

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Si	(0,8,8)	12.914	82.19	5.9856	5.05	1.7888	9.03	22.36	24.11
	Equiv. Refl.: (8,0,8), (8,8,0)								
Ge	(0,6,10)	12.779	78.62	3.3822	7.25	2.6228	19.03	32.79	37.91
	Equiv. Refl.: (0,10,6), (6,0,10), (6,6,8), (6,8,6), (6,10,0), (8,6,6), (10,0,6), (10,6,0)								
Si	(2,4,10)	12.504	73.59	2.9466	2.71	3.8393	10.41	47.99	49.11
	Equiv. Refl.: (2,10,4), (4,2,10), (4,10,2), (10,2,4), (10,4,2)								
Ge	(3,3,11)	12.919	82.35	2.5565	7.33	1.7503	12.84	21.88	25.37
	Equiv. Refl.: (3,7,9), (3,9,7), (3,11,3), (7,3,9), (7,9,3), (9,3,7), (9,7,3), (11,3,3)								
Ge	(0,8,8)	12.397	72	2.4698	5.11	4.2342	21.65	52.93	57.19
	Equiv. Refl.: (8,0,8), (8,8,0)								
Si	(1,1,11)	12.659	76.21	1.9733	2.18	3.1995	6.97	39.99	40.6
	Equiv. Refl.: (1,11,1), (5,7,7), (7,5,7), (7,7,5), (11,1,1)								
Ge	(1,3,11)	12.542	74.19	1.4437	3.95	3.6915	14.58	46.14	48.39
	Equiv. Refl.: (1,7,9), (1,9,7), (1,11,3), (3,1,11), (3,11,1), (5,5,9), (5,9,5), (7,1,9), (7,9,1), (9,1,7), (9,5,5), (9,7,1), (11,1,3), (11,3,1)								
Sapph	(1,2,26)	13.032	88.83	23.865	22.3	0.266	5.92	3.32	6.79
	Equiv. Refl.: (1,-3,-26), (2,1,-26), (2,-3,26), (3,-1,-26), (3,-2,26), (-1,3,26), (-1,-2,-26), (-2,3,-26), (-2,-1,26), (-3,1,26), (-3,2,-26)								
LiNbO3	(2,8,6)	13.023	87.58	22.715	23.7	0.55	13.02	6.88	14.72
	Equiv. Refl.: (8,-10,6), (10,-8,6), (-2,10,6), (-8,-2,6), (-10,2,6)								
LiNbO3	(8,2,-6)	13.023	87.58	21.876	23.7	0.55	13.02	6.88	14.72
	Equiv. Refl.: (-2,-8,-6), (-8,10,-6), (-10,8,-6)								
LiNbO3	(2,-10,-6)	13.023	87.58	21.875	23.7	0.55	13.02	6.88	14.72
	Equiv. Refl.: (10,-2,-6)								
LiNbO3	(2,-10,6)	13.023	87.58	20.271	21.9	0.55	12.05	6.88	13.88
	Equiv. Refl.: (8,2,6), (10,-2,6), (-2,-8,6), (-8,10,6), (-10,8,6)								
LiNbO3	(2,8,-6)	13.023	87.58	20.112	21.9	0.55	12.05	6.88	13.88
	Equiv. Refl.: (8,-10,-6), (10,-8,-6), (-2,10,-6), (-8,-2,-6), (-10,2,-6)								
LiNbO3	(4,-9,16)	13.005	86.12	17.735	17.5	0.885	15.45	11.06	19
	Equiv. Refl.: (5,4,16), (9,-4,16), (-4,-5,16), (-5,9,16), (-9,5,16)								
Sapph	(5,5,0)	13.029	88.21	17.638	16.1	0.407	6.55	5.08	8.29
	Equiv. Refl.: (5,-10,0), (10,-5,0), (-5,10,0), (-5,-5,0), (-10,5,0)								
LiNbO3	(4,5,-16)	13.005	86.12	17.327	17.5	0.885	15.45	11.06	19
	Equiv. Refl.: (5,-9,-16), (9,-5,-16), (-4,9,-16), (-5,-4,-16), (-9,4,-16)								
LiNbO3	(2,7,-14)	12.99	85.23	14.211	13.9	1.088	15.12	13.6	20.34
	Equiv. Refl.: (7,-9,-14), (9,-7,-14), (-2,9,-14), (-7,-2,-14), (-9,2,-14)								
Sapph	(1,8,-4)	12.995	85.5	13.535	11.5	1.026	11.76	12.83	17.4
	Equiv. Refl.: (1,-9,4), (8,1,4), (8,-9,-4), (9,-1,4), (9,-8,-4), (-1,9,-4), (-1,-8,4), (-8,9,4), (-8,-1,-4), (-9,1,-4), (-9,8,4)								
LiNbO3	(2,-9,14)	12.99	85.23	13.495	13.9	1.088	15.12	13.6	20.34
	Equiv. Refl.: (7,2,14), (9,-2,14), (-2,-7,14), (-7,9,14), (-9,7,14)								
Sapph	(3,5,16)	13.008	86.34	13.289	11.3	0.833	9.41	10.42	14.04
	Equiv. Refl.: (3,-8,-16), (5,3,-16), (5,-8,16), (8,-3,-16), (8,-5,16), (-3,8,16), (-3,-5,-16), (-5,8,-16), (-5,-3,16), (-8,3,16), (-8,5,-16)								
LiNbO3	(3,4,-22)	12.974	84.45	10.5	10.7	1.267	13.5	15.83	20.81
	Equiv. Refl.: (4,-7,-22), (7,-4,-22), (-3,7,-22), (-4,-3,-22), (-7,3,-22)								
LiNbO3	(3,-7,22)	12.974	84.45	10.113	10.7	1.267	13.5	15.83	20.81
	Equiv. Refl.: (4,3,22), (7,-3,22), (-3,-4,22), (-4,7,22), (-7,4,22)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
LiNbO3	(4,-10,-10)	12.921	82.4	9.369	9.2	1.739	15.96	21.74	26.97
	Equiv. Refl.: (6,4,-10), (10,-4,-10), (-4,-6,-10), (-6,10,-10), (-10,6,-10)								
LiNbO3	(4,6,10)	12.921	82.4	9.14	9.2	1.739	15.96	21.74	26.97
	Equiv. Refl.: (6,-10,10), (10,-6,10), (-4,10,10), (-6,-4,10), (-10,4,10)								
LiNbO3	(3,7,8)	12.866	80.77	7.647	7.4	2.118	15.68	26.47	30.77
	Equiv. Refl.: (7,-10,8), (10,-7,8), (-3,10,8), (-7,-3,8), (-10,3,8)								
LiNbO3	(3,3,-24)	12.938	83	7.589	7.8	1.602	12.48	20.02	23.59
	Equiv. Refl.: (3,-6,-24), (6,-3,-24), (-3,6,-24), (-3,-3,-24), (-6,3,-24)								
LiNbO3	(3,-10,-8)	12.866	80.77	7.5	7.4	2.118	15.68	26.47	30.77
	Equiv. Refl.: (7,3,-8), (10,-3,-8), (-3,-7,-8), (-7,10,-8), (-10,7,-8)								
LiNbO3	(3,3,24)	12.938	83	7.338	7.8	1.602	12.48	20.02	23.59
	Equiv. Refl.: (3,-6,24), (6,-3,24), (-3,-3,24)								
LiNbO3	(-3,6,24)	12.938	83	7.337	7.8	1.602	12.48	20.02	23.59
	Equiv. Refl.: (-6,3,24)								
LiNbO3	(0,-9,6)	12.799	79.08	7.085	6.8	2.516	17.03	31.45	35.76
	Equiv. Refl.: (9,0,6), (-9,9,6)								
LiNbO3	(0,9,-6)	12.799	79.08	7.047	6.8	2.516	17.03	31.45	35.76
	Equiv. Refl.: (9,-9,-6), (-9,0,-6)								
LiNbO3	(1,-7,20)	12.772	78.47	6.669	6.3	2.659	16.87	33.23	37.27
	Equiv. Refl.: (6,1,20), (7,-1,20), (-1,-6,20), (-6,7,20), (-7,6,20)								
LiNbO3	(0,-8,14)	12.765	78.31	6.632	6.1	2.697	16.55	33.72	37.56
	Equiv. Refl.: (8,0,14), (-8,8,14)								
LiNbO3	(2,-10,0)	12.744	77.87	6.62	6.3	2.801	17.55	35.02	39.17
	Equiv. Refl.: (8,2,0), (10,-2,0), (-2,-8,0), (-8,10,0), (-10,8,0)								
LiNbO3	(2,8,0)	12.744	77.87	6.534	6.3	2.801	17.55	35.02	39.17
	Equiv. Refl.: (8,-10,0), (10,-8,0), (-2,10,0), (-8,-2,0), (-10,2,0)								
LiNbO3	(1,6,-20)	12.772	78.47	6.529	6.3	2.659	16.87	33.23	37.27
	Equiv. Refl.: (6,-7,-20), (7,-6,-20), (-1,7,-20), (-6,-1,-20), (-7,1,-20)								
LiNbO3	(0,4,26)	12.888	81.4	6.187	6.4	1.971	12.52	24.64	27.64
	Equiv. Refl.: (4,-4,26), (-4,0,26)								
LiNbO3	(0,-9,-6)	12.799	79.08	6.063	5.9	2.516	14.76	31.45	34.74
	Equiv. Refl.: (9,0,-6), (-9,9,-6)								
LiNbO3	(0,8,-14)	12.765	78.31	6.046	6.1	2.697	16.55	33.72	37.56
	Equiv. Refl.: (8,-8,-14), (-8,0,-14)								
LiNbO3	(0,-4,-26)	12.888	81.4	5.97	6.4	1.971	12.52	24.64	27.64
	Equiv. Refl.: (4,0,-26), (-4,4,-26)								
Quartz	(8,0,-5)	12.99	85.26	5.86	5.2	1.081	5.6	13.51	14.62
	Equiv. Refl.: (8,-8,5), (-8,0,5), (-8,8,-5)								
