Report document

Report generated: 2023-07-12 15:51:30.929155

The next 4 sections describe individual scans, without a pre-focus lens and then one per pre-focus lens.
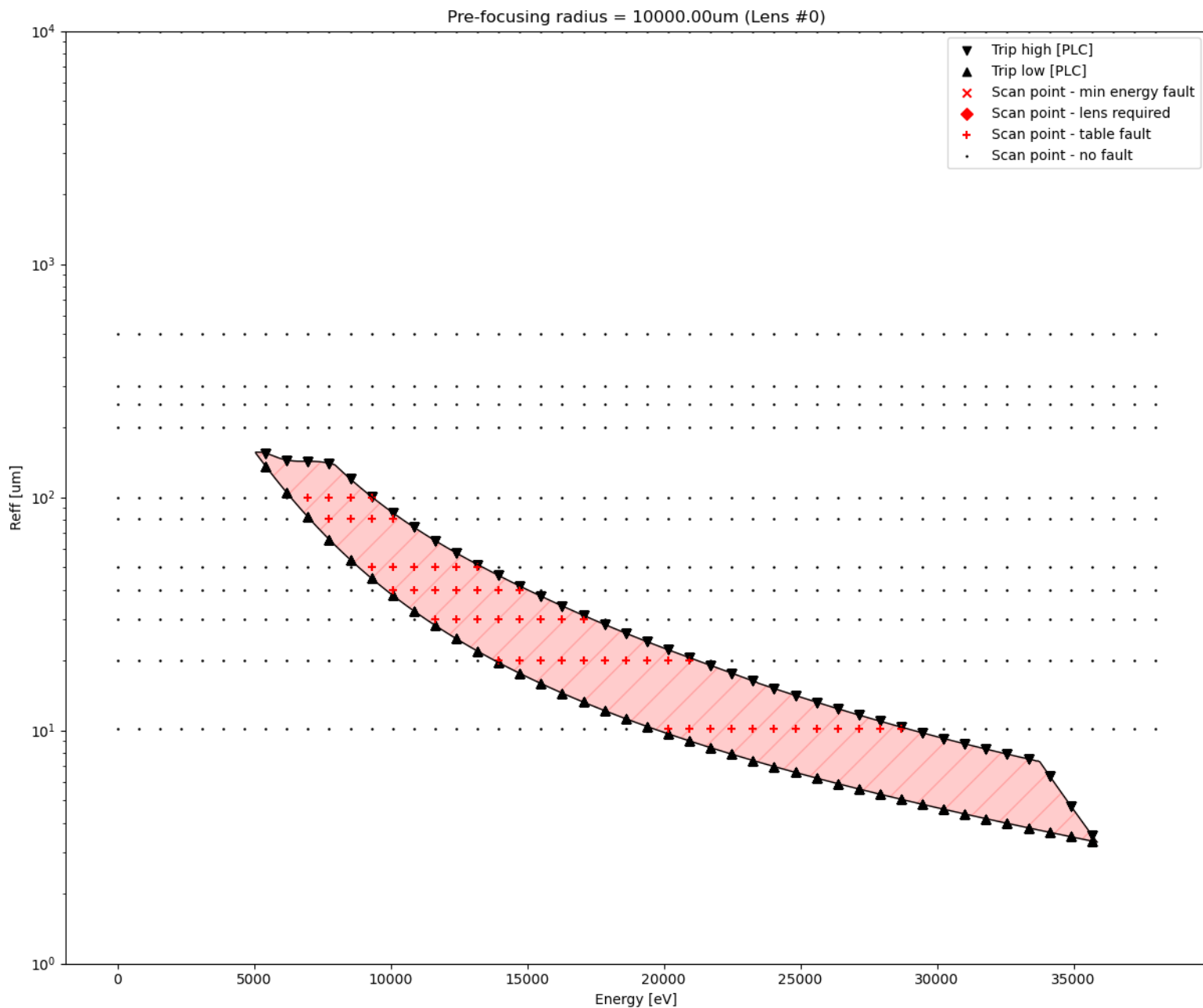
Scan 1: No pre-focusing lens

Data generated: 2023-07-12 22:53:11
bluesky scan sweep_energy_plan performed without a pre-focus lens.

Scan Information

1. Choose a few transfocator lens sets to span the effective radius range.
2. For each of those lens sets, scan energy at regular intervals.
3. Each marker on the plot represents one of those scan points.
4. Record if PLC reported a fault and why.

Pre-focusing radius = 10000.00um (Lens #0)

Plot / Table Information

No fault indicates that a data point was checked but no fault reported by PLC.
Trip Low and **Trip High** are values from the spreadsheet table, interpolated by the PLC and reported to EPICS.
The lines drawn around these regions and the highlighted regions are directly from the spreadsheet.
Min Energy Fault indicates that it does not meet minimum energy requirement for a given XRT lens.
Table Fault indicates a fault from the spreadsheet table disallowed region.
Lens Required Fault markers are clipped at the bottom of the plot.

Scan 1: No pre-focusing lens: Scan Data Table

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
0.00	0.00	10000.00	0.00	0	0	0	0	0
775.51	0.00	10000.00	0.00	0	0	0	0	0
1551.02	0.00	10000.00	0.00	0	0	0	0	0
2326.53	0.00	10000.00	0.00	0	0	0	0	0
3102.04	0.00	10000.00	0.00	0	0	0	0	0
3877.55	0.00	10000.00	0.00	0	0	0	0	0
4653.06	0.00	10000.00	0.00	0	0	0	0	0
5428.57	135.90	10000.00	154.66	0	0	0	0	0
6204.08	104.53	10000.00	144.25	0	0	0	0	0
6979.59	82.12	10000.00	142.55	0	0	0	0	0
7755.10	65.89	10000.00	139.79	0	0	0	0	0
8530.61	53.89	10000.00	119.71	0	0	0	0	0
9306.12	44.86	10000.00	100.49	0	0	0	0	0
10081.63	37.92	10000.00	85.80	0	0	0	0	0
10857.14	32.50	10000.00	74.31	0	0	0	0	0
11632.65	28.19	10000.00	65.13	0	0	0	0	0
12408.16	24.71	10000.00	57.64	0	0	0	0	0
13183.67	21.86	10000.00	51.44	0	0	0	0	0
13959.18	19.51	10000.00	46.13	0	0	0	0	0
14734.69	17.54	10000.00	41.55	0	0	0	0	0
15510.20	15.87	10000.00	37.59	0	0	0	0	0
16285.71	14.44	10000.00	34.14	0	0	0	0	0
17061.22	13.21	10000.00	31.12	0	0	0	0	0
17836.73	12.14	10000.00	28.45	0	0	0	0	0
18612.24	11.21	10000.00	26.09	0	0	0	0	0
19387.76	10.39	10000.00	24.01	0	0	0	0	0
20163.27	9.66	10000.00	22.16	0	0	0	0	0
20938.78	9.01	10000.00	20.50	0	0	0	0	0
21714.29	8.42	10000.00	19.00	0	0	0	0	0
22489.80	7.90	10000.00	17.61	0	0	0	0	0
23265.31	7.42	10000.00	16.30	0	0	0	0	0
24040.82	6.99	10000.00	15.11	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
24816.33	6.60	10000.00	14.12	0	0	0	0	0
25591.84	6.24	10000.00	13.21	0	0	0	0	0
26367.35	5.91	10000.00	12.38	0	0	0	0	0
27142.86	5.60	10000.00	11.63	0	0	0	0	0
27918.37	5.32	10000.00	10.95	0	0	0	0	0
28693.88	5.06	10000.00	10.32	0	0	0	0	0
29469.39	4.81	10000.00	9.75	0	0	0	0	0
30244.90	4.59	10000.00	9.23	0	0	0	0	0
31020.41	4.38	10000.00	8.75	0	0	0	0	0
31795.92	4.18	10000.00	8.31	0	0	0	0	0
32571.43	3.99	10000.00	7.90	0	0	0	0	0
33346.94	3.82	10000.00	7.53	0	0	0	0	0
34122.45	3.65	10000.00	6.38	0	0	0	0	0
34897.96	3.50	10000.00	4.74	0	0	0	0	0
35673.47	3.35	10000.00	3.55	0	0	0	0	0
36448.98	0.00	10000.00	0.00	0	0	0	0	0
37224.49	0.00	10000.00	0.00	0	0	0	0	0
38000.00	0.00	10000.00	0.00	0	0	0	0	0
0.00	0.00	10.17	0.00	0	0	0	0	0
775.51	0.00	10.17	0.00	0	0	0	0	0
1551.02	0.00	10.17	0.00	0	0	0	0	0
2326.53	0.00	10.17	0.00	0	0	0	0	0
3102.04	0.00	10.17	0.00	0	0	0	0	0
3877.55	0.00	10.17	0.00	0	0	0	0	0
4653.06	0.00	10.17	0.00	0	0	0	0	0
5428.57	135.90	10.17	154.66	0	0	0	0	0
6204.08	104.53	10.17	144.25	0	0	0	0	0
6979.59	82.12	10.17	142.55	0	0	0	0	0
7755.10	65.89	10.17	139.79	0	0	0	0	0
8530.61	53.89	10.17	119.71	0	0	0	0	0
9306.12	44.86	10.17	100.49	0	0	0	0	0
10081.63	37.92	10.17	85.80	0	0	0	0	0
10857.14	32.50	10.17	74.31	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
11632.65	28.19	10.17	65.13	0	0	0	0	0
12408.16	24.71	10.17	57.64	0	0	0	0	0
13183.67	21.86	10.17	51.44	0	0	0	0	0
13959.18	19.51	10.17	46.13	0	0	0	0	0
14734.69	17.54	10.17	41.55	0	0	0	0	0
15510.20	15.87	10.17	37.59	0	0	0	0	0
16285.71	14.44	10.17	34.14	0	0	0	0	0
17061.22	13.21	10.17	31.12	0	0	0	0	0
17836.73	12.14	10.17	28.45	0	0	0	0	0
18612.24	11.21	10.17	26.09	0	0	0	0	0
19387.76	10.39	10.17	24.01	0	0	0	0	0
20163.27	9.66	10.17	22.16	1	0	0	0	1
20938.78	9.01	10.17	20.50	1	0	0	0	1
21714.29	8.42	10.17	19.00	1	0	0	0	1
22489.80	7.90	10.17	17.61	1	0	0	0	1
23265.31	7.42	10.17	16.30	1	0	0	0	1
24040.82	6.99	10.17	15.11	1	0	0	0	1
24816.33	6.60	10.17	14.12	1	0	0	0	1
25591.84	6.24	10.17	13.21	1	0	0	0	1
26367.35	5.91	10.17	12.38	1	0	0	0	1
27142.86	5.60	10.17	11.63	1	0	0	0	1
27918.37	5.32	10.17	10.95	1	0	0	0	1
28693.88	5.06	10.17	10.32	1	0	0	0	1
29469.39	4.81	10.17	9.75	0	0	0	0	0
30244.90	4.59	10.17	9.23	0	0	0	0	0
31020.41	4.38	10.17	8.75	0	0	0	0	0
31795.92	4.18	10.17	8.31	0	0	0	0	0
32571.43	3.99	10.17	7.90	0	0	0	0	0
33346.94	3.82	10.17	7.53	0	0	0	0	0
34122.45	3.65	10.17	6.38	0	0	0	0	0
34897.96	3.50	10.17	4.74	0	0	0	0	0
35673.47	3.35	10.17	3.55	0	0	0	0	0
36448.98	0.00	10.17	0.00	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
37224.49	0.00	10.17	0.00	0	0	0	0	0
38000.00	0.00	10.17	0.00	0	0	0	0	0
0.00	0.00	20.00	0.00	0	0	0	0	0
775.51	0.00	20.00	0.00	0	0	0	0	0
1551.02	0.00	20.00	0.00	0	0	0	0	0
2326.53	0.00	20.00	0.00	0	0	0	0	0
3102.04	0.00	20.00	0.00	0	0	0	0	0
3877.55	0.00	20.00	0.00	0	0	0	0	0
4653.06	0.00	20.00	0.00	0	0	0	0	0
5428.57	135.90	20.00	154.66	0	0	0	0	0
6204.08	104.53	20.00	144.25	0	0	0	0	0
6979.59	82.12	20.00	142.55	0	0	0	0	0
7755.10	65.89	20.00	139.79	0	0	0	0	0
8530.61	53.89	20.00	119.71	0	0	0	0	0
9306.12	44.86	20.00	100.49	0	0	0	0	0
10081.63	37.92	20.00	85.80	0	0	0	0	0
10857.14	32.50	20.00	74.31	0	0	0	0	0
11632.65	28.19	20.00	65.13	0	0	0	0	0
12408.16	24.71	20.00	57.64	0	0	0	0	0
13183.67	21.86	20.00	51.44	0	0	0	0	0
13959.18	19.51	20.00	46.13	1	0	0	0	1
14734.69	17.54	20.00	41.55	1	0	0	0	1
15510.20	15.87	20.00	37.59	1	0	0	0	1
16285.71	14.44	20.00	34.14	1	0	0	0	1
17061.22	13.21	20.00	31.12	1	0	0	0	1
17836.73	12.14	20.00	28.45	1	0	0	0	1
18612.24	11.21	20.00	26.09	1	0	0	0	1
19387.76	10.39	20.00	24.01	1	0	0	0	1
20163.27	9.66	20.00	22.16	1	0	0	0	1
20938.78	9.01	20.00	20.50	1	0	0	0	1
21714.29	8.42	20.00	19.00	0	0	0	0	0
22489.80	7.90	20.00	17.61	0	0	0	0	0
23265.31	7.42	20.00	16.30	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
24040.82	6.99	20.00	15.11	0	0	0	0	0
24816.33	6.60	20.00	14.12	0	0	0	0	0
25591.84	6.24	20.00	13.21	0	0	0	0	0
26367.35	5.91	20.00	12.38	0	0	0	0	0
27142.86	5.60	20.00	11.63	0	0	0	0	0
27918.37	5.32	20.00	10.95	0	0	0	0	0
28693.88	5.06	20.00	10.32	0	0	0	0	0
29469.39	4.81	20.00	9.75	0	0	0	0	0
30244.90	4.59	20.00	9.23	0	0	0	0	0
31020.41	4.38	20.00	8.75	0	0	0	0	0
31795.92	4.18	20.00	8.31	0	0	0	0	0
32571.43	3.99	20.00	7.90	0	0	0	0	0
33346.94	3.82	20.00	7.53	0	0	0	0	0
34122.45	3.65	20.00	6.38	0	0	0	0	0
34897.96	3.50	20.00	4.74	0	0	0	0	0
35673.47	3.35	20.00	3.55	0	0	0	0	0
36448.98	0.00	20.00	0.00	0	0	0	0	0
37224.49	0.00	20.00	0.00	0	0	0	0	0
38000.00	0.00	20.00	0.00	0	0	0	0	0
0.00	0.00	30.00	0.00	0	0	0	0	0
775.51	0.00	30.00	0.00	0	0	0	0	0
1551.02	0.00	30.00	0.00	0	0	0	0	0
2326.53	0.00	30.00	0.00	0	0	0	0	0
3102.04	0.00	30.00	0.00	0	0	0	0	0
3877.55	0.00	30.00	0.00	0	0	0	0	0
4653.06	0.00	30.00	0.00	0	0	0	0	0
5428.57	135.90	30.00	154.66	0	0	0	0	0
6204.08	104.53	30.00	144.25	0	0	0	0	0
6979.59	82.12	30.00	142.55	0	0	0	0	0
7755.10	65.89	30.00	139.79	0	0	0	0	0
8530.61	53.89	30.00	119.71	0	0	0	0	0
9306.12	44.86	30.00	100.49	0	0	0	0	0
10081.63	37.92	30.00	85.80	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
10857.14	32.50	30.00	74.31	0	0	0	0	0
11632.65	28.19	30.00	65.13	1	0	0	0	1
12408.16	24.71	30.00	57.64	1	0	0	0	1
13183.67	21.86	30.00	51.44	1	0	0	0	1
13959.18	19.51	30.00	46.13	1	0	0	0	1
14734.69	17.54	30.00	41.55	1	0	0	0	1
15510.20	15.87	30.00	37.59	1	0	0	0	1
16285.71	14.44	30.00	34.14	1	0	0	0	1
17061.22	13.21	30.00	31.12	1	0	0	0	1
17836.73	12.14	30.00	28.45	0	0	0	0	0
18612.24	11.21	30.00	26.09	0	0	0	0	0
19387.76	10.39	30.00	24.01	0	0	0	0	0
20163.27	9.66	30.00	22.16	0	0	0	0	0
20938.78	9.01	30.00	20.50	0	0	0	0	0
21714.29	8.42	30.00	19.00	0	0	0	0	0
22489.80	7.90	30.00	17.61	0	0	0	0	0
23265.31	7.42	30.00	16.30	0	0	0	0	0
24040.82	6.99	30.00	15.11	0	0	0	0	0
24816.33	6.60	30.00	14.12	0	0	0	0	0
25591.84	6.24	30.00	13.21	0	0	0	0	0
26367.35	5.91	30.00	12.38	0	0	0	0	0
27142.86	5.60	30.00	11.63	0	0	0	0	0
27918.37	5.32	30.00	10.95	0	0	0	0	0
28693.88	5.06	30.00	10.32	0	0	0	0	0
29469.39	4.81	30.00	9.75	0	0	0	0	0
30244.90	4.59	30.00	9.23	0	0	0	0	0
31020.41	4.38	30.00	8.75	0	0	0	0	0
31795.92	4.18	30.00	8.31	0	0	0	0	0
32571.43	3.99	30.00	7.90	0	0	0	0	0
33346.94	3.82	30.00	7.53	0	0	0	0	0
34122.45	3.65	30.00	6.38	0	0	0	0	0
34897.96	3.50	30.00	4.74	0	0	0	0	0
35673.47	3.35	30.00	3.55	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
36448.98	0.00	30.00	0.00	0	0	0	0	0
37224.49	0.00	30.00	0.00	0	0	0	0	0
38000.00	0.00	30.00	0.00	0	0	0	0	0
0.00	0.00	40.00	0.00	0	0	0	0	0
775.51	0.00	40.00	0.00	0	0	0	0	0
1551.02	0.00	40.00	0.00	0	0	0	0	0
2326.53	0.00	40.00	0.00	0	0	0	0	0
3102.04	0.00	40.00	0.00	0	0	0	0	0
3877.55	0.00	40.00	0.00	0	0	0	0	0
4653.06	0.00	40.00	0.00	0	0	0	0	0
5428.57	135.90	40.00	154.66	0	0	0	0	0
6204.08	104.53	40.00	144.25	0	0	0	0	0
6979.59	82.12	40.00	142.55	0	0	0	0	0
7755.10	65.89	40.00	139.79	0	0	0	0	0
8530.61	53.89	40.00	119.71	0	0	0	0	0
9306.12	44.86	40.00	100.49	0	0	0	0	0
10081.63	37.92	40.00	85.80	1	0	0	0	1
10857.14	32.50	40.00	74.31	1	0	0	0	1
11632.65	28.19	40.00	65.13	1	0	0	0	1
12408.16	24.71	40.00	57.64	1	0	0	0	1
13183.67	21.86	40.00	51.44	1	0	0	0	1
13959.18	19.51	40.00	46.13	1	0	0	0	1
14734.69	17.54	40.00	41.55	1	0	0	0	1
15510.20	15.87	40.00	37.59	0	0	0	0	0
16285.71	14.44	40.00	34.14	0	0	0	0	0
17061.22	13.21	40.00	31.12	0	0	0	0	0
17836.73	12.14	40.00	28.45	0	0	0	0	0
18612.24	11.21	40.00	26.09	0	0	0	0	0
19387.76	10.39	40.00	24.01	0	0	0	0	0
20163.27	9.66	40.00	22.16	0	0	0	0	0
20938.78	9.01	40.00	20.50	0	0	0	0	0
21714.29	8.42	40.00	19.00	0	0	0	0	0
22489.80	7.90	40.00	17.61	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
23265.31	7.42	40.00	16.30	0	0	0	0	0
24040.82	6.99	40.00	15.11	0	0	0	0	0
24816.33	6.60	40.00	14.12	0	0	0	0	0
25591.84	6.24	40.00	13.21	0	0	0	0	0
26367.35	5.91	40.00	12.38	0	0	0	0	0
27142.86	5.60	40.00	11.63	0	0	0	0	0
27918.37	5.32	40.00	10.95	0	0	0	0	0
28693.88	5.06	40.00	10.32	0	0	0	0	0
29469.39	4.81	40.00	9.75	0	0	0	0	0
30244.90	4.59	40.00	9.23	0	0	0	0	0
31020.41	4.38	40.00	8.75	0	0	0	0	0
31795.92	4.18	40.00	8.31	0	0	0	0	0
32571.43	3.99	40.00	7.90	0	0	0	0	0
33346.94	3.82	40.00	7.53	0	0	0	0	0
34122.45	3.65	40.00	6.38	0	0	0	0	0
34897.96	3.50	40.00	4.74	0	0	0	0	0
35673.47	3.35	40.00	3.55	0	0	0	0	0
36448.98	0.00	40.00	0.00	0	0	0	0	0
37224.49	0.00	40.00	0.00	0	0	0	0	0
38000.00	0.00	40.00	0.00	0	0	0	0	0
0.00	0.00	50.00	0.00	0	0	0	0	0
775.51	0.00	50.00	0.00	0	0	0	0	0
1551.02	0.00	50.00	0.00	0	0	0	0	0
2326.53	0.00	50.00	0.00	0	0	0	0	0
3102.04	0.00	50.00	0.00	0	0	0	0	0
3877.55	0.00	50.00	0.00	0	0	0	0	0
4653.06	0.00	50.00	0.00	0	0	0	0	0
5428.57	135.90	50.00	154.66	0	0	0	0	0
6204.08	104.53	50.00	144.25	0	0	0	0	0
6979.59	82.12	50.00	142.55	0	0	0	0	0
7755.10	65.89	50.00	139.79	0	0	0	0	0
8530.61	53.89	50.00	119.71	0	0	0	0	0
9306.12	44.86	50.00	100.49	1	0	0	0	1

