0)	(1 -5 3)	8.575	1.462	5.87	81.6	57.9
[3 -3 4]	(1 1 0)	(1 5 3)	8.575	1.462	5.87	58.9	78.1
[3 -3 -4]	(1 1 0)	(2 -2 3)	8.575	1.459	5.88	67.0	65.3
[1 -1 0]	(1 1 0)	(2 2 3)	8.575	1.459	5.88	57.4	82.9
[1 -1 -2]	(1 1 0)	(-1 -7 3)	8.575	1.450	5.91	78.9	57.9
[3 -3 8]	(1 1 0)	(-1 7 3)	8.575	1.450	5.91	71.3	61.4
[3 -3 8]	(1 1 0)	(-5 3 3)	8.575	1.433	5.98	69.4	61.4
[3 -3 2]	(1 1 0)	(5 3 -3)	8.575	1.433	5.98	55.3	87.5
[3 -3 10]	(1 1 0)	(3 -7 -3)	8.575	1.418	6.05	86.9	54.5
[3 -3 -4]	(1 1 0)	(3 7 -3)	8.575	1.418	6.05	63.4	65.3
[3 -3 10]	(1 1 0)	(-4 6 3)	8.575	1.411	6.08	83.7	54.5
[3 -3 -2]	(1 1 0)	(4 6 -3)	8.575	1.411	6.08	57.4	73.7
[1 -1 2]	(1 1 0)	(5 7 1)	8.575	1.411	6.08	16.7	69.3
[1 -1 -2]	(1 1 0)	(2 -4 3)	8.575	1.407	6.09	72.2	57.9
[3 -3 2]	(1 1 0)	(2 4 3)	8.575	1.407	6.09	53.8	87.5
[1 -1 4]	(1 1 0)	(7 3 -1)	8.575	1.395	6.15	20.8	48.6
[1 -1 1]	(1 1 0)	(4 6 2)	8.575	1.390	6.17	32.4	82.8

Richterite (110) 362 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 -1 -2]	(1 1 0)	(2 8 -3)	8.575	1.387	6.18	69.8	57.9
[1 -1 -3]	(1 1 0)	(-5 1 -2)	8.575	1.372	6.25	44.3	48.7
[1 -1 -2]	(1 1 0)	(5 1 2)	8.575	1.372	6.25	38.2	57.9
[1 -1 -2]	(1 1 0)	(6 4 1)	8.575	1.370	6.26	18.0	57.9
[1 -1 4]	(1 1 0)	(7 -1 -2)	8.575	1.369	6.26	44.2	48.6
[1 -1 3]	(1 1 0)	(-7 -1 2)	8.575	1.369	6.26	38.2	57.8
[3 -3 10]	(1 1 0)	(5 -5 -3)	8.575	1.369	6.27	74.6	54.5
[1 -1 0]	(1 1 0)	(-5 -5 3)	8.575	1.369	6.27	52.2	82.9
[3 -3 -8]	(1 1 0)	(1 -7 3)	8.575	1.362	6.29	86.1	51.5
[1 -1 2]	(1 1 0)	(1 7 3)	8.575	1.362	6.29	56.6	69.3
[3 -3 -8]	(1 1 0)	(0 -8 3)	8.575	1.360	6.31	84.8	51.5
[3 -3 8]	(1 1 0)	(0 8 3)	8.575	1.360	6.31	62.6	61.4
[3 -3 -2]	(1 1 0)	(3 1 3)	8.575	1.354	6.33	53.9	73.7
[1 -1 -2]	(1 1 0)	(6 8 -1)	8.575	1.351	6.35	17.7	57.9
[1 -1 3]	(1 1 0)	(3 9 2)	8.575	1.343	6.38	37.3	57.8
[1 -1 -1]	(1 1 0)	(5 3 2)	8.575	1.343	6.39	33.2	69.4
[1 -1 -2]	(1 1 0)	(-5 -9 2)	8.575	1.341	6.39	37.2	57.9
[1 -1 2]	(1 1 0)	(7 3 -2)	8.575	1.340	6.40	33.2	69.3
[3 -3 8]	(1 1 0)	(-6 2 3)	8.575	1.339	6.40	61.0	61.4
[3 -3 4]	(1 1 0)	(6 2 -3)	8.575	1.339	6.40	51.7	78.1
[1 -1 2]	(1 1 0)	(-7 -5 1)	8.575	1.335	6.42	15.8	69.3
[3 -3 -8]	(1 1 0)	(2 -6 3)	8.575	1.332	6.44	77.2	51.5
[3 -3 4]	(1 1 0)	(2 6 3)	8.575	1.332	6.44	51.3	78.1
[3 -3 -8]	(1 1 0)	(-1 -9 3)	8.575	1.325	6.47	75.9	51.5
[3 -3 10]	(1 1 0)	(-1 9 3)	8.575	1.325	6.47	68.9	54.5
[2 -2 1]	(1 1 0)	(-2 0 4)	8.575	1.308	6.55	89.9	89.9
[1 -1 4]	(1 1 0)	(4 -8 -3)	8.575	1.308	6.56	87.9	48.6
[3 -3 -4]	(1 1 0)	(-4 -8 3)	8.575	1.308	6.56	55.6	65.3
[1 -1 0]	(1 1 0)	(6 6 1)	8.575	1.300	6.60	14.5	82.9
[3 -3 10]	(1 1 0)	(6 -4 -3)	8.575	1.299	6.60	66.2	54.5
[3 -3 2]	(1 1 0)	(-6 -4 3)	8.575	1.299	6.60	48.2	87.5
[1 -1 4]	(1 1 0)	(5 9 1)	8.575	1.294	6.63	19.2	48.6
[1 -1 0]	(1 1 0)	(1 1 -4)	8.575	1.294	6.63	85.2	82.9
[2 -2 1]	(1 1 0)	(-1 1 4)	8.575	1.294	6.63	81.5	89.9
[1 -1 1]	(1 1 0)	(3 -1 -4)	8.575	1.293	6.63	85.0	82.8
[2 -2 1]	(1 1 0)	(-3 -1 4)	8.575	1.293	6.63	81.2	89.9
[1 -1 0]	(1 1 0)	(5 5 2)	8.575	1.289	6.65	29.8	82.9
[1 -1 -1]	(1 1 0)	(6 8 -2)	8.575	1.289	6.65	31.7	69.4
[1 -1 1]	(1 1 0)	(-7 -5 2)	8.575	1.286	6.67	29.7	82.8
[1 -1 4]	(1 1 0)	(5 -7 -3)	8.575	1.286	6.67	79.3	48.6
[3 -3 -2]	(1 1 0)	(-5 -7 3)	8.575	1.286	6.67	50.2	73.7
[3 -3 -8]	(1 1 0)	(3 -5 3)	8.575	1.274	6.73	68.9	51.5
[3 -3 2]	(1 1 0)	(3 5 3)	8.575	1.274	6.73	46.9	87.5
[2 -2 -1]	(1 1 0)	(-1 -3 4)	8.575	1.269	6.76	89.0	75.9
[1 -1 1]	(1 1 0)	(1 -3 -4)	8.575	1.269	6.76	77.9	82.8
[2 -2 3]	(1 1 0)	(3 -3 -4)	8.575	1.268	6.76	88.7	75.8
[1 -1 0]	(1 1 0)	(-3 -3 4)	8.575	1.268	6.76	77.6	82.9
[2 -2 -1]	(1 1 0)	(2 4 -4)	8.575	1.259	6.81	82.6	75.9

Richterite (110) 362 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[1 -1 0]	(1 1 0)	(7 7 -1)	8.575	1.258	6.82	14.0	82.9
[3 -3 -10]	(1 1 0)	(-1 9 -3)	8.575	1.257	6.82	90.0	46.1
[3 -3 8]	(1 1 0)	(1 9 3)	8.575	1.257	6.82	55.2	61.4
[2 -2 -1]	(1 1 0)	(0 -2 4)	8.575	1.252	6.85	80.6	75.9
[2 -2 1]	(1 1 0)	(0 2 4)	8.575	1.252	6.85	73.2	89.9
[2 -2 3]	(1 1 0)	(4 -2 -4)	8.575	1.251	6.86	80.4	75.8
[2 -2 1]	(1 1 0)	(4 2 -4)	8.575	1.251	6.86	72.9	89.9
[3 -3 -10]	(1 1 0)	(-2 8 -3)	8.575	1.244	6.90	81.7	46.1
[1 -1 2]	(1 1 0)	(2 8 3)	8.575	1.244	6.90	49.7	69.3
[3 -3 -4]	(1 1 0)	(4 0 3)	8.575	1.241	6.91	51.5	65.3
[3 -3 8]	(1 1 0)	(7 -1 -3)	8.575	1.235	6.94	53.8	61.4
[1 -1 2]	(1 1 0)	(-7 -1 3)	8.575	1.235	6.94	49.2	69.3
[1 -1 -2]	(1 1 0)	(4 -2 3)	8.575	1.230	6.97	56.4	57.9
[3 -3 -2]	(1 1 0)	(4 2 3)	8.575	1.230	6.97	47.3	73.7
[1 -1 -3]	(1 1 0)	(6 0 2)	8.575	1.225	7.00	38.6	48.7
[1 -1 -1]	(1 1 0)	(-1 -5 4)	8.575	1.224	7.01	87.4	69.4
[2 -2 3]	(1 1 0)	(-1 5 4)	8.575	1.224	7.01	74.7	75.8
[1 -1 2]	(1 1 0)	(3 -5 -4)	8.575	1.223	7.01	87.7	69.3
[2 -2 -1]	(1 1 0)	(3 5 -4)	8.575	1.223	7.01	74.4	75.9
[1 -1 1]	(1 1 0)	(5 7 2)	8.575	1.219	7.03	28.0	82.8
[1 -1 2]	(1 1 0)	(6 8 1)	8.575	1.218	7.04	14.4	69.3
[1 -1 0]	(1 1 0)	(7 7 -2)	8.575	1.217	7.05	27.9	82.9
[3 -3 10]	(1 1 0)	(7 -3 -3)	8.575	1.214	7.07	58.7	54.5
[3 -3 4]	(1 1 0)	(7 3 -3)	8.575	1.214	7.07	45.3	78.1
[1 -1 3]	(1 1 0)	(-8 -2 2)	8.575	1.212	7.08	33.2	57.8
[2 -2 -1]	(1 1 0)	(1 -1 4)	8.575	1.211	7.08	72.6	75.9
[1 -1 0]	(1 1 0)	(1 1 4)	8.575	1.211	7.08	68.9	82.9
[1 -1 4]	(1 1 0)	(8 4 -1)	8.575	1.209	7.09	17.9	48.6
[2 -2 3]	(1 1 0)	(-5 1 4)	8.575	1.209	7.09	72.4	75.8
[1 -1 1]	(1 1 0)	(5 1 -4)	8.575	1.209	7.09	68.7	82.8
[3 -3 -10]	(1 1 0)	(-3 7 -3)	8.575	1.206	7.11	73.7	46.1
[3 -3 4]	(1 1 0)	(3 7 3)	8.575	1.206	7.11	45.0	78.1
[3 -3 -8]	(1 1 0)	(-4 4 -3)	8.575	1.199	7.15	61.4	51.5
[1 -1 0]	(1 1 0)	(4 4 3)	8.575	1.199	7.15	43.8	82.9
[3 -3 -4]	(1 1 0)	(-5 -9 3)	8.575	1.196	7.17	49.0	65.3
[1 -1 -1]	(1 1 0)	(1 -3 4)	8.575	1.191	7.20	76.5	69.4
[2 -2 1]	(1 1 0)	(1 3 4)	8.575	1.191	7.20	65.5	89.9
[1 -1 2]	(1 1 0)	(5 -3 -4)	8.575	1.189	7.21	76.2	69.3
[2 -2 1]	(1 1 0)	(-5 -3 4)	8.575	1.189	7.21	65.3	89.9
[1 -1 -2]	(1 1 0)	(7 5 1)	8.575	1.188	7.22	15.5	57.9
[1 -1 -1]	(1 1 0)	(6 4 2)	8.575	1.184	7.24	28.9	69.4
[1 -1 2]	(1 1 0)	(-8 -4 2)	8.575	1.181	7.26	28.9	69.3
[1 -1 -2]	(1 1 0)	(7 9 -1)	8.575	1.174	7.31	15.4	57.9
[1 -1 4]	(1 1 0)	(-7 5 3)	8.575	1.173	7.31	63.7	48.6
[3 -3 2]	(1 1 0)	(7 5 -3)	8.575	1.173	7.31	42.3	87.5
[2 -2 -3]	(1 1 0)	(0 6 -4)	8.575	1.169	7.34	88.0	63.4
[2 -2 3]	(1 1 0)	(0 6 4)	8.575	1.169	7.34	67.1	75.8
[2 -2 5]	(1 1 0)	(-4 6 4)	8.575	1.167	7.34	87.8	63.2

Richterite (110) 362 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[2 -2 -1]	(1 1 0)	(4 6 -4)	8.575	1.167	7.34	66.9	75.9
[3 -3 -2]	(1 1 0)	(-6 -8 3)	8.575	1.167	7.35	44.2	73.7
[2 -2 -3]	(1 1 0)	(1 7 -4)	8.575	1.163	7.37	84.2	63.4
[1 -1 2]	(1 1 0)	(1 -7 -4)	8.575	1.163	7.37	71.9	69.3
[2 -2 5]	(1 1 0)	(-3 7 4)	8.575	1.163	7.37	84.4	63.2
[1 -1 -1]	(1 1 0)	(-3 -7 4)	8.575	1.163	7.37	71.7	69.4
[1 -1 2]	(1 1 0)	(8 6 -1)	8.575	1.160	7.39	13.7	69.3
[2 -2 -3]	(1 1 0)	(-1 5 -4)	8.575	1.153	7.44	80.3	63.4
[1 -1 1]	(1 1 0)	(1 5 4)	8.575	1.153	7.44	62.6	82.8
[2 -2 -1]	(1 1 0)	(2 0 4)	8.575	1.153	7.44	65.2	75.9
[2 -2 5]	(1 1 0)	(5 -5 -4)	8.575	1.151	7.45	80.1	63.2
[1 -1 0]	(1 1 0)	(-5 -5 4)	8.575	1.151	7.45	62.4	82.9
[3 -3 -10]	(1 1 0)	(4 -6 3)	8.575	1.151	7.45	66.3	46.1
[3 -3 2]	(1 1 0)	(4 6 3)	8.575	1.151	7.45	41.3	87.5
[2 -2 3]	(1 1 0)	(6 0 -4)	8.575	1.150	7.46	65.0	75.8
[1 -1 2]	(1 1 0)	(5 9 2)	8.575	1.142	7.51	27.8	69.3
[1 -1 -1]	(1 1 0)	(7 9 -2)	8.575	1.140	7.52	27.7	69.4
[2 -2 -3]	(1 1 0)	(2 8 -4)	8.575	1.138	7.54	76.6	63.4
[1 -1 1]	(1 1 0)	(-8 -6 2)	8.575	1.136	7.55	25.9	82.8
[1 -1 0]	(1 1 0)	(7 7 1)	8.575	1.133	7.57	12.6	82.9
[1 -1 -2]	(1 1 0)	(5 -1 3)	8.575	1.133	7.57	50.0	57.9
[3 -3 -4]	(1 1 0)	(5 1 3)	8.575	1.133	7.57	45.6	65.3
[3 -3 8]	(1 1 0)	(-8 0 3)	8.575	1.132	7.58	47.7	61.4
[3 -3 10]	(1 1 0)	(-8 2 3)	8.575	1.123	7.63	52.3	54.5
[1 -1 2]	(1 1 0)	(8 2 -3)	8.575	1.123	7.63	43.5	69.3
[1 -1 0]	(1 1 0)	(-7 -7 3)	8.575	1.120	7.66	40.3	82.9
[2 -2 -3]	(1 1 0)	(2 -4 4)	8.575	1.118	7.67	72.9	63.4
[2 -2 1]	(1 1 0)	(2 4 4)	8.575	1.118	7.67	58.7	89.9
[3 -3 -8]	(1 1 0)	(5 -3 3)	8.575	1.116	7.68	54.8	51.5
[3 -3 -2]	(1 1 0)	(5 3 3)	8.575	1.116	7.68	41.8	73.7
[2 -2 5]	(1 1 0)	(6 -4 -4)	8.575	1.116	7.69	72.7	63.2
[2 -2 1]	(1 1 0)	(-6 -4 4)	8.575	1.116	7.69	58.5	89.9
[1 -1 -2]	(1 1 0)	(1 -7 4)	8.575	1.102	7.78	84.0	57.9
[2 -2 3]	(1 1 0)	(1 7 4)	8.575	1.102	7.78	60.3	75.8
[1 -1 0]	(1 1 0)	(8 8 -1)	8.575	1.101	7.79	12.2	82.9
[1 -1 3]	(1 1 0)	(-5 7 4)	8.575	1.101	7.79	83.8	57.8
[2 -2 -1]	(1 1 0)	(5 7 -4)	8.575	1.101	7.79	60.1	75.9
[1 -1 4]	(1 1 0)	(-8 4 3)	8.575	1.099	7.80	57.1	48.6
[3 -3 4]	(1 1 0)	(8 4 -3)	8.575	1.099	7.80	40.1	78.1
[1 -1 -3]	(1 1 0)	(7 1 2)	8.575	1.098	7.81	34.0	48.7
[1 -1 4]	(1 1 0)	(9 1 -2)	8.575	1.096	7.82	33.9	48.6
[1 -1 -2]	(1 1 0)	(-1 -9 4)	8.575	1.096	7.83	81.3	57.9
[2 -2 5]	(1 1 0)	(-1 9 4)	8.575	1.096	7.83	69.7	63.2
[1 -1 3]	(1 1 0)	(3 -9 -4)	8.575	1.095	7.83	81.5	57.8
[2 -2 -3]	(1 1 0)	(3 9 -4)	8.575	1.095	7.83	69.4	63.4
[3 -3 4]	(1 1 0)	(4 8 3)	8.575	1.093	7.85	39.8	78.1
[3 -3 -10]	(1 1 0)	(5 -5 3)	8.575	1.085	7.91	59.7	46.1
[1 -1 0]	(1 1 0)	(5 5 3)	8.575	1.085	7.91	38.8	82.9

Richterite (110) 362 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[1 -1 -1]	(1 1 0)	(3 -1 4)	8.575	1.084	7.91	62.3	69.4
[2 -2 -1]	(1 1 0)	(3 1 4)	8.575	1.084	7.91	58.6	75.9
[1 -1 -2]	(1 1 0)	(7 3 2)	8.575	1.083	7.92	29.2	57.9
[1 -1 1]	(1 1 0)	(6 8 2)	8.575	1.081	7.93	24.6	82.8
[1 -1 2]	(1 1 0)	(-7 1 4)	8.575	1.081	7.93	62.1	69.3
[2 -2 3]	(1 1 0)	(7 1 -4)	8.575	1.081	7.93	58.5	75.8
[1 -1 3]	(1 1 0)	(-9 -3 2)	8.575	1.081	7.93	29.2	57.8
[1 -1 2]	(1 1 0)	(7 9 1)	8.575	1.070	8.02	12.6	69.3
[2 -2 -3]	(1 1 0)	(-3 3 -4)	8.575	1.069	8.02	66.1	63.4
[1 -1 0]	(1 1 0)	(3 3 4)	8.575	1.069	8.02	55.4	82.9
[2 -2 5]	(1 1 0)	(7 -3 -4)	8.575	1.067	8.04	65.9	63.2
[1 -1 1]	(1 1 0)	(-7 -3 4)	8.575	1.067	8.04	55.3	82.8
[1 -1 4]	(1 1 0)	(9 5 -1)	8.575	1.066	8.05	15.7	48.6
[3 -3 2]	(1 1 0)	(8 6 -3)	8.575	1.062	8.07	37.5	87.5
[3 -3 -2]	(1 1 0)	(-7 -9 3)	8.575	1.059	8.10	39.2	73.7
[1 -1 -1]	(1 1 0)	(7 5 2)	8.575	1.054	8.13	25.5	69.4
[1 -1 2]	(1 1 0)	(-9 -5 2)	8.575	1.052	8.15	25.5	69.3
[1 -1 -2]	(1 1 0)	(8 6 1)	8.575	1.048	8.19	13.7	57.9
[5 -5 2]	(1 1 0)	(2 0 -5)	8.575	1.045	8.20	87.4	88.6
[2 -2 -5]	(1 1 0)	(1 -9 4)	8.575	1.044	8.21	87.3	53.0
[1 -1 2]	(1 1 0)	(1 9 4)	8.575	1.044	8.21	58.6	69.3
[5 -5 4]	(1 1 0)	(3 -1 -5)	8.575	1.043	8.22	88.6	85.6
[5 -5 2]	(1 1 0)	(-3 -1 5)	8.575	1.043	8.22	85.6	88.6
[2 -2 7]	(1 1 0)	(5 -9 -4)	8.575	1.043	8.23	87.1	52.9
[1 -1 -1]	(1 1 0)	(-5 -9 4)	8.575	1.043	8.23	58.3	69.4
[3 -3 2]	(1 1 0)	(5 7 3)	8.575	1.042	8.23	36.7	87.5
[1 -1 -2]	(1 1 0)	(-3 5 -4)	8.575	1.041	8.23	70.0	57.9
[2 -2 1]	(1 1 0)	(3 5 4)	8.575	1.041	8.23	52.7	89.9
[2 -2 1]	(1 1 0)	(7 5 -4)	8.575	1.039	8.25	52.6	89.9
[1 -1 0]	(1 1 0)	(-2 -2 5)	8.575	1.039	8.26	89.6	82.9
[5 -5 4]	(1 1 0)	(-2 2 5)	8.575	1.039	8.26	84.4	85.6
[3 -3 10]	(1 1 0)	(-9 1 3)	8.575	1.035	8.28	46.8	54.5
[3 -3 8]	(1 1 0)	(9 1 -3)	8.575	1.035	8.28	42.5	61.4
[3 -3 -8]	(1 1 0)	(-6 2 -3)	8.575	1.033	8.30	49.2	51.5
[3 -3 -4]	(1 1 0)	(6 2 3)	8.575	1.033	8.30	40.7	65.3
[5 -5 4]	(1 1 0)	(-4 0 5)	8.575	1.033	8.30	81.7	85.6
[1 -1 0]	(1 1 0)	(-1 -1 5)	8.575	1.032	8.31	83.5	82.9
[5 -5 2]	(1 1 0)	(1 -1 -5)	8.575	1.032	8.31	80.5	88.6
[2 -2 -5]	(1 1 0)	(2 -8 4)	8.575	1.031	8.32	80.4	53.0
[2 -2 3]	(1 1 0)	(2 8 4)	8.575	1.031	8.32	54.3	75.8
[5 -5 6]	(1 1 0)	(-3 3 5)	8.575	1.030	8.32	88.4	79.9
[1 -1 0]	(1 1 0)	(-3 -3 5)	8.575	1.030	8.32	82.7	82.9
[2 -2 7]	(1 1 0)	(6 -8 -4)	8.575	1.029	8.34	80.2	52.9
[2 -2 -1]	(1 1 0)	(-6 -8 4)	8.575	1.029	8.34	54.1	75.9
[5 -5 6]	(1 1 0)	(4 -2 -5)	8.575	1.026	8.35	84.8	79.9
[5 -5 2]	(1 1 0)	(-4 -2 5)	8.575	1.026	8.35	78.8	88.6
[1 -1 2]	(1 1 0)	(9 7 -1)	8.575	1.025	8.36	12.1	69.3
[1 -1 4]	(1 1 0)	(-9 3 3)	8.575	1.022	8.39	51.4	48.6

Richterite (110) 362 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 -1 2]	(1 1 0)	(9 3 -3)	8.575	1.022	8.39	38.8	69.3
[5 -5 -2]	(1 1 0)	(2 4 -5)	8.575	1.019	8.41	86.6	77.3
[5 -5 6]	(1 1 0)	(2 -4 -5)	8.575	1.019	8.41	81.5	79.9
[5 -5 -2]	(1 1 0)	(-1 -3 5)	8.575	1.019	8.41	86.6	77.3
[5 -5 4]	(1 1 0)	(1 -3 -5)	8.575	1.019	8.41	77.6	85.6
[1 -1 0]	(1 1 0)	(7 7 2)	8.575	1.015	8.45	23.0	82.9
[3 -3 -10]	(1 1 0)	(6 -4 3)	8.575	1.014	8.46	53.8	46.1
[3 -3 -2]	(1 1 0)	(6 4 3)	8.575	1.014	8.46	37.3	73.7
[1 -1 1]	(1 1 0)	(9 7 -2)	8.575	1.013	8.46	23.0	82.8
[2 -2 -3]	(1 1 0)	(-4 2 -4)	8.575	1.012	8.47	59.9	63.4
[2 -2 -1]	(1 1 0)	(4 2 4)	8.575	1.012	8.47	52.9	75.9
[2 -2 5]	(1 1 0)	(-8 2 4)	8.575	1.009	8.50	59.7	63.2
[2 -2 3]	(1 1 0)	(8 2 -4)	8.575	1.009	8.50	52.7	75.8
[5 -5 6]	(1 1 0)	(-5 1 5)	8.575	1.008	8.50	78.1	79.9
[5 -5 4]	(1 1 0)	(5 1 -5)	8.575	1.008	8.50	75.0	85.6
[5 -5 8]	(1 1 0)	(-4 4 5)	8.575	1.008	8.51	87.8	74.5
[1 -1 0]	(1 1 0)	(4 4 -5)	8.575	1.008	8.51	76.0	82.9
[5 -5 8]	(1 1 0)	(-3 5 5)	8.575	1.005	8.53	85.5	74.5
[5 -5 -2]	(1 1 0)	(-3 -5 5)	8.575	1.005	8.53	79.9	77.3
[5 -5 -2]	(1 1 0)	(0 -2 5)	8.575	1.005	8.53	79.8	77.3
[5 -5 2]	(1 1 0)	(0 2 5)	8.575	1.005	8.53	73.9	88.6
[2 -2 -5]	(1 1 0)	(3 -7 4)	8.575	1.004	8.54	73.8	53.0
[1 -1 1]	(1 1 0)	(3 7 4)	8.575	1.004	8.54	50.6	82.8
[1 -1 0]	(1 1 0)	(8 8 1)	8.575	1.003	8.55	11.1	82.9
[2 -2 7]	(1 1 0)	(7 -7 -4)	8.575	1.002	8.56	73.6	52.9
[1 -1 0]	(1 1 0)	(-7 -7 4)	8.575	1.002	8.56	50.5	82.9

Richterite (130) 313 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[3 -1 0]	(1 3 0)	(0 0 1)	5.185	5.056	1.03	82.1	77.3
[3 -1 4]	(1 3 0)	(1 -1 -1)	5.185	4.870	1.06	85.0	69.1
[3 -1 2]	(1 3 0)	(1 1 -1)	5.185	4.870	1.06	68.9	85.5
[3 -1 2]	(1 3 0)	(0 2 1)	5.185	4.432	1.17	58.1	85.5
[3 -1 6]	(1 3 0)	(2 0 -1)	5.185	4.061	1.28	70.3	55.5
[3 -1 -4]	(1 3 0)	(1 -1 1)	5.185	3.976	1.30	81.6	50.2
[3 -1 -2]	(1 3 0)	(1 1 1)	5.185	3.976	1.30	59.3	62.1
[3 -1 0]	(1 3 0)	(1 3 -1)	5.185	3.900	1.33	49.8	77.3
[3 -1 8]	(1 3 0)	(2 -2 -1)	5.185	3.716	1.40	88.2	45.3
[3 -1 4]	(1 3 0)	(2 2 -1)	5.185	3.716	1.40	49.5	69.1
[3 -1 -4]	(1 3 0)	(0 -4 1)	5.185	3.404	1.52	57.9	50.2
[3 -1 4]	(1 3 0)	(0 4 1)	5.185	3.404	1.52	44.1	69.1
[3 -1 0]	(1 3 0)	(1 3 1)	5.185	3.393	1.53	41.7	77.3
[3 -1 8]	(1 3 0)	(3 1 -1)	5.185	3.067	1.69	55.6	45.3
[3 -1 2]	(1 3 0)	(-2 -4 1)	5.185	3.046	1.70	35.7	85.5
[3 -1 8]	(1 3 0)	(-1 5 1)	5.185	2.976	1.74	53.2	45.3
[3 -1 -2]	(1 3 0)	(-1 -5 1)	5.185	2.976	1.74	40.0	62.1
[3 -1 -4]	(1 3 0)	(2 2 1)	5.185	2.954	1.76	47.3	50.2
[3 -1 6]	(1 3 0)	(-3 -3 1)	5.185	2.775	1.87	40.0	55.5
[3 -1 2]	(1 3 0)	(1 5 1)	5.185	2.731	1.90	31.6	85.5
[3 -1 6]	(1 3 0)	(0 6 1)	5.185	2.624	1.98	37.5	55.5
[3 -1 2]	(1 3 0)	(-1 1 2)	5.185	2.591	2.00	83.3	85.5
[3 -1 1]	(1 3 0)	(-1 -1 2)	5.185	2.591	2.00	83.1	85.8
[3 -1 -2]	(1 3 0)	(2 4 1)	5.185	2.582	2.01	33.9	62.1
[3 -1 3]	(1 3 0)	(2 0 -2)	5.185	2.525	2.05	81.9	77.0
[3 -1 0]	(1 3 0)	(-2 -6 1)	5.185	2.449	2.12	28.7	77.3
[3 -1 -1]	(1 3 0)	(0 2 -2)	5.185	2.438	2.13	84.8	69.3
[3 -1 1]	(1 3 0)	(0 2 2)	5.185	2.438	2.13	69.1	85.8
[3 -1 3]	(1 3 0)	(-1 3 2)	5.185	2.407	2.15	70.7	77.0
[3 -1 0]	(1 3 0)	(-1 -3 2)	5.185	2.407	2.15	70.6	77.3
[3 -1 4]	(1 3 0)	(3 5 -1)	5.185	2.377	2.18	29.1	69.1
[3 -1 -4]	(1 3 0)	(-1 -7 1)	5.185	2.333	2.22	35.5	50.2
[3 -1 -2]	(1 3 0)	(1 -1 2)	5.185	2.287	2.27	81.6	62.1
[3 -1 -1]	(1 3 0)	(1 1 2)	5.185	2.287	2.27	69.1	69.3
[3 -1 5]	(1 3 0)	(3 -1 -2)	5.185	2.282	2.27	81.5	61.9
[3 -1 4]	(1 3 0)	(-3 -1 2)	5.185	2.282	2.27	69.0	69.1
[3 -1 5]	(1 3 0)	(-2 4 2)	5.185	2.214	2.34	73.6	61.9
[3 -1 1]	(1 3 0)	(2 4 -2)	5.185	2.214	2.34	58.0	85.8
[3 -1 4]	(1 3 0)	(1 7 1)	5.185	2.210	2.35	26.9	69.1
[3 -1 0]	(1 3 0)	(2 6 1)	5.185	2.188	2.37	25.4	77.3
[3 -1 8]	(1 3 0)	(-4 -4 1)	5.185	2.159	2.40	35.5	45.3
[3 -1 -3]	(1 3 0)	(-1 3 -2)	5.185	2.158	2.40	86.6	55.7
[3 -1 0]	(1 3 0)	(1 3 2)	5.185	2.158	2.40	57.7	77.3
[3 -1 6]	(1 3 0)	(3 -3 -2)	5.185	2.154	2.41	86.7	55.5
[3 -1 3]	(1 3 0)	(3 3 -2)	5.185	2.154	2.41	57.6	77.0
[3 -1 4]	(1 3 0)	(1 -5 -2)	5.185	2.133	2.43	60.8	69.1
[3 -1 -1]	(1 3 0)	(1 5 -2)	5.185	2.133	2.43	60.6	69.3
[3 -1 8]	(1 3 0)	(0 8 1)	5.185	2.095	2.48	34.3	45.3

Richterite (130) 313 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[3 -1 -4]	(1 3 0)	(3 5 1)	5.185	2.040	2.54	30.5	50.2
[3 -1 -3]	(1 3 0)	(2 0 2)	5.185	2.036	2.55	70.4	55.7
[3 -1 -2]	(1 3 0)	(2 8 -1)	5.185	2.003	2.59	25.7	62.1
[3 -1 7]	(1 3 0)	(-4 2 2)	5.185	1.983	2.61	81.5	50.0
[3 -1 5]	(1 3 0)	(4 2 -2)	5.185	1.983	2.61	59.2	61.9
[3 -1 -4]	(1 3 0)	(-1 5 -2)	5.185	1.954	2.65	76.5	50.2
[3 -1 1]	(1 3 0)	(1 5 2)	5.185	1.954	2.65	48.5	85.8
[3 -1 -3]	(1 3 0)	(0 -6 2)	5.185	1.951	2.66	64.5	55.7
[3 -1 3]	(1 3 0)	(0 6 2)	5.185	1.951	2.66	49.9	77.0
[3 -1 7]	(1 3 0)	(-3 5 2)	5.185	1.951	2.66	76.7	50.0
[3 -1 2]	(1 3 0)	(3 5 -2)	5.185	1.951	2.66	48.4	85.5
[3 -1 6]	(1 3 0)	(-4 -6 1)	5.185	1.912	2.71	26.3	55.5
[3 -1 -5]	(1 3 0)	(-2 4 -2)	5.185	1.862	2.78	88.0	45.4
[3 -1 -1]	(1 3 0)	(2 4 2)	5.185	1.862	2.78	49.5	69.3
[3 -1 5]	(1 3 0)	(-1 7 2)	5.185	1.855	2.79	53.5	61.9
[3 -1 -2]	(1 3 0)	(1 7 -2)	5.185	1.855	2.79	53.4	62.1
[3 -1 2]	(1 3 0)	(2 8 1)	5.185	1.852	2.80	20.8	85.5
[3 -1 6]	(1 3 0)	(1 9 1)	5.185	1.828	2.84	25.1	55.5
[3 -1 -2]	(1 3 0)	(3 7 1)	5.185	1.793	2.89	22.8	62.1
[3 -1 -5]	(1 3 0)	(3 -1 2)	5.185	1.772	2.93	72.0	45.4
[3 -1 -4]	(1 3 0)	(3 1 2)	5.185	1.772	2.93	61.9	50.2
[3 -1 8]	(1 3 0)	(-5 1 2)	5.185	1.767	2.93	71.9	45.3
[3 -1 7]	(1 3 0)	(5 1 -2)	5.185	1.767	2.93	61.8	50.0
[3 -1 2]	(1 3 0)	(-2 0 3)	5.185	1.737	2.98	87.2	85.5
[3 -1 -5]	(1 3 0)	(-1 7 -2)	5.185	1.734	2.99	68.5	45.4
[3 -1 2]	(1 3 0)	(1 7 2)	5.185	1.734	2.99	41.6	85.5
[3 -1 8]	(1 3 0)	(-3 7 2)	5.185	1.732	2.99	68.7	45.3
[3 -1 1]	(1 3 0)	(3 7 -2)	5.185	1.732	2.99	41.6	85.8
[9 -3 2]	(1 3 0)	(-1 -1 3)	5.185	1.730	3.00	88.1	82.9
[9 -3 4]	(1 3 0)	(-1 1 3)	5.185	1.730	3.00	82.8	88.7
[3 -1 -3]	(1 3 0)	(3 3 2)	5.185	1.710	3.03	52.3	55.7
[3 -1 0]	(1 3 0)	(3 9 -1)	5.185	1.709	3.03	19.6	77.3
[9 -3 8]	(1 3 0)	(-2 2 3)	5.185	1.707	3.04	83.8	79.8
[9 -3 4]	(1 3 0)	(-2 -2 3)	5.185	1.707	3.04	78.2	88.7
[3 -1 6]	(1 3 0)	(5 3 -2)	5.185	1.705	3.04	52.2	55.5
[3 -1 7]	(1 3 0)	(2 -8 -2)	5.185	1.701	3.05	58.0	50.0
[3 -1 -1]	(1 3 0)	(2 8 -2)	5.185	1.701	3.05	44.0	69.3
[3 -1 3]	(1 3 0)	(4 6 -2)	5.185	1.694	3.06	41.6	77.0
[9 -3 10]	(1 3 0)	(3 -1 -3)	5.185	1.676	3.09	86.4	74.3
[9 -3 8]	(1 3 0)	(3 1 -3)	5.185	1.676	3.09	77.5	79.8
[3 -1 4]	(1 3 0)	(-4 -8 1)	5.185	1.676	3.09	20.0	69.1
[3 -1 0]	(1 3 0)	(1 3 -3)	5.185	1.672	3.10	79.3	77.3
[3 -1 2]	(1 3 0)	(1 -3 -3)	5.185	1.672	3.10	74.0	85.5
[9 -3 -2]	(1 3 0)	(0 2 -3)	5.185	1.658	3.13	89.1	71.9
[9 -3 2]	(1 3 0)	(0 2 3)	5.185	1.658	3.13	73.3	82.9
[9 -3 10]	(1 3 0)	(-2 4 3)	5.185	1.625	3.19	75.4	74.3
[9 -3 2]	(1 3 0)	(-2 -4 3)	5.185	1.625	3.19	69.9	82.9
[3 -1 6]	(1 3 0)	(-1 9 2)	5.185	1.612	3.22	48.3	55.5

Richterite (130) 313 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[3 -1 -3]	(1 3 0)	(-1 -9 2)	5.185	1.612	3.22	48.2	55.7
[3 -1 -2]	(1 3 0)	(3 5 2)	5.185	1.603	3.24	43.9	62.1
[3 -1 5]	(1 3 0)	(-5 -5 2)	5.185	1.599	3.24	43.9	61.9
[3 -1 4]	(1 3 0)	(4 0 -3)	5.185	1.589	3.26	77.2	69.1
[3 -1 8]	(1 3 0)	(5 7 -1)	5.185	1.587	3.27	25.3	45.3
[9 -3 -4]	(1 3 0)	(-1 1 -3)	5.185	1.587	3.27	81.7	66.8
[9 -3 -2]	(1 3 0)	(1 1 3)	5.185	1.587	3.27	73.1	71.9
[9 -3 -4]	(1 3 0)	(0 -4 3)	5.185	1.583	3.28	80.8	66.8
[9 -3 4]	(1 3 0)	(0 4 3)	5.185	1.583	3.28	65.2	88.7
[9 -3 -2]	(1 3 0)	(-1 -5 3)	5.185	1.572	3.30	71.4	71.9
[9 -3 8]	(1 3 0)	(-1 5 3)	5.185	1.572	3.30	66.3	79.8
[9 -3 14]	(1 3 0)	(4 -2 -3)	5.185	1.566	3.31	85.8	64.2
[9 -3 10]	(1 3 0)	(-4 -2 3)	5.185	1.566	3.31	68.8	74.3
[3 -1 -2]	(1 3 0)	(-1 3 -3)	5.185	1.541	3.36	90.0	62.1
[3 -1 0]	(1 3 0)	(1 3 3)	5.185	1.541	3.36	64.9	77.3
[3 -1 -5]	(1 3 0)	(4 2 2)	5.185	1.538	3.37	55.6	45.4
[9 -3 14]	(1 3 0)	(-3 5 3)	5.185	1.531	3.39	77.1	64.2
[9 -3 4]	(1 3 0)	(-3 -5 3)	5.185	1.531	3.39	61.4	88.7
[3 -1 3]	(1 3 0)	(1 9 2)	5.185	1.530	3.39	36.9	77.0
[3 -1 0]	(1 3 0)	(-3 -9 2)	5.185	1.529	3.39	36.8	77.3
[3 -1 1]	(1 3 0)	(2 8 2)	5.185	1.525	3.40	35.8	85.8
[3 -1 4]	(1 3 0)	(-2 6 3)	5.185	1.512	3.43	68.1	69.1
[3 -1 0]	(1 3 0)	(-2 -6 3)	5.185	1.512	3.43	62.7	77.3
[3 -1 -4]	(1 3 0)	(4 8 1)	5.185	1.507	3.44	22.0	50.2
[9 -3 16]	(1 3 0)	(-4 4 3)	5.185	1.502	3.45	86.2	59.7
[9 -3 8]	(1 3 0)	(-4 -4 3)	5.185	1.502	3.45	61.0	79.8
[3 -1 -2]	(1 3 0)	(2 0 3)	5.185	1.478	3.51	73.5	62.1
[3 -1 -1]	(1 3 0)	(3 7 2)	5.185	1.474	3.52	37.0	69.3
[3 -1 7]	(1 3 0)	(6 4 -2)	5.185	1.474	3.52	47.3	50.0
[3 -1 4]	(1 3 0)	(-5 -7 2)	5.185	1.472	3.52	37.0	69.1
[9 -3 16]	(1 3 0)	(5 -1 -3)	5.185	1.470	3.53	77.4	59.7
[9 -3 14]	(1 3 0)	(-5 -1 3)	5.185	1.470	3.53	69.3	64.2
[9 -3 -8]	(1 3 0)	(-1 5 -3)	5.185	1.462	3.55	82.3	57.7
[9 -3 2]	(1 3 0)	(1 5 3)	5.185	1.462	3.55	57.6	82.9
[9 -3 -8]	(1 3 0)	(-2 2 -3)	5.185	1.459	3.55	81.5	57.7
[9 -3 -4]	(1 3 0)	(2 2 3)	5.185	1.459	3.55	65.5	66.8
[9 -3 -4]	(1 3 0)	(-1 -7 3)	5.185	1.450	3.58	64.7	66.8
[9 -3 10]	(1 3 0)	(-1 7 3)	5.185	1.450	3.58	59.7	74.3
[3 -1 6]	(1 3 0)	(-5 3 3)	5.185	1.433	3.62	85.4	55.5
[3 -1 4]	(1 3 0)	(5 3 -3)	5.185	1.433	3.62	61.6	69.1
[3 -1 6]	(1 3 0)	(-5 -9 1)	5.185	1.426	3.64	19.3	55.5
[9 -3 16]	(1 3 0)	(-3 7 3)	5.185	1.418	3.66	70.3	59.7
[9 -3 2]	(1 3 0)	(-3 -7 3)	5.185	1.418	3.66	55.0	82.9
[3 -1 6]	(1 3 0)	(-4 6 3)	5.185	1.411	3.67	78.9	55.5
[3 -1 2]	(1 3 0)	(-4 -6 3)	5.185	1.411	3.67	54.2	85.5
[9 -3 -10]	(1 3 0)	(2 -4 3)	5.185	1.407	3.69	89.3	53.8
[9 -3 -2]	(1 3 0)	(2 4 3)	5.185	1.407	3.69	58.1	71.9
[3 -1 -3]	(1 3 0)	(4 6 2)	5.185	1.390	3.73	40.0	55.7

Richterite (130) 313 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[9 -3 -2]	(1 3 0)	(-2 -8 3)	5.185	1.387	3.74	56.7	71.9
[9 -3 20]	(1 3 0)	(-5 5 3)	5.185	1.369	3.79	87.2	51.8
[9 -3 10]	(1 3 0)	(-5 -5 3)	5.185	1.369	3.79	54.6	74.3
[9 -3 -10]	(1 3 0)	(-1 7 -3)	5.185	1.362	3.81	75.5	53.8
[9 -3 4]	(1 3 0)	(1 7 3)	5.185	1.362	3.81	51.4	88.7
[9 -3 -8]	(1 3 0)	(0 -8 3)	5.185	1.360	3.81	67.2	57.7
[9 -3 8]	(1 3 0)	(0 8 3)	5.185	1.360	3.81	52.4	79.8
[9 -3 -8]	(1 3 0)	(3 1 3)	5.185	1.354	3.83	66.6	57.7
[3 -1 0]	(1 3 0)	(3 9 2)	5.185	1.343	3.86	31.7	77.3
[3 -1 3]	(1 3 0)	(5 9 -2)	5.185	1.341	3.87	31.7	77.0
[9 -3 20]	(1 3 0)	(6 -2 -3)	5.185	1.339	3.87	77.8	51.8
[9 -3 16]	(1 3 0)	(-6 -2 3)	5.185	1.339	3.87	62.8	59.7
[3 -1 -4]	(1 3 0)	(-2 6 -3)	5.185	1.332	3.89	83.7	50.2
[3 -1 0]	(1 3 0)	(2 6 3)	5.185	1.332	3.89	51.5	77.3
[3 -1 -2]	(1 3 0)	(1 9 -3)	5.185	1.325	3.91	59.2	62.1
[3 -1 4]	(1 3 0)	(1 -9 -3)	5.185	1.325	3.91	54.4	69.1
[6 -2 3]	(1 3 0)	(2 0 -4)	5.185	1.308	3.96	89.9	89.9
[9 -3 20]	(1 3 0)	(4 -8 -3)	5.185	1.308	3.96	72.6	51.8
[9 -3 4]	(1 3 0)	(4 8 -3)	5.185	1.308	3.96	48.6	88.7
[9 -3 22]	(1 3 0)	(-6 4 3)	5.185	1.299	3.99	85.1	48.3
[9 -3 14]	(1 3 0)	(6 4 -3)	5.185	1.299	3.99	55.8	64.2
[6 -2 1]	(1 3 0)	(-1 -1 4)	5.185	1.294	4.01	89.4	81.5
[3 -1 1]	(1 3 0)	(1 -1 -4)	5.185	1.294	4.01	82.6	85.8
[6 -2 5]	(1 3 0)	(3 -1 -4)	5.185	1.293	4.01	89.2	81.2
[3 -1 2]	(1 3 0)	(-3 -1 4)	5.185	1.293	4.01	82.4	85.5
[3 -1 -5]	(1 3 0)	(5 5 2)	5.185	1.289	4.02	43.8	45.4
[3 -1 5]	(1 3 0)	(6 8 -2)	5.185	1.289	4.02	33.9	61.9
[3 -1 8]	(1 3 0)	(-7 -5 2)	5.185	1.286	4.03	43.8	45.3
[9 -3 22]	(1 3 0)	(-5 7 3)	5.185	1.286	4.03	80.6	48.3
[9 -3 8]	(1 3 0)	(-5 -7 3)	5.185	1.286	4.03	48.5	79.8
[9 -3 -14]	(1 3 0)	(3 -5 3)	5.185	1.274	4.07	88.7	46.9
[9 -3 -4]	(1 3 0)	(3 5 3)	5.185	1.274	4.07	52.6	66.8
[3 -1 0]	(1 3 0)	(1 3 -4)	5.185	1.269	4.09	83.9	77.3
[6 -2 3]	(1 3 0)	(1 -3 -4)	5.185	1.269	4.09	75.9	89.9
[3 -1 3]	(1 3 0)	(-3 3 4)	5.185	1.268	4.09	84.1	77.0
[6 -2 3]	(1 3 0)	(3 3 -4)	5.185	1.268	4.09	75.8	89.9
[6 -2 1]	(1 3 0)	(2 4 -4)	5.185	1.259	4.12	76.6	81.5
[3 -1 -4]	(1 3 0)	(1 -9 3)	5.185	1.257	4.13	69.7	50.2
[3 -1 2]	(1 3 0)	(1 9 3)	5.185	1.257	4.13	46.3	85.5
[6 -2 -1]	(1 3 0)	(0 2 -4)	5.185	1.252	4.14	88.7	73.2
[6 -2 1]	(1 3 0)	(0 2 4)	5.185	1.252	4.14	75.4	81.5
[6 -2 7]	(1 3 0)	(-4 2 4)	5.185	1.251	4.15	88.6	73.0
[6 -2 5]	(1 3 0)	(4 2 -4)	5.185	1.251	4.15	75.3	81.2
[9 -3 -14]	(1 3 0)	(-2 8 -3)	5.185	1.244	4.17	77.5	46.9
[9 -3 2]	(1 3 0)	(2 8 3)	5.185	1.244	4.17	45.9	82.9
[3 -1 -4]	(1 3 0)	(4 0 3)	5.185	1.241	4.18	67.9	50.2
[9 -3 22]	(1 3 0)	(-7 1 3)	5.185	1.235	4.20	71.4	48.3
[9 -3 20]	(1 3 0)	(7 1 -3)	5.185	1.235	4.20	64.3	51.8

Richterite (130) 313 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[9 -3 -14]	(1 3 0)	(-4 2 -3)	5.185	1.230	4.22	74.9	46.9
[9 -3 -10]	(1 3 0)	(4 2 3)	5.185	1.230	4.22	61.0	53.8
[6 -2 -1]	(1 3 0)	(-1 -5 4)	5.185	1.224	4.24	77.6	73.2
[3 -1 2]	(1 3 0)	(-1 5 4)	5.185	1.224	4.24	69.7	85.5
[6 -2 7]	(1 3 0)	(3 -5 -4)	5.185	1.223	4.24	77.8	73.0
[3 -1 1]	(1 3 0)	(3 5 -4)	5.185	1.223	4.24	69.6	85.8
[3 -1 -4]	(1 3 0)	(5 7 2)	5.185	1.219	4.25	37.4	50.2
[3 -1 7]	(1 3 0)	(7 7 -2)	5.185	1.217	4.26	37.4	50.0
[3 -1 8]	(1 3 0)	(7 -3 -3)	5.185	1.214	4.27	78.3	45.3
[3 -1 6]	(1 3 0)	(7 3 -3)	5.185	1.214	4.27	57.5	55.5
[3 -1 -1]	(1 3 0)	(1 -1 4)	5.185	1.211	4.28	81.7	69.3
[6 -2 -1]	(1 3 0)	(1 1 4)	5.185	1.211	4.28	75.2	73.2
[3 -1 4]	(1 3 0)	(5 -1 -4)	5.185	1.209	4.29	81.6	69.1
[6 -2 7]	(1 3 0)	(-5 -1 4)	5.185	1.209	4.29	75.1	73.0
[9 -3 -2]	(1 3 0)	(3 7 3)	5.185	1.206	4.30	46.7	71.9
[9 -3 -8]	(1 3 0)	(4 4 3)	5.185	1.199	4.33	54.3	57.7
[3 -1 8]	(1 3 0)	(-5 9 3)	5.185	1.196	4.34	74.8	45.3
[3 -1 2]	(1 3 0)	(-5 -9 3)	5.185	1.196	4.34	43.4	85.5
[6 -2 -3]	(1 3 0)	(1 -3 4)	5.185	1.191	4.35	88.2	65.6
[3 -1 0]	(1 3 0)	(1 3 4)	5.185	1.191	4.35	68.9	77.3
[6 -2 9]	(1 3 0)	(5 -3 -4)	5.185	1.189	4.36	88.0	65.4
[3 -1 3]	(1 3 0)	(-5 -3 4)	5.185	1.189	4.36	68.8	77.0
[9 -3 16]	(1 3 0)	(7 5 -3)	5.185	1.173	4.42	51.2	59.7
[6 -2 -3]	(1 3 0)	(0 -6 4)	5.185	1.169	4.44	78.8	65.6
[6 -2 3]	(1 3 0)	(0 6 4)	5.185	1.169	4.44	63.3	89.9
[6 -2 9]	(1 3 0)	(-4 6 4)	5.185	1.167	4.44	79.0	65.4
[6 -2 3]	(1 3 0)	(4 6 -4)	5.185	1.167	4.44	63.2	89.9
[9 -3 10]	(1 3 0)	(-6 -8 3)	5.185	1.167	4.44	44.0	74.3
[3 -1 -1]	(1 3 0)	(1 7 -4)	5.185	1.163	4.46	71.9	69.3
[6 -2 5]	(1 3 0)	(1 -7 -4)	5.185	1.163	4.46	64.1	81.2
[3 -1 4]	(1 3 0)	(-3 7 4)	5.185	1.163	4.46	72.1	69.1
[6 -2 1]	(1 3 0)	(3 7 -4)	5.185	1.163	4.46	64.0	81.5
[3 -1 -2]	(1 3 0)	(-1 5 -4)	5.185	1.153	4.50	85.7	62.1
[6 -2 1]	(1 3 0)	(1 5 4)	5.185	1.153	4.50	63.0	81.5
[6 -2 -3]	(1 3 0)	(2 0 4)	5.185	1.153	4.50	75.3	65.6
[3 -1 5]	(1 3 0)	(5 -5 -4)	5.185	1.151	4.51	85.9	61.9
[6 -2 5]	(1 3 0)	(5 5 -4)	5.185	1.151	4.51	62.9	81.2
[3 -1 -2]	(1 3 0)	(4 6 3)	5.185	1.151	4.51	48.3	62.1
[6 -2 9]	(1 3 0)	(6 0 -4)	5.185	1.150	4.51	75.2	65.4
[3 -1 -3]	(1 3 0)	(5 9 2)	5.185	1.142	4.54	31.9	55.7
[3 -1 6]	(1 3 0)	(-7 -9 2)	5.185	1.140	4.55	31.9	55.5
[6 -2 7]	(1 3 0)	(-2 8 4)	5.185	1.138	4.56	65.4	73.0
[6 -2 -1]	(1 3 0)	(-2 -8 4)	5.185	1.138	4.56	65.2	73.2
[9 -3 -14]	(1 3 0)	(5 1 3)	5.185	1.133	4.58	62.8	46.9
[3 -1 8]	(1 3 0)	(-8 0 3)	5.185	1.132	4.58	66.0	45.3
[9 -3 22]	(1 3 0)	(-8 -2 3)	5.185	1.123	4.62	59.5	48.3
[9 -3 14]	(1 3 0)	(7 7 -3)	5.185	1.120	4.63	45.5	64.2
[6 -2 -5]	(1 3 0)	(-2 4 -4)	5.185	1.118	4.64	87.7	58.8