Quartz	(0,8,5)	12.99	85.26	5.859	5.2	1.081	5.6	13.51	14.62
	Equiv. Refl.: (0,-8,-5)								
Sapph	(2,6,14)	12.741	77.81	5.739	4.7	2.815	13.12	35.19	37.55
	Equiv. Refl.: (2,-8,-14), (6,2,-14), (6,-8,14), (8,-2,-14), (8,-6,14), (-2,8,14), (-2,-6,-14), (-6,8,-14), (-6,-2,14), (-8,2,14), (-8,6,-14)								
LiNbO3	(0,9,6)	12.799	79.08	5.694	5.9	2.516	14.76	31.45	34.74
	Equiv. Refl.: (9,-9,6), (-9,0,6)								
LiNbO3	(0,-2,-28)	12.826	79.73	5.503	5.6	2.362	13.33	29.53	32.4
	Equiv. Refl.: (2,0,-28), (-2,2,-28)								
LiNbO3	(0,2,28)	12.826	79.73	5.474	5.6	2.362	13.33	29.53	32.4
	Equiv. Refl.: (2,-2,28), (-2,0,28)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Sapph	(0,8,10)	12.947	83.35	5.428	4.6	1.52	7.02	19	20.26
	Equiv. Refl.: (0,-8,-10), (8,0,-10), (8,-8,10), (-8,0,10), (-8,8,-10)								
Sapph	(2,2,24)	12.585	74.9	5.265	4.2	3.518	14.85	43.97	46.41
	Equiv. Refl.: (2,2,-24), (2,-4,24), (2,-4,-24), (4,-2,24), (4,-2,-24), (-2,4,24), (-2,4,-24), (-2,-2,24), (-2,-2,-24), (-4,2,24), (-4,2,-24)								
LiNbO3	(4,-9,-14)	12.535	74.08	5.251	4.9	3.717	18.23	46.46	49.91
	Equiv. Refl.: (5,4,-14), (9,-4,-14), (-4,-5,-14), (-5,9,-14), (-9,5,-14)								
LiNbO3	(0,1,-28)	12.598	75.12	5.16	5	3.463	17.2	43.29	46.58
	Equiv. Refl.: (1,-1,-28), (-1,0,-28)								
LiNbO3	(0,-1,28)	12.598	75.12	5.151	5	3.463	17.2	43.29	46.58
	Equiv. Refl.: (1,0,28), (-1,1,28)								
LiNbO3	(1,8,-10)	12.694	76.87	5.072	5	3.041	15.1	38.02	40.9
	Equiv. Refl.: (8,-9,-10), (9,-8,-10), (-1,9,-10), (-8,-1,-10), (-9,1,-10)								
LiNbO3	(4,5,14)	12.535	74.08	5.069	4.9	3.717	18.23	46.46	49.91
	Equiv. Refl.: (5,-9,14), (9,-5,14), (-4,9,14), (-5,-4,14), (-9,4,14)								
LiNbO3	(4,-10,8)	12.639	75.84	4.987	4.8	3.289	15.79	41.11	44.04
	Equiv. Refl.: (6,4,8), (10,-4,8), (-4,-6,8), (-6,10,8), (-10,6,8)								
LiNbO3	(-1,5,-24)	12.481	73.24	4.963	4.7	3.925	18.48	49.07	52.43
	Equiv. Refl.: (-5,1,-24)								
LiNbO3	(1,4,-24)	12.481	73.24	4.962	4.7	3.925	18.48	49.07	52.43
	Equiv. Refl.: (4,-5,-24), (5,-4,-24), (-4,-1,-24)								
LiNbO3	(1,-5,24)	12.481	73.24	4.959	4.7	3.925	18.48	49.07	52.43
	Equiv. Refl.: (4,1,24), (5,-1,24), (-1,-4,24), (-4,5,24), (-5,4,24)								
LiNbO3	(1,4,24)	12.481	73.24	4.933	4.7	3.925	18.36	49.07	52.39
	Equiv. Refl.: (4,-5,24), (5,-4,24), (-1,5,24), (-4,-1,24), (-5,1,24)								
LiNbO3	(1,-5,-24)	12.481	73.24	4.909	4.7	3.925	18.36	49.07	52.39
	Equiv. Refl.: (4,1,-24), (5,-1,-24), (-1,-4,-24), (-4,5,-24), (-5,4,-24)								
LiNbO3	(1,-9,10)	12.694	76.87	4.9	5	3.041	15.1	38.02	40.9
	Equiv. Refl.: (8,1,10), (9,-1,10), (-1,-8,10), (-8,9,10), (-9,8,10)								
LiNbO3	(4,6,-8)	12.639	75.84	4.756	4.8	3.289	15.79	41.11	44.04
	Equiv. Refl.: (6,-10,-8), (10,-6,-8), (-4,10,-8), (-6,-4,-8), (-10,4,-8)								
LiNbO3	(3,4,20)	12.31	70.79	4.604	4.3	4.541	19.64	56.76	60.06
	Equiv. Refl.: (4,-7,20), (7,-4,20), (-3,7,20), (-4,-3,20), (-7,3,20)								
LiNbO3	(3,-7,-20)	12.31	70.79	4.598	4.3	4.541	19.64	56.76	60.06
	Equiv. Refl.: (4,3,-20), (7,-3,-20), (-3,-4,-20), (-4,7,-20), (-7,4,-20)								
Sapph	(3,5,-14)	12.472	73.1	4.496	3.5	3.961	13.77	49.51	51.39
	Equiv. Refl.: (3,-8,14), (5,3,14), (5,-8,-14), (8,-3,14), (8,-5,-14), (-3,8,-14), (-3,-5,14), (-5,8,14), (-5,-3,-14), (-8,3,-14), (-8,5,14)								
LiNbO3	(4,4,-18)	12.554	74.38	4.438	4.3	3.644	15.79	45.55	48.21
	Equiv. Refl.: (4,-8,-18), (8,-4,-18), (-4,8,-18), (-4,-4,-18), (-8,4,-18)								
LiNbO3	(3,7,-4)	12.488	73.34	4.354	4.2	3.901	16.48	48.77	51.48
	Equiv. Refl.: (7,-10,-4), (10,-7,-4), (-3,10,-4), (-7,-3,-4), (-10,3,-4)								
Quartz	(2,5,-8)	12.923	82.47	4.129	3.5	1.724	5.97	21.55	22.36
	Equiv. Refl.: (2,-7,8)								
Quartz	(-7,2,-8)	12.923	82.47	4.128	3.5	1.724	5.97	21.55	22.36
	Equiv. Refl.: (-7,5,8)								
Quartz	(5,2,8)	12.923	82.47	4.127	3.5	1.724	5.96	21.55	22.36
	Equiv. Refl.: (5,-7,-8)								
Quartz	(-2,7,-8)	12.923	82.47	4.126	3.5	1.724	5.97	21.55	22.36
	Equiv. Refl.: (-2,-5,8)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
LiNbO3	(1,-6,22)	12.519	73.82	4.125	4.2	3.782	16.03	47.27	49.91
	Equiv. Refl.: (5,1,22), (6,-1,22), (-1,-5,22), (-5,6,22), (-6,5,22), (7,-2,8), (7,-5,-8)								
Quartz	(-5,7,8)	12.923	82.47	4.124	3.5	1.724	5.96	21.55	22.36
	Equiv. Refl.: (-5,-2,-8)								
Sapph	(0,6,18)	12.461	72.94	4.121	3.2	4	12.94	50	51.65
	Equiv. Refl.: (0,6,-18), (0,-6,18), (0,-6,-18), (6,0,18), (6,0,-18), (6,-6,18), (6,-6,-18), (-6,0,18), (-6,0,-18), (-6,6,18), (-6,6,-18)								
LiNbO3	(4,4,18)	12.554	74.38	4.103	4.3	3.644	15.79	45.55	48.21
	Equiv. Refl.: (4,-8,18), (8,-4,18), (-4,8,18), (-4,-4,18), (-8,4,18)								
LiNbO3	(3,-10,4)	12.488	73.34	4.042	4.2	3.901	16.48	48.77	51.48
	Equiv. Refl.: (7,3,4), (10,-3,4), (-3,-7,4), (-7,10,4), (-10,7,4)								
LiNbO3	(0,9,0)	12.514	73.75	4.034	4.1	3.799	15.67	47.49	50
	Equiv. Refl.: (9,-9,0), (-9,0,0)								
LiNbO3	(1,5,-22)	12.519	73.82	4.022	4.2	3.782	16.03	47.27	49.91
	Equiv. Refl.: (-1,6,-22), (-5,-1,-22), (-6,1,-22)								
LiNbO3	(5,-6,-22)	12.519	73.82	4.021	4.2	3.782	16.03	47.27	49.91
	Equiv. Refl.: (6,-5,-22)								
LiNbO3	(1,-4,26)	12.661	76.25	3.948	4.2	3.19	13.48	39.87	42.09
	Equiv. Refl.: (3,1,26), (4,-1,26), (-1,-3,26), (-3,4,26), (-4,3,26)								
LiNbO3	(1,3,-26)	12.661	76.25	3.883	4.2	3.19	13.48	39.87	42.09
	Equiv. Refl.: (3,6,12), (3,-4,-26), (4,-3,-26), (6,-9,12), (9,-6,12), (-1,4,-26), (-3,9,12), (-3,-1,-26), (-4,1,-26), (-6,-3,12), (-9,3,12)								
LiNbO3	(0,-9,0)	12.514	73.75	3.846	4.1	3.799	15.67	47.49	50
	Equiv. Refl.: (9,0,0), (-9,9,0)								
LiNbO3	(3,-9,-12)	12.272	70.3	3.816	3.9	4.667	18.29	58.34	61.14
	Equiv. Refl.: (6,3,-12), (9,-3,-12), (-3,-6,-12), (-6,9,-12), (-9,6,-12)								
LiNbO3	(3,-10,-2)	12.391	71.92	3.719	3.8	4.256	16.23	53.2	55.62
	Equiv. Refl.: (7,3,-2), (10,-3,-2), (-3,-7,-2), (-7,10,-2), (-10,7,-2)								