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
10081.63	37.92	50.00	85.80	1	0	0	0	1
10857.14	32.50	50.00	74.31	1	0	0	0	1
11632.65	28.19	50.00	65.13	1	0	0	0	1
12408.16	24.71	50.00	57.64	1	0	0	0	1
13183.67	21.86	50.00	51.44	1	0	0	0	1
13959.18	19.51	50.00	46.13	0	0	0	0	0
14734.69	17.54	50.00	41.55	0	0	0	0	0
15510.20	15.87	50.00	37.59	0	0	0	0	0
16285.71	14.44	50.00	34.14	0	0	0	0	0
17061.22	13.21	50.00	31.12	0	0	0	0	0
17836.73	12.14	50.00	28.45	0	0	0	0	0
18612.24	11.21	50.00	26.09	0	0	0	0	0
19387.76	10.39	50.00	24.01	0	0	0	0	0
20163.27	9.66	50.00	22.16	0	0	0	0	0
20938.78	9.01	50.00	20.50	0	0	0	0	0
21714.29	8.42	50.00	19.00	0	0	0	0	0
22489.80	7.90	50.00	17.61	0	0	0	0	0
23265.31	7.42	50.00	16.30	0	0	0	0	0
24040.82	6.99	50.00	15.11	0	0	0	0	0
24816.33	6.60	50.00	14.12	0	0	0	0	0
25591.84	6.24	50.00	13.21	0	0	0	0	0
26367.35	5.91	50.00	12.38	0	0	0	0	0
27142.86	5.60	50.00	11.63	0	0	0	0	0
27918.37	5.32	50.00	10.95	0	0	0	0	0
28693.88	5.06	50.00	10.32	0	0	0	0	0
29469.39	4.81	50.00	9.75	0	0	0	0	0
30244.90	4.59	50.00	9.23	0	0	0	0	0
31020.41	4.38	50.00	8.75	0	0	0	0	0
31795.92	4.18	50.00	8.31	0	0	0	0	0
32571.43	3.99	50.00	7.90	0	0	0	0	0
33346.94	3.82	50.00	7.53	0	0	0	0	0
34122.45	3.65	50.00	6.38	0	0	0	0	0
34897.96	3.50	50.00	4.74	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
35673.47	3.35	50.00	3.55	0	0	0	0	0
36448.98	0.00	50.00	0.00	0	0	0	0	0
37224.49	0.00	50.00	0.00	0	0	0	0	0
38000.00	0.00	50.00	0.00	0	0	0	0	0
0.00	0.00	81.08	0.00	0	0	0	0	0
775.51	0.00	81.08	0.00	0	0	0	0	0
1551.02	0.00	81.08	0.00	0	0	0	0	0
2326.53	0.00	81.08	0.00	0	0	0	0	0
3102.04	0.00	81.08	0.00	0	0	0	0	0
3877.55	0.00	81.08	0.00	0	0	0	0	0
4653.06	0.00	81.08	0.00	0	0	0	0	0
5428.57	135.90	81.08	154.66	0	0	0	0	0
6204.08	104.53	81.08	144.25	0	0	0	0	0
6979.59	82.12	81.08	142.55	0	0	0	0	0
7755.10	65.89	81.08	139.79	1	0	0	0	1
8530.61	53.89	81.08	119.71	1	0	0	0	1
9306.12	44.86	81.08	100.49	1	0	0	0	1
10081.63	37.92	81.08	85.80	1	0	0	0	1
10857.14	32.50	81.08	74.31	0	0	0	0	0
11632.65	28.19	81.08	65.13	0	0	0	0	0
12408.16	24.71	81.08	57.64	0	0	0	0	0
13183.67	21.86	81.08	51.44	0	0	0	0	0
13959.18	19.51	81.08	46.13	0	0	0	0	0
14734.69	17.54	81.08	41.55	0	0	0	0	0
15510.20	15.87	81.08	37.59	0	0	0	0	0
16285.71	14.44	81.08	34.14	0	0	0	0	0
17061.22	13.21	81.08	31.12	0	0	0	0	0
17836.73	12.14	81.08	28.45	0	0	0	0	0
18612.24	11.21	81.08	26.09	0	0	0	0	0
19387.76	10.39	81.08	24.01	0	0	0	0	0
20163.27	9.66	81.08	22.16	0	0	0	0	0
20938.78	9.01	81.08	20.50	0	0	0	0	0
21714.29	8.42	81.08	19.00	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
22489.80	7.90	81.08	17.61	0	0	0	0	0
23265.31	7.42	81.08	16.30	0	0	0	0	0
24040.82	6.99	81.08	15.11	0	0	0	0	0
24816.33	6.60	81.08	14.12	0	0	0	0	0
25591.84	6.24	81.08	13.21	0	0	0	0	0
26367.35	5.91	81.08	12.38	0	0	0	0	0
27142.86	5.60	81.08	11.63	0	0	0	0	0
27918.37	5.32	81.08	10.95	0	0	0	0	0
28693.88	5.06	81.08	10.32	0	0	0	0	0
29469.39	4.81	81.08	9.75	0	0	0	0	0
30244.90	4.59	81.08	9.23	0	0	0	0	0
31020.41	4.38	81.08	8.75	0	0	0	0	0
31795.92	4.18	81.08	8.31	0	0	0	0	0
32571.43	3.99	81.08	7.90	0	0	0	0	0
33346.94	3.82	81.08	7.53	0	0	0	0	0
34122.45	3.65	81.08	6.38	0	0	0	0	0
34897.96	3.50	81.08	4.74	0	0	0	0	0
35673.47	3.35	81.08	3.55	0	0	0	0	0
36448.98	0.00	81.08	0.00	0	0	0	0	0
37224.49	0.00	81.08	0.00	0	0	0	0	0
38000.00	0.00	81.08	0.00	0	0	0	0	0
0.00	0.00	100.00	0.00	0	0	0	0	0
775.51	0.00	100.00	0.00	0	0	0	0	0
1551.02	0.00	100.00	0.00	0	0	0	0	0
2326.53	0.00	100.00	0.00	0	0	0	0	0
3102.04	0.00	100.00	0.00	0	0	0	0	0
3877.55	0.00	100.00	0.00	0	0	0	0	0
4653.06	0.00	100.00	0.00	0	0	0	0	0
5428.57	135.90	100.00	154.66	0	0	0	0	0
6204.08	104.53	100.00	144.25	0	0	0	0	0
6979.59	82.12	100.00	142.55	1	0	0	0	1
7755.10	65.89	100.00	139.79	1	0	0	0	1
8530.61	53.89	100.00	119.71	1	0	0	0	1

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
9306.12	44.86	100.00	100.49	1	0	0	0	1
10081.63	37.92	100.00	85.80	0	0	0	0	0
10857.14	32.50	100.00	74.31	0	0	0	0	0
11632.65	28.19	100.00	65.13	0	0	0	0	0
12408.16	24.71	100.00	57.64	0	0	0	0	0
13183.67	21.86	100.00	51.44	0	0	0	0	0
13959.18	19.51	100.00	46.13	0	0	0	0	0
14734.69	17.54	100.00	41.55	0	0	0	0	0
15510.20	15.87	100.00	37.59	0	0	0	0	0
16285.71	14.44	100.00	34.14	0	0	0	0	0
17061.22	13.21	100.00	31.12	0	0	0	0	0
17836.73	12.14	100.00	28.45	0	0	0	0	0
18612.24	11.21	100.00	26.09	0	0	0	0	0
19387.76	10.39	100.00	24.01	0	0	0	0	0
20163.27	9.66	100.00	22.16	0	0	0	0	0
20938.78	9.01	100.00	20.50	0	0	0	0	0
21714.29	8.42	100.00	19.00	0	0	0	0	0
22489.80	7.90	100.00	17.61	0	0	0	0	0
23265.31	7.42	100.00	16.30	0	0	0	0	0
24040.82	6.99	100.00	15.11	0	0	0	0	0
24816.33	6.60	100.00	14.12	0	0	0	0	0
25591.84	6.24	100.00	13.21	0	0	0	0	0
26367.35	5.91	100.00	12.38	0	0	0	0	0
27142.86	5.60	100.00	11.63	0	0	0	0	0
27918.37	5.32	100.00	10.95	0	0	0	0	0
28693.88	5.06	100.00	10.32	0	0	0	0	0
29469.39	4.81	100.00	9.75	0	0	0	0	0
30244.90	4.59	100.00	9.23	0	0	0	0	0
31020.41	4.38	100.00	8.75	0	0	0	0	0
31795.92	4.18	100.00	8.31	0	0	0	0	0
32571.43	3.99	100.00	7.90	0	0	0	0	0
33346.94	3.82	100.00	7.53	0	0	0	0	0
34122.45	3.65	100.00	6.38	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
34897.96	3.50	100.00	4.74	0	0	0	0	0
35673.47	3.35	100.00	3.55	0	0	0	0	0
36448.98	0.00	100.00	0.00	0	0	0	0	0
37224.49	0.00	100.00	0.00	0	0	0	0	0
38000.00	0.00	100.00	0.00	0	0	0	0	0
0.00	0.00	200.00	0.00	0	0	0	0	0
775.51	0.00	200.00	0.00	0	0	0	0	0
1551.02	0.00	200.00	0.00	0	0	0	0	0
2326.53	0.00	200.00	0.00	0	0	0	0	0
3102.04	0.00	200.00	0.00	0	0	0	0	0
3877.55	0.00	200.00	0.00	0	0	0	0	0
4653.06	0.00	200.00	0.00	0	0	0	0	0
5428.57	135.90	200.00	154.66	0	0	0	0	0
6204.08	104.53	200.00	144.25	0	0	0	0	0
6979.59	82.12	200.00	142.55	0	0	0	0	0
7755.10	65.89	200.00	139.79	0	0	0	0	0
8530.61	53.89	200.00	119.71	0	0	0	0	0
9306.12	44.86	200.00	100.49	0	0	0	0	0
10081.63	37.92	200.00	85.80	0	0	0	0	0
10857.14	32.50	200.00	74.31	0	0	0	0	0
11632.65	28.19	200.00	65.13	0	0	0	0	0
12408.16	24.71	200.00	57.64	0	0	0	0	0
13183.67	21.86	200.00	51.44	0	0	0	0	0
13959.18	19.51	200.00	46.13	0	0	0	0	0
14734.69	17.54	200.00	41.55	0	0	0	0	0
15510.20	15.87	200.00	37.59	0	0	0	0	0
16285.71	14.44	200.00	34.14	0	0	0	0	0
17061.22	13.21	200.00	31.12	0	0	0	0	0
17836.73	12.14	200.00	28.45	0	0	0	0	0
18612.24	11.21	200.00	26.09	0	0	0	0	0
19387.76	10.39	200.00	24.01	0	0	0	0	0
20163.27	9.66	200.00	22.16	0	0	0	0	0
20938.78	9.01	200.00	20.50	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
21714.29	8.42	200.00	19.00	0	0	0	0	0
22489.80	7.90	200.00	17.61	0	0	0	0	0
23265.31	7.42	200.00	16.30	0	0	0	0	0
24040.82	6.99	200.00	15.11	0	0	0	0	0
24816.33	6.60	200.00	14.12	0	0	0	0	0
25591.84	6.24	200.00	13.21	0	0	0	0	0
26367.35	5.91	200.00	12.38	0	0	0	0	0
27142.86	5.60	200.00	11.63	0	0	0	0	0
27918.37	5.32	200.00	10.95	0	0	0	0	0
28693.88	5.06	200.00	10.32	0	0	0	0	0
29469.39	4.81	200.00	9.75	0	0	0	0	0
30244.90	4.59	200.00	9.23	0	0	0	0	0
31020.41	4.38	200.00	8.75	0	0	0	0	0
31795.92	4.18	200.00	8.31	0	0	0	0	0
32571.43	3.99	200.00	7.90	0	0	0	0	0
33346.94	3.82	200.00	7.53	0	0	0	0	0
34122.45	3.65	200.00	6.38	0	0	0	0	0
34897.96	3.50	200.00	4.74	0	0	0	0	0
35673.47	3.35	200.00	3.55	0	0	0	0	0
36448.98	0.00	200.00	0.00	0	0	0	0	0
37224.49	0.00	200.00	0.00	0	0	0	0	0
38000.00	0.00	200.00	0.00	0	0	0	0	0
0.00	0.00	250.00	0.00	0	0	0	0	0
775.51	0.00	250.00	0.00	0	0	0	0	0
1551.02	0.00	250.00	0.00	0	0	0	0	0
2326.53	0.00	250.00	0.00	0	0	0	0	0
3102.04	0.00	250.00	0.00	0	0	0	0	0
3877.55	0.00	250.00	0.00	0	0	0	0	0
4653.06	0.00	250.00	0.00	0	0	0	0	0
5428.57	135.90	250.00	154.66	0	0	0	0	0
6204.08	104.53	250.00	144.25	0	0	0	0	0
6979.59	82.12	250.00	142.55	0	0	0	0	0
7755.10	65.89	250.00	139.79	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
8530.61	53.89	250.00	119.71	0	0	0	0	0
9306.12	44.86	250.00	100.49	0	0	0	0	0
10081.63	37.92	250.00	85.80	0	0	0	0	0
10857.14	32.50	250.00	74.31	0	0	0	0	0
11632.65	28.19	250.00	65.13	0	0	0	0	0
12408.16	24.71	250.00	57.64	0	0	0	0	0
13183.67	21.86	250.00	51.44	0	0	0	0	0
13959.18	19.51	250.00	46.13	0	0	0	0	0
14734.69	17.54	250.00	41.55	0	0	0	0	0
15510.20	15.87	250.00	37.59	0	0	0	0	0
16285.71	14.44	250.00	34.14	0	0	0	0	0
17061.22	13.21	250.00	31.12	0	0	0	0	0
17836.73	12.14	250.00	28.45	0	0	0	0	0
18612.24	11.21	250.00	26.09	0	0	0	0	0
19387.76	10.39	250.00	24.01	0	0	0	0	0
20163.27	9.66	250.00	22.16	0	0	0	0	0
20938.78	9.01	250.00	20.50	0	0	0	0	0
21714.29	8.42	250.00	19.00	0	0	0	0	0
22489.80	7.90	250.00	17.61	0	0	0	0	0
23265.31	7.42	250.00	16.30	0	0	0	0	0
24040.82	6.99	250.00	15.11	0	0	0	0	0
24816.33	6.60	250.00	14.12	0	0	0	0	0
25591.84	6.24	250.00	13.21	0	0	0	0	0
26367.35	5.91	250.00	12.38	0	0	0	0	0
27142.86	5.60	250.00	11.63	0	0	0	0	0
27918.37	5.32	250.00	10.95	0	0	0	0	0
28693.88	5.06	250.00	10.32	0	0	0	0	0
29469.39	4.81	250.00	9.75	0	0	0	0	0
30244.90	4.59	250.00	9.23	0	0	0	0	0
31020.41	4.38	250.00	8.75	0	0	0	0	0
31795.92	4.18	250.00	8.31	0	0	0	0	0
32571.43	3.99	250.00	7.90	0	0	0	0	0
33346.94	3.82	250.00	7.53	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
34122.45	3.65	250.00	6.38	0	0	0	0	0
34897.96	3.50	250.00	4.74	0	0	0	0	0
35673.47	3.35	250.00	3.55	0	0	0	0	0
36448.98	0.00	250.00	0.00	0	0	0	0	0
37224.49	0.00	250.00	0.00	0	0	0	0	0
38000.00	0.00	250.00	0.00	0	0	0	0	0
0.00	0.00	300.00	0.00	0	0	0	0	0
775.51	0.00	300.00	0.00	0	0	0	0	0
1551.02	0.00	300.00	0.00	0	0	0	0	0
2326.53	0.00	300.00	0.00	0	0	0	0	0
3102.04	0.00	300.00	0.00	0	0	0	0	0
3877.55	0.00	300.00	0.00	0	0	0	0	0
4653.06	0.00	300.00	0.00	0	0	0	0	0
5428.57	135.90	300.00	154.66	0	0	0	0	0
6204.08	104.53	300.00	144.25	0	0	0	0	0
6979.59	82.12	300.00	142.55	0	0	0	0	0
7755.10	65.89	300.00	139.79	0	0	0	0	0
8530.61	53.89	300.00	119.71	0	0	0	0	0
9306.12	44.86	300.00	100.49	0	0	0	0	0
10081.63	37.92	300.00	85.80	0	0	0	0	0
10857.14	32.50	300.00	74.31	0	0	0	0	0
11632.65	28.19	300.00	65.13	0	0	0	0	0
12408.16	24.71	300.00	57.64	0	0	0	0	0
13183.67	21.86	300.00	51.44	0	0	0	0	0
13959.18	19.51	300.00	46.13	0	0	0	0	0
14734.69	17.54	300.00	41.55	0	0	0	0	0
15510.20	15.87	300.00	37.59	0	0	0	0	0
16285.71	14.44	300.00	34.14	0	0	0	0	0
17061.22	13.21	300.00	31.12	0	0	0	0	0
17836.73	12.14	300.00	28.45	0	0	0	0	0
18612.24	11.21	300.00	26.09	0	0	0	0	0
19387.76	10.39	300.00	24.01	0	0	0	0	0
20163.27	9.66	300.00	22.16	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
20938.78	9.01	300.00	20.50	0	0	0	0	0
21714.29	8.42	300.00	19.00	0	0	0	0	0
22489.80	7.90	300.00	17.61	0	0	0	0	0
23265.31	7.42	300.00	16.30	0	0	0	0	0
24040.82	6.99	300.00	15.11	0	0	0	0	0
24816.33	6.60	300.00	14.12	0	0	0	0	0
25591.84	6.24	300.00	13.21	0	0	0	0	0
26367.35	5.91	300.00	12.38	0	0	0	0	0
27142.86	5.60	300.00	11.63	0	0	0	0	0
27918.37	5.32	300.00	10.95	0	0	0	0	0
28693.88	5.06	300.00	10.32	0	0	0	0	0
29469.39	4.81	300.00	9.75	0	0	0	0	0
30244.90	4.59	300.00	9.23	0	0	0	0	0
31020.41	4.38	300.00	8.75	0	0	0	0	0
31795.92	4.18	300.00	8.31	0	0	0	0	0
32571.43	3.99	300.00	7.90	0	0	0	0	0
33346.94	3.82	300.00	7.53	0	0	0	0	0
34122.45	3.65	300.00	6.38	0	0	0	0	0
34897.96	3.50	300.00	4.74	0	0	0	0	0
35673.47	3.35	300.00	3.55	0	0	0	0	0
36448.98	0.00	300.00	0.00	0	0	0	0	0
37224.49	0.00	300.00	0.00	0	0	0	0	0
38000.00	0.00	300.00	0.00	0	0	0	0	0
0.00	0.00	500.00	0.00	0	0	0	0	0
775.51	0.00	500.00	0.00	0	0	0	0	0
1551.02	0.00	500.00	0.00	0	0	0	0	0
2326.53	0.00	500.00	0.00	0	0	0	0	0
3102.04	0.00	500.00	0.00	0	0	0	0	0
3877.55	0.00	500.00	0.00	0	0	0	0	0
4653.06	0.00	500.00	0.00	0	0	0	0	0
5428.57	135.90	500.00	154.66	0	0	0	0	0
6204.08	104.53	500.00	144.25	0	0	0	0	0
6979.59	82.12	500.00	142.55	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
7755.10	65.89	500.00	139.79	0	0	0	0	0
8530.61	53.89	500.00	119.71	0	0	0	0	0
9306.12	44.86	500.00	100.49	0	0	0	0	0
10081.63	37.92	500.00	85.80	0	0	0	0	0
10857.14	32.50	500.00	74.31	0	0	0	0	0
11632.65	28.19	500.00	65.13	0	0	0	0	0
12408.16	24.71	500.00	57.64	0	0	0	0	0
13183.67	21.86	500.00	51.44	0	0	0	0	0
13959.18	19.51	500.00	46.13	0	0	0	0	0
14734.69	17.54	500.00	41.55	0	0	0	0	0
15510.20	15.87	500.00	37.59	0	0	0	0	0
16285.71	14.44	500.00	34.14	0	0	0	0	0
17061.22	13.21	500.00	31.12	0	0	0	0	0
17836.73	12.14	500.00	28.45	0	0	0	0	0
18612.24	11.21	500.00	26.09	0	0	0	0	0
19387.76	10.39	500.00	24.01	0	0	0	0	0
20163.27	9.66	500.00	22.16	0	0	0	0	0
20938.78	9.01	500.00	20.50	0	0	0	0	0
21714.29	8.42	500.00	19.00	0	0	0	0	0
22489.80	7.90	500.00	17.61	0	0	0	0	0
23265.31	7.42	500.00	16.30	0	0	0	0	0
24040.82	6.99	500.00	15.11	0	0	0	0	0
24816.33	6.60	500.00	14.12	0	0	0	0	0
25591.84	6.24	500.00	13.21	0	0	0	0	0
26367.35	5.91	500.00	12.38	0	0	0	0	0
27142.86	5.60	500.00	11.63	0	0	0	0	0
27918.37	5.32	500.00	10.95	0	0	0	0	0
28693.88	5.06	500.00	10.32	0	0	0	0	0
29469.39	4.81	500.00	9.75	0	0	0	0	0
30244.90	4.59	500.00	9.23	0	0	0	0	0
31020.41	4.38	500.00	8.75	0	0	0	0	0
31795.92	4.18	500.00	8.31	0	0	0	0	0
32571.43	3.99	500.00	7.90	0	0	0	0	0