Richterite (130) 313 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[6 -2 -1]	(1 3 0)	(2 4 4)	5.185	1.118	4.64	63.2	73.2
[3 -1 -4]	(1 3 0)	(5 3 3)	5.185	1.116	4.65	56.4	50.2
[6 -2 11]	(1 3 0)	(6 -4 -4)	5.185	1.116	4.65	87.5	58.6
[6 -2 7]	(1 3 0)	(-6 -4 4)	5.185	1.116	4.65	63.1	73.0
[6 -2 -5]	(1 3 0)	(1 -7 4)	5.185	1.102	4.70	80.1	58.8
[3 -1 1]	(1 3 0)	(1 7 4)	5.185	1.102	4.70	57.6	85.8
[6 -2 11]	(1 3 0)	(5 -7 -4)	5.185	1.101	4.71	80.2	58.6
[3 -1 2]	(1 3 0)	(5 7 -4)	5.185	1.101	4.71	57.5	85.5
[9 -3 20]	(1 3 0)	(-8 -4 3)	5.185	1.099	4.72	53.3	51.8
[6 -2 -3]	(1 3 0)	(1 9 -4)	5.185	1.096	4.73	66.9	65.6
[3 -1 3]	(1 3 0)	(1 -9 -4)	5.185	1.096	4.73	59.2	77.0
[6 -2 9]	(1 3 0)	(-3 9 4)	5.185	1.095	4.74	67.0	65.4
[3 -1 0]	(1 3 0)	(3 9 -4)	5.185	1.095	4.74	59.1	77.3
[9 -3 -4]	(1 3 0)	(4 8 3)	5.185	1.093	4.75	42.9	66.8
[9 -3 -10]	(1 3 0)	(5 5 3)	5.185	1.085	4.78	50.4	53.8
[6 -2 -5]	(1 3 0)	(-3 1 -4)	5.185	1.084	4.78	75.6	58.8
[3 -1 -2]	(1 3 0)	(3 1 4)	5.185	1.084	4.78	69.6	62.1
[3 -1 -5]	(1 3 0)	(6 8 2)	5.185	1.081	4.80	35.5	45.4
[6 -2 11]	(1 3 0)	(7 -1 -4)	5.185	1.081	4.80	75.5	58.6
[3 -1 5]	(1 3 0)	(7 1 -4)	5.185	1.081	4.80	69.6	61.9
[3 -1 -3]	(1 3 0)	(-3 3 -4)	5.185	1.069	4.85	81.6	55.7
[6 -2 -3]	(1 3 0)	(3 3 4)	5.185	1.069	4.85	63.8	65.6
[3 -1 6]	(1 3 0)	(-7 3 4)	5.185	1.067	4.86	81.4	55.5
[6 -2 9]	(1 3 0)	(7 3 -4)	5.185	1.067	4.86	63.7	65.4
[3 -1 6]	(1 3 0)	(-8 -6 3)	5.185	1.062	4.88	47.6	55.5
[3 -1 4]	(1 3 0)	(7 9 -3)	5.185	1.059	4.90	40.5	69.1
[15 -5 6]	(1 3 0)	(-2 0 5)	5.185	1.045	4.96	88.4	87.5
[3 -1 -3]	(1 3 0)	(1 -9 4)	5.185	1.044	4.97	75.0	55.7
[6 -2 3]	(1 3 0)	(1 9 4)	5.185	1.044	4.97	52.9	89.9
[3 -1 2]	(1 3 0)	(3 -1 -5)	5.185	1.043	4.97	89.0	85.5
[15 -5 8]	(1 3 0)	(3 1 -5)	5.185	1.043	4.97	85.5	89.0
[3 -1 6]	(1 3 0)	(5 -9 -4)	5.185	1.043	4.97	75.1	55.5
[6 -2 3]	(1 3 0)	(5 9 -4)	5.185	1.043	4.97	52.8	89.9
[9 -3 -8]	(1 3 0)	(5 7 3)	5.185	1.042	4.98	44.9	57.7
[6 -2 -7]	(1 3 0)	(3 -5 4)	5.185	1.041	4.98	87.3	52.8
[3 -1 -1]	(1 3 0)	(3 5 4)	5.185	1.041	4.98	58.3	69.3
[6 -2 13]	(1 3 0)	(7 -5 -4)	5.185	1.039	4.99	87.1	52.7
[3 -1 4]	(1 3 0)	(-7 -5 4)	5.185	1.039	4.99	58.2	69.1
[15 -5 4]	(1 3 0)	(2 2 -5)	5.185	1.039	4.99	86.1	84.1
[15 -5 8]	(1 3 0)	(2 -2 -5)	5.185	1.039	4.99	83.0	89.0
[15 -5 12]	(1 3 0)	(4 0 -5)	5.185	1.033	5.02	85.0	82.1
[15 -5 2]	(1 3 0)	(-1 -1 5)	5.185	1.032	5.02	87.9	80.6
[15 -5 4]	(1 3 0)	(1 -1 -5)	5.185	1.032	5.02	82.4	84.1
[6 -2 -7]	(1 3 0)	(-2 8 -4)	5.185	1.031	5.03	81.3	52.8
[6 -2 1]	(1 3 0)	(2 8 4)	5.185	1.031	5.03	52.8	81.5
[15 -5 12]	(1 3 0)	(-3 3 5)	5.185	1.030	5.03	83.6	82.1
[15 -5 6]	(1 3 0)	(-3 -3 5)	5.185	1.030	5.03	80.1	87.5
[6 -2 13]	(1 3 0)	(-6 8 4)	5.185	1.029	5.04	81.4	52.7

Richterite (130) 313 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[6 -2 5]	(1 3 0)	(-6 -8 4)	5.185	1.029	5.04	52.7	81.2
[15 -5 14]	(1 3 0)	(-4 2 5)	5.185	1.026	5.05	89.6	78.7
[3 -1 2]	(1 3 0)	(4 2 -5)	5.185	1.026	5.05	79.6	85.5
[3 -1 8]	(1 3 0)	(-9 -3 3)	5.185	1.022	5.07	55.6	45.3
[15 -5 2]	(1 3 0)	(2 4 -5)	5.185	1.019	5.09	80.8	80.6
[3 -1 2]	(1 3 0)	(2 -4 -5)	5.185	1.019	5.09	77.7	85.5
[3 -1 0]	(1 3 0)	(1 3 -5)	5.185	1.019	5.09	86.7	77.3
[15 -5 6]	(1 3 0)	(1 -3 -5)	5.185	1.019	5.09	77.1	87.5
[9 -3 -14]	(1 3 0)	(6 4 3)	5.185	1.014	5.11	52.8	46.9
[6 -2 -7]	(1 3 0)	(4 -2 4)	5.185	1.012	5.12	76.0	52.8
[6 -2 -5]	(1 3 0)	(4 2 4)	5.185	1.012	5.12	64.7	58.8
[6 -2 13]	(1 3 0)	(8 -2 -4)	5.185	1.009	5.14	75.9	52.7
[6 -2 11]	(1 3 0)	(-8 -2 4)	5.185	1.009	5.14	64.7	58.6
[15 -5 16]	(1 3 0)	(5 -1 -5)	5.185	1.008	5.14	84.6	75.4
[15 -5 14]	(1 3 0)	(-5 -1 5)	5.185	1.008	5.14	79.2	78.7
[15 -5 16]	(1 3 0)	(-4 4 5)	5.185	1.008	5.15	84.3	75.4
[15 -5 8]	(1 3 0)	(-4 -4 5)	5.185	1.008	5.15	74.3	89.0
[15 -5 14]	(1 3 0)	(-3 5 5)	5.185	1.005	5.16	78.4	78.7
[15 -5 4]	(1 3 0)	(-3 -5 5)	5.185	1.005	5.16	74.9	84.1
[15 -5 -2]	(1 3 0)	(0 -2 5)	5.185	1.005	5.16	87.4	74.0
[15 -5 2]	(1 3 0)	(0 2 5)	5.185	1.005	5.16	76.7	80.6
[3 -1 -4]	(1 3 0)	(-3 7 -4)	5.185	1.004	5.17	87.3	50.2
[6 -2 -1]	(1 3 0)	(3 7 4)	5.185	1.004	5.17	53.2	73.2
[3 -1 7]	(1 3 0)	(-7 7 4)	5.185	1.002	5.18	87.5	50.0
[6 -2 7]	(1 3 0)	(-7 -7 4)	5.185	1.002	5.18	53.2	73.0

Richterite (200) 191 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[0 1 0]	(2 0 0)	(0 0 1)	4.845	5.056	0.96	75.0	90.0
[0 1 1]	(2 0 0)	(1 1 -1)	4.845	4.870	0.99	75.3	74.1
[0 -1 1]	(2 0 0)	(1 1 1)	4.845	3.976	1.22	52.2	74.1
[0 -1 -2]	(2 0 0)	(-2 -2 1)	4.845	3.716	1.30	54.7	60.4
[0 -1 3]	(2 0 0)	(1 3 1)	4.845	3.393	1.43	58.4	49.5
[0 -1 1]	(2 0 0)	(-3 1 1)	4.845	3.067	1.58	37.5	74.1
[0 -1 2]	(2 0 0)	(2 2 1)	4.845	2.954	1.64	40.5	60.4
[0 -1 -3]	(2 0 0)	(-3 -3 1)	4.845	2.775	1.75	44.2	49.5
[0 2 1]	(2 0 0)	(1 1 -2)	4.845	2.591	1.87	89.8	81.9
[0 1 0]	(2 0 0)	(2 0 -2)	4.845	2.525	1.92	74.7	90.0
[0 1 0]	(2 0 0)	(4 0 -1)	4.845	2.444	1.98	27.8	90.0
[0 1 1]	(2 0 0)	(0 2 -2)	4.845	2.438	1.99	75.6	74.1
[0 2 3]	(2 0 0)	(1 3 -2)	4.845	2.407	2.01	89.9	66.9
[0 -1 -2]	(2 0 0)	(-4 -2 1)	4.845	2.363	2.05	31.3	60.4
[0 -2 1]	(2 0 0)	(1 1 2)	4.845	2.287	2.12	62.0	81.9
[0 -2 -1]	(2 0 0)	(-3 -1 2)	4.845	2.282	2.12	61.7	81.9
[0 -1 3]	(2 0 0)	(3 3 1)	4.845	2.275	2.13	34.8	49.5
[0 1 2]	(2 0 0)	(2 4 -2)	4.845	2.214	2.19	76.7	60.4
[0 2 -3]	(2 0 0)	(1 3 2)	4.845	2.158	2.25	63.7	66.9
[0 2 3]	(2 0 0)	(3 3 -2)	4.845	2.154	2.25	63.5	66.9
[0 -2 -5]	(2 0 0)	(-1 -5 2)	4.845	2.133	2.27	89.9	54.6
[0 1 0]	(2 0 0)	(2 0 2)	4.845	2.036	2.38	51.1	90.0
[0 1 0]	(2 0 0)	(4 0 1)	4.845	1.993	2.43	22.4	90.0
[0 1 1]	(2 0 0)	(5 1 -1)	4.845	1.978	2.45	23.1	74.1
[0 2 -5]	(2 0 0)	(1 5 2)	4.845	1.954	2.48	66.3	54.6
[0 -1 3]	(2 0 0)	(0 6 2)	4.845	1.951	2.48	78.5	49.5
[0 -2 -5]	(2 0 0)	(-3 -5 2)	4.845	1.951	2.48	66.1	54.6
[0 1 -2]	(2 0 0)	(4 2 1)	4.845	1.948	2.49	25.3	60.4
[0 1 3]	(2 0 0)	(5 3 -1)	4.845	1.893	2.56	28.4	49.5
[0 1 -2]	(2 0 0)	(2 4 2)	4.845	1.862	2.60	54.9	60.4
[0 -2 -7]	(2 0 0)	(-1 -7 2)	4.845	1.855	2.61	89.9	45.1
[0 -2 1]	(2 0 0)	(3 1 2)	4.845	1.772	2.73	43.1	81.9
[0 -2 -1]	(2 0 0)	(-5 -1 2)	4.845	1.767	2.74	43.0	81.9
[0 1 0]	(2 0 0)	(2 0 -3)	4.845	1.737	2.79	84.7	90.0
[0 -2 -7]	(2 0 0)	(1 -7 2)	4.845	1.734	2.79	69.1	45.1
[0 2 7]	(2 0 0)	(3 7 -2)	4.845	1.732	2.80	69.0	45.1
[0 3 -1]	(2 0 0)	(1 -1 -3)	4.845	1.730	2.80	85.0	84.6
[0 -2 3]	(2 0 0)	(3 3 2)	4.845	1.710	2.83	45.3	66.9
[0 -3 -2]	(2 0 0)	(-2 -2 3)	4.845	1.707	2.84	84.8	79.3
[0 2 3]	(2 0 0)	(5 3 -2)	4.845	1.705	2.84	45.1	66.9
[0 1 3]	(2 0 0)	(4 6 -2)	4.845	1.694	2.86	58.3	49.5
[0 -3 1]	(2 0 0)	(-3 1 3)	4.845	1.676	2.89	74.8	84.6
[0 -1 -1]	(2 0 0)	(-1 -3 3)	4.845	1.672	2.90	85.2	74.1
[0 1 1]	(2 0 0)	(-5 1 -1)	4.845	1.664	2.91	19.3	74.1
[0 -3 2]	(2 0 0)	(0 2 3)	4.845	1.658	2.92	75.3	79.3
[0 -1 -2]	(2 0 0)	(-6 -2 1)	4.845	1.642	2.95	21.1	60.4
[0 3 4]	(2 0 0)	(2 4 -3)	4.845	1.625	2.98	85.0	69.2
[0 1 -3]	(2 0 0)	(5 3 1)	4.845	1.612	3.00	23.9	49.5

Richterite (200) 191 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[0 -2 5]	(2 0 0)	(3 5 2)	4.845	1.603	3.02	48.7	54.6
[0 -2 -5]	(2 0 0)	(-5 -5 2)	4.845	1.599	3.03	48.6	54.6
[0 1 0]	(2 0 0)	(4 0 -3)	4.845	1.589	3.05	65.6	90.0
[0 3 1]	(2 0 0)	(-1 1 -3)	4.845	1.587	3.05	66.0	84.6
[0 -3 -4]	(2 0 0)	(0 -4 3)	4.845	1.583	3.06	76.0	69.2
[0 -3 5]	(2 0 0)	(-1 5 3)	4.845	1.572	3.08	85.5	64.7
[0 -3 -2]	(2 0 0)	(-4 -2 3)	4.845	1.566	3.09	66.0	79.3
[0 1 1]	(2 0 0)	(-4 2 -2)	4.845	1.538	3.15	37.6	74.1
[0 -3 -5]	(2 0 0)	(-3 -5 3)	4.845	1.531	3.16	76.2	64.7
[0 1 2]	(2 0 0)	(2 6 -3)	4.845	1.512	3.20	85.4	60.4
[0 -3 -4]	(2 0 0)	(-4 -4 3)	4.845	1.502	3.22	67.0	69.2
[0 1 0]	(2 0 0)	(2 0 3)	4.845	1.478	3.28	57.9	90.0
[0 -2 7]	(2 0 0)	(3 7 2)	4.845	1.474	3.29	52.6	45.1
[0 -1 -2]	(2 0 0)	(-6 -4 2)	4.845	1.474	3.29	40.4	60.4
[0 2 7]	(2 0 0)	(5 7 -2)	4.845	1.472	3.29	52.5	45.1
[0 -3 -1]	(2 0 0)	(-5 -1 3)	4.845	1.470	3.30	57.8	84.6
[0 -3 5]	(2 0 0)	(1 5 3)	4.845	1.462	3.31	68.0	64.7
[0 3 -2]	(2 0 0)	(2 2 3)	4.845	1.459	3.32	58.3	79.3
[0 -3 7]	(2 0 0)	(-1 7 3)	4.845	1.450	3.34	85.8	56.4
[0 -1 1]	(2 0 0)	(-5 3 3)	4.845	1.433	3.38	58.7	74.1
[0 1 1]	(2 0 0)	(7 1 -1)	4.845	1.428	3.39	16.5	74.1
[0 -3 -7]	(2 0 0)	(-3 -7 3)	4.845	1.418	3.42	77.2	56.4
[0 -1 2]	(2 0 0)	(6 2 1)	4.845	1.418	3.42	18.2	60.4
[0 -1 -2]	(2 0 0)	(-4 -6 3)	4.845	1.411	3.43	68.5	60.4
[0 -3 -4]	(2 0 0)	(2 -4 3)	4.845	1.407	3.44	59.6	69.2
[0 1 3]	(2 0 0)	(7 3 -1)	4.845	1.395	3.47	20.5	49.5
[0 1 -3]	(2 0 0)	(4 6 2)	4.845	1.390	3.48	44.3	49.5
[0 2 -1]	(2 0 0)	(5 1 2)	4.845	1.372	3.53	32.0	81.9
[0 2 1]	(2 0 0)	(7 1 -2)	4.845	1.369	3.54	31.9	81.9
[0 -3 -5]	(2 0 0)	(-5 -5 3)	4.845	1.369	3.54	60.2	64.7
[0 -3 7]	(2 0 0)	(1 7 3)	4.845	1.362	3.56	69.5	56.4
[0 3 -8]	(2 0 0)	(0 8 3)	4.845	1.360	3.56	78.0	52.8
[0 -2 -3]	(2 0 0)	(5 -3 2)	4.845	1.343	3.61	33.9	66.9
[0 2 3]	(2 0 0)	(7 3 -2)	4.845	1.340	3.62	33.8	66.9
[0 -3 2]	(2 0 0)	(-6 2 3)	4.845	1.339	3.62	51.4	79.3
[0 -1 2]	(2 0 0)	(2 6 3)	4.845	1.332	3.64	61.4	60.4
[0 1 -3]	(2 0 0)	(1 -9 -3)	4.845	1.325	3.66	86.2	49.5
[0 1 0]	(2 0 0)	(2 0 -4)	4.845	1.308	3.70	89.8	90.0
[0 3 -8]	(2 0 0)	(4 -8 -3)	4.845	1.308	3.70	70.2	52.8
[0 -3 -4]	(2 0 0)	(-6 -4 3)	4.845	1.299	3.73	52.8	69.2
[0 4 -1]	(2 0 0)	(1 -1 -4)	4.845	1.294	3.74	82.5	85.9
[0 4 1]	(2 0 0)	(3 1 -4)	4.845	1.293	3.75	82.2	85.9
[0 2 -5]	(2 0 0)	(5 5 2)	4.845	1.289	3.76	37.2	54.6
[0 2 5]	(2 0 0)	(7 5 -2)	4.845	1.286	3.77	37.1	54.6
[0 -3 -7]	(2 0 0)	(-5 -7 3)	4.845	1.286	3.77	62.2	56.4
[0 -3 -5]	(2 0 0)	(3 -5 3)	4.845	1.274	3.80	53.9	64.7
[0 -4 3]	(2 0 0)	(-1 3 4)	4.845	1.269	3.82	82.6	78.0
[0 -4 3]	(2 0 0)	(-3 3 4)	4.845	1.268	3.82	82.3	78.0

Richterite (200) 191 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[0 1 1]	(2 0 0)	(2 4 -4)	4.845	1.259	3.85	89.9	74.1
[0 -1 3]	(2 0 0)	(1 9 3)	4.845	1.257	3.86	71.2	49.5
[0 1 0]	(2 0 0)	(8 0 -1)	4.845	1.254	3.86	13.9	90.0
[0 2 1]	(2 0 0)	(0 2 -4)	4.845	1.252	3.87	75.2	81.9
[0 -1 -1]	(2 0 0)	(7 -1 1)	4.845	1.252	3.87	14.4	74.1
[0 2 1]	(2 0 0)	(4 2 -4)	4.845	1.251	3.87	74.9	81.9
[0 3 -8]	(2 0 0)	(2 8 3)	4.845	1.244	3.90	63.4	52.8
[0 1 2]	(2 0 0)	(8 2 -1)	4.845	1.242	3.90	15.8	60.4
[0 -3 -2]	(2 0 0)	(4 -2 3)	4.845	1.230	3.94	45.9	79.3
[0 1 -3]	(2 0 0)	(7 3 1)	4.845	1.230	3.94	18.0	49.5
[0 1 0]	(2 0 0)	(6 0 2)	4.845	1.225	3.96	27.9	90.0
[0 4 5]	(2 0 0)	(1 5 -4)	4.845	1.224	3.96	82.9	70.4
[0 4 -5]	(2 0 0)	(3 -5 -4)	4.845	1.223	3.96	82.6	70.4
[0 2 7]	(2 0 0)	(-5 7 -2)	4.845	1.219	3.97	41.1	45.1
[0 2 7]	(2 0 0)	(7 7 -2)	4.845	1.217	3.98	41.0	45.1
[0 1 -1]	(2 0 0)	(7 -3 -3)	4.845	1.214	3.99	46.3	74.1
[0 1 1]	(2 0 0)	(8 2 -2)	4.845	1.212	4.00	28.8	74.1
[0 4 -1]	(2 0 0)	(1 1 4)	4.845	1.211	4.00	68.1	85.9
[0 4 -1]	(2 0 0)	(5 -1 -4)	4.845	1.209	4.01	67.9	85.9
[0 3 -7]	(2 0 0)	(3 7 3)	4.845	1.206	4.02	56.1	56.4
[0 1 3]	(2 0 0)	(5 9 -3)	4.845	1.196	4.05	64.3	49.5
[0 4 3]	(2 0 0)	(-1 3 -4)	4.845	1.191	4.07	68.5	78.0
[0 4 -3]	(2 0 0)	(5 -3 -4)	4.845	1.189	4.08	68.3	78.0
[0 -1 2]	(2 0 0)	(6 4 2)	4.845	1.184	4.09	31.4	60.4
[0 1 2]	(2 0 0)	(8 4 -2)	4.845	1.181	4.10	31.3	60.4
[0 -3 -5]	(2 0 0)	(-7 -5 3)	4.845	1.173	4.13	48.1	64.7
[0 -2 3]	(2 0 0)	(0 6 4)	4.845	1.169	4.14	76.2	66.9
[0 2 3]	(2 0 0)	(4 6 -4)	4.845	1.167	4.15	75.9	66.9
[0 -3 -8]	(2 0 0)	(-6 -8 3)	4.845	1.167	4.15	57.1	52.8
[0 -4 7]	(2 0 0)	(-1 7 4)	4.845	1.163	4.16	83.2	63.6
[0 -4 7]	(2 0 0)	(-3 7 4)	4.845	1.163	4.17	83.0	63.6
[0 -4 -5]	(2 0 0)	(1 -5 4)	4.845	1.153	4.20	69.2	70.4
[0 -4 5]	(2 0 0)	(-5 5 4)	4.845	1.151	4.21	69.0	70.4
[0 -1 -2]	(2 0 0)	(4 -6 3)	4.845	1.151	4.21	49.4	60.4
[0 1 0]	(2 0 0)	(6 0 -4)	4.845	1.150	4.21	61.5	90.0
[0 1 3]	(2 0 0)	(8 6 -2)	4.845	1.136	4.27	34.8	49.5
[0 -3 1]	(2 0 0)	(5 1 3)	4.845	1.133	4.28	40.7	84.6
[0 1 0]	(2 0 0)	(8 0 -3)	4.845	1.132	4.28	40.4	90.0
[0 3 -2]	(2 0 0)	(8 -2 -3)	4.845	1.123	4.31	40.9	79.3
[0 3 -7]	(2 0 0)	(7 -7 -3)	4.845	1.120	4.33	50.4	56.4
[0 1 1]	(2 0 0)	(-2 4 -4)	4.845	1.118	4.33	62.7	74.1
[0 -1 1]	(2 0 0)	(5 3 3)	4.845	1.116	4.34	41.7	74.1
[0 1 1]	(2 0 0)	(6 4 -4)	4.845	1.116	4.34	62.4	74.1
[0 -1 1]	(2 0 0)	(-9 1 1)	4.845	1.111	4.36	12.8	74.1
[0 -1 2]	(2 0 0)	(8 2 1)	4.845	1.106	4.38	14.1	60.4
[0 -4 -7]	(2 0 0)	(1 -7 4)	4.845	1.102	4.40	70.2	63.6
[0 4 -7]	(2 0 0)	(5 -7 -4)	4.845	1.101	4.40	69.9	63.6
[0 3 4]	(2 0 0)	(8 4 -3)	4.845	1.099	4.41	42.4	69.2

Richterite (200) 191 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[0 2 -1]	(2 0 0)	(7 1 2)	4.845	1.098	4.41	25.1	81.9
[0 2 1]	(2 0 0)	(9 1 -2)	4.845	1.096	4.42	25.0	81.9
[0 4 -9]	(2 0 0)	(1 -9 -4)	4.845	1.096	4.42	83.6	57.4
[0 1 3]	(2 0 0)	(9 3 -1)	4.845	1.095	4.42	16.0	49.5
[0 -4 -9]	(2 0 0)	(-3 -9 4)	4.845	1.095	4.42	83.4	57.4
[0 -3 8]	(2 0 0)	(4 8 3)	4.845	1.093	4.43	51.8	52.8
[0 3 -5]	(2 0 0)	(5 5 3)	4.845	1.085	4.47	43.5	64.7
[0 -4 -1]	(2 0 0)	(3 -1 4)	4.845	1.084	4.47	56.1	85.9
[0 2 -3]	(2 0 0)	(7 3 2)	4.845	1.083	4.47	26.7	66.9
[0 4 1]	(2 0 0)	(7 1 -4)	4.845	1.081	4.48	55.9	85.9
[0 2 3]	(2 0 0)	(9 3 -2)	4.845	1.081	4.48	26.7	66.9
[0 4 3]	(2 0 0)	(-3 3 -4)	4.845	1.069	4.53	56.7	78.0
[0 4 -3]	(2 0 0)	(7 -3 -4)	4.845	1.067	4.54	56.5	78.0
[0 1 2]	(2 0 0)	(8 6 -3)	4.845	1.062	4.56	44.4	60.4
[0 -1 -3]	(2 0 0)	(-7 -9 3)	4.845	1.059	4.57	52.9	49.5
[0 -2 5]	(2 0 0)	(7 5 2)	4.845	1.054	4.60	29.6	54.6
[0 -2 -5]	(2 0 0)	(-9 -5 2)	4.845	1.052	4.60	29.6	54.6
[0 1 0]	(2 0 0)	(-2 0 5)	4.845	1.045	4.63	87.1	90.0
[0 4 9]	(2 0 0)	(-1 9 -4)	4.845	1.044	4.64	71.3	57.4
[0 5 -1]	(2 0 0)	(3 -1 -5)	4.845	1.043	4.64	86.8	86.7
[0 -4 -9]	(2 0 0)	(-5 -9 4)	4.845	1.043	4.65	71.0	57.4
[0 -3 7]	(2 0 0)	(5 7 3)	4.845	1.042	4.65	45.8	56.4
[0 4 -5]	(2 0 0)	(3 5 4)	4.845	1.041	4.65	57.6	70.4
[0 -5 -2]	(2 0 0)	(-2 -2 5)	4.845	1.039	4.66	87.1	83.5
[0 3 1]	(2 0 0)	(9 1 -3)	4.845	1.035	4.68	36.6	84.6
[0 3 -2]	(2 0 0)	(6 2 3)	4.845	1.033	4.69	37.1	79.3
[0 1 0]	(2 0 0)	(4 0 -5)	4.845	1.033	4.69	80.6	90.0
[0 5 1]	(2 0 0)	(1 1 -5)	4.845	1.032	4.69	81.0	86.7
[0 -1 2]	(2 0 0)	(2 8 4)	4.845	1.031	4.70	65.0	60.4
[0 5 3]	(2 0 0)	(3 3 -5)	4.845	1.030	4.70	86.8	80.3
[0 -1 -2]	(2 0 0)	(-6 -8 4)	4.845	1.029	4.71	64.7	60.4
[0 5 2]	(2 0 0)	(4 2 -5)	4.845	1.026	4.72	80.7	83.5
[0 -1 1]	(2 0 0)	(-9 3 3)	4.845	1.022	4.74	37.5	74.1
[0 -5 4]	(2 0 0)	(-2 4 5)	4.845	1.019	4.75	87.1	77.2
[0 5 -3]	(2 0 0)	(1 -3 -5)	4.845	1.019	4.75	81.1	80.3
[0 -2 7]	(2 0 0)	(7 7 2)	4.845	1.015	4.77	33.2	45.1
[0 3 -4]	(2 0 0)	(6 4 3)	4.845	1.014	4.78	38.4	69.2
[0 2 7]	(2 0 0)	(9 7 -2)	4.845	1.013	4.78	33.1	45.1
[0 2 -1]	(2 0 0)	(4 2 4)	4.845	1.012	4.79	51.4	81.9
[0 2 1]	(2 0 0)	(8 2 -4)	4.845	1.009	4.80	51.2	81.9
[0 -5 1]	(2 0 0)	(-5 1 5)	4.845	1.008	4.80	74.8	86.7
[0 5 4]	(2 0 0)	(4 4 -5)	4.845	1.008	4.81	80.9	77.2
[0 -1 1]	(2 0 0)	(-3 5 5)	4.845	1.005	4.82	86.9	74.1
[0 -5 2]	(2 0 0)	(0 2 5)	4.845	1.005	4.82	75.1	83.5
[0 -4 -7]	(2 0 0)	(3 -7 4)	4.845	1.004	4.83	58.9	63.6
[0 4 -7]	(2 0 0)	(7 -7 -4)	4.845	1.002	4.84	58.7	63.6
[0 -1 1]	(2 0 0)	(9 1 1)	4.845	1.000	4.84	11.5	74.1

Richterite (150) 294 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[5 -1 0]	(1 5 0)	(0 0 1)	3.443	5.056	0.68	84.7	76.0
[5 -1 6]	(1 5 0)	(1 -1 -1)	3.443	4.870	0.71	81.0	70.4
[5 -1 4]	(1 5 0)	(1 1 -1)	3.443	4.870	0.71	70.3	81.2
[5 -1 2]	(1 5 0)	(0 2 1)	3.443	4.432	0.78	58.0	87.3
[5 -1 10]	(1 5 0)	(2 0 -1)	3.443	4.061	0.85	77.0	52.8
[5 -1 -6]	(1 5 0)	(1 -1 1)	3.443	3.976	0.87	89.1	49.4
[5 -1 -4]	(1 5 0)	(1 1 1)	3.443	3.976	0.87	65.2	56.8
[5 -1 2]	(1 5 0)	(1 3 -1)	3.443	3.900	0.88	48.2	87.3
[5 -1 12]	(1 5 0)	(2 -2 -1)	3.443	3.716	0.93	80.1	46.1
[5 -1 8]	(1 5 0)	(2 2 -1)	3.443	3.716	0.93	54.4	60.8
[5 -1 -4]	(1 5 0)	(0 4 -1)	3.443	3.404	1.01	51.0	56.8
[5 -1 4]	(1 5 0)	(0 4 1)	3.443	3.404	1.01	41.2	81.2
[5 -1 -2]	(1 5 0)	(1 3 1)	3.443	3.393	1.01	45.4	65.7
[5 -1 6]	(1 5 0)	(-2 -4 1)	3.443	3.046	1.13	38.1	70.4
[5 -1 10]	(1 5 0)	(-1 5 1)	3.443	2.976	1.16	45.6	52.8
[5 -1 0]	(1 5 0)	(-1 -5 1)	3.443	2.976	1.16	35.9	76.0
[5 -1 12]	(1 5 0)	(3 3 -1)	3.443	2.775	1.24	47.4	46.1
[5 -1 0]	(1 5 0)	(1 5 1)	3.443	2.731	1.26	32.5	76.0
[5 -1 -6]	(1 5 0)	(0 6 -1)	3.443	2.624	1.31	41.3	49.4
[5 -1 6]	(1 5 0)	(0 6 1)	3.443	2.624	1.31	32.1	70.4
[5 -1 3]	(1 5 0)	(-1 1 2)	3.443	2.591	1.33	82.5	87.0
[5 -1 2]	(1 5 0)	(1 1 -2)	3.443	2.591	1.33	82.4	87.3
[5 -1 -6]	(1 5 0)	(2 4 1)	3.443	2.582	1.33	40.5	49.4
[5 -1 5]	(1 5 0)	(-2 0 2)	3.443	2.525	1.36	84.6	75.7
[5 -1 4]	(1 5 0)	(2 6 -1)	3.443	2.449	1.41	28.3	81.2
[5 -1 -1]	(1 5 0)	(0 -2 2)	3.443	2.438	1.41	80.9	70.7
[5 -1 1]	(1 5 0)	(0 2 2)	3.443	2.438	1.41	70.4	81.5
[5 -1 4]	(1 5 0)	(1 -3 -2)	3.443	2.407	1.43	68.5	81.2
[5 -1 1]	(1 5 0)	(1 3 -2)	3.443	2.407	1.43	68.4	81.5
[5 -1 10]	(1 5 0)	(-3 -5 1)	3.443	2.377	1.45	34.8	52.8
[5 -1 12]	(1 5 0)	(-1 7 1)	3.443	2.333	1.48	38.2	46.1
[5 -1 -2]	(1 5 0)	(-1 -7 1)	3.443	2.333	1.48	29.3	65.7
[5 -1 -3]	(1 5 0)	(1 -1 2)	3.443	2.287	1.51	87.1	61.1
[5 -1 -2]	(1 5 0)	(1 1 2)	3.443	2.287	1.51	73.6	65.7
[5 -1 8]	(1 5 0)	(3 -1 -2)	3.443	2.282	1.51	87.0	60.8
[5 -1 7]	(1 5 0)	(-3 -1 2)	3.443	2.282	1.51	73.5	65.4
[5 -1 7]	(1 5 0)	(-2 4 2)	3.443	2.214	1.56	68.4	65.4
[5 -1 3]	(1 5 0)	(-2 -4 2)	3.443	2.214	1.56	57.9	87.0
[5 -1 2]	(1 5 0)	(1 7 1)	3.443	2.210	1.56	25.0	87.3
[5 -1 -4]	(1 5 0)	(2 6 1)	3.443	2.188	1.57	30.0	56.8
[5 -1 -4]	(1 5 0)	(-1 3 -2)	3.443	2.158	1.60	80.1	56.8
[5 -1 -1]	(1 5 0)	(1 3 2)	3.443	2.158	1.60	60.9	70.7
[5 -1 9]	(1 5 0)	(-3 3 2)	3.443	2.154	1.60	80.3	56.6
[5 -1 6]	(1 5 0)	(3 3 -2)	3.443	2.154	1.60	60.9	70.4
[5 -1 5]	(1 5 0)	(-1 5 2)	3.443	2.133	1.61	57.3	75.7
[5 -1 0]	(1 5 0)	(-1 -5 2)	3.443	2.133	1.61	57.2	76.0
[5 -1 8]	(1 5 0)	(0 8 1)	3.443	2.095	1.64	27.3	60.8
[5 -1 -5]	(1 5 0)	(2 0 2)	3.443	2.036	1.69	77.1	53.0

Richterite (150) 294 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[5 -1 2]	(1 5 0)	(2 8 -1)	3.443	2.003	1.72	22.5	87.3
[5 -1 11]	(1 5 0)	(-4 2 2)	3.443	1.983	1.74	89.0	49.3
[5 -1 9]	(1 5 0)	(4 2 -2)	3.443	1.983	1.74	65.2	56.6
[5 -1 -5]	(1 5 0)	(1 -5 2)	3.443	1.954	1.76	69.3	53.0
[5 -1 0]	(1 5 0)	(1 5 2)	3.443	1.954	1.76	50.3	76.0
[5 -1 -3]	(1 5 0)	(0 6 -2)	3.443	1.951	1.76	58.4	61.1
[5 -1 3]	(1 5 0)	(0 6 2)	3.443	1.951	1.76	48.3	87.0
[5 -1 10]	(1 5 0)	(-3 5 2)	3.443	1.951	1.76	69.4	52.8
[5 -1 5]	(1 5 0)	(3 5 -2)	3.443	1.951	1.76	50.3	75.7
[5 -1 -4]	(1 5 0)	(-1 -9 1)	3.443	1.896	1.82	25.7	56.8
[5 -1 -7]	(1 5 0)	(-2 4 -2)	3.443	1.862	1.85	80.0	46.3
[5 -1 -3]	(1 5 0)	(2 4 2)	3.443	1.862	1.85	54.4	61.1
[5 -1 6]	(1 5 0)	(-1 7 2)	3.443	1.855	1.86	48.8	70.4
[5 -1 -1]	(1 5 0)	(-1 -7 2)	3.443	1.855	1.86	48.7	70.7
[5 -1 -2]	(1 5 0)	(2 8 1)	3.443	1.852	1.86	22.8	65.7
[5 -1 4]	(1 5 0)	(1 9 1)	3.443	1.828	1.88	20.7	81.2
[5 -1 -7]	(1 5 0)	(3 1 2)	3.443	1.772	1.94	69.6	46.3
[5 -1 12]	(1 5 0)	(-5 -1 2)	3.443	1.767	1.95	69.5	46.1
[15 -3 10]	(1 5 0)	(2 0 -3)	3.443	1.737	1.98	88.1	85.0
[5 -1 -6]	(1 5 0)	(1 -7 2)	3.443	1.734	1.99	60.7	49.4
[5 -1 1]	(1 5 0)	(1 7 2)	3.443	1.734	1.99	42.1	81.5
[5 -1 11]	(1 5 0)	(3 -7 -2)	3.443	1.732	1.99	60.8	49.3
[5 -1 4]	(1 5 0)	(3 7 -2)	3.443	1.732	1.99	42.0	81.2
[15 -3 4]	(1 5 0)	(-1 -1 3)	3.443	1.730	1.99	86.7	83.4
[5 -1 2]	(1 5 0)	(-1 1 3)	3.443	1.730	1.99	83.2	87.3
[5 -1 -6]	(1 5 0)	(3 3 2)	3.443	1.710	2.01	59.3	49.4
[5 -1 6]	(1 5 0)	(3 9 -1)	3.443	1.709	2.01	20.3	70.4
[5 -1 4]	(1 5 0)	(2 -2 -3)	3.443	1.707	2.02	81.9	81.2
[15 -3 8]	(1 5 0)	(2 2 -3)	3.443	1.707	2.02	78.1	88.9
[5 -1 11]	(1 5 0)	(-5 -3 2)	3.443	1.705	2.02	59.3	49.3
[5 -1 9]	(1 5 0)	(-2 8 2)	3.443	1.701	2.02	51.1	56.6
[5 -1 1]	(1 5 0)	(-2 -8 2)	3.443	1.701	2.02	41.1	81.5
[5 -1 7]	(1 5 0)	(-4 -6 2)	3.443	1.694	2.03	45.4	65.4
[15 -3 16]	(1 5 0)	(-3 1 3)	3.443	1.676	2.05	89.5	73.9
[15 -3 14]	(1 5 0)	(3 1 -3)	3.443	1.676	2.05	79.7	77.5
[5 -1 12]	(1 5 0)	(-4 -8 1)	3.443	1.676	2.05	26.4	46.1
[15 -3 2]	(1 5 0)	(1 3 -3)	3.443	1.672	2.06	77.0	79.7
[15 -3 8]	(1 5 0)	(1 -3 -3)	3.443	1.672	2.06	73.5	88.9
[15 -3 -2]	(1 5 0)	(0 2 -3)	3.443	1.658	2.08	85.5	72.4
[15 -3 2]	(1 5 0)	(0 2 3)	3.443	1.658	2.08	75.0	79.7
[15 -3 14]	(1 5 0)	(-2 4 3)	3.443	1.625	2.12	72.6	77.5
[5 -1 2]	(1 5 0)	(-2 -4 3)	3.443	1.625	2.12	68.9	87.3
[5 -1 7]	(1 5 0)	(-1 9 2)	3.443	1.612	2.14	42.6	65.4
[5 -1 -2]	(1 5 0)	(-1 -9 2)	3.443	1.612	2.14	42.5	65.7
[5 -1 -5]	(1 5 0)	(3 5 2)	3.443	1.603	2.15	50.1	53.0
[5 -1 10]	(1 5 0)	(-5 -5 2)	3.443	1.599	2.15	50.1	52.8
[15 -3 20]	(1 5 0)	(4 0 -3)	3.443	1.589	2.17	81.6	67.1
[5 -1 -2]	(1 5 0)	(-1 1 -3)	3.443	1.587	2.17	86.3	65.7

Richterite (150) 294 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[15 -3 -4]	(1 5 0)	(1 1 3)	3.443	1.587	2.17	77.0	69.0
[15 -3 -4]	(1 5 0)	(0 -4 3)	3.443	1.583	2.18	76.4	69.0
[15 -3 4]	(1 5 0)	(0 4 3)	3.443	1.583	2.18	65.9	83.4
[5 -1 0]	(1 5 0)	(1 5 -3)	3.443	1.572	2.19	68.2	76.0
[15 -3 10]	(1 5 0)	(1 -5 -3)	3.443	1.572	2.19	64.7	85.0
[5 -1 -6]	(1 5 0)	(3 9 1)	3.443	1.570	2.19	23.3	49.4
[15 -3 22]	(1 5 0)	(4 -2 -3)	3.443	1.566	2.20	89.2	63.9
[5 -1 6]	(1 5 0)	(4 2 -3)	3.443	1.566	2.20	72.3	70.4
[15 -3 -8]	(1 5 0)	(-1 3 -3)	3.443	1.541	2.23	84.6	62.6
[15 -3 -2]	(1 5 0)	(1 3 3)	3.443	1.541	2.23	68.0	72.4
[15 -3 20]	(1 5 0)	(-3 5 3)	3.443	1.531	2.25	72.3	67.1
[15 -3 10]	(1 5 0)	(-3 -5 3)	3.443	1.531	2.25	61.7	85.0
[5 -1 -7]	(1 5 0)	(-1 9 -2)	3.443	1.530	2.25	54.0	46.3
[5 -1 2]	(1 5 0)	(1 9 2)	3.443	1.530	2.25	35.8	87.3
[5 -1 12]	(1 5 0)	(-3 9 2)	3.443	1.529	2.25	54.1	46.1
[5 -1 3]	(1 5 0)	(-3 -9 2)	3.443	1.529	2.25	35.8	87.0
[5 -1 -1]	(1 5 0)	(2 8 2)	3.443	1.525	2.26	38.1	70.7
[15 -3 16]	(1 5 0)	(-2 6 3)	3.443	1.512	2.28	64.4	73.9
[15 -3 4]	(1 5 0)	(-2 -6 3)	3.443	1.512	2.28	60.7	83.4
[5 -1 8]	(1 5 0)	(-4 4 3)	3.443	1.502	2.29	80.4	60.8
[15 -3 16]	(1 5 0)	(-4 -4 3)	3.443	1.502	2.29	63.7	73.9
[15 -3 -10]	(1 5 0)	(2 0 3)	3.443	1.478	2.33	79.1	59.6
[5 -1 -4]	(1 5 0)	(3 7 2)	3.443	1.474	2.34	42.3	56.8
[5 -1 9]	(1 5 0)	(5 7 -2)	3.443	1.472	2.34	42.3	56.6
[15 -3 26]	(1 5 0)	(-5 1 3)	3.443	1.470	2.34	83.4	58.0
[5 -1 8]	(1 5 0)	(5 1 -3)	3.443	1.470	2.34	74.7	60.8
[15 -3 -10]	(1 5 0)	(1 -5 3)	3.443	1.462	2.36	76.2	59.6
[5 -1 0]	(1 5 0)	(1 5 3)	3.443	1.462	2.36	59.7	76.0
[5 -1 -4]	(1 5 0)	(-2 2 -3)	3.443	1.459	2.36	87.8	56.8
[15 -3 -8]	(1 5 0)	(2 2 3)	3.443	1.459	2.36	70.5	62.6
[15 -3 -2]	(1 5 0)	(-1 -7 3)	3.443	1.450	2.37	60.7	72.4
[5 -1 4]	(1 5 0)	(-1 7 3)	3.443	1.450	2.37	57.2	81.2
[15 -3 28]	(1 5 0)	(5 -3 -3)	3.443	1.433	2.40	88.1	55.3
[15 -3 22]	(1 5 0)	(5 3 -3)	3.443	1.433	2.40	66.2	63.9
[15 -3 22]	(1 5 0)	(3 -7 -3)	3.443	1.418	2.43	64.8	63.9
[15 -3 8]	(1 5 0)	(3 7 -3)	3.443	1.418	2.43	54.4	88.9
[15 -3 26]	(1 5 0)	(4 -6 -3)	3.443	1.411	2.44	72.6	58.0
[15 -3 14]	(1 5 0)	(4 6 -3)	3.443	1.411	2.44	55.9	77.5
[15 -3 -14]	(1 5 0)	(2 -4 3)	3.443	1.407	2.45	83.9	54.2
[5 -1 -2]	(1 5 0)	(2 4 3)	3.443	1.407	2.45	62.3	65.7
[5 -1 -7]	(1 5 0)	(4 6 2)	3.443	1.390	2.48	47.3	46.3
[15 -3 2]	(1 5 0)	(2 8 -3)	3.443	1.387	2.48	53.9	79.7
[5 -1 10]	(1 5 0)	(5 -5 -3)	3.443	1.369	2.52	80.2	52.8
[15 -3 20]	(1 5 0)	(5 5 -3)	3.443	1.369	2.52	58.4	67.1
[5 -1 -4]	(1 5 0)	(1 -7 3)	3.443	1.362	2.53	68.9	56.8
[15 -3 2]	(1 5 0)	(1 7 3)	3.443	1.362	2.53	52.5	79.7
[15 -3 -8]	(1 5 0)	(0 -8 3)	3.443	1.360	2.53	61.4	62.6
[15 -3 8]	(1 5 0)	(0 8 3)	3.443	1.360	2.53	51.2	88.9

Richterite (150) 294 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[15 -3 -14]	(1 5 0)	(3 1 3)	3.443	1.354	2.54	73.1	54.2
[5 -1 -3]	(1 5 0)	(3 9 2)	3.443	1.343	2.56	35.9	61.1
[5 -1 8]	(1 5 0)	(5 9 -2)	3.443	1.341	2.57	35.9	60.8
[15 -3 32]	(1 5 0)	(-6 2 3)	3.443	1.339	2.57	85.1	50.4
[15 -3 28]	(1 5 0)	(6 2 -3)	3.443	1.339	2.57	69.0	55.3
[15 -3 -16]	(1 5 0)	(2 -6 3)	3.443	1.332	2.59	76.4	51.7
[15 -3 -4]	(1 5 0)	(2 6 3)	3.443	1.332	2.59	54.9	69.0
[15 -3 -4]	(1 5 0)	(-1 -9 3)	3.443	1.325	2.60	54.4	69.0
[15 -3 14]	(1 5 0)	(-1 9 3)	3.443	1.325	2.60	51.0	77.5
[10 -2 5]	(1 5 0)	(-2 0 4)	3.443	1.308	2.63	89.9	89.9
[15 -3 28]	(1 5 0)	(-4 8 3)	3.443	1.308	2.63	65.8	55.3
[5 -1 4]	(1 5 0)	(-4 -8 3)	3.443	1.308	2.63	49.3	81.2
[15 -3 34]	(1 5 0)	(6 -4 -3)	3.443	1.299	2.65	87.2	48.2
[15 -3 26]	(1 5 0)	(6 4 -3)	3.443	1.299	2.65	61.4	58.0
[5 -1 1]	(1 5 0)	(-1 -1 4)	3.443	1.294	2.66	88.9	81.5
[10 -2 3]	(1 5 0)	(-1 1 4)	3.443	1.294	2.66	83.6	84.4
[5 -1 4]	(1 5 0)	(3 -1 -4)	3.443	1.293	2.66	89.0	81.2
[10 -2 7]	(1 5 0)	(3 1 -4)	3.443	1.293	2.66	83.5	84.1
[5 -1 11]	(1 5 0)	(6 8 -2)	3.443	1.289	2.67	40.5	49.3
[15 -3 32]	(1 5 0)	(5 -7 -3)	3.443	1.286	2.68	73.1	50.4
[5 -1 6]	(1 5 0)	(5 7 -3)	3.443	1.286	2.68	51.5	70.4
[15 -3 -20]	(1 5 0)	(3 -5 3)	3.443	1.274	2.70	83.5	47.3
[15 -3 -10]	(1 5 0)	(3 5 3)	3.443	1.274	2.70	57.8	59.6
[10 -2 1]	(1 5 0)	(-1 -3 4)	3.443	1.269	2.71	81.5	78.7
[5 -1 2]	(1 5 0)	(-1 3 4)	3.443	1.269	2.71	76.2	87.3
[10 -2 9]	(1 5 0)	(3 -3 -4)	3.443	1.268	2.71	81.6	78.4
[5 -1 3]	(1 5 0)	(3 3 -4)	3.443	1.268	2.71	76.1	87.0
[10 -2 3]	(1 5 0)	(2 4 -4)	3.443	1.259	2.74	75.1	84.4
[15 -3 -14]	(1 5 0)	(1 -9 3)	3.443	1.257	2.74	62.6	54.2
[15 -3 4]	(1 5 0)	(1 9 3)	3.443	1.257	2.74	46.5	83.4
[10 -2 -1]	(1 5 0)	(0 -2 4)	3.443	1.252	2.75	87.9	73.3
[10 -2 1]	(1 5 0)	(0 2 4)	3.443	1.252	2.75	77.4	78.7
[10 -2 11]	(1 5 0)	(4 -2 -4)	3.443	1.251	2.75	88.0	73.0
[10 -2 9]	(1 5 0)	(4 2 -4)	3.443	1.251	2.75	77.3	78.4
[5 -1 -6]	(1 5 0)	(2 -8 3)	3.443	1.244	2.77	69.8	49.4
[15 -3 -2]	(1 5 0)	(2 8 3)	3.443	1.244	2.77	48.4	72.4
[15 -3 -20]	(1 5 0)	(4 0 3)	3.443	1.241	2.77	75.5	47.3
[5 -1 12]	(1 5 0)	(7 -1 -3)	3.443	1.235	2.79	79.2	46.1
[15 -3 34]	(1 5 0)	(-7 -1 3)	3.443	1.235	2.79	71.8	48.2
[15 -3 -22]	(1 5 0)	(4 -2 3)	3.443	1.230	2.80	83.0	45.3
[5 -1 -6]	(1 5 0)	(4 2 3)	3.443	1.230	2.80	68.1	49.4
[5 -1 0]	(1 5 0)	(1 5 -4)	3.443	1.224	2.81	74.5	76.0
[10 -2 5]	(1 5 0)	(1 -5 -4)	3.443	1.224	2.81	69.2	89.9
[5 -1 5]	(1 5 0)	(-3 5 4)	3.443	1.223	2.82	74.7	75.7
[10 -2 5]	(1 5 0)	(-3 -5 4)	3.443	1.223	2.82	69.1	89.9
[15 -3 32]	(1 5 0)	(7 3 -3)	3.443	1.214	2.84	64.5	50.4
[10 -2 -3]	(1 5 0)	(-1 1 -4)	3.443	1.211	2.84	85.9	68.1
[5 -1 -1]	(1 5 0)	(1 1 4)	3.443	1.211	2.84	78.8	70.7