LiNbO3	(2,6,-16)	12.318	70.91	3.666	3.7	4.512	16.79	56.4	58.85
	Equiv. Refl.: (6,-8,-16), (8,-6,-16), (-2,8,-16), (-6,-2,-16), (-8,2,-16)								
Sapph	(1,8,-1)	12.863	80.67	3.652	3.2	2.141	6.78	26.76	27.61
	Equiv. Refl.: (1,-9,1), (8,1,1), (8,-9,-1), (9,-1,1), (9,-8,-1), (-1,9,-1), (-1,-8,1), (-8,9,1), (-8,-1,-1), (-9,1,-1), (-9,8,1)								
LiNbO3	(3,7,2)	12.391	71.92	3.604	3.8	4.256	16.23	53.2	55.62
	Equiv. Refl.: (7,-10,2), (10,-7,2), (-3,10,2), (-7,-3,2), (-10,3,2)								
Quartz	(-8,1,-6)	12.975	84.52	3.594	3.2	1.25	3.97	15.62	16.12
	Equiv. Refl.: (-8,7,6)								
Quartz	(1,7,-6)	12.975	84.52	3.593	3.2	1.25	3.96	15.62	16.12
	Equiv. Refl.: (7,1,6), (7,-8,-6)								
Quartz	(1,-8,6)	12.975	84.52	3.592	3.2	1.25	3.96	15.62	16.12
LiNbO3	(1,8,8)	12.407	72.15	3.545	3.7	4.199	15.56	52.48	54.74
	Equiv. Refl.: (8,-9,8), (9,-8,8), (-1,9,8), (-8,-1,8), (-9,1,8)								
Quartz	(8,-7,-6)	12.975	84.52	3.522	3.2	1.25	3.97	15.62	16.12
Quartz	(8,-1,6)	12.975	84.52	3.521	3.2	1.25	3.97	15.62	16.12
	Equiv. Refl.: (-7,8,6), (-7,-1,-6)								
Quartz	(-1,8,-6)	12.975	84.52	3.52	3.2	1.25	3.96	15.62	16.12
	Equiv. Refl.: (-1,-7,6)								
LiNbO3	(2,-8,16)	12.318	70.91	3.516	3.7	4.512	16.79	56.4	58.85
	Equiv. Refl.: (6,2,16), (8,-2,16), (-2,-6,16), (-6,8,16), (-8,6,16)								
LiNbO3	(1,-9,-8)	12.407	72.15	3.506	3.7	4.199	15.56	52.48	54.74
	Equiv. Refl.: (8,1,-8), (9,-1,-8), (-1,-8,-8), (-8,9,-8), (-9,8,-8)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
LiNbO3	(3,-9,12)	12.272	70.3	3.384	3.5	4.667	16.36	58.34	60.59
	Equiv. Refl.: (6,3,12), (9,-3,12), (-3,-6,12), (-6,9,12), (-9,6,12)								
Sapph	(0,2,-26)	12.769	78.41	3.356	2.7	2.674	7.28	33.42	34.21
	Equiv. Refl.: (0,-2,26), (2,0,26), (2,-2,-26), (-2,0,-26), (-2,2,26)								
LiNbO3	(3,6,-12)	12.272	70.3	3.334	3.5	4.667	16.36	58.34	60.59
	Equiv. Refl.: (6,-9,-12), (9,-6,-12), (-3,9,-12), (-6,-3,-12), (-9,3,-12)								
Quartz	(1,-8,-6)	12.975	84.52	3.299	2.9	1.25	3.59	15.62	16.03
	Equiv. Refl.: (-8,1,6), (-8,7,-6)								
Quartz	(1,7,6)	12.975	84.52	3.298	2.9	1.25	3.59	15.62	16.03
	Equiv. Refl.: (7,1,-6)								
Quartz	(7,-8,6)	12.975	84.52	3.297	2.9	1.25	3.59	15.62	16.03
LiNbO3	(4,6,4)	12.253	70.06	3.279	3.4	4.73	16.21	59.12	61.3
	Equiv. Refl.: (6,-10,4), (10,-6,4), (-4,10,4), (-6,-4,4), (-10,4,4)								
LiNbO3	(4,-10,-4)	12.253	70.06	3.267	3.4	4.73	16.21	59.12	61.3
	Equiv. Refl.: (6,4,-4), (10,-4,-4), (-4,-6,-4), (-6,10,-4), (-10,6,-4)								
LiNbO3	(5,5,6)	12.337	71.17	3.251	3.4	4.445	15.08	55.57	57.58
	Equiv. Refl.: (5,-10,6), (10,-5,6), (-5,10,6), (-5,-5,6), (-10,5,6)								
LiNbO3	(2,-6,-22)	12.285	70.47	3.212	3.4	4.624	15.64	57.8	59.88
	Equiv. Refl.: (4,2,-22), (6,-2,-22), (-2,-4,-22), (-4,6,-22), (-6,4,-22)								
LiNbO3	(2,4,22)	12.285	70.47	3.203	3.4	4.624	15.64	57.8	59.88
	Equiv. Refl.: (4,-6,22), (6,-4,22), (-2,6,22), (-4,-2,22), (-6,2,22)								
Sapph	(2,7,4)	12.461	72.94	3.175	2.5	4.001	9.82	50.01	50.96
	Equiv. Refl.: (2,-9,-4), (7,2,-4), (7,-9,4), (9,-2,-4), (9,-7,4), (-2,9,4), (-2,-7,-4), (-7,9,-4), (-7,-2,4), (-9,2,4), (-9,7,-4)								
Quartz	(8,-1,-6)	12.975	84.52	3.147	2.9	1.25	3.59	15.62	16.03
	Equiv. Refl.: (8,-7,6), (-1,8,6)								
Quartz	(-1,-7,-6)	12.975	84.52	3.146	2.9	1.25	3.59	15.62	16.03
	Equiv. Refl.: (-7,-1,6)								
Quartz	(-7,8,-6)	12.975	84.52	3.145	2.9	1.25	3.59	15.62	16.03
LiNbO3	(5,5,-6)	12.337	71.17	3.136	3.4	4.445	15.08	55.57	57.58
	Equiv. Refl.: (5,-10,-6), (10,-5,-6), (-5,10,-6), (-5,-5,-6), (-10,5,-6)								
Quartz	(3,7,0)	12.95	83.45	3.071	2.6	1.496	3.93	18.7	19.11
	Equiv. Refl.: (3,-10,0), (7,3,0), (7,-10,0), (-10,3,0), (-10,7,0)								
Quartz	(5,5,0)	12.618	75.47	3.069	2.3	3.379	7.92	42.24	42.98
	Equiv. Refl.: (5,-10,0), (-10,5,0)								
Quartz	(10,-5,0)	12.618	75.47	3.066	2.3	3.379	7.92	42.24	42.98
	Equiv. Refl.: (-5,10,0), (-5,-5,0)								
Quartz	(10,-3,0)	12.95	83.45	2.974	2.6	1.496	3.93	18.7	19.11
	Equiv. Refl.: (10,-7,0), (-3,10,0), (-3,-7,0), (-7,10,0), (-7,-3,0)								
Sapph	(2,4,-20)	12.43	72.47	2.894	2.6	4.118	10.68	51.47	52.57
	Equiv. Refl.: (2,-6,20), (4,2,20), (4,-6,-20), (6,-2,20), (6,-4,-20), (-2,6,-20), (-2,-4,20), (-4,6,20), (-4,-2,-20), (-6,2,-20), (-6,4,20)								
Quartz	(-6,4,-9)	12.884	81.28	2.839	2.3	1.999	4.69	24.99	25.43
Quartz	(2,4,9)	12.884	81.28	2.838	2.3	1.999	4.69	24.99	25.43
	Equiv. Refl.: (2,-6,-9), (4,2,-9), (4,-6,9), (-6,2,9)								
Sapph	(4,5,-10)	12.682	76.64	2.791	2.6	3.095	7.97	38.69	39.51
	Equiv. Refl.: (4,-9,10), (5,4,10), (5,-9,-10), (9,-4,10), (9,-5,-10), (-4,9,-10), (-4,-5,10), (-5,9,10), (-5,-4,-10), (-9,4,-10), (-9,5,10)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Sapph	(1,5,20)	12.7	76.98	2.698	2.5	3.015	7.57	37.68	38.44
	Equiv. Refl.: (1,-6,-20), (5,1,-20), (5,-6,20), (6,-1,-20), (6,-5,20), (-1,6,20), (-1,-5,-20), (-5,6,-20), (-5,-1,20), (-6,1,20), (-6,5,-20)								
Sapph	(4,5,11)	12.87	80.86	2.651	2.6	2.097	5.39	26.21	26.76
	Equiv. Refl.: (4,-9,-11), (5,4,-11), (5,-9,11), (9,-4,-11), (9,-5,11), (-4,9,11), (-4,-5,-11), (-5,9,-11), (-5,-4,11), (-9,4,11), (-9,5,-11)								
Quartz	(8,0,5)	12.99	85.26	2.61	2.7	1.081	2.93	13.51	13.83
	Equiv. Refl.: (-8,0,-5)								
Quartz	(0,8,-5)	12.99	85.26	2.609	2.7	1.081	2.93	13.51	13.82
	Equiv. Refl.: (0,-8,5), (8,-8,-5), (-8,8,5)								
Quartz	(0,7,7)	12.98	84.74	2.533	2.5	1.2	3.03	14.99	15.3
	Equiv. Refl.: (0,-7,-7)								
Quartz	(7,-7,7)	12.98	84.74	2.531	2.5	1.2	3.03	14.99	15.3
	Equiv. Refl.: (-7,7,-7)								
Quartz	(7,0,-7)	12.98	84.74	2.53	2.5	1.2	3.02	14.99	15.3
	Equiv. Refl.: (-7,0,7)								
Quartz	(6,-4,9)	12.884	81.28	2.504	2.3	1.999	4.69	24.99	25.43
Quartz	(6,-2,-9)	12.884	81.28	2.503	2.3	1.999	4.69	24.99	25.43
	Equiv. Refl.: (-4,6,-9), (-4,-2,9)								
Quartz	(-2,6,9)	12.884	81.28	2.502	2.3	1.999	4.69	24.99	25.43
	Equiv. Refl.: (-2,-4,-9)								