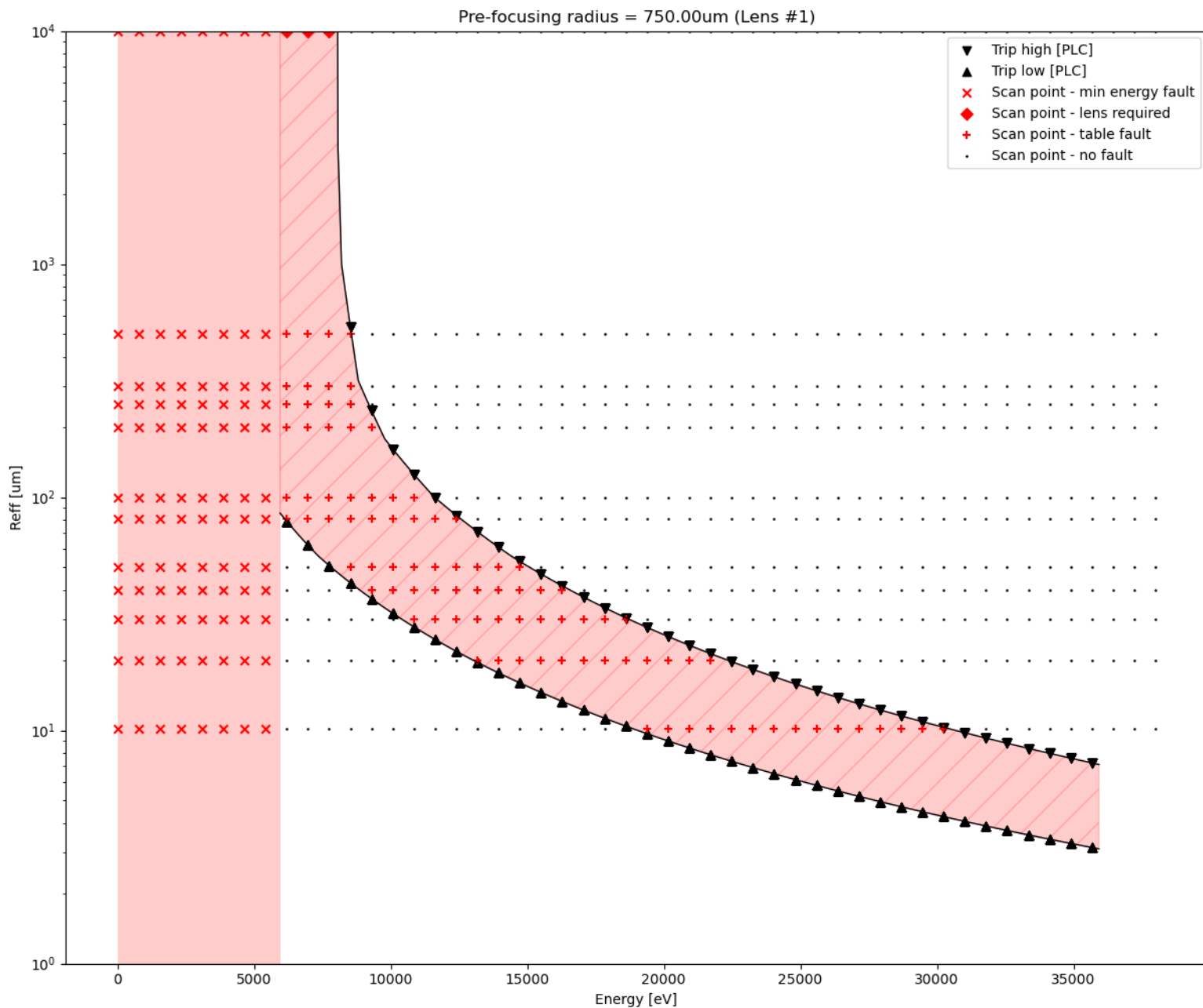| Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
33346.94	3.82	500.00	7.53	0	0	0	0	0
34122.45	3.65	500.00	6.38	0	0	0	0	0
34897.96	3.50	500.00	4.74	0	0	0	0	0
35673.47	3.35	500.00	3.55	0	0	0	0	0
36448.98	0.00	500.00	0.00	0	0	0	0	0
37224.49	0.00	500.00	0.00	0	0	0	0	0
38000.00	0.00	500.00	0.00	0	0	0	0	0

Scan 2: 750.000μm pre-focusing lens

Data generated: 2023-07-12 22:54:20
bluesky scan sweep_energy_plan with 750.000μm pre-focusing lens..

Scan Information

1. Choose a few transfocator lens sets to span the effective radius range.
2. For each of those lens sets, scan energy at regular intervals.
3. Each marker on the plot represents one of those scan points.
4. Record if PLC reported a fault and why.

Pre-focusing radius = 750.00um (Lens #1)

Plot / Table Information

No fault indicates that a data point was checked but no fault reported by PLC.
Trip Low and **Trip High** are values from the spreadsheet table, interpolated by the PLC and reported to EPICS.
The lines drawn around these regions and the highlighted regions are directly from the spreadsheet.
Min Energy Fault indicates that it does not meet minimum energy requirement for a given XRT lens.
Table Fault indicates a fault from the spreadsheet table disallowed region.
Lens Required Fault markers are clipped at the bottom of the plot.