Richterite (150) 294 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[10 -2 13]	(1 5 0)	(-5 1 4)	3.443	1.209	2.85	85.8	67.9
[5 -1 6]	(1 5 0)	(5 1 -4)	3.443	1.209	2.85	78.7	70.4
[15 -3 -22]	(1 5 0)	(3 -7 3)	3.443	1.206	2.85	76.7	45.3
[15 -3 -8]	(1 5 0)	(3 7 3)	3.443	1.206	2.85	51.2	62.6
[15 -3 -16]	(1 5 0)	(4 4 3)	3.443	1.199	2.87	61.0	51.7
[15 -3 34]	(1 5 0)	(-5 9 3)	3.443	1.196	2.88	66.9	48.2
[15 -3 16]	(1 5 0)	(-5 -9 3)	3.443	1.196	2.88	45.5	73.9
[5 -1 -2]	(1 5 0)	(-1 3 -4)	3.443	1.191	2.89	87.1	65.7
[10 -2 -1]	(1 5 0)	(1 3 4)	3.443	1.191	2.89	71.9	73.3
[5 -1 7]	(1 5 0)	(-5 3 4)	3.443	1.189	2.90	87.2	65.4
[10 -2 11]	(1 5 0)	(-5 -3 4)	3.443	1.189	2.90	71.8	73.0
[5 -1 10]	(1 5 0)	(7 5 -3)	3.443	1.173	2.93	57.6	52.8
[10 -2 -3]	(1 5 0)	(0 -6 4)	3.443	1.169	2.95	74.3	68.1
[10 -2 3]	(1 5 0)	(0 6 4)	3.443	1.169	2.95	63.8	84.4
[10 -2 13]	(1 5 0)	(4 -6 -4)	3.443	1.167	2.95	74.4	67.9
[10 -2 7]	(1 5 0)	(4 6 -4)	3.443	1.167	2.95	63.8	84.1
[15 -3 22]	(1 5 0)	(-6 -8 3)	3.443	1.167	2.95	48.2	63.9
[10 -2 -1]	(1 5 0)	(1 7 -4)	3.443	1.163	2.96	68.2	73.3
[5 -1 3]	(1 5 0)	(-1 7 4)	3.443	1.163	2.96	62.9	87.0
[10 -2 11]	(1 5 0)	(3 -7 -4)	3.443	1.163	2.96	68.3	73.0
[5 -1 2]	(1 5 0)	(3 7 -4)	3.443	1.163	2.96	62.8	87.3
[10 -2 -5]	(1 5 0)	(1 -5 4)	3.443	1.153	2.99	80.4	63.3
[5 -1 0]	(1 5 0)	(1 5 4)	3.443	1.153	2.99	65.3	76.0
[10 -2 -5]	(1 5 0)	(2 0 4)	3.443	1.153	2.99	80.3	63.3
[10 -2 15]	(1 5 0)	(-5 5 4)	3.443	1.151	2.99	80.5	63.1
[5 -1 5]	(1 5 0)	(5 5 -4)	3.443	1.151	2.99	65.2	75.7
[15 -3 -14]	(1 5 0)	(4 6 3)	3.443	1.151	2.99	54.4	54.2
[10 -2 15]	(1 5 0)	(6 0 -4)	3.443	1.150	2.99	80.2	63.1
[10 -2 9]	(1 5 0)	(2 -8 -4)	3.443	1.138	3.03	62.5	78.4
[10 -2 1]	(1 5 0)	(2 8 -4)	3.443	1.138	3.03	62.4	78.7
[15 -3 28]	(1 5 0)	(7 7 -3)	3.443	1.120	3.07	51.4	55.3
[10 -2 -7]	(1 5 0)	(2 -4 4)	3.443	1.118	3.08	86.3	58.9
[10 -2 -3]	(1 5 0)	(2 4 4)	3.443	1.118	3.08	67.0	68.1
[15 -3 -22]	(1 5 0)	(5 3 3)	3.443	1.116	3.09	64.2	45.3
[10 -2 17]	(1 5 0)	(-6 4 4)	3.443	1.116	3.09	86.4	58.7
[10 -2 13]	(1 5 0)	(-6 -4 4)	3.443	1.116	3.09	67.0	67.9
[5 -1 -3]	(1 5 0)	(-1 7 -4)	3.443	1.102	3.12	74.3	61.1
[10 -2 1]	(1 5 0)	(1 7 4)	3.443	1.102	3.12	59.2	78.7
[5 -1 8]	(1 5 0)	(-5 7 4)	3.443	1.101	3.13	74.4	60.8
[10 -2 9]	(1 5 0)	(-5 -7 4)	3.443	1.101	3.13	59.1	78.4
[5 -1 12]	(1 5 0)	(8 4 -3)	3.443	1.099	3.13	60.9	46.1
[5 -1 -1]	(1 5 0)	(-1 -9 4)	3.443	1.096	3.14	62.5	70.7
[10 -2 7]	(1 5 0)	(-1 9 4)	3.443	1.096	3.14	57.3	84.1
[5 -1 6]	(1 5 0)	(3 -9 -4)	3.443	1.095	3.14	62.7	70.4
[10 -2 3]	(1 5 0)	(3 9 -4)	3.443	1.095	3.14	57.2	84.4
[5 -1 -4]	(1 5 0)	(4 8 3)	3.443	1.093	3.15	48.4	56.8
[15 -3 -20]	(1 5 0)	(5 5 3)	3.443	1.085	3.17	57.8	47.3
[5 -1 -4]	(1 5 0)	(3 -1 4)	3.443	1.084	3.18	81.8	56.8

Richterite (150) 294 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[10 -2 -7]	(1 5 0)	(3 1 4)	3.443	1.084	3.18	75.3	58.9
[5 -1 9]	(1 5 0)	(7 -1 -4)	3.443	1.081	3.18	81.7	56.6
[10 -2 17]	(1 5 0)	(7 1 -4)	3.443	1.081	3.18	75.3	58.7
[10 -2 -9]	(1 5 0)	(3 -3 4)	3.443	1.069	3.22	88.1	54.8
[5 -1 -3]	(1 5 0)	(3 3 4)	3.443	1.069	3.22	69.0	61.1
[10 -2 19]	(1 5 0)	(7 -3 -4)	3.443	1.067	3.23	88.1	54.6
[5 -1 8]	(1 5 0)	(-7 -3 4)	3.443	1.067	3.23	69.0	60.8
[15 -3 34]	(1 5 0)	(8 6 -3)	3.443	1.062	3.24	54.8	48.2
[15 -3 26]	(1 5 0)	(7 9 -3)	3.443	1.059	3.25	45.7	58.0
[5 -1 2]	(1 5 0)	(2 0 -5)	3.443	1.045	3.29	89.0	87.3
[10 -2 -7]	(1 5 0)	(-1 9 -4)	3.443	1.044	3.30	68.7	58.9
[5 -1 1]	(1 5 0)	(1 9 4)	3.443	1.044	3.30	53.8	81.5
[25 -5 16]	(1 5 0)	(-3 1 5)	3.443	1.043	3.30	88.1	85.8
[25 -5 14]	(1 5 0)	(-3 -1 5)	3.443	1.043	3.30	85.8	88.1
[10 -2 17]	(1 5 0)	(-5 9 4)	3.443	1.043	3.30	68.8	58.7
[5 -1 4]	(1 5 0)	(-5 -9 4)	3.443	1.043	3.30	53.7	81.2
[5 -1 -6]	(1 5 0)	(5 7 3)	3.443	1.042	3.30	51.8	49.4
[5 -1 -5]	(1 5 0)	(-3 5 -4)	3.443	1.041	3.31	85.7	53.0
[10 -2 -5]	(1 5 0)	(3 5 4)	3.443	1.041	3.31	63.0	63.3
[5 -1 10]	(1 5 0)	(-7 5 4)	3.443	1.039	3.31	85.8	52.8
[10 -2 15]	(1 5 0)	(-7 -5 4)	3.443	1.039	3.31	62.9	63.1
[25 -5 8]	(1 5 0)	(2 2 -5)	3.443	1.039	3.31	85.0	85.0
[25 -5 12]	(1 5 0)	(2 -2 -5)	3.443	1.039	3.31	82.9	89.6
[5 -1 4]	(1 5 0)	(4 0 -5)	3.443	1.033	3.33	86.7	81.2
[25 -5 4]	(1 5 0)	(1 1 -5)	3.443	1.032	3.34	89.8	80.4
[25 -5 6]	(1 5 0)	(-1 1 5)	3.443	1.032	3.34	83.8	82.7
[10 -2 -9]	(1 5 0)	(-2 8 -4)	3.443	1.031	3.34	74.4	54.8
[10 -2 -1]	(1 5 0)	(2 8 4)	3.443	1.031	3.34	55.3	73.3
[25 -5 18]	(1 5 0)	(3 -3 -5)	3.443	1.030	3.34	82.1	83.5
[25 -5 12]	(1 5 0)	(3 3 -5)	3.443	1.030	3.34	79.8	89.6
[10 -2 19]	(1 5 0)	(6 -8 -4)	3.443	1.029	3.35	74.6	54.6
[10 -2 11]	(1 5 0)	(6 8 -4)	3.443	1.029	3.35	55.3	73.0
[25 -5 22]	(1 5 0)	(4 -2 -5)	3.443	1.026	3.35	87.3	79.0
[25 -5 18]	(1 5 0)	(4 2 -5)	3.443	1.026	3.35	80.7	83.5
[25 -5 6]	(1 5 0)	(-2 -4 5)	3.443	1.019	3.38	79.1	82.7
[25 -5 14]	(1 5 0)	(-2 4 5)	3.443	1.019	3.38	77.0	88.1
[25 -5 2]	(1 5 0)	(-1 -3 5)	3.443	1.019	3.38	84.3	78.2
[25 -5 8]	(1 5 0)	(-1 3 5)	3.443	1.019	3.38	77.9	85.0
[10 -2 -11]	(1 5 0)	(4 -2 4)	3.443	1.012	3.40	83.2	51.2
[10 -2 -9]	(1 5 0)	(4 2 4)	3.443	1.012	3.40	71.1	54.8
[10 -2 21]	(1 5 0)	(8 -2 -4)	3.443	1.009	3.41	83.1	51.0
[10 -2 19]	(1 5 0)	(-8 -2 4)	3.443	1.009	3.41	71.0	54.6
[25 -5 26]	(1 5 0)	(5 -1 -5)	3.443	1.008	3.41	87.6	74.6
[25 -5 24]	(1 5 0)	(-5 -1 5)	3.443	1.008	3.41	81.7	76.8
[25 -5 24]	(1 5 0)	(-4 4 5)	3.443	1.008	3.42	81.5	76.8
[25 -5 16]	(1 5 0)	(-4 -4 5)	3.443	1.008	3.42	74.9	85.8
[5 -1 4]	(1 5 0)	(-3 5 5)	3.443	1.005	3.42	76.4	81.2
[5 -1 2]	(1 5 0)	(-3 -5 5)	3.443	1.005	3.42	74.1	87.3

Richterite (150) 294 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[25 -5 -2]	(1 5 0)	(0 2 -5)	3.443	1.005	3.42	89.4	73.8
[25 -5 2]	(1 5 0)	(0 2 5)	3.443	1.005	3.42	78.9	78.2
[10 -2 -11]	(1 5 0)	(-3 7 -4)	3.443	1.004	3.43	80.0	51.2
[5 -1 -2]	(1 5 0)	(3 7 4)	3.443	1.004	3.43	57.3	65.7
[10 -2 21]	(1 5 0)	(7 -7 -4)	3.443	1.002	3.44	80.1	51.0
[5 -1 7]	(1 5 0)	(7 7 -4)	3.443	1.002	3.44	57.3	65.4

Richterite (240) 331 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[2 -1 0]	(2 4 0)	(0 0 1)	3.337	5.056	0.66	79.8	79.0
[2 -1 3]	(2 4 0)	(1 -1 -1)	3.337	4.870	0.69	89.0	68.5
[2 -1 1]	(2 4 0)	(1 1 -1)	3.337	4.870	0.69	68.5	89.9
[2 -1 -2]	(2 4 0)	(0 2 -1)	3.337	4.432	0.75	78.9	59.7
[2 -1 2]	(2 4 0)	(0 2 1)	3.337	4.432	0.75	59.7	78.8
[2 -1 4]	(2 4 0)	(2 0 -1)	3.337	4.061	0.82	64.2	59.5
[2 -1 -3]	(2 4 0)	(1 -1 1)	3.337	3.976	0.84	74.6	52.0
[2 -1 -1]	(2 4 0)	(1 1 1)	3.337	3.976	0.84	54.6	68.7
[2 -1 5]	(2 4 0)	(-1 3 1)	3.337	3.900	0.86	71.3	51.9
[2 -1 -1]	(2 4 0)	(-1 -3 1)	3.337	3.900	0.86	53.1	68.7
[2 -1 6]	(2 4 0)	(2 -2 -1)	3.337	3.716	0.90	84.0	45.6
[2 -1 2]	(2 4 0)	(-2 -2 1)	3.337	3.716	0.90	46.4	78.8
[2 -1 -4]	(2 4 0)	(0 4 -1)	3.337	3.404	0.98	65.4	45.7
[2 -1 4]	(2 4 0)	(0 4 1)	3.337	3.404	0.98	49.0	59.5
[2 -1 1]	(2 4 0)	(1 3 1)	3.337	3.393	0.98	40.4	89.9
[2 -1 -4]	(2 4 0)	(2 0 1)	3.337	3.119	1.07	56.4	45.7
[2 -1 5]	(2 4 0)	(-3 -1 1)	3.337	3.067	1.09	48.2	51.9
[2 -1 0]	(2 4 0)	(2 4 -1)	3.337	3.046	1.10	36.3	79.0
[2 -1 -3]	(2 4 0)	(-1 -5 1)	3.337	2.976	1.12	46.2	52.0
[2 -1 -2]	(2 4 0)	(2 2 1)	3.337	2.954	1.13	40.8	59.7
[2 -1 3]	(2 4 0)	(-3 -3 1)	3.337	2.775	1.20	34.7	68.5
[2 -1 3]	(2 4 0)	(1 5 1)	3.337	2.731	1.22	34.1	68.5
[2 -1 6]	(2 4 0)	(0 6 1)	3.337	2.624	1.27	44.6	45.6
[4 -2 3]	(2 4 0)	(-1 1 2)	3.337	2.591	1.29	84.3	84.3
[4 -2 1]	(2 4 0)	(-1 -1 2)	3.337	2.591	1.29	84.0	84.5
[2 -1 0]	(2 4 0)	(2 4 1)	3.337	2.582	1.29	30.2	79.0
[2 -1 2]	(2 4 0)	(2 0 -2)	3.337	2.525	1.32	79.6	78.8
[2 -1 -2]	(2 4 0)	(-2 -6 1)	3.337	2.449	1.36	32.8	59.7
[2 -1 -1]	(2 4 0)	(0 2 -2)	3.337	2.438	1.37	88.8	68.7
[2 -1 1]	(2 4 0)	(0 2 2)	3.337	2.438	1.37	68.7	89.9
[4 -2 5]	(2 4 0)	(-1 3 2)	3.337	2.407	1.39	73.6	73.5
[4 -2 -1]	(2 4 0)	(-1 -3 2)	3.337	2.407	1.39	73.4	73.7
[2 -1 1]	(2 4 0)	(3 5 -1)	3.337	2.377	1.40	27.0	89.9
[2 -1 6]	(2 4 0)	(-4 -2 1)	3.337	2.363	1.41	39.2	45.6
[4 -2 -3]	(2 4 0)	(1 -1 2)	3.337	2.287	1.46	76.5	64.0
[4 -2 -1]	(2 4 0)	(1 1 2)	3.337	2.287	1.46	65.6	73.7
[4 -2 7]	(2 4 0)	(3 -1 -2)	3.337	2.282	1.46	76.3	63.8
[4 -2 5]	(2 4 0)	(3 1 -2)	3.337	2.282	1.46	65.4	73.5
[2 -1 -3]	(2 4 0)	(3 3 1)	3.337	2.275	1.47	33.5	52.0
[2 -1 4]	(2 4 0)	(-2 4 2)	3.337	2.214	1.51	79.1	59.5
[2 -1 0]	(2 4 0)	(-2 -4 2)	3.337	2.214	1.51	59.5	79.0
[2 -1 5]	(2 4 0)	(1 7 1)	3.337	2.210	1.51	32.5	51.9
[2 -1 2]	(2 4 0)	(2 6 1)	3.337	2.188	1.53	25.2	78.8
[2 -1 4]	(2 4 0)	(4 4 -1)	3.337	2.159	1.55	28.6	59.5
[4 -2 -5]	(2 4 0)	(-1 3 -2)	3.337	2.158	1.55	87.1	55.7
[4 -2 1]	(2 4 0)	(1 3 2)	3.337	2.158	1.55	55.9	84.5
[4 -2 9]	(2 4 0)	(-3 3 2)	3.337	2.154	1.55	86.9	55.5
[4 -2 3]	(2 4 0)	(3 3 -2)	3.337	2.154	1.55	55.8	84.3

Richterite (240) 331 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[4 -2 7]	(2 4 0)	(1 -5 -2)	3.337	2.133	1.56	65.3	63.8
[4 -2 -3]	(2 4 0)	(1 5 -2)	3.337	2.133	1.56	65.1	64.0
[2 -1 -1]	(2 4 0)	(3 5 1)	3.337	2.040	1.64	24.7	68.7
[2 -1 -2]	(2 4 0)	(2 0 2)	3.337	2.036	1.64	64.4	59.7
[2 -1 -4]	(2 4 0)	(-2 -8 1)	3.337	2.003	1.67	32.3	45.7
[2 -1 5]	(2 4 0)	(4 -2 -2)	3.337	1.983	1.68	74.4	51.9
[2 -1 3]	(2 4 0)	(4 2 -2)	3.337	1.983	1.68	54.5	68.5
[4 -2 -7]	(2 4 0)	(1 -5 2)	3.337	1.954	1.71	83.8	48.7
[4 -2 3]	(2 4 0)	(1 5 2)	3.337	1.954	1.71	48.6	84.3
[2 -1 -3]	(2 4 0)	(0 -6 2)	3.337	1.951	1.71	71.1	52.0
[2 -1 3]	(2 4 0)	(0 6 2)	3.337	1.951	1.71	53.3	68.5
[4 -2 11]	(2 4 0)	(3 -5 -2)	3.337	1.951	1.71	84.0	48.6
[4 -2 1]	(2 4 0)	(3 5 -2)	3.337	1.951	1.71	48.5	84.5
[2 -1 2]	(2 4 0)	(4 6 -1)	3.337	1.912	1.75	21.9	78.8
[2 -1 -4]	(2 4 0)	(-2 4 -2)	3.337	1.862	1.79	84.1	45.7
[2 -1 0]	(2 4 0)	(2 4 2)	3.337	1.862	1.79	46.4	79.0
[4 -2 9]	(2 4 0)	(-1 7 2)	3.337	1.855	1.80	59.3	55.5
[4 -2 -5]	(2 4 0)	(-1 -7 2)	3.337	1.855	1.80	59.2	55.7
[2 -1 4]	(2 4 0)	(2 8 1)	3.337	1.852	1.80	24.3	59.5
[2 -1 -4]	(2 4 0)	(4 4 1)	3.337	1.829	1.82	29.2	45.7
[2 -1 1]	(2 4 0)	(3 7 1)	3.337	1.793	1.86	20.0	89.9
[4 -2 -7]	(2 4 0)	(-3 1 -2)	3.337	1.772	1.88	64.4	48.7
[4 -2 -5]	(2 4 0)	(3 1 2)	3.337	1.772	1.88	55.1	55.7
[4 -2 11]	(2 4 0)	(-5 1 2)	3.337	1.767	1.89	64.3	48.6
[4 -2 9]	(2 4 0)	(5 1 -2)	3.337	1.767	1.89	55.0	55.5
[2 -1 5]	(2 4 0)	(-5 -5 1)	3.337	1.750	1.91	25.2	51.9
[6 -3 4]	(2 4 0)	(2 0 -3)	3.337	1.737	1.92	86.4	86.2
[4 -2 5]	(2 4 0)	(1 7 2)	3.337	1.734	1.92	43.7	73.5
[4 -2 -1]	(2 4 0)	(3 7 -2)	3.337	1.732	1.93	43.6	73.7
[6 -3 1]	(2 4 0)	(1 1 -3)	3.337	1.730	1.93	89.5	82.7
[2 -1 1]	(2 4 0)	(1 -1 -3)	3.337	1.730	1.93	82.7	89.9
[4 -2 -3]	(2 4 0)	(3 3 2)	3.337	1.710	1.95	46.6	64.0
[2 -1 -3]	(2 4 0)	(-3 -9 1)	3.337	1.709	1.95	24.5	52.0
[2 -1 2]	(2 4 0)	(-2 2 3)	3.337	1.707	1.95	85.9	78.8
[6 -3 2]	(2 4 0)	(-2 -2 3)	3.337	1.707	1.95	78.6	86.4
[4 -2 7]	(2 4 0)	(5 3 -2)	3.337	1.705	1.96	46.6	63.8
[2 -1 6]	(2 4 0)	(2 -8 -2)	3.337	1.701	1.96	65.6	45.6
[2 -1 -2]	(2 4 0)	(2 8 -2)	3.337	1.701	1.96	48.9	59.7
[2 -1 1]	(2 4 0)	(4 6 -2)	3.337	1.694	1.97	40.3	89.9
[6 -3 7]	(2 4 0)	(3 -1 -3)	3.337	1.676	1.99	83.4	75.3
[6 -3 5]	(2 4 0)	(-3 -1 3)	3.337	1.676	1.99	75.7	82.5
[2 -1 0]	(2 4 0)	(4 8 -1)	3.337	1.676	1.99	19.0	79.0
[6 -3 -1]	(2 4 0)	(1 3 -3)	3.337	1.672	2.00	82.0	75.5
[6 -3 5]	(2 4 0)	(1 -3 -3)	3.337	1.672	2.00	75.2	82.5
[2 -1 -2]	(2 4 0)	(4 6 1)	3.337	1.672	2.00	21.7	59.7
[6 -3 -2]	(2 4 0)	(0 -2 3)	3.337	1.658	2.01	87.4	72.0
[6 -3 2]	(2 4 0)	(0 2 3)	3.337	1.658	2.01	72.2	86.4
[6 -3 8]	(2 4 0)	(-2 4 3)	3.337	1.625	2.05	78.7	71.8

Richterite (240) 331 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[2 -1 0]	(2 4 0)	(-2 -4 3)	3.337	1.625	2.05	71.6	79.0
[4 -2 11]	(2 4 0)	(-1 9 2)	3.337	1.612	2.07	55.3	48.6
[4 -2 -7]	(2 4 0)	(-1 -9 2)	3.337	1.612	2.07	55.1	48.7
[4 -2 -1]	(2 4 0)	(3 5 2)	3.337	1.603	2.08	39.6	73.7
[4 -2 5]	(2 4 0)	(-5 -5 2)	3.337	1.599	2.09	39.6	73.5
[6 -3 8]	(2 4 0)	(4 0 -3)	3.337	1.589	2.10	73.5	71.8
[2 -1 3]	(2 4 0)	(-5 -7 1)	3.337	1.587	2.10	19.0	68.5
[2 -1 -1]	(2 4 0)	(1 -1 3)	3.337	1.587	2.10	77.4	68.7
[6 -3 -1]	(2 4 0)	(1 1 3)	3.337	1.587	2.10	70.0	75.5
[6 -3 -4]	(2 4 0)	(0 4 -3)	3.337	1.583	2.11	85.3	65.5
[6 -3 4]	(2 4 0)	(0 4 3)	3.337	1.583	2.11	65.4	86.2
[2 -1 -1]	(2 4 0)	(1 5 -3)	3.337	1.572	2.12	75.2	68.7
[6 -3 7]	(2 4 0)	(1 -5 -3)	3.337	1.572	2.12	68.7	75.3
[2 -1 3]	(2 4 0)	(3 9 1)	3.337	1.570	2.13	18.8	68.5
[6 -3 10]	(2 4 0)	(-4 2 3)	3.337	1.566	2.13	81.0	65.4
[2 -1 2]	(2 4 0)	(4 2 -3)	3.337	1.566	2.13	66.2	78.8
[6 -3 -5]	(2 4 0)	(-1 3 -3)	3.337	1.541	2.16	84.8	62.5
[6 -3 1]	(2 4 0)	(1 3 3)	3.337	1.541	2.16	63.0	82.7
[2 -1 -3]	(2 4 0)	(4 2 2)	3.337	1.538	2.17	48.2	52.0
[6 -3 11]	(2 4 0)	(3 -5 -3)	3.337	1.531	2.18	82.2	62.3
[6 -3 1]	(2 4 0)	(3 5 -3)	3.337	1.531	2.18	62.2	82.7
[4 -2 7]	(2 4 0)	(1 9 2)	3.337	1.530	2.18	40.7	63.8
[4 -2 -3]	(2 4 0)	(-3 -9 2)	3.337	1.529	2.18	40.5	64.0
[2 -1 2]	(2 4 0)	(2 8 2)	3.337	1.525	2.19	36.4	78.8
[6 -3 10]	(2 4 0)	(2 -6 -3)	3.337	1.512	2.21	72.4	65.4
[6 -3 -2]	(2 4 0)	(2 6 -3)	3.337	1.512	2.21	65.6	72.0
[2 -1 0]	(2 4 0)	(4 8 1)	3.337	1.507	2.21	17.1	79.0
[2 -1 4]	(2 4 0)	(-4 4 3)	3.337	1.502	2.22	88.2	59.5
[6 -3 4]	(2 4 0)	(4 4 -3)	3.337	1.502	2.22	59.7	86.2
[6 -3 -4]	(2 4 0)	(2 0 3)	3.337	1.478	2.26	68.5	65.5
[4 -2 1]	(2 4 0)	(3 7 2)	3.337	1.474	2.26	34.5	84.5
[2 -1 4]	(2 4 0)	(6 4 -2)	3.337	1.474	2.26	40.8	59.5
[4 -2 3]	(2 4 0)	(-5 -7 2)	3.337	1.472	2.27	34.4	84.3
[6 -3 11]	(2 4 0)	(5 -1 -3)	3.337	1.470	2.27	72.0	62.3
[2 -1 3]	(2 4 0)	(-5 -1 3)	3.337	1.470	2.27	64.8	68.5
[2 -1 6]	(2 4 0)	(6 6 -1)	3.337	1.466	2.28	23.1	45.6
[6 -3 -7]	(2 4 0)	(-1 5 -3)	3.337	1.462	2.28	88.3	56.9
[2 -1 1]	(2 4 0)	(1 5 3)	3.337	1.462	2.28	56.9	89.9
[2 -1 -2]	(2 4 0)	(2 -2 3)	3.337	1.459	2.29	75.7	59.7
[6 -3 -2]	(2 4 0)	(2 2 3)	3.337	1.459	2.29	61.6	72.0
[6 -3 -5]	(2 4 0)	(1 7 -3)	3.337	1.450	2.30	69.5	62.5
[2 -1 3]	(2 4 0)	(-1 7 3)	3.337	1.450	2.30	63.3	68.5
[6 -3 13]	(2 4 0)	(-5 3 3)	3.337	1.433	2.33	79.1	56.8
[6 -3 7]	(2 4 0)	(5 3 -3)	3.337	1.433	2.33	58.2	75.3
[2 -1 1]	(2 4 0)	(5 9 -1)	3.337	1.426	2.34	15.8	89.9
[6 -3 13]	(2 4 0)	(3 -7 -3)	3.337	1.418	2.35	76.2	56.8
[6 -3 -1]	(2 4 0)	(3 7 -3)	3.337	1.418	2.35	57.1	75.5
[6 -3 14]	(2 4 0)	(4 -6 -3)	3.337	1.411	2.36	85.4	54.3

Richterite (240) 331 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[6 -3 2]	(2 4 0)	(4 6 -3)	3.337	1.411	2.36	54.1	86.4
[2 -1 -3]	(2 4 0)	(5 7 1)	3.337	1.411	2.37	20.0	52.0
[6 -3 -8]	(2 4 0)	(2 -4 3)	3.337	1.407	2.37	82.7	54.4
[2 -1 0]	(2 4 0)	(2 4 3)	3.337	1.407	2.37	55.2	79.0
[2 -1 -1]	(2 4 0)	(4 6 2)	3.337	1.390	2.40	34.8	68.7
[6 -3 -4]	(2 4 0)	(-2 -8 3)	3.337	1.387	2.41	60.8	65.5
[2 -1 5]	(2 4 0)	(5 -5 -3)	3.337	1.369	2.44	85.8	51.9
[6 -3 5]	(2 4 0)	(-5 -5 3)	3.337	1.369	2.44	52.3	82.5
[2 -1 -3]	(2 4 0)	(-1 7 -3)	3.337	1.362	2.45	82.3	52.0
[6 -3 5]	(2 4 0)	(1 7 3)	3.337	1.362	2.45	52.0	82.5
[6 -3 -8]	(2 4 0)	(0 8 -3)	3.337	1.360	2.45	73.5	54.4
[6 -3 8]	(2 4 0)	(0 8 3)	3.337	1.360	2.45	55.1	71.8
[6 -3 -5]	(2 4 0)	(3 1 3)	3.337	1.354	2.47	61.0	62.5
[2 -1 4]	(2 4 0)	(6 8 -1)	3.337	1.351	2.47	17.4	59.5
[4 -2 3]	(2 4 0)	(3 9 2)	3.337	1.343	2.48	31.0	84.3
[4 -2 -7]	(2 4 0)	(5 3 2)	3.337	1.343	2.49	43.1	48.7
[4 -2 1]	(2 4 0)	(-5 -9 2)	3.337	1.341	2.49	31.0	84.5
[4 -2 11]	(2 4 0)	(7 3 -2)	3.337	1.340	2.49	43.1	48.6
[6 -3 14]	(2 4 0)	(-6 2 3)	3.337	1.339	2.49	71.1	54.3
[6 -3 10]	(2 4 0)	(6 2 -3)	3.337	1.339	2.49	57.6	65.4
[6 -3 -10]	(2 4 0)	(-2 6 -3)	3.337	1.332	2.51	89.1	49.8
[6 -3 2]	(2 4 0)	(2 6 3)	3.337	1.332	2.51	49.9	86.4
[6 -3 -7]	(2 4 0)	(1 9 -3)	3.337	1.325	2.52	64.9	56.9
[6 -3 11]	(2 4 0)	(1 -9 -3)	3.337	1.325	2.52	59.0	62.3
[2 -1 1]	(2 4 0)	(2 0 -4)	3.337	1.308	2.55	89.9	89.9
[6 -3 16]	(2 4 0)	(4 -8 -3)	3.337	1.308	2.55	79.7	49.6
[2 -1 0]	(2 4 0)	(4 8 -3)	3.337	1.308	2.55	49.8	79.0
[6 -3 16]	(2 4 0)	(6 -4 -3)	3.337	1.299	2.57	77.7	49.6
[6 -3 8]	(2 4 0)	(-6 -4 3)	3.337	1.299	2.57	51.6	71.8
[2 -1 -1]	(2 4 0)	(5 9 1)	3.337	1.294	2.58	15.4	68.7
[8 -4 1]	(2 4 0)	(1 1 -4)	3.337	1.294	2.58	87.8	81.8
[8 -4 3]	(2 4 0)	(-1 1 4)	3.337	1.294	2.58	81.9	87.3
[8 -4 7]	(2 4 0)	(-3 1 4)	3.337	1.293	2.58	87.5	81.5
[8 -4 5]	(2 4 0)	(3 1 -4)	3.337	1.293	2.58	81.7	87.1
[4 -2 -5]	(2 4 0)	(5 5 2)	3.337	1.289	2.59	36.6	55.7
[2 -1 2]	(2 4 0)	(-6 -8 2)	3.337	1.289	2.59	30.1	78.8
[4 -2 9]	(2 4 0)	(7 5 -2)	3.337	1.286	2.59	36.6	55.5
[6 -3 17]	(2 4 0)	(5 -7 -3)	3.337	1.286	2.59	88.1	47.5
[2 -1 1]	(2 4 0)	(5 7 -3)	3.337	1.286	2.59	47.5	89.9
[6 -3 -11]	(2 4 0)	(-3 5 -3)	3.337	1.274	2.62	81.1	47.6
[6 -3 -1]	(2 4 0)	(3 5 3)	3.337	1.274	2.62	48.9	75.5
[8 -4 -1]	(2 4 0)	(-1 -3 4)	3.337	1.269	2.63	86.5	76.4
[8 -4 5]	(2 4 0)	(-1 3 4)	3.337	1.269	2.63	76.2	87.1
[8 -4 9]	(2 4 0)	(3 -3 -4)	3.337	1.268	2.63	86.7	76.1
[8 -4 3]	(2 4 0)	(3 3 -4)	3.337	1.268	2.63	76.0	87.3
[2 -1 0]	(2 4 0)	(-2 -4 4)	3.337	1.259	2.65	78.5	79.0
[6 -3 -11]	(2 4 0)	(-1 9 -3)	3.337	1.257	2.66	77.1	47.6
[6 -3 7]	(2 4 0)	(1 9 3)	3.337	1.257	2.66	48.1	75.3

Richterite (240) 331 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[4 -2 -1]	(2 4 0)	(0 2 -4)	3.337	1.252	2.66	85.5	73.7
[4 -2 1]	(2 4 0)	(0 2 4)	3.337	1.252	2.66	74.0	84.5
[4 -2 5]	(2 4 0)	(-4 2 4)	3.337	1.251	2.67	85.3	73.5
[4 -2 3]	(2 4 0)	(4 2 -4)	3.337	1.251	2.67	73.9	84.3
[2 -1 -4]	(2 4 0)	(2 -8 3)	3.337	1.244	2.68	85.2	45.7
[6 -3 4]	(2 4 0)	(2 8 3)	3.337	1.244	2.68	45.6	86.2
[6 -3 -8]	(2 4 0)	(4 0 3)	3.337	1.241	2.69	61.1	54.4
[2 -1 5]	(2 4 0)	(7 -1 -3)	3.337	1.235	2.70	64.2	51.9
[6 -3 13]	(2 4 0)	(-7 -1 3)	3.337	1.235	2.70	57.8	56.8
[6 -3 -10]	(2 4 0)	(4 -2 3)	3.337	1.230	2.71	67.5	49.8
[2 -1 -2]	(2 4 0)	(4 2 3)	3.337	1.230	2.71	54.8	59.7
[8 -4 -3]	(2 4 0)	(1 5 -4)	3.337	1.224	2.73	81.0	71.2
[8 -4 7]	(2 4 0)	(1 -5 -4)	3.337	1.224	2.73	71.0	81.5
[8 -4 11]	(2 4 0)	(-3 5 4)	3.337	1.223	2.73	81.3	71.0
[8 -4 1]	(2 4 0)	(-3 -5 4)	3.337	1.223	2.73	70.8	81.8
[4 -2 -3]	(2 4 0)	(5 7 2)	3.337	1.219	2.74	31.2	64.0
[2 -1 -4]	(2 4 0)	(6 8 1)	3.337	1.218	2.74	19.0	45.7
[4 -2 7]	(2 4 0)	(7 7 -2)	3.337	1.217	2.74	31.2	63.8
[6 -3 17]	(2 4 0)	(7 -3 -3)	3.337	1.214	2.75	70.6	47.5
[6 -3 11]	(2 4 0)	(-7 -3 3)	3.337	1.214	2.75	51.7	62.3
[8 -4 -3]	(2 4 0)	(1 -1 4)	3.337	1.211	2.76	77.9	71.2
[8 -4 -1]	(2 4 0)	(1 1 4)	3.337	1.211	2.76	72.3	76.4
[8 -4 11]	(2 4 0)	(5 -1 -4)	3.337	1.209	2.76	77.8	71.0
[8 -4 9]	(2 4 0)	(-5 -1 4)	3.337	1.209	2.76	72.1	76.1
[6 -3 1]	(2 4 0)	(3 7 3)	3.337	1.206	2.77	44.2	82.7
[2 -1 -4]	(2 4 0)	(-4 4 -3)	3.337	1.199	2.78	73.8	45.7
[6 -3 -4]	(2 4 0)	(4 4 3)	3.337	1.199	2.78	49.0	65.5
[6 -3 1]	(2 4 0)	(-5 -9 3)	3.337	1.196	2.79	43.7	82.7
[8 -4 -5]	(2 4 0)	(1 -3 4)	3.337	1.191	2.80	83.6	66.3
[8 -4 1]	(2 4 0)	(1 3 4)	3.337	1.191	2.80	66.9	81.8
[8 -4 13]	(2 4 0)	(-5 3 4)	3.337	1.189	2.81	83.4	66.1
[8 -4 7]	(2 4 0)	(5 3 -4)	3.337	1.189	2.81	66.7	81.5
[2 -1 -4]	(2 4 0)	(6 4 2)	3.337	1.184	2.82	39.2	45.7
[2 -1 6]	(2 4 0)	(8 4 -2)	3.337	1.181	2.83	39.2	45.6
[2 -1 5]	(2 4 0)	(7 9 -1)	3.337	1.174	2.84	16.6	51.9
[2 -1 3]	(2 4 0)	(-7 -5 3)	3.337	1.173	2.84	46.3	68.5
[4 -2 -3]	(2 4 0)	(0 6 -4)	3.337	1.169	2.86	83.6	64.0
[4 -2 3]	(2 4 0)	(0 6 4)	3.337	1.169	2.86	63.9	84.3
[4 -2 7]	(2 4 0)	(-4 6 4)	3.337	1.167	2.86	83.8	63.8
[4 -2 1]	(2 4 0)	(-4 -6 4)	3.337	1.167	2.86	63.7	84.5
[6 -3 4]	(2 4 0)	(6 8 -3)	3.337	1.167	2.86	42.1	86.2
[8 -4 -5]	(2 4 0)	(-1 -7 4)	3.337	1.163	2.87	76.1	66.3
[8 -4 9]	(2 4 0)	(-1 7 4)	3.337	1.163	2.87	66.3	76.1
[8 -4 13]	(2 4 0)	(-3 7 4)	3.337	1.163	2.87	76.3	66.1
[8 -4 -1]	(2 4 0)	(-3 -7 4)	3.337	1.163	2.87	66.1	76.4
[8 -4 -7]	(2 4 0)	(1 -5 4)	3.337	1.153	2.89	89.0	61.8
[8 -4 3]	(2 4 0)	(1 5 4)	3.337	1.153	2.89	61.9	87.3
[2 -1 -1]	(2 4 0)	(2 0 4)	3.337	1.153	2.90	71.0	68.7

Richterite (240) 331 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[8 -4 15]	(2 4 0)	(-5 5 4)	3.337	1.151	2.90	88.8	61.6
[8 -4 5]	(2 4 0)	(5 5 -4)	3.337	1.151	2.90	61.7	87.1
[6 -3 -2]	(2 4 0)	(4 6 3)	3.337	1.151	2.90	43.9	72.0
[2 -1 3]	(2 4 0)	(6 0 -4)	3.337	1.150	2.90	70.8	68.5
[4 -2 -1]	(2 4 0)	(5 9 2)	3.337	1.142	2.92	27.0	73.7
[4 -2 5]	(2 4 0)	(-7 -9 2)	3.337	1.140	2.93	27.0	73.5
[2 -1 -1]	(2 4 0)	(2 8 -4)	3.337	1.138	2.93	68.9	68.7
[2 -1 5]	(2 4 0)	(-8 -6 2)	3.337	1.136	2.94	33.5	51.9
[6 -3 -11]	(2 4 0)	(5 -1 3)	3.337	1.133	2.95	61.5	47.6
[2 -1 -3]	(2 4 0)	(5 1 3)	3.337	1.133	2.95	55.5	52.0
[6 -3 16]	(2 4 0)	(8 0 -3)	3.337	1.132	2.95	58.4	49.6
[2 -1 6]	(2 4 0)	(8 -2 -3)	3.337	1.123	2.97	64.4	45.6
[6 -3 14]	(2 4 0)	(8 2 -3)	3.337	1.123	2.97	52.5	54.3
[6 -3 7]	(2 4 0)	(-7 -7 3)	3.337	1.120	2.98	41.6	75.3
[2 -1 -2]	(2 4 0)	(2 -4 4)	3.337	1.118	2.98	81.9	59.7
[2 -1 0]	(2 4 0)	(2 4 4)	3.337	1.118	2.98	60.5	79.0
[6 -3 -7]	(2 4 0)	(5 3 3)	3.337	1.116	2.99	49.7	56.9
[2 -1 4]	(2 4 0)	(-6 4 4)	3.337	1.116	2.99	81.8	59.5
[2 -1 2]	(2 4 0)	(6 4 -4)	3.337	1.116	2.99	60.4	78.8
[8 -4 -9]	(2 4 0)	(-1 7 -4)	3.337	1.102	3.03	86.0	57.6
[8 -4 5]	(2 4 0)	(1 7 4)	3.337	1.102	3.03	57.5	87.1
[8 -4 17]	(2 4 0)	(-5 7 4)	3.337	1.101	3.03	86.2	57.5
[8 -4 3]	(2 4 0)	(-5 -7 4)	3.337	1.101	3.03	57.3	87.3
[2 -1 4]	(2 4 0)	(8 4 -3)	3.337	1.099	3.04	47.0	59.5
[8 -4 -7]	(2 4 0)	(-1 -9 4)	3.337	1.096	3.05	71.8	61.8
[8 -4 11]	(2 4 0)	(-1 9 4)	3.337	1.096	3.05	62.3	71.0
[8 -4 15]	(2 4 0)	(3 -9 -4)	3.337	1.095	3.05	72.0	61.6
[8 -4 -3]	(2 4 0)	(3 9 -4)	3.337	1.095	3.05	62.1	71.2
[2 -1 0]	(2 4 0)	(4 8 3)	3.337	1.093	3.05	39.6	79.0
[6 -3 -5]	(2 4 0)	(5 5 3)	3.337	1.085	3.08	44.5	62.5
[8 -4 -7]	(2 4 0)	(3 -1 4)	3.337	1.084	3.08	70.1	61.8
[8 -4 -5]	(2 4 0)	(3 1 4)	3.337	1.084	3.08	64.8	66.3
[2 -1 -2]	(2 4 0)	(6 8 2)	3.337	1.081	3.09	28.6	59.7
[8 -4 15]	(2 4 0)	(7 -1 -4)	3.337	1.081	3.09	69.9	61.6
[8 -4 13]	(2 4 0)	(-7 -1 4)	3.337	1.081	3.09	64.6	66.1
[8 -4 -9]	(2 4 0)	(-3 3 -4)	3.337	1.069	3.12	75.4	57.6
[8 -4 -3]	(2 4 0)	(3 3 4)	3.337	1.069	3.12	59.7	71.2
[8 -4 17]	(2 4 0)	(-7 3 4)	3.337	1.067	3.13	75.2	57.5
[8 -4 11]	(2 4 0)	(7 3 -4)	3.337	1.067	3.13	59.6	71.0
[6 -3 10]	(2 4 0)	(-8 -6 3)	3.337	1.062	3.14	42.0	65.4
[6 -3 5]	(2 4 0)	(7 9 -3)	3.337	1.059	3.15	37.8	82.5
[10 -5 4]	(2 4 0)	(2 0 -5)	3.337	1.045	3.19	88.0	87.9
[8 -4 -11]	(2 4 0)	(-1 9 -4)	3.337	1.044	3.20	81.4	53.8
[8 -4 7]	(2 4 0)	(1 9 4)	3.337	1.044	3.20	53.8	81.5
[10 -5 7]	(2 4 0)	(3 -1 -5)	3.337	1.043	3.20	89.9	85.4
[2 -1 1]	(2 4 0)	(3 1 -5)	3.337	1.043	3.20	85.4	89.9
[8 -4 19]	(2 4 0)	(-5 9 4)	3.337	1.043	3.20	81.6	53.6
[8 -4 1]	(2 4 0)	(-5 -9 4)	3.337	1.043	3.20	53.6	81.8

Richterite (240) 331 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[2 -1 -1]	(2 4 0)	(5 7 3)	3.337	1.042	3.20	39.9	68.7
[8 -4 -11]	(2 4 0)	(-3 5 -4)	3.337	1.041	3.20	80.6	53.8
[8 -4 -1]	(2 4 0)	(3 5 4)	3.337	1.041	3.20	55.0	76.4
[8 -4 9]	(2 4 0)	(7 5 -4)	3.337	1.039	3.21	54.9	76.1
[10 -5 2]	(2 4 0)	(-2 -2 5)	3.337	1.039	3.21	87.3	83.4
[10 -5 6]	(2 4 0)	(-2 2 5)	3.337	1.039	3.21	83.3	87.6
[6 -3 17]	(2 4 0)	(-9 -1 3)	3.337	1.035	3.22	53.6	47.5
[6 -3 -10]	(2 4 0)	(6 2 3)	3.337	1.033	3.23	50.9	49.8
[10 -5 8]	(2 4 0)	(-4 0 5)	3.337	1.033	3.23	83.6	83.2
[10 -5 1]	(2 4 0)	(-1 -1 5)	3.337	1.032	3.23	86.1	81.2
[10 -5 3]	(2 4 0)	(1 -1 -5)	3.337	1.032	3.23	81.4	85.6
[2 -1 -3]	(2 4 0)	(-2 8 -4)	3.337	1.031	3.24	88.1	52.0
[2 -1 1]	(2 4 0)	(2 8 4)	3.337	1.031	3.24	52.0	89.9
[10 -5 9]	(2 4 0)	(3 -3 -5)	3.337	1.030	3.24	85.2	81.0
[10 -5 3]	(2 4 0)	(3 3 -5)	3.337	1.030	3.24	80.8	85.6
[2 -1 5]	(2 4 0)	(6 -8 -4)	3.337	1.029	3.24	88.3	51.9
[2 -1 1]	(2 4 0)	(6 8 -4)	3.337	1.029	3.24	51.8	89.9
[2 -1 2]	(2 4 0)	(-4 2 5)	3.337	1.026	3.25	88.3	78.8
[10 -5 6]	(2 4 0)	(4 2 -5)	3.337	1.026	3.25	78.9	87.6
[2 -1 5]	(2 4 0)	(-9 -3 3)	3.337	1.022	3.26	48.2	51.9
[2 -1 0]	(2 4 0)	(2 4 -5)	3.337	1.019	3.27	82.8	79.0
[10 -5 8]	(2 4 0)	(2 -4 -5)	3.337	1.019	3.27	78.8	83.2
[10 -5 -1]	(2 4 0)	(1 3 -5)	3.337	1.019	3.27	89.2	76.9
[2 -1 1]	(2 4 0)	(1 -3 -5)	3.337	1.019	3.27	76.9	89.9
[4 -2 -7]	(2 4 0)	(7 7 2)	3.337	1.015	3.29	31.1	48.7
[6 -3 -8]	(2 4 0)	(6 4 3)	3.337	1.014	3.29	45.6	54.4
[4 -2 11]	(2 4 0)	(9 7 -2)	3.337	1.013	3.29	31.1	48.6
[4 -2 -5]	(2 4 0)	(-4 2 -4)	3.337	1.012	3.30	69.5	55.7
[4 -2 -3]	(2 4 0)	(4 2 4)	3.337	1.012	3.30	59.3	64.0
[4 -2 9]	(2 4 0)	(-8 2 4)	3.337	1.009	3.31	69.4	55.5
[4 -2 7]	(2 4 0)	(8 2 -4)	3.337	1.009	3.31	59.2	63.8
[10 -5 11]	(2 4 0)	(5 -1 -5)	3.337	1.008	3.31	81.9	76.7
[10 -5 9]	(2 4 0)	(-5 -1 5)	3.337	1.008	3.31	77.2	81.0
[10 -5 12]	(2 4 0)	(-4 4 5)	3.337	1.008	3.31	87.2	74.6
[10 -5 4]	(2 4 0)	(4 4 -5)	3.337	1.008	3.31	74.5	87.9
[10 -5 11]	(2 4 0)	(3 -5 -5)	3.337	1.005	3.32	80.8	76.7
[10 -5 1]	(2 4 0)	(3 5 -5)	3.337	1.005	3.32	76.4	81.2
[10 -5 -2]	(2 4 0)	(0 2 -5)	3.337	1.005	3.32	84.4	74.8
[10 -5 2]	(2 4 0)	(0 2 5)	3.337	1.005	3.32	75.2	83.4
[8 -4 -13]	(2 4 0)	(-3 7 -4)	3.337	1.004	3.33	85.5	50.3
[8 -4 1]	(2 4 0)	(3 7 4)	3.337	1.004	3.33	50.8	81.8
[8 -4 21]	(2 4 0)	(-7 7 4)	3.337	1.002	3.33	85.3	50.2
[8 -4 7]	(2 4 0)	(7 7 -4)	3.337	1.002	3.33	50.7	81.5