Quartz	(-8,5,-7)	12.98	84.74	2.046	2.4	1.2	2.89	14.99	15.27
Quartz	(3,5,7)	12.98	84.74	2.045	2.4	1.2	2.89	14.99	15.27
	Equiv. Refl.: (3,-8,-7), (-8,3,7)								
Quartz	(5,3,-7)	12.98	84.74	2.043	2.4	1.2	2.88	14.99	15.27
	Equiv. Refl.: (5,-8,7)								
Quartz	(8,-5,7)	12.98	84.74	2.028	2.4	1.2	2.89	14.99	15.27
Quartz	(8,-3,-7)	12.98	84.74	2.027	2.4	1.2	2.89	14.99	15.27
	Equiv. Refl.: (-3,8,7), (-3,-5,-7)								
Quartz	(-5,8,-7)	12.98	84.74	2.025	2.4	1.2	2.88	14.99	15.27
	Equiv. Refl.: (-5,-3,7)								
Quartz	(-6,9,-5)	12.908	82.01	1.939	2.1	1.83	3.89	22.87	23.2
Quartz	(-3,9,5)	12.908	82.01	1.938	2.1	1.83	3.89	22.87	23.2
	Equiv. Refl.: (-3,-6,-5), (-6,-3,5)								
Quartz	(9,-3,-5)	12.908	82.01	1.937	2.1	1.83	3.89	22.87	23.2
	Equiv. Refl.: (9,-6,5)								
Quartz	(-1,2,-11)	12.867	80.79	1.872	2.1	2.113	4.34	26.41	26.76
	Equiv. Refl.: (-1,-1,11), (-1,-1,-11)								
Quartz	(2,-1,11)	12.867	80.79	1.871	2.1	2.113	4.33	26.41	26.76
	Equiv. Refl.: (2,-1,-11), (-1,2,11)								
Quartz	(3,6,5)	12.908	82.01	1.865	2.1	1.83	3.89	22.87	23.2
	Equiv. Refl.: (3,-9,-5), (6,-9,5)								
Quartz	(6,3,-5)	12.908	82.01	1.864	2.1	1.83	3.89	22.87	23.2
	Equiv. Refl.: (-9,3,5), (-9,6,-5)								
Quartz	(1,1,11)	12.867	80.79	1.856	2.1	2.113	4.34	26.41	26.76
	Equiv. Refl.: (1,1,-11), (1,-2,11)								
Quartz	(1,-2,-11)	12.867	80.79	1.855	2.1	2.113	4.33	26.41	26.76
	Equiv. Refl.: (-2,1,11), (-2,1,-11)								
Quartz	(2,4,-9)	12.884	81.28	1.818	2	1.999	4.04	24.99	25.31
	Equiv. Refl.: (2,-6,9)								
Quartz	(4,2,9)	12.884	81.28	1.817	2	1.999	4.04	24.99	25.31
	Equiv. Refl.: (4,-6,-9), (-6,2,-9), (-6,4,9)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Quartz	(-2,6,-9)	12.884	81.28	1.814	2	1.999	4.04	24.99	25.31
	Equiv. Refl.: (-2,-4,9)								
Quartz	(6,-2,9)	12.884	81.28	1.813	2	1.999	4.04	24.99	25.31
	Equiv. Refl.: (6,-4,-9), (-4,6,9), (-4,-2,-9)								
Quartz	(4,6,-1)	12.753	78.07	1.765	1.9	2.754	5.16	34.43	34.81
	Equiv. Refl.: (4,-10,1), (6,4,1), (6,-10,-1), (-10,4,-1), (-10,6,1)								
Quartz	(0,2,11)	12.949	83.43	1.742	2	1.502	3.06	18.77	19.02
	Equiv. Refl.: (0,-2,-11)								
Quartz	(2,0,-11)	12.949	83.43	1.739	2	1.502	3.05	18.77	19.02
	Equiv. Refl.: (-2,0,11)								
Quartz	(2,-2,11)	12.949	83.43	1.738	2	1.502	3.05	18.77	19.02
	Equiv. Refl.: (-2,2,-11)								
Quartz	(10,-4,1)	12.753	78.07	1.716	1.9	2.754	5.16	34.43	34.81
	Equiv. Refl.: (10,-6,-1), (-6,10,1)								
Quartz	(-4,10,-1)	12.753	78.07	1.715	1.9	2.754	5.16	34.43	34.81
	Equiv. Refl.: (-4,-6,1), (-6,-4,-1)								
Sapph	(2,7,-8)	12.893	81.52	1.646	2	1.943	3.79	24.28	24.58
	Equiv. Refl.: (2,-9,8), (7,2,8), (7,-9,-8), (9,-2,8), (9,-7,-8), (-2,9,-8), (-2,-7,8), (-7,9,8), (-7,-2,-8), (-9,2,-8), (-9,7,8)								
Quartz	(-2,9,4)	12.778	78.6	1.629	1.8	2.627	4.62	32.84	33.16
	Equiv. Refl.: (-2,-7,-4), (-7,9,-4), (-7,-2,4)								
Quartz	(9,-2,-4)	12.778	78.6	1.628	1.8	2.627	4.62	32.84	33.16
	Equiv. Refl.: (9,-7,4)								
Quartz	(10,-4,-2)	12.907	81.97	1.617	1.8	1.839	3.32	22.98	23.22
	Equiv. Refl.: (10,-6,2), (-4,10,2), (-4,-6,-2), (-6,10,-2), (-6,-4,2)								
Quartz	(9,-4,-5)	12.743	77.85	1.599	1.7	2.807	4.86	35.08	35.42
	Equiv. Refl.: (9,-5,5)								
Quartz	(-4,9,5)	12.743	77.85	1.598	1.7	2.807	4.86	35.08	35.42
	Equiv. Refl.: (-4,-5,-5), (-5,9,-5), (-5,-4,5)								
Quartz	(4,5,5)	12.743	77.85	1.592	1.7	2.807	4.86	35.08	35.42
	Equiv. Refl.: (4,-9,-5), (5,4,-5), (5,-9,5), (7,-9,4), (-9,4,5), (-9,5,-5)								
Quartz	(2,7,4)	12.778	78.6	1.591	1.8	2.627	4.62	32.84	33.16
	Equiv. Refl.: (2,-9,-4), (7,2,-4), (-9,2,4), (-9,7,-4)								
Quartz	(8,-3,-6)	12.304	70.72	1.59	1.7	4.561	7.53	57.01	57.5
	Equiv. Refl.: (8,-5,6), (-3,8,6), (-3,-5,-6), (-5,8,-6), (-5,-3,6)								
Quartz	(5,3,-6)	12.304	70.72	1.581	1.7	4.561	7.53	57.01	57.5
	Equiv. Refl.: (5,-8,6), (-8,3,6)								
Quartz	(3,5,6)	12.304	70.72	1.58	1.7	4.561	7.53	57.01	57.5
	Equiv. Refl.: (3,-8,-6), (-8,5,-6)								
Quartz	(0,8,-4)	12.526	73.94	1.547	1.6	3.752	6.15	46.9	47.3
	Equiv. Refl.: (0,-8,4), (8,0,4), (8,-8,-4), (-8,0,-4), (-8,8,4)								
Quartz	(4,6,2)	12.907	81.97	1.526	1.8	1.839	3.32	22.98	23.22
	Equiv. Refl.: (4,-10,-2), (6,4,-2), (6,-10,2), (-10,4,2), (-10,6,-2)								
Quartz	(4,-8,-7)	12.898	81.69	1.518	1.7	1.904	3.32	23.8	24.03
	Equiv. Refl.: (-8,4,7), (-8,4,-7)								
Quartz	(4,4,7)	12.898	81.69	1.517	1.7	1.904	3.32	23.8	24.03
	Equiv. Refl.: (4,4,-7), (4,-8,7)								
Quartz	(8,-4,7)	12.898	81.69	1.514	1.7	1.904	3.32	23.8	24.03
	Equiv. Refl.: (8,-4,-7), (-4,8,7), (-4,8,-7), (-4,-4,-7)								
Quartz	(-4,-4,7)	12.898	81.69	1.513	1.7	1.904	3.32	23.8	24.03

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Quartz	(6,-3,-9)	12.802	79.14	1.498	1.7	2.5	4.15	31.25	31.52
	Equiv. Refl.: (-3,6,9)								
Quartz	(6,-3,9)	12.802	79.14	1.497	1.7	2.5	4.15	31.25	31.52
	Equiv. Refl.: (-3,6,-9), (-3,-3,9), (-3,-3,-9)								
Quartz	(3,3,9)	12.802	79.14	1.493	1.7	2.5	4.15	31.25	31.52
	Equiv. Refl.: (3,3,-9), (3,-6,9), (3,-6,-9), (-6,3,9), (-6,3,-9)								
Sapph	(4,4,15)	12.645	75.95	1.466	1.6	3.263	5.35	40.78	41.13
	Equiv. Refl.: (4,4,-15), (4,-8,15), (4,-8,-15), (8,-4,15), (8,-4,-15), (-4,8,15), (-4,8,-15), (-4,-4,15), (-4,-4,-15), (-8,4,15), (-8,4,-15)								
Sapph	(2,6,-13)	12.498	73.49	1.423	1.6	3.864	6.05	48.29	48.67
	Equiv. Refl.: (2,-8,13), (6,2,13), (6,-8,-13), (8,-2,13), (8,-6,-13), (-2,8,-13), (-2,-6,13), (-6,8,13), (-6,-2,-13), (-8,2,-13), (-8,6,13)								
Quartz	(-3,7,8)	12.757	78.15	1.412	1.6	2.735	4.26	34.19	34.45
	Equiv. Refl.: (-3,-4,-8), (-4,7,-8)								
Quartz	(7,-3,-8)	12.757	78.15	1.411	1.6	2.735	4.26	34.19	34.45
	Equiv. Refl.: (7,-4,8), (-4,-3,8)								
LiNbO3	(2,2,27)	12.999	85.75	1.405	3.3	0.969	3.19	12.11	12.53
	Equiv. Refl.: (2,2,-27), (2,-4,27), (2,-4,-27), (4,-2,27), (4,-2,-27), (-2,4,27), (-2,4,-27), (-2,-2,27), (-2,-2,-27), (-4,2,27), (-4,2,-27)								