Scan 2: 750.000μm pre-focusing lens: Scan Data Table

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
0.00	0.00	10000.00	0.00	1	0	1	0	0
775.51	0.00	10000.00	0.00	1	0	1	0	0
1551.02	0.00	10000.00	0.00	1	0	1	0	0
2326.53	0.00	10000.00	0.00	1	0	1	0	0
3102.04	0.00	10000.00	0.00	1	0	1	0	0
3877.55	0.00	10000.00	0.00	1	0	1	0	0
4653.06	0.00	10000.00	0.00	1	0	1	0	0
5428.57	0.00	10000.00	0.00	1	0	1	0	0
6204.08	78.79	10000.00	10000.00	1	0	0	1	1
6979.59	62.19	10000.00	10000.00	1	0	0	1	1
7755.10	50.90	10000.00	10000.00	1	0	0	1	1
8530.61	42.90	10000.00	539.26	0	0	0	0	0
9306.12	36.68	10000.00	235.21	0	0	0	0	0
10081.63	31.76	10000.00	161.03	0	0	0	0	0
10857.14	27.78	10000.00	125.36	0	0	0	0	0
11632.65	24.52	10000.00	99.43	0	0	0	0	0
12408.16	21.81	10000.00	83.63	0	0	0	0	0
13183.67	19.54	10000.00	71.09	0	0	0	0	0
13959.18	17.61	10000.00	60.99	0	0	0	0	0
14734.69	15.96	10000.00	53.02	0	0	0	0	0
15510.20	14.54	10000.00	46.82	0	0	0	0	0
16285.71	13.30	10000.00	41.65	0	0	0	0	0
17061.22	12.22	10000.00	37.29	0	0	0	0	0
17836.73	11.27	10000.00	33.57	0	0	0	0	0
18612.24	10.42	10000.00	30.39	0	0	0	0	0
19387.76	9.67	10000.00	27.64	0	0	0	0	0
20163.27	9.00	10000.00	25.25	0	0	0	0	0
20938.78	8.40	10000.00	23.16	0	0	0	0	0
21714.29	7.85	10000.00	21.32	0	0	0	0	0
22489.80	7.36	10000.00	19.70	0	0	0	0	0
23265.31	6.92	10000.00	18.25	0	0	0	0	0
24040.82	6.51	10000.00	16.97	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
24816.33	6.14	10000.00	15.81	0	0	0	0	0
25591.84	5.80	10000.00	14.78	0	0	0	0	0
26367.35	5.49	10000.00	13.84	0	0	0	0	0
27142.86	5.21	10000.00	13.00	0	0	0	0	0
27918.37	4.94	10000.00	12.23	0	0	0	0	0
28693.88	4.70	10000.00	11.53	0	0	0	0	0
29469.39	4.47	10000.00	10.89	0	0	0	0	0
30244.90	4.26	10000.00	10.30	0	0	0	0	0
31020.41	4.07	10000.00	9.76	0	0	0	0	0
31795.92	3.89	10000.00	9.26	0	0	0	0	0
32571.43	3.72	10000.00	8.80	0	0	0	0	0
33346.94	3.56	10000.00	8.37	0	0	0	0	0
34122.45	3.41	10000.00	7.97	0	0	0	0	0
34897.96	3.27	10000.00	7.59	0	0	0	0	0
35673.47	3.14	10000.00	7.25	0	0	0	0	0
36448.98	0.00	10000.00	0.00	0	0	0	0	0
37224.49	0.00	10000.00	0.00	0	0	0	0	0
38000.00	0.00	10000.00	0.00	0	0	0	0	0
0.00	0.00	10.17	0.00	1	0	1	0	0
775.51	0.00	10.17	0.00	1	0	1	0	0
1551.02	0.00	10.17	0.00	1	0	1	0	0
2326.53	0.00	10.17	0.00	1	0	1	0	0
3102.04	0.00	10.17	0.00	1	0	1	0	0
3877.55	0.00	10.17	0.00	1	0	1	0	0
4653.06	0.00	10.17	0.00	1	0	1	0	0
5428.57	0.00	10.17	0.00	1	0	1	0	0
6204.08	78.79	10.17	10000.00	0	0	0	0	0
6979.59	62.19	10.17	10000.00	0	0	0	0	0
7755.10	50.90	10.17	10000.00	0	0	0	0	0
8530.61	42.90	10.17	539.26	0	0	0	0	0
9306.12	36.68	10.17	235.21	0	0	0	0	0
10081.63	31.76	10.17	161.03	0	0	0	0	0
10857.14	27.78	10.17	125.36	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
11632.65	24.52	10.17	99.43	0	0	0	0	0
12408.16	21.81	10.17	83.63	0	0	0	0	0
13183.67	19.54	10.17	71.09	0	0	0	0	0
13959.18	17.61	10.17	60.99	0	0	0	0	0
14734.69	15.96	10.17	53.02	0	0	0	0	0
15510.20	14.54	10.17	46.82	0	0	0	0	0
16285.71	13.30	10.17	41.65	0	0	0	0	0
17061.22	12.22	10.17	37.29	0	0	0	0	0
17836.73	11.27	10.17	33.57	0	0	0	0	0
18612.24	10.42	10.17	30.39	0	0	0	0	0
19387.76	9.67	10.17	27.64	1	0	0	0	1
20163.27	9.00	10.17	25.25	1	0	0	0	1
20938.78	8.40	10.17	23.16	1	0	0	0	1
21714.29	7.85	10.17	21.32	1	0	0	0	1
22489.80	7.36	10.17	19.70	1	0	0	0	1
23265.31	6.92	10.17	18.25	1	0	0	0	1
24040.82	6.51	10.17	16.97	1	0	0	0	1
24816.33	6.14	10.17	15.81	1	0	0	0	1
25591.84	5.80	10.17	14.78	1	0	0	0	1
26367.35	5.49	10.17	13.84	1	0	0	0	1
27142.86	5.21	10.17	13.00	1	0	0	0	1
27918.37	4.94	10.17	12.23	1	0	0	0	1
28693.88	4.70	10.17	11.53	1	0	0	0	1
29469.39	4.47	10.17	10.89	1	0	0	0	1
30244.90	4.26	10.17	10.30	1	0	0	0	1
31020.41	4.07	10.17	9.76	0	0	0	0	0
31795.92	3.89	10.17	9.26	0	0	0	0	0
32571.43	3.72	10.17	8.80	0	0	0	0	0
33346.94	3.56	10.17	8.37	0	0	0	0	0
34122.45	3.41	10.17	7.97	0	0	0	0	0
34897.96	3.27	10.17	7.59	0	0	0	0	0
35673.47	3.14	10.17	7.25	0	0	0	0	0
36448.98	0.00	10.17	0.00	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
37224.49	0.00	10.17	0.00	0	0	0	0	0
38000.00	0.00	10.17	0.00	0	0	0	0	0
0.00	0.00	20.00	0.00	1	0	1	0	0
775.51	0.00	20.00	0.00	1	0	1	0	0
1551.02	0.00	20.00	0.00	1	0	1	0	0
2326.53	0.00	20.00	0.00	1	0	1	0	0
3102.04	0.00	20.00	0.00	1	0	1	0	0
3877.55	0.00	20.00	0.00	1	0	1	0	0
4653.06	0.00	20.00	0.00	1	0	1	0	0
5428.57	0.00	20.00	0.00	1	0	1	0	0
6204.08	78.79	20.00	10000.00	0	0	0	0	0
6979.59	62.19	20.00	10000.00	0	0	0	0	0
7755.10	50.90	20.00	10000.00	0	0	0	0	0
8530.61	42.90	20.00	539.26	0	0	0	0	0
9306.12	36.68	20.00	235.21	0	0	0	0	0
10081.63	31.76	20.00	161.03	0	0	0	0	0
10857.14	27.78	20.00	125.36	0	0	0	0	0
11632.65	24.52	20.00	99.43	0	0	0	0	0
12408.16	21.81	20.00	83.63	0	0	0	0	0
13183.67	19.54	20.00	71.09	1	0	0	0	1
13959.18	17.61	20.00	60.99	1	0	0	0	1
14734.69	15.96	20.00	53.02	1	0	0	0	1
15510.20	14.54	20.00	46.82	1	0	0	0	1
16285.71	13.30	20.00	41.65	1	0	0	0	1
17061.22	12.22	20.00	37.29	1	0	0	0	1
17836.73	11.27	20.00	33.57	1	0	0	0	1
18612.24	10.42	20.00	30.39	1	0	0	0	1
19387.76	9.67	20.00	27.64	1	0	0	0	1
20163.27	9.00	20.00	25.25	1	0	0	0	1
20938.78	8.40	20.00	23.16	1	0	0	0	1
21714.29	7.85	20.00	21.32	1	0	0	0	1
22489.80	7.36	20.00	19.70	0	0	0	0	0
23265.31	6.92	20.00	18.25	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
24040.82	6.51	20.00	16.97	0	0	0	0	0
24816.33	6.14	20.00	15.81	0	0	0	0	0
25591.84	5.80	20.00	14.78	0	0	0	0	0
26367.35	5.49	20.00	13.84	0	0	0	0	0
27142.86	5.21	20.00	13.00	0	0	0	0	0
27918.37	4.94	20.00	12.23	0	0	0	0	0
28693.88	4.70	20.00	11.53	0	0	0	0	0
29469.39	4.47	20.00	10.89	0	0	0	0	0
30244.90	4.26	20.00	10.30	0	0	0	0	0
31020.41	4.07	20.00	9.76	0	0	0	0	0
31795.92	3.89	20.00	9.26	0	0	0	0	0
32571.43	3.72	20.00	8.80	0	0	0	0	0
33346.94	3.56	20.00	8.37	0	0	0	0	0
34122.45	3.41	20.00	7.97	0	0	0	0	0
34897.96	3.27	20.00	7.59	0	0	0	0	0
35673.47	3.14	20.00	7.25	0	0	0	0	0
36448.98	0.00	20.00	0.00	0	0	0	0	0
37224.49	0.00	20.00	0.00	0	0	0	0	0
38000.00	0.00	20.00	0.00	0	0	0	0	0
0.00	0.00	30.00	0.00	1	0	1	0	0
775.51	0.00	30.00	0.00	1	0	1	0	0
1551.02	0.00	30.00	0.00	1	0	1	0	0
2326.53	0.00	30.00	0.00	1	0	1	0	0
3102.04	0.00	30.00	0.00	1	0	1	0	0
3877.55	0.00	30.00	0.00	1	0	1	0	0
4653.06	0.00	30.00	0.00	1	0	1	0	0
5428.57	0.00	30.00	0.00	1	0	1	0	0
6204.08	78.79	30.00	10000.00	0	0	0	0	0
6979.59	62.19	30.00	10000.00	0	0	0	0	0
7755.10	50.90	30.00	10000.00	0	0	0	0	0
8530.61	42.90	30.00	539.26	0	0	0	0	0
9306.12	36.68	30.00	235.21	0	0	0	0	0
10081.63	31.76	30.00	161.03	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
10857.14	27.78	30.00	125.36	1	0	0	0	1
11632.65	24.52	30.00	99.43	1	0	0	0	1
12408.16	21.81	30.00	83.63	1	0	0	0	1
13183.67	19.54	30.00	71.09	1	0	0	0	1
13959.18	17.61	30.00	60.99	1	0	0	0	1
14734.69	15.96	30.00	53.02	1	0	0	0	1
15510.20	14.54	30.00	46.82	1	0	0	0	1
16285.71	13.30	30.00	41.65	1	0	0	0	1
17061.22	12.22	30.00	37.29	1	0	0	0	1
17836.73	11.27	30.00	33.57	1	0	0	0	1
18612.24	10.42	30.00	30.39	1	0	0	0	1
19387.76	9.67	30.00	27.64	0	0	0	0	0
20163.27	9.00	30.00	25.25	0	0	0	0	0
20938.78	8.40	30.00	23.16	0	0	0	0	0
21714.29	7.85	30.00	21.32	0	0	0	0	0
22489.80	7.36	30.00	19.70	0	0	0	0	0
23265.31	6.92	30.00	18.25	0	0	0	0	0
24040.82	6.51	30.00	16.97	0	0	0	0	0
24816.33	6.14	30.00	15.81	0	0	0	0	0
25591.84	5.80	30.00	14.78	0	0	0	0	0
26367.35	5.49	30.00	13.84	0	0	0	0	0
27142.86	5.21	30.00	13.00	0	0	0	0	0
27918.37	4.94	30.00	12.23	0	0	0	0	0
28693.88	4.70	30.00	11.53	0	0	0	0	0
29469.39	4.47	30.00	10.89	0	0	0	0	0
30244.90	4.26	30.00	10.30	0	0	0	0	0
31020.41	4.07	30.00	9.76	0	0	0	0	0
31795.92	3.89	30.00	9.26	0	0	0	0	0
32571.43	3.72	30.00	8.80	0	0	0	0	0
33346.94	3.56	30.00	8.37	0	0	0	0	0
34122.45	3.41	30.00	7.97	0	0	0	0	0
34897.96	3.27	30.00	7.59	0	0	0	0	0
35673.47	3.14	30.00	7.25	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
36448.98	0.00	30.00	0.00	0	0	0	0	0
37224.49	0.00	30.00	0.00	0	0	0	0	0
38000.00	0.00	30.00	0.00	0	0	0	0	0
0.00	0.00	40.00	0.00	1	0	1	0	0
775.51	0.00	40.00	0.00	1	0	1	0	0
1551.02	0.00	40.00	0.00	1	0	1	0	0
2326.53	0.00	40.00	0.00	1	0	1	0	0
3102.04	0.00	40.00	0.00	1	0	1	0	0
3877.55	0.00	40.00	0.00	1	0	1	0	0
4653.06	0.00	40.00	0.00	1	0	1	0	0
5428.57	0.00	40.00	0.00	1	0	1	0	0
6204.08	78.79	40.00	10000.00	0	0	0	0	0
6979.59	62.19	40.00	10000.00	0	0	0	0	0
7755.10	50.90	40.00	10000.00	0	0	0	0	0
8530.61	42.90	40.00	539.26	0	0	0	0	0
9306.12	36.68	40.00	235.21	1	0	0	0	1
10081.63	31.76	40.00	161.03	1	0	0	0	1
10857.14	27.78	40.00	125.36	1	0	0	0	1
11632.65	24.52	40.00	99.43	1	0	0	0	1
12408.16	21.81	40.00	83.63	1	0	0	0	1
13183.67	19.54	40.00	71.09	1	0	0	0	1
13959.18	17.61	40.00	60.99	1	0	0	0	1
14734.69	15.96	40.00	53.02	1	0	0	0	1
15510.20	14.54	40.00	46.82	1	0	0	0	1
16285.71	13.30	40.00	41.65	1	0	0	0	1
17061.22	12.22	40.00	37.29	0	0	0	0	0
17836.73	11.27	40.00	33.57	0	0	0	0	0
18612.24	10.42	40.00	30.39	0	0	0	0	0
19387.76	9.67	40.00	27.64	0	0	0	0	0
20163.27	9.00	40.00	25.25	0	0	0	0	0
20938.78	8.40	40.00	23.16	0	0	0	0	0
21714.29	7.85	40.00	21.32	0	0	0	0	0
22489.80	7.36	40.00	19.70	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
23265.31	6.92	40.00	18.25	0	0	0	0	0
24040.82	6.51	40.00	16.97	0	0	0	0	0
24816.33	6.14	40.00	15.81	0	0	0	0	0
25591.84	5.80	40.00	14.78	0	0	0	0	0
26367.35	5.49	40.00	13.84	0	0	0	0	0
27142.86	5.21	40.00	13.00	0	0	0	0	0
27918.37	4.94	40.00	12.23	0	0	0	0	0
28693.88	4.70	40.00	11.53	0	0	0	0	0
29469.39	4.47	40.00	10.89	0	0	0	0	0
30244.90	4.26	40.00	10.30	0	0	0	0	0
31020.41	4.07	40.00	9.76	0	0	0	0	0
31795.92	3.89	40.00	9.26	0	0	0	0	0
32571.43	3.72	40.00	8.80	0	0	0	0	0
33346.94	3.56	40.00	8.37	0	0	0	0	0
34122.45	3.41	40.00	7.97	0	0	0	0	0
34897.96	3.27	40.00	7.59	0	0	0	0	0
35673.47	3.14	40.00	7.25	0	0	0	0	0
36448.98	0.00	40.00	0.00	0	0	0	0	0
37224.49	0.00	40.00	0.00	0	0	0	0	0
38000.00	0.00	40.00	0.00	0	0	0	0	0
0.00	0.00	50.00	0.00	1	0	1	0	0
775.51	0.00	50.00	0.00	1	0	1	0	0
1551.02	0.00	50.00	0.00	1	0	1	0	0
2326.53	0.00	50.00	0.00	1	0	1	0	0
3102.04	0.00	50.00	0.00	1	0	1	0	0
3877.55	0.00	50.00	0.00	1	0	1	0	0
4653.06	0.00	50.00	0.00	1	0	1	0	0
5428.57	0.00	50.00	0.00	1	0	1	0	0
6204.08	78.79	50.00	10000.00	0	0	0	0	0
6979.59	62.19	50.00	10000.00	0	0	0	0	0
7755.10	50.90	50.00	10000.00	0	0	0	0	0
8530.61	42.90	50.00	539.26	1	0	0	0	1
9306.12	36.68	50.00	235.21	1	0	0	0	1

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
10081.63	31.76	50.00	161.03	1	0	0	0	1
10857.14	27.78	50.00	125.36	1	0	0	0	1
11632.65	24.52	50.00	99.43	1	0	0	0	1
12408.16	21.81	50.00	83.63	1	0	0	0	1
13183.67	19.54	50.00	71.09	1	0	0	0	1
13959.18	17.61	50.00	60.99	1	0	0	0	1
14734.69	15.96	50.00	53.02	1	0	0	0	1
15510.20	14.54	50.00	46.82	0	0	0	0	0
16285.71	13.30	50.00	41.65	0	0	0	0	0
17061.22	12.22	50.00	37.29	0	0	0	0	0
17836.73	11.27	50.00	33.57	0	0	0	0	0
18612.24	10.42	50.00	30.39	0	0	0	0	0
19387.76	9.67	50.00	27.64	0	0	0	0	0
20163.27	9.00	50.00	25.25	0	0	0	0	0
20938.78	8.40	50.00	23.16	0	0	0	0	0
21714.29	7.85	50.00	21.32	0	0	0	0	0
22489.80	7.36	50.00	19.70	0	0	0	0	0
23265.31	6.92	50.00	18.25	0	0	0	0	0
24040.82	6.51	50.00	16.97	0	0	0	0	0
24816.33	6.14	50.00	15.81	0	0	0	0	0
25591.84	5.80	50.00	14.78	0	0	0	0	0
26367.35	5.49	50.00	13.84	0	0	0	0	0
27142.86	5.21	50.00	13.00	0	0	0	0	0
27918.37	4.94	50.00	12.23	0	0	0	0	0
28693.88	4.70	50.00	11.53	0	0	0	0	0
29469.39	4.47	50.00	10.89	0	0	0	0	0
30244.90	4.26	50.00	10.30	0	0	0	0	0
31020.41	4.07	50.00	9.76	0	0	0	0	0
31795.92	3.89	50.00	9.26	0	0	0	0	0
32571.43	3.72	50.00	8.80	0	0	0	0	0
33346.94	3.56	50.00	8.37	0	0	0	0	0
34122.45	3.41	50.00	7.97	0	0	0	0	0
34897.96	3.27	50.00	7.59	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
35673.47	3.14	50.00	7.25	0	0	0	0	0
36448.98	0.00	50.00	0.00	0	0	0	0	0
37224.49	0.00	50.00	0.00	0	0	0	0	0
38000.00	0.00	50.00	0.00	0	0	0	0	0
0.00	0.00	81.08	0.00	1	0	1	0	0
775.51	0.00	81.08	0.00	1	0	1	0	0
1551.02	0.00	81.08	0.00	1	0	1	0	0
2326.53	0.00	81.08	0.00	1	0	1	0	0
3102.04	0.00	81.08	0.00	1	0	1	0	0
3877.55	0.00	81.08	0.00	1	0	1	0	0
4653.06	0.00	81.08	0.00	1	0	1	0	0
5428.57	0.00	81.08	0.00	1	0	1	0	0
6204.08	78.79	81.08	10000.00	1	0	0	0	1
6979.59	62.19	81.08	10000.00	1	0	0	0	1
7755.10	50.90	81.08	10000.00	1	0	0	0	1
8530.61	42.90	81.08	539.26	1	0	0	0	1
9306.12	36.68	81.08	235.21	1	0	0	0	1
10081.63	31.76	81.08	161.03	1	0	0	0	1
10857.14	27.78	81.08	125.36	1	0	0	0	1
11632.65	24.52	81.08	99.43	1	0	0	0	1
12408.16	21.81	81.08	83.63	1	0	0	0	1
13183.67	19.54	81.08	71.09	0	0	0	0	0
13959.18	17.61	81.08	60.99	0	0	0	0	0
14734.69	15.96	81.08	53.02	0	0	0	0	0
15510.20	14.54	81.08	46.82	0	0	0	0	0
16285.71	13.30	81.08	41.65	0	0	0	0	0
17061.22	12.22	81.08	37.29	0	0	0	0	0
17836.73	11.27	81.08	33.57	0	0	0	0	0
18612.24	10.42	81.08	30.39	0	0	0	0	0
19387.76	9.67	81.08	27.64	0	0	0	0	0
20163.27	9.00	81.08	25.25	0	0	0	0	0
20938.78	8.40	81.08	23.16	0	0	0	0	0
21714.29	7.85	81.08	21.32	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
22489.80	7.36	81.08	19.70	0	0	0	0	0
23265.31	6.92	81.08	18.25	0	0	0	0	0
24040.82	6.51	81.08	16.97	0	0	0	0	0
24816.33	6.14	81.08	15.81	0	0	0	0	0
25591.84	5.80	81.08	14.78	0	0	0	0	0
26367.35	5.49	81.08	13.84	0	0	0	0	0
27142.86	5.21	81.08	13.00	0	0	0	0	0
27918.37	4.94	81.08	12.23	0	0	0	0	0
28693.88	4.70	81.08	11.53	0	0	0	0	0
29469.39	4.47	81.08	10.89	0	0	0	0	0
30244.90	4.26	81.08	10.30	0	0	0	0	0
31020.41	4.07	81.08	9.76	0	0	0	0	0
31795.92	3.89	81.08	9.26	0	0	0	0	0
32571.43	3.72	81.08	8.80	0	0	0	0	0
33346.94	3.56	81.08	8.37	0	0	0	0	0
34122.45	3.41	81.08	7.97	0	0	0	0	0
34897.96	3.27	81.08	7.59	0	0	0	0	0
35673.47	3.14	81.08	7.25	0	0	0	0	0
36448.98	0.00	81.08	0.00	0	0	0	0	0
37224.49	0.00	81.08	0.00	0	0	0	0	0
38000.00	0.00	81.08	0.00	0	0	0	0	0
0.00	0.00	100.00	0.00	1	0	1	0	0
775.51	0.00	100.00	0.00	1	0	1	0	0
1551.02	0.00	100.00	0.00	1	0	1	0	0
2326.53	0.00	100.00	0.00	1	0	1	0	0
3102.04	0.00	100.00	0.00	1	0	1	0	0
3877.55	0.00	100.00	0.00	1	0	1	0	0
4653.06	0.00	100.00	0.00	1	0	1	0	0
5428.57	0.00	100.00	0.00	1	0	1	0	0
6204.08	78.79	100.00	10000.00	1	0	0	0	1
6979.59	62.19	100.00	10000.00	1	0	0	0	1
7755.10	50.90	100.00	10000.00	1	0	0	0	1
8530.61	42.90	100.00	539.26	1	0	0	0	1