Richterite (310) 380 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$
[1 -3 0]	(3 1 0)	(0 0 1)	3.181	5.056	0.63	75.3	87.4
[1 -3 4]	(3 1 0)	(-1 1 1)	3.181	4.870	0.65	78.2	71.9
[1 -3 -2]	(3 1 0)	(1 1 -1)	3.181	4.870	0.65	72.8	76.9
[1 -3 6]	(3 1 0)	(0 2 1)	3.181	4.432	0.72	72.2	62.8
[1 -3 2]	(3 1 0)	(2 0 -1)	3.181	4.061	0.78	51.6	82.0
[1 -3 -4]	(3 1 0)	(1 -1 1)	3.181	3.976	0.80	55.5	67.2
[1 -3 2]	(3 1 0)	(1 1 1)	3.181	3.976	0.80	50.1	82.0
[1 -3 -8]	(3 1 0)	(-1 -3 1)	3.181	3.900	0.82	71.9	51.6
[1 -3 8]	(3 1 0)	(2 -2 -1)	3.181	3.716	0.86	60.1	55.0
[1 -3 -4]	(3 1 0)	(-2 -2 1)	3.181	3.716	0.86	50.3	67.2
[1 -3 -10]	(3 1 0)	(1 -3 1)	3.181	3.393	0.94	65.2	45.6
[1 -3 8]	(3 1 0)	(1 3 1)	3.181	3.393	0.94	52.3	55.0
[1 -3 -2]	(3 1 0)	(2 0 1)	3.181	3.119	1.02	37.7	76.9
[1 -3 6]	(3 1 0)	(-3 1 1)	3.181	3.067	1.04	41.2	62.8
[1 -3 0]	(3 1 0)	(3 1 -1)	3.181	3.067	1.04	35.9	87.4
[1 -3 -10]	(3 1 0)	(2 4 -1)	3.181	3.046	1.04	54.5	45.6
[1 -3 -8]	(3 1 0)	(-2 2 -1)	3.181	2.954	1.08	46.1	51.6
[1 -3 4]	(3 1 0)	(2 2 1)	3.181	2.954	1.08	36.4	71.9
[1 -3 -6]	(3 1 0)	(-3 -3 1)	3.181	2.775	1.15	38.3	58.8
[1 -3 2]	(3 1 0)	(-1 1 2)	3.181	2.591	1.23	88.8	82.0
[1 -3 -1]	(3 1 0)	(-1 -1 2)	3.181	2.591	1.23	88.5	82.1
[1 -3 10]	(3 1 0)	(2 4 1)	3.181	2.582	1.23	41.3	48.4
[1 -3 1]	(3 1 0)	(2 0 -2)	3.181	2.525	1.26	75.0	87.3
[1 -3 4]	(3 1 0)	(-4 0 1)	3.181	2.444	1.30	29.4	71.9
[1 -3 -3]	(3 1 0)	(0 -2 2)	3.181	2.438	1.30	78.5	71.9
[1 -3 3]	(3 1 0)	(0 2 2)	3.181	2.438	1.30	73.1	76.8
[1 -3 -6]	(3 1 0)	(3 -1 1)	3.181	2.429	1.31	32.9	58.8
[1 -3 5]	(3 1 0)	(-1 3 2)	3.181	2.407	1.32	86.3	67.2
[1 -3 -4]	(3 1 0)	(-1 -3 2)	3.181	2.407	1.32	86.0	67.2
[1 -3 10]	(3 1 0)	(4 -2 -1)	3.181	2.363	1.35	37.1	48.4
[1 -3 -2]	(3 1 0)	(4 2 -1)	3.181	2.363	1.35	27.6	76.9
[1 -3 -2]	(3 1 0)	(1 -1 2)	3.181	2.287	1.39	63.8	76.9
[1 -3 1]	(3 1 0)	(1 1 2)	3.181	2.287	1.39	61.0	87.3
[1 -3 3]	(3 1 0)	(3 -1 -2)	3.181	2.282	1.39	63.6	76.8
[1 -3 0]	(3 1 0)	(-3 -1 2)	3.181	2.282	1.39	60.8	87.4
[1 -3 6]	(3 1 0)	(3 3 1)	3.181	2.275	1.40	29.3	62.8
[1 -3 7]	(3 1 0)	(-2 4 2)	3.181	2.214	1.44	81.7	58.7
[1 -3 -5]	(3 1 0)	(2 4 -2)	3.181	2.214	1.44	71.9	62.9
[1 -3 -8]	(3 1 0)	(-4 -4 1)	3.181	2.159	1.47	31.8	51.6
[1 -3 -5]	(3 1 0)	(1 -3 2)	3.181	2.158	1.47	67.9	62.9
[1 -3 4]	(3 1 0)	(1 3 2)	3.181	2.158	1.47	60.2	71.9
[1 -3 6]	(3 1 0)	(3 -3 -2)	3.181	2.154	1.48	67.7	62.8
[1 -3 -3]	(3 1 0)	(-3 -3 2)	3.181	2.154	1.48	60.0	71.9
[1 -3 8]	(3 1 0)	(-1 5 2)	3.181	2.133	1.49	84.4	55.0
[1 -3 -7]	(3 1 0)	(-1 -5 2)	3.181	2.133	1.49	84.1	55.0
[1 -3 -1]	(3 1 0)	(2 0 2)	3.181	2.036	1.56	51.8	82.1
[1 -3 8]	(3 1 0)	(5 -1 -1)	3.181	1.978	1.61	27.5	55.0
[1 -3 2]	(3 1 0)	(-5 -1 1)	3.181	1.978	1.61	22.4	82.0

Richterite (310) 380 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$
[1 -3 -8]	(3 1 0)	(1 -5 2)	3.181	1.954	1.63	72.3	51.6
[1 -3 7]	(3 1 0)	(1 5 2)	3.181	1.954	1.63	60.9	58.7
[1 -3 -9]	(3 1 0)	(0 -6 2)	3.181	1.951	1.63	85.0	48.5
[1 -3 9]	(3 1 0)	(0 6 2)	3.181	1.951	1.63	72.2	51.6
[1 -3 9]	(3 1 0)	(3 -5 -2)	3.181	1.951	1.63	72.1	51.6
[1 -3 -6]	(3 1 0)	(3 5 -2)	3.181	1.951	1.63	60.7	58.8
[1 -3 -10]	(3 1 0)	(-4 2 -1)	3.181	1.948	1.63	31.4	45.6
[1 -3 2]	(3 1 0)	(4 2 1)	3.181	1.948	1.63	22.1	82.0
[1 -3 -4]	(3 1 0)	(-5 -3 1)	3.181	1.893	1.68	23.1	67.2
[1 -3 -7]	(3 1 0)	(2 -4 2)	3.181	1.862	1.71	60.3	55.0
[1 -3 5]	(3 1 0)	(2 4 2)	3.181	1.862	1.71	50.5	67.2
[1 -3 11]	(3 1 0)	(-1 7 2)	3.181	1.855	1.71	83.1	45.6
[1 -3 -10]	(3 1 0)	(1 7 -2)	3.181	1.855	1.71	82.9	45.6
[1 -3 8]	(3 1 0)	(4 4 1)	3.181	1.829	1.74	25.3	55.0
[1 -3 -3]	(3 1 0)	(3 -1 2)	3.181	1.772	1.80	45.4	71.9
[1 -3 0]	(3 1 0)	(3 1 2)	3.181	1.772	1.80	42.7	87.4
[1 -3 4]	(3 1 0)	(5 -1 -2)	3.181	1.767	1.80	45.3	71.9
[1 -3 1]	(3 1 0)	(-5 -1 2)	3.181	1.767	1.80	42.5	87.3
[1 -3 -10]	(3 1 0)	(5 5 -1)	3.181	1.750	1.82	27.9	45.6
[3 -9 2]	(3 1 0)	(-2 0 3)	3.181	1.737	1.83	84.8	89.1
[1 -3 10]	(3 1 0)	(1 7 2)	3.181	1.734	1.83	62.3	48.4
[1 -3 -9]	(3 1 0)	(-3 -7 2)	3.181	1.732	1.84	62.1	48.5
[3 -9 -2]	(3 1 0)	(-1 -1 3)	3.181	1.730	1.84	86.0	83.8
[3 -9 4]	(3 1 0)	(1 -1 -3)	3.181	1.730	1.84	84.2	85.5
[1 -3 -6]	(3 1 0)	(3 -3 2)	3.181	1.710	1.86	49.8	58.8
[1 -3 3]	(3 1 0)	(3 3 2)	3.181	1.710	1.86	42.1	76.8
[3 -9 8]	(3 1 0)	(2 -2 -3)	3.181	1.707	1.86	86.7	78.5
[3 -9 -4]	(3 1 0)	(-2 -2 3)	3.181	1.707	1.86	83.0	80.3
[1 -3 7]	(3 1 0)	(5 -3 -2)	3.181	1.705	1.87	49.7	58.7
[1 -3 -2]	(3 1 0)	(-5 -3 2)	3.181	1.705	1.87	42.0	76.9
[1 -3 11]	(3 1 0)	(4 -6 -2)	3.181	1.694	1.88	65.0	45.6
[1 -3 -7]	(3 1 0)	(-4 -6 2)	3.181	1.694	1.88	52.2	55.0
[1 -3 2]	(3 1 0)	(-3 1 3)	3.181	1.676	1.90	76.0	82.0
[1 -3 0]	(3 1 0)	(3 1 -3)	3.181	1.676	1.90	74.1	87.4
[3 -9 -8]	(3 1 0)	(1 3 -3)	3.181	1.672	1.90	88.0	73.6
[3 -9 10]	(3 1 0)	(-1 3 3)	3.181	1.672	1.90	82.6	75.2
[1 -3 6]	(3 1 0)	(-6 0 1)	3.181	1.668	1.91	21.0	62.8
[1 -3 -8]	(3 1 0)	(5 -1 1)	3.181	1.664	1.91	23.9	51.6
[1 -3 -2]	(3 1 0)	(5 1 1)	3.181	1.664	1.91	19.1	76.9
[1 -3 -2]	(3 1 0)	(0 -2 3)	3.181	1.658	1.92	77.3	76.9
[1 -3 2]	(3 1 0)	(0 2 3)	3.181	1.658	1.92	73.7	82.0
[1 -3 0]	(3 1 0)	(6 2 -1)	3.181	1.642	1.94	18.3	87.4
[3 -9 14]	(3 1 0)	(2 -4 -3)	3.181	1.625	1.96	88.6	68.7
[3 -9 -10]	(3 1 0)	(2 4 -3)	3.181	1.625	1.96	81.6	70.3
[1 -3 4]	(3 1 0)	(5 3 1)	3.181	1.612	1.97	18.9	71.9
[1 -3 -9]	(3 1 0)	(-3 5 -2)	3.181	1.603	1.98	54.9	48.5
[1 -3 6]	(3 1 0)	(3 5 2)	3.181	1.603	1.98	43.5	62.8
[1 -3 10]	(3 1 0)	(-5 5 2)	3.181	1.599	1.99	54.8	48.4

Richterite (310) 380 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 -3 -5]	(3 1 0)	(5 5 -2)	3.181	1.599	1.99	43.4	62.9
[3 -9 4]	(3 1 0)	(-4 0 3)	3.181	1.589	2.00	66.0	85.5
[3 -9 -4]	(3 1 0)	(1 -1 3)	3.181	1.587	2.01	67.3	80.3
[3 -9 2]	(3 1 0)	(1 1 3)	3.181	1.587	2.01	65.4	89.1
[1 -3 -4]	(3 1 0)	(0 -4 3)	3.181	1.583	2.01	79.7	67.2
[1 -3 4]	(3 1 0)	(0 4 3)	3.181	1.583	2.01	72.6	71.9
[3 -9 -14]	(3 1 0)	(-1 -5 3)	3.181	1.572	2.02	89.8	64.3
[3 -9 16]	(3 1 0)	(1 -5 -3)	3.181	1.572	2.02	81.3	65.7
[1 -3 -6]	(3 1 0)	(6 4 -1)	3.181	1.569	2.03	20.5	58.8
[3 -9 10]	(3 1 0)	(-4 2 3)	3.181	1.566	2.03	68.2	75.2
[3 -9 -2]	(3 1 0)	(4 2 -3)	3.181	1.566	2.03	64.5	83.8
[3 -9 -10]	(3 1 0)	(-1 3 -3)	3.181	1.541	2.06	69.8	70.3
[3 -9 8]	(3 1 0)	(1 3 3)	3.181	1.541	2.06	64.4	78.5
[1 -3 -5]	(3 1 0)	(-4 2 -2)	3.181	1.538	2.07	41.3	62.9
[1 -3 1]	(3 1 0)	(4 2 2)	3.181	1.538	2.07	36.0	87.3
[1 -3 6]	(3 1 0)	(-3 5 3)	3.181	1.531	2.08	80.6	62.8
[1 -3 -4]	(3 1 0)	(3 5 -3)	3.181	1.531	2.08	72.1	67.2
[1 -3 11]	(3 1 0)	(2 8 2)	3.181	1.525	2.09	54.7	45.6
[1 -3 10]	(3 1 0)	(5 5 1)	3.181	1.522	2.09	22.9	48.4
[3 -9 20]	(3 1 0)	(-2 6 3)	3.181	1.512	2.10	89.7	60.1
[3 -9 -16]	(3 1 0)	(-2 -6 3)	3.181	1.512	2.10	80.5	61.5
[3 -9 16]	(3 1 0)	(4 -4 -3)	3.181	1.502	2.12	70.9	65.7
[3 -9 -8]	(3 1 0)	(-4 -4 3)	3.181	1.502	2.12	63.9	73.6
[3 -9 -2]	(3 1 0)	(2 0 3)	3.181	1.478	2.15	58.4	83.8
[1 -3 9]	(3 1 0)	(3 7 2)	3.181	1.474	2.16	46.0	51.6
[1 -3 9]	(3 1 0)	(6 -4 -2)	3.181	1.474	2.16	46.0	51.6
[1 -3 -3]	(3 1 0)	(-6 -4 2)	3.181	1.474	2.16	36.3	71.9
[1 -3 -8]	(3 1 0)	(5 7 -2)	3.181	1.472	2.16	45.9	51.6
[3 -9 8]	(3 1 0)	(-5 1 3)	3.181	1.470	2.16	59.3	78.5
[3 -9 2]	(3 1 0)	(5 1 -3)	3.181	1.470	2.16	57.4	89.1
[3 -9 -16]	(3 1 0)	(1 -5 3)	3.181	1.462	2.18	72.5	61.5
[3 -9 14]	(3 1 0)	(1 5 3)	3.181	1.462	2.18	64.0	68.7
[3 -9 -8]	(3 1 0)	(2 -2 3)	3.181	1.459	2.18	60.7	73.6
[3 -9 4]	(3 1 0)	(2 2 3)	3.181	1.459	2.18	57.0	85.5
[3 -9 -20]	(3 1 0)	(1 7 -3)	3.181	1.450	2.19	88.6	56.2
[3 -9 22]	(3 1 0)	(1 -7 -3)	3.181	1.450	2.19	80.4	57.5
[1 -3 -6]	(3 1 0)	(6 0 1)	3.181	1.435	2.22	18.7	58.8
[3 -9 14]	(3 1 0)	(-5 3 3)	3.181	1.433	2.22	61.8	68.7
[3 -9 -4]	(3 1 0)	(5 3 -3)	3.181	1.433	2.22	56.5	80.3
[1 -3 10]	(3 1 0)	(-7 1 1)	3.181	1.428	2.23	21.4	48.4
[1 -3 4]	(3 1 0)	(7 1 -1)	3.181	1.428	2.23	16.7	71.9
[1 -3 8]	(3 1 0)	(-3 7 3)	3.181	1.418	2.24	82.8	55.0
[1 -3 -6]	(3 1 0)	(3 7 -3)	3.181	1.418	2.24	71.9	58.8
[1 -3 0]	(3 1 0)	(6 2 1)	3.181	1.418	2.24	15.7	87.4
[3 -9 22]	(3 1 0)	(4 -6 -3)	3.181	1.411	2.25	73.7	57.5
[3 -9 -14]	(3 1 0)	(-4 -6 3)	3.181	1.411	2.25	63.9	64.3
[3 -9 -14]	(3 1 0)	(2 -4 3)	3.181	1.407	2.26	63.5	64.3
[3 -9 10]	(3 1 0)	(2 4 3)	3.181	1.407	2.26	56.5	75.2

Richterite (310) 380 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[1 -3 -2]	(3 1 0)	(-7 -3 1)	3.181	1.395	2.28	15.9	76.9
[1 -3 7]	(3 1 0)	(4 6 2)	3.181	1.390	2.29	38.4	58.7
[3 -9 -22]	(3 1 0)	(-2 -8 3)	3.181	1.387	2.29	79.8	53.9
[1 -3 -4]	(3 1 0)	(5 -1 2)	3.181	1.372	2.32	34.7	67.2
[1 -3 -1]	(3 1 0)	(5 1 2)	3.181	1.372	2.32	32.0	82.1
[1 -3 6]	(3 1 0)	(6 4 1)	3.181	1.370	2.32	17.1	62.8
[1 -3 5]	(3 1 0)	(-7 1 2)	3.181	1.369	2.32	34.6	67.2
[1 -3 2]	(3 1 0)	(7 1 -2)	3.181	1.369	2.32	31.9	82.0
[3 -9 20]	(3 1 0)	(-5 5 3)	3.181	1.369	2.32	64.9	60.1
[3 -9 -10]	(3 1 0)	(5 5 -3)	3.181	1.369	2.32	56.4	70.3
[3 -9 -22]	(3 1 0)	(-1 7 -3)	3.181	1.362	2.34	75.2	53.9
[3 -9 20]	(3 1 0)	(1 7 3)	3.181	1.362	2.34	64.3	60.1
[1 -3 -8]	(3 1 0)	(0 8 -3)	3.181	1.360	2.34	84.1	51.6
[1 -3 8]	(3 1 0)	(0 8 3)	3.181	1.360	2.34	72.1	55.0
[1 -3 0]	(3 1 0)	(3 1 3)	3.181	1.354	2.35	51.0	87.4
[1 -3 -7]	(3 1 0)	(-5 3 -2)	3.181	1.343	2.37	38.8	55.0
[1 -3 2]	(3 1 0)	(5 3 2)	3.181	1.343	2.37	31.2	82.0
[1 -3 8]	(3 1 0)	(-7 3 2)	3.181	1.340	2.37	38.7	55.0
[1 -3 -1]	(3 1 0)	(7 3 -2)	3.181	1.340	2.37	31.1	82.1
[1 -3 4]	(3 1 0)	(-6 2 3)	3.181	1.339	2.38	53.9	71.9
[1 -3 0]	(3 1 0)	(6 2 -3)	3.181	1.339	2.38	50.2	87.4
[1 -3 -8]	(3 1 0)	(-7 -5 1)	3.181	1.335	2.38	19.0	51.6
[3 -9 -20]	(3 1 0)	(2 -6 3)	3.181	1.332	2.39	66.6	56.2
[3 -9 16]	(3 1 0)	(2 6 3)	3.181	1.332	2.39	56.9	65.7
[3 -9 -26]	(3 1 0)	(-1 -9 3)	3.181	1.325	2.40	87.3	49.5
[3 -9 28]	(3 1 0)	(-1 9 3)	3.181	1.325	2.40	79.8	50.5
[2 -6 1]	(3 1 0)	(-2 0 4)	3.181	1.308	2.43	89.8	90.0
[3 -9 28]	(3 1 0)	(4 -8 -3)	3.181	1.308	2.43	76.3	50.5
[3 -9 -20]	(3 1 0)	(4 8 -3)	3.181	1.308	2.43	64.4	56.2
[1 -3 6]	(3 1 0)	(-6 4 3)	3.181	1.299	2.45	56.8	62.8
[1 -3 -2]	(3 1 0)	(6 4 -3)	3.181	1.299	2.45	49.8	76.9
[2 -6 -1]	(3 1 0)	(-1 -1 4)	3.181	1.294	2.46	83.3	84.7
[1 -3 1]	(3 1 0)	(1 -1 -4)	3.181	1.294	2.46	81.9	87.3
[2 -6 3]	(3 1 0)	(3 -1 -4)	3.181	1.293	2.46	83.0	84.6
[1 -3 0]	(3 1 0)	(-3 -1 4)	3.181	1.293	2.46	81.6	87.4
[1 -3 -10]	(3 1 0)	(-5 5 -2)	3.181	1.289	2.47	43.6	45.6
[1 -3 5]	(3 1 0)	(5 5 2)	3.181	1.289	2.47	32.3	67.2
[1 -3 -9]	(3 1 0)	(6 8 -2)	3.181	1.289	2.47	41.1	48.5
[1 -3 11]	(3 1 0)	(-7 5 2)	3.181	1.286	2.47	43.5	45.6
[1 -3 -4]	(3 1 0)	(7 5 -2)	3.181	1.286	2.47	32.2	67.2
[3 -9 26]	(3 1 0)	(-5 7 3)	3.181	1.286	2.47	68.0	52.7
[3 -9 -16]	(3 1 0)	(5 7 -3)	3.181	1.286	2.47	57.0	61.5
[1 -3 -6]	(3 1 0)	(-3 5 -3)	3.181	1.274	2.50	58.6	58.8
[1 -3 4]	(3 1 0)	(3 5 3)	3.181	1.274	2.50	50.2	71.9
[1 -3 -2]	(3 1 0)	(1 3 -4)	3.181	1.269	2.51	84.8	76.9
[2 -6 5]	(3 1 0)	(-1 3 4)	3.181	1.269	2.51	80.7	79.4
[1 -3 3]	(3 1 0)	(-3 3 4)	3.181	1.268	2.51	84.5	76.8
[2 -6 -3]	(3 1 0)	(3 3 -4)	3.181	1.268	2.51	80.4	79.5

Richterite (310) 380 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[2 -6 -5]	(3 1 0)	(2 4 -4)	3.181	1.259	2.53	87.1	74.4
[3 -9 -28]	(3 1 0)	(-1 9 -3)	3.181	1.257	2.53	77.8	47.5
[3 -9 26]	(3 1 0)	(1 9 3)	3.181	1.257	2.53	64.9	52.7
[1 -3 8]	(3 1 0)	(-8 0 1)	3.181	1.254	2.54	17.0	55.0
[2 -6 -3]	(3 1 0)	(0 -2 4)	3.181	1.252	2.54	76.8	79.5
[2 -6 3]	(3 1 0)	(0 2 4)	3.181	1.252	2.54	74.0	84.6
[1 -3 -10]	(3 1 0)	(7 -1 1)	3.181	1.252	2.54	19.6	45.6
[1 -3 -4]	(3 1 0)	(7 1 1)	3.181	1.252	2.54	15.0	67.2
[2 -6 5]	(3 1 0)	(4 -2 -4)	3.181	1.251	2.54	76.5	79.4
[2 -6 -1]	(3 1 0)	(-4 -2 4)	3.181	1.251	2.54	73.7	84.7
[3 -9 -26]	(3 1 0)	(2 -8 3)	3.181	1.244	2.56	69.7	49.5
[3 -9 22]	(3 1 0)	(2 8 3)	3.181	1.244	2.56	57.7	57.5
[1 -3 2]	(3 1 0)	(-8 -2 1)	3.181	1.242	2.56	13.9	82.0
[3 -9 -4]	(3 1 0)	(4 0 3)	3.181	1.241	2.56	46.2	80.3
[3 -9 10]	(3 1 0)	(-7 1 3)	3.181	1.235	2.58	47.1	75.2
[3 -9 4]	(3 1 0)	(7 1 -3)	3.181	1.235	2.58	45.2	85.5
[3 -9 -10]	(3 1 0)	(-4 2 -3)	3.181	1.230	2.59	48.5	70.3
[3 -9 2]	(3 1 0)	(4 2 3)	3.181	1.230	2.59	44.8	89.1
[1 -3 2]	(3 1 0)	(7 3 1)	3.181	1.230	2.59	13.7	82.0
[1 -3 -3]	(3 1 0)	(6 0 2)	3.181	1.225	2.60	29.5	71.9
[2 -6 -7]	(3 1 0)	(1 5 -4)	3.181	1.224	2.60	86.3	69.6
[1 -3 4]	(3 1 0)	(-1 5 4)	3.181	1.224	2.60	79.7	71.9
[2 -6 9]	(3 1 0)	(-3 5 4)	3.181	1.223	2.60	86.0	69.5
[1 -3 -3]	(3 1 0)	(3 5 -4)	3.181	1.223	2.60	79.4	71.9
[1 -3 8]	(3 1 0)	(5 7 2)	3.181	1.219	2.61	34.7	55.0
[1 -3 -7]	(3 1 0)	(7 7 -2)	3.181	1.217	2.61	34.6	55.0
[3 -9 16]	(3 1 0)	(-7 3 3)	3.181	1.214	2.62	49.7	65.7
[3 -9 -2]	(3 1 0)	(7 3 -3)	3.181	1.214	2.62	44.4	83.8
[1 -3 7]	(3 1 0)	(-8 2 2)	3.181	1.212	2.63	32.8	58.7
[1 -3 1]	(3 1 0)	(8 2 -2)	3.181	1.212	2.63	27.6	87.3
[1 -3 -1]	(3 1 0)	(-1 1 -4)	3.181	1.211	2.63	69.2	82.1
[2 -6 1]	(3 1 0)	(1 1 4)	3.181	1.211	2.63	67.8	90.0
[1 -3 -4]	(3 1 0)	(-8 -4 1)	3.181	1.209	2.63	14.5	67.2
[1 -3 2]	(3 1 0)	(5 -1 -4)	3.181	1.209	2.63	68.9	82.0
[2 -6 1]	(3 1 0)	(-5 -1 4)	3.181	1.209	2.63	67.5	90.0
[1 -3 -8]	(3 1 0)	(3 -7 3)	3.181	1.206	2.64	61.9	51.6
[1 -3 6]	(3 1 0)	(3 7 3)	3.181	1.206	2.64	51.0	62.8
[3 -9 -16]	(3 1 0)	(-4 4 -3)	3.181	1.199	2.65	51.4	61.5
[3 -9 8]	(3 1 0)	(4 4 3)	3.181	1.199	2.65	44.5	78.5
[3 -9 32]	(3 1 0)	(-5 9 3)	3.181	1.196	2.66	71.0	46.5
[3 -9 -22]	(3 1 0)	(5 9 -3)	3.181	1.196	2.66	58.1	53.9
[2 -6 -5]	(3 1 0)	(-1 3 -4)	3.181	1.191	2.67	70.9	74.4
[1 -3 2]	(3 1 0)	(1 3 4)	3.181	1.191	2.67	66.8	82.0
[2 -6 7]	(3 1 0)	(-5 3 4)	3.181	1.189	2.68	70.6	74.3
[1 -3 -1]	(3 1 0)	(5 3 -4)	3.181	1.189	2.68	66.5	82.1
[1 -3 8]	(3 1 0)	(7 5 1)	3.181	1.188	2.68	16.1	55.0
[1 -3 -9]	(3 1 0)	(6 -4 2)	3.181	1.184	2.69	37.2	48.5
[1 -3 3]	(3 1 0)	(6 4 2)	3.181	1.184	2.69	27.7	76.8

Richterite (310) 380 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 -3 10]	(3 1 0)	(8 -4 -2)	3.181	1.181	2.69	37.1	48.4
[1 -3 -2]	(3 1 0)	(8 4 -2)	3.181	1.181	2.69	27.6	76.9
[3 -9 22]	(3 1 0)	(7 -5 -3)	3.181	1.173	2.71	52.9	57.5
[3 -9 -8]	(3 1 0)	(7 5 -3)	3.181	1.173	2.71	44.5	73.6
[2 -6 -9]	(3 1 0)	(0 6 -4)	3.181	1.169	2.72	80.2	65.0
[2 -6 9]	(3 1 0)	(0 6 4)	3.181	1.169	2.72	72.5	69.5
[2 -6 11]	(3 1 0)	(4 -6 -4)	3.181	1.167	2.72	80.0	65.0
[2 -6 -7]	(3 1 0)	(-4 -6 4)	3.181	1.167	2.72	72.2	69.6
[1 -3 10]	(3 1 0)	(6 -8 -3)	3.181	1.167	2.73	63.4	48.4
[1 -3 -6]	(3 1 0)	(6 8 -3)	3.181	1.167	2.73	51.5	58.8
[1 -3 -5]	(3 1 0)	(1 7 -4)	3.181	1.163	2.73	87.7	62.9
[2 -6 11]	(3 1 0)	(-1 7 4)	3.181	1.163	2.73	78.9	65.0
[1 -3 6]	(3 1 0)	(3 -7 -4)	3.181	1.163	2.74	87.5	62.8
[2 -6 -9]	(3 1 0)	(-3 -7 4)	3.181	1.163	2.74	78.6	65.0
[1 -3 -10]	(3 1 0)	(8 6 -1)	3.181	1.160	2.74	18.1	45.6
[1 -3 -4]	(3 1 0)	(-1 5 -4)	3.181	1.153	2.76	72.8	67.2
[2 -6 7]	(3 1 0)	(1 5 4)	3.181	1.153	2.76	66.2	74.3
[2 -6 -1]	(3 1 0)	(2 0 4)	3.181	1.153	2.76	62.2	84.7
[1 -3 5]	(3 1 0)	(5 -5 -4)	3.181	1.151	2.76	72.6	67.2
[2 -6 -5]	(3 1 0)	(-5 -5 4)	3.181	1.151	2.76	66.0	74.4
[3 -9 -22]	(3 1 0)	(4 -6 3)	3.181	1.151	2.76	54.8	53.9
[3 -9 14]	(3 1 0)	(4 6 3)	3.181	1.151	2.76	45.1	68.7
[2 -6 3]	(3 1 0)	(6 0 -4)	3.181	1.150	2.77	62.0	84.6
[1 -3 11]	(3 1 0)	(5 9 2)	3.181	1.142	2.79	37.7	45.6
[1 -3 -10]	(3 1 0)	(7 9 -2)	3.181	1.140	2.79	37.6	45.6
[2 -6 -11]	(3 1 0)	(-2 -8 4)	3.181	1.138	2.80	85.0	60.8
[1 -3 -5]	(3 1 0)	(8 6 -2)	3.181	1.136	2.80	29.2	62.9
[3 -9 -8]	(3 1 0)	(-5 1 -3)	3.181	1.133	2.81	42.6	73.6
[3 -9 -2]	(3 1 0)	(5 1 3)	3.181	1.133	2.81	40.8	83.8
[3 -9 8]	(3 1 0)	(-8 0 3)	3.181	1.132	2.81	41.4	78.5
[3 -9 14]	(3 1 0)	(8 -2 -3)	3.181	1.123	2.83	43.7	68.7
[3 -9 2]	(3 1 0)	(-8 -2 3)	3.181	1.123	2.83	40.1	89.1
[3 -9 28]	(3 1 0)	(7 -7 -3)	3.181	1.120	2.84	56.3	50.5
[3 -9 -14]	(3 1 0)	(-7 -7 3)	3.181	1.120	2.84	45.5	64.3
[2 -6 -7]	(3 1 0)	(2 -4 4)	3.181	1.118	2.85	65.8	69.6
[2 -6 5]	(3 1 0)	(2 4 4)	3.181	1.118	2.85	60.4	79.4
[3 -9 -14]	(3 1 0)	(5 -3 3)	3.181	1.116	2.85	45.2	64.3
[3 -9 4]	(3 1 0)	(5 3 3)	3.181	1.116	2.85	39.9	85.5
[2 -6 9]	(3 1 0)	(6 -4 -4)	3.181	1.116	2.85	65.5	69.5
[2 -6 -3]	(3 1 0)	(-6 -4 4)	3.181	1.116	2.85	60.1	79.5
[1 -3 -8]	(3 1 0)	(8 0 1)	3.181	1.114	2.85	15.8	51.6
[1 -3 6]	(3 1 0)	(-9 -1 1)	3.181	1.111	2.86	13.8	62.8
[1 -3 -2]	(3 1 0)	(8 2 1)	3.181	1.106	2.88	12.5	76.9
[2 -6 -11]	(3 1 0)	(-1 7 -4)	3.181	1.102	2.89	74.8	60.8
[1 -3 5]	(3 1 0)	(1 7 4)	3.181	1.102	2.89	66.0	67.2
[2 -6 13]	(3 1 0)	(-5 7 4)	3.181	1.101	2.89	74.6	60.7
[1 -3 -4]	(3 1 0)	(5 7 -4)	3.181	1.101	2.89	65.8	67.2
[3 -9 20]	(3 1 0)	(-8 4 3)	3.181	1.099	2.89	46.6	60.1

Richterite (310) 380 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[3 -9 -4]	(3 1 0)	(8 4 -3)	3.181	1.099	2.89	39.7	80.3
[1 -3 -5]	(3 1 0)	(7 -1 2)	3.181	1.098	2.90	28.1	62.9
[1 -3 -2]	(3 1 0)	(7 1 2)	3.181	1.098	2.90	25.5	76.9
[1 -3 6]	(3 1 0)	(9 -1 -2)	3.181	1.096	2.90	28.1	62.8
[1 -3 3]	(3 1 0)	(-9 -1 2)	3.181	1.096	2.90	25.5	76.8
[2 -6 -13]	(3 1 0)	(-1 -9 4)	3.181	1.096	2.90	89.0	56.9
[1 -3 7]	(3 1 0)	(1 -9 -4)	3.181	1.096	2.90	78.4	58.7
[1 -3 0]	(3 1 0)	(9 3 -1)	3.181	1.095	2.90	12.1	87.4
[2 -6 15]	(3 1 0)	(3 -9 -4)	3.181	1.095	2.91	88.8	56.8
[1 -3 -6]	(3 1 0)	(-3 -9 4)	3.181	1.095	2.91	78.1	58.8
[3 -9 -28]	(3 1 0)	(4 -8 3)	3.181	1.093	2.91	58.2	47.5
[3 -9 20]	(3 1 0)	(4 8 3)	3.181	1.093	2.91	46.3	60.1
[3 -9 -20]	(3 1 0)	(5 -5 3)	3.181	1.085	2.93	48.4	56.2
[3 -9 10]	(3 1 0)	(5 5 3)	3.181	1.085	2.93	40.0	75.2
[2 -6 -3]	(3 1 0)	(3 -1 4)	3.181	1.084	2.94	57.4	79.5
[1 -3 0]	(3 1 0)	(3 1 4)	3.181	1.084	2.94	56.0	87.4
[1 -3 4]	(3 1 0)	(8 4 1)	3.181	1.083	2.94	12.6	71.9
[1 -3 -8]	(3 1 0)	(7 -3 2)	3.181	1.083	2.94	31.9	51.6
[1 -3 1]	(3 1 0)	(7 3 2)	3.181	1.083	2.94	24.5	87.3
[1 -3 9]	(3 1 0)	(6 8 2)	3.181	1.081	2.94	31.8	51.6
[2 -6 5]	(3 1 0)	(-7 1 4)	3.181	1.081	2.94	57.2	79.4
[1 -3 1]	(3 1 0)	(7 1 -4)	3.181	1.081	2.94	55.8	87.3
[1 -3 9]	(3 1 0)	(-9 3 2)	3.181	1.081	2.94	31.8	51.6
[1 -3 0]	(3 1 0)	(9 3 -2)	3.181	1.081	2.94	24.4	87.4
[1 -3 -3]	(3 1 0)	(3 -3 4)	3.181	1.069	2.98	59.3	71.9
[2 -6 3]	(3 1 0)	(3 3 4)	3.181	1.069	2.98	55.2	84.6
[1 -3 4]	(3 1 0)	(7 -3 -4)	3.181	1.067	2.98	59.1	71.9
[2 -6 -1]	(3 1 0)	(-7 -3 4)	3.181	1.067	2.98	54.9	84.7
[1 -3 -6]	(3 1 0)	(9 5 -1)	3.181	1.066	2.99	13.8	58.8
[3 -9 26]	(3 1 0)	(8 -6 -3)	3.181	1.062	3.00	49.9	52.7
[3 -9 -10]	(3 1 0)	(-8 -6 3)	3.181	1.062	3.00	40.3	70.3
[3 -9 -20]	(3 1 0)	(7 9 -3)	3.181	1.059	3.00	46.9	56.2
[1 -3 4]	(3 1 0)	(7 5 2)	3.181	1.054	3.02	25.1	71.9
[1 -3 -3]	(3 1 0)	(9 5 -2)	3.181	1.052	3.02	25.0	71.9
[1 -3 10]	(3 1 0)	(8 6 1)	3.181	1.048	3.04	15.5	48.4
[5 -15 2]	(3 1 0)	(-2 0 5)	3.181	1.045	3.04	87.1	89.5
[1 -3 -7]	(3 1 0)	(-1 9 -4)	3.181	1.044	3.05	76.8	55.0
[2 -6 13]	(3 1 0)	(1 9 4)	3.181	1.044	3.05	66.1	60.7
[5 -15 6]	(3 1 0)	(3 -1 -5)	3.181	1.043	3.05	87.4	86.2
[1 -3 0]	(3 1 0)	(-3 -1 5)	3.181	1.043	3.05	86.2	87.4
[1 -3 8]	(3 1 0)	(5 -9 -4)	3.181	1.043	3.05	76.6	55.0
[2 -6 -11]	(3 1 0)	(-5 -9 4)	3.181	1.043	3.05	65.9	60.8
[3 -9 -26]	(3 1 0)	(5 -7 3)	3.181	1.042	3.05	51.8	49.5
[3 -9 16]	(3 1 0)	(5 7 3)	3.181	1.042	3.05	40.9	65.7
[2 -6 -9]	(3 1 0)	(3 -5 4)	3.181	1.041	3.05	61.4	65.0
[1 -3 3]	(3 1 0)	(3 5 4)	3.181	1.041	3.05	54.8	76.8
[1 -3 -2]	(3 1 0)	(-7 -5 4)	3.181	1.039	3.06	54.6	76.9
[5 -15 -4]	(3 1 0)	(-2 -2 5)	3.181	1.039	3.06	88.2	83.1

Richterite (310) 380 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[5 -15 8]	(3 1 0)	(2 -2 -5)	3.181	1.039	3.06	86.0	84.1
[1 -3 4]	(3 1 0)	(9 -1 -3)	3.181	1.035	3.07	38.6	71.9
[1 -3 2]	(3 1 0)	(9 1 -3)	3.181	1.035	3.07	36.8	82.0
[1 -3 -4]	(3 1 0)	(-6 2 -3)	3.181	1.033	3.08	39.9	67.2
[1 -3 0]	(3 1 0)	(6 2 3)	3.181	1.033	3.08	36.4	87.4
[5 -15 4]	(3 1 0)	(-4 0 5)	3.181	1.033	3.08	80.8	88.4
[5 -15 -2]	(3 1 0)	(-1 -1 5)	3.181	1.032	3.08	81.7	85.2
[5 -15 4]	(3 1 0)	(1 -1 -5)	3.181	1.032	3.08	80.5	88.4
[2 -6 -13]	(3 1 0)	(2 -8 4)	3.181	1.031	3.09	70.1	56.9
[2 -6 11]	(3 1 0)	(2 8 4)	3.181	1.031	3.09	60.4	65.0
[5 -15 12]	(3 1 0)	(3 -3 -5)	3.181	1.030	3.09	88.5	79.9
[5 -15 -6]	(3 1 0)	(-3 -3 5)	3.181	1.030	3.09	85.2	81.0
[2 -6 15]	(3 1 0)	(6 -8 -4)	3.181	1.029	3.09	69.9	56.8
[2 -6 -9]	(3 1 0)	(-6 -8 4)	3.181	1.029	3.09	60.2	65.0
[1 -3 2]	(3 1 0)	(4 -2 -5)	3.181	1.026	3.10	82.0	82.0
[5 -15 -2]	(3 1 0)	(-4 -2 5)	3.181	1.026	3.10	79.7	85.2
[1 -3 6]	(3 1 0)	(9 -3 -3)	3.181	1.022	3.11	41.2	62.8
[1 -3 0]	(3 1 0)	(-9 -3 3)	3.181	1.022	3.11	35.9	87.4
[1 -3 -2]	(3 1 0)	(-2 -4 5)	3.181	1.019	3.12	89.4	76.9
[5 -15 14]	(3 1 0)	(2 -4 -5)	3.181	1.019	3.12	85.0	77.9
[5 -15 -8]	(3 1 0)	(-1 -3 5)	3.181	1.019	3.12	82.9	78.9
[1 -3 2]	(3 1 0)	(1 -3 -5)	3.181	1.019	3.12	79.5	82.0
[3 -9 -16]	(3 1 0)	(-8 -8 3)	3.181	1.016	3.13	41.5	61.5
[1 -3 7]	(3 1 0)	(7 7 2)	3.181	1.015	3.13	27.0	58.7
[1 -3 -6]	(3 1 0)	(6 -4 3)	3.181	1.014	3.14	42.8	58.8
[1 -3 2]	(3 1 0)	(6 4 3)	3.181	1.014	3.14	35.9	82.0
[1 -3 -6]	(3 1 0)	(9 7 -2)	3.181	1.013	3.14	26.9	58.8
[2 -6 -5]	(3 1 0)	(-4 2 -4)	3.181	1.012	3.14	53.4	74.4
[2 -6 1]	(3 1 0)	(4 2 4)	3.181	1.012	3.14	50.6	90.0
[2 -6 7]	(3 1 0)	(8 -2 -4)	3.181	1.009	3.15	53.2	74.3
[2 -6 1]	(3 1 0)	(8 2 -4)	3.181	1.009	3.15	50.5	90.0
[5 -15 8]	(3 1 0)	(-5 1 5)	3.181	1.008	3.15	75.6	84.1
[5 -15 2]	(3 1 0)	(5 1 -5)	3.181	1.008	3.15	74.4	89.5
[5 -15 16]	(3 1 0)	(-4 4 5)	3.181	1.008	3.16	83.2	75.8
[5 -15 -8]	(3 1 0)	(4 4 -5)	3.181	1.008	3.16	78.8	78.9
[5 -15 18]	(3 1 0)	(-3 5 5)	3.181	1.005	3.16	89.6	73.8
[5 -15 -12]	(3 1 0)	(3 5 -5)	3.181	1.005	3.16	84.2	74.9
[5 -15 -6]	(3 1 0)	(0 2 -5)	3.181	1.005	3.16	76.5	81.0
[5 -15 6]	(3 1 0)	(0 2 5)	3.181	1.005	3.16	74.2	86.2
[1 -3 -6]	(3 1 0)	(-3 7 -4)	3.181	1.004	3.17	63.8	58.8
[2 -6 9]	(3 1 0)	(3 7 4)	3.181	1.004	3.17	55.0	69.5
[1 -3 7]	(3 1 0)	(7 -7 -4)	3.181	1.002	3.18	63.6	58.7
[2 -6 -7]	(3 1 0)	(7 7 -4)	3.181	1.002	3.18	54.8	69.6
[1 -3 -6]	(3 1 0)	(9 1 1)	3.181	1.000	3.18	12.9	58.8

Richterite (170) 287 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[7 -1 0]	(1 7 0)	(0 0 1)	2.539	5.056	0.50	86.1	75.5
[7 -1 8]	(1 7 0)	(1 -1 -1)	2.539	4.870	0.52	79.1	71.3
[7 -1 6]	(1 7 0)	(1 1 -1)	2.539	4.870	0.52	71.2	79.3
[7 -1 2]	(1 7 0)	(0 2 1)	2.539	4.432	0.57	58.4	83.8
[7 -1 14]	(1 7 0)	(2 0 -1)	2.539	4.061	0.63	80.5	51.9
[7 -1 -8]	(1 7 0)	(-1 1 -1)	2.539	3.976	0.64	87.3	49.5
[7 -1 -6]	(1 7 0)	(1 1 1)	2.539	3.976	0.64	68.3	54.8
[7 -1 10]	(1 7 0)	(-1 3 1)	2.539	3.900	0.65	56.0	64.0
[7 -1 4]	(1 7 0)	(-1 -3 1)	2.539	3.900	0.65	48.2	87.7
[7 -1 16]	(1 7 0)	(-2 2 1)	2.539	3.716	0.68	76.2	47.0
[7 -1 12]	(1 7 0)	(-2 -2 1)	2.539	3.716	0.68	57.3	57.6
[7 -1 -4]	(1 7 0)	(0 4 -1)	2.539	3.404	0.75	48.1	60.9
[7 -1 4]	(1 7 0)	(0 4 1)	2.539	3.404	0.75	40.6	87.7
[7 -1 -4]	(1 7 0)	(1 3 1)	2.539	3.393	0.75	47.9	60.9
[7 -1 10]	(1 7 0)	(-2 -4 1)	2.539	3.046	0.83	40.3	64.0
[7 -1 12]	(1 7 0)	(-1 5 1)	2.539	2.976	0.85	42.3	57.6
[7 -1 2]	(1 7 0)	(-1 -5 1)	2.539	2.976	0.85	34.9	83.8
[7 -1 -2]	(1 7 0)	(1 5 1)	2.539	2.731	0.93	34.3	67.9
[7 -1 -6]	(1 7 0)	(0 -6 1)	2.539	2.624	0.97	37.8	54.8
[7 -1 6]	(1 7 0)	(0 6 1)	2.539	2.624	0.97	30.7	79.3
[7 -1 4]	(1 7 0)	(1 -1 -2)	2.539	2.591	0.98	82.2	87.7
[7 -1 3]	(1 7 0)	(1 1 -2)	2.539	2.591	0.98	82.2	88.0
[7 -1 7]	(1 7 0)	(2 0 -2)	2.539	2.525	1.01	86.0	75.3
[7 -1 8]	(1 7 0)	(-2 -6 1)	2.539	2.449	1.04	29.6	71.3
[7 -1 -1]	(1 7 0)	(0 2 -2)	2.539	2.438	1.04	79.0	71.6
[7 -1 1]	(1 7 0)	(0 2 2)	2.539	2.438	1.04	71.3	79.6
[7 -1 5]	(1 7 0)	(-1 3 2)	2.539	2.407	1.05	67.8	83.5
[7 -1 2]	(1 7 0)	(-1 -3 2)	2.539	2.407	1.05	67.7	83.8
[7 -1 16]	(1 7 0)	(3 5 -1)	2.539	2.377	1.07	38.4	47.0
[7 -1 14]	(1 7 0)	(1 -7 -1)	2.539	2.333	1.09	34.5	51.9
[7 -1 0]	(1 7 0)	(1 7 -1)	2.539	2.333	1.09	27.4	75.5
[7 -1 -4]	(1 7 0)	(1 -1 2)	2.539	2.287	1.11	89.8	60.9
[7 -1 -3]	(1 7 0)	(1 1 2)	2.539	2.287	1.11	75.9	64.3
[7 -1 11]	(1 7 0)	(3 -1 -2)	2.539	2.282	1.11	89.7	60.7
[7 -1 10]	(1 7 0)	(-3 -1 2)	2.539	2.282	1.11	75.9	64.0
[7 -1 9]	(1 7 0)	(-2 4 2)	2.539	2.214	1.15	66.2	67.6
[7 -1 5]	(1 7 0)	(-2 -4 2)	2.539	2.214	1.15	58.4	83.5
[7 -1 0]	(1 7 0)	(1 7 1)	2.539	2.210	1.15	25.8	75.5
[7 -1 -8]	(1 7 0)	(2 6 1)	2.539	2.188	1.16	33.3	49.5
[7 -1 -5]	(1 7 0)	(1 -3 2)	2.539	2.158	1.18	77.1	57.8
[7 -1 -2]	(1 7 0)	(1 3 2)	2.539	2.158	1.18	62.9	67.9
[7 -1 12]	(1 7 0)	(3 -3 -2)	2.539	2.154	1.18	77.2	57.6
[7 -1 9]	(1 7 0)	(3 3 -2)	2.539	2.154	1.18	62.9	67.6
[7 -1 6]	(1 7 0)	(1 -5 -2)	2.539	2.133	1.19	56.1	79.3
[7 -1 1]	(1 7 0)	(1 5 -2)	2.539	2.133	1.19	56.0	79.6
[7 -1 -8]	(1 7 0)	(0 -8 1)	2.539	2.095	1.21	31.8	49.5
[7 -1 8]	(1 7 0)	(0 8 1)	2.539	2.095	1.21	25.0	71.3
[7 -1 -7]	(1 7 0)	(2 0 2)	2.539	2.036	1.25	80.5	52.1

Richterite (170) 287 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$
[7 -1 6]	(1 7 0)	(-2 -8 1)	2.539	2.003	1.27	22.9	79.3
[7 -1 15]	(1 7 0)	(-4 2 2)	2.539	1.983	1.28	87.3	49.3
[7 -1 13]	(1 7 0)	(-4 -2 2)	2.539	1.983	1.28	68.3	54.6
[7 -1 -6]	(1 7 0)	(-1 5 -2)	2.539	1.954	1.30	66.0	54.8
[7 -1 -1]	(1 7 0)	(1 5 2)	2.539	1.954	1.30	51.9	71.6
[7 -1 -3]	(1 7 0)	(0 6 -2)	2.539	1.951	1.30	55.9	64.3
[7 -1 3]	(1 7 0)	(0 6 2)	2.539	1.951	1.30	48.3	88.0
[7 -1 13]	(1 7 0)	(-3 5 2)	2.539	1.951	1.30	66.1	54.6
[7 -1 8]	(1 7 0)	(-3 -5 2)	2.539	1.951	1.30	51.9	71.3
[7 -1 16]	(1 7 0)	(-1 9 1)	2.539	1.896	1.34	29.7	47.0
[7 -1 -2]	(1 7 0)	(-1 -9 1)	2.539	1.896	1.34	23.0	67.9
[7 -1 -9]	(1 7 0)	(-2 4 -2)	2.539	1.862	1.36	76.1	47.1
[7 -1 -5]	(1 7 0)	(2 4 2)	2.539	1.862	1.36	57.3	57.8
[7 -1 7]	(1 7 0)	(-1 7 2)	2.539	1.855	1.37	47.1	75.3
[7 -1 0]	(1 7 0)	(-1 -7 2)	2.539	1.855	1.37	47.1	75.5
[7 -1 -6]	(1 7 0)	(2 8 1)	2.539	1.852	1.37	25.7	54.8
[7 -1 2]	(1 7 0)	(1 9 1)	2.539	1.828	1.39	20.6	83.8
[21 -3 14]	(1 7 0)	(2 0 -3)	2.539	1.737	1.46	88.6	84.9
[7 -1 -7]	(1 7 0)	(1 -7 2)	2.539	1.734	1.46	57.1	52.1
[7 -1 0]	(1 7 0)	(1 7 2)	2.539	1.734	1.46	43.2	75.5
[7 -1 14]	(1 7 0)	(3 -7 -2)	2.539	1.732	1.47	57.2	51.9
[7 -1 7]	(1 7 0)	(3 7 -2)	2.539	1.732	1.47	43.2	75.3
[7 -1 2]	(1 7 0)	(1 1 -3)	2.539	1.730	1.47	86.1	83.8
[21 -3 8]	(1 7 0)	(1 -1 -3)	2.539	1.730	1.47	83.5	86.6
[7 -1 -9]	(1 7 0)	(3 3 2)	2.539	1.710	1.48	63.0	47.1
[7 -1 12]	(1 7 0)	(-3 -9 1)	2.539	1.709	1.49	22.8	57.6
[21 -3 16]	(1 7 0)	(-2 2 3)	2.539	1.707	1.49	81.1	82.1
[7 -1 4]	(1 7 0)	(-2 -2 3)	2.539	1.707	1.49	78.3	87.7
[7 -1 16]	(1 7 0)	(5 3 -2)	2.539	1.705	1.49	63.1	47.0
[7 -1 11]	(1 7 0)	(2 -8 -2)	2.539	1.701	1.49	48.2	60.7
[7 -1 3]	(1 7 0)	(2 8 -2)	2.539	1.701	1.49	40.6	88.0
[7 -1 11]	(1 7 0)	(4 6 -2)	2.539	1.694	1.50	47.9	60.7
[21 -3 22]	(1 7 0)	(-3 1 3)	2.539	1.676	1.51	88.9	73.9
[21 -3 20]	(1 7 0)	(-3 -1 3)	2.539	1.676	1.51	81.0	76.6
[21 -3 4]	(1 7 0)	(1 3 -3)	2.539	1.672	1.52	76.1	81.0
[21 -3 10]	(1 7 0)	(1 -3 -3)	2.539	1.672	1.52	73.4	89.4
[21 -3 -2]	(1 7 0)	(0 2 -3)	2.539	1.658	1.53	83.8	72.9
[21 -3 2]	(1 7 0)	(0 2 3)	2.539	1.658	1.53	76.1	78.2
[7 -1 6]	(1 7 0)	(-2 4 3)	2.539	1.625	1.56	71.5	79.3
[21 -3 10]	(1 7 0)	(-2 -4 3)	2.539	1.625	1.56	68.7	89.4
[7 -1 8]	(1 7 0)	(-1 9 2)	2.539	1.612	1.58	40.6	71.3
[7 -1 -1]	(1 7 0)	(-1 -9 2)	2.539	1.612	1.58	40.5	71.6
[7 -1 -8]	(1 7 0)	(3 5 2)	2.539	1.603	1.58	53.6	49.5
[7 -1 15]	(1 7 0)	(-5 -5 2)	2.539	1.599	1.59	53.7	49.3
[21 -3 28]	(1 7 0)	(4 0 -3)	2.539	1.589	1.60	83.8	66.4
[21 -3 -8]	(1 7 0)	(-1 1 -3)	2.539	1.587	1.60	88.7	65.5
[7 -1 -2]	(1 7 0)	(1 1 3)	2.539	1.587	1.60	79.1	67.9
[21 -3 -4]	(1 7 0)	(0 -4 3)	2.539	1.583	1.60	74.4	70.3