Quartz	(3,4,8)	12.757	78.15	1.403	1.6	2.735	4.26	34.19	34.45
	Equiv. Refl.: (3,-7,-8)								
Quartz	(4,3,-8)	12.757	78.15	1.402	1.6	2.735	4.26	34.19	34.45
	Equiv. Refl.: (4,-7,8), (-7,3,8), (-7,4,-8)								
Quartz	(4,-4,-10)	12.866	80.76	1.393	1.6	2.121	3.39	26.51	26.72
	Equiv. Refl.: (-4,4,10)								
Quartz	(0,4,-10)	12.866	80.76	1.392	1.6	2.121	3.39	26.51	26.72
	Equiv. Refl.: (0,-4,10), (4,0,10), (-4,0,-10)								
Quartz	(7,-1,7)	12.48	73.22	1.265	1.3	3.931	5.27	49.14	49.42
	Equiv. Refl.: (7,-6,-7), (-1,7,-7), (-1,-6,7), (-6,7,7), (-6,-1,-7)								
Quartz	(1,8,3)	12.915	82.23	1.262	1.5	1.779	2.63	22.23	22.39
	Equiv. Refl.: (1,-9,-3), (6,3,5), (6,-9,-5), (8,1,-3), (8,-9,3), (-9,1,3), (-9,6,5), (-9,8,-3)								
Quartz	(3,6,-5)	12.908	82.01	1.261	1.5	1.83	2.75	22.87	23.04
	Equiv. Refl.: (3,-9,5), (-9,3,-5)								
Quartz	(9,-1,3)	12.915	82.23	1.256	1.5	1.779	2.68	22.23	22.39
	Equiv. Refl.: (-1,9,-3), (-1,-8,3), (-8,9,3), (-8,-1,-3)								
Quartz	(9,-3,5)	12.908	82.01	1.255	1.5	1.83	2.75	22.87	23.04
	Equiv. Refl.: (9,-6,-5), (9,-8,-3), (-3,9,-5), (-3,-6,5), (-6,9,5), (-6,-3,-5)								
Quartz	(1,8,-3)	12.915	82.23	1.246	1.5	1.779	2.68	22.23	22.39
	Equiv. Refl.: (1,-9,3), (8,1,3), (8,-9,-3), (-9,1,-3), (-9,8,3)								
Quartz	(0,3,10)	12.275	70.34	1.224	1.3	4.658	6.07	58.23	58.54
	Equiv. Refl.: (0,-3,-10), (3,0,-10), (3,-3,10), (-3,0,10), (-3,3,-10)								
Quartz	(-7,6,7)	12.48	73.22	1.218	1.3	3.931	5.27	49.14	49.42
Quartz	(1,6,-7)	12.48	73.22	1.217	1.3	3.931	5.27	49.14	49.42
	Equiv. Refl.: (1,-7,7), (6,1,7), (6,-7,-7), (-7,1,-7)								
Sapph	(0,5,22)	12.917	82.27	1.215	1.6	1.768	2.76	22.1	22.28
	Equiv. Refl.: (0,-5,-22), (5,0,-22), (5,-5,22), (-5,0,22), (-5,5,-22)								
Quartz	(7,-3,8)	12.757	78.15	1.194	1.3	2.735	3.68	34.19	34.39
	Equiv. Refl.: (7,-4,-8), (-3,7,-8), (-3,-4,8), (-4,7,8), (-4,-3,-8)								
Quartz	(9,-8,3)	12.915	82.23	1.187	1.5	1.779	2.63	22.23	22.39
	Equiv. Refl.: (-1,9,3), (-1,-8,-3), (-8,-1,3)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Quartz	(9,-1,-3)	12.915	82.23	1.186	1.5	1.779	2.63	22.23	22.39
	Equiv. Refl.: (-8,9,-3)								
Quartz	(-8,9,2)	12.658	76.19	1.185	1.3	3.205	4.21	40.06	40.28
Quartz	(9,-1,2)	12.658	76.19	1.184	1.3	3.205	4.21	40.06	40.28
	Equiv. Refl.: (9,-8,-2), (-1,9,-2), (-1,-8,2), (-8,-1,-2)								
Quartz	(1,8,-2)	12.658	76.19	1.18	1.3	3.205	4.21	40.06	40.28
	Equiv. Refl.: (1,-9,2), (8,1,2), (8,-9,-2), (-9,1,-2), (-9,8,2)								
Quartz	(4,3,8)	12.757	78.15	1.178	1.3	2.735	3.68	34.19	34.39
	Equiv. Refl.: (4,-7,-8), (-7,4,8)								
Quartz	(3,4,-8)	12.757	78.15	1.177	1.3	2.735	3.68	34.19	34.39
	Equiv. Refl.: (3,-7,8), (-7,3,-8)								
Sapph	(0,1,26)	12.5	73.53	1.174	1.3	3.853	5.11	48.16	48.43
	Equiv. Refl.: (0,-1,-26), (1,0,-26), (1,-1,26), (-1,0,26), (-1,1,-26)								
Quartz	(9,-3,4)	12.441	72.64	1.168	1.2	4.075	5.08	50.93	51.18
	Equiv. Refl.: (9,-6,-4)								
Quartz	(-3,9,-4)	12.441	72.64	1.167	1.2	4.075	5.07	50.93	51.18
	Equiv. Refl.: (-3,-6,4), (-6,9,4), (-6,-3,-4)								
Sapph	(1,5,-19)	12.345	71.27	1.126	1.3	4.419	5.57	55.23	55.51
	Equiv. Refl.: (1,-6,19), (5,1,19), (5,-6,-19), (6,-1,19), (6,-5,-19), (-1,6,-19), (-1,-5,19), (-5,6,19), (-5,-1,-19), (-6,1,-19), (-6,5,19)								
Quartz	(3,6,-4)	12.441	72.64	1.125	1.2	4.075	5.07	50.93	51.18
	Equiv. Refl.: (3,-9,4), (6,3,4), (-9,3,-4), (-9,6,4)								
Quartz	(6,-9,-4)	12.441	72.64	1.124	1.2	4.075	5.07	50.93	51.18
Quartz	(9,-4,5)	12.743	77.85	1.114	1.3	2.807	3.56	35.08	35.26
	Equiv. Refl.: (9,-5,-5), (-4,9,-5), (-4,-5,5), (-5,9,5), (-5,-4,-5)								
Quartz	(-9,4,-5)	12.743	77.85	1.108	1.3	2.807	3.56	35.08	35.26
Quartz	(4,5,-5)	12.743	77.85	1.107	1.3	2.807	3.56	35.08	35.26
	Equiv. Refl.: (4,-9,5), (5,4,5), (5,-9,-5), (-9,5,5)								
Quartz	(6,0,-8)	12.674	76.48	1.098	1.2	3.135	3.87	39.18	39.37
Quartz	(0,6,8)	12.674	76.48	1.097	1.2	3.135	3.87	39.18	39.37
	Equiv. Refl.: (0,-6,-8), (6,-6,8), (-6,0,8), (-6,6,-8)								
Sapph	(2,7,7)	12.759	78.2	1.069	1.3	2.724	3.53	34.05	34.23
	Equiv. Refl.: (2,-9,-7), (7,2,-7), (7,-9,7), (9,-2,-7), (9,-7,7), (-2,9,7), (-2,-7,-7), (-7,9,-7), (-7,-2,7), (-9,2,7), (-9,7,-7)								
Quartz	(9,-1,0)	12.448	72.75	1.05	1.1	4.048	4.63	50.6	50.81
	Equiv. Refl.: (9,-8,0), (-1,9,0), (-1,-8,0), (-8,9,0), (-8,-1,0)								
Sapph	(1,6,16)	12.476	73.15	1.048	1.2	3.947	4.74	49.34	49.57
	Equiv. Refl.: (1,-7,-16), (6,1,-16), (6,-7,16), (7,-1,-16), (7,-6,16), (-1,7,16), (-1,-6,-16), (-6,7,-16), (-6,-1,16), (-7,1,16), (-7,6,-16), (8,-3,7), (8,-5,-7), (-3,8,-7)								
Quartz	(-3,-5,7)	12.98	84.74	1.047	1.4	1.2	1.7	14.99	15.09
Quartz	(-5,8,7)	12.98	84.74	1.045	1.4	1.2	1.7	14.99	15.09
	Equiv. Refl.: (-5,-3,-7)								
Quartz	(1,8,0)	12.448	72.75	1.03	1.1	4.048	4.63	50.6	50.81
	Equiv. Refl.: (1,-9,0), (3,-8,7), (8,1,0), (8,-9,0), (-8,3,-7), (-9,1,0), (-9,8,0)								
Quartz	(3,5,-7)	12.98	84.74	1.029	1.4	1.2	1.7	14.99	15.09
	Equiv. Refl.: (-8,5,7)								
Quartz	(5,3,7)	12.98	84.74	1.027	1.4	1.2	1.7	14.99	15.09
	Equiv. Refl.: (5,-8,-7)								
Quartz	(10,-4,-1)	12.753	78.07	1.002	1.2	2.754	3.19	34.43	34.58
	Equiv. Refl.: (10,-6,1), (-4,10,1), (-4,-6,-1), (-6,10,-1), (-6,-4,1)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Quartz	(4,6,1)	12.753	78.07	0.987	1.2	2.754	3.19	34.43	34.58
	Equiv. Refl.: (4,-10,-1), (6,4,-1), (6,-10,1), (-10,4,1), (-10,6,-1)								
Quartz	(9,-1,1)	12.501	73.55	0.967	1.1	3.85	4.06	48.12	48.29
	Equiv. Refl.: (9,-8,-1)								
Quartz	(-1,9,-1)	12.501	73.55	0.966	1.1	3.85	4.05	48.12	48.29
	Equiv. Refl.: (-1,-8,1), (-8,9,1), (-8,-1,-1)								
Quartz	(9,-4,4)	12.27	70.27	0.96	1	4.676	4.91	58.45	58.65
	Equiv. Refl.: (9,-5,-4), (-4,9,-4), (-4,-5,4), (-5,9,4), (-5,-4,-4)								
Quartz	(4,5,-4)	12.27	70.27	0.955	1	4.676	4.91	58.45	58.65