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
9306.12	36.68	100.00	235.21	1	0	0	0	1
10081.63	31.76	100.00	161.03	1	0	0	0	1
10857.14	27.78	100.00	125.36	1	0	0	0	1
11632.65	24.52	100.00	99.43	0	0	0	0	0
12408.16	21.81	100.00	83.63	0	0	0	0	0
13183.67	19.54	100.00	71.09	0	0	0	0	0
13959.18	17.61	100.00	60.99	0	0	0	0	0
14734.69	15.96	100.00	53.02	0	0	0	0	0
15510.20	14.54	100.00	46.82	0	0	0	0	0
16285.71	13.30	100.00	41.65	0	0	0	0	0
17061.22	12.22	100.00	37.29	0	0	0	0	0
17836.73	11.27	100.00	33.57	0	0	0	0	0
18612.24	10.42	100.00	30.39	0	0	0	0	0
19387.76	9.67	100.00	27.64	0	0	0	0	0
20163.27	9.00	100.00	25.25	0	0	0	0	0
20938.78	8.40	100.00	23.16	0	0	0	0	0
21714.29	7.85	100.00	21.32	0	0	0	0	0
22489.80	7.36	100.00	19.70	0	0	0	0	0
23265.31	6.92	100.00	18.25	0	0	0	0	0
24040.82	6.51	100.00	16.97	0	0	0	0	0
24816.33	6.14	100.00	15.81	0	0	0	0	0
25591.84	5.80	100.00	14.78	0	0	0	0	0
26367.35	5.49	100.00	13.84	0	0	0	0	0
27142.86	5.21	100.00	13.00	0	0	0	0	0
27918.37	4.94	100.00	12.23	0	0	0	0	0
28693.88	4.70	100.00	11.53	0	0	0	0	0
29469.39	4.47	100.00	10.89	0	0	0	0	0
30244.90	4.26	100.00	10.30	0	0	0	0	0
31020.41	4.07	100.00	9.76	0	0	0	0	0
31795.92	3.89	100.00	9.26	0	0	0	0	0
32571.43	3.72	100.00	8.80	0	0	0	0	0
33346.94	3.56	100.00	8.37	0	0	0	0	0
34122.45	3.41	100.00	7.97	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
34897.96	3.27	100.00	7.59	0	0	0	0	0
35673.47	3.14	100.00	7.25	0	0	0	0	0
36448.98	0.00	100.00	0.00	0	0	0	0	0
37224.49	0.00	100.00	0.00	0	0	0	0	0
38000.00	0.00	100.00	0.00	0	0	0	0	0
0.00	0.00	200.00	0.00	1	0	1	0	0
775.51	0.00	200.00	0.00	1	0	1	0	0
1551.02	0.00	200.00	0.00	1	0	1	0	0
2326.53	0.00	200.00	0.00	1	0	1	0	0
3102.04	0.00	200.00	0.00	1	0	1	0	0
3877.55	0.00	200.00	0.00	1	0	1	0	0
4653.06	0.00	200.00	0.00	1	0	1	0	0
5428.57	0.00	200.00	0.00	1	0	1	0	0
6204.08	78.79	200.00	10000.00	1	0	0	0	1
6979.59	62.19	200.00	10000.00	1	0	0	0	1
7755.10	50.90	200.00	10000.00	1	0	0	0	1
8530.61	42.90	200.00	539.26	1	0	0	0	1
9306.12	36.68	200.00	235.21	1	0	0	0	1
10081.63	31.76	200.00	161.03	0	0	0	0	0
10857.14	27.78	200.00	125.36	0	0	0	0	0
11632.65	24.52	200.00	99.43	0	0	0	0	0
12408.16	21.81	200.00	83.63	0	0	0	0	0
13183.67	19.54	200.00	71.09	0	0	0	0	0
13959.18	17.61	200.00	60.99	0	0	0	0	0
14734.69	15.96	200.00	53.02	0	0	0	0	0
15510.20	14.54	200.00	46.82	0	0	0	0	0
16285.71	13.30	200.00	41.65	0	0	0	0	0
17061.22	12.22	200.00	37.29	0	0	0	0	0
17836.73	11.27	200.00	33.57	0	0	0	0	0
18612.24	10.42	200.00	30.39	0	0	0	0	0
19387.76	9.67	200.00	27.64	0	0	0	0	0
20163.27	9.00	200.00	25.25	0	0	0	0	0
20938.78	8.40	200.00	23.16	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
21714.29	7.85	200.00	21.32	0	0	0	0	0
22489.80	7.36	200.00	19.70	0	0	0	0	0
23265.31	6.92	200.00	18.25	0	0	0	0	0
24040.82	6.51	200.00	16.97	0	0	0	0	0
24816.33	6.14	200.00	15.81	0	0	0	0	0
25591.84	5.80	200.00	14.78	0	0	0	0	0
26367.35	5.49	200.00	13.84	0	0	0	0	0
27142.86	5.21	200.00	13.00	0	0	0	0	0
27918.37	4.94	200.00	12.23	0	0	0	0	0
28693.88	4.70	200.00	11.53	0	0	0	0	0
29469.39	4.47	200.00	10.89	0	0	0	0	0
30244.90	4.26	200.00	10.30	0	0	0	0	0
31020.41	4.07	200.00	9.76	0	0	0	0	0
31795.92	3.89	200.00	9.26	0	0	0	0	0
32571.43	3.72	200.00	8.80	0	0	0	0	0
33346.94	3.56	200.00	8.37	0	0	0	0	0
34122.45	3.41	200.00	7.97	0	0	0	0	0
34897.96	3.27	200.00	7.59	0	0	0	0	0
35673.47	3.14	200.00	7.25	0	0	0	0	0
36448.98	0.00	200.00	0.00	0	0	0	0	0
37224.49	0.00	200.00	0.00	0	0	0	0	0
38000.00	0.00	200.00	0.00	0	0	0	0	0
0.00	0.00	250.00	0.00	1	0	1	0	0
775.51	0.00	250.00	0.00	1	0	1	0	0
1551.02	0.00	250.00	0.00	1	0	1	0	0
2326.53	0.00	250.00	0.00	1	0	1	0	0
3102.04	0.00	250.00	0.00	1	0	1	0	0
3877.55	0.00	250.00	0.00	1	0	1	0	0
4653.06	0.00	250.00	0.00	1	0	1	0	0
5428.57	0.00	250.00	0.00	1	0	1	0	0
6204.08	78.79	250.00	10000.00	1	0	0	0	1
6979.59	62.19	250.00	10000.00	1	0	0	0	1
7755.10	50.90	250.00	10000.00	1	0	0	0	1

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
8530.61	42.90	250.00	539.26	1	0	0	0	1
9306.12	36.68	250.00	235.21	0	0	0	0	0
10081.63	31.76	250.00	161.03	0	0	0	0	0
10857.14	27.78	250.00	125.36	0	0	0	0	0
11632.65	24.52	250.00	99.43	0	0	0	0	0
12408.16	21.81	250.00	83.63	0	0	0	0	0
13183.67	19.54	250.00	71.09	0	0	0	0	0
13959.18	17.61	250.00	60.99	0	0	0	0	0
14734.69	15.96	250.00	53.02	0	0	0	0	0
15510.20	14.54	250.00	46.82	0	0	0	0	0
16285.71	13.30	250.00	41.65	0	0	0	0	0
17061.22	12.22	250.00	37.29	0	0	0	0	0
17836.73	11.27	250.00	33.57	0	0	0	0	0
18612.24	10.42	250.00	30.39	0	0	0	0	0
19387.76	9.67	250.00	27.64	0	0	0	0	0
20163.27	9.00	250.00	25.25	0	0	0	0	0
20938.78	8.40	250.00	23.16	0	0	0	0	0
21714.29	7.85	250.00	21.32	0	0	0	0	0
22489.80	7.36	250.00	19.70	0	0	0	0	0
23265.31	6.92	250.00	18.25	0	0	0	0	0
24040.82	6.51	250.00	16.97	0	0	0	0	0
24816.33	6.14	250.00	15.81	0	0	0	0	0
25591.84	5.80	250.00	14.78	0	0	0	0	0
26367.35	5.49	250.00	13.84	0	0	0	0	0
27142.86	5.21	250.00	13.00	0	0	0	0	0
27918.37	4.94	250.00	12.23	0	0	0	0	0
28693.88	4.70	250.00	11.53	0	0	0	0	0
29469.39	4.47	250.00	10.89	0	0	0	0	0
30244.90	4.26	250.00	10.30	0	0	0	0	0
31020.41	4.07	250.00	9.76	0	0	0	0	0
31795.92	3.89	250.00	9.26	0	0	0	0	0
32571.43	3.72	250.00	8.80	0	0	0	0	0
33346.94	3.56	250.00	8.37	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
34122.45	3.41	250.00	7.97	0	0	0	0	0
34897.96	3.27	250.00	7.59	0	0	0	0	0
35673.47	3.14	250.00	7.25	0	0	0	0	0
36448.98	0.00	250.00	0.00	0	0	0	0	0
37224.49	0.00	250.00	0.00	0	0	0	0	0
38000.00	0.00	250.00	0.00	0	0	0	0	0
0.00	0.00	300.00	0.00	1	0	1	0	0
775.51	0.00	300.00	0.00	1	0	1	0	0
1551.02	0.00	300.00	0.00	1	0	1	0	0
2326.53	0.00	300.00	0.00	1	0	1	0	0
3102.04	0.00	300.00	0.00	1	0	1	0	0
3877.55	0.00	300.00	0.00	1	0	1	0	0
4653.06	0.00	300.00	0.00	1	0	1	0	0
5428.57	0.00	300.00	0.00	1	0	1	0	0
6204.08	78.79	300.00	10000.00	1	0	0	0	1
6979.59	62.19	300.00	10000.00	1	0	0	0	1
7755.10	50.90	300.00	10000.00	1	0	0	0	1
8530.61	42.90	300.00	539.26	1	0	0	0	1
9306.12	36.68	300.00	235.21	0	0	0	0	0
10081.63	31.76	300.00	161.03	0	0	0	0	0
10857.14	27.78	300.00	125.36	0	0	0	0	0
11632.65	24.52	300.00	99.43	0	0	0	0	0
12408.16	21.81	300.00	83.63	0	0	0	0	0
13183.67	19.54	300.00	71.09	0	0	0	0	0
13959.18	17.61	300.00	60.99	0	0	0	0	0
14734.69	15.96	300.00	53.02	0	0	0	0	0
15510.20	14.54	300.00	46.82	0	0	0	0	0
16285.71	13.30	300.00	41.65	0	0	0	0	0
17061.22	12.22	300.00	37.29	0	0	0	0	0
17836.73	11.27	300.00	33.57	0	0	0	0	0
18612.24	10.42	300.00	30.39	0	0	0	0	0
19387.76	9.67	300.00	27.64	0	0	0	0	0
20163.27	9.00	300.00	25.25	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
20938.78	8.40	300.00	23.16	0	0	0	0	0
21714.29	7.85	300.00	21.32	0	0	0	0	0
22489.80	7.36	300.00	19.70	0	0	0	0	0
23265.31	6.92	300.00	18.25	0	0	0	0	0
24040.82	6.51	300.00	16.97	0	0	0	0	0
24816.33	6.14	300.00	15.81	0	0	0	0	0
25591.84	5.80	300.00	14.78	0	0	0	0	0
26367.35	5.49	300.00	13.84	0	0	0	0	0
27142.86	5.21	300.00	13.00	0	0	0	0	0
27918.37	4.94	300.00	12.23	0	0	0	0	0
28693.88	4.70	300.00	11.53	0	0	0	0	0
29469.39	4.47	300.00	10.89	0	0	0	0	0
30244.90	4.26	300.00	10.30	0	0	0	0	0
31020.41	4.07	300.00	9.76	0	0	0	0	0
31795.92	3.89	300.00	9.26	0	0	0	0	0
32571.43	3.72	300.00	8.80	0	0	0	0	0
33346.94	3.56	300.00	8.37	0	0	0	0	0
34122.45	3.41	300.00	7.97	0	0	0	0	0
34897.96	3.27	300.00	7.59	0	0	0	0	0
35673.47	3.14	300.00	7.25	0	0	0	0	0
36448.98	0.00	300.00	0.00	0	0	0	0	0
37224.49	0.00	300.00	0.00	0	0	0	0	0
38000.00	0.00	300.00	0.00	0	0	0	0	0
0.00	0.00	500.00	0.00	1	0	1	0	0
775.51	0.00	500.00	0.00	1	0	1	0	0
1551.02	0.00	500.00	0.00	1	0	1	0	0
2326.53	0.00	500.00	0.00	1	0	1	0	0
3102.04	0.00	500.00	0.00	1	0	1	0	0
3877.55	0.00	500.00	0.00	1	0	1	0	0
4653.06	0.00	500.00	0.00	1	0	1	0	0
5428.57	0.00	500.00	0.00	1	0	1	0	0
6204.08	78.79	500.00	10000.00	1	0	0	0	1
6979.59	62.19	500.00	10000.00	1	0	0	0	1

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
7755.10	50.90	500.00	10000.00	1	0	0	0	1
8530.61	42.90	500.00	539.26	1	0	0	0	1
9306.12	36.68	500.00	235.21	0	0	0	0	0
10081.63	31.76	500.00	161.03	0	0	0	0	0
10857.14	27.78	500.00	125.36	0	0	0	0	0
11632.65	24.52	500.00	99.43	0	0	0	0	0
12408.16	21.81	500.00	83.63	0	0	0	0	0
13183.67	19.54	500.00	71.09	0	0	0	0	0
13959.18	17.61	500.00	60.99	0	0	0	0	0
14734.69	15.96	500.00	53.02	0	0	0	0	0
15510.20	14.54	500.00	46.82	0	0	0	0	0
16285.71	13.30	500.00	41.65	0	0	0	0	0
17061.22	12.22	500.00	37.29	0	0	0	0	0
17836.73	11.27	500.00	33.57	0	0	0	0	0
18612.24	10.42	500.00	30.39	0	0	0	0	0
19387.76	9.67	500.00	27.64	0	0	0	0	0
20163.27	9.00	500.00	25.25	0	0	0	0	0
20938.78	8.40	500.00	23.16	0	0	0	0	0
21714.29	7.85	500.00	21.32	0	0	0	0	0
22489.80	7.36	500.00	19.70	0	0	0	0	0
23265.31	6.92	500.00	18.25	0	0	0	0	0
24040.82	6.51	500.00	16.97	0	0	0	0	0
24816.33	6.14	500.00	15.81	0	0	0	0	0
25591.84	5.80	500.00	14.78	0	0	0	0	0
26367.35	5.49	500.00	13.84	0	0	0	0	0
27142.86	5.21	500.00	13.00	0	0	0	0	0
27918.37	4.94	500.00	12.23	0	0	0	0	0
28693.88	4.70	500.00	11.53	0	0	0	0	0
29469.39	4.47	500.00	10.89	0	0	0	0	0
30244.90	4.26	500.00	10.30	0	0	0	0	0
31020.41	4.07	500.00	9.76	0	0	0	0	0
31795.92	3.89	500.00	9.26	0	0	0	0	0
32571.43	3.72	500.00	8.80	0	0	0	0	0

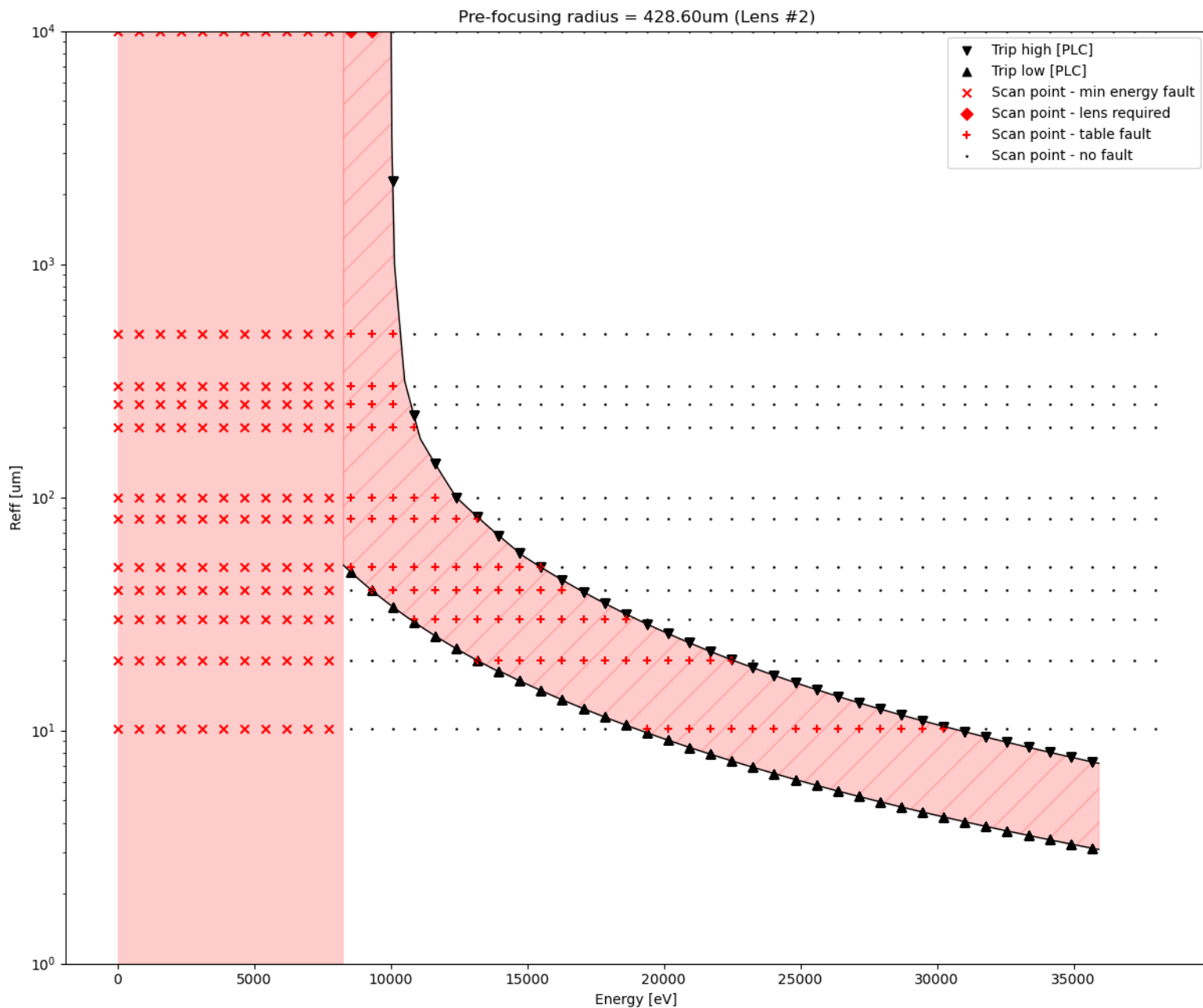| Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
33346.94	3.56	500.00	8.37	0	0	0	0	0
34122.45	3.41	500.00	7.97	0	0	0	0	0
34897.96	3.27	500.00	7.59	0	0	0	0	0
35673.47	3.14	500.00	7.25	0	0	0	0	0
36448.98	0.00	500.00	0.00	0	0	0	0	0
37224.49	0.00	500.00	0.00	0	0	0	0	0
38000.00	0.00	500.00	0.00	0	0	0	0	0

Scan 3: 428.571μm pre-focusing lens

Data generated: 2023-07-12 22:55:29
bluesky scan sweep_energy_plan with 428.571μm pre-focusing lens.

Scan Information

1. Choose a few transfocator lens sets to span the effective radius range.
2. For each of those lens sets, scan energy at regular intervals.
3. Each marker on the plot represents one of those scan points.
4. Record if PLC reported a fault and why.

Pre-focusing radius = 428.60um (Lens #2)

Plot / Table Information

No fault indicates that a data point was checked but no fault reported by PLC.

Trip Low and **Trip High** are values from the spreadsheet table, interpolated by the PLC and reported to EPICS.

The lines drawn around these regions and the highlighted regions are directly from the spreadsheet.

Min Energy Fault indicates that it does not meet minimum energy requirement for a given XRT lens.

Table Fault indicates a fault from the spreadsheet table disallowed region.

Lens Required Fault markers are clipped at the bottom of the plot.