Richterite (170) 287 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[21 -3 4]	(1 7 0)	(0 4 3)	2.539	1.583	1.60	66.7	81.0
[21 -3 2]	(1 7 0)	(-1 -5 3)	2.539	1.572	1.62	67.0	78.2
[7 -1 4]	(1 7 0)	(-1 5 3)	2.539	1.572	1.62	64.4	87.7
[7 -1 10]	(1 7 0)	(4 -2 -3)	2.539	1.566	1.62	86.7	64.0
[21 -3 26]	(1 7 0)	(4 2 -3)	2.539	1.566	1.62	74.3	68.8
[21 -3 -10]	(1 7 0)	(1 -3 3)	2.539	1.541	1.65	82.0	63.1
[21 -3 -4]	(1 7 0)	(1 3 3)	2.539	1.541	1.65	69.8	70.3
[21 -3 26]	(1 7 0)	(3 -5 -3)	2.539	1.531	1.66	70.2	68.8
[21 -3 16]	(1 7 0)	(3 5 -3)	2.539	1.531	1.66	62.4	82.1
[7 -1 -8]	(1 7 0)	(1 -9 2)	2.539	1.530	1.66	50.3	49.5
[7 -1 1]	(1 7 0)	(1 9 2)	2.539	1.530	1.66	36.5	79.6
[7 -1 15]	(1 7 0)	(3 -9 -2)	2.539	1.529	1.66	50.4	49.3
[7 -1 6]	(1 7 0)	(3 9 -2)	2.539	1.529	1.66	36.5	79.3
[7 -1 -3]	(1 7 0)	(2 8 2)	2.539	1.525	1.66	40.3	64.3
[21 -3 20]	(1 7 0)	(2 -6 -3)	2.539	1.512	1.68	63.0	76.6
[21 -3 8]	(1 7 0)	(2 6 -3)	2.539	1.512	1.68	60.2	86.6
[21 -3 32]	(1 7 0)	(4 -4 -3)	2.539	1.502	1.69	77.7	61.8
[7 -1 8]	(1 7 0)	(4 4 -3)	2.539	1.502	1.69	65.3	71.3
[21 -3 -14]	(1 7 0)	(2 0 3)	2.539	1.478	1.72	82.0	58.8
[7 -1 -7]	(1 7 0)	(3 7 2)	2.539	1.474	1.72	45.6	52.1
[7 -1 14]	(1 7 0)	(5 7 -2)	2.539	1.472	1.73	45.6	51.9
[7 -1 12]	(1 7 0)	(-5 1 3)	2.539	1.470	1.73	86.4	57.6
[21 -3 34]	(1 7 0)	(5 1 -3)	2.539	1.470	1.73	77.5	59.6
[7 -1 -4]	(1 7 0)	(-1 5 -3)	2.539	1.462	1.74	73.5	60.9
[21 -3 -2]	(1 7 0)	(1 5 3)	2.539	1.462	1.74	61.2	72.9
[21 -3 -16]	(1 7 0)	(-2 2 -3)	2.539	1.459	1.74	89.1	56.8
[7 -1 -4]	(1 7 0)	(2 2 3)	2.539	1.459	1.74	73.1	60.9
[7 -1 0]	(1 7 0)	(1 7 -3)	2.539	1.450	1.75	59.1	75.5
[21 -3 14]	(1 7 0)	(1 -7 -3)	2.539	1.450	1.75	56.6	84.9
[21 -3 38]	(1 7 0)	(-5 3 3)	2.539	1.433	1.77	84.9	55.6
[21 -3 32]	(1 7 0)	(-5 -3 3)	2.539	1.433	1.77	68.8	61.8
[21 -3 28]	(1 7 0)	(-3 7 3)	2.539	1.418	1.79	62.5	66.4
[21 -3 14]	(1 7 0)	(-3 -7 3)	2.539	1.418	1.79	54.7	84.9
[21 -3 34]	(1 7 0)	(-4 6 3)	2.539	1.411	1.80	69.6	59.6
[21 -3 22]	(1 7 0)	(-4 -6 3)	2.539	1.411	1.80	57.3	73.9
[7 -1 -6]	(1 7 0)	(-2 4 -3)	2.539	1.407	1.80	80.7	54.8
[21 -3 -10]	(1 7 0)	(2 4 3)	2.539	1.407	1.80	64.7	63.1
[21 -3 22]	(1 7 0)	(-2 8 3)	2.539	1.387	1.83	55.8	73.9
[7 -1 2]	(1 7 0)	(-2 -8 3)	2.539	1.387	1.83	53.1	83.8
[21 -3 40]	(1 7 0)	(-5 5 3)	2.539	1.369	1.85	76.8	53.7
[7 -1 10]	(1 7 0)	(-5 -5 3)	2.539	1.369	1.85	60.7	64.0
[21 -3 -14]	(1 7 0)	(-1 7 -3)	2.539	1.362	1.86	65.9	58.8
[7 -1 0]	(1 7 0)	(1 7 3)	2.539	1.362	1.86	53.7	75.5
[21 -3 -8]	(1 7 0)	(0 8 -3)	2.539	1.360	1.87	59.0	65.5
[21 -3 8]	(1 7 0)	(0 8 3)	2.539	1.360	1.87	51.3	86.6
[21 -3 -20]	(1 7 0)	(3 1 3)	2.539	1.354	1.88	76.4	53.0
[7 -1 -6]	(1 7 0)	(3 9 2)	2.539	1.343	1.89	38.9	54.8
[7 -1 13]	(1 7 0)	(5 9 -2)	2.539	1.341	1.89	38.9	54.6

Richterite (170) 287 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$
[21 -3 44]	(1 7 0)	(6 -2 -3)	2.539	1.339	1.90	88.7	50.2
[21 -3 40]	(1 7 0)	(-6 -2 3)	2.539	1.339	1.90	72.3	53.7
[21 -3 -20]	(1 7 0)	(-2 6 -3)	2.539	1.332	1.91	73.0	53.0
[21 -3 -8]	(1 7 0)	(2 6 3)	2.539	1.332	1.91	57.0	65.5
[21 -3 -2]	(1 7 0)	(-1 -9 3)	2.539	1.325	1.92	52.6	72.9
[21 -3 16]	(1 7 0)	(-1 9 3)	2.539	1.325	1.92	50.0	82.1
[14 -2 7]	(1 7 0)	(-2 0 4)	2.539	1.308	1.94	90.0	89.9
[7 -1 12]	(1 7 0)	(-4 8 3)	2.539	1.308	1.94	62.7	57.6
[21 -3 20]	(1 7 0)	(-4 -8 3)	2.539	1.308	1.94	50.4	76.6
[21 -3 46]	(1 7 0)	(-6 4 3)	2.539	1.299	1.95	83.5	48.5
[21 -3 38]	(1 7 0)	(-6 -4 3)	2.539	1.299	1.95	64.5	55.6
[14 -2 3]	(1 7 0)	(-1 -1 4)	2.539	1.294	1.96	88.1	81.7
[7 -1 2]	(1 7 0)	(-1 1 4)	2.539	1.294	1.96	84.1	83.8
[14 -2 11]	(1 7 0)	(3 -1 -4)	2.539	1.293	1.96	88.2	81.4
[7 -1 5]	(1 7 0)	(3 1 -4)	2.539	1.293	1.96	84.1	83.5
[7 -1 14]	(1 7 0)	(5 -7 -3)	2.539	1.286	1.97	69.5	51.9
[21 -3 28]	(1 7 0)	(5 7 -3)	2.539	1.286	1.97	53.6	66.4
[21 -3 -26]	(1 7 0)	(3 -5 3)	2.539	1.274	1.99	79.7	47.9
[21 -3 -16]	(1 7 0)	(3 5 3)	2.539	1.274	1.99	60.8	56.8
[7 -1 1]	(1 7 0)	(-1 -3 4)	2.539	1.269	2.00	80.5	79.6
[14 -2 5]	(1 7 0)	(-1 3 4)	2.539	1.269	2.00	76.5	85.9
[7 -1 6]	(1 7 0)	(3 -3 -4)	2.539	1.268	2.00	80.5	79.3
[14 -2 9]	(1 7 0)	(3 3 -4)	2.539	1.268	2.00	76.4	85.6
[14 -2 5]	(1 7 0)	(2 4 -4)	2.539	1.259	2.02	74.7	85.9
[21 -3 -16]	(1 7 0)	(1 -9 3)	2.539	1.257	2.02	59.4	56.8
[21 -3 2]	(1 7 0)	(1 9 3)	2.539	1.257	2.02	47.4	78.2
[14 -2 -1]	(1 7 0)	(0 -2 4)	2.539	1.252	2.03	86.3	73.5
[14 -2 1]	(1 7 0)	(0 2 4)	2.539	1.252	2.03	78.6	77.5
[14 -2 15]	(1 7 0)	(4 -2 -4)	2.539	1.251	2.03	86.4	73.3
[14 -2 13]	(1 7 0)	(4 2 -4)	2.539	1.251	2.03	78.5	77.3
[21 -3 -22]	(1 7 0)	(2 -8 3)	2.539	1.244	2.04	66.2	51.2
[7 -1 -2]	(1 7 0)	(2 8 3)	2.539	1.244	2.04	50.3	67.9
[21 -3 -28]	(1 7 0)	(4 0 3)	2.539	1.241	2.05	79.4	46.4
[21 -3 50]	(1 7 0)	(7 -1 -3)	2.539	1.235	2.06	83.1	45.5
[7 -1 16]	(1 7 0)	(-7 -1 3)	2.539	1.235	2.06	75.6	47.0
[21 -3 -26]	(1 7 0)	(4 2 3)	2.539	1.230	2.06	71.9	47.9
[14 -2 1]	(1 7 0)	(-1 -5 4)	2.539	1.224	2.08	73.3	77.5
[7 -1 3]	(1 7 0)	(-1 5 4)	2.539	1.224	2.08	69.3	88.0
[14 -2 13]	(1 7 0)	(-3 5 4)	2.539	1.223	2.08	73.3	77.3
[7 -1 4]	(1 7 0)	(-3 -5 4)	2.539	1.223	2.08	69.3	87.7
[21 -3 46]	(1 7 0)	(7 3 -3)	2.539	1.214	2.09	68.2	48.5
[7 -1 -2]	(1 7 0)	(-1 1 -4)	2.539	1.211	2.10	88.0	67.9
[14 -2 -3]	(1 7 0)	(1 1 4)	2.539	1.211	2.10	80.7	69.7
[7 -1 9]	(1 7 0)	(-5 1 4)	2.539	1.209	2.10	88.0	67.6
[14 -2 17]	(1 7 0)	(5 1 -4)	2.539	1.209	2.10	80.7	69.4
[21 -3 -28]	(1 7 0)	(3 -7 3)	2.539	1.206	2.10	72.8	46.4
[21 -3 -14]	(1 7 0)	(3 7 3)	2.539	1.206	2.10	53.9	58.8
[7 -1 -8]	(1 7 0)	(4 4 3)	2.539	1.199	2.12	64.6	49.5

Richterite (170) 287 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[21 -3 44]	(1 7 0)	(-5 9 3)	2.539	1.196	2.12	63.2	50.2
[21 -3 26]	(1 7 0)	(5 9 -3)	2.539	1.196	2.12	47.3	68.8
[14 -2 -5]	(1 7 0)	(1 -3 4)	2.539	1.191	2.13	84.8	66.0
[7 -1 -1]	(1 7 0)	(1 3 4)	2.539	1.191	2.13	73.5	71.6
[14 -2 19]	(1 7 0)	(5 -3 -4)	2.539	1.189	2.14	84.8	65.8
[7 -1 8]	(1 7 0)	(5 3 -4)	2.539	1.189	2.14	73.5	71.3
[21 -3 44]	(1 7 0)	(-7 -5 3)	2.539	1.173	2.16	61.2	50.2
[14 -2 -3]	(1 7 0)	(0 6 -4)	2.539	1.169	2.17	72.2	69.7
[14 -2 3]	(1 7 0)	(0 6 4)	2.539	1.169	2.17	64.5	81.7
[14 -2 17]	(1 7 0)	(-4 6 4)	2.539	1.167	2.17	72.3	69.4
[14 -2 11]	(1 7 0)	(-4 -6 4)	2.539	1.167	2.17	64.5	81.4
[21 -3 50]	(1 7 0)	(-6 8 3)	2.539	1.167	2.18	69.7	45.5
[21 -3 34]	(1 7 0)	(-6 -8 3)	2.539	1.167	2.18	50.8	59.6
[7 -1 0]	(1 7 0)	(1 7 -4)	2.539	1.163	2.18	66.7	75.5
[14 -2 7]	(1 7 0)	(-1 7 4)	2.539	1.163	2.18	62.8	89.9
[7 -1 7]	(1 7 0)	(-3 7 4)	2.539	1.163	2.18	66.8	75.3
[14 -2 7]	(1 7 0)	(-3 -7 4)	2.539	1.163	2.18	62.7	89.9
[7 -1 -3]	(1 7 0)	(-1 5 -4)	2.539	1.153	2.20	77.9	64.3
[14 -2 -1]	(1 7 0)	(1 5 4)	2.539	1.153	2.20	66.7	73.5
[14 -2 -7]	(1 7 0)	(2 0 4)	2.539	1.153	2.20	82.9	62.6
[7 -1 10]	(1 7 0)	(-5 5 4)	2.539	1.151	2.21	78.0	64.0
[14 -2 15]	(1 7 0)	(5 5 -4)	2.539	1.151	2.21	66.7	73.3
[21 -3 -22]	(1 7 0)	(4 6 3)	2.539	1.151	2.21	57.8	51.2
[14 -2 21]	(1 7 0)	(6 0 -4)	2.539	1.150	2.21	82.8	62.4
[14 -2 11]	(1 7 0)	(2 -8 -4)	2.539	1.138	2.23	61.6	81.4
[14 -2 3]	(1 7 0)	(2 8 -4)	2.539	1.138	2.23	61.5	81.7
[7 -1 14]	(1 7 0)	(-7 -7 3)	2.539	1.120	2.27	54.7	51.9
[14 -2 -9]	(1 7 0)	(-2 4 -4)	2.539	1.118	2.27	83.5	59.3
[14 -2 -5]	(1 7 0)	(2 4 4)	2.539	1.118	2.27	69.2	66.0
[14 -2 23]	(1 7 0)	(6 -4 -4)	2.539	1.116	2.28	83.5	59.1
[14 -2 19]	(1 7 0)	(6 4 -4)	2.539	1.116	2.28	69.2	65.8
[14 -2 -7]	(1 7 0)	(-1 7 -4)	2.539	1.102	2.30	71.6	62.6
[7 -1 0]	(1 7 0)	(1 7 4)	2.539	1.102	2.30	60.5	75.5
[14 -2 21]	(1 7 0)	(-5 7 4)	2.539	1.101	2.31	71.7	62.4
[7 -1 7]	(1 7 0)	(-5 -7 4)	2.539	1.101	2.31	60.4	75.3
[14 -2 -1]	(1 7 0)	(1 9 -4)	2.539	1.096	2.32	60.8	73.5
[7 -1 4]	(1 7 0)	(1 -9 -4)	2.539	1.096	2.32	56.9	87.7
[14 -2 15]	(1 7 0)	(-3 9 4)	2.539	1.095	2.32	60.9	73.3
[7 -1 3]	(1 7 0)	(-3 -9 4)	2.539	1.095	2.32	56.9	88.0
[21 -3 -20]	(1 7 0)	(4 8 3)	2.539	1.093	2.32	51.7	53.0
[14 -2 -11]	(1 7 0)	(-3 1 -4)	2.539	1.084	2.34	84.9	56.3
[7 -1 -5]	(1 7 0)	(3 1 4)	2.539	1.084	2.34	78.3	57.8
[14 -2 25]	(1 7 0)	(-7 1 4)	2.539	1.081	2.35	84.8	56.1
[7 -1 12]	(1 7 0)	(7 1 -4)	2.539	1.081	2.35	78.3	57.6
[7 -1 -6]	(1 7 0)	(3 -3 4)	2.539	1.069	2.37	88.6	54.8
[14 -2 -9]	(1 7 0)	(3 3 4)	2.539	1.069	2.37	71.8	59.3
[7 -1 13]	(1 7 0)	(7 -3 -4)	2.539	1.067	2.38	88.7	54.6
[14 -2 23]	(1 7 0)	(7 3 -4)	2.539	1.067	2.38	71.8	59.1

Richterite (170) 287 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[21 -3 50]	(1 7 0)	(-8 -6 3)	2.539	1.062	2.39	58.6	45.5
[21 -3 40]	(1 7 0)	(7 9 -3)	2.539	1.059	2.40	48.9	53.7
[35 -5 14]	(1 7 0)	(-2 0 5)	2.539	1.045	2.43	89.2	87.2
[7 -1 -4]	(1 7 0)	(-1 9 -4)	2.539	1.044	2.43	65.9	60.9
[14 -2 1]	(1 7 0)	(1 9 4)	2.539	1.044	2.43	54.8	77.5
[35 -5 22]	(1 7 0)	(-3 1 5)	2.539	1.043	2.43	87.7	86.0
[7 -1 4]	(1 7 0)	(-3 -1 5)	2.539	1.043	2.43	86.0	87.7
[7 -1 11]	(1 7 0)	(-5 9 4)	2.539	1.043	2.44	66.0	60.7
[14 -2 13]	(1 7 0)	(-5 -9 4)	2.539	1.043	2.44	54.8	77.3
[21 -3 -28]	(1 7 0)	(5 7 3)	2.539	1.042	2.44	55.6	46.4
[14 -2 -13]	(1 7 0)	(3 -5 4)	2.539	1.041	2.44	82.4	53.4
[7 -1 -4]	(1 7 0)	(3 5 4)	2.539	1.041	2.44	65.6	60.9
[14 -2 27]	(1 7 0)	(7 -5 -4)	2.539	1.039	2.44	82.5	53.2
[7 -1 11]	(1 7 0)	(7 5 -4)	2.539	1.039	2.44	65.6	60.7
[35 -5 12]	(1 7 0)	(-2 -2 5)	2.539	1.039	2.44	84.5	85.5
[35 -5 16]	(1 7 0)	(-2 2 5)	2.539	1.039	2.44	83.0	88.9
[35 -5 28]	(1 7 0)	(-4 0 5)	2.539	1.033	2.46	87.6	81.0
[35 -5 6]	(1 7 0)	(1 1 -5)	2.539	1.032	2.46	89.3	80.4
[35 -5 8]	(1 7 0)	(1 -1 -5)	2.539	1.032	2.46	84.5	82.1
[14 -2 -11]	(1 7 0)	(-2 8 -4)	2.539	1.031	2.46	71.3	56.3
[14 -2 -3]	(1 7 0)	(2 8 4)	2.539	1.031	2.46	57.1	69.7
[35 -5 24]	(1 7 0)	(-3 3 5)	2.539	1.030	2.46	81.5	84.3
[35 -5 18]	(1 7 0)	(-3 -3 5)	2.539	1.030	2.46	79.8	89.4
[14 -2 25]	(1 7 0)	(-6 8 4)	2.539	1.029	2.47	71.4	56.1
[14 -2 17]	(1 7 0)	(-6 -8 4)	2.539	1.029	2.47	57.1	69.4
[7 -1 6]	(1 7 0)	(-4 2 5)	2.539	1.026	2.47	86.3	79.3
[35 -5 26]	(1 7 0)	(-4 -2 5)	2.539	1.026	2.47	81.4	82.6
[7 -1 2]	(1 7 0)	(2 4 -5)	2.539	1.019	2.49	78.4	83.8
[35 -5 18]	(1 7 0)	(2 -4 -5)	2.539	1.019	2.49	76.9	89.4
[35 -5 4]	(1 7 0)	(1 3 -5)	2.539	1.019	2.49	83.1	78.8
[7 -1 2]	(1 7 0)	(-1 3 5)	2.539	1.019	2.49	78.4	83.8
[14 -2 -15]	(1 7 0)	(4 -2 4)	2.539	1.012	2.51	86.7	50.8
[14 -2 -13]	(1 7 0)	(4 2 4)	2.539	1.012	2.51	74.4	53.4
[14 -2 29]	(1 7 0)	(8 -2 -4)	2.539	1.009	2.52	86.6	50.6
[14 -2 27]	(1 7 0)	(-8 -2 4)	2.539	1.009	2.52	74.3	53.2
[35 -5 36]	(1 7 0)	(5 -1 -5)	2.539	1.008	2.52	89.1	74.5
[35 -5 34]	(1 7 0)	(-5 -1 5)	2.539	1.008	2.52	83.0	76.1
[35 -5 32]	(1 7 0)	(-4 4 5)	2.539	1.008	2.52	80.2	77.7
[35 -5 24]	(1 7 0)	(-4 -4 5)	2.539	1.008	2.52	75.4	84.3
[35 -5 26]	(1 7 0)	(-3 5 5)	2.539	1.005	2.53	75.6	82.6
[35 -5 16]	(1 7 0)	(-3 -5 5)	2.539	1.005	2.53	73.9	88.9
[35 -5 -2]	(1 7 0)	(0 2 -5)	2.539	1.005	2.53	87.8	73.9
[35 -5 2]	(1 7 0)	(0 2 5)	2.539	1.005	2.53	80.1	77.1
[7 -1 -7]	(1 7 0)	(3 -7 4)	2.539	1.004	2.53	76.5	52.1
[14 -2 -7]	(1 7 0)	(3 7 4)	2.539	1.004	2.53	59.8	62.6
[7 -1 14]	(1 7 0)	(7 -7 -4)	2.539	1.002	2.53	76.6	51.9
[14 -2 21]	(1 7 0)	(7 7 -4)	2.539	1.002	2.53	59.8	62.4

Richterite (350) 333 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[5 -3 0]	(3 5 0)	(0 0 1)	2.428	5.056	0.48	78.8	80.0
[5 -3 8]	(3 5 0)	(-1 1 1)	2.428	4.870	0.50	89.1	68.5
[5 -3 2]	(3 5 0)	(1 1 -1)	2.428	4.870	0.50	68.6	88.1
[5 -3 6]	(3 5 0)	(0 2 1)	2.428	4.432	0.55	60.8	75.9
[5 -3 10]	(3 5 0)	(-2 0 1)	2.428	4.061	0.60	61.7	61.8
[5 -3 -8]	(3 5 0)	(1 -1 1)	2.428	3.976	0.61	71.4	53.3
[5 -3 -2]	(3 5 0)	(1 1 1)	2.428	3.976	0.61	52.9	72.3
[5 -3 14]	(3 5 0)	(-1 3 1)	2.428	3.900	0.62	74.6	50.6
[5 -3 -4]	(3 5 0)	(-1 -3 1)	2.428	3.900	0.62	55.1	65.2
[5 -3 16]	(3 5 0)	(2 -2 -1)	2.428	3.716	0.65	80.3	46.1
[5 -3 4]	(3 5 0)	(-2 -2 1)	2.428	3.716	0.65	45.6	83.8
[5 -3 12]	(3 5 0)	(0 4 1)	2.428	3.404	0.71	51.8	55.8
[5 -3 4]	(3 5 0)	(1 3 1)	2.428	3.393	0.72	40.7	83.8
[5 -3 -10]	(3 5 0)	(2 0 1)	2.428	3.119	0.78	52.9	48.4
[5 -3 12]	(3 5 0)	(-3 -1 1)	2.428	3.067	0.79	45.1	55.8
[5 -3 -2]	(3 5 0)	(2 4 -1)	2.428	3.046	0.80	37.6	72.3
[5 -3 -10]	(3 5 0)	(1 5 -1)	2.428	2.976	0.82	49.5	48.4
[5 -3 -4]	(3 5 0)	(2 2 1)	2.428	2.954	0.82	38.4	65.2
[5 -3 6]	(3 5 0)	(3 3 -1)	2.428	2.775	0.88	33.1	75.9
[5 -3 10]	(3 5 0)	(1 5 1)	2.428	2.731	0.89	36.3	61.8
[5 -3 4]	(3 5 0)	(1 -1 -2)	2.428	2.591	0.94	84.8	83.8
[5 -3 1]	(3 5 0)	(1 1 -2)	2.428	2.591	0.94	84.6	84.0
[5 -3 2]	(3 5 0)	(2 4 1)	2.428	2.582	0.94	29.6	88.1
[5 -3 5]	(3 5 0)	(-2 0 2)	2.428	2.525	0.96	78.6	79.8
[5 -3 -8]	(3 5 0)	(2 6 -1)	2.428	2.449	0.99	35.7	53.3
[5 -3 -3]	(3 5 0)	(0 2 -2)	2.428	2.438	1.00	89.3	68.7
[5 -3 3]	(3 5 0)	(0 2 2)	2.428	2.438	1.00	68.8	87.9
[5 -3 7]	(3 5 0)	(-1 3 2)	2.428	2.407	1.01	75.1	72.1
[5 -3 -2]	(3 5 0)	(-1 -3 2)	2.428	2.407	1.01	74.9	72.3
[5 -3 0]	(3 5 0)	(3 5 -1)	2.428	2.377	1.02	27.5	80.0
[5 -3 14]	(3 5 0)	(-4 -2 1)	2.428	2.363	1.03	35.7	50.6
[5 -3 -4]	(3 5 0)	(1 -1 2)	2.428	2.287	1.06	74.3	65.2
[5 -3 -1]	(3 5 0)	(1 1 2)	2.428	2.287	1.06	64.2	76.1
[5 -3 9]	(3 5 0)	(3 -1 -2)	2.428	2.282	1.06	74.1	65.1
[5 -3 6]	(3 5 0)	(-3 -1 2)	2.428	2.282	1.06	64.0	75.9
[5 -3 -6]	(3 5 0)	(3 3 1)	2.428	2.275	1.07	30.5	58.9
[5 -3 11]	(3 5 0)	(2 -4 -2)	2.428	2.214	1.10	81.7	58.7
[5 -3 -1]	(3 5 0)	(2 4 -2)	2.428	2.214	1.10	60.6	76.1
[5 -3 16]	(3 5 0)	(1 7 1)	2.428	2.210	1.10	35.9	46.1
[5 -3 8]	(3 5 0)	(2 6 1)	2.428	2.188	1.11	26.7	68.5
[5 -3 8]	(3 5 0)	(4 4 -1)	2.428	2.159	1.12	26.3	68.5
[5 -3 -7]	(3 5 0)	(-1 3 -2)	2.428	2.158	1.13	84.2	56.0
[5 -3 2]	(3 5 0)	(1 3 2)	2.428	2.158	1.13	55.6	88.1
[5 -3 12]	(3 5 0)	(3 -3 -2)	2.428	2.154	1.13	84.0	55.8
[5 -3 3]	(3 5 0)	(-3 -3 2)	2.428	2.154	1.13	55.4	87.9
[5 -3 10]	(3 5 0)	(-1 5 2)	2.428	2.133	1.14	67.7	61.8
[5 -3 -5]	(3 5 0)	(1 5 -2)	2.428	2.133	1.14	67.4	62.0
[5 -3 0]	(3 5 0)	(3 5 1)	2.428	2.040	1.19	23.3	80.0

Richterite (350) 333 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[5 -3 -5]	(3 5 0)	(2 0 2)	2.428	2.036	1.19	61.8	62.0
[5 -3 -10]	(3 5 0)	(1 -5 2)	2.428	1.954	1.24	87.2	48.4
[5 -3 5]	(3 5 0)	(1 5 2)	2.428	1.954	1.24	49.3	79.8
[5 -3 -9]	(3 5 0)	(0 -6 2)	2.428	1.951	1.24	74.4	50.7
[5 -3 9]	(3 5 0)	(0 6 2)	2.428	1.951	1.24	55.3	65.1
[5 -3 15]	(3 5 0)	(3 -5 -2)	2.428	1.951	1.24	87.4	48.3
[5 -3 0]	(3 5 0)	(3 5 -2)	2.428	1.951	1.24	49.2	80.0
[5 -3 2]	(3 5 0)	(-4 -6 1)	2.428	1.912	1.27	21.4	88.1
[5 -3 16]	(3 5 0)	(5 3 -1)	2.428	1.893	1.28	30.1	46.1
[5 -3 -11]	(3 5 0)	(-2 4 -2)	2.428	1.862	1.30	80.5	46.2
[5 -3 1]	(3 5 0)	(2 4 2)	2.428	1.862	1.30	45.7	84.0
[5 -3 13]	(3 5 0)	(-1 7 2)	2.428	1.855	1.31	62.4	53.1
[5 -3 -8]	(3 5 0)	(1 7 -2)	2.428	1.855	1.31	62.2	53.3
[5 -3 14]	(3 5 0)	(2 8 1)	2.428	1.852	1.31	27.2	50.6
[5 -3 -8]	(3 5 0)	(4 4 1)	2.428	1.829	1.33	25.9	53.3
[5 -3 6]	(3 5 0)	(3 7 1)	2.428	1.793	1.35	20.7	75.9
[5 -3 -9]	(3 5 0)	(-3 1 -2)	2.428	1.772	1.37	61.0	50.7
[5 -3 -6]	(3 5 0)	(3 1 2)	2.428	1.772	1.37	52.3	58.9
[5 -3 14]	(3 5 0)	(-5 1 2)	2.428	1.767	1.37	60.9	50.6
[5 -3 11]	(3 5 0)	(5 1 -2)	2.428	1.767	1.37	52.2	58.7
[5 -3 10]	(3 5 0)	(-5 -5 1)	2.428	1.750	1.39	22.3	61.8
[15 -9 10]	(3 5 0)	(2 0 -3)	2.428	1.737	1.40	86.0	86.5
[5 -3 8]	(3 5 0)	(1 7 2)	2.428	1.734	1.40	45.4	68.5
[5 -3 -3]	(3 5 0)	(-3 -7 2)	2.428	1.732	1.40	45.2	68.7
[15 -9 2]	(3 5 0)	(-1 -1 3)	2.428	1.730	1.40	89.8	82.7
[15 -9 8]	(3 5 0)	(-1 1 3)	2.428	1.730	1.40	82.7	89.2
[5 -3 -3]	(3 5 0)	(3 3 2)	2.428	1.710	1.42	44.5	68.7
[15 -9 16]	(3 5 0)	(-2 2 3)	2.428	1.707	1.42	86.9	78.5
[15 -9 4]	(3 5 0)	(-2 -2 3)	2.428	1.707	1.42	79.0	85.4
[5 -3 8]	(3 5 0)	(5 3 -2)	2.428	1.705	1.42	44.5	68.5
[5 -3 1]	(3 5 0)	(-4 -6 2)	2.428	1.694	1.43	40.6	84.0
[5 -3 6]	(3 5 0)	(-3 1 3)	2.428	1.676	1.45	82.1	75.9
[5 -3 4]	(3 5 0)	(3 1 -3)	2.428	1.676	1.45	75.1	83.8
[5 -3 -4]	(3 5 0)	(-4 -8 1)	2.428	1.676	1.45	20.6	65.2
[15 -9 -4]	(3 5 0)	(1 3 -3)	2.428	1.672	1.45	83.3	74.8
[15 -9 14]	(3 5 0)	(1 -3 -3)	2.428	1.672	1.45	76.0	81.1
[5 -3 -2]	(3 5 0)	(4 6 1)	2.428	1.672	1.45	19.6	72.3
[5 -3 -2]	(3 5 0)	(0 2 -3)	2.428	1.658	1.46	85.9	72.3
[5 -3 2]	(3 5 0)	(0 2 3)	2.428	1.658	1.46	72.0	88.1
[15 -9 22]	(3 5 0)	(2 -4 -3)	2.428	1.625	1.49	80.3	70.9
[15 -9 -2]	(3 5 0)	(2 4 -3)	2.428	1.625	1.49	72.7	77.4
[5 -3 16]	(3 5 0)	(1 -9 -2)	2.428	1.612	1.51	58.8	46.1
[5 -3 -11]	(3 5 0)	(1 9 -2)	2.428	1.612	1.51	58.6	46.2
[5 -3 0]	(3 5 0)	(3 5 2)	2.428	1.603	1.52	38.5	80.0
[5 -3 5]	(3 5 0)	(5 5 -2)	2.428	1.599	1.52	38.4	79.8
[15 -9 20]	(3 5 0)	(-4 0 3)	2.428	1.589	1.53	71.9	73.4
[5 -3 4]	(3 5 0)	(5 7 -1)	2.428	1.587	1.53	17.8	83.8
[15 -9 -8]	(3 5 0)	(-1 1 -3)	2.428	1.587	1.53	75.6	69.9

Richterite (350) 333 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[15 -9 -2]	(3 5 0)	(1 1 3)	2.428	1.587	1.53	68.7	77.4
[5 -3 -4]	(3 5 0)	(0 -4 3)	2.428	1.583	1.53	87.5	65.2
[5 -3 4]	(3 5 0)	(0 4 3)	2.428	1.583	1.53	65.9	83.8
[15 -9 -10]	(3 5 0)	(-1 -5 3)	2.428	1.572	1.54	77.2	67.5
[15 -9 20]	(3 5 0)	(-1 5 3)	2.428	1.572	1.54	70.1	73.4
[5 -3 12]	(3 5 0)	(3 9 1)	2.428	1.570	1.55	21.3	55.8
[15 -9 26]	(3 5 0)	(4 -2 -3)	2.428	1.566	1.55	78.8	66.2
[15 -9 14]	(3 5 0)	(-4 -2 3)	2.428	1.566	1.55	65.3	81.1
[15 -9 -14]	(3 5 0)	(1 -3 3)	2.428	1.541	1.58	82.4	63.0
[15 -9 4]	(3 5 0)	(1 3 3)	2.428	1.541	1.58	62.4	85.4
[5 -3 -7]	(3 5 0)	(4 2 2)	2.428	1.538	1.58	45.1	56.0
[5 -3 10]	(3 5 0)	(-3 5 3)	2.428	1.531	1.59	84.6	61.8
[5 -3 0]	(3 5 0)	(-3 -5 3)	2.428	1.531	1.59	63.0	80.0
[5 -3 11]	(3 5 0)	(1 9 2)	2.428	1.530	1.59	43.2	58.7
[5 -3 -6]	(3 5 0)	(3 9 -2)	2.428	1.529	1.59	43.0	58.9
[5 -3 7]	(3 5 0)	(2 8 2)	2.428	1.525	1.59	37.8	72.1
[5 -3 -10]	(3 5 0)	(5 5 1)	2.428	1.522	1.60	22.9	48.4
[15 -9 28]	(3 5 0)	(2 -6 -3)	2.428	1.512	1.61	74.7	64.0
[15 -9 -8]	(3 5 0)	(2 6 -3)	2.428	1.512	1.61	67.3	69.9
[5 -3 4]	(3 5 0)	(4 8 1)	2.428	1.507	1.61	16.8	83.8
[15 -9 32]	(3 5 0)	(4 -4 -3)	2.428	1.502	1.62	85.5	59.7
[15 -9 8]	(3 5 0)	(-4 -4 3)	2.428	1.502	1.62	59.4	89.2
[15 -9 -10]	(3 5 0)	(2 0 3)	2.428	1.478	1.64	66.4	67.5
[5 -3 3]	(3 5 0)	(3 7 2)	2.428	1.474	1.65	34.3	87.9
[5 -3 9]	(3 5 0)	(-6 -4 2)	2.428	1.474	1.65	38.4	65.1
[5 -3 2]	(3 5 0)	(5 7 -2)	2.428	1.472	1.65	34.2	88.1
[15 -9 28]	(3 5 0)	(5 -1 -3)	2.428	1.470	1.65	69.6	64.0
[15 -9 22]	(3 5 0)	(-5 -1 3)	2.428	1.470	1.65	63.0	70.9
[5 -3 12]	(3 5 0)	(6 6 -1)	2.428	1.466	1.66	19.8	55.8
[15 -9 -20]	(3 5 0)	(-1 5 -3)	2.428	1.462	1.66	88.8	56.9
[15 -9 10]	(3 5 0)	(1 5 3)	2.428	1.462	1.66	57.1	86.5
[15 -9 -16]	(3 5 0)	(2 -2 3)	2.428	1.459	1.66	73.1	60.9
[15 -9 -4]	(3 5 0)	(2 2 3)	2.428	1.459	1.66	60.1	74.8
[15 -9 -16]	(3 5 0)	(1 7 -3)	2.428	1.450	1.67	72.0	60.9
[15 -9 26]	(3 5 0)	(-1 7 3)	2.428	1.450	1.67	65.3	66.2
[15 -9 34]	(3 5 0)	(-5 3 3)	2.428	1.433	1.69	76.3	57.7
[15 -9 16]	(3 5 0)	(5 3 -3)	2.428	1.433	1.69	57.0	78.5
[5 -3 -2]	(3 5 0)	(-5 -9 1)	2.428	1.426	1.70	16.6	72.3
[5 -3 12]	(3 5 0)	(-3 7 3)	2.428	1.418	1.71	79.1	55.8
[5 -3 -2]	(3 5 0)	(-3 -7 3)	2.428	1.418	1.71	58.5	72.3
[15 -9 38]	(3 5 0)	(-4 6 3)	2.428	1.411	1.72	88.4	54.0
[15 -9 2]	(3 5 0)	(-4 -6 3)	2.428	1.411	1.72	54.6	82.7
[5 -3 -4]	(3 5 0)	(5 7 1)	2.428	1.411	1.72	17.3	65.2
[15 -9 -22]	(3 5 0)	(-2 4 -3)	2.428	1.407	1.73	79.7	55.1
[15 -9 2]	(3 5 0)	(2 4 3)	2.428	1.407	1.73	54.4	82.7
[5 -3 -1]	(3 5 0)	(4 6 2)	2.428	1.390	1.75	33.2	76.1
[15 -9 -14]	(3 5 0)	(-2 -8 3)	2.428	1.387	1.75	63.1	63.0
[5 -3 -11]	(3 5 0)	(5 1 2)	2.428	1.372	1.77	46.6	46.2

Richterite (350) 333 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[5 -3 16]	(3 5 0)	(-7 -1 2)	2.428	1.369	1.77	46.6	46.1
[15 -9 40]	(3 5 0)	(5 -5 -3)	2.428	1.369	1.77	82.6	52.3
[15 -9 10]	(3 5 0)	(-5 -5 3)	2.428	1.369	1.77	51.8	86.5
[15 -9 -26]	(3 5 0)	(-1 7 -3)	2.428	1.362	1.78	85.5	51.6
[15 -9 16]	(3 5 0)	(1 7 3)	2.428	1.362	1.78	52.8	78.5
[5 -3 -8]	(3 5 0)	(0 8 -3)	2.428	1.360	1.79	76.5	53.3
[5 -3 8]	(3 5 0)	(0 8 3)	2.428	1.360	1.79	56.9	68.5
[5 -3 -4]	(3 5 0)	(3 1 3)	2.428	1.354	1.79	58.7	65.2
[5 -3 6]	(3 5 0)	(6 8 -1)	2.428	1.351	1.80	15.4	75.9
[5 -3 6]	(3 5 0)	(3 9 2)	2.428	1.343	1.81	31.9	75.9
[5 -3 -8]	(3 5 0)	(5 3 2)	2.428	1.343	1.81	39.8	53.3
[5 -3 -1]	(3 5 0)	(-5 -9 2)	2.428	1.341	1.81	31.9	76.1
[5 -3 13]	(3 5 0)	(7 3 -2)	2.428	1.340	1.81	39.8	53.1
[5 -3 12]	(3 5 0)	(6 -2 -3)	2.428	1.339	1.81	68.1	55.8
[5 -3 8]	(3 5 0)	(-6 -2 3)	2.428	1.339	1.81	55.6	68.5
[15 -9 -28]	(3 5 0)	(2 -6 3)	2.428	1.332	1.82	85.8	49.9
[15 -9 8]	(3 5 0)	(2 6 3)	2.428	1.332	1.82	49.8	89.2
[15 -9 -22]	(3 5 0)	(-1 -9 3)	2.428	1.325	1.83	67.9	55.1
[15 -9 32]	(3 5 0)	(-1 9 3)	2.428	1.325	1.83	61.5	59.7
[10 -6 5]	(3 5 0)	(-2 0 4)	2.428	1.308	1.86	89.9	89.9
[15 -9 44]	(3 5 0)	(-4 8 3)	2.428	1.308	1.86	83.1	49.0
[15 -9 -4]	(3 5 0)	(-4 -8 3)	2.428	1.308	1.86	51.0	74.8
[5 -3 14]	(3 5 0)	(6 -4 -3)	2.428	1.299	1.87	74.4	50.6
[5 -3 6]	(3 5 0)	(-6 -4 3)	2.428	1.299	1.87	50.1	75.9
[5 -3 2]	(3 5 0)	(5 9 1)	2.428	1.294	1.88	14.3	88.1
[10 -6 1]	(3 5 0)	(-1 -1 4)	2.428	1.294	1.88	87.0	82.0
[5 -3 2]	(3 5 0)	(1 -1 -4)	2.428	1.294	1.88	81.7	88.1
[10 -6 9]	(3 5 0)	(3 -1 -4)	2.428	1.293	1.88	86.8	81.8
[5 -3 3]	(3 5 0)	(-3 -1 4)	2.428	1.293	1.88	81.5	87.9
[5 -3 -5]	(3 5 0)	(5 5 2)	2.428	1.289	1.88	33.9	62.0
[5 -3 3]	(3 5 0)	(6 8 -2)	2.428	1.289	1.88	29.5	87.9
[5 -3 10]	(3 5 0)	(-7 -5 2)	2.428	1.286	1.89	33.9	61.8
[15 -9 46]	(3 5 0)	(5 -7 -3)	2.428	1.286	1.89	88.4	47.5
[15 -9 4]	(3 5 0)	(-5 -7 3)	2.428	1.286	1.89	47.7	85.4
[5 -3 -10]	(3 5 0)	(3 -5 3)	2.428	1.274	1.91	77.6	48.4
[5 -3 0]	(3 5 0)	(3 5 3)	2.428	1.274	1.91	47.8	80.0
[5 -3 -1]	(3 5 0)	(1 3 -4)	2.428	1.269	1.91	87.7	76.1
[10 -6 7]	(3 5 0)	(1 -3 -4)	2.428	1.269	1.91	76.5	85.8
[5 -3 6]	(3 5 0)	(-3 3 4)	2.428	1.268	1.91	87.9	75.9
[10 -6 3]	(3 5 0)	(-3 -3 4)	2.428	1.268	1.91	76.3	86.0
[10 -6 -1]	(3 5 0)	(2 4 -4)	2.428	1.259	1.93	79.5	78.0
[5 -3 14]	(3 5 0)	(7 7 -1)	2.428	1.258	1.93	18.1	50.6
[15 -9 -32]	(3 5 0)	(1 -9 3)	2.428	1.257	1.93	80.6	46.9
[15 -9 22]	(3 5 0)	(1 9 3)	2.428	1.257	1.93	49.7	70.9
[10 -6 -3]	(3 5 0)	(0 2 -4)	2.428	1.252	1.94	84.1	74.2
[10 -6 3]	(3 5 0)	(0 2 4)	2.428	1.252	1.94	73.6	86.0
[10 -6 13]	(3 5 0)	(-4 2 4)	2.428	1.251	1.94	83.9	74.0
[10 -6 7]	(3 5 0)	(4 2 -4)	2.428	1.251	1.94	73.4	85.8

Richterite (350) 333 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[15 -9 -34]	(3 5 0)	(2 -8 3)	2.428	1.244	1.95	88.9	45.5
[15 -9 14]	(3 5 0)	(2 8 3)	2.428	1.244	1.95	46.2	81.1
[15 -9 -20]	(3 5 0)	(4 0 3)	2.428	1.241	1.96	58.1	56.9
[15 -9 38]	(3 5 0)	(7 -1 -3)	2.428	1.235	1.97	61.0	54.0
[15 -9 32]	(3 5 0)	(-7 -1 3)	2.428	1.235	1.97	55.1	59.7
[15 -9 -26]	(3 5 0)	(4 -2 3)	2.428	1.230	1.97	64.2	51.6
[15 -9 -14]	(3 5 0)	(4 2 3)	2.428	1.230	1.97	52.3	63.0
[10 -6 -5]	(3 5 0)	(1 5 -4)	2.428	1.224	1.98	82.8	70.5
[5 -3 5]	(3 5 0)	(1 -5 -4)	2.428	1.224	1.98	71.8	79.8
[10 -6 15]	(3 5 0)	(-3 5 4)	2.428	1.223	1.99	83.0	70.3
[5 -3 0]	(3 5 0)	(-3 -5 4)	2.428	1.223	1.99	71.6	80.0
[5 -3 -2]	(3 5 0)	(5 7 2)	2.428	1.219	1.99	29.3	72.3
[5 -3 -6]	(3 5 0)	(6 8 1)	2.428	1.218	1.99	15.8	58.9
[5 -3 7]	(3 5 0)	(-7 -7 2)	2.428	1.217	2.00	29.2	72.1
[15 -9 44]	(3 5 0)	(7 -3 -3)	2.428	1.214	2.00	67.1	49.0
[15 -9 26]	(3 5 0)	(7 3 -3)	2.428	1.214	2.00	49.5	66.2
[5 -3 -2]	(3 5 0)	(-1 1 -4)	2.428	1.211	2.00	76.3	72.3
[10 -6 -1]	(3 5 0)	(1 1 4)	2.428	1.211	2.00	71.1	78.0
[5 -3 7]	(3 5 0)	(-5 1 4)	2.428	1.209	2.01	76.1	72.1
[10 -6 11]	(3 5 0)	(5 1 -4)	2.428	1.209	2.01	70.9	77.8
[5 -3 2]	(3 5 0)	(3 7 3)	2.428	1.206	2.01	43.8	88.1
[15 -9 -32]	(3 5 0)	(4 -4 3)	2.428	1.199	2.03	70.2	46.9
[15 -9 -8]	(3 5 0)	(4 4 3)	2.428	1.199	2.03	47.0	69.9
[15 -9 -2]	(3 5 0)	(5 9 -3)	2.428	1.196	2.03	44.6	77.4
[10 -6 -7]	(3 5 0)	(1 -3 4)	2.428	1.191	2.04	81.5	66.9
[5 -3 1]	(3 5 0)	(1 3 4)	2.428	1.191	2.04	66.2	84.0
[10 -6 17]	(3 5 0)	(5 -3 -4)	2.428	1.189	2.04	81.3	66.8
[5 -3 4]	(3 5 0)	(-5 -3 4)	2.428	1.189	2.04	66.0	83.8
[5 -3 -9]	(3 5 0)	(6 4 2)	2.428	1.184	2.05	35.7	50.7
[5 -3 14]	(3 5 0)	(-8 -4 2)	2.428	1.181	2.06	35.7	50.6
[5 -3 8]	(3 5 0)	(7 9 -1)	2.428	1.174	2.07	13.9	68.5
[15 -9 20]	(3 5 0)	(-7 -5 3)	2.428	1.173	2.07	44.6	73.4
[10 -6 -9]	(3 5 0)	(0 6 -4)	2.428	1.169	2.08	85.9	63.6
[10 -6 9]	(3 5 0)	(0 6 4)	2.428	1.169	2.08	64.5	81.8
[10 -6 19]	(3 5 0)	(-4 6 4)	2.428	1.167	2.08	86.1	63.4
[10 -6 1]	(3 5 0)	(-4 -6 4)	2.428	1.167	2.08	64.3	82.0
[5 -3 2]	(3 5 0)	(6 8 -3)	2.428	1.167	2.08	42.0	88.1
[5 -3 -4]	(3 5 0)	(-1 -7 4)	2.428	1.163	2.09	78.3	65.2
[10 -6 13]	(3 5 0)	(-1 7 4)	2.428	1.163	2.09	67.7	74.0
[5 -3 9]	(3 5 0)	(3 -7 -4)	2.428	1.163	2.09	78.5	65.1
[10 -6 -3]	(3 5 0)	(3 7 -4)	2.428	1.163	2.09	67.5	74.2
[5 -3 -5]	(3 5 0)	(-1 5 -4)	2.428	1.153	2.11	86.5	62.0
[10 -6 5]	(3 5 0)	(1 5 4)	2.428	1.153	2.11	61.8	89.9
[10 -6 -5]	(3 5 0)	(2 0 4)	2.428	1.153	2.11	69.1	70.5
[5 -3 10]	(3 5 0)	(5 -5 -4)	2.428	1.151	2.11	86.4	61.8
[10 -6 5]	(3 5 0)	(5 5 -4)	2.428	1.151	2.11	61.6	89.9
[15 -9 -2]	(3 5 0)	(4 6 3)	2.428	1.151	2.11	42.5	77.4
[10 -6 15]	(3 5 0)	(-6 0 4)	2.428	1.150	2.11	69.0	70.3