	Equiv. Refl.: (4,-9,4), (5,4,4), (5,-9,-4), (-9,5,4)								
Quartz	(-9,4,-4)	12.27	70.27	0.954	1	4.676	4.91	58.45	58.65
Quartz	(2,6,6)	12.56	74.48	0.936	1	3.619	3.8	45.24	45.4
	Equiv. Refl.: (6,2,-6), (6,-8,6), (-8,2,6), (-8,6,-6)								
Quartz	(2,-8,-6)	12.56	74.48	0.935	1	3.619	3.8	45.24	45.4
Quartz	(8,-6,6)	12.56	74.48	0.916	1.1	3.619	3.8	45.24	45.4
	Equiv. Refl.: (-6,8,-6), (-6,-2,6)								
Quartz	(8,-2,-6)	12.56	74.48	0.915	1	3.619	3.8	45.24	45.4
	Equiv. Refl.: (-2,8,6), (-2,-6,-6)								
Quartz	(1,8,-1)	12.501	73.55	0.91	1.1	3.85	4.05	48.12	48.29
	Equiv. Refl.: (1,-9,1), (8,1,1), (8,-9,-1), (-9,1,-1), (-9,8,1)								
Quartz	(0,8,4)	12.526	73.94	0.909	1	3.752	3.86	46.9	47.06
	Equiv. Refl.: (0,-8,-4), (-1,4,10), (-1,-3,-10), (-3,4,-10)								
Quartz	(4,-1,-10)	12.616	75.43	0.908	1	3.388	3.44	42.34	42.48
	Equiv. Refl.: (4,-3,10), (8,0,-4), (8,-8,4), (-3,-1,10), (-8,0,4), (-8,8,-4)								
Sapph	(2,3,23)	12.787	78.81	0.885	1.1	2.579	2.9	32.23	32.36
	Equiv. Refl.: (2,-5,-23), (3,2,-23), (3,-5,23), (5,-2,-23), (5,-3,23), (-2,5,23), (-2,-3,-23), (-3,5,-23), (-3,-2,23), (-5,2,23), (-5,3,-23)								
Quartz	(3,6,4)	12.441	72.64	0.869	1	4.075	3.99	50.93	51.09
	Equiv. Refl.: (3,-9,-4), (-9,3,4)								
Quartz	(6,3,-4)	12.441	72.64	0.868	1	4.075	3.99	50.93	51.09
	Equiv. Refl.: (6,-9,4), (9,-3,-4), (9,-6,4), (-3,9,4), (-3,-6,-4), (-6,9,-4), (-6,-3,4), (-9,6,-4)								
Quartz	(2,7,3)	12.412	72.22	0.862	1	4.18	4.03	52.25	52.4
	Equiv. Refl.: (2,-9,-3), (7,2,-3), (7,-9,3), (-9,2,3), (-9,7,-3)								
Quartz	(0,1,-11)	12.701	77	0.859	1	3.009	3.05	37.61	37.73
	Equiv. Refl.: (0,-1,11), (1,0,11), (1,-1,-11), (-1,1,11)								
Quartz	(-1,0,-11)	12.701	77	0.858	1	3.009	3.04	37.61	37.73
Quartz	(7,1,-5)	12.405	72.12	0.856	1	4.206	4.01	52.57	52.72
	Equiv. Refl.: (7,-8,5)								
Quartz	(1,7,5)	12.405	72.12	0.855	1	4.206	4	52.57	52.72
	Equiv. Refl.: (1,-8,-5), (-8,1,5), (-8,7,-5)								
Quartz	(1,3,10)	12.616	75.43	0.854	1	3.388	3.44	42.34	42.48
	Equiv. Refl.: (1,-4,-10), (3,-4,10)								
Quartz	(3,1,-10)	12.616	75.43	0.853	1	3.388	3.44	42.34	42.48
	Equiv. Refl.: (-4,1,10), (-4,3,-10)								
Quartz	(-7,-2,3)	12.412	72.22	0.848	1	4.18	4.03	52.25	52.4
Quartz	(9,-2,-3)	12.412	72.22	0.847	1	4.18	4.03	52.25	52.4
	Equiv. Refl.: (9,-7,3), (-2,9,3), (-2,-7,-3), (-7,9,-3)								
Sapph	(2,7,-5)	12.543	74.21	0.845	1	3.685	3.75	46.07	46.22
	Equiv. Refl.: (2,-9,5), (7,2,5), (7,-9,-5), (9,-2,5), (9,-7,-5), (-2,9,-5), (-2,-7,5), (-7,9,5), (-7,-2,-5), (-9,2,-5), (-9,7,5)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Ref	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Quartz	(-7,8,-5)	12.405	72.12	0.833	1	4.206	4.01	52.57	52.72
	Equiv. Refl.: (-7,-1,5)								
Quartz	(8,-1,-5)	12.405	72.12	0.832	1	4.206	4	52.57	52.72
	Equiv. Refl.: (8,-7,5), (-1,8,5), (-1,-7,-5)								
Quartz	(1,7,-5)	12.405	72.12	0.781	0.9	4.206	3.72	52.57	52.7
	Equiv. Refl.: (1,-8,5), (-8,1,-5), (-8,7,5)								
Quartz	(7,1,5)	12.405	72.12	0.78	0.9	4.206	3.71	52.57	52.7
	Equiv. Refl.: (7,-8,-5)								
Quartz	(4,5,4)	12.27	70.27	0.777	0.9	4.676	4.09	58.45	58.59
	Equiv. Refl.: (4,-9,-4), (5,4,-4), (5,-9,4), (-9,4,4), (-9,5,-4)								
Quartz	(9,-4,-4)	12.27	70.27	0.772	0.9	4.676	4.09	58.45	58.59
	Equiv. Refl.: (9,-5,4), (-4,9,4), (-4,-5,-4), (-5,-4,4)								
Quartz	(-5,9,-4)	12.27	70.27	0.771	0.9	4.676	4.08	58.45	58.59
Quartz	(8,-1,5)	12.405	72.12	0.764	0.9	4.206	3.72	52.57	52.7
	Equiv. Refl.: (8,-7,-5), (-1,8,-5), (-1,-7,5), (-7,8,5), (-7,-1,-5)								
Quartz	(4,-2,10)	12.532	74.02	0.763	0.9	3.732	3.31	46.65	46.77
	Equiv. Refl.: (4,-2,-10), (-2,4,-10)								
Quartz	(-2,4,10)	12.532	74.02	0.762	0.9	3.732	3.31	46.65	46.77
	Equiv. Refl.: (-2,-2,10), (-2,-2,-10), (-4,2,10), (-4,2,-10)								
Quartz	(2,2,10)	12.532	74.02	0.761	0.9	3.732	3.31	46.65	46.77
	Equiv. Refl.: (2,2,-10), (2,-4,10), (2,-4,-10)								
Sapph	(2,7,1)	12.323	70.98	0.743	0.9	4.493	3.99	56.16	56.3
	Equiv. Refl.: (2,-9,-1), (7,2,-1), (7,-9,1), (9,-2,-1), (9,-7,1), (-2,9,1), (-2,-7,-1), (-7,9,-1), (-7,-2,1), (-9,2,1), (-9,7,-1)								
Quartz	(10,-3,1)	13.001	85.84	0.724	1.2	0.948	1.09	11.85	11.9
	Equiv. Refl.: (10,-7,-1), (-3,10,-1), (-3,-7,1)								
Quartz	(-7,10,1)	13.001	85.84	0.723	1.2	0.948	1.09	11.85	11.9
	Equiv. Refl.: (-7,-3,-1)								
LiNbO3	(2,7,13)	12.78	78.65	0.715	1.5	2.615	3.9	32.69	32.92
	Equiv. Refl.: (2,-9,-13), (7,2,-13), (7,-9,13), (9,-2,-13), (9,-7,13), (-2,9,13), (-2,-7,-13), (-7,9,-13), (-7,-2,13), (-9,2,13), (-9,7,-13), (1,8,2), (1,-9,-2), (8,1,-2), (8,-9,2), (-9,1,2), (-9,8,-2)								
Sapph	(3,6,6)	12.28	70.4	0.703	0.8	4.642	3.91	58.03	58.16
	Equiv. Refl.: (3,6,-6), (3,-9,6), (3,-9,-6), (6,3,6), (6,3,-6), (6,-9,6), (6,-9,-6), (9,-3,6), (9,-3,-6), (9,-6,6), (9,-6,-6), (-3,9,6), (-3,9,-6), (-3,-6,6), (-3,-6,-6), (-6,9,6), (-6,9,-6), (-6,-3,6), (-6,-3,-6), (-9,3,6), (-9,3,-6), (-9,6,6), (-9,6,-6)								
Quartz	(3,7,-1)	13.001	85.84	0.68	1.2	0.948	1.09	11.85	11.9
	Equiv. Refl.: (3,-10,1), (7,3,1), (7,-10,-1), (-10,3,-1), (-10,7,1)								
Quartz	(3,5,-6)	12.304	70.72	0.673	0.8	4.561	3.49	57.01	57.11
	Equiv. Refl.: (3,-8,6), (5,3,6), (5,-8,-6), (-8,3,-6), (-8,5,6)								
Quartz	(9,-1,-2)	12.658	76.19	0.648	0.8	3.205	2.66	40.06	40.14
	Equiv. Refl.: (9,-8,2), (-1,9,2), (-1,-8,-2), (-8,9,-2), (-8,-1,2)								
Quartz	(8,-3,6)	12.304	70.72	0.645	0.8	4.561	3.49	57.01	57.11
	Equiv. Refl.: (8,-5,-6), (-3,8,-6), (-3,-5,6), (-5,8,6), (-5,-3,-6)								
LiNbO3	(1,6,19)	12.463	72.96	0.608	1.2	3.994	4.67	49.93	50.15
	Equiv. Refl.: (1,-7,-19), (6,1,-19), (6,-7,19), (7,-1,-19), (7,-6,19), (-1,7,19), (-1,-6,-19), (-6,7,-19), (-6,-1,19), (-7,1,19), (-7,6,-19)								
LiNbO3	(1,1,27)	12.312	70.82	0.592	1.1	4.534	5.02	56.67	56.89