Scan 3: 428.571μm pre-focusing lens: Scan Data Table

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
0.00	0.00	10000.00	0.00	1	0	1	0	0
775.51	0.00	10000.00	0.00	1	0	1	0	0
1551.02	0.00	10000.00	0.00	1	0	1	0	0
2326.53	0.00	10000.00	0.00	1	0	1	0	0
3102.04	0.00	10000.00	0.00	1	0	1	0	0
3877.55	0.00	10000.00	0.00	1	0	1	0	0
4653.06	0.00	10000.00	0.00	1	0	1	0	0
5428.57	0.00	10000.00	0.00	1	0	1	0	0
6204.08	0.00	10000.00	0.00	1	0	1	0	0
6979.59	0.00	10000.00	0.00	1	0	1	0	0
7755.10	0.00	10000.00	0.00	1	0	1	0	0
8530.61	47.89	10000.00	10000.00	1	0	0	1	1
9306.12	39.93	10000.00	10000.00	1	0	0	1	1
10081.63	33.87	10000.00	2263.58	0	0	0	0	0
10857.14	29.16	10000.00	224.18	0	0	0	0	0
11632.65	25.42	10000.00	139.24	0	0	0	0	0
12408.16	22.40	10000.00	99.99	0	0	0	0	0
13183.67	19.92	10000.00	82.26	0	0	0	0	0
13959.18	17.86	10000.00	68.49	0	0	0	0	0
14734.69	16.29	10000.00	57.58	0	0	0	0	0
15510.20	14.80	10000.00	50.05	0	0	0	0	0
16285.71	13.51	10000.00	44.14	0	0	0	0	0
17061.22	12.39	10000.00	39.21	0	0	0	0	0
17836.73	11.40	10000.00	35.07	0	0	0	0	0
18612.24	10.53	10000.00	31.56	0	0	0	0	0
19387.76	9.75	10000.00	28.56	0	0	0	0	0
20163.27	9.07	10000.00	25.98	0	0	0	0	0
20938.78	8.45	10000.00	23.74	0	0	0	0	0
21714.29	7.89	10000.00	21.78	0	0	0	0	0
22489.80	7.39	10000.00	20.06	0	0	0	0	0
23265.31	6.94	10000.00	18.55	0	0	0	0	0
24040.82	6.53	10000.00	17.21	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
24816.33	6.15	10000.00	16.02	0	0	0	0	0
25591.84	5.81	10000.00	14.95	0	0	0	0	0
26367.35	5.49	10000.00	13.99	0	0	0	0	0
27142.86	5.20	10000.00	13.12	0	0	0	0	0
27918.37	4.93	10000.00	12.34	0	0	0	0	0
28693.88	4.69	10000.00	11.63	0	0	0	0	0
29469.39	4.46	10000.00	10.99	0	0	0	0	0
30244.90	4.25	10000.00	10.40	0	0	0	0	0
31020.41	4.05	10000.00	9.86	0	0	0	0	0
31795.92	3.87	10000.00	9.35	0	0	0	0	0
32571.43	3.70	10000.00	8.89	0	0	0	0	0
33346.94	3.54	10000.00	8.45	0	0	0	0	0
34122.45	3.39	10000.00	8.05	0	0	0	0	0
34897.96	3.25	10000.00	7.67	0	0	0	0	0
35673.47	3.12	10000.00	7.32	0	0	0	0	0
36448.98	0.00	10000.00	0.00	0	0	0	0	0
37224.49	0.00	10000.00	0.00	0	0	0	0	0
38000.00	0.00	10000.00	0.00	0	0	0	0	0
0.00	0.00	10.17	0.00	1	0	1	0	0
775.51	0.00	10.17	0.00	1	0	1	0	0
1551.02	0.00	10.17	0.00	1	0	1	0	0
2326.53	0.00	10.17	0.00	1	0	1	0	0
3102.04	0.00	10.17	0.00	1	0	1	0	0
3877.55	0.00	10.17	0.00	1	0	1	0	0
4653.06	0.00	10.17	0.00	1	0	1	0	0
5428.57	0.00	10.17	0.00	1	0	1	0	0
6204.08	0.00	10.17	0.00	1	0	1	0	0
6979.59	0.00	10.17	0.00	1	0	1	0	0
7755.10	0.00	10.17	0.00	1	0	1	0	0
8530.61	47.89	10.17	10000.00	0	0	0	0	0
9306.12	39.93	10.17	10000.00	0	0	0	0	0
10081.63	33.87	10.17	2263.58	0	0	0	0	0
10857.14	29.16	10.17	224.18	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
11632.65	25.42	10.17	139.24	0	0	0	0	0
12408.16	22.40	10.17	99.99	0	0	0	0	0
13183.67	19.92	10.17	82.26	0	0	0	0	0
13959.18	17.86	10.17	68.49	0	0	0	0	0
14734.69	16.29	10.17	57.58	0	0	0	0	0
15510.20	14.80	10.17	50.05	0	0	0	0	0
16285.71	13.51	10.17	44.14	0	0	0	0	0
17061.22	12.39	10.17	39.21	0	0	0	0	0
17836.73	11.40	10.17	35.07	0	0	0	0	0
18612.24	10.53	10.17	31.56	0	0	0	0	0
19387.76	9.75	10.17	28.56	1	0	0	0	1
20163.27	9.07	10.17	25.98	1	0	0	0	1
20938.78	8.45	10.17	23.74	1	0	0	0	1
21714.29	7.89	10.17	21.78	1	0	0	0	1
22489.80	7.39	10.17	20.06	1	0	0	0	1
23265.31	6.94	10.17	18.55	1	0	0	0	1
24040.82	6.53	10.17	17.21	1	0	0	0	1
24816.33	6.15	10.17	16.02	1	0	0	0	1
25591.84	5.81	10.17	14.95	1	0	0	0	1
26367.35	5.49	10.17	13.99	1	0	0	0	1
27142.86	5.20	10.17	13.12	1	0	0	0	1
27918.37	4.93	10.17	12.34	1	0	0	0	1
28693.88	4.69	10.17	11.63	1	0	0	0	1
29469.39	4.46	10.17	10.99	1	0	0	0	1
30244.90	4.25	10.17	10.40	1	0	0	0	1
31020.41	4.05	10.17	9.86	0	0	0	0	0
31795.92	3.87	10.17	9.35	0	0	0	0	0
32571.43	3.70	10.17	8.89	0	0	0	0	0
33346.94	3.54	10.17	8.45	0	0	0	0	0
34122.45	3.39	10.17	8.05	0	0	0	0	0
34897.96	3.25	10.17	7.67	0	0	0	0	0
35673.47	3.12	10.17	7.32	0	0	0	0	0
36448.98	0.00	10.17	0.00	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
37224.49	0.00	10.17	0.00	0	0	0	0	0
38000.00	0.00	10.17	0.00	0	0	0	0	0
0.00	0.00	20.00	0.00	1	0	1	0	0
775.51	0.00	20.00	0.00	1	0	1	0	0
1551.02	0.00	20.00	0.00	1	0	1	0	0
2326.53	0.00	20.00	0.00	1	0	1	0	0
3102.04	0.00	20.00	0.00	1	0	1	0	0
3877.55	0.00	20.00	0.00	1	0	1	0	0
4653.06	0.00	20.00	0.00	1	0	1	0	0
5428.57	0.00	20.00	0.00	1	0	1	0	0
6204.08	0.00	20.00	0.00	1	0	1	0	0
6979.59	0.00	20.00	0.00	1	0	1	0	0
7755.10	0.00	20.00	0.00	1	0	1	0	0
8530.61	47.89	20.00	10000.00	0	0	0	0	0
9306.12	39.93	20.00	10000.00	0	0	0	0	0
10081.63	33.87	20.00	2263.58	0	0	0	0	0
10857.14	29.16	20.00	224.18	0	0	0	0	0
11632.65	25.42	20.00	139.24	0	0	0	0	0
12408.16	22.40	20.00	99.99	0	0	0	0	0
13183.67	19.92	20.00	82.26	1	0	0	0	1
13959.18	17.86	20.00	68.49	1	0	0	0	1
14734.69	16.29	20.00	57.58	1	0	0	0	1
15510.20	14.80	20.00	50.05	1	0	0	0	1
16285.71	13.51	20.00	44.14	1	0	0	0	1
17061.22	12.39	20.00	39.21	1	0	0	0	1
17836.73	11.40	20.00	35.07	1	0	0	0	1
18612.24	10.53	20.00	31.56	1	0	0	0	1
19387.76	9.75	20.00	28.56	1	0	0	0	1
20163.27	9.07	20.00	25.98	1	0	0	0	1
20938.78	8.45	20.00	23.74	1	0	0	0	1
21714.29	7.89	20.00	21.78	1	0	0	0	1
22489.80	7.39	20.00	20.06	1	0	0	0	1
23265.31	6.94	20.00	18.55	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
24040.82	6.53	20.00	17.21	0	0	0	0	0
24816.33	6.15	20.00	16.02	0	0	0	0	0
25591.84	5.81	20.00	14.95	0	0	0	0	0
26367.35	5.49	20.00	13.99	0	0	0	0	0
27142.86	5.20	20.00	13.12	0	0	0	0	0
27918.37	4.93	20.00	12.34	0	0	0	0	0
28693.88	4.69	20.00	11.63	0	0	0	0	0
29469.39	4.46	20.00	10.99	0	0	0	0	0
30244.90	4.25	20.00	10.40	0	0	0	0	0
31020.41	4.05	20.00	9.86	0	0	0	0	0
31795.92	3.87	20.00	9.35	0	0	0	0	0
32571.43	3.70	20.00	8.89	0	0	0	0	0
33346.94	3.54	20.00	8.45	0	0	0	0	0
34122.45	3.39	20.00	8.05	0	0	0	0	0
34897.96	3.25	20.00	7.67	0	0	0	0	0
35673.47	3.12	20.00	7.32	0	0	0	0	0
36448.98	0.00	20.00	0.00	0	0	0	0	0
37224.49	0.00	20.00	0.00	0	0	0	0	0
38000.00	0.00	20.00	0.00	0	0	0	0	0
0.00	0.00	30.00	0.00	1	0	1	0	0
775.51	0.00	30.00	0.00	1	0	1	0	0
1551.02	0.00	30.00	0.00	1	0	1	0	0
2326.53	0.00	30.00	0.00	1	0	1	0	0
3102.04	0.00	30.00	0.00	1	0	1	0	0
3877.55	0.00	30.00	0.00	1	0	1	0	0
4653.06	0.00	30.00	0.00	1	0	1	0	0
5428.57	0.00	30.00	0.00	1	0	1	0	0
6204.08	0.00	30.00	0.00	1	0	1	0	0
6979.59	0.00	30.00	0.00	1	0	1	0	0
7755.10	0.00	30.00	0.00	1	0	1	0	0
8530.61	47.89	30.00	10000.00	0	0	0	0	0
9306.12	39.93	30.00	10000.00	0	0	0	0	0
10081.63	33.87	30.00	2263.58	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
10857.14	29.16	30.00	224.18	1	0	0	0	1
11632.65	25.42	30.00	139.24	1	0	0	0	1
12408.16	22.40	30.00	99.99	1	0	0	0	1
13183.67	19.92	30.00	82.26	1	0	0	0	1
13959.18	17.86	30.00	68.49	1	0	0	0	1
14734.69	16.29	30.00	57.58	1	0	0	0	1
15510.20	14.80	30.00	50.05	1	0	0	0	1
16285.71	13.51	30.00	44.14	1	0	0	0	1
17061.22	12.39	30.00	39.21	1	0	0	0	1
17836.73	11.40	30.00	35.07	1	0	0	0	1
18612.24	10.53	30.00	31.56	1	0	0	0	1
19387.76	9.75	30.00	28.56	0	0	0	0	0
20163.27	9.07	30.00	25.98	0	0	0	0	0
20938.78	8.45	30.00	23.74	0	0	0	0	0
21714.29	7.89	30.00	21.78	0	0	0	0	0
22489.80	7.39	30.00	20.06	0	0	0	0	0
23265.31	6.94	30.00	18.55	0	0	0	0	0
24040.82	6.53	30.00	17.21	0	0	0	0	0
24816.33	6.15	30.00	16.02	0	0	0	0	0
25591.84	5.81	30.00	14.95	0	0	0	0	0
26367.35	5.49	30.00	13.99	0	0	0	0	0
27142.86	5.20	30.00	13.12	0	0	0	0	0
27918.37	4.93	30.00	12.34	0	0	0	0	0
28693.88	4.69	30.00	11.63	0	0	0	0	0
29469.39	4.46	30.00	10.99	0	0	0	0	0
30244.90	4.25	30.00	10.40	0	0	0	0	0
31020.41	4.05	30.00	9.86	0	0	0	0	0
31795.92	3.87	30.00	9.35	0	0	0	0	0
32571.43	3.70	30.00	8.89	0	0	0	0	0
33346.94	3.54	30.00	8.45	0	0	0	0	0
34122.45	3.39	30.00	8.05	0	0	0	0	0
34897.96	3.25	30.00	7.67	0	0	0	0	0
35673.47	3.12	30.00	7.32	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
36448.98	0.00	30.00	0.00	0	0	0	0	0
37224.49	0.00	30.00	0.00	0	0	0	0	0
38000.00	0.00	30.00	0.00	0	0	0	0	0
0.00	0.00	40.00	0.00	1	0	1	0	0
775.51	0.00	40.00	0.00	1	0	1	0	0
1551.02	0.00	40.00	0.00	1	0	1	0	0
2326.53	0.00	40.00	0.00	1	0	1	0	0
3102.04	0.00	40.00	0.00	1	0	1	0	0
3877.55	0.00	40.00	0.00	1	0	1	0	0
4653.06	0.00	40.00	0.00	1	0	1	0	0
5428.57	0.00	40.00	0.00	1	0	1	0	0
6204.08	0.00	40.00	0.00	1	0	1	0	0
6979.59	0.00	40.00	0.00	1	0	1	0	0
7755.10	0.00	40.00	0.00	1	0	1	0	0
8530.61	47.89	40.00	10000.00	0	0	0	0	0
9306.12	39.93	40.00	10000.00	1	0	0	0	1
10081.63	33.87	40.00	2263.58	1	0	0	0	1
10857.14	29.16	40.00	224.18	1	0	0	0	1
11632.65	25.42	40.00	139.24	1	0	0	0	1
12408.16	22.40	40.00	99.99	1	0	0	0	1
13183.67	19.92	40.00	82.26	1	0	0	0	1
13959.18	17.86	40.00	68.49	1	0	0	0	1
14734.69	16.29	40.00	57.58	1	0	0	0	1
15510.20	14.80	40.00	50.05	1	0	0	0	1
16285.71	13.51	40.00	44.14	1	0	0	0	1
17061.22	12.39	40.00	39.21	0	0	0	0	0
17836.73	11.40	40.00	35.07	0	0	0	0	0
18612.24	10.53	40.00	31.56	0	0	0	0	0
19387.76	9.75	40.00	28.56	0	0	0	0	0
20163.27	9.07	40.00	25.98	0	0	0	0	0
20938.78	8.45	40.00	23.74	0	0	0	0	0
21714.29	7.89	40.00	21.78	0	0	0	0	0
22489.80	7.39	40.00	20.06	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
23265.31	6.94	40.00	18.55	0	0	0	0	0
24040.82	6.53	40.00	17.21	0	0	0	0	0
24816.33	6.15	40.00	16.02	0	0	0	0	0
25591.84	5.81	40.00	14.95	0	0	0	0	0
26367.35	5.49	40.00	13.99	0	0	0	0	0
27142.86	5.20	40.00	13.12	0	0	0	0	0
27918.37	4.93	40.00	12.34	0	0	0	0	0
28693.88	4.69	40.00	11.63	0	0	0	0	0
29469.39	4.46	40.00	10.99	0	0	0	0	0
30244.90	4.25	40.00	10.40	0	0	0	0	0
31020.41	4.05	40.00	9.86	0	0	0	0	0
31795.92	3.87	40.00	9.35	0	0	0	0	0
32571.43	3.70	40.00	8.89	0	0	0	0	0
33346.94	3.54	40.00	8.45	0	0	0	0	0
34122.45	3.39	40.00	8.05	0	0	0	0	0
34897.96	3.25	40.00	7.67	0	0	0	0	0
35673.47	3.12	40.00	7.32	0	0	0	0	0
36448.98	0.00	40.00	0.00	0	0	0	0	0
37224.49	0.00	40.00	0.00	0	0	0	0	0
38000.00	0.00	40.00	0.00	0	0	0	0	0
0.00	0.00	50.00	0.00	1	0	1	0	0
775.51	0.00	50.00	0.00	1	0	1	0	0
1551.02	0.00	50.00	0.00	1	0	1	0	0
2326.53	0.00	50.00	0.00	1	0	1	0	0
3102.04	0.00	50.00	0.00	1	0	1	0	0
3877.55	0.00	50.00	0.00	1	0	1	0	0
4653.06	0.00	50.00	0.00	1	0	1	0	0
5428.57	0.00	50.00	0.00	1	0	1	0	0
6204.08	0.00	50.00	0.00	1	0	1	0	0
6979.59	0.00	50.00	0.00	1	0	1	0	0
7755.10	0.00	50.00	0.00	1	0	1	0	0
8530.61	47.89	50.00	10000.00	1	0	0	0	1
9306.12	39.93	50.00	10000.00	1	0	0	0	1