Richterite (350) 333 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[5 -3 1]	(3 5 0)	(5 9 2)	2.428	1.142	2.13	26.0	84.0
[5 -3 4]	(3 5 0)	(-7 -9 2)	2.428	1.140	2.13	26.0	83.8
[10 -6 -7]	(3 5 0)	(2 8 -4)	2.428	1.138	2.13	70.9	66.9
[5 -3 11]	(3 5 0)	(-8 -6 2)	2.428	1.136	2.14	30.5	58.7
[15 -9 -28]	(3 5 0)	(5 -1 3)	2.428	1.133	2.14	58.0	49.9
[15 -9 -22]	(3 5 0)	(5 1 3)	2.428	1.133	2.14	52.4	55.1
[15 -9 40]	(3 5 0)	(8 0 -3)	2.428	1.132	2.15	55.1	52.3
[15 -9 46]	(3 5 0)	(8 -2 -3)	2.428	1.123	2.16	60.8	47.5
[15 -9 34]	(3 5 0)	(-8 -2 3)	2.428	1.123	2.16	49.6	57.7
[15 -9 14]	(3 5 0)	(7 7 -3)	2.428	1.120	2.17	40.5	81.1
[10 -6 -11]	(3 5 0)	(-2 4 -4)	2.428	1.118	2.17	79.3	60.4
[10 -6 1]	(3 5 0)	(2 4 4)	2.428	1.118	2.17	59.6	82.0
[15 -9 -34]	(3 5 0)	(-5 3 -3)	2.428	1.116	2.18	63.8	45.5
[15 -9 -16]	(3 5 0)	(5 3 3)	2.428	1.116	2.18	47.0	60.9
[10 -6 21]	(3 5 0)	(-6 4 4)	2.428	1.116	2.18	79.2	60.2
[10 -6 9]	(3 5 0)	(6 4 -4)	2.428	1.116	2.18	59.5	81.8
[10 -6 -13]	(3 5 0)	(1 -7 4)	2.428	1.102	2.20	88.8	57.4
[5 -3 4]	(3 5 0)	(1 7 4)	2.428	1.102	2.20	57.9	83.8
[5 -3 16]	(3 5 0)	(-8 -8 1)	2.428	1.101	2.21	17.0	46.1
[10 -6 23]	(3 5 0)	(-5 7 4)	2.428	1.101	2.21	89.0	57.3
[5 -3 1]	(3 5 0)	(-5 -7 4)	2.428	1.101	2.21	57.7	84.0
[15 -9 28]	(3 5 0)	(8 4 -3)	2.428	1.099	2.21	44.5	64.0
[10 -6 -11]	(3 5 0)	(-1 -9 4)	2.428	1.096	2.22	74.4	60.4
[5 -3 8]	(3 5 0)	(-1 9 4)	2.428	1.096	2.22	64.1	68.5
[10 -6 21]	(3 5 0)	(3 -9 -4)	2.428	1.095	2.22	74.6	60.2
[5 -3 -3]	(3 5 0)	(3 9 -4)	2.428	1.095	2.22	63.9	68.7
[15 -9 4]	(3 5 0)	(4 8 3)	2.428	1.093	2.22	38.9	85.4
[15 -9 -10]	(3 5 0)	(5 5 3)	2.428	1.085	2.24	42.3	67.5
[10 -6 -9]	(3 5 0)	(-3 1 -4)	2.428	1.084	2.24	67.7	63.6
[5 -3 -3]	(3 5 0)	(3 1 4)	2.428	1.084	2.24	62.8	68.7
[5 -3 -3]	(3 5 0)	(6 8 2)	2.428	1.081	2.25	26.3	68.7
[10 -6 19]	(3 5 0)	(7 -1 -4)	2.428	1.081	2.25	67.5	63.4
[5 -3 8]	(3 5 0)	(-7 -1 4)	2.428	1.081	2.25	62.6	68.5
[5 -3 -8]	(3 5 0)	(7 9 1)	2.428	1.070	2.27	14.8	53.3
[5 -3 -6]	(3 5 0)	(3 -3 4)	2.428	1.069	2.27	72.6	58.9
[10 -6 -3]	(3 5 0)	(3 3 4)	2.428	1.069	2.27	58.1	74.2
[5 -3 11]	(3 5 0)	(7 -3 -4)	2.428	1.067	2.28	72.5	58.7
[10 -6 13]	(3 5 0)	(-7 -3 4)	2.428	1.067	2.28	58.0	74.0
[15 -9 22]	(3 5 0)	(8 6 -3)	2.428	1.062	2.29	40.1	70.9
[15 -9 8]	(3 5 0)	(-7 -9 3)	2.428	1.059	2.29	37.4	89.2
[5 -3 -10]	(3 5 0)	(7 5 2)	2.428	1.054	2.30	32.6	48.4
[5 -3 15]	(3 5 0)	(9 5 -2)	2.428	1.052	2.31	32.6	48.3
[5 -3 2]	(3 5 0)	(2 0 -5)	2.428	1.045	2.32	87.8	88.1
[5 -3 -8]	(3 5 0)	(-1 9 -4)	2.428	1.044	2.33	84.5	53.3
[10 -6 11]	(3 5 0)	(1 9 4)	2.428	1.044	2.33	54.7	77.8
[25 -15 18]	(3 5 0)	(3 -1 -5)	2.428	1.043	2.33	89.7	85.4
[25 -15 12]	(3 5 0)	(-3 -1 5)	2.428	1.043	2.33	85.4	89.7
[5 -3 13]	(3 5 0)	(-5 9 4)	2.428	1.043	2.33	84.7	53.1

Richterite (350) 333 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[10 -6 -1]	(3 5 0)	(-5 -9 4)	2.428	1.043	2.33	54.5	78.0
[15 -9 -4]	(3 5 0)	(5 7 3)	2.428	1.042	2.33	38.2	74.8
[10 -6 -15]	(3 5 0)	(-3 5 -4)	2.428	1.041	2.33	77.5	54.6
[5 -3 0]	(3 5 0)	(3 5 4)	2.428	1.041	2.33	53.9	80.0
[5 -3 5]	(3 5 0)	(-7 -5 4)	2.428	1.039	2.34	53.8	79.8
[25 -15 4]	(3 5 0)	(2 2 -5)	2.428	1.039	2.34	87.9	83.2
[25 -15 16]	(3 5 0)	(-2 2 5)	2.428	1.039	2.34	83.5	87.0
[5 -3 16]	(3 5 0)	(-9 1 3)	2.428	1.035	2.35	55.5	46.1
[5 -3 14]	(3 5 0)	(9 1 -3)	2.428	1.035	2.35	50.2	50.6
[5 -3 -8]	(3 5 0)	(6 2 3)	2.428	1.033	2.35	47.6	53.3
[5 -3 4]	(3 5 0)	(4 0 -5)	2.428	1.033	2.35	83.0	83.8
[25 -15 2]	(3 5 0)	(1 1 -5)	2.428	1.032	2.35	85.3	81.6
[25 -15 8]	(3 5 0)	(-1 1 5)	2.428	1.032	2.35	81.1	86.4
[10 -6 -17]	(3 5 0)	(-2 8 -4)	2.428	1.031	2.36	88.7	52.0
[10 -6 7]	(3 5 0)	(2 8 4)	2.428	1.031	2.36	52.2	85.8
[25 -15 24]	(3 5 0)	(3 -3 -5)	2.428	1.030	2.36	86.1	80.6
[25 -15 6]	(3 5 0)	(3 3 -5)	2.428	1.030	2.36	81.2	84.8
[10 -6 27]	(3 5 0)	(-6 8 4)	2.428	1.029	2.36	88.5	51.9
[10 -6 3]	(3 5 0)	(6 8 -4)	2.428	1.029	2.36	52.0	86.0
[25 -15 26]	(3 5 0)	(-4 2 5)	2.428	1.026	2.37	87.3	79.0
[25 -15 14]	(3 5 0)	(4 2 -5)	2.428	1.026	2.37	78.8	88.7
[5 -3 12]	(3 5 0)	(-9 -3 3)	2.428	1.022	2.38	45.1	55.8
[25 -15 -2]	(3 5 0)	(2 4 -5)	2.428	1.019	2.38	83.8	78.4
[25 -15 22]	(3 5 0)	(2 -4 -5)	2.428	1.019	2.38	79.4	82.2
[25 -15 -4]	(3 5 0)	(-1 -3 5)	2.428	1.019	2.38	89.6	76.9
[25 -15 14]	(3 5 0)	(1 -3 -5)	2.428	1.019	2.38	76.9	88.7
[5 -3 -7]	(3 5 0)	(7 7 2)	2.428	1.015	2.39	27.9	56.0
[5 -3 -6]	(3 5 0)	(6 4 3)	2.428	1.014	2.39	42.8	58.9
[5 -3 12]	(3 5 0)	(9 7 -2)	2.428	1.013	2.40	27.9	55.8
[10 -6 -13]	(3 5 0)	(-4 2 -4)	2.428	1.012	2.40	66.6	57.4
[10 -6 -7]	(3 5 0)	(4 2 4)	2.428	1.012	2.40	57.2	66.9
[10 -6 23]	(3 5 0)	(-8 2 4)	2.428	1.009	2.41	66.5	57.3
[10 -6 17]	(3 5 0)	(8 2 -4)	2.428	1.009	2.41	57.1	66.8
[25 -15 28]	(3 5 0)	(-5 1 5)	2.428	1.008	2.41	80.7	77.5
[25 -15 22]	(3 5 0)	(5 1 -5)	2.428	1.008	2.41	76.5	82.2
[25 -15 32]	(3 5 0)	(4 -4 -5)	2.428	1.008	2.41	88.6	74.4
[25 -15 8]	(3 5 0)	(4 4 -5)	2.428	1.008	2.41	74.7	86.4
[5 -3 6]	(3 5 0)	(3 -5 -5)	2.428	1.005	2.42	82.0	75.9
[5 -3 0]	(3 5 0)	(3 5 -5)	2.428	1.005	2.42	77.2	80.0
[25 -15 -6]	(3 5 0)	(0 2 -5)	2.428	1.005	2.42	83.0	75.3
[25 -15 6]	(3 5 0)	(0 2 5)	2.428	1.005	2.42	74.6	84.8
[5 -3 -9]	(3 5 0)	(-3 7 -4)	2.428	1.004	2.42	82.2	50.7
[10 -6 3]	(3 5 0)	(3 7 4)	2.428	1.004	2.42	50.3	86.0
[5 -3 14]	(3 5 0)	(-7 7 4)	2.428	1.002	2.42	82.0	50.6
[10 -6 7]	(3 5 0)	(7 7 -4)	2.428	1.002	2.42	50.1	85.8

Richterite (420) 372 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[1 -2 0]	(4 2 0)	(0 0 1)	2.343	5.056	0.46	75.5	86.1
[1 -2 3]	(4 2 0)	(-1 1 1)	2.343	4.870	0.48	79.7	71.0
[1 -2 -1]	(4 2 0)	(1 1 -1)	2.343	4.870	0.48	71.8	78.4
[1 -2 4]	(4 2 0)	(0 2 1)	2.343	4.432	0.53	70.0	64.3
[1 -2 2]	(4 2 0)	(2 0 -1)	2.343	4.061	0.58	52.4	78.3
[1 -2 -3]	(4 2 0)	(1 -1 1)	2.343	3.976	0.59	57.4	64.3
[1 -2 1]	(4 2 0)	(1 1 1)	2.343	3.976	0.59	49.6	86.0
[1 -2 7]	(4 2 0)	(1 -3 -1)	2.343	3.900	0.60	88.0	48.2
[1 -2 -5]	(4 2 0)	(1 3 -1)	2.343	3.900	0.60	69.0	52.9
[1 -2 6]	(4 2 0)	(-2 2 1)	2.343	3.716	0.63	62.9	52.9
[1 -2 -2]	(4 2 0)	(2 2 -1)	2.343	3.716	0.63	48.6	71.1
[1 -2 5]	(4 2 0)	(1 3 1)	2.343	3.393	0.69	49.7	58.2
[1 -2 -2]	(4 2 0)	(2 0 1)	2.343	3.119	0.75	39.0	71.1
[1 -2 5]	(4 2 0)	(-3 1 1)	2.343	3.067	0.76	43.6	58.2
[1 -2 1]	(4 2 0)	(3 1 -1)	2.343	3.067	0.76	36.0	86.0
[1 -2 -6]	(4 2 0)	(-2 -4 1)	2.343	3.046	0.77	51.3	48.2
[1 -2 -6]	(4 2 0)	(2 -2 1)	2.343	2.954	0.79	49.2	48.2
[1 -2 2]	(4 2 0)	(2 2 1)	2.343	2.954	0.79	35.2	78.3
[1 -2 -3]	(4 2 0)	(3 3 -1)	2.343	2.775	0.84	36.0	64.3
[2 -4 3]	(4 2 0)	(1 -1 -2)	2.343	2.591	0.90	88.1	82.1
[2 -4 -1]	(4 2 0)	(1 1 -2)	2.343	2.591	0.90	87.8	82.2
[1 -2 6]	(4 2 0)	(2 4 1)	2.343	2.582	0.91	38.2	52.9
[1 -2 1]	(4 2 0)	(2 0 -2)	2.343	2.525	0.93	75.3	86.0
[1 -2 4]	(4 2 0)	(-4 0 1)	2.343	2.444	0.96	31.2	64.3
[1 -2 -2]	(4 2 0)	(0 -2 2)	2.343	2.438	0.96	80.0	71.1
[1 -2 2]	(4 2 0)	(0 2 2)	2.343	2.438	0.96	72.0	78.3
[1 -2 -5]	(4 2 0)	(3 -1 1)	2.343	2.429	0.96	35.6	52.9
[1 -2 -1]	(4 2 0)	(3 1 1)	2.343	2.429	0.96	28.3	78.4
[2 -4 7]	(4 2 0)	(-1 3 2)	2.343	2.407	0.97	84.4	67.6
[2 -4 -5]	(4 2 0)	(-1 -3 2)	2.343	2.407	0.97	84.1	67.6
[1 -2 0]	(4 2 0)	(4 2 -1)	2.343	2.363	0.99	26.9	86.1
[2 -4 -3]	(4 2 0)	(1 -1 2)	2.343	2.287	1.02	65.0	74.7
[2 -4 1]	(4 2 0)	(1 1 2)	2.343	2.287	1.02	60.9	90.0
[2 -4 5]	(4 2 0)	(3 -1 -2)	2.343	2.282	1.03	64.8	74.6
[2 -4 1]	(4 2 0)	(-3 -1 2)	2.343	2.282	1.03	60.7	90.0
[1 -2 3]	(4 2 0)	(3 3 1)	2.343	2.275	1.03	27.4	71.0
[1 -2 5]	(4 2 0)	(2 -4 -2)	2.343	2.214	1.06	84.2	58.2
[1 -2 -3]	(4 2 0)	(-2 -4 2)	2.343	2.214	1.06	69.8	64.3
[1 -2 -4]	(4 2 0)	(4 4 -1)	2.343	2.159	1.09	29.0	58.3
[2 -4 -7]	(4 2 0)	(-1 3 -2)	2.343	2.158	1.09	70.2	61.2
[2 -4 5]	(4 2 0)	(1 3 2)	2.343	2.158	1.09	58.8	74.6
[2 -4 9]	(4 2 0)	(-3 3 2)	2.343	2.154	1.09	70.0	61.2
[2 -4 -3]	(4 2 0)	(3 3 -2)	2.343	2.154	1.09	58.6	74.7
[2 -4 11]	(4 2 0)	(1 -5 -2)	2.343	2.133	1.10	81.6	55.5
[2 -4 -9]	(4 2 0)	(1 5 -2)	2.343	2.133	1.10	81.4	55.5
[1 -2 7]	(4 2 0)	(3 5 1)	2.343	2.040	1.15	31.5	48.2
[1 -2 -1]	(4 2 0)	(2 0 2)	2.343	2.036	1.15	52.6	78.4
[1 -2 7]	(4 2 0)	(5 -1 -1)	2.343	1.978	1.18	30.5	48.2

Richterite (420) 372 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[1 -2 3]	(4 2 0)	(5 1 -1)	2.343	1.978	1.18	23.6	71.0
[2 -4 -11]	(4 2 0)	(-1 5 -2)	2.343	1.954	1.20	75.3	50.5
[2 -4 9]	(4 2 0)	(1 5 2)	2.343	1.954	1.20	58.5	61.2
[1 -2 -6]	(4 2 0)	(0 6 -2)	2.343	1.951	1.20	88.2	48.2
[1 -2 6]	(4 2 0)	(0 6 2)	2.343	1.951	1.20	69.2	52.9
[2 -4 13]	(4 2 0)	(-3 5 2)	2.343	1.951	1.20	75.1	50.5
[2 -4 -7]	(4 2 0)	(3 5 -2)	2.343	1.951	1.20	58.3	61.2
[1 -2 -1]	(4 2 0)	(5 3 -1)	2.343	1.893	1.24	21.7	78.4
[1 -2 -5]	(4 2 0)	(-2 4 -2)	2.343	1.862	1.26	63.1	52.9
[1 -2 3]	(4 2 0)	(2 4 2)	2.343	1.862	1.26	48.8	71.0
[2 -4 15]	(4 2 0)	(1 -7 -2)	2.343	1.855	1.26	79.8	46.1
[2 -4 -13]	(4 2 0)	(1 7 -2)	2.343	1.855	1.26	79.6	46.1
[1 -2 4]	(4 2 0)	(4 4 1)	2.343	1.829	1.28	22.8	64.3
[2 -4 -5]	(4 2 0)	(3 -1 2)	2.343	1.772	1.32	47.1	67.6
[2 -4 -1]	(4 2 0)	(3 1 2)	2.343	1.772	1.32	43.1	82.2
[2 -4 7]	(4 2 0)	(5 -1 -2)	2.343	1.767	1.33	46.9	67.6
[2 -4 3]	(4 2 0)	(-5 -1 2)	2.343	1.767	1.33	43.0	82.1
[1 -2 -5]	(4 2 0)	(5 5 -1)	2.343	1.750	1.34	24.8	52.9
[3 -6 2]	(4 2 0)	(2 0 -3)	2.343	1.737	1.35	84.9	88.6
[2 -4 13]	(4 2 0)	(1 7 2)	2.343	1.734	1.35	59.2	50.5
[2 -4 -11]	(4 2 0)	(3 7 -2)	2.343	1.732	1.35	59.0	50.5
[3 -6 -1]	(4 2 0)	(1 1 -3)	2.343	1.730	1.35	86.6	83.5
[1 -2 1]	(4 2 0)	(-1 1 3)	2.343	1.730	1.35	83.8	86.0
[2 -4 -9]	(4 2 0)	(-3 3 -2)	2.343	1.710	1.37	52.4	55.5
[2 -4 3]	(4 2 0)	(3 3 2)	2.343	1.710	1.37	41.3	82.1
[1 -2 2]	(4 2 0)	(-2 2 3)	2.343	1.707	1.37	87.7	78.3
[3 -6 -2]	(4 2 0)	(2 2 -3)	2.343	1.707	1.37	82.2	80.9
[2 -4 11]	(4 2 0)	(-5 3 2)	2.343	1.705	1.37	52.3	55.5
[2 -4 -1]	(4 2 0)	(5 3 -2)	2.343	1.705	1.37	41.1	82.2
[1 -2 -4]	(4 2 0)	(4 6 -2)	2.343	1.694	1.38	49.5	58.3
[3 -6 5]	(4 2 0)	(3 -1 -3)	2.343	1.676	1.40	76.7	80.9
[3 -6 1]	(4 2 0)	(-3 -1 3)	2.343	1.676	1.40	73.9	88.7
[3 -6 -5]	(4 2 0)	(-1 -3 3)	2.343	1.672	1.40	89.3	73.5
[3 -6 7]	(4 2 0)	(1 -3 -3)	2.343	1.672	1.40	81.4	75.8
[1 -2 6]	(4 2 0)	(6 0 -1)	2.343	1.668	1.40	23.6	52.9
[1 -2 -3]	(4 2 0)	(5 1 1)	2.343	1.664	1.41	20.7	64.3
[3 -6 -4]	(4 2 0)	(0 -2 3)	2.343	1.658	1.41	78.5	75.9
[3 -6 4]	(4 2 0)	(0 2 3)	2.343	1.658	1.41	73.0	83.4
[1 -2 2]	(4 2 0)	(6 2 -1)	2.343	1.642	1.43	18.7	78.3
[3 -6 10]	(4 2 0)	(2 -4 -3)	2.343	1.625	1.44	89.6	68.7
[1 -2 -2]	(4 2 0)	(2 4 -3)	2.343	1.625	1.44	80.0	71.1
[1 -2 1]	(4 2 0)	(5 3 1)	2.343	1.612	1.45	18.0	86.0
[2 -4 -13]	(4 2 0)	(3 -5 2)	2.343	1.603	1.46	58.2	46.1
[2 -4 7]	(4 2 0)	(3 5 2)	2.343	1.603	1.46	41.5	67.6
[2 -4 15]	(4 2 0)	(5 -5 -2)	2.343	1.599	1.46	58.0	46.1
[2 -4 -5]	(4 2 0)	(5 5 -2)	2.343	1.599	1.46	41.4	67.6
[3 -6 4]	(4 2 0)	(-4 0 3)	2.343	1.589	1.47	66.5	83.4
[1 -2 -1]	(4 2 0)	(1 -1 3)	2.343	1.587	1.48	68.2	78.4

Richterite (420) 372 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[3 -6 1]	(4 2 0)	(1 1 3)	2.343	1.587	1.48	65.5	88.7
[3 -6 -8]	(4 2 0)	(0 -4 3)	2.343	1.583	1.48	81.5	66.5
[3 -6 8]	(4 2 0)	(0 4 3)	2.343	1.583	1.48	71.2	73.4
[1 -2 -3]	(4 2 0)	(1 5 -3)	2.343	1.572	1.49	88.1	64.3
[3 -6 11]	(4 2 0)	(1 -5 -3)	2.343	1.572	1.49	79.4	66.4
[1 -2 -2]	(4 2 0)	(6 4 -1)	2.343	1.569	1.49	18.5	71.1
[3 -6 8]	(4 2 0)	(-4 2 3)	2.343	1.566	1.50	69.5	73.4
[1 -2 0]	(4 2 0)	(4 2 -3)	2.343	1.566	1.50	64.1	86.1
[3 -6 -7]	(4 2 0)	(-1 3 -3)	2.343	1.541	1.52	71.4	68.8
[3 -6 5]	(4 2 0)	(1 3 3)	2.343	1.541	1.52	63.5	80.9
[1 -2 -4]	(4 2 0)	(-4 2 -2)	2.343	1.538	1.52	43.7	58.3
[1 -2 0]	(4 2 0)	(4 2 2)	2.343	1.538	1.52	36.1	86.1
[3 -6 13]	(4 2 0)	(-3 5 3)	2.343	1.531	1.53	82.8	62.2
[3 -6 -7]	(4 2 0)	(3 5 -3)	2.343	1.531	1.53	70.3	68.8
[1 -2 7]	(4 2 0)	(2 8 2)	2.343	1.525	1.54	51.4	48.2
[1 -2 5]	(4 2 0)	(5 5 1)	2.343	1.522	1.54	20.0	58.2
[3 -6 14]	(4 2 0)	(-2 6 3)	2.343	1.512	1.55	87.3	60.2
[3 -6 -10]	(4 2 0)	(-2 -6 3)	2.343	1.512	1.55	78.3	62.2
[1 -2 4]	(4 2 0)	(4 -4 -3)	2.343	1.502	1.56	72.9	64.3
[3 -6 -4]	(4 2 0)	(-4 -4 3)	2.343	1.502	1.56	62.6	75.9
[3 -6 -2]	(4 2 0)	(2 0 3)	2.343	1.478	1.59	59.1	80.9
[2 -4 11]	(4 2 0)	(3 7 2)	2.343	1.474	1.59	43.1	55.5
[1 -2 7]	(4 2 0)	(6 -4 -2)	2.343	1.474	1.59	49.1	48.2
[1 -2 -1]	(4 2 0)	(-6 -4 2)	2.343	1.474	1.59	35.1	78.4
[2 -4 -9]	(4 2 0)	(5 7 -2)	2.343	1.472	1.59	43.0	55.5
[3 -6 7]	(4 2 0)	(-5 1 3)	2.343	1.470	1.59	60.3	75.8
[1 -2 1]	(4 2 0)	(5 1 -3)	2.343	1.470	1.59	57.6	86.0
[1 -2 -6]	(4 2 0)	(-6 -6 1)	2.343	1.466	1.60	22.0	48.2
[3 -6 -11]	(4 2 0)	(1 -5 3)	2.343	1.462	1.60	74.8	60.2
[1 -2 3]	(4 2 0)	(1 5 3)	2.343	1.462	1.60	62.4	71.0
[1 -2 -2]	(4 2 0)	(2 -2 3)	2.343	1.459	1.61	62.1	71.1
[3 -6 2]	(4 2 0)	(2 2 3)	2.343	1.459	1.61	56.8	88.6
[3 -6 -13]	(4 2 0)	(-1 -7 3)	2.343	1.450	1.62	86.0	56.4
[1 -2 5]	(4 2 0)	(-1 7 3)	2.343	1.450	1.62	77.9	58.2
[1 -2 -6]	(4 2 0)	(6 0 1)	2.343	1.435	1.63	21.6	48.2
[3 -6 11]	(4 2 0)	(5 -3 -3)	2.343	1.433	1.63	63.7	66.4
[3 -6 -1]	(4 2 0)	(5 3 -3)	2.343	1.433	1.63	55.8	83.5
[1 -2 5]	(4 2 0)	(-7 -1 1)	2.343	1.428	1.64	18.7	58.2
[3 -6 17]	(4 2 0)	(3 -7 -3)	2.343	1.418	1.65	85.6	54.6
[3 -6 -11]	(4 2 0)	(-3 -7 3)	2.343	1.418	1.65	69.4	60.2
[1 -2 -2]	(4 2 0)	(6 2 1)	2.343	1.418	1.65	16.6	71.1
[3 -6 16]	(4 2 0)	(-4 6 3)	2.343	1.411	1.66	76.3	56.4
[3 -6 -8]	(4 2 0)	(4 6 -3)	2.343	1.411	1.66	61.9	66.5
[3 -6 -10]	(4 2 0)	(-2 4 -3)	2.343	1.407	1.66	65.7	62.2
[1 -2 2]	(4 2 0)	(2 4 3)	2.343	1.407	1.66	55.4	78.3
[1 -2 1]	(4 2 0)	(-7 -3 1)	2.343	1.395	1.68	15.5	86.0
[1 -2 4]	(4 2 0)	(4 6 2)	2.343	1.390	1.69	36.1	64.3
[3 -6 -14]	(4 2 0)	(2 8 -3)	2.343	1.387	1.69	77.0	54.6

Richterite (420) 372 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[2 -4 -7]	(4 2 0)	(-5 1 -2)	2.343	1.372	1.71	36.7	61.2
[2 -4 -3]	(4 2 0)	(5 1 2)	2.343	1.372	1.71	32.9	74.7
[1 -2 2]	(4 2 0)	(6 4 1)	2.343	1.370	1.71	15.5	78.3
[2 -4 9]	(4 2 0)	(7 -1 -2)	2.343	1.369	1.71	36.7	61.2
[2 -4 5]	(4 2 0)	(-7 -1 2)	2.343	1.369	1.71	32.9	74.6
[1 -2 5]	(4 2 0)	(5 -5 -3)	2.343	1.369	1.71	67.3	58.2
[3 -6 -5]	(4 2 0)	(-5 -5 3)	2.343	1.369	1.71	54.9	73.5
[1 -2 -5]	(4 2 0)	(1 -7 3)	2.343	1.362	1.72	78.1	52.9
[3 -6 13]	(4 2 0)	(1 7 3)	2.343	1.362	1.72	62.0	62.2
[3 -6 -16]	(4 2 0)	(0 -8 3)	2.343	1.360	1.72	87.1	51.3
[3 -6 16]	(4 2 0)	(0 8 3)	2.343	1.360	1.72	69.4	56.4
[3 -6 -1]	(4 2 0)	(3 1 3)	2.343	1.354	1.73	51.3	83.5
[2 -4 15]	(4 2 0)	(3 9 2)	2.343	1.343	1.74	45.4	46.1
[2 -4 -11]	(4 2 0)	(5 -3 2)	2.343	1.343	1.74	41.7	50.5
[2 -4 1]	(4 2 0)	(5 3 2)	2.343	1.343	1.74	30.9	90.0
[2 -4 -13]	(4 2 0)	(5 9 -2)	2.343	1.341	1.75	45.3	46.1
[2 -4 13]	(4 2 0)	(-7 3 2)	2.343	1.340	1.75	41.6	50.5
[2 -4 1]	(4 2 0)	(7 3 -2)	2.343	1.340	1.75	30.8	90.0
[3 -6 10]	(4 2 0)	(-6 2 3)	2.343	1.339	1.75	55.5	68.7
[3 -6 2]	(4 2 0)	(6 2 -3)	2.343	1.339	1.75	50.2	88.6
[1 -2 -3]	(4 2 0)	(-7 -5 1)	2.343	1.335	1.75	16.4	64.3
[3 -6 -14]	(4 2 0)	(2 -6 3)	2.343	1.332	1.76	69.3	54.6
[3 -6 10]	(4 2 0)	(2 6 3)	2.343	1.332	1.76	55.0	68.7
[3 -6 -17]	(4 2 0)	(1 9 -3)	2.343	1.325	1.77	84.2	49.7
[3 -6 19]	(4 2 0)	(1 -9 -3)	2.343	1.325	1.77	76.8	51.3
[2 -4 1]	(4 2 0)	(2 0 -4)	2.343	1.308	1.79	89.9	90.0
[3 -6 20]	(4 2 0)	(-4 8 3)	2.343	1.308	1.79	79.4	49.7
[1 -2 -4]	(4 2 0)	(4 8 -3)	2.343	1.308	1.79	61.8	58.3
[1 -2 6]	(4 2 0)	(6 6 1)	2.343	1.300	1.80	18.1	52.9
[3 -6 14]	(4 2 0)	(6 -4 -3)	2.343	1.299	1.80	59.1	60.2
[3 -6 -2]	(4 2 0)	(-6 -4 3)	2.343	1.299	1.80	48.9	80.9
[4 -8 -1]	(4 2 0)	(-1 -1 4)	2.343	1.294	1.81	83.8	84.2
[4 -8 3]	(4 2 0)	(1 -1 -4)	2.343	1.294	1.81	81.7	88.0
[4 -8 5]	(4 2 0)	(3 -1 -4)	2.343	1.293	1.81	83.5	84.1
[4 -8 1]	(4 2 0)	(3 1 -4)	2.343	1.293	1.81	81.4	88.1
[2 -4 5]	(4 2 0)	(5 5 2)	2.343	1.289	1.82	30.7	74.6
[1 -2 -5]	(4 2 0)	(-6 -8 2)	2.343	1.289	1.82	38.1	52.9
[2 -4 -3]	(4 2 0)	(7 5 -2)	2.343	1.286	1.82	30.6	74.7
[3 -6 19]	(4 2 0)	(-5 7 3)	2.343	1.286	1.82	70.9	51.3
[1 -2 -3]	(4 2 0)	(5 7 -3)	2.343	1.286	1.82	54.9	64.3
[3 -6 -13]	(4 2 0)	(3 -5 3)	2.343	1.274	1.84	61.2	56.4
[3 -6 7]	(4 2 0)	(3 5 3)	2.343	1.274	1.84	48.8	75.8
[4 -8 -5]	(4 2 0)	(1 3 -4)	2.343	1.269	1.85	85.9	76.5
[4 -8 7]	(4 2 0)	(-1 3 4)	2.343	1.269	1.85	79.8	80.2
[4 -8 9]	(4 2 0)	(3 -3 -4)	2.343	1.268	1.85	85.6	76.4
[4 -8 -3]	(4 2 0)	(-3 -3 4)	2.343	1.268	1.85	79.5	80.3
[2 -4 -3]	(4 2 0)	(-2 -4 4)	2.343	1.259	1.86	85.9	74.7
[3 -6 -19]	(4 2 0)	(1 -9 3)	2.343	1.257	1.86	81.1	46.8

Richterite (420) 372 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[3 -6 17]	(4 2 0)	(1 9 3)	2.343	1.257	1.86	62.1	54.6
[1 -2 -1]	(4 2 0)	(0 2 -4)	2.343	1.252	1.87	77.7	78.4
[1 -2 1]	(4 2 0)	(0 2 4)	2.343	1.252	1.87	73.6	86.0
[1 -2 -5]	(4 2 0)	(7 1 1)	2.343	1.252	1.87	17.4	52.9
[1 -2 2]	(4 2 0)	(4 -2 -4)	2.343	1.251	1.87	77.4	78.3
[1 -2 0]	(4 2 0)	(-4 -2 4)	2.343	1.251	1.87	73.3	86.1
[1 -2 -6]	(4 2 0)	(2 -8 3)	2.343	1.244	1.88	72.8	48.2
[3 -6 14]	(4 2 0)	(2 8 3)	2.343	1.244	1.88	55.2	60.2
[1 -2 4]	(4 2 0)	(8 2 -1)	2.343	1.242	1.89	15.3	64.3
[3 -6 -4]	(4 2 0)	(4 0 3)	2.343	1.241	1.89	47.2	75.9
[1 -2 3]	(4 2 0)	(7 -1 -3)	2.343	1.235	1.90	48.5	71.0
[3 -6 5]	(4 2 0)	(-7 -1 3)	2.343	1.235	1.90	45.8	80.9
[3 -6 -8]	(4 2 0)	(4 -2 3)	2.343	1.230	1.90	50.2	66.5
[1 -2 0]	(4 2 0)	(4 2 3)	2.343	1.230	1.90	45.0	86.1
[1 -2 -1]	(4 2 0)	(7 3 1)	2.343	1.230	1.91	13.9	78.4
[1 -2 -3]	(4 2 0)	(6 0 2)	2.343	1.225	1.91	31.3	64.3
[4 -8 -9]	(4 2 0)	(-1 -5 4)	2.343	1.224	1.91	88.0	69.3
[4 -8 11]	(4 2 0)	(1 -5 -4)	2.343	1.224	1.91	78.2	72.8
[4 -8 13]	(4 2 0)	(3 -5 -4)	2.343	1.223	1.92	87.7	69.3
[4 -8 -7]	(4 2 0)	(-3 -5 4)	2.343	1.223	1.92	77.9	72.9
[2 -4 9]	(4 2 0)	(5 7 2)	2.343	1.219	1.92	32.1	61.2
[2 -4 -7]	(4 2 0)	(7 7 -2)	2.343	1.217	1.93	32.0	61.2
[3 -6 13]	(4 2 0)	(7 -3 -3)	2.343	1.214	1.93	51.9	62.2
[3 -6 1]	(4 2 0)	(-7 -3 3)	2.343	1.214	1.93	44.1	88.7
[1 -2 6]	(4 2 0)	(8 -2 -2)	2.343	1.212	1.93	35.5	52.9
[1 -2 2]	(4 2 0)	(-8 -2 2)	2.343	1.212	1.93	28.2	78.3
[4 -8 -3]	(4 2 0)	(1 -1 4)	2.343	1.211	1.93	69.9	80.3
[4 -8 1]	(4 2 0)	(1 1 4)	2.343	1.211	1.93	67.9	88.1
[1 -2 0]	(4 2 0)	(8 4 -1)	2.343	1.209	1.94	13.4	86.1
[4 -8 7]	(4 2 0)	(5 -1 -4)	2.343	1.209	1.94	69.7	80.2
[4 -8 3]	(4 2 0)	(-5 -1 4)	2.343	1.209	1.94	67.6	88.0
[3 -6 -17]	(4 2 0)	(3 -7 3)	2.343	1.206	1.94	65.0	49.7
[3 -6 11]	(4 2 0)	(3 7 3)	2.343	1.206	1.94	49.0	66.4
[1 -2 -4]	(4 2 0)	(4 -4 3)	2.343	1.199	1.95	53.9	58.3
[3 -6 4]	(4 2 0)	(4 4 3)	2.343	1.199	1.95	43.7	83.4
[3 -6 23]	(4 2 0)	(5 -9 -3)	2.343	1.196	1.96	74.3	45.4
[3 -6 -13]	(4 2 0)	(-5 -9 3)	2.343	1.196	1.96	55.4	56.4
[4 -8 -7]	(4 2 0)	(1 -3 4)	2.343	1.191	1.97	72.3	72.9
[4 -8 5]	(4 2 0)	(1 3 4)	2.343	1.191	1.97	66.2	84.1
[4 -8 11]	(4 2 0)	(5 -3 -4)	2.343	1.189	1.97	72.0	72.8
[4 -8 -1]	(4 2 0)	(-5 -3 4)	2.343	1.189	1.97	65.9	84.2
[1 -2 3]	(4 2 0)	(7 5 1)	2.343	1.188	1.97	13.9	71.0
[1 -2 1]	(4 2 0)	(6 4 2)	2.343	1.184	1.98	27.0	86.0
[1 -2 0]	(4 2 0)	(-8 -4 2)	2.343	1.181	1.98	26.9	86.1
[3 -6 17]	(4 2 0)	(7 -5 -3)	2.343	1.173	2.00	55.6	54.6
[1 -2 -1]	(4 2 0)	(-7 -5 3)	2.343	1.173	2.00	43.4	78.4
[1 -2 -3]	(4 2 0)	(0 -6 4)	2.343	1.169	2.00	82.3	64.3
[1 -2 3]	(4 2 0)	(0 6 4)	2.343	1.169	2.00	70.9	71.0

Richterite (420) 372 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[1 -2 4]	(4 2 0)	(4 -6 -4)	2.343	1.167	2.01	82.0	64.3
[1 -2 -2]	(4 2 0)	(-4 -6 4)	2.343	1.167	2.01	70.6	71.1
[3 -6 22]	(4 2 0)	(6 -8 -3)	2.343	1.167	2.01	66.6	46.8
[3 -6 -10]	(4 2 0)	(-6 -8 3)	2.343	1.167	2.01	49.1	62.2
[4 -8 -13]	(4 2 0)	(-1 -7 4)	2.343	1.163	2.01	89.9	62.8
[4 -8 15]	(4 2 0)	(1 -7 -4)	2.343	1.163	2.01	76.9	65.9
[4 -8 17]	(4 2 0)	(3 -7 -4)	2.343	1.163	2.01	89.7	62.7
[4 -8 -11]	(4 2 0)	(-3 -7 4)	2.343	1.163	2.01	76.7	66.0
[1 -2 -4]	(4 2 0)	(8 6 -1)	2.343	1.160	2.02	15.1	58.3
[4 -8 -11]	(4 2 0)	(-1 5 -4)	2.343	1.153	2.03	74.7	66.0
[4 -8 9]	(4 2 0)	(1 5 4)	2.343	1.153	2.03	65.0	76.4
[2 -4 -1]	(4 2 0)	(2 0 4)	2.343	1.153	2.03	62.8	82.2
[4 -8 15]	(4 2 0)	(-5 5 4)	2.343	1.151	2.04	74.5	65.9
[4 -8 -5]	(4 2 0)	(5 5 -4)	2.343	1.151	2.04	64.8	76.5
[3 -6 -16]	(4 2 0)	(4 -6 3)	2.343	1.151	2.04	57.7	51.3
[3 -6 8]	(4 2 0)	(4 6 3)	2.343	1.151	2.04	43.5	73.4
[2 -4 3]	(4 2 0)	(6 0 -4)	2.343	1.150	2.04	62.5	82.1
[2 -4 13]	(4 2 0)	(5 9 2)	2.343	1.142	2.05	34.5	50.5
[2 -4 -11]	(4 2 0)	(-7 -9 2)	2.343	1.140	2.06	34.4	50.5
[2 -4 -7]	(4 2 0)	(2 8 -4)	2.343	1.138	2.06	82.6	61.2
[1 -2 -2]	(4 2 0)	(-8 -6 2)	2.343	1.136	2.06	27.3	71.1
[1 -2 7]	(4 2 0)	(7 7 1)	2.343	1.133	2.07	16.9	48.2
[3 -6 -7]	(4 2 0)	(-5 1 -3)	2.343	1.133	2.07	44.2	68.8
[1 -2 -1]	(4 2 0)	(5 1 3)	2.343	1.133	2.07	41.5	78.4
[3 -6 8]	(4 2 0)	(-8 0 3)	2.343	1.132	2.07	42.6	73.4
[1 -2 4]	(4 2 0)	(8 -2 -3)	2.343	1.123	2.09	45.6	64.3
[3 -6 4]	(4 2 0)	(-8 -2 3)	2.343	1.123	2.09	40.4	83.4
[1 -2 7]	(4 2 0)	(7 -7 -3)	2.343	1.120	2.09	59.5	48.2
[3 -6 -7]	(4 2 0)	(-7 -7 3)	2.343	1.120	2.09	43.5	68.8
[2 -4 -5]	(4 2 0)	(2 -4 4)	2.343	1.118	2.10	67.5	67.6
[2 -4 3]	(4 2 0)	(2 4 4)	2.343	1.118	2.10	59.6	82.1
[3 -6 -11]	(4 2 0)	(5 -3 3)	2.343	1.116	2.10	47.5	60.2
[3 -6 1]	(4 2 0)	(5 3 3)	2.343	1.116	2.10	39.8	88.7
[2 -4 7]	(4 2 0)	(6 -4 -4)	2.343	1.116	2.10	67.3	67.6
[2 -4 -1]	(4 2 0)	(-6 -4 4)	2.343	1.116	2.10	59.4	82.2
[1 -2 7]	(4 2 0)	(9 1 -1)	2.343	1.111	2.11	16.5	48.2
[1 -2 -4]	(4 2 0)	(8 2 1)	2.343	1.106	2.12	14.4	58.3
[4 -8 -15]	(4 2 0)	(-1 7 -4)	2.343	1.102	2.13	77.2	59.7
[4 -8 13]	(4 2 0)	(1 7 4)	2.343	1.102	2.13	64.3	69.3
[4 -8 19]	(4 2 0)	(-5 7 4)	2.343	1.101	2.13	77.0	59.7
[4 -8 -9]	(4 2 0)	(5 7 -4)	2.343	1.101	2.13	64.0	69.3
[3 -6 16]	(4 2 0)	(8 -4 -3)	2.343	1.099	2.13	49.2	56.4
[1 -2 0]	(4 2 0)	(-8 -4 3)	2.343	1.099	2.13	39.2	86.1
[2 -4 -9]	(4 2 0)	(7 -1 2)	2.343	1.098	2.13	30.6	55.5
[2 -4 -5]	(4 2 0)	(7 1 2)	2.343	1.098	2.13	27.0	67.6
[2 -4 11]	(4 2 0)	(-9 1 2)	2.343	1.096	2.14	30.6	55.5
[2 -4 7]	(4 2 0)	(9 1 -2)	2.343	1.096	2.14	26.9	67.6
[4 -8 -17]	(4 2 0)	(-1 -9 4)	2.343	1.096	2.14	88.3	56.9

Richterite (420) 372 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[4 -8 19]	(4 2 0)	(-1 9 4)	2.343	1.096	2.14	75.9	59.7
[1 -2 3]	(4 2 0)	(-9 -3 1)	2.343	1.095	2.14	12.8	71.0
[4 -8 21]	(4 2 0)	(-3 9 4)	2.343	1.095	2.14	88.6	56.8
[4 -8 -15]	(4 2 0)	(-3 -9 4)	2.343	1.095	2.14	75.7	59.7
[3 -6 -20]	(4 2 0)	(4 -8 3)	2.343	1.093	2.14	61.5	45.5
[1 -2 4]	(4 2 0)	(4 8 3)	2.343	1.093	2.14	44.0	64.3
[1 -2 -5]	(4 2 0)	(-5 5 -3)	2.343	1.085	2.16	51.2	52.9
[3 -6 5]	(4 2 0)	(5 5 3)	2.343	1.085	2.16	39.0	80.9
[4 -8 -5]	(4 2 0)	(-3 1 -4)	2.343	1.084	2.16	58.4	76.5
[4 -8 -1]	(4 2 0)	(3 1 4)	2.343	1.084	2.16	56.4	84.2
[2 -4 -13]	(4 2 0)	(7 -3 2)	2.343	1.083	2.16	35.0	46.1
[2 -4 -1]	(4 2 0)	(7 3 2)	2.343	1.083	2.16	24.7	82.2
[1 -2 5]	(4 2 0)	(6 8 2)	2.343	1.081	2.17	29.1	58.2
[4 -8 9]	(4 2 0)	(-7 1 4)	2.343	1.081	2.17	58.2	76.4
[4 -8 5]	(4 2 0)	(7 1 -4)	2.343	1.081	2.17	56.2	84.1
[2 -4 15]	(4 2 0)	(-9 3 2)	2.343	1.081	2.17	35.0	46.1
[2 -4 3]	(4 2 0)	(9 3 -2)	2.343	1.081	2.17	24.6	82.1
[4 -8 -9]	(4 2 0)	(3 -3 4)	2.343	1.069	2.19	60.8	69.3
[4 -8 3]	(4 2 0)	(3 3 4)	2.343	1.069	2.19	54.8	88.0
[4 -8 13]	(4 2 0)	(-7 3 4)	2.343	1.067	2.20	60.6	69.3
[4 -8 1]	(4 2 0)	(7 3 -4)	2.343	1.067	2.20	54.6	88.1
[1 -2 -1]	(4 2 0)	(-9 -5 1)	2.343	1.066	2.20	12.0	78.4
[3 -6 20]	(4 2 0)	(8 -6 -3)	2.343	1.062	2.21	53.0	49.7
[3 -6 -4]	(4 2 0)	(8 6 -3)	2.343	1.062	2.21	38.9	75.9
[3 -6 -11]	(4 2 0)	(-7 -9 3)	2.343	1.059	2.21	44.4	60.2
[2 -4 3]	(4 2 0)	(7 5 2)	2.343	1.054	2.22	24.0	82.1
[2 -4 -1]	(4 2 0)	(-9 -5 2)	2.343	1.052	2.23	23.9	82.2
[1 -2 4]	(4 2 0)	(8 6 1)	2.343	1.048	2.24	12.8	64.3
[5 -10 2]	(4 2 0)	(2 0 -5)	2.343	1.045	2.24	87.2	89.3
[4 -8 -19]	(4 2 0)	(1 -9 4)	2.343	1.044	2.24	79.6	54.2
[4 -8 17]	(4 2 0)	(1 9 4)	2.343	1.044	2.24	63.9	62.7
[1 -2 1]	(4 2 0)	(3 -1 -5)	2.343	1.043	2.25	87.7	86.0
[5 -10 1]	(4 2 0)	(-3 -1 5)	2.343	1.043	2.25	86.0	87.7
[4 -8 23]	(4 2 0)	(5 -9 -4)	2.343	1.043	2.25	79.4	54.2
[4 -8 -13]	(4 2 0)	(-5 -9 4)	2.343	1.043	2.25	63.6	62.8
[3 -6 -19]	(4 2 0)	(5 -7 3)	2.343	1.042	2.25	55.0	46.8
[1 -2 3]	(4 2 0)	(5 7 3)	2.343	1.042	2.25	39.2	71.0
[4 -8 -13]	(4 2 0)	(3 -5 4)	2.343	1.041	2.25	63.5	62.8
[4 -8 7]	(4 2 0)	(3 5 4)	2.343	1.041	2.25	53.9	80.2
[4 -8 -3]	(4 2 0)	(7 5 -4)	2.343	1.039	2.25	53.7	80.3
[5 -10 -2]	(4 2 0)	(2 2 -5)	2.343	1.039	2.26	88.8	83.0
[5 -10 6]	(4 2 0)	(-2 2 5)	2.343	1.039	2.26	85.5	84.5
[3 -6 11]	(4 2 0)	(-9 1 3)	2.343	1.035	2.26	40.3	66.4
[3 -6 7]	(4 2 0)	(9 1 -3)	2.343	1.035	2.26	37.7	75.8
[3 -6 -10]	(4 2 0)	(-6 2 -3)	2.343	1.033	2.27	42.0	62.2
[3 -6 -2]	(4 2 0)	(6 2 3)	2.343	1.033	2.27	36.8	80.9
[5 -10 4]	(4 2 0)	(-4 0 5)	2.343	1.033	2.27	81.0	87.6
[5 -10 -1]	(4 2 0)	(-1 -1 5)	2.343	1.032	2.27	82.1	84.5

Richterite (420) 372 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[5 -10 3]	(4 2 0)	(1 -1 -5)	2.343	1.032	2.27	80.4	89.2
[2 -4 -9]	(4 2 0)	(2 -8 4)	2.343	1.031	2.27	72.8	55.5
[2 -4 7]	(4 2 0)	(2 8 4)	2.343	1.031	2.27	58.4	67.6
[5 -10 9]	(4 2 0)	(3 -3 -5)	2.343	1.030	2.27	89.4	79.8
[5 -10 -3]	(4 2 0)	(-3 -3 5)	2.343	1.030	2.27	84.5	81.4
[2 -4 11]	(4 2 0)	(6 -8 -4)	2.343	1.029	2.28	72.6	55.5
[2 -4 -5]	(4 2 0)	(-6 -8 4)	2.343	1.029	2.28	58.2	67.6
[5 -10 8]	(4 2 0)	(4 -2 -5)	2.343	1.026	2.28	82.7	81.4
[1 -2 0]	(4 2 0)	(-4 -2 5)	2.343	1.026	2.28	79.4	86.1
[1 -2 -5]	(4 2 0)	(9 7 -1)	2.343	1.025	2.29	14.2	52.9
[1 -2 5]	(4 2 0)	(-9 3 3)	2.343	1.022	2.29	43.6	58.2
[1 -2 1]	(4 2 0)	(9 3 -3)	2.343	1.022	2.29	36.0	86.0
[5 -10 -6]	(4 2 0)	(-2 -4 5)	2.343	1.019	2.30	89.5	76.9
[1 -2 2]	(4 2 0)	(-2 4 5)	2.343	1.019	2.30	84.0	78.3
[1 -2 -1]	(4 2 0)	(1 3 -5)	2.343	1.019	2.30	83.8	78.4
[5 -10 7]	(4 2 0)	(-1 3 5)	2.343	1.019	2.30	78.9	82.9
[2 -4 7]	(4 2 0)	(7 7 2)	2.343	1.015	2.31	24.8	67.6
[3 -6 -14]	(4 2 0)	(-6 4 -3)	2.343	1.014	2.31	45.5	54.6
[3 -6 2]	(4 2 0)	(6 4 3)	2.343	1.014	2.31	35.5	88.6
[2 -4 -5]	(4 2 0)	(-9 -7 2)	2.343	1.013	2.31	24.8	67.6
[1 -2 -2]	(4 2 0)	(4 -2 4)	2.343	1.012	2.32	54.8	71.1
[1 -2 0]	(4 2 0)	(4 2 4)	2.343	1.012	2.32	50.8	86.1
[1 -2 3]	(4 2 0)	(8 -2 -4)	2.343	1.009	2.32	54.7	71.0
[1 -2 1]	(4 2 0)	(-8 -2 4)	2.343	1.009	2.32	50.6	86.0
[5 -10 7]	(4 2 0)	(5 -1 -5)	2.343	1.008	2.32	76.1	82.9
[5 -10 3]	(4 2 0)	(-5 -1 5)	2.343	1.008	2.32	74.5	89.2
[5 -10 12]	(4 2 0)	(4 -4 -5)	2.343	1.008	2.32	84.4	75.3
[5 -10 -4]	(4 2 0)	(-4 -4 5)	2.343	1.008	2.32	77.9	79.9
[5 -10 13]	(4 2 0)	(-3 5 5)	2.343	1.005	2.33	89.0	73.9
[5 -10 -7]	(4 2 0)	(3 5 -5)	2.343	1.005	2.33	83.0	75.4
[5 -10 -4]	(4 2 0)	(0 2 -5)	2.343	1.005	2.33	77.3	79.9
[5 -10 4]	(4 2 0)	(0 2 5)	2.343	1.005	2.33	74.0	87.6
[4 -8 -17]	(4 2 0)	(-3 7 -4)	2.343	1.004	2.33	66.3	56.9
[4 -8 11]	(4 2 0)	(3 7 4)	2.343	1.004	2.33	53.4	72.8
[4 -8 21]	(4 2 0)	(-7 7 4)	2.343	1.002	2.34	66.1	56.8
[4 -8 -7]	(4 2 0)	(7 7 -4)	2.343	1.002	2.34	53.2	72.9