	Equiv. Refl.: (1,1,-27), (1,-2,27), (1,-2,-27), (2,-1,27), (2,-1,-27), (-1,2,27), (-1,2,-27), (-1,-1,27), (-1,-1,-27), (-2,1,27), (-2,1,-27)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Quartz	(0,4,10)	12.866	80.76	0.588	0.8	2.121	1.71	26.51	26.56
	Equiv. Refl.: (0,-4,-10)								
Quartz	(0,6,-8)	12.674	76.48	0.587	0.7	3.135	2.32	39.18	39.25
	Equiv. Refl.: (0,-6,8), (4,0,-10), (6,0,8), (6,-6,-8), (-6,0,-8), (-6,6,8)								
Quartz	(4,-4,10)	12.866	80.76	0.586	0.8	2.121	1.71	26.51	26.56
	Equiv. Refl.: (-4,0,10), (-4,4,-10)								
Sapph	(1,6,-17)	12.773	78.5	0.583	0.8	2.652	2.17	33.15	33.22
	Equiv. Refl.: (1,-7,17), (6,1,17), (6,-7,-17), (7,-1,17), (7,-6,-17), (-1,7,-17), (-1,-6,17), (-6,7,17), (-6,-1,-17), (-7,1,-17), (-7,6,17)								
Sapph	(1,2,-25)	12.579	74.79	0.535	0.7	3.543	2.54	44.29	44.36
	Equiv. Refl.: (1,-3,25), (2,1,25), (2,-3,-25), (3,-1,25), (3,-2,-25), (-1,3,-25), (-1,-2,25), (-2,3,25), (-2,-1,-25), (-3,1,-25), (-3,2,25), (3,1,10), (3,-4,-10), (-4,1,-10)								
Quartz	(1,3,-10)	12.616	75.43	0.534	0.7	3.388	2.22	42.34	42.4
	Equiv. Refl.: (1,-4,10), (-4,3,10)								
LiNbO3	(2,4,-23)	12.646	75.97	0.529	1.2	3.258	3.75	40.73	40.9
	Equiv. Refl.: (2,-6,23), (4,2,23), (4,-6,-23), (6,-2,23), (6,-4,-23), (-2,6,-23), (-2,-4,23), (-4,6,23), (-4,-2,-23), (-6,2,-23), (-6,4,23)								
LiNbO3	(2,7,-11)	12.399	72.03	0.524	1	4.228	4.43	52.85	53.03
	Equiv. Refl.: (2,-9,11), (7,2,11), (7,-9,-11), (9,-2,11), (9,-7,-11), (-2,9,-11), (-2,-7,11), (-7,9,11), (-7,-2,-11), (-9,2,-11), (-9,7,11), (10,-4,0), (10,-6,0), (-4,10,0), (-4,-6,0), (-6,10,0), (-6,-4,0)								
Quartz	(4,6,0)	12.702	77.02	0.523	0.7	3.006	2.05	37.57	37.63
	Equiv. Refl.: (4,-10,0), (6,4,0), (6,-10,0), (-10,4,0), (-10,6,0)								
Sapph	(2,7,-2)	12.351	71.36	0.518	0.7	4.397	2.94	54.97	55.04
	Equiv. Refl.: (2,-9,2), (7,2,2), (7,-9,-2), (9,-2,2), (9,-7,-2), (-2,9,-2), (-2,-7,2), (-7,9,2), (-7,-2,-2), (-9,2,-2), (-9,7,2)								
Sapph	(2,3,-22)	12.38	71.76	0.517	0.7	4.296	2.89	53.71	53.78
	Equiv. Refl.: (2,-5,22), (3,2,22), (3,-5,-22), (5,-2,22), (5,-3,-22), (-2,5,-22), (-2,-3,22), (-3,5,22), (-3,-2,-22), (-5,2,-22), (-5,3,22)								
Sapph	(0,7,14)	12.472	73.1	0.511	0.7	3.961	2.66	49.51	49.58
	Equiv. Refl.: (0,-7,-14), (7,0,-14), (7,-7,14), (-7,0,14), (-7,7,-14)								
Quartz	(-6,-2,-6)	12.56	74.48	0.501	0.6	3.619	2.21	45.24	45.3
Quartz	(8,-2,6)	12.56	74.48	0.5	0.6	3.619	2.21	45.24	45.3
	Equiv. Refl.: (8,-6,-6), (-2,8,-6), (-2,-6,6), (-6,8,6)								
Sapph	(2,5,18)	12.731	77.6	0.499	0.7	2.866	2.04	35.82	35.88
	Equiv. Refl.: (2,5,-18), (2,-7,18), (2,-7,-18), (5,2,18), (5,2,-18), (5,-7,18), (5,-7,-18), (7,-2,18), (7,-2,-18), (7,-5,18), (7,-5,-18), (-2,7,18), (-2,7,-18), (-2,-5,18), (-2,-5,-18), (-5,7,18), (-5,7,-18), (-5,-2,18), (-5,-2,-18), (-7,2,18), (-7,2,-18), (-7,5,18), (-7,5,-18)								
Quartz	(4,-1,10)	12.616	75.43	0.491	0.7	3.388	2.22	42.34	42.4
	Equiv. Refl.: (-3,4,10), (-3,-1,-10)								
Quartz	(4,-3,-10)	12.616	75.43	0.49	0.7	3.388	2.22	42.34	42.4
	Equiv. Refl.: (-1,4,-10), (-1,-3,10)								
Quartz	(1,4,9)	12.294	70.59	0.487	0.6	4.593	2.73	57.41	57.48
	Equiv. Refl.: (1,-5,-9), (4,1,-9), (4,-5,9), (-5,1,9), (-5,4,-9)								
Quartz	(-1,5,9)	12.294	70.59	0.48	0.6	4.593	2.73	57.41	57.48
	Equiv. Refl.: (-1,-4,-9), (-4,-1,9)								
Quartz	(5,-1,-9)	12.294	70.59	0.479	0.6	4.593	2.72	57.41	57.47
	Equiv. Refl.: (5,-4,9), (-4,5,-9)								
LiNbO3	(4,6,7)	12.52	73.83	0.451	1	3.778	3.75	47.23	47.38
	Equiv. Refl.: (4,-10,-7), (6,4,-7), (6,-10,7), (10,-4,-7), (10,-6,7), (-4,10,7), (-4,-6,-7), (-6,10,-7), (-6,-4,7), (-10,4,7), (-10,6,-7)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Quartz	(6,2,6)	12.56	74.48	0.45	0.6	3.619	2.21	45.24	45.3
	Equiv. Refl.: (6,-8,-6), (-8,2,-6), (-8,6,6)								
Quartz	(2,6,-6)	12.56	74.48	0.449	0.6	3.619	2.21	45.24	45.3
	Equiv. Refl.: (2,-8,6)								
Quartz	(6,1,-7)	12.48	73.22	0.44	0.6	3.931	2.19	49.14	49.18
	Equiv. Refl.: (6,-7,7)								
Quartz	(1,6,7)	12.48	73.22	0.439	0.6	3.931	2.19	49.14	49.18
	Equiv. Refl.: (1,-7,-7), (-7,1,7), (-7,6,-7)								
Quartz	(-6,7,-7)	12.48	73.22	0.423	0.6	3.931	2.19	49.14	49.18
	Equiv. Refl.: (-6,-1,7)								
Quartz	(7,-1,-7)	12.48	73.22	0.422	0.6	3.931	2.19	49.14	49.18
	Equiv. Refl.: (7,-6,7), (-1,7,7), (-1,-6,-7)								
LiNbO3	(4,6,-5)	12.326	71.02	0.415	0.9	4.483	4	56.03	56.18
	Equiv. Refl.: (4,-10,5), (6,4,5), (6,-10,-5), (10,-4,5), (10,-6,-5), (-4,10,-5), (-4,-6,5), (-6,10,5), (-6,-4,-5), (-10,4,-5), (-10,6,5)								
Quartz	(0,2,-11)	12.949	83.43	0.387	0.7	1.502	1	18.77	18.8
	Equiv. Refl.: (0,-2,11)								
Quartz	(2,-2,-11)	12.949	83.43	0.384	0.7	1.502	1	18.77	18.8
	Equiv. Refl.: (-2,2,11)								
Quartz	(2,0,11)	12.949	83.43	0.383	0.7	1.502	1	18.77	18.8
	Equiv. Refl.: (-2,0,-11)								
Sapph	(4,5,8)	12.355	71.41	0.324	0.5	4.385	2.07	54.81	54.85
	Equiv. Refl.: (4,-9,-8), (5,4,-8), (5,-9,8), (9,-4,-8), (9,-5,8), (-4,9,8), (-4,-5,-8), (-5,9,-8), (-5,-4,8), (-9,4,8), (-9,5,-8)								
Quartz	(1,8,1)	12.501	73.55	0.314	0.4	3.85	1.65	48.12	48.15
	Equiv. Refl.: (1,-9,-1), (8,1,-1), (8,-9,1), (-9,1,1), (-9,8,-1)								
Quartz	(10,-5,1)	12.67	76.41	0.294	0.4	3.152	1.39	39.4	39.42
	Equiv. Refl.: (10,-5,-1), (-5,10,1), (-5,10,-1), (-5,-5,1), (-5,-5,-1)								
Quartz	(5,5,1)	12.67	76.41	0.293	0.4	3.152	1.39	39.4	39.42
	Equiv. Refl.: (5,5,-1), (5,-10,1), (5,-10,-1), (-10,5,1), (-10,5,-1)								
Quartz	(9,-1,-1)	12.501	73.55	0.291	0.4	3.85	1.65	48.12	48.15
	Equiv. Refl.: (9,-8,1), (-1,9,1), (-1,-8,-1), (-8,9,-1), (-8,-1,1)								
Sapph	(0,8,-8)	12.627	75.62	0.277	0.5	3.342	1.51	41.78	41.81
	Equiv. Refl.: (0,-8,8), (8,0,8), (8,-8,-8), (-8,0,-8), (-8,8,8)								
LiNbO3	(1,5,23)	12.873	80.96	0.271	1	2.073	1.98	25.91	25.99
	Equiv. Refl.: (1,-6,-23), (5,1,-23), (5,-6,23), (6,-1,-23), (6,-5,23), (-1,6,23), (-1,-5,-23), (-5,6,-23), (-5,-1,23), (-6,1,23), (-6,5,-23)								