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
10081.63	33.87	50.00	2263.58	1	0	0	0	1
10857.14	29.16	50.00	224.18	1	0	0	0	1
11632.65	25.42	50.00	139.24	1	0	0	0	1
12408.16	22.40	50.00	99.99	1	0	0	0	1
13183.67	19.92	50.00	82.26	1	0	0	0	1
13959.18	17.86	50.00	68.49	1	0	0	0	1
14734.69	16.29	50.00	57.58	1	0	0	0	1
15510.20	14.80	50.00	50.05	1	0	0	0	1
16285.71	13.51	50.00	44.14	0	0	0	0	0
17061.22	12.39	50.00	39.21	0	0	0	0	0
17836.73	11.40	50.00	35.07	0	0	0	0	0
18612.24	10.53	50.00	31.56	0	0	0	0	0
19387.76	9.75	50.00	28.56	0	0	0	0	0
20163.27	9.07	50.00	25.98	0	0	0	0	0
20938.78	8.45	50.00	23.74	0	0	0	0	0
21714.29	7.89	50.00	21.78	0	0	0	0	0
22489.80	7.39	50.00	20.06	0	0	0	0	0
23265.31	6.94	50.00	18.55	0	0	0	0	0
24040.82	6.53	50.00	17.21	0	0	0	0	0
24816.33	6.15	50.00	16.02	0	0	0	0	0
25591.84	5.81	50.00	14.95	0	0	0	0	0
26367.35	5.49	50.00	13.99	0	0	0	0	0
27142.86	5.20	50.00	13.12	0	0	0	0	0
27918.37	4.93	50.00	12.34	0	0	0	0	0
28693.88	4.69	50.00	11.63	0	0	0	0	0
29469.39	4.46	50.00	10.99	0	0	0	0	0
30244.90	4.25	50.00	10.40	0	0	0	0	0
31020.41	4.05	50.00	9.86	0	0	0	0	0
31795.92	3.87	50.00	9.35	0	0	0	0	0
32571.43	3.70	50.00	8.89	0	0	0	0	0
33346.94	3.54	50.00	8.45	0	0	0	0	0
34122.45	3.39	50.00	8.05	0	0	0	0	0
34897.96	3.25	50.00	7.67	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
35673.47	3.12	50.00	7.32	0	0	0	0	0
36448.98	0.00	50.00	0.00	0	0	0	0	0
37224.49	0.00	50.00	0.00	0	0	0	0	0
38000.00	0.00	50.00	0.00	0	0	0	0	0
0.00	0.00	81.08	0.00	1	0	1	0	0
775.51	0.00	81.08	0.00	1	0	1	0	0
1551.02	0.00	81.08	0.00	1	0	1	0	0
2326.53	0.00	81.08	0.00	1	0	1	0	0
3102.04	0.00	81.08	0.00	1	0	1	0	0
3877.55	0.00	81.08	0.00	1	0	1	0	0
4653.06	0.00	81.08	0.00	1	0	1	0	0
5428.57	0.00	81.08	0.00	1	0	1	0	0
6204.08	0.00	81.08	0.00	1	0	1	0	0
6979.59	0.00	81.08	0.00	1	0	1	0	0
7755.10	0.00	81.08	0.00	1	0	1	0	0
8530.61	47.89	81.08	10000.00	1	0	0	0	1
9306.12	39.93	81.08	10000.00	1	0	0	0	1
10081.63	33.87	81.08	2263.58	1	0	0	0	1
10857.14	29.16	81.08	224.18	1	0	0	0	1
11632.65	25.42	81.08	139.24	1	0	0	0	1
12408.16	22.40	81.08	99.99	1	0	0	0	1
13183.67	19.92	81.08	82.26	1	0	0	0	1
13959.18	17.86	81.08	68.49	0	0	0	0	0
14734.69	16.29	81.08	57.58	0	0	0	0	0
15510.20	14.80	81.08	50.05	0	0	0	0	0
16285.71	13.51	81.08	44.14	0	0	0	0	0
17061.22	12.39	81.08	39.21	0	0	0	0	0
17836.73	11.40	81.08	35.07	0	0	0	0	0
18612.24	10.53	81.08	31.56	0	0	0	0	0
19387.76	9.75	81.08	28.56	0	0	0	0	0
20163.27	9.07	81.08	25.98	0	0	0	0	0
20938.78	8.45	81.08	23.74	0	0	0	0	0
21714.29	7.89	81.08	21.78	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
22489.80	7.39	81.08	20.06	0	0	0	0	0
23265.31	6.94	81.08	18.55	0	0	0	0	0
24040.82	6.53	81.08	17.21	0	0	0	0	0
24816.33	6.15	81.08	16.02	0	0	0	0	0
25591.84	5.81	81.08	14.95	0	0	0	0	0
26367.35	5.49	81.08	13.99	0	0	0	0	0
27142.86	5.20	81.08	13.12	0	0	0	0	0
27918.37	4.93	81.08	12.34	0	0	0	0	0
28693.88	4.69	81.08	11.63	0	0	0	0	0
29469.39	4.46	81.08	10.99	0	0	0	0	0
30244.90	4.25	81.08	10.40	0	0	0	0	0
31020.41	4.05	81.08	9.86	0	0	0	0	0
31795.92	3.87	81.08	9.35	0	0	0	0	0
32571.43	3.70	81.08	8.89	0	0	0	0	0
33346.94	3.54	81.08	8.45	0	0	0	0	0
34122.45	3.39	81.08	8.05	0	0	0	0	0
34897.96	3.25	81.08	7.67	0	0	0	0	0
35673.47	3.12	81.08	7.32	0	0	0	0	0
36448.98	0.00	81.08	0.00	0	0	0	0	0
37224.49	0.00	81.08	0.00	0	0	0	0	0
38000.00	0.00	81.08	0.00	0	0	0	0	0
0.00	0.00	100.00	0.00	1	0	1	0	0
775.51	0.00	100.00	0.00	1	0	1	0	0
1551.02	0.00	100.00	0.00	1	0	1	0	0
2326.53	0.00	100.00	0.00	1	0	1	0	0
3102.04	0.00	100.00	0.00	1	0	1	0	0
3877.55	0.00	100.00	0.00	1	0	1	0	0
4653.06	0.00	100.00	0.00	1	0	1	0	0
5428.57	0.00	100.00	0.00	1	0	1	0	0
6204.08	0.00	100.00	0.00	1	0	1	0	0
6979.59	0.00	100.00	0.00	1	0	1	0	0
7755.10	0.00	100.00	0.00	1	0	1	0	0
8530.61	47.89	100.00	10000.00	1	0	0	0	1

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
9306.12	39.93	100.00	10000.00	1	0	0	0	1
10081.63	33.87	100.00	2263.58	1	0	0	0	1
10857.14	29.16	100.00	224.18	1	0	0	0	1
11632.65	25.42	100.00	139.24	1	0	0	0	1
12408.16	22.40	100.00	99.99	0	0	0	0	0
13183.67	19.92	100.00	82.26	0	0	0	0	0
13959.18	17.86	100.00	68.49	0	0	0	0	0
14734.69	16.29	100.00	57.58	0	0	0	0	0
15510.20	14.80	100.00	50.05	0	0	0	0	0
16285.71	13.51	100.00	44.14	0	0	0	0	0
17061.22	12.39	100.00	39.21	0	0	0	0	0
17836.73	11.40	100.00	35.07	0	0	0	0	0
18612.24	10.53	100.00	31.56	0	0	0	0	0
19387.76	9.75	100.00	28.56	0	0	0	0	0
20163.27	9.07	100.00	25.98	0	0	0	0	0
20938.78	8.45	100.00	23.74	0	0	0	0	0
21714.29	7.89	100.00	21.78	0	0	0	0	0
22489.80	7.39	100.00	20.06	0	0	0	0	0
23265.31	6.94	100.00	18.55	0	0	0	0	0
24040.82	6.53	100.00	17.21	0	0	0	0	0
24816.33	6.15	100.00	16.02	0	0	0	0	0
25591.84	5.81	100.00	14.95	0	0	0	0	0
26367.35	5.49	100.00	13.99	0	0	0	0	0
27142.86	5.20	100.00	13.12	0	0	0	0	0
27918.37	4.93	100.00	12.34	0	0	0	0	0
28693.88	4.69	100.00	11.63	0	0	0	0	0
29469.39	4.46	100.00	10.99	0	0	0	0	0
30244.90	4.25	100.00	10.40	0	0	0	0	0
31020.41	4.05	100.00	9.86	0	0	0	0	0
31795.92	3.87	100.00	9.35	0	0	0	0	0
32571.43	3.70	100.00	8.89	0	0	0	0	0
33346.94	3.54	100.00	8.45	0	0	0	0	0
34122.45	3.39	100.00	8.05	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
34897.96	3.25	100.00	7.67	0	0	0	0	0
35673.47	3.12	100.00	7.32	0	0	0	0	0
36448.98	0.00	100.00	0.00	0	0	0	0	0
37224.49	0.00	100.00	0.00	0	0	0	0	0
38000.00	0.00	100.00	0.00	0	0	0	0	0
0.00	0.00	200.00	0.00	1	0	1	0	0
775.51	0.00	200.00	0.00	1	0	1	0	0
1551.02	0.00	200.00	0.00	1	0	1	0	0
2326.53	0.00	200.00	0.00	1	0	1	0	0
3102.04	0.00	200.00	0.00	1	0	1	0	0
3877.55	0.00	200.00	0.00	1	0	1	0	0
4653.06	0.00	200.00	0.00	1	0	1	0	0
5428.57	0.00	200.00	0.00	1	0	1	0	0
6204.08	0.00	200.00	0.00	1	0	1	0	0
6979.59	0.00	200.00	0.00	1	0	1	0	0
7755.10	0.00	200.00	0.00	1	0	1	0	0
8530.61	47.89	200.00	10000.00	1	0	0	0	1
9306.12	39.93	200.00	10000.00	1	0	0	0	1
10081.63	33.87	200.00	2263.58	1	0	0	0	1
10857.14	29.16	200.00	224.18	1	0	0	0	1
11632.65	25.42	200.00	139.24	0	0	0	0	0
12408.16	22.40	200.00	99.99	0	0	0	0	0
13183.67	19.92	200.00	82.26	0	0	0	0	0
13959.18	17.86	200.00	68.49	0	0	0	0	0
14734.69	16.29	200.00	57.58	0	0	0	0	0
15510.20	14.80	200.00	50.05	0	0	0	0	0
16285.71	13.51	200.00	44.14	0	0	0	0	0
17061.22	12.39	200.00	39.21	0	0	0	0	0
17836.73	11.40	200.00	35.07	0	0	0	0	0
18612.24	10.53	200.00	31.56	0	0	0	0	0
19387.76	9.75	200.00	28.56	0	0	0	0	0
20163.27	9.07	200.00	25.98	0	0	0	0	0
20938.78	8.45	200.00	23.74	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
21714.29	7.89	200.00	21.78	0	0	0	0	0
22489.80	7.39	200.00	20.06	0	0	0	0	0
23265.31	6.94	200.00	18.55	0	0	0	0	0
24040.82	6.53	200.00	17.21	0	0	0	0	0
24816.33	6.15	200.00	16.02	0	0	0	0	0
25591.84	5.81	200.00	14.95	0	0	0	0	0
26367.35	5.49	200.00	13.99	0	0	0	0	0
27142.86	5.20	200.00	13.12	0	0	0	0	0
27918.37	4.93	200.00	12.34	0	0	0	0	0
28693.88	4.69	200.00	11.63	0	0	0	0	0
29469.39	4.46	200.00	10.99	0	0	0	0	0
30244.90	4.25	200.00	10.40	0	0	0	0	0
31020.41	4.05	200.00	9.86	0	0	0	0	0
31795.92	3.87	200.00	9.35	0	0	0	0	0
32571.43	3.70	200.00	8.89	0	0	0	0	0
33346.94	3.54	200.00	8.45	0	0	0	0	0
34122.45	3.39	200.00	8.05	0	0	0	0	0
34897.96	3.25	200.00	7.67	0	0	0	0	0
35673.47	3.12	200.00	7.32	0	0	0	0	0
36448.98	0.00	200.00	0.00	0	0	0	0	0
37224.49	0.00	200.00	0.00	0	0	0	0	0
38000.00	0.00	200.00	0.00	0	0	0	0	0
0.00	0.00	250.00	0.00	1	0	1	0	0
775.51	0.00	250.00	0.00	1	0	1	0	0
1551.02	0.00	250.00	0.00	1	0	1	0	0
2326.53	0.00	250.00	0.00	1	0	1	0	0
3102.04	0.00	250.00	0.00	1	0	1	0	0
3877.55	0.00	250.00	0.00	1	0	1	0	0
4653.06	0.00	250.00	0.00	1	0	1	0	0
5428.57	0.00	250.00	0.00	1	0	1	0	0
6204.08	0.00	250.00	0.00	1	0	1	0	0
6979.59	0.00	250.00	0.00	1	0	1	0	0
7755.10	0.00	250.00	0.00	1	0	1	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
8530.61	47.89	250.00	10000.00	1	0	0	0	1
9306.12	39.93	250.00	10000.00	1	0	0	0	1
10081.63	33.87	250.00	2263.58	1	0	0	0	1
10857.14	29.16	250.00	224.18	0	0	0	0	0
11632.65	25.42	250.00	139.24	0	0	0	0	0
12408.16	22.40	250.00	99.99	0	0	0	0	0
13183.67	19.92	250.00	82.26	0	0	0	0	0
13959.18	17.86	250.00	68.49	0	0	0	0	0
14734.69	16.29	250.00	57.58	0	0	0	0	0
15510.20	14.80	250.00	50.05	0	0	0	0	0
16285.71	13.51	250.00	44.14	0	0	0	0	0
17061.22	12.39	250.00	39.21	0	0	0	0	0
17836.73	11.40	250.00	35.07	0	0	0	0	0
18612.24	10.53	250.00	31.56	0	0	0	0	0
19387.76	9.75	250.00	28.56	0	0	0	0	0
20163.27	9.07	250.00	25.98	0	0	0	0	0
20938.78	8.45	250.00	23.74	0	0	0	0	0
21714.29	7.89	250.00	21.78	0	0	0	0	0
22489.80	7.39	250.00	20.06	0	0	0	0	0
23265.31	6.94	250.00	18.55	0	0	0	0	0
24040.82	6.53	250.00	17.21	0	0	0	0	0
24816.33	6.15	250.00	16.02	0	0	0	0	0
25591.84	5.81	250.00	14.95	0	0	0	0	0
26367.35	5.49	250.00	13.99	0	0	0	0	0
27142.86	5.20	250.00	13.12	0	0	0	0	0
27918.37	4.93	250.00	12.34	0	0	0	0	0
28693.88	4.69	250.00	11.63	0	0	0	0	0
29469.39	4.46	250.00	10.99	0	0	0	0	0
30244.90	4.25	250.00	10.40	0	0	0	0	0
31020.41	4.05	250.00	9.86	0	0	0	0	0
31795.92	3.87	250.00	9.35	0	0	0	0	0
32571.43	3.70	250.00	8.89	0	0	0	0	0
33346.94	3.54	250.00	8.45	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
34122.45	3.39	250.00	8.05	0	0	0	0	0
34897.96	3.25	250.00	7.67	0	0	0	0	0
35673.47	3.12	250.00	7.32	0	0	0	0	0
36448.98	0.00	250.00	0.00	0	0	0	0	0
37224.49	0.00	250.00	0.00	0	0	0	0	0
38000.00	0.00	250.00	0.00	0	0	0	0	0
0.00	0.00	300.00	0.00	1	0	1	0	0
775.51	0.00	300.00	0.00	1	0	1	0	0
1551.02	0.00	300.00	0.00	1	0	1	0	0
2326.53	0.00	300.00	0.00	1	0	1	0	0
3102.04	0.00	300.00	0.00	1	0	1	0	0
3877.55	0.00	300.00	0.00	1	0	1	0	0
4653.06	0.00	300.00	0.00	1	0	1	0	0
5428.57	0.00	300.00	0.00	1	0	1	0	0
6204.08	0.00	300.00	0.00	1	0	1	0	0
6979.59	0.00	300.00	0.00	1	0	1	0	0
7755.10	0.00	300.00	0.00	1	0	1	0	0
8530.61	47.89	300.00	10000.00	1	0	0	0	1
9306.12	39.93	300.00	10000.00	1	0	0	0	1
10081.63	33.87	300.00	2263.58	1	0	0	0	1
10857.14	29.16	300.00	224.18	0	0	0	0	0
11632.65	25.42	300.00	139.24	0	0	0	0	0
12408.16	22.40	300.00	99.99	0	0	0	0	0
13183.67	19.92	300.00	82.26	0	0	0	0	0
13959.18	17.86	300.00	68.49	0	0	0	0	0
14734.69	16.29	300.00	57.58	0	0	0	0	0
15510.20	14.80	300.00	50.05	0	0	0	0	0
16285.71	13.51	300.00	44.14	0	0	0	0	0
17061.22	12.39	300.00	39.21	0	0	0	0	0
17836.73	11.40	300.00	35.07	0	0	0	0	0
18612.24	10.53	300.00	31.56	0	0	0	0	0
19387.76	9.75	300.00	28.56	0	0	0	0	0
20163.27	9.07	300.00	25.98	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
20938.78	8.45	300.00	23.74	0	0	0	0	0
21714.29	7.89	300.00	21.78	0	0	0	0	0
22489.80	7.39	300.00	20.06	0	0	0	0	0
23265.31	6.94	300.00	18.55	0	0	0	0	0
24040.82	6.53	300.00	17.21	0	0	0	0	0
24816.33	6.15	300.00	16.02	0	0	0	0	0
25591.84	5.81	300.00	14.95	0	0	0	0	0
26367.35	5.49	300.00	13.99	0	0	0	0	0
27142.86	5.20	300.00	13.12	0	0	0	0	0
27918.37	4.93	300.00	12.34	0	0	0	0	0
28693.88	4.69	300.00	11.63	0	0	0	0	0
29469.39	4.46	300.00	10.99	0	0	0	0	0
30244.90	4.25	300.00	10.40	0	0	0	0	0
31020.41	4.05	300.00	9.86	0	0	0	0	0
31795.92	3.87	300.00	9.35	0	0	0	0	0
32571.43	3.70	300.00	8.89	0	0	0	0	0
33346.94	3.54	300.00	8.45	0	0	0	0	0
34122.45	3.39	300.00	8.05	0	0	0	0	0
34897.96	3.25	300.00	7.67	0	0	0	0	0
35673.47	3.12	300.00	7.32	0	0	0	0	0
36448.98	0.00	300.00	0.00	0	0	0	0	0
37224.49	0.00	300.00	0.00	0	0	0	0	0
38000.00	0.00	300.00	0.00	0	0	0	0	0
0.00	0.00	500.00	0.00	1	0	1	0	0
775.51	0.00	500.00	0.00	1	0	1	0	0
1551.02	0.00	500.00	0.00	1	0	1	0	0
2326.53	0.00	500.00	0.00	1	0	1	0	0
3102.04	0.00	500.00	0.00	1	0	1	0	0
3877.55	0.00	500.00	0.00	1	0	1	0	0
4653.06	0.00	500.00	0.00	1	0	1	0	0
5428.57	0.00	500.00	0.00	1	0	1	0	0
6204.08	0.00	500.00	0.00	1	0	1	0	0
6979.59	0.00	500.00	0.00	1	0	1	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
7755.10	0.00	500.00	0.00	1	0	1	0	0
8530.61	47.89	500.00	10000.00	1	0	0	0	1
9306.12	39.93	500.00	10000.00	1	0	0	0	1
10081.63	33.87	500.00	2263.58	1	0	0	0	1
10857.14	29.16	500.00	224.18	0	0	0	0	0
11632.65	25.42	500.00	139.24	0	0	0	0	0
12408.16	22.40	500.00	99.99	0	0	0	0	0
13183.67	19.92	500.00	82.26	0	0	0	0	0
13959.18	17.86	500.00	68.49	0	0	0	0	0
14734.69	16.29	500.00	57.58	0	0	0	0	0
15510.20	14.80	500.00	50.05	0	0	0	0	0
16285.71	13.51	500.00	44.14	0	0	0	0	0
17061.22	12.39	500.00	39.21	0	0	0	0	0
17836.73	11.40	500.00	35.07	0	0	0	0	0
18612.24	10.53	500.00	31.56	0	0	0	0	0
19387.76	9.75	500.00	28.56	0	0	0	0	0
20163.27	9.07	500.00	25.98	0	0	0	0	0
20938.78	8.45	500.00	23.74	0	0	0	0	0
21714.29	7.89	500.00	21.78	0	0	0	0	0
22489.80	7.39	500.00	20.06	0	0	0	0	0
23265.31	6.94	500.00	18.55	0	0	0	0	0
24040.82	6.53	500.00	17.21	0	0	0	0	0
24816.33	6.15	500.00	16.02	0	0	0	0	0
25591.84	5.81	500.00	14.95	0	0	0	0	0
26367.35	5.49	500.00	13.99	0	0	0	0	0
27142.86	5.20	500.00	13.12	0	0	0	0	0
27918.37	4.93	500.00	12.34	0	0	0	0	0
28693.88	4.69	500.00	11.63	0	0	0	0	0
29469.39	4.46	500.00	10.99	0	0	0	0	0
30244.90	4.25	500.00	10.40	0	0	0	0	0
31020.41	4.05	500.00	9.86	0	0	0	0	0
31795.92	3.87	500.00	9.35	0	0	0	0	0
32571.43	3.70	500.00	8.89	0	0	0	0	0