Richterite (280) 296 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[4 -1 0]	(2 8 0)	(0 0 1)	2.079	5.056	0.41	83.6	76.4
[4 -1 5]	(2 8 0)	(1 -1 -1)	2.079	4.870	0.43	82.5	69.8
[4 -1 3]	(2 8 0)	(1 1 -1)	2.079	4.870	0.43	69.6	82.9
[4 -1 2]	(2 8 0)	(0 2 1)	2.079	4.432	0.47	57.9	89.9
[4 -1 8]	(2 8 0)	(2 0 -1)	2.079	4.061	0.51	74.3	53.7
[4 -1 -5]	(2 8 0)	(1 -1 1)	2.079	3.976	0.52	86.1	49.6
[4 -1 -3]	(2 8 0)	(1 1 1)	2.079	3.976	0.52	62.7	58.7
[4 -1 1]	(2 8 0)	(-1 -3 1)	2.079	3.900	0.53	48.6	83.2
[4 -1 10]	(2 8 0)	(-2 2 1)	2.079	3.716	0.56	83.3	45.6
[4 -1 6]	(2 8 0)	(2 2 -1)	2.079	3.716	0.56	52.3	63.9
[4 -1 -4]	(2 8 0)	(0 -4 1)	2.079	3.404	0.61	53.6	53.9
[4 -1 4]	(2 8 0)	(0 4 1)	2.079	3.404	0.61	42.1	76.2
[4 -1 -1]	(2 8 0)	(1 3 1)	2.079	3.393	0.61	43.6	70.0
[4 -1 4]	(2 8 0)	(2 4 -1)	2.079	3.046	0.68	36.8	76.2
[4 -1 9]	(2 8 0)	(1 -5 -1)	2.079	2.976	0.70	48.5	49.4
[4 -1 -1]	(2 8 0)	(1 5 -1)	2.079	2.976	0.70	37.2	70.0
[4 -1 -6]	(2 8 0)	(2 2 1)	2.079	2.954	0.70	52.0	45.8
[4 -1 9]	(2 8 0)	(3 3 -1)	2.079	2.775	0.75	44.3	49.4
[4 -1 1]	(2 8 0)	(1 5 1)	2.079	2.731	0.76	31.7	83.2
[4 -1 -6]	(2 8 0)	(0 6 -1)	2.079	2.624	0.79	44.4	45.8
[4 -1 6]	(2 8 0)	(0 6 1)	2.079	2.624	0.79	33.9	63.9
[8 -2 5]	(2 8 0)	(-1 1 2)	2.079	2.591	0.80	82.8	86.4
[8 -2 3]	(2 8 0)	(-1 -1 2)	2.079	2.591	0.80	82.6	86.6
[4 -1 -4]	(2 8 0)	(2 4 1)	2.079	2.582	0.81	37.6	53.9
[4 -1 4]	(2 8 0)	(-2 0 2)	2.079	2.525	0.82	83.5	76.2
[4 -1 2]	(2 8 0)	(2 6 -1)	2.079	2.449	0.85	27.9	89.9
[4 -1 -1]	(2 8 0)	(0 -2 2)	2.079	2.438	0.85	82.4	70.0
[4 -1 1]	(2 8 0)	(0 2 2)	2.079	2.438	0.85	69.8	83.2
[8 -2 7]	(2 8 0)	(1 -3 -2)	2.079	2.407	0.86	69.3	79.5
[8 -2 1]	(2 8 0)	(1 3 -2)	2.079	2.407	0.86	69.2	79.8
[4 -1 7]	(2 8 0)	(3 5 -1)	2.079	2.377	0.87	32.2	58.5
[4 -1 -3]	(2 8 0)	(-1 -7 1)	2.079	2.333	0.89	31.4	58.7
[8 -2 -5]	(2 8 0)	(1 -1 2)	2.079	2.287	0.91	84.9	61.3
[8 -2 -3]	(2 8 0)	(1 1 2)	2.079	2.287	0.91	71.7	67.0
[8 -2 13]	(2 8 0)	(3 -1 -2)	2.079	2.282	0.91	84.8	61.1
[8 -2 11]	(2 8 0)	(-3 -1 2)	2.079	2.282	0.91	71.6	66.8
[4 -1 6]	(2 8 0)	(-2 4 2)	2.079	2.214	0.94	70.4	63.9
[4 -1 2]	(2 8 0)	(-2 -4 2)	2.079	2.214	0.94	57.8	89.9
[4 -1 3]	(2 8 0)	(1 7 1)	2.079	2.210	0.94	25.2	82.9
[4 -1 -2]	(2 8 0)	(2 6 1)	2.079	2.188	0.95	27.7	64.1
[8 -2 -7]	(2 8 0)	(-1 3 -2)	2.079	2.158	0.96	82.7	56.2
[8 -2 -1]	(2 8 0)	(1 3 2)	2.079	2.158	0.96	59.5	73.2
[8 -2 15]	(2 8 0)	(-3 3 2)	2.079	2.154	0.97	82.8	56.0
[8 -2 9]	(2 8 0)	(3 3 -2)	2.079	2.154	0.97	59.4	72.9
[8 -2 9]	(2 8 0)	(-1 5 2)	2.079	2.133	0.97	58.5	72.9
[8 -2 -1]	(2 8 0)	(-1 -5 2)	2.079	2.133	0.97	58.4	73.2
[4 -1 8]	(2 8 0)	(0 8 1)	2.079	2.095	0.99	29.8	53.7
[4 -1 -4]	(2 8 0)	(2 0 2)	2.079	2.036	1.02	74.4	53.9

Richterite (280) 296 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[4 -1 0]	(2 8 0)	(2 8 -1)	2.079	2.003	1.04	23.2	76.4
[4 -1 9]	(2 8 0)	(4 -2 -2)	2.079	1.983	1.05	86.0	49.4
[4 -1 7]	(2 8 0)	(-4 -2 2)	2.079	1.983	1.05	62.7	58.5
[8 -2 -9]	(2 8 0)	(-1 5 -2)	2.079	1.954	1.06	72.1	51.7
[8 -2 1]	(2 8 0)	(1 5 2)	2.079	1.954	1.06	49.4	79.8
[4 -1 -3]	(2 8 0)	(0 6 -2)	2.079	1.951	1.07	60.7	58.7
[4 -1 3]	(2 8 0)	(0 6 2)	2.079	1.951	1.07	48.7	82.9
[8 -2 17]	(2 8 0)	(-3 5 2)	2.079	1.951	1.07	72.3	51.5
[8 -2 7]	(2 8 0)	(-3 -5 2)	2.079	1.951	1.07	49.3	79.5
[4 -1 10]	(2 8 0)	(4 6 -1)	2.079	1.912	1.09	30.7	45.6
[4 -1 -5]	(2 8 0)	(-1 -9 1)	2.079	1.896	1.10	28.4	49.6
[4 -1 -6]	(2 8 0)	(-2 4 -2)	2.079	1.862	1.12	83.2	45.8
[4 -1 -2]	(2 8 0)	(2 4 2)	2.079	1.862	1.12	52.3	64.1
[8 -2 11]	(2 8 0)	(1 -7 -2)	2.079	1.855	1.12	50.5	66.8
[8 -2 -3]	(2 8 0)	(1 7 -2)	2.079	1.855	1.12	50.4	67.0
[4 -1 5]	(2 8 0)	(1 9 1)	2.079	1.828	1.14	21.9	69.8
[4 -1 -5]	(2 8 0)	(3 7 1)	2.079	1.793	1.16	26.7	49.6
[8 -2 -11]	(2 8 0)	(3 1 2)	2.079	1.772	1.17	66.4	47.6
[8 -2 19]	(2 8 0)	(5 1 -2)	2.079	1.767	1.18	66.4	47.5
[12 -3 8]	(2 8 0)	(-2 0 3)	2.079	1.737	1.20	87.7	85.2
[8 -2 -11]	(2 8 0)	(-1 7 -2)	2.079	1.734	1.20	63.7	47.6
[8 -2 3]	(2 8 0)	(1 7 2)	2.079	1.734	1.20	41.6	86.6
[8 -2 19]	(2 8 0)	(-3 7 2)	2.079	1.732	1.20	63.9	47.5
[8 -2 5]	(2 8 0)	(-3 -7 2)	2.079	1.732	1.20	41.5	86.4
[4 -1 1]	(2 8 0)	(1 1 -3)	2.079	1.730	1.20	87.3	83.2
[12 -3 5]	(2 8 0)	(1 -1 -3)	2.079	1.730	1.20	83.0	87.8
[8 -2 -9]	(2 8 0)	(3 3 2)	2.079	1.710	1.22	56.4	51.7
[4 -1 3]	(2 8 0)	(-3 -9 1)	2.079	1.709	1.22	19.2	82.9
[12 -3 10]	(2 8 0)	(-2 2 3)	2.079	1.707	1.22	82.6	80.6
[4 -1 2]	(2 8 0)	(2 2 -3)	2.079	1.707	1.22	78.1	89.9
[8 -2 17]	(2 8 0)	(-5 -3 2)	2.079	1.705	1.22	56.4	51.5
[4 -1 8]	(2 8 0)	(2 -8 -2)	2.079	1.701	1.22	53.7	53.7
[4 -1 0]	(2 8 0)	(2 8 -2)	2.079	1.701	1.22	42.0	76.4
[4 -1 5]	(2 8 0)	(4 6 -2)	2.079	1.694	1.23	43.6	69.8
[12 -3 13]	(2 8 0)	(3 -1 -3)	2.079	1.676	1.24	88.3	74.0
[12 -3 11]	(2 8 0)	(-3 -1 3)	2.079	1.676	1.24	78.8	78.4
[4 -1 8]	(2 8 0)	(4 8 -1)	2.079	1.676	1.24	23.4	53.7
[12 -3 1]	(2 8 0)	(-1 -3 3)	2.079	1.672	1.24	77.9	78.6
[12 -3 7]	(2 8 0)	(-1 3 3)	2.079	1.672	1.24	73.6	87.5
[12 -3 -2]	(2 8 0)	(0 2 -3)	2.079	1.658	1.25	86.9	72.1
[12 -3 2]	(2 8 0)	(0 2 3)	2.079	1.658	1.25	74.2	80.9
[4 -1 4]	(2 8 0)	(-2 4 3)	2.079	1.625	1.28	73.6	76.2
[12 -3 4]	(2 8 0)	(2 4 -3)	2.079	1.625	1.28	69.1	85.5
[8 -2 13]	(2 8 0)	(1 -9 -2)	2.079	1.612	1.29	44.7	61.1
[8 -2 -5]	(2 8 0)	(1 9 -2)	2.079	1.612	1.29	44.6	61.3
[8 -2 -7]	(2 8 0)	(3 5 2)	2.079	1.603	1.30	47.4	56.2
[8 -2 15]	(2 8 0)	(5 5 -2)	2.079	1.599	1.30	47.5	56.0
[12 -3 16]	(2 8 0)	(-4 0 3)	2.079	1.589	1.31	79.8	67.8

Richterite (280) 296 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[12 -3 -5]	(2 8 0)	(1 -1 3)	2.079	1.587	1.31	84.4	66.0
[4 -1 -1]	(2 8 0)	(1 1 3)	2.079	1.587	1.31	75.4	70.0
[12 -3 -4]	(2 8 0)	(0 4 -3)	2.079	1.583	1.31	78.1	68.0
[12 -3 4]	(2 8 0)	(0 4 3)	2.079	1.583	1.31	65.5	85.5
[12 -3 -1]	(2 8 0)	(1 5 -3)	2.079	1.572	1.32	69.4	74.2
[4 -1 3]	(2 8 0)	(1 -5 -3)	2.079	1.572	1.32	65.2	82.9
[4 -1 -3]	(2 8 0)	(3 9 1)	2.079	1.570	1.32	20.6	58.7
[4 -1 6]	(2 8 0)	(4 -2 -3)	2.079	1.566	1.33	88.8	63.9
[12 -3 14]	(2 8 0)	(4 2 -3)	2.079	1.566	1.33	70.8	71.9
[12 -3 -7]	(2 8 0)	(-1 3 -3)	2.079	1.541	1.35	86.7	62.3
[12 -3 -1]	(2 8 0)	(1 3 3)	2.079	1.541	1.35	66.6	74.2
[12 -3 17]	(2 8 0)	(-3 5 3)	2.079	1.531	1.36	74.2	65.8
[12 -3 7]	(2 8 0)	(-3 -5 3)	2.079	1.531	1.36	61.4	87.5
[8 -2 5]	(2 8 0)	(1 9 2)	2.079	1.530	1.36	35.9	86.4
[8 -2 3]	(2 8 0)	(-3 -9 2)	2.079	1.529	1.36	35.8	86.6
[4 -1 0]	(2 8 0)	(2 8 2)	2.079	1.525	1.36	36.8	76.4
[12 -3 14]	(2 8 0)	(-2 6 3)	2.079	1.512	1.38	65.8	71.9
[12 -3 2]	(2 8 0)	(2 6 -3)	2.079	1.512	1.38	61.4	80.9
[12 -3 20]	(2 8 0)	(-4 4 3)	2.079	1.502	1.38	82.7	60.2
[4 -1 4]	(2 8 0)	(-4 -4 3)	2.079	1.502	1.38	62.5	76.2
[12 -3 -8]	(2 8 0)	(2 0 3)	2.079	1.478	1.41	76.8	60.5
[8 -2 -5]	(2 8 0)	(3 7 2)	2.079	1.474	1.41	39.9	61.3
[4 -1 10]	(2 8 0)	(6 4 -2)	2.079	1.474	1.41	52.0	45.6
[8 -2 13]	(2 8 0)	(-5 -7 2)	2.079	1.472	1.41	39.9	61.1
[4 -1 7]	(2 8 0)	(5 -1 -3)	2.079	1.470	1.41	81.0	58.5
[12 -3 19]	(2 8 0)	(-5 -1 3)	2.079	1.470	1.41	72.5	62.0
[4 -1 -3]	(2 8 0)	(-1 5 -3)	2.079	1.462	1.42	78.6	58.7
[12 -3 1]	(2 8 0)	(1 5 3)	2.079	1.462	1.42	58.7	78.6
[12 -3 -10]	(2 8 0)	(2 -2 3)	2.079	1.459	1.42	85.3	57.1
[4 -1 -2]	(2 8 0)	(2 2 3)	2.079	1.459	1.42	68.4	64.1
[4 -1 -1]	(2 8 0)	(1 7 -3)	2.079	1.450	1.43	62.2	70.0
[12 -3 11]	(2 8 0)	(1 -7 -3)	2.079	1.450	1.43	58.1	78.4
[12 -3 23]	(2 8 0)	(5 -3 -3)	2.079	1.433	1.45	89.3	55.3
[12 -3 17]	(2 8 0)	(-5 -3 3)	2.079	1.433	1.45	64.3	65.8
[12 -3 19]	(2 8 0)	(-3 7 3)	2.079	1.418	1.47	66.9	62.0
[12 -3 5]	(2 8 0)	(-3 -7 3)	2.079	1.418	1.47	54.4	87.8
[12 -3 22]	(2 8 0)	(-4 6 3)	2.079	1.411	1.47	75.0	56.9
[12 -3 10]	(2 8 0)	(-4 -6 3)	2.079	1.411	1.47	55.1	80.6
[4 -1 -4]	(2 8 0)	(-2 4 -3)	2.079	1.407	1.48	86.6	53.9
[12 -3 -4]	(2 8 0)	(2 4 3)	2.079	1.407	1.48	60.4	68.0
[4 -1 -5]	(2 8 0)	(4 6 2)	2.079	1.390	1.50	44.2	49.6
[4 -1 0]	(2 8 0)	(-2 -8 3)	2.079	1.387	1.50	54.8	76.4
[12 -3 25]	(2 8 0)	(-5 5 3)	2.079	1.369	1.52	83.0	52.2
[4 -1 5]	(2 8 0)	(5 5 -3)	2.079	1.369	1.52	56.7	69.8
[12 -3 -11]	(2 8 0)	(1 -7 3)	2.079	1.362	1.53	71.5	55.4
[4 -1 1]	(2 8 0)	(1 7 3)	2.079	1.362	1.53	51.9	83.2
[12 -3 -8]	(2 8 0)	(0 -8 3)	2.079	1.360	1.53	63.6	60.5
[12 -3 8]	(2 8 0)	(0 8 3)	2.079	1.360	1.53	51.5	85.2

Richterite (280) 296 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[12 -3 -11]	(2 8 0)	(3 1 3)	2.079	1.354	1.54	70.4	55.4
[8 -2 -3]	(2 8 0)	(3 9 2)	2.079	1.343	1.55	33.9	67.0
[8 -2 11]	(2 8 0)	(-5 -9 2)	2.079	1.341	1.55	33.9	66.8
[12 -3 26]	(2 8 0)	(6 -2 -3)	2.079	1.339	1.55	82.2	50.8
[12 -3 22]	(2 8 0)	(-6 -2 3)	2.079	1.339	1.55	66.5	56.9
[12 -3 -14]	(2 8 0)	(-2 6 -3)	2.079	1.332	1.56	79.3	51.0
[12 -3 -2]	(2 8 0)	(2 6 3)	2.079	1.332	1.56	53.3	72.1
[12 -3 -5]	(2 8 0)	(1 9 -3)	2.079	1.325	1.57	56.2	66.0
[12 -3 13]	(2 8 0)	(1 -9 -3)	2.079	1.325	1.57	52.2	74.0
[4 -1 2]	(2 8 0)	(2 0 -4)	2.079	1.308	1.59	89.9	89.9
[4 -1 8]	(2 8 0)	(4 -8 -3)	2.079	1.308	1.59	68.4	53.7
[12 -3 8]	(2 8 0)	(4 8 -3)	2.079	1.308	1.59	48.8	85.2
[12 -3 28]	(2 8 0)	(-6 4 3)	2.079	1.299	1.60	89.7	48.1
[12 -3 20]	(2 8 0)	(6 4 -3)	2.079	1.299	1.60	59.0	60.2
[16 -4 3]	(2 8 0)	(-1 -1 4)	2.079	1.294	1.61	89.6	81.5
[16 -4 5]	(2 8 0)	(-1 1 4)	2.079	1.294	1.61	83.1	84.9
[16 -4 13]	(2 8 0)	(3 -1 -4)	2.079	1.293	1.61	89.7	81.2
[16 -4 11]	(2 8 0)	(3 1 -4)	2.079	1.293	1.61	83.0	84.6
[4 -1 8]	(2 8 0)	(6 8 -2)	2.079	1.289	1.61	37.7	53.7
[4 -1 9]	(2 8 0)	(5 -7 -3)	2.079	1.286	1.62	76.0	49.4
[12 -3 13]	(2 8 0)	(5 7 -3)	2.079	1.286	1.62	50.1	74.0
[12 -3 -17]	(2 8 0)	(3 -5 3)	2.079	1.274	1.63	86.6	47.0
[12 -3 -7]	(2 8 0)	(3 5 3)	2.079	1.274	1.63	55.6	62.3
[16 -4 1]	(2 8 0)	(-1 -3 4)	2.079	1.269	1.64	82.4	78.1
[16 -4 7]	(2 8 0)	(-1 3 4)	2.079	1.269	1.64	76.0	88.4
[16 -4 15]	(2 8 0)	(3 -3 -4)	2.079	1.268	1.64	82.6	77.8
[16 -4 9]	(2 8 0)	(3 3 -4)	2.079	1.268	1.64	75.9	88.1
[4 -1 1]	(2 8 0)	(2 4 -4)	2.079	1.259	1.65	75.6	83.2
[12 -3 -13]	(2 8 0)	(1 -9 3)	2.079	1.257	1.65	65.4	52.4
[12 -3 5]	(2 8 0)	(1 9 3)	2.079	1.257	1.65	46.1	87.8
[8 -2 -1]	(2 8 0)	(0 -2 4)	2.079	1.252	1.66	89.3	73.2
[8 -2 1]	(2 8 0)	(0 2 4)	2.079	1.252	1.66	76.5	79.8
[8 -2 9]	(2 8 0)	(4 -2 -4)	2.079	1.251	1.66	89.4	72.9
[8 -2 7]	(2 8 0)	(4 2 -4)	2.079	1.251	1.66	76.4	79.5
[12 -3 -16]	(2 8 0)	(2 -8 3)	2.079	1.244	1.67	72.8	48.3
[4 -1 0]	(2 8 0)	(2 8 3)	2.079	1.244	1.67	47.2	76.4
[12 -3 -16]	(2 8 0)	(4 0 3)	2.079	1.241	1.67	72.4	48.3
[12 -3 29]	(2 8 0)	(-7 1 3)	2.079	1.235	1.68	76.0	46.8
[4 -1 9]	(2 8 0)	(7 1 -3)	2.079	1.235	1.68	68.8	49.4
[4 -1 -6]	(2 8 0)	(-4 2 -3)	2.079	1.230	1.69	79.7	45.8
[12 -3 -14]	(2 8 0)	(4 2 3)	2.079	1.230	1.69	65.2	51.0
[16 -4 -1]	(2 8 0)	(-1 -5 4)	2.079	1.224	1.70	75.7	74.8
[16 -4 9]	(2 8 0)	(-1 5 4)	2.079	1.224	1.70	69.3	88.1
[16 -4 17]	(2 8 0)	(3 -5 -4)	2.079	1.223	1.70	75.8	74.5
[16 -4 7]	(2 8 0)	(3 5 -4)	2.079	1.223	1.70	69.2	88.4
[12 -3 25]	(2 8 0)	(-7 -3 3)	2.079	1.214	1.71	61.6	52.2
[16 -4 -5]	(2 8 0)	(1 -1 4)	2.079	1.211	1.72	84.2	68.5
[16 -4 -3]	(2 8 0)	(1 1 4)	2.079	1.211	1.72	77.3	71.6

Richterite (280) 296 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[16 -4 21]	(2 8 0)	(-5 1 4)	2.079	1.209	1.72	84.1	68.3
[16 -4 19]	(2 8 0)	(5 1 -4)	2.079	1.209	1.72	77.2	71.3
[12 -3 -5]	(2 8 0)	(3 7 3)	2.079	1.206	1.72	49.2	66.0
[4 -1 -4]	(2 8 0)	(4 4 3)	2.079	1.199	1.73	58.2	53.9
[12 -3 29]	(2 8 0)	(5 -9 -3)	2.079	1.196	1.74	70.0	46.8
[12 -3 11]	(2 8 0)	(5 9 -3)	2.079	1.196	1.74	44.4	78.4
[16 -4 -7]	(2 8 0)	(-1 3 -4)	2.079	1.191	1.75	89.0	65.5
[16 -4 -1]	(2 8 0)	(1 3 4)	2.079	1.191	1.75	70.6	74.8
[16 -4 23]	(2 8 0)	(5 -3 -4)	2.079	1.189	1.75	89.1	65.3
[16 -4 17]	(2 8 0)	(5 3 -4)	2.079	1.189	1.75	70.5	74.5
[12 -3 23]	(2 8 0)	(-7 -5 3)	2.079	1.173	1.77	54.9	55.3
[8 -2 -3]	(2 8 0)	(0 6 -4)	2.079	1.169	1.78	76.0	67.0
[8 -2 3]	(2 8 0)	(0 6 4)	2.079	1.169	1.78	63.5	86.6
[8 -2 11]	(2 8 0)	(-4 6 4)	2.079	1.167	1.78	76.2	66.8
[8 -2 5]	(2 8 0)	(4 6 -4)	2.079	1.167	1.78	63.4	86.4
[12 -3 16]	(2 8 0)	(-6 -8 3)	2.079	1.167	1.78	46.3	67.8
[16 -4 -3]	(2 8 0)	(1 7 -4)	2.079	1.163	1.79	69.6	71.6
[16 -4 11]	(2 8 0)	(-1 7 4)	2.079	1.163	1.79	63.3	84.6
[16 -4 19]	(2 8 0)	(3 -7 -4)	2.079	1.163	1.79	69.7	71.3
[16 -4 5]	(2 8 0)	(3 7 -4)	2.079	1.163	1.79	63.1	84.9
[16 -4 -9]	(2 8 0)	(1 -5 4)	2.079	1.153	1.80	82.5	62.7
[16 -4 1]	(2 8 0)	(1 5 4)	2.079	1.153	1.80	64.2	78.1
[4 -1 -2]	(2 8 0)	(2 0 4)	2.079	1.153	1.80	78.3	64.1
[16 -4 25]	(2 8 0)	(-5 5 4)	2.079	1.151	1.81	82.6	62.5
[16 -4 15]	(2 8 0)	(5 5 -4)	2.079	1.151	1.81	64.1	77.8
[12 -3 -10]	(2 8 0)	(4 6 3)	2.079	1.151	1.81	51.8	57.1
[4 -1 6]	(2 8 0)	(6 0 -4)	2.079	1.150	1.81	78.2	63.9
[8 -2 -11]	(2 8 0)	(5 9 2)	2.079	1.142	1.82	36.2	47.6
[8 -2 19]	(2 8 0)	(7 9 -2)	2.079	1.140	1.82	36.2	47.5
[4 -1 4]	(2 8 0)	(-2 8 4)	2.079	1.138	1.83	63.6	76.2
[4 -1 0]	(2 8 0)	(-2 -8 4)	2.079	1.138	1.83	63.4	76.4
[4 -1 10]	(2 8 0)	(-8 -2 3)	2.079	1.123	1.85	64.3	45.6
[4 -1 7]	(2 8 0)	(7 7 -3)	2.079	1.120	1.86	48.8	58.5
[4 -1 -3]	(2 8 0)	(2 -4 4)	2.079	1.118	1.86	88.7	58.7
[4 -1 -1]	(2 8 0)	(2 4 4)	2.079	1.118	1.86	65.4	70.0
[12 -3 -17]	(2 8 0)	(5 3 3)	2.079	1.116	1.86	61.0	47.0
[4 -1 7]	(2 8 0)	(-6 4 4)	2.079	1.116	1.86	88.8	58.5
[4 -1 5]	(2 8 0)	(6 4 -4)	2.079	1.116	1.86	65.3	69.8
[16 -4 -11]	(2 8 0)	(1 -7 4)	2.079	1.102	1.89	76.5	60.0
[16 -4 3]	(2 8 0)	(1 7 4)	2.079	1.102	1.89	58.4	81.5
[16 -4 27]	(2 8 0)	(5 -7 -4)	2.079	1.101	1.89	76.7	59.8
[16 -4 13]	(2 8 0)	(5 7 -4)	2.079	1.101	1.89	58.3	81.2
[12 -3 28]	(2 8 0)	(-8 -4 3)	2.079	1.099	1.89	57.8	48.1
[16 -4 -5]	(2 8 0)	(1 9 -4)	2.079	1.096	1.90	64.1	68.5
[16 -4 13]	(2 8 0)	(1 -9 -4)	2.079	1.096	1.90	57.9	81.2
[16 -4 21]	(2 8 0)	(-3 9 4)	2.079	1.095	1.90	64.3	68.3
[16 -4 3]	(2 8 0)	(-3 -9 4)	2.079	1.095	1.90	57.8	81.5
[12 -3 -8]	(2 8 0)	(4 8 3)	2.079	1.093	1.90	46.0	60.5

Richterite (280) 296 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[4 -1 -5]	(2 8 0)	(5 5 3)	2.079	1.085	1.92	54.7	49.6
[16 -4 -13]	(2 8 0)	(3 -1 4)	2.079	1.084	1.92	79.3	57.5
[16 -4 -11]	(2 8 0)	(3 1 4)	2.079	1.084	1.92	73.0	60.0
[16 -4 29]	(2 8 0)	(7 -1 -4)	2.079	1.081	1.92	79.2	57.3
[16 -4 27]	(2 8 0)	(7 1 -4)	2.079	1.081	1.92	72.9	59.8
[16 -4 -15]	(2 8 0)	(3 -3 4)	2.079	1.069	1.94	85.5	55.0
[16 -4 -9]	(2 8 0)	(3 3 4)	2.079	1.069	1.94	66.8	62.7
[16 -4 31]	(2 8 0)	(7 -3 -4)	2.079	1.067	1.95	85.4	54.9
[16 -4 25]	(2 8 0)	(-7 -3 4)	2.079	1.067	1.95	66.8	62.5
[12 -3 26]	(2 8 0)	(8 6 -3)	2.079	1.062	1.96	51.8	50.8
[12 -3 19]	(2 8 0)	(-7 -9 3)	2.079	1.059	1.96	43.4	62.0
[20 -5 8]	(2 8 0)	(-2 0 5)	2.079	1.045	1.99	88.7	87.3
[16 -4 -13]	(2 8 0)	(1 -9 4)	2.079	1.044	1.99	71.2	57.5
[16 -4 5]	(2 8 0)	(1 9 4)	2.079	1.044	1.99	53.2	84.9
[20 -5 13]	(2 8 0)	(3 -1 -5)	2.079	1.043	1.99	88.5	85.7
[20 -5 11]	(2 8 0)	(3 1 -5)	2.079	1.043	1.99	85.7	88.5
[16 -4 29]	(2 8 0)	(-5 9 4)	2.079	1.043	1.99	71.3	57.3
[16 -4 11]	(2 8 0)	(-5 -9 4)	2.079	1.043	1.99	53.2	84.6
[12 -3 -13]	(2 8 0)	(5 7 3)	2.079	1.042	2.00	48.9	52.4
[16 -4 -17]	(2 8 0)	(3 -5 4)	2.079	1.041	2.00	88.5	52.8
[16 -4 -7]	(2 8 0)	(3 5 4)	2.079	1.041	2.00	61.0	65.5
[16 -4 33]	(2 8 0)	(7 -5 -4)	2.079	1.039	2.00	88.6	52.6
[16 -4 23]	(2 8 0)	(7 5 -4)	2.079	1.039	2.00	60.9	65.3
[20 -5 6]	(2 8 0)	(-2 -2 5)	2.079	1.039	2.00	85.4	84.6
[4 -1 2]	(2 8 0)	(-2 2 5)	2.079	1.039	2.00	82.9	89.9
[20 -5 16]	(2 8 0)	(-4 0 5)	2.079	1.033	2.01	86.0	81.5
[20 -5 3]	(2 8 0)	(-1 -1 5)	2.079	1.032	2.01	89.0	80.4
[4 -1 1]	(2 8 0)	(1 -1 -5)	2.079	1.032	2.01	83.2	83.2
[4 -1 -4]	(2 8 0)	(-2 8 -4)	2.079	1.031	2.02	77.1	53.9
[4 -1 0]	(2 8 0)	(2 8 4)	2.079	1.031	2.02	54.1	76.4
[4 -1 3]	(2 8 0)	(-3 3 5)	2.079	1.030	2.02	82.7	82.9
[20 -5 9]	(2 8 0)	(-3 -3 5)	2.079	1.030	2.02	79.9	88.7
[4 -1 8]	(2 8 0)	(-6 8 4)	2.079	1.029	2.02	77.3	53.7
[4 -1 4]	(2 8 0)	(-6 -8 4)	2.079	1.029	2.02	54.1	76.2
[20 -5 18]	(2 8 0)	(-4 2 5)	2.079	1.026	2.03	88.2	78.8
[20 -5 14]	(2 8 0)	(4 2 -5)	2.079	1.026	2.03	80.2	84.3
[20 -5 4]	(2 8 0)	(-2 -4 5)	2.079	1.019	2.04	79.7	81.8
[20 -5 12]	(2 8 0)	(-2 4 5)	2.079	1.019	2.04	77.2	87.1
[20 -5 1]	(2 8 0)	(-1 -3 5)	2.079	1.019	2.04	85.2	77.8
[20 -5 7]	(2 8 0)	(-1 3 5)	2.079	1.019	2.04	77.5	86.0
[8 -2 -9]	(2 8 0)	(4 -2 4)	2.079	1.012	2.05	80.3	51.7
[8 -2 -7]	(2 8 0)	(4 2 4)	2.079	1.012	2.05	68.5	56.2
[8 -2 17]	(2 8 0)	(8 -2 -4)	2.079	1.009	2.06	80.2	51.5
[8 -2 15]	(2 8 0)	(-8 -2 4)	2.079	1.009	2.06	68.4	56.0
[20 -5 21]	(2 8 0)	(5 -1 -5)	2.079	1.008	2.06	86.4	74.8
[20 -5 19]	(2 8 0)	(-5 -1 5)	2.079	1.008	2.06	80.7	77.5
[4 -1 4]	(2 8 0)	(-4 4 5)	2.079	1.008	2.06	82.5	76.2
[20 -5 12]	(2 8 0)	(-4 -4 5)	2.079	1.008	2.06	74.6	87.1

Richterite (280) 296 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[20 -5 17]	(2 8 0)	(-3 5 5)	2.079	1.005	2.07	77.1	80.2
[20 -5 7]	(2 8 0)	(-3 -5 5)	2.079	1.005	2.07	74.3	86.0
[20 -5 -2]	(2 8 0)	(0 -2 5)	2.079	1.005	2.07	89.3	73.8
[20 -5 2]	(2 8 0)	(0 2 5)	2.079	1.005	2.07	77.9	79.1
[16 -4 -19]	(2 8 0)	(3 -7 4)	2.079	1.004	2.07	82.9	50.6
[16 -4 -5]	(2 8 0)	(3 7 4)	2.079	1.004	2.07	55.5	68.5
[16 -4 35]	(2 8 0)	(7 -7 -4)	2.079	1.002	2.08	83.0	50.5
[16 -4 21]	(2 8 0)	(7 7 -4)	2.079	1.002	2.08	55.5	68.3

Richterite (370) 318 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$
[7 -3 0]	(3 7 0)	(0 0 1)	2.040	5.056	0.40	80.6	78.3
[7 -3 10]	(3 7 0)	(1 -1 -1)	2.040	4.870	0.42	87.4	68.6
[7 -3 4]	(3 7 0)	(1 1 -1)	2.040	4.870	0.42	68.6	88.2
[7 -3 6]	(3 7 0)	(0 2 1)	2.040	4.432	0.46	58.9	81.4
[7 -3 14]	(3 7 0)	(2 0 -1)	2.040	4.061	0.50	66.5	57.8
[7 -3 -10]	(3 7 0)	(1 -1 1)	2.040	3.976	0.51	77.3	51.1
[7 -3 -4]	(3 7 0)	(1 1 1)	2.040	3.976	0.51	56.3	65.9
[7 -3 -2]	(3 7 0)	(-1 -3 1)	2.040	3.900	0.52	51.6	71.9
[7 -3 20]	(3 7 0)	(2 -2 -1)	2.040	3.716	0.55	87.0	45.3
[7 -3 8]	(3 7 0)	(-2 -2 1)	2.040	3.716	0.55	47.4	74.8
[7 -3 -12]	(3 7 0)	(0 4 -1)	2.040	3.404	0.60	62.4	47.2
[7 -3 12]	(3 7 0)	(0 4 1)	2.040	3.404	0.60	46.9	62.9
[7 -3 2]	(3 7 0)	(1 3 1)	2.040	3.393	0.60	40.6	85.0
[7 -3 18]	(3 7 0)	(-3 -1 1)	2.040	3.067	0.66	51.0	49.0
[7 -3 2]	(3 7 0)	(2 4 -1)	2.040	3.046	0.67	35.7	85.0
[7 -3 -8]	(3 7 0)	(1 5 -1)	2.040	2.976	0.69	43.6	55.6
[7 -3 -8]	(3 7 0)	(2 2 1)	2.040	2.954	0.69	43.2	55.6
[7 -3 12]	(3 7 0)	(3 3 -1)	2.040	2.775	0.74	36.5	62.9
[7 -3 8]	(3 7 0)	(1 5 1)	2.040	2.731	0.75	32.7	74.8
[7 -3 18]	(3 7 0)	(0 6 1)	2.040	2.624	0.78	41.6	49.0
[7 -3 5]	(3 7 0)	(-1 1 2)	2.040	2.591	0.79	83.8	84.8
[7 -3 2]	(3 7 0)	(-1 -1 2)	2.040	2.591	0.79	83.6	85.0
[7 -3 -2]	(3 7 0)	(2 4 1)	2.040	2.582	0.79	31.3	71.9
[7 -3 7]	(3 7 0)	(2 0 -2)	2.040	2.525	0.81	80.4	78.1
[7 -3 -4]	(3 7 0)	(-2 -6 1)	2.040	2.449	0.83	30.8	65.9
[7 -3 -3]	(3 7 0)	(0 2 -2)	2.040	2.438	0.84	87.2	68.9
[7 -3 3]	(3 7 0)	(0 2 2)	2.040	2.438	0.84	68.7	88.4
[7 -3 8]	(3 7 0)	(1 -3 -2)	2.040	2.407	0.85	72.4	74.8
[7 -3 -1]	(3 7 0)	(1 3 -2)	2.040	2.407	0.85	72.2	75.0
[7 -3 6]	(3 7 0)	(-3 -5 1)	2.040	2.377	0.86	27.3	81.4
[7 -3 -5]	(3 7 0)	(1 -1 2)	2.040	2.287	0.89	78.4	63.1
[7 -3 -2]	(3 7 0)	(1 1 2)	2.040	2.287	0.89	66.9	71.9
[7 -3 12]	(3 7 0)	(3 -1 -2)	2.040	2.282	0.89	78.3	62.9
[7 -3 9]	(3 7 0)	(-3 -1 2)	2.040	2.282	0.89	66.7	71.7
[7 -3 -12]	(3 7 0)	(3 3 1)	2.040	2.275	0.90	36.3	47.2
[7 -3 13]	(3 7 0)	(2 -4 -2)	2.040	2.214	0.92	76.9	60.3
[7 -3 1]	(3 7 0)	(2 4 -2)	2.040	2.214	0.92	58.8	81.6
[7 -3 14]	(3 7 0)	(1 7 1)	2.040	2.210	0.92	29.9	57.8
[7 -3 4]	(3 7 0)	(2 6 1)	2.040	2.188	0.93	24.7	88.2
[7 -3 16]	(3 7 0)	(-4 -4 1)	2.040	2.159	0.94	31.0	53.1
[7 -3 -8]	(3 7 0)	(1 -3 2)	2.040	2.158	0.95	89.6	55.6
[7 -3 1]	(3 7 0)	(1 3 2)	2.040	2.158	0.95	56.5	81.6
[7 -3 15]	(3 7 0)	(3 -3 -2)	2.040	2.154	0.95	89.4	55.4
[7 -3 6]	(3 7 0)	(3 3 -2)	2.040	2.154	0.95	56.3	81.4
[7 -3 11]	(3 7 0)	(1 -5 -2)	2.040	2.133	0.96	63.4	65.7
[7 -3 -4]	(3 7 0)	(1 5 -2)	2.040	2.133	0.96	63.2	65.9
[7 -3 -6]	(3 7 0)	(3 5 1)	2.040	2.040	1.00	26.6	60.5
[7 -3 -7]	(3 7 0)	(2 0 2)	2.040	2.036	1.00	66.6	57.9

Richterite (370) 318 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[7 -3 -10]	(3 7 0)	(2 8 -1)	2.040	2.003	1.02	29.4	51.1
[7 -3 17]	(3 7 0)	(-4 2 2)	2.040	1.983	1.03	77.2	51.0
[7 -3 11]	(3 7 0)	(4 2 -2)	2.040	1.983	1.03	56.2	65.7
[7 -3 -11]	(3 7 0)	(1 -5 2)	2.040	1.954	1.04	80.9	49.1
[7 -3 4]	(3 7 0)	(1 5 2)	2.040	1.954	1.04	48.3	88.2
[7 -3 -9]	(3 7 0)	(0 -6 2)	2.040	1.951	1.05	68.5	53.3
[7 -3 9]	(3 7 0)	(0 6 2)	2.040	1.951	1.05	51.8	71.7
[7 -3 18]	(3 7 0)	(3 -5 -2)	2.040	1.951	1.05	81.1	49.0
[7 -3 3]	(3 7 0)	(3 5 -2)	2.040	1.951	1.05	48.2	88.4
[7 -3 10]	(3 7 0)	(4 6 -1)	2.040	1.912	1.07	23.1	68.6
[7 -3 -13]	(3 7 0)	(-2 4 -2)	2.040	1.862	1.10	87.2	45.4
[7 -3 -1]	(3 7 0)	(2 4 2)	2.040	1.862	1.10	47.4	75.0
[7 -3 14]	(3 7 0)	(-1 7 2)	2.040	1.855	1.10	56.9	57.8
[7 -3 -7]	(3 7 0)	(-1 -7 2)	2.040	1.855	1.10	56.8	57.9
[7 -3 10]	(3 7 0)	(2 8 1)	2.040	1.852	1.10	22.3	68.6
[7 -3 20]	(3 7 0)	(1 9 1)	2.040	1.828	1.12	29.4	45.3
[7 -3 0]	(3 7 0)	(3 7 1)	2.040	1.793	1.14	20.5	78.3
[7 -3 -12]	(3 7 0)	(3 -1 2)	2.040	1.772	1.15	67.3	47.2
[7 -3 -9]	(3 7 0)	(3 1 2)	2.040	1.772	1.15	57.6	53.3
[7 -3 19]	(3 7 0)	(5 -1 -2)	2.040	1.767	1.15	67.2	47.1
[7 -3 16]	(3 7 0)	(-5 -1 2)	2.040	1.767	1.15	57.6	53.1
[7 -3 20]	(3 7 0)	(5 5 -1)	2.040	1.750	1.17	28.1	45.3
[21 -9 14]	(3 7 0)	(-2 0 3)	2.040	1.737	1.17	86.7	85.9
[7 -3 7]	(3 7 0)	(1 7 2)	2.040	1.734	1.18	42.6	78.1
[7 -3 0]	(3 7 0)	(-3 -7 2)	2.040	1.732	1.18	42.5	78.3
[21 -9 4]	(3 7 0)	(1 1 -3)	2.040	1.730	1.18	89.0	82.7
[21 -9 10]	(3 7 0)	(1 -1 -3)	2.040	1.730	1.18	82.7	89.5
[7 -3 -6]	(3 7 0)	(3 3 2)	2.040	1.710	1.19	48.7	60.5
[7 -3 -6]	(3 7 0)	(-3 -9 1)	2.040	1.709	1.19	22.0	60.5
[21 -9 20]	(3 7 0)	(-2 2 3)	2.040	1.707	1.19	85.0	79.2
[21 -9 8]	(3 7 0)	(-2 -2 3)	2.040	1.707	1.19	78.4	87.3
[7 -3 13]	(3 7 0)	(5 3 -2)	2.040	1.705	1.20	48.6	60.3
[7 -3 19]	(3 7 0)	(2 -8 -2)	2.040	1.701	1.20	62.5	47.1
[7 -3 -5]	(3 7 0)	(2 8 -2)	2.040	1.701	1.20	46.8	63.1
[7 -3 5]	(3 7 0)	(4 6 -2)	2.040	1.694	1.20	40.5	84.8
[7 -3 8]	(3 7 0)	(3 -1 -3)	2.040	1.676	1.22	84.6	74.8
[7 -3 6]	(3 7 0)	(-3 -1 3)	2.040	1.676	1.22	76.3	81.4
[7 -3 4]	(3 7 0)	(4 8 -1)	2.040	1.676	1.22	18.7	88.2
[21 -9 -2]	(3 7 0)	(-1 -3 3)	2.040	1.672	1.22	80.9	76.1
[21 -9 16]	(3 7 0)	(-1 3 3)	2.040	1.672	1.22	74.7	83.6
[7 -3 -10]	(3 7 0)	(4 6 1)	2.040	1.672	1.22	24.2	51.1
[7 -3 -2]	(3 7 0)	(0 2 -3)	2.040	1.658	1.23	88.8	71.9
[7 -3 2]	(3 7 0)	(0 2 3)	2.040	1.658	1.23	72.5	85.0
[21 -9 26]	(3 7 0)	(2 -4 -3)	2.040	1.625	1.25	77.3	72.7
[21 -9 2]	(3 7 0)	(2 4 -3)	2.040	1.625	1.25	70.8	80.5
[7 -3 17]	(3 7 0)	(1 -9 -2)	2.040	1.612	1.27	52.4	51.0
[7 -3 -10]	(3 7 0)	(1 9 -2)	2.040	1.612	1.27	52.3	51.1
[7 -3 -3]	(3 7 0)	(3 5 2)	2.040	1.603	1.27	41.0	68.9

Richterite (370) 318 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[7 -3 10]	(3 7 0)	(5 5 -2)	2.040	1.599	1.28	41.0	68.6
[21 -9 28]	(3 7 0)	(-4 0 3)	2.040	1.589	1.28	74.9	70.7
[7 -3 14]	(3 7 0)	(5 7 -1)	2.040	1.587	1.29	21.0	57.8
[21 -9 -10]	(3 7 0)	(-1 1 -3)	2.040	1.587	1.29	79.0	67.9
[21 -9 -4]	(3 7 0)	(1 1 3)	2.040	1.587	1.29	71.1	74.0
[7 -3 -4]	(3 7 0)	(0 -4 3)	2.040	1.583	1.29	83.5	65.9
[7 -3 4]	(3 7 0)	(0 4 3)	2.040	1.583	1.29	65.2	88.2
[21 -9 -8]	(3 7 0)	(-1 -5 3)	2.040	1.572	1.30	73.7	69.9
[21 -9 22]	(3 7 0)	(-1 5 3)	2.040	1.572	1.30	67.6	77.0
[7 -3 6]	(3 7 0)	(3 9 1)	2.040	1.570	1.30	17.7	81.4
[21 -9 34]	(3 7 0)	(4 -2 -3)	2.040	1.566	1.30	82.8	64.8
[21 -9 22]	(3 7 0)	(-4 -2 3)	2.040	1.566	1.30	67.1	77.0
[21 -9 -16]	(3 7 0)	(1 -3 3)	2.040	1.541	1.32	86.8	62.2
[21 -9 2]	(3 7 0)	(1 3 3)	2.040	1.541	1.32	63.6	80.5
[7 -3 -11]	(3 7 0)	(4 2 2)	2.040	1.538	1.33	51.0	49.1
[7 -3 12]	(3 7 0)	(-3 5 3)	2.040	1.531	1.33	80.1	62.9
[7 -3 2]	(3 7 0)	(-3 -5 3)	2.040	1.531	1.33	61.7	85.0
[7 -3 10]	(3 7 0)	(1 9 2)	2.040	1.530	1.33	38.9	68.6
[7 -3 -3]	(3 7 0)	(-3 -9 2)	2.040	1.529	1.33	38.8	68.9
[7 -3 5]	(3 7 0)	(2 8 2)	2.040	1.525	1.34	35.8	84.8
[21 -9 32]	(3 7 0)	(-2 6 3)	2.040	1.512	1.35	70.7	66.7
[21 -9 -4]	(3 7 0)	(-2 -6 3)	2.040	1.512	1.35	64.4	74.0
[7 -3 -4]	(3 7 0)	(4 8 1)	2.040	1.507	1.35	18.4	65.9
[21 -9 40]	(3 7 0)	(4 -4 -3)	2.040	1.502	1.36	89.6	59.4
[21 -9 16]	(3 7 0)	(4 4 -3)	2.040	1.502	1.36	60.0	83.6
[21 -9 -14]	(3 7 0)	(2 0 3)	2.040	1.478	1.38	70.4	64.1
[7 -3 0]	(3 7 0)	(3 7 2)	2.040	1.474	1.38	35.1	78.3
[7 -3 15]	(3 7 0)	(-6 -4 2)	2.040	1.474	1.38	43.2	55.4
[7 -3 7]	(3 7 0)	(5 7 -2)	2.040	1.472	1.39	35.1	78.1
[21 -9 38]	(3 7 0)	(5 -1 -3)	2.040	1.470	1.39	74.1	61.2
[21 -9 32]	(3 7 0)	(-5 -1 3)	2.040	1.470	1.39	66.5	66.7
[21 -9 -22]	(3 7 0)	(-1 5 -3)	2.040	1.462	1.40	85.9	57.1
[21 -9 8]	(3 7 0)	(1 5 3)	2.040	1.462	1.40	57.0	87.3
[21 -9 -20]	(3 7 0)	(2 -2 3)	2.040	1.459	1.40	78.0	58.8
[21 -9 -8]	(3 7 0)	(2 2 3)	2.040	1.459	1.40	63.0	69.9
[21 -9 -14]	(3 7 0)	(1 7 -3)	2.040	1.450	1.41	67.6	64.1
[21 -9 28]	(3 7 0)	(-1 7 3)	2.040	1.450	1.41	61.8	70.7
[21 -9 44]	(3 7 0)	(-5 3 3)	2.040	1.433	1.42	81.5	56.2
[21 -9 26]	(3 7 0)	(5 3 -3)	2.040	1.433	1.42	59.4	72.7
[7 -3 8]	(3 7 0)	(-5 -9 1)	2.040	1.426	1.43	16.4	74.8
[7 -3 14]	(3 7 0)	(-3 7 3)	2.040	1.418	1.44	73.9	57.8
[7 -3 0]	(3 7 0)	(-3 -7 3)	2.040	1.418	1.44	56.1	78.3
[21 -9 46]	(3 7 0)	(-4 6 3)	2.040	1.411	1.45	82.8	54.6
[21 -9 10]	(3 7 0)	(-4 -6 3)	2.040	1.411	1.45	54.0	89.5
[21 -9 -26]	(3 7 0)	(2 -4 3)	2.040	1.407	1.45	85.3	54.0
[21 -9 -2]	(3 7 0)	(2 4 3)	2.040	1.407	1.45	56.2	76.1
[7 -3 -5]	(3 7 0)	(4 6 2)	2.040	1.390	1.47	36.5	63.1
[21 -9 -10]	(3 7 0)	(2 8 -3)	2.040	1.387	1.47	59.1	67.9