LiNbO3	(1,3,25)	12.252	70.04	0.25	0.7	4.734	3.1	59.17	59.25
	Equiv. Refl.: (1,-4,-25), (3,1,-25), (3,-4,25), (4,-1,-25), (4,-3,25), (-1,4,25), (-1,-3,-25), (-3,4,-25), (-3,-1,25), (-4,1,25), (-4,3,-25)								
Sapph	(1,8,2)	12.889	81.42	0.233	0.5	1.966	0.96	24.58	24.6
	Equiv. Refl.: (1,-9,-2), (8,1,-2), (8,-9,2), (9,-1,-2), (9,-8,2), (-1,9,2), (-1,-8,-2), (-8,9,-2), (-8,-1,2), (-9,1,2), (-9,8,-2)								
Sapph	(0,3,24)	12.312	70.83	0.221	0.4	4.532	1.6	56.65	56.67
	Equiv. Refl.: (0,3,-24), (0,-3,24), (0,-3,-24), (3,0,24), (3,0,-24), (3,-3,24), (3,-3,-24), (-3,0,24), (-3,0,-24), (-3,3,24), (-3,3,-24)								
Quartz	(0,1,11)	12.701	77	0.215	0.4	3.009	1.09	37.61	37.62
	Equiv. Refl.: (0,-1,-11), (1,-1,11), (-1,1,-11)								
Quartz	(1,0,-11)	12.701	77	0.214	0.4	3.009	1.08	37.61	37.62
	Equiv. Refl.: (-1,0,11)								

Ei =	13.035	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	∫ IR dΘ	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
LiNbO3	(4,5,-13)	12.318	70.91	0.209	0.6	4.511	2.72	56.39	56.46
	Equiv. Refl.: (4,-9,13), (5,4,13), (5,-9,-13), (9,-4,13), (9,-5,-13), (-4,9,-13), (-4,-5,13), (-5,9,13), (-5,-4,-13), (-9,4,-13), (-9,5,13)								
LiNbO3	(3,6,15)	12.915	82.22	0.203	0.9	1.78	1.58	22.25	22.31
	Equiv. Refl.: (3,6,-15), (3,-9,15), (3,-9,-15), (6,3,15), (6,3,-15), (6,-9,15), (6,-9,-15), (9,-3,15), (9,-3,-15), (9,-6,15), (9,-6,-15), (-3,9,15), (-3,9,-15), (-3,-6,15), (-3,-6,-15), (-6,9,15), (-6,9,-15), (-6,-3,15), (-6,-3,-15), (-9,3,15), (-9,3,-15), (-9,6,15), (-9,6,-15)								
LiNbO3	(3,7,-7)	12.749	77.98	0.199	0.7	2.776	1.98	34.7	34.75
	Equiv. Refl.: (3,-10,7), (7,3,7), (7,-10,-7), (10,-3,7), (10,-7,-7), (-3,10,-7), (-3,-7,7), (-7,10,7), (-7,-3,-7), (-10,3,-7), (-10,7,7)								
Sapph	(3,4,-19)	12.883	81.25	0.19	0.4	2.006	0.86	25.08	25.09
	Equiv. Refl.: (3,-7,19), (4,3,19), (4,-7,-19), (7,-3,19), (7,-4,-19), (-3,7,-19), (-3,-4,19), (-4,7,19), (-4,-3,-19), (-7,3,-19), (-7,4,19)								
Sapph	(3,6,9)	12.69	76.79	0.179	0.4	3.06	1.08	38.24	38.26
	Equiv. Refl.: (3,6,-9), (3,-9,9), (3,-9,-9), (6,3,9), (6,3,-9), (6,-9,9), (6,-9,-9), (9,-3,9), (9,-3,-9), (9,-6,9), (9,-6,-9), (-3,9,9), (-3,9,-9), (-3,-6,9), (-3,-6,-9), (-6,9,9), (-6,9,-9), (-6,-3,9), (-6,-3,-9), (-9,3,9), (-9,3,-9), (-9,6,9), (-9,6,-9)								
LiNbO3	(3,7,5)	12.56	74.48	0.167	0.6	3.62	2.11	45.26	45.31
	Equiv. Refl.: (3,-10,-5), (7,3,-5), (7,-10,5), (10,-3,-5), (10,-7,5), (-3,10,5), (-3,-7,-5), (-7,10,-5), (-7,-3,5), (-10,3,5), (-10,7,-5)								
Quartz	(-2,9,-3)	12.412	72.22	0.157	0.3	4.18	1.08	52.25	52.26
	Equiv. Refl.: (-2,-7,3)								
Quartz	(9,-2,3)	12.412	72.22	0.156	0.3	4.18	1.08	52.25	52.26
	Equiv. Refl.: (9,-7,-3), (-7,9,3), (-7,-2,-3)								
LiNbO3	(3,7,-1)	12.367	71.58	0.153	0.5	4.342	2.25	54.27	54.32
	Equiv. Refl.: (3,-10,1), (7,3,1), (7,-10,-1), (10,-3,1), (10,-7,-1), (-3,10,-1), (-3,-7,1), (-7,10,1), (-7,-3,-1), (-10,3,-1), (-10,7,1)								
LiNbO3	(2,8,3)	12.814	79.45	0.144	0.6	2.429	1.57	30.36	30.4
	Equiv. Refl.: (2,8,-3), (2,-10,3), (2,-10,-3), (8,2,3), (8,2,-3), (8,-10,3), (8,-10,-3), (10,-2,3), (10,-2,-3), (10,-8,3), (10,-8,-3), (-2,10,3), (-2,10,-3), (-2,-8,3), (-2,-8,-3), (-8,10,3), (-8,10,-3), (-8,-2,3), (-8,-2,-3), (-10,2,3), (-10,2,-3), (-10,8,3), (-10,8,-3)								
Quartz	(2,7,-3)	12.412	72.22	0.143	0.3	4.18	1.08	52.25	52.26
	Equiv. Refl.: (2,-9,3), (-9,7,3)								
Quartz	(7,2,3)	12.412	72.22	0.142	0.3	4.18	1.08	52.25	52.26
	Equiv. Refl.: (7,-9,-3), (-9,2,-3)								
LiNbO3	(2,5,21)	12.79	78.88	0.123	0.6	2.562	1.49	32.03	32.06
	Equiv. Refl.: (2,5,-21), (2,-7,21), (2,-7,-21), (5,2,21), (5,2,-21), (5,-7,21), (5,-7,-21), (7,-2,21), (7,-2,-21), (7,-5,21), (7,-5,-21), (-2,7,21), (-2,7,-21), (-2,-5,21), (-2,-5,-21), (-5,7,21), (-5,7,-21), (-5,-2,21), (-5,-2,-21), (-7,2,21), (-7,2,-21), (-7,5,21), (-7,5,-21)								
LiNbO3	(2,6,17)	12.583	74.87	0.094	0.4	3.525	1.55	44.07	44.09
	Equiv. Refl.: (2,-8,-17), (6,2,-17), (6,-8,17), (8,-2,-17), (8,-6,17), (-2,8,17), (-2,-6,-17), (-6,8,-17), (-6,-2,17), (-8,2,17), (-8,6,-17)								
LiNbO3	(3,5,19)	12.92	82.38	0.082	0.6	1.743	1.01	21.78	21.81
	Equiv. Refl.: (3,-8,-19), (5,3,-19), (5,-8,19), (8,-3,-19), (8,-5,19), (-3,8,19), (-3,-5,-19), (-5,8,-19), (-5,-3,19), (-8,3,19), (-8,5,-19)								
Sapph	(1,7,12)	12.721	77.39	0.066	0.2	2.916	0.59	36.46	36.46
	Equiv. Refl.: (1,7,-12), (1,-8,12), (1,-8,-12), (7,1,12), (7,1,-12), (7,-8,12), (7,-8,-12), (8,-1,12), (8,-1,-12), (8,-7,12), (8,-7,-12), (-1,8,12), (-1,8,-12), (-1,-7,12), (-1,-7,-12), (-7,8,12), (-7,8,-12), (-7,-1,12), (-7,-1,-12), (-8,1,12), (-8,1,-12), (-8,7,12), (-8,7,-12)								
LiNbO3	(2,3,-25)	12.717	77.31	0.064	0.4	2.935	1.17	36.68	36.7
	Equiv. Refl.: (2,-5,25), (3,2,25), (3,-5,-25), (5,-2,25), (5,-3,-25), (-2,5,-25), (-2,-3,25), (-3,5,25), (-3,-2,-25), (-5,2,-25), (-5,3,25)								

LiNbO3	(1,7,15)	12.458	72.89	0.056	0.3	4.013	1.3	50.17	50.18
Equiv. Refl.: (1,7,-15), (1,-8,15), (1,-8,-15), (7,1,15), (7,1,-15), (7,-8,15), (7,-8,-15), (8,-1,15), (8,-1,-15), (8,-7,15), (8,-7,-15), (-1,8,15), (-1,8,-15), (-1,-7,15), (-1,-7,-15), (-7,8,15), (-7,8,-15), (-7,-1,15), (-7,-1,-15), (-8,1,15), (-8,1,-15), (-8,7,15), (-8,7,-15)									
LiNbO3	(1,8,11)	12.858	80.56	0.052	0.4	2.168	0.91	27.1	27.11
Equiv. Refl.: (1,-9,-11), (8,1,-11), (8,-9,11), (9,-1,-11), (9,-8,11), (-1,9,11), (-1,-8,-11), (-8,9,-11), (-8,-1,11), (-9,1,11), (-9,8,-11)									
LiNbO3	(3,5,-17)	12.35	71.35	0.044	0.3	4.4	1.22	55	55.02
Equiv. Refl.: (3,-8,17), (5,3,17), (5,-8,-17), (8,-3,17), (8,-5,-17), (-3,8,-17), (-3,-5,17), (-5,8,17), (-5,-3,-17), (-8,3,-17), (-8,5,17)									
LiNbO3	(1,8,-7)	12.286	70.48	0.033	0.2	4.621	1.1	57.76	57.77
Equiv. Refl.: (1,-9,7), (8,1,7), (8,-9,-7), (9,-1,7), (9,-8,-7), (-1,9,-7), (-1,-8,7), (-8,9,7), (-8,-1,-7), (-9,1,-7), (-9,8,7)									