Richterite (370) 318 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[21 -9 50]	(3 7 0)	(-5 5 3)	2.040	1.369	1.49	88.5	51.7
[21 -9 20]	(3 7 0)	(5 5 -3)	2.040	1.369	1.49	53.0	79.2
[21 -9 -28]	(3 7 0)	(1 -7 3)	2.040	1.362	1.50	79.6	52.6
[21 -9 14]	(3 7 0)	(1 7 3)	2.040	1.362	1.50	51.5	85.9
[7 -3 -8]	(3 7 0)	(0 -8 3)	2.040	1.360	1.50	70.9	55.6
[7 -3 8]	(3 7 0)	(0 8 3)	2.040	1.360	1.50	53.9	74.8
[7 -3 -6]	(3 7 0)	(3 1 3)	2.040	1.354	1.51	63.1	60.5
[7 -3 18]	(3 7 0)	(6 8 -1)	2.040	1.351	1.51	20.0	49.0
[7 -3 3]	(3 7 0)	(3 9 2)	2.040	1.343	1.52	30.9	88.4
[7 -3 -13]	(3 7 0)	(5 3 2)	2.040	1.343	1.52	46.1	45.4
[7 -3 4]	(3 7 0)	(-5 -9 2)	2.040	1.341	1.52	30.8	88.2
[7 -3 20]	(3 7 0)	(7 3 -2)	2.040	1.340	1.52	46.1	45.3
[7 -3 16]	(3 7 0)	(-6 2 3)	2.040	1.339	1.52	73.7	53.1
[7 -3 12]	(3 7 0)	(6 2 -3)	2.040	1.339	1.52	59.5	62.9
[21 -9 -32]	(3 7 0)	(2 -6 3)	2.040	1.332	1.53	88.1	49.8
[21 -9 4]	(3 7 0)	(2 6 3)	2.040	1.332	1.53	50.3	82.7
[21 -9 -20]	(3 7 0)	(-1 -9 3)	2.040	1.325	1.54	62.6	58.8
[21 -9 34]	(3 7 0)	(-1 9 3)	2.040	1.325	1.54	57.1	64.8
[14 -6 7]	(3 7 0)	(2 0 -4)	2.040	1.308	1.56	89.9	89.9
[21 -9 52]	(3 7 0)	(-4 8 3)	2.040	1.308	1.56	76.9	50.3
[21 -9 4]	(3 7 0)	(-4 -8 3)	2.040	1.308	1.56	49.1	82.7
[7 -3 18]	(3 7 0)	(6 -4 -3)	2.040	1.299	1.57	80.6	49.0
[7 -3 10]	(3 7 0)	(-6 -4 3)	2.040	1.299	1.57	53.1	68.6
[7 -3 -8]	(3 7 0)	(5 9 1)	2.040	1.294	1.58	17.4	55.6
[7 -3 1]	(3 7 0)	(1 1 -4)	2.040	1.294	1.58	88.4	81.6
[14 -6 5]	(3 7 0)	(-1 1 4)	2.040	1.294	1.58	82.1	86.7
[7 -3 6]	(3 7 0)	(-3 1 4)	2.040	1.293	1.58	88.2	81.4
[14 -6 9]	(3 7 0)	(3 1 -4)	2.040	1.293	1.58	81.9	86.5
[7 -3 -10]	(3 7 0)	(5 5 2)	2.040	1.289	1.58	39.2	51.1
[7 -3 9]	(3 7 0)	(-6 -8 2)	2.040	1.289	1.58	31.2	71.7
[7 -3 17]	(3 7 0)	(7 5 -2)	2.040	1.286	1.59	39.2	51.0
[21 -9 56]	(3 7 0)	(5 -7 -3)	2.040	1.286	1.59	85.2	47.7
[21 -9 14]	(3 7 0)	(5 7 -3)	2.040	1.286	1.59	47.6	85.9
[7 -3 -12]	(3 7 0)	(3 -5 3)	2.040	1.274	1.60	84.0	47.2
[7 -3 -2]	(3 7 0)	(3 5 3)	2.040	1.274	1.60	50.2	71.9
[14 -6 -1]	(3 7 0)	(1 3 -4)	2.040	1.269	1.61	85.5	76.7
[7 -3 4]	(3 7 0)	(1 -3 -4)	2.040	1.269	1.61	76.0	88.2
[14 -6 15]	(3 7 0)	(-3 3 4)	2.040	1.268	1.61	85.6	76.4
[7 -3 3]	(3 7 0)	(3 3 -4)	2.040	1.268	1.61	75.8	88.4
[14 -6 1]	(3 7 0)	(2 4 -4)	2.040	1.259	1.62	77.7	79.9
[21 -9 -34]	(3 7 0)	(1 -9 3)	2.040	1.257	1.62	74.2	48.5
[21 -9 20]	(3 7 0)	(1 9 3)	2.040	1.257	1.62	47.2	79.2
[14 -6 -3]	(3 7 0)	(0 2 -4)	2.040	1.252	1.63	86.8	73.5
[14 -6 3]	(3 7 0)	(0 2 4)	2.040	1.252	1.63	74.5	83.3
[14 -6 17]	(3 7 0)	(-4 2 4)	2.040	1.251	1.63	86.6	73.2
[14 -6 11]	(3 7 0)	(4 2 -4)	2.040	1.251	1.63	74.3	83.1
[21 -9 -38]	(3 7 0)	(2 -8 3)	2.040	1.244	1.64	82.2	46.0
[21 -9 10]	(3 7 0)	(2 8 3)	2.040	1.244	1.64	45.5	89.5

Richterite (370) 318 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[21 -9 -28]	(3 7 0)	(4 0 3)	2.040	1.241	1.64	63.7	52.6
[21 -9 52]	(3 7 0)	(7 -1 -3)	2.040	1.235	1.65	66.9	50.3
[21 -9 46]	(3 7 0)	(7 1 -3)	2.040	1.235	1.65	60.3	54.6
[21 -9 -34]	(3 7 0)	(-4 2 -3)	2.040	1.230	1.66	70.4	48.5
[21 -9 -22]	(3 7 0)	(4 2 3)	2.040	1.230	1.66	57.1	57.1
[7 -3 -2]	(3 7 0)	(-1 -5 4)	2.040	1.224	1.67	79.7	71.9
[14 -6 11]	(3 7 0)	(-1 5 4)	2.040	1.224	1.67	70.4	83.1
[7 -3 9]	(3 7 0)	(3 -5 -4)	2.040	1.223	1.67	79.9	71.7
[14 -6 3]	(3 7 0)	(3 5 -4)	2.040	1.223	1.67	70.2	83.3
[7 -3 -7]	(3 7 0)	(5 7 2)	2.040	1.219	1.67	33.3	57.9
[7 -3 14]	(3 7 0)	(-7 -7 2)	2.040	1.217	1.68	33.3	57.8
[21 -9 58]	(3 7 0)	(7 -3 -3)	2.040	1.214	1.68	73.6	46.5
[21 -9 40]	(3 7 0)	(-7 -3 3)	2.040	1.214	1.68	53.9	59.4
[14 -6 -5]	(3 7 0)	(1 -1 4)	2.040	1.211	1.68	79.4	70.4
[7 -3 -1]	(3 7 0)	(1 1 4)	2.040	1.211	1.68	73.4	75.0
[14 -6 19]	(3 7 0)	(5 -1 -4)	2.040	1.209	1.69	79.2	70.1
[7 -3 8]	(3 7 0)	(-5 -1 4)	2.040	1.209	1.69	73.2	74.8
[7 -3 0]	(3 7 0)	(3 7 3)	2.040	1.206	1.69	44.9	78.3
[21 -9 -16]	(3 7 0)	(4 4 3)	2.040	1.199	1.70	50.9	62.2
[21 -9 8]	(3 7 0)	(5 9 -3)	2.040	1.196	1.71	43.3	87.3
[7 -3 -4]	(3 7 0)	(-1 3 -4)	2.040	1.191	1.71	85.4	65.9
[14 -6 1]	(3 7 0)	(1 3 4)	2.040	1.191	1.71	67.6	79.9
[7 -3 11]	(3 7 0)	(5 -3 -4)	2.040	1.189	1.72	85.2	65.7
[14 -6 13]	(3 7 0)	(-5 -3 4)	2.040	1.189	1.72	67.4	79.7
[21 -9 34]	(3 7 0)	(7 5 -3)	2.040	1.173	1.74	48.0	64.8
[14 -6 -9]	(3 7 0)	(0 -6 4)	2.040	1.169	1.75	81.7	64.5
[14 -6 9]	(3 7 0)	(0 6 4)	2.040	1.169	1.75	63.5	86.5
[14 -6 23]	(3 7 0)	(4 -6 -4)	2.040	1.167	1.75	81.9	64.3
[14 -6 5]	(3 7 0)	(4 6 -4)	2.040	1.167	1.75	63.3	86.7
[7 -3 6]	(3 7 0)	(-6 -8 3)	2.040	1.167	1.75	42.6	81.4
[14 -6 -7]	(3 7 0)	(1 7 -4)	2.040	1.163	1.75	74.4	67.4
[7 -3 7]	(3 7 0)	(1 -7 -4)	2.040	1.163	1.75	65.3	78.1
[14 -6 21]	(3 7 0)	(-3 7 4)	2.040	1.163	1.75	74.6	67.2
[7 -3 0]	(3 7 0)	(-3 -7 4)	2.040	1.163	1.75	65.2	78.3
[14 -6 -11]	(3 7 0)	(-1 5 -4)	2.040	1.153	1.77	88.9	61.8
[7 -3 2]	(3 7 0)	(1 5 4)	2.040	1.153	1.77	62.2	85.0
[14 -6 -7]	(3 7 0)	(2 0 4)	2.040	1.153	1.77	72.6	67.4
[14 -6 25]	(3 7 0)	(-5 5 4)	2.040	1.151	1.77	89.1	61.6
[7 -3 5]	(3 7 0)	(-5 -5 4)	2.040	1.151	1.77	62.0	84.8
[21 -9 -10]	(3 7 0)	(4 6 3)	2.040	1.151	1.77	45.4	67.9
[14 -6 21]	(3 7 0)	(-6 0 4)	2.040	1.150	1.77	72.5	67.2
[7 -3 -4]	(3 7 0)	(5 9 2)	2.040	1.142	1.79	28.5	65.9
[7 -3 11]	(3 7 0)	(-7 -9 2)	2.040	1.140	1.79	28.5	65.7
[14 -6 -5]	(3 7 0)	(2 8 -4)	2.040	1.138	1.79	67.4	70.4
[7 -3 19]	(3 7 0)	(-8 -6 2)	2.040	1.136	1.80	36.3	47.1
[21 -9 -38]	(3 7 0)	(5 -1 3)	2.040	1.133	1.80	64.5	46.0
[21 -9 -32]	(3 7 0)	(5 1 3)	2.040	1.133	1.80	58.2	49.8
[21 -9 56]	(3 7 0)	(8 0 -3)	2.040	1.132	1.80	61.3	47.7

Richterite (370) 318 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[21 -9 50]	(3 7 0)	(8 2 -3)	2.040	1.123	1.82	55.1	51.7
[21 -9 28]	(3 7 0)	(-7 -7 3)	2.040	1.120	1.82	42.9	70.7
[14 -6 -13]	(3 7 0)	(2 -4 4)	2.040	1.118	1.82	84.2	59.2
[14 -6 -1]	(3 7 0)	(2 4 4)	2.040	1.118	1.82	61.4	76.7
[21 -9 -26]	(3 7 0)	(5 3 3)	2.040	1.116	1.83	52.2	54.0
[14 -6 27]	(3 7 0)	(-6 4 4)	2.040	1.116	1.83	84.0	59.0
[14 -6 15]	(3 7 0)	(6 4 -4)	2.040	1.116	1.83	61.3	76.4
[7 -3 -7]	(3 7 0)	(1 -7 4)	2.040	1.102	1.85	83.6	57.9
[14 -6 7]	(3 7 0)	(1 7 4)	2.040	1.102	1.85	57.4	89.9
[7 -3 14]	(3 7 0)	(5 -7 -4)	2.040	1.101	1.85	83.8	57.8
[14 -6 7]	(3 7 0)	(5 7 -4)	2.040	1.101	1.85	57.3	89.9
[21 -9 44]	(3 7 0)	(-8 -4 3)	2.040	1.099	1.86	49.3	56.2
[7 -3 -5]	(3 7 0)	(1 9 -4)	2.040	1.096	1.86	69.8	63.1
[14 -6 17]	(3 7 0)	(1 -9 -4)	2.040	1.096	1.86	61.0	73.2
[7 -3 12]	(3 7 0)	(-3 9 4)	2.040	1.095	1.86	70.0	62.9
[14 -6 -3]	(3 7 0)	(-3 -9 4)	2.040	1.095	1.86	60.8	73.5
[21 -9 -4]	(3 7 0)	(4 8 3)	2.040	1.093	1.87	40.7	74.0
[21 -9 -20]	(3 7 0)	(5 5 3)	2.040	1.085	1.88	46.6	58.8
[7 -3 -6]	(3 7 0)	(3 -1 4)	2.040	1.084	1.88	72.2	60.5
[14 -6 -9]	(3 7 0)	(3 1 4)	2.040	1.084	1.88	66.6	64.5
[7 -3 -9]	(3 7 0)	(6 8 2)	2.040	1.081	1.89	31.0	53.3
[7 -3 13]	(3 7 0)	(7 -1 -4)	2.040	1.081	1.89	72.0	60.3
[14 -6 23]	(3 7 0)	(7 1 -4)	2.040	1.081	1.89	66.5	64.3
[14 -6 -15]	(3 7 0)	(-3 3 -4)	2.040	1.069	1.91	77.8	56.7
[7 -3 -3]	(3 7 0)	(3 3 4)	2.040	1.069	1.91	61.2	68.9
[14 -6 29]	(3 7 0)	(-7 3 4)	2.040	1.067	1.91	77.6	56.6
[7 -3 10]	(3 7 0)	(7 3 -4)	2.040	1.067	1.91	61.1	68.6
[21 -9 38]	(3 7 0)	(-8 -6 3)	2.040	1.062	1.92	44.0	61.2
[21 -9 22]	(3 7 0)	(7 9 -3)	2.040	1.059	1.93	38.5	77.0
[35 -15 14]	(3 7 0)	(2 0 -5)	2.040	1.045	1.95	88.1	87.7
[14 -6 -17]	(3 7 0)	(-1 9 -4)	2.040	1.044	1.95	78.9	54.4
[7 -3 5]	(3 7 0)	(1 9 4)	2.040	1.044	1.95	53.2	84.8
[35 -15 24]	(3 7 0)	(-3 1 5)	2.040	1.043	1.95	89.5	85.4
[35 -15 18]	(3 7 0)	(-3 -1 5)	2.040	1.043	1.95	85.4	89.5
[14 -6 31]	(3 7 0)	(-5 9 4)	2.040	1.043	1.96	79.1	54.2
[7 -3 2]	(3 7 0)	(-5 -9 4)	2.040	1.043	1.96	53.1	85.0
[21 -9 -14]	(3 7 0)	(5 7 3)	2.040	1.042	1.96	41.6	64.1
[7 -3 -9]	(3 7 0)	(-3 5 -4)	2.040	1.041	1.96	83.2	53.3
[14 -6 -3]	(3 7 0)	(3 5 4)	2.040	1.041	1.96	56.1	73.5
[7 -3 16]	(3 7 0)	(-7 5 4)	2.040	1.039	1.96	83.0	53.1
[14 -6 17]	(3 7 0)	(7 5 -4)	2.040	1.039	1.96	56.0	73.2
[35 -15 8]	(3 7 0)	(-2 -2 5)	2.040	1.039	1.96	86.8	83.6
[7 -3 4]	(3 7 0)	(-2 2 5)	2.040	1.039	1.96	83.1	88.2
[7 -3 20]	(3 7 0)	(-9 -1 3)	2.040	1.035	1.97	56.6	45.3
[7 -3 -12]	(3 7 0)	(6 2 3)	2.040	1.033	1.97	53.8	47.2
[35 -15 28]	(3 7 0)	(-4 0 5)	2.040	1.033	1.97	84.1	82.7
[35 -15 4]	(3 7 0)	(-1 -1 5)	2.040	1.032	1.98	86.8	80.9
[7 -3 2]	(3 7 0)	(1 -1 -5)	2.040	1.032	1.98	81.8	85.0

Richterite (370) 318 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C
[14 -6 -19]	(3 7 0)	(-2 8 -4)	2.040	1.031	1.98	85.4	52.2
[14 -6 5]	(3 7 0)	(2 8 4)	2.040	1.031	1.98	52.1	86.7
[7 -3 6]	(3 7 0)	(-3 3 5)	2.040	1.030	1.98	84.6	81.4
[35 -15 12]	(3 7 0)	(-3 -3 5)	2.040	1.030	1.98	80.5	86.4
[14 -6 33]	(3 7 0)	(-6 8 4)	2.040	1.029	1.98	85.6	52.0
[14 -6 9]	(3 7 0)	(-6 -8 4)	2.040	1.029	1.98	52.0	86.5
[35 -15 34]	(3 7 0)	(4 -2 -5)	2.040	1.026	1.99	89.1	78.7
[35 -15 22]	(3 7 0)	(-4 -2 5)	2.040	1.026	1.99	79.1	86.8
[7 -3 18]	(3 7 0)	(9 3 -3)	2.040	1.022	1.99	51.0	49.0
[35 -15 2]	(3 7 0)	(-2 -4 5)	2.040	1.019	2.00	81.9	79.6
[35 -15 26]	(3 7 0)	(-2 4 5)	2.040	1.019	2.00	78.3	84.1
[35 -15 -2]	(3 7 0)	(-1 -3 5)	2.040	1.019	2.00	88.2	77.0
[35 -15 16]	(3 7 0)	(-1 3 5)	2.040	1.019	2.00	76.9	89.1
[7 -3 -10]	(3 7 0)	(6 4 3)	2.040	1.014	2.01	48.3	51.1
[14 -6 -17]	(3 7 0)	(4 -2 4)	2.040	1.012	2.02	72.0	54.4
[14 -6 -11]	(3 7 0)	(4 2 4)	2.040	1.012	2.02	61.3	61.8
[14 -6 31]	(3 7 0)	(8 -2 -4)	2.040	1.009	2.02	71.9	54.2
[14 -6 25]	(3 7 0)	(8 2 -4)	2.040	1.009	2.02	61.3	61.6
[35 -15 38]	(3 7 0)	(5 -1 -5)	2.040	1.008	2.02	82.9	76.1
[35 -15 32]	(3 7 0)	(5 1 -5)	2.040	1.008	2.02	78.0	80.0
[7 -3 8]	(3 7 0)	(4 -4 -5)	2.040	1.008	2.02	86.0	74.8
[35 -15 16]	(3 7 0)	(4 4 -5)	2.040	1.008	2.02	74.3	89.1
[35 -15 36]	(3 7 0)	(-3 5 5)	2.040	1.005	2.03	79.8	77.4
[35 -15 6]	(3 7 0)	(3 5 -5)	2.040	1.005	2.03	75.8	82.3
[35 -15 -6]	(3 7 0)	(0 2 -5)	2.040	1.005	2.03	85.6	74.4
[35 -15 6]	(3 7 0)	(0 2 5)	2.040	1.005	2.03	75.7	82.3
[14 -6 -21]	(3 7 0)	(3 -7 4)	2.040	1.004	2.03	88.3	50.1
[7 -3 0]	(3 7 0)	(3 7 4)	2.040	1.004	2.03	51.6	78.3
[14 -6 35]	(3 7 0)	(-7 7 4)	2.040	1.002	2.04	88.1	50.0
[7 -3 7]	(3 7 0)	(7 7 -4)	2.040	1.002	2.04	51.5	78.1

Richterite (190) 283 Zone Axes***a* 10.030Å *b* 18.415Å *c* 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	<i>d</i> (hk0)	<i>d</i> (hkl)	<i>d</i> Ratio	θ°	ZA $^\circ$
[9 -1 0]	(1 9 0)	(0 0 1)	2.002	5.056	0.40	86.9	75.3
[9 -1 10]	(1 9 0)	(1 -1 -1)	2.002	4.870	0.41	78.1	72.0
[9 -1 8]	(1 9 0)	(1 1 -1)	2.002	4.870	0.41	71.9	78.2
[9 -1 2]	(1 9 0)	(0 2 1)	2.002	4.432	0.45	58.8	81.8
[9 -1 18]	(1 9 0)	(2 0 -1)	2.002	4.061	0.49	82.5	51.5
[9 -1 -10]	(1 9 0)	(-1 1 -1)	2.002	3.976	0.50	85.2	49.7
[9 -1 -8]	(1 9 0)	(1 1 1)	2.002	3.976	0.50	70.2	53.8
[9 -1 6]	(1 9 0)	(-1 -3 1)	2.002	3.900	0.51	48.4	84.8
[9 -1 20]	(1 9 0)	(-2 2 1)	2.002	3.716	0.54	74.0	47.6
[9 -1 16]	(1 9 0)	(-2 -2 1)	2.002	3.716	0.54	59.1	55.9
[9 -1 -4]	(1 9 0)	(0 4 -1)	2.002	3.404	0.59	46.6	63.6
[9 -1 4]	(1 9 0)	(0 4 1)	2.002	3.404	0.59	40.6	88.5
[9 -1 -12]	(1 9 0)	(-1 3 -1)	2.002	3.393	0.59	64.4	46.0
[9 -1 -6]	(1 9 0)	(1 3 1)	2.002	3.393	0.59	49.5	58.5
[9 -1 14]	(1 9 0)	(2 4 -1)	2.002	3.046	0.66	41.8	60.7
[9 -1 14]	(1 9 0)	(1 -5 -1)	2.002	2.976	0.67	40.7	60.7
[9 -1 4]	(1 9 0)	(1 5 -1)	2.002	2.976	0.67	34.7	88.5
[9 -1 -4]	(1 9 0)	(1 5 1)	2.002	2.731	0.73	35.6	63.6
[9 -1 -6]	(1 9 0)	(0 6 -1)	2.002	2.624	0.76	36.0	58.5
[9 -1 6]	(1 9 0)	(0 6 1)	2.002	2.624	0.76	30.2	84.8
[9 -1 5]	(1 9 0)	(-1 1 2)	2.002	2.591	0.77	82.1	88.2
[9 -1 4]	(1 9 0)	(-1 -1 2)	2.002	2.591	0.77	82.1	88.5
[9 -1 9]	(1 9 0)	(-2 0 2)	2.002	2.525	0.79	86.9	75.1
[9 -1 12]	(1 9 0)	(2 6 -1)	2.002	2.449	0.82	30.8	66.1
[9 -1 -1]	(1 9 0)	(0 -2 2)	2.002	2.438	0.82	78.0	72.2
[9 -1 1]	(1 9 0)	(0 2 2)	2.002	2.438	0.82	71.9	78.5
[9 -1 6]	(1 9 0)	(1 -3 -2)	2.002	2.407	0.83	67.5	84.8
[9 -1 3]	(1 9 0)	(1 3 -2)	2.002	2.407	0.83	67.4	85.1
[9 -1 16]	(1 9 0)	(1 -7 -1)	2.002	2.333	0.86	32.6	55.9
[9 -1 2]	(1 9 0)	(1 7 -1)	2.002	2.333	0.86	26.8	81.8
[9 -1 -5]	(1 9 0)	(1 -1 2)	2.002	2.287	0.88	88.6	61.0
[9 -1 -4]	(1 9 0)	(1 1 2)	2.002	2.287	0.88	77.4	63.6
[9 -1 14]	(1 9 0)	(3 -1 -2)	2.002	2.282	0.88	88.7	60.7
[9 -1 13]	(1 9 0)	(3 1 -2)	2.002	2.282	0.88	77.3	63.4
[9 -1 11]	(1 9 0)	(-2 4 2)	2.002	2.214	0.90	65.0	69.0
[9 -1 7]	(1 9 0)	(2 4 -2)	2.002	2.214	0.90	58.8	81.5
[9 -1 -2]	(1 9 0)	(1 7 1)	2.002	2.210	0.91	26.8	69.2
[9 -1 -12]	(1 9 0)	(2 6 1)	2.002	2.188	0.92	35.5	46.0
[9 -1 -6]	(1 9 0)	(1 -3 2)	2.002	2.158	0.93	75.4	58.5
[9 -1 -3]	(1 9 0)	(1 3 2)	2.002	2.158	0.93	64.2	66.4
[9 -1 15]	(1 9 0)	(3 -3 -2)	2.002	2.154	0.93	75.5	58.2
[9 -1 12]	(1 9 0)	(3 3 -2)	2.002	2.154	0.93	64.2	66.1
[9 -1 7]	(1 9 0)	(1 -5 -2)	2.002	2.133	0.94	55.5	81.5
[9 -1 2]	(1 9 0)	(1 5 -2)	2.002	2.133	0.94	55.4	81.8
[9 -1 -8]	(1 9 0)	(0 -8 1)	2.002	2.095	0.96	29.7	53.8
[9 -1 8]	(1 9 0)	(0 8 1)	2.002	2.095	0.96	24.1	78.2
[9 -1 -9]	(1 9 0)	(2 0 2)	2.002	2.036	0.98	82.5	51.7
[9 -1 10]	(1 9 0)	(2 8 -1)	2.002	2.003	1.00	23.7	72.0

Richterite (190) 283 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[9 -1 19]	(1 9 0)	(4 -2 -2)	2.002	1.983	1.01	85.2	49.5
[9 -1 17]	(1 9 0)	(4 2 -2)	2.002	1.983	1.01	70.2	53.6
[9 -1 -7]	(1 9 0)	(-1 5 -2)	2.002	1.954	1.02	64.1	56.1
[9 -1 -2]	(1 9 0)	(1 5 2)	2.002	1.954	1.02	53.0	69.2
[9 -1 -3]	(1 9 0)	(0 6 -2)	2.002	1.951	1.03	54.5	66.4
[9 -1 3]	(1 9 0)	(0 6 2)	2.002	1.951	1.03	48.4	85.1
[9 -1 16]	(1 9 0)	(-3 5 2)	2.002	1.951	1.03	64.2	55.9
[9 -1 11]	(1 9 0)	(-3 -5 2)	2.002	1.951	1.03	53.0	69.0
[9 -1 18]	(1 9 0)	(-1 9 1)	2.002	1.896	1.06	27.6	51.5
[9 -1 -11]	(1 9 0)	(-2 4 -2)	2.002	1.862	1.08	73.9	47.8
[9 -1 -7]	(1 9 0)	(2 4 2)	2.002	1.862	1.08	59.0	56.1
[9 -1 8]	(1 9 0)	(-1 7 2)	2.002	1.855	1.08	46.4	78.2
[9 -1 1]	(1 9 0)	(-1 -7 2)	2.002	1.855	1.08	46.3	78.5
[9 -1 -10]	(1 9 0)	(2 8 1)	2.002	1.852	1.08	27.7	49.7
[9 -1 6]	(1 9 0)	(2 0 -3)	2.002	1.737	1.15	88.9	84.8
[9 -1 -8]	(1 9 0)	(1 -7 2)	2.002	1.734	1.15	55.2	53.8
[9 -1 -1]	(1 9 0)	(1 7 2)	2.002	1.734	1.15	44.1	72.2
[9 -1 17]	(1 9 0)	(3 -7 -2)	2.002	1.732	1.16	55.3	53.6
[9 -1 10]	(1 9 0)	(3 7 -2)	2.002	1.732	1.16	44.1	72.0
[27 -3 8]	(1 9 0)	(-1 -1 3)	2.002	1.730	1.16	85.8	84.0
[27 -3 10]	(1 9 0)	(-1 1 3)	2.002	1.730	1.16	83.7	86.2
[9 -1 -12]	(1 9 0)	(3 3 2)	2.002	1.710	1.17	65.3	46.0
[9 -1 18]	(1 9 0)	(3 9 -1)	2.002	1.709	1.17	24.7	51.5
[27 -3 20]	(1 9 0)	(2 -2 -3)	2.002	1.707	1.17	80.6	82.6
[27 -3 16]	(1 9 0)	(2 2 -3)	2.002	1.707	1.17	78.5	87.0
[9 -1 21]	(1 9 0)	(-5 -3 2)	2.002	1.705	1.17	65.3	45.8
[9 -1 13]	(1 9 0)	(-2 8 2)	2.002	1.701	1.18	46.7	63.4
[9 -1 5]	(1 9 0)	(-2 -8 2)	2.002	1.701	1.18	40.6	88.2
[9 -1 21]	(1 9 0)	(-4 6 2)	2.002	1.694	1.18	64.5	45.8
[9 -1 15]	(1 9 0)	(-4 -6 2)	2.002	1.694	1.18	49.6	58.2
[27 -3 28]	(1 9 0)	(3 -1 -3)	2.002	1.676	1.19	88.0	74.0
[27 -3 26]	(1 9 0)	(3 1 -3)	2.002	1.676	1.19	81.8	76.1
[9 -1 2]	(1 9 0)	(-1 -3 3)	2.002	1.672	1.20	75.6	81.8
[9 -1 4]	(1 9 0)	(-1 3 3)	2.002	1.672	1.20	73.5	88.5
[27 -3 -2]	(1 9 0)	(0 -2 3)	2.002	1.658	1.21	82.9	73.3
[27 -3 2]	(1 9 0)	(0 2 3)	2.002	1.658	1.21	76.8	77.5
[27 -3 22]	(1 9 0)	(2 -4 -3)	2.002	1.625	1.23	70.9	80.4
[27 -3 14]	(1 9 0)	(2 4 -3)	2.002	1.625	1.23	68.7	89.3
[9 -1 9]	(1 9 0)	(1 -9 -2)	2.002	1.612	1.24	39.6	75.1
[9 -1 0]	(1 9 0)	(1 9 -2)	2.002	1.612	1.24	39.5	75.3
[9 -1 -11]	(1 9 0)	(3 5 2)	2.002	1.603	1.25	55.8	47.8
[9 -1 20]	(1 9 0)	(5 5 -2)	2.002	1.599	1.25	55.8	47.6
[9 -1 12]	(1 9 0)	(-4 0 3)	2.002	1.589	1.26	85.1	66.1
[27 -3 -10]	(1 9 0)	(-1 1 -3)	2.002	1.587	1.26	90.0	65.4
[27 -3 -8]	(1 9 0)	(1 1 3)	2.002	1.587	1.26	80.3	67.3
[27 -3 -4]	(1 9 0)	(0 4 -3)	2.002	1.583	1.26	73.4	71.2
[27 -3 4]	(1 9 0)	(0 4 3)	2.002	1.583	1.26	67.3	79.6
[27 -3 4]	(1 9 0)	(1 5 -3)	2.002	1.572	1.27	66.3	79.6

Richterite (190) 283 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[27 -3 14]	(1 9 0)	(1 -5 -3)	2.002	1.572	1.27	64.3	89.3
[27 -3 38]	(1 9 0)	(-4 2 3)	2.002	1.566	1.28	85.3	64.3
[27 -3 34]	(1 9 0)	(-4 -2 3)	2.002	1.566	1.28	75.5	68.0
[9 -1 -4]	(1 9 0)	(-1 3 -3)	2.002	1.541	1.30	80.6	63.6
[9 -1 -2]	(1 9 0)	(1 3 3)	2.002	1.541	1.30	70.9	69.2
[27 -3 32]	(1 9 0)	(-3 5 3)	2.002	1.531	1.31	69.1	70.0
[27 -3 22]	(1 9 0)	(-3 -5 3)	2.002	1.531	1.31	62.9	80.4
[9 -1 -9]	(1 9 0)	(-1 9 -2)	2.002	1.530	1.31	48.2	51.7
[9 -1 0]	(1 9 0)	(1 9 2)	2.002	1.530	1.31	37.2	75.3
[9 -1 18]	(1 9 0)	(-3 9 2)	2.002	1.529	1.31	48.3	51.5
[9 -1 9]	(1 9 0)	(-3 -9 2)	2.002	1.529	1.31	37.2	75.1
[9 -1 -5]	(1 9 0)	(2 8 2)	2.002	1.525	1.31	41.8	61.0
[9 -1 8]	(1 9 0)	(-2 6 3)	2.002	1.512	1.32	62.3	78.2
[9 -1 4]	(1 9 0)	(2 6 -3)	2.002	1.512	1.32	60.1	88.5
[27 -3 40]	(1 9 0)	(4 -4 -3)	2.002	1.502	1.33	76.2	62.5
[27 -3 32]	(1 9 0)	(4 4 -3)	2.002	1.502	1.33	66.4	70.0
[9 -1 -6]	(1 9 0)	(2 0 3)	2.002	1.478	1.35	83.7	58.5
[9 -1 -10]	(1 9 0)	(3 7 2)	2.002	1.474	1.36	47.6	49.7
[9 -1 19]	(1 9 0)	(5 7 -2)	2.002	1.472	1.36	47.7	49.5
[27 -3 46]	(1 9 0)	(-5 1 3)	2.002	1.470	1.36	88.2	57.4
[27 -3 44]	(1 9 0)	(5 1 -3)	2.002	1.470	1.36	79.2	59.1
[27 -3 -14]	(1 9 0)	(1 -5 3)	2.002	1.462	1.37	71.9	61.8
[27 -3 -4]	(1 9 0)	(1 5 3)	2.002	1.462	1.37	62.2	71.2
[27 -3 -20]	(1 9 0)	(2 -2 3)	2.002	1.459	1.37	87.3	56.9
[27 -3 -16]	(1 9 0)	(2 2 3)	2.002	1.459	1.37	74.7	60.1
[27 -3 2]	(1 9 0)	(-1 -7 3)	2.002	1.450	1.38	58.4	77.5
[27 -3 16]	(1 9 0)	(-1 7 3)	2.002	1.450	1.38	56.3	87.0
[9 -1 16]	(1 9 0)	(5 -3 -3)	2.002	1.433	1.40	83.0	55.9
[9 -1 14]	(1 9 0)	(5 3 -3)	2.002	1.433	1.40	70.4	60.7
[27 -3 34]	(1 9 0)	(3 -7 -3)	2.002	1.418	1.41	61.2	68.0
[27 -3 20]	(1 9 0)	(3 7 -3)	2.002	1.418	1.41	55.0	82.6
[9 -1 14]	(1 9 0)	(4 -6 -3)	2.002	1.411	1.42	68.0	60.7
[9 -1 10]	(1 9 0)	(4 6 -3)	2.002	1.411	1.42	58.3	72.0
[27 -3 -22]	(1 9 0)	(-2 4 -3)	2.002	1.407	1.42	78.8	55.3
[27 -3 -14]	(1 9 0)	(2 4 3)	2.002	1.407	1.42	66.2	61.8
[27 -3 26]	(1 9 0)	(-2 8 3)	2.002	1.387	1.44	55.0	76.1
[27 -3 10]	(1 9 0)	(-2 -8 3)	2.002	1.387	1.44	52.8	86.2
[27 -3 50]	(1 9 0)	(-5 5 3)	2.002	1.369	1.46	74.9	54.4
[27 -3 40]	(1 9 0)	(-5 -5 3)	2.002	1.369	1.46	62.2	62.5
[27 -3 -16]	(1 9 0)	(-1 7 -3)	2.002	1.362	1.47	64.2	60.1
[27 -3 -2]	(1 9 0)	(1 7 3)	2.002	1.362	1.47	54.6	73.3
[27 -3 -8]	(1 9 0)	(0 8 -3)	2.002	1.360	1.47	57.7	67.3
[27 -3 8]	(1 9 0)	(0 8 3)	2.002	1.360	1.47	51.6	84.0
[27 -3 -26]	(1 9 0)	(3 1 3)	2.002	1.354	1.48	78.4	52.4
[9 -1 -9]	(1 9 0)	(3 9 2)	2.002	1.343	1.49	40.8	51.7
[9 -1 18]	(1 9 0)	(5 9 -2)	2.002	1.341	1.49	40.9	51.5
[27 -3 56]	(1 9 0)	(6 -2 -3)	2.002	1.339	1.49	89.2	50.2
[27 -3 52]	(1 9 0)	(6 2 -3)	2.002	1.339	1.49	74.3	52.9

Richterite (190) 283 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	d (hk0)	d (hkl)	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[9 -1 -8]	(1 9 0)	(2 -6 3)	2.002	1.332	1.50	71.0	53.8
[9 -1 -4]	(1 9 0)	(2 6 3)	2.002	1.332	1.50	58.4	63.6
[9 -1 0]	(1 9 0)	(-1 -9 3)	2.002	1.325	1.51	51.7	75.3
[9 -1 6]	(1 9 0)	(-1 9 3)	2.002	1.325	1.51	49.7	84.8
[18 -2 9]	(1 9 0)	(-2 0 4)	2.002	1.308	1.53	90.0	89.8
[27 -3 44]	(1 9 0)	(-4 8 3)	2.002	1.308	1.53	60.9	59.1
[27 -3 28]	(1 9 0)	(-4 -8 3)	2.002	1.308	1.53	51.2	74.0
[27 -3 58]	(1 9 0)	(-6 4 3)	2.002	1.299	1.54	81.3	48.9
[27 -3 50]	(1 9 0)	(-6 -4 3)	2.002	1.299	1.54	66.4	54.4
[9 -1 2]	(1 9 0)	(1 1 -4)	2.002	1.294	1.55	87.6	81.8
[18 -2 5]	(1 9 0)	(-1 1 4)	2.002	1.294	1.55	84.5	83.5
[9 -1 7]	(1 9 0)	(3 -1 -4)	2.002	1.293	1.55	87.7	81.5
[18 -2 13]	(1 9 0)	(3 1 -4)	2.002	1.293	1.55	84.4	83.2
[27 -3 52]	(1 9 0)	(5 -7 -3)	2.002	1.286	1.56	67.5	52.9
[27 -3 38]	(1 9 0)	(5 7 -3)	2.002	1.286	1.56	54.9	64.3
[27 -3 -32]	(1 9 0)	(3 -5 3)	2.002	1.274	1.57	77.5	48.4
[27 -3 -22]	(1 9 0)	(3 5 3)	2.002	1.274	1.57	62.6	55.3
[18 -2 3]	(1 9 0)	(-1 -3 4)	2.002	1.269	1.58	79.9	80.2
[9 -1 3]	(1 9 0)	(-1 3 4)	2.002	1.269	1.58	76.8	85.1
[18 -2 15]	(1 9 0)	(3 -3 -4)	2.002	1.268	1.58	79.9	79.9
[9 -1 6]	(1 9 0)	(3 3 -4)	2.002	1.268	1.58	76.7	84.8
[18 -2 7]	(1 9 0)	(2 4 -4)	2.002	1.259	1.59	74.5	86.8
[9 -1 -6]	(1 9 0)	(1 -9 3)	2.002	1.257	1.59	57.7	58.5
[9 -1 0]	(1 9 0)	(1 9 3)	2.002	1.257	1.59	48.1	75.3
[18 -2 -1]	(1 9 0)	(0 -2 4)	2.002	1.252	1.60	85.4	73.8
[18 -2 1]	(1 9 0)	(0 2 4)	2.002	1.252	1.60	79.3	76.9
[18 -2 19]	(1 9 0)	(4 -2 -4)	2.002	1.251	1.60	85.5	73.5
[18 -2 17]	(1 9 0)	(4 2 -4)	2.002	1.251	1.60	79.2	76.6
[27 -3 -26]	(1 9 0)	(2 -8 3)	2.002	1.244	1.61	64.1	52.4
[27 -3 -10]	(1 9 0)	(2 8 3)	2.002	1.244	1.61	51.6	65.4
[9 -1 -12]	(1 9 0)	(4 0 3)	2.002	1.241	1.61	81.7	46.0
[27 -3 64]	(1 9 0)	(-7 1 3)	2.002	1.235	1.62	85.4	45.3
[27 -3 62]	(1 9 0)	(7 1 -3)	2.002	1.235	1.62	77.8	46.4
[27 -3 -34]	(1 9 0)	(4 2 3)	2.002	1.230	1.63	74.1	47.2
[9 -1 1]	(1 9 0)	(1 5 -4)	2.002	1.224	1.64	72.6	78.5
[18 -2 7]	(1 9 0)	(1 -5 -4)	2.002	1.224	1.64	69.5	86.8
[9 -1 8]	(1 9 0)	(-3 5 4)	2.002	1.223	1.64	72.6	78.2
[18 -2 11]	(1 9 0)	(-3 -5 4)	2.002	1.223	1.64	69.4	86.5
[9 -1 20]	(1 9 0)	(7 3 -3)	2.002	1.214	1.65	70.4	47.6
[18 -2 -5]	(1 9 0)	(-1 1 -4)	2.002	1.211	1.65	89.3	67.8
[9 -1 -2]	(1 9 0)	(1 1 4)	2.002	1.211	1.65	81.9	69.2
[18 -2 23]	(1 9 0)	(5 -1 -4)	2.002	1.209	1.66	89.2	67.5
[9 -1 11]	(1 9 0)	(-5 -1 4)	2.002	1.209	1.66	81.8	69.0
[27 -3 -34]	(1 9 0)	(-3 7 -3)	2.002	1.206	1.66	70.5	47.2
[27 -3 -20]	(1 9 0)	(3 7 3)	2.002	1.206	1.66	55.7	56.9
[27 -3 -32]	(1 9 0)	(4 4 3)	2.002	1.199	1.67	66.7	48.4
[9 -1 18]	(1 9 0)	(-5 9 3)	2.002	1.196	1.67	61.2	51.5
[9 -1 12]	(1 9 0)	(5 9 -3)	2.002	1.196	1.67	48.6	66.1

Richterite (190) 283 Zone Axes **a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°**Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$ C $^\circ$
[9 -1 -3]	(1 9 0)	(-1 3 -4)	2.002	1.191	1.68	83.4	66.4
[18 -2 -3]	(1 9 0)	(1 3 4)	2.002	1.191	1.68	74.6	70.7
[9 -1 12]	(1 9 0)	(-5 3 4)	2.002	1.189	1.68	83.5	66.1
[18 -2 21]	(1 9 0)	(-5 -3 4)	2.002	1.189	1.68	74.6	70.5
[27 -3 58]	(1 9 0)	(7 5 -3)	2.002	1.173	1.71	63.3	48.9
[18 -2 -3]	(1 9 0)	(0 -6 4)	2.002	1.169	1.71	71.1	70.7
[18 -2 3]	(1 9 0)	(0 6 4)	2.002	1.169	1.71	65.0	80.2
[18 -2 21]	(1 9 0)	(4 -6 -4)	2.002	1.167	1.71	71.2	70.5
[18 -2 15]	(1 9 0)	(4 6 -4)	2.002	1.167	1.71	65.0	79.9
[27 -3 62]	(1 9 0)	(-6 8 3)	2.002	1.167	1.72	67.4	46.4
[27 -3 46]	(1 9 0)	(-6 -8 3)	2.002	1.167	1.72	52.5	57.4
[18 -2 1]	(1 9 0)	(1 7 -4)	2.002	1.163	1.72	65.9	76.9
[9 -1 4]	(1 9 0)	(1 -7 -4)	2.002	1.163	1.72	62.8	88.5
[18 -2 17]	(1 9 0)	(-3 7 4)	2.002	1.163	1.72	66.0	76.6
[9 -1 5]	(1 9 0)	(-3 -7 4)	2.002	1.163	1.72	62.8	88.2
[18 -2 -7]	(1 9 0)	(-1 5 -4)	2.002	1.153	1.74	76.5	65.0
[9 -1 -1]	(1 9 0)	(1 5 4)	2.002	1.153	1.74	67.7	72.2
[18 -2 -9]	(1 9 0)	(2 0 4)	2.002	1.153	1.74	84.4	62.3
[18 -2 25]	(1 9 0)	(5 -5 -4)	2.002	1.151	1.74	76.6	64.7
[9 -1 10]	(1 9 0)	(5 5 -4)	2.002	1.151	1.74	67.7	72.0
[9 -1 -10]	(1 9 0)	(4 6 3)	2.002	1.151	1.74	59.9	49.7
[18 -2 27]	(1 9 0)	(6 0 -4)	2.002	1.150	1.74	84.3	62.0
[18 -2 13]	(1 9 0)	(-2 8 4)	2.002	1.138	1.76	61.1	83.2
[18 -2 5]	(1 9 0)	(-2 -8 4)	2.002	1.138	1.76	61.1	83.5
[27 -3 56]	(1 9 0)	(7 7 -3)	2.002	1.120	1.79	56.7	50.2
[18 -2 -11]	(1 9 0)	(2 -4 4)	2.002	1.118	1.79	81.8	59.7
[18 -2 -7]	(1 9 0)	(2 4 4)	2.002	1.118	1.79	70.6	65.0
[18 -2 29]	(1 9 0)	(6 -4 -4)	2.002	1.116	1.79	81.9	59.5
[18 -2 25]	(1 9 0)	(6 4 -4)	2.002	1.116	1.79	70.6	64.7
[9 -1 -4]	(1 9 0)	(1 -7 4)	2.002	1.102	1.82	70.1	63.6
[18 -2 -1]	(1 9 0)	(1 7 4)	2.002	1.102	1.82	61.3	73.8
[9 -1 13]	(1 9 0)	(5 -7 -4)	2.002	1.101	1.82	70.2	63.4
[18 -2 19]	(1 9 0)	(5 7 -4)	2.002	1.101	1.82	61.3	73.5
[9 -1 0]	(1 9 0)	(1 9 -4)	2.002	1.096	1.83	59.9	75.3
[18 -2 9]	(1 9 0)	(1 -9 -4)	2.002	1.096	1.83	56.9	89.8
[9 -1 9]	(1 9 0)	(-3 9 4)	2.002	1.095	1.83	60.0	75.1
[18 -2 9]	(1 9 0)	(-3 -9 4)	2.002	1.095	1.83	56.8	89.8
[27 -3 -28]	(1 9 0)	(4 8 3)	2.002	1.093	1.83	53.7	51.0
[9 -1 -7]	(1 9 0)	(-3 1 -4)	2.002	1.084	1.85	86.7	56.1
[18 -2 -13]	(1 9 0)	(3 1 4)	2.002	1.084	1.85	80.1	57.2
[9 -1 16]	(1 9 0)	(-7 1 4)	2.002	1.081	1.85	86.7	55.9
[18 -2 31]	(1 9 0)	(7 1 -4)	2.002	1.081	1.85	80.0	57.0
[18 -2 -15]	(1 9 0)	(3 -3 4)	2.002	1.069	1.87	86.7	54.9
[9 -1 -6]	(1 9 0)	(3 3 4)	2.002	1.069	1.87	73.5	58.5
[18 -2 33]	(1 9 0)	(7 -3 -4)	2.002	1.067	1.88	86.8	54.7
[9 -1 15]	(1 9 0)	(7 3 -4)	2.002	1.067	1.88	73.5	58.2
[9 -1 18]	(1 9 0)	(-7 -9 3)	2.002	1.059	1.89	50.9	51.5
[45 -5 18]	(1 9 0)	(-2 0 5)	2.002	1.045	1.91	89.4	87.1

Richterite (190) 283 Zone Axes a 10.030Å b 18.415Å c 5.234Å α 90° β 104.97° γ 90°Space Group C2/m permits only $(h+k)=2n$

[U V W]	(h k 0)	(h k l)	$d(hk0)$	$d(hkl)$	d Ratio	θ°	ZA $^\circ$
[18 -2 -9]	(1 9 0)	(1 -9 4)	2.002	1.044	1.92	64.3	62.3
[9 -1 0]	(1 9 0)	(1 9 4)	2.002	1.044	1.92	55.6	75.3
[45 -5 28]	(1 9 0)	(3 -1 -5)	2.002	1.043	1.92	87.5	86.2
[45 -5 26]	(1 9 0)	(3 1 -5)	2.002	1.043	1.92	86.2	87.5
[18 -2 27]	(1 9 0)	(-5 9 4)	2.002	1.043	1.92	64.4	62.0
[9 -1 9]	(1 9 0)	(-5 -9 4)	2.002	1.043	1.92	55.6	75.1
[9 -1 -8]	(1 9 0)	(-3 5 -4)	2.002	1.041	1.92	80.4	53.8
[18 -2 -11]	(1 9 0)	(3 5 4)	2.002	1.041	1.92	67.2	59.7
[9 -1 17]	(1 9 0)	(-7 5 4)	2.002	1.039	1.93	80.5	53.6
[18 -2 29]	(1 9 0)	(-7 -5 4)	2.002	1.039	1.93	67.2	59.5
[45 -5 16]	(1 9 0)	(2 2 -5)	2.002	1.039	1.93	84.3	85.8
[9 -1 4]	(1 9 0)	(2 -2 -5)	2.002	1.039	1.93	83.1	88.5
[45 -5 36]	(1 9 0)	(4 0 -5)	2.002	1.033	1.94	88.1	80.8
[45 -5 8]	(1 9 0)	(-1 -1 5)	2.002	1.032	1.94	88.7	80.5
[9 -1 2]	(1 9 0)	(-1 1 5)	2.002	1.032	1.94	85.0	81.8
[18 -2 -13]	(1 9 0)	(2 -8 4)	2.002	1.031	1.94	69.5	57.2
[18 -2 -5]	(1 9 0)	(2 8 4)	2.002	1.031	1.94	58.3	67.8
[9 -1 6]	(1 9 0)	(-3 3 5)	2.002	1.030	1.94	81.2	84.8
[45 -5 24]	(1 9 0)	(-3 -3 5)	2.002	1.030	1.94	79.9	88.8
[18 -2 31]	(1 9 0)	(-6 8 4)	2.002	1.029	1.95	69.6	57.0
[18 -2 23]	(1 9 0)	(-6 -8 4)	2.002	1.029	1.95	58.3	67.5
[45 -5 38]	(1 9 0)	(-4 2 5)	2.002	1.026	1.95	85.7	79.5
[45 -5 34]	(1 9 0)	(-4 -2 5)	2.002	1.026	1.95	81.8	82.2
[45 -5 14]	(1 9 0)	(2 4 -5)	2.002	1.019	1.96	78.1	84.4
[45 -5 22]	(1 9 0)	(2 -4 -5)	2.002	1.019	1.96	76.9	89.8
[45 -5 6]	(1 9 0)	(1 3 -5)	2.002	1.019	1.96	82.5	79.2
[45 -5 12]	(1 9 0)	(1 -3 -5)	2.002	1.019	1.96	78.8	83.1
[18 -2 -19]	(1 9 0)	(4 -2 4)	2.002	1.012	1.98	88.8	50.7
[18 -2 -17]	(1 9 0)	(4 2 4)	2.002	1.012	1.98	76.3	52.7
[18 -2 37]	(1 9 0)	(8 -2 -4)	2.002	1.009	1.98	88.7	50.5
[18 -2 35]	(1 9 0)	(-8 -2 4)	2.002	1.009	1.98	76.3	52.5
[45 -5 46]	(1 9 0)	(5 -1 -5)	2.002	1.008	1.99	90.0	74.4
[45 -5 44]	(1 9 0)	(-5 -1 5)	2.002	1.008	1.99	83.8	75.7
[9 -1 8]	(1 9 0)	(-4 4 5)	2.002	1.008	1.99	79.5	78.2
[45 -5 32]	(1 9 0)	(4 4 -5)	2.002	1.008	1.99	75.7	83.5
[45 -5 32]	(1 9 0)	(3 -5 -5)	2.002	1.005	1.99	75.2	83.5
[45 -5 22]	(1 9 0)	(3 5 -5)	2.002	1.005	1.99	73.8	89.8
[45 -5 -2]	(1 9 0)	(0 -2 5)	2.002	1.005	1.99	86.9	74.1
[45 -5 2]	(1 9 0)	(0 2 5)	2.002	1.005	1.99	80.8	76.6
[18 -2 -17]	(1 9 0)	(3 -7 4)	2.002	1.004	1.99	74.5	52.7
[9 -1 -5]	(1 9 0)	(3 7 4)	2.002	1.004	1.99	61.3	61.0
[18 -2 35]	(1 9 0)	(7 -7 -4)	2.002	1.002	2.00	74.6	52.5
[9 -1 14]	(1 9 0)	(7 7 -4)	2.002	1.002	2.00	61.3	60.7