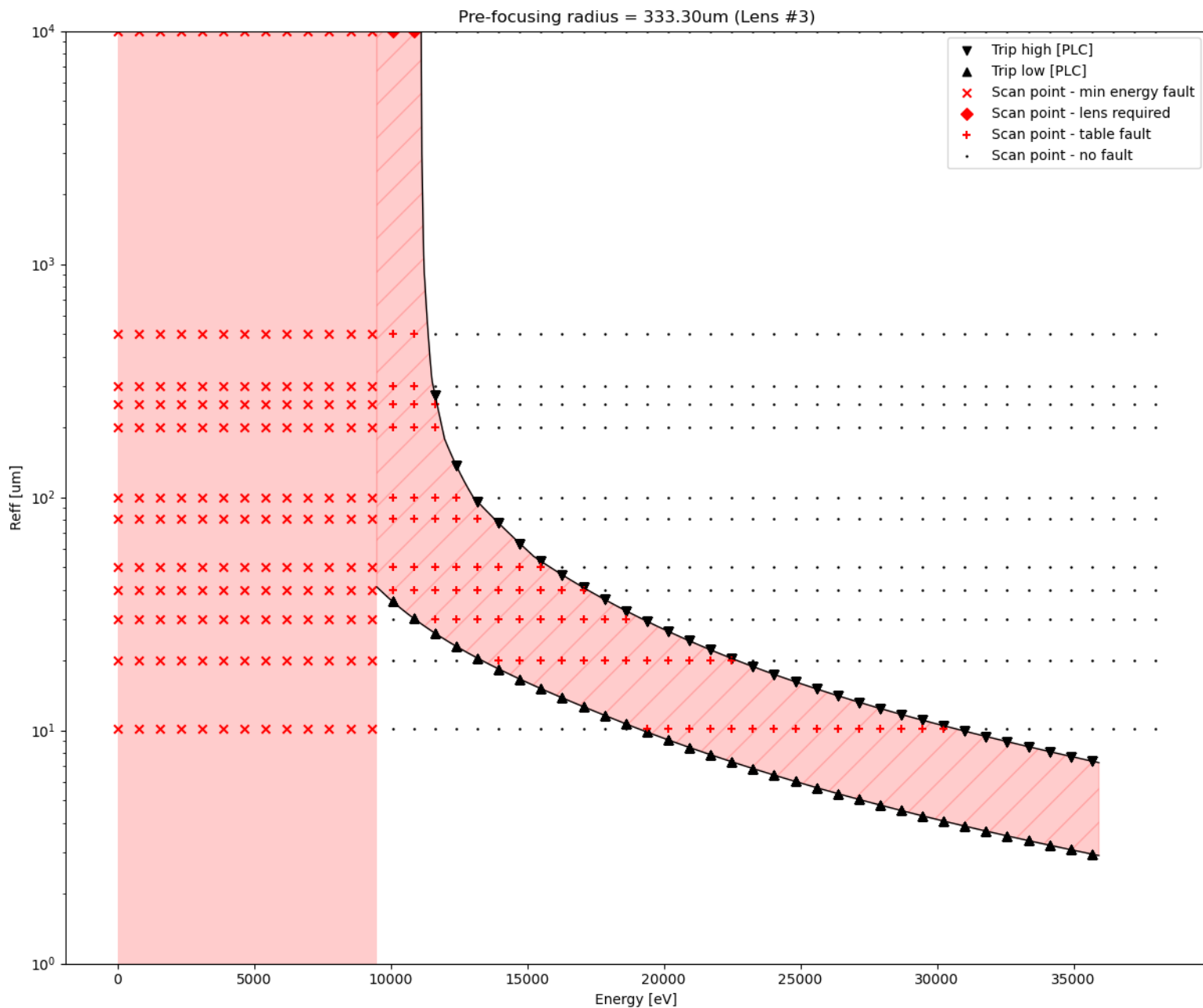| Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
33346.94	3.54	500.00	8.45	0	0	0	0	0
34122.45	3.39	500.00	8.05	0	0	0	0	0
34897.96	3.25	500.00	7.67	0	0	0	0	0
35673.47	3.12	500.00	7.32	0	0	0	0	0
36448.98	0.00	500.00	0.00	0	0	0	0	0
37224.49	0.00	500.00	0.00	0	0	0	0	0
38000.00	0.00	500.00	0.00	0	0	0	0	0

Scan 4: 333.333µm pre-focusing lens

Data generated: 2023-07-12 22:56:38
bluesky scan sweep_energy_plan with 333.333µm pre-focusing lens.

Scan Information

1. Choose a few transfocator lens sets to span the effective radius range.
2. For each of those lens sets, scan energy at regular intervals.
3. Each marker on the plot represents one of those scan points.
4. Record if PLC reported a fault and why.

Pre-focusing radius = 333.30um (Lens #3)

Plot / Table Information

No fault indicates that a data point was checked but no fault reported by PLC.
Trip Low and **Trip High** are values from the spreadsheet table, interpolated by the PLC and reported to EPICS.
The lines drawn around these regions and the highlighted regions are directly from the spreadsheet.
Min Energy Fault indicates that it does not meet minimum energy requirement for a given XRT lens.
Table Fault indicates a fault from the spreadsheet table disallowed region.
Lens Required Fault markers are clipped at the bottom of the plot.

Scan 4: 333.333µm pre-focusing lens: Scan Data Table

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
0.00	0.00	10000.00	0.00	1	0	1	0	0
775.51	0.00	10000.00	0.00	1	0	1	0	0
1551.02	0.00	10000.00	0.00	1	0	1	0	0
2326.53	0.00	10000.00	0.00	1	0	1	0	0
3102.04	0.00	10000.00	0.00	1	0	1	0	0
3877.55	0.00	10000.00	0.00	1	0	1	0	0
4653.06	0.00	10000.00	0.00	1	0	1	0	0
5428.57	0.00	10000.00	0.00	1	0	1	0	0
6204.08	0.00	10000.00	0.00	1	0	1	0	0
6979.59	0.00	10000.00	0.00	1	0	1	0	0
7755.10	0.00	10000.00	0.00	1	0	1	0	0
8530.61	0.00	10000.00	0.00	1	0	1	0	0
9306.12	0.00	10000.00	0.00	1	0	1	0	0
10081.63	35.65	10000.00	10000.00	1	0	0	1	1
10857.14	30.16	10000.00	10000.00	1	0	0	1	1
11632.65	26.07	10000.00	274.10	0	0	0	0	0
12408.16	22.92	10000.00	136.69	0	0	0	0	0
13183.67	20.39	10000.00	95.73	0	0	0	0	0
13959.18	18.32	10000.00	77.39	0	0	0	0	0
14734.69	16.58	10000.00	63.29	0	0	0	0	0
15510.20	15.08	10000.00	53.10	0	0	0	0	0
16285.71	13.78	10000.00	46.44	0	0	0	0	0
17061.22	12.62	10000.00	40.96	0	0	0	0	0
17836.73	11.59	10000.00	36.41	0	0	0	0	0
18612.24	10.66	10000.00	32.58	0	0	0	0	0
19387.76	9.83	10000.00	29.34	0	0	0	0	0
20163.27	9.10	10000.00	26.58	0	0	0	0	0
20938.78	8.44	10000.00	24.20	0	0	0	0	0
21714.29	7.86	10000.00	22.14	0	0	0	0	0
22489.80	7.33	10000.00	20.34	0	0	0	0	0
23265.31	6.85	10000.00	18.77	0	0	0	0	0
24040.82	6.42	10000.00	17.38	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
24816.33	6.03	10000.00	16.15	0	0	0	0	0
25591.84	5.68	10000.00	15.06	0	0	0	0	0
26367.35	5.35	10000.00	14.08	0	0	0	0	0
27142.86	5.05	10000.00	13.20	0	0	0	0	0
27918.37	4.78	10000.00	12.41	0	0	0	0	0
28693.88	4.53	10000.00	11.70	0	0	0	0	0
29469.39	4.30	10000.00	11.05	0	0	0	0	0
30244.90	4.08	10000.00	10.46	0	0	0	0	0
31020.41	3.88	10000.00	9.92	0	0	0	0	0
31795.92	3.70	10000.00	9.41	0	0	0	0	0
32571.43	3.52	10000.00	8.94	0	0	0	0	0
33346.94	3.36	10000.00	8.51	0	0	0	0	0
34122.45	3.21	10000.00	8.11	0	0	0	0	0
34897.96	3.07	10000.00	7.73	0	0	0	0	0
35673.47	2.94	10000.00	7.38	0	0	0	0	0
36448.98	0.00	10000.00	0.00	0	0	0	0	0
37224.49	0.00	10000.00	0.00	0	0	0	0	0
38000.00	0.00	10000.00	0.00	0	0	0	0	0
0.00	0.00	10.17	0.00	1	0	1	0	0
775.51	0.00	10.17	0.00	1	0	1	0	0
1551.02	0.00	10.17	0.00	1	0	1	0	0
2326.53	0.00	10.17	0.00	1	0	1	0	0
3102.04	0.00	10.17	0.00	1	0	1	0	0
3877.55	0.00	10.17	0.00	1	0	1	0	0
4653.06	0.00	10.17	0.00	1	0	1	0	0
5428.57	0.00	10.17	0.00	1	0	1	0	0
6204.08	0.00	10.17	0.00	1	0	1	0	0
6979.59	0.00	10.17	0.00	1	0	1	0	0
7755.10	0.00	10.17	0.00	1	0	1	0	0
8530.61	0.00	10.17	0.00	1	0	1	0	0
9306.12	0.00	10.17	0.00	1	0	1	0	0
10081.63	35.65	10.17	10000.00	0	0	0	0	0
10857.14	30.16	10.17	10000.00	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
11632.65	26.07	10.17	274.10	0	0	0	0	0
12408.16	22.92	10.17	136.69	0	0	0	0	0
13183.67	20.39	10.17	95.73	0	0	0	0	0
13959.18	18.32	10.17	77.39	0	0	0	0	0
14734.69	16.58	10.17	63.29	0	0	0	0	0
15510.20	15.08	10.17	53.10	0	0	0	0	0
16285.71	13.78	10.17	46.44	0	0	0	0	0
17061.22	12.62	10.17	40.96	0	0	0	0	0
17836.73	11.59	10.17	36.41	0	0	0	0	0
18612.24	10.66	10.17	32.58	0	0	0	0	0
19387.76	9.83	10.17	29.34	1	0	0	0	1
20163.27	9.10	10.17	26.58	1	0	0	0	1
20938.78	8.44	10.17	24.20	1	0	0	0	1
21714.29	7.86	10.17	22.14	1	0	0	0	1
22489.80	7.33	10.17	20.34	1	0	0	0	1
23265.31	6.85	10.17	18.77	1	0	0	0	1
24040.82	6.42	10.17	17.38	1	0	0	0	1
24816.33	6.03	10.17	16.15	1	0	0	0	1
25591.84	5.68	10.17	15.06	1	0	0	0	1
26367.35	5.35	10.17	14.08	1	0	0	0	1
27142.86	5.05	10.17	13.20	1	0	0	0	1
27918.37	4.78	10.17	12.41	1	0	0	0	1
28693.88	4.53	10.17	11.70	1	0	0	0	1
29469.39	4.30	10.17	11.05	1	0	0	0	1
30244.90	4.08	10.17	10.46	1	0	0	0	1
31020.41	3.88	10.17	9.92	0	0	0	0	0
31795.92	3.70	10.17	9.41	0	0	0	0	0
32571.43	3.52	10.17	8.94	0	0	0	0	0
33346.94	3.36	10.17	8.51	0	0	0	0	0
34122.45	3.21	10.17	8.11	0	0	0	0	0
34897.96	3.07	10.17	7.73	0	0	0	0	0
35673.47	2.94	10.17	7.38	0	0	0	0	0
36448.98	0.00	10.17	0.00	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
37224.49	0.00	10.17	0.00	0	0	0	0	0
38000.00	0.00	10.17	0.00	0	0	0	0	0
0.00	0.00	20.00	0.00	1	0	1	0	0
775.51	0.00	20.00	0.00	1	0	1	0	0
1551.02	0.00	20.00	0.00	1	0	1	0	0
2326.53	0.00	20.00	0.00	1	0	1	0	0
3102.04	0.00	20.00	0.00	1	0	1	0	0
3877.55	0.00	20.00	0.00	1	0	1	0	0
4653.06	0.00	20.00	0.00	1	0	1	0	0
5428.57	0.00	20.00	0.00	1	0	1	0	0
6204.08	0.00	20.00	0.00	1	0	1	0	0
6979.59	0.00	20.00	0.00	1	0	1	0	0
7755.10	0.00	20.00	0.00	1	0	1	0	0
8530.61	0.00	20.00	0.00	1	0	1	0	0
9306.12	0.00	20.00	0.00	1	0	1	0	0
10081.63	35.65	20.00	10000.00	0	0	0	0	0
10857.14	30.16	20.00	10000.00	0	0	0	0	0
11632.65	26.07	20.00	274.10	0	0	0	0	0
12408.16	22.92	20.00	136.69	0	0	0	0	0
13183.67	20.39	20.00	95.73	0	0	0	0	0
13959.18	18.32	20.00	77.39	1	0	0	0	1
14734.69	16.58	20.00	63.29	1	0	0	0	1
15510.20	15.08	20.00	53.10	1	0	0	0	1
16285.71	13.78	20.00	46.44	1	0	0	0	1
17061.22	12.62	20.00	40.96	1	0	0	0	1
17836.73	11.59	20.00	36.41	1	0	0	0	1
18612.24	10.66	20.00	32.58	1	0	0	0	1
19387.76	9.83	20.00	29.34	1	0	0	0	1
20163.27	9.10	20.00	26.58	1	0	0	0	1
20938.78	8.44	20.00	24.20	1	0	0	0	1
21714.29	7.86	20.00	22.14	1	0	0	0	1
22489.80	7.33	20.00	20.34	1	0	0	0	1
23265.31	6.85	20.00	18.77	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
24040.82	6.42	20.00	17.38	0	0	0	0	0
24816.33	6.03	20.00	16.15	0	0	0	0	0
25591.84	5.68	20.00	15.06	0	0	0	0	0
26367.35	5.35	20.00	14.08	0	0	0	0	0
27142.86	5.05	20.00	13.20	0	0	0	0	0
27918.37	4.78	20.00	12.41	0	0	0	0	0
28693.88	4.53	20.00	11.70	0	0	0	0	0
29469.39	4.30	20.00	11.05	0	0	0	0	0
30244.90	4.08	20.00	10.46	0	0	0	0	0
31020.41	3.88	20.00	9.92	0	0	0	0	0
31795.92	3.70	20.00	9.41	0	0	0	0	0
32571.43	3.52	20.00	8.94	0	0	0	0	0
33346.94	3.36	20.00	8.51	0	0	0	0	0
34122.45	3.21	20.00	8.11	0	0	0	0	0
34897.96	3.07	20.00	7.73	0	0	0	0	0
35673.47	2.94	20.00	7.38	0	0	0	0	0
36448.98	0.00	20.00	0.00	0	0	0	0	0
37224.49	0.00	20.00	0.00	0	0	0	0	0
38000.00	0.00	20.00	0.00	0	0	0	0	0
0.00	0.00	30.00	0.00	1	0	1	0	0
775.51	0.00	30.00	0.00	1	0	1	0	0
1551.02	0.00	30.00	0.00	1	0	1	0	0
2326.53	0.00	30.00	0.00	1	0	1	0	0
3102.04	0.00	30.00	0.00	1	0	1	0	0
3877.55	0.00	30.00	0.00	1	0	1	0	0
4653.06	0.00	30.00	0.00	1	0	1	0	0
5428.57	0.00	30.00	0.00	1	0	1	0	0
6204.08	0.00	30.00	0.00	1	0	1	0	0
6979.59	0.00	30.00	0.00	1	0	1	0	0
7755.10	0.00	30.00	0.00	1	0	1	0	0
8530.61	0.00	30.00	0.00	1	0	1	0	0
9306.12	0.00	30.00	0.00	1	0	1	0	0
10081.63	35.65	30.00	10000.00	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
10857.14	30.16	30.00	10000.00	0	0	0	0	0
11632.65	26.07	30.00	274.10	1	0	0	0	1
12408.16	22.92	30.00	136.69	1	0	0	0	1
13183.67	20.39	30.00	95.73	1	0	0	0	1
13959.18	18.32	30.00	77.39	1	0	0	0	1
14734.69	16.58	30.00	63.29	1	0	0	0	1
15510.20	15.08	30.00	53.10	1	0	0	0	1
16285.71	13.78	30.00	46.44	1	0	0	0	1
17061.22	12.62	30.00	40.96	1	0	0	0	1
17836.73	11.59	30.00	36.41	1	0	0	0	1
18612.24	10.66	30.00	32.58	1	0	0	0	1
19387.76	9.83	30.00	29.34	0	0	0	0	0
20163.27	9.10	30.00	26.58	0	0	0	0	0
20938.78	8.44	30.00	24.20	0	0	0	0	0
21714.29	7.86	30.00	22.14	0	0	0	0	0
22489.80	7.33	30.00	20.34	0	0	0	0	0
23265.31	6.85	30.00	18.77	0	0	0	0	0
24040.82	6.42	30.00	17.38	0	0	0	0	0
24816.33	6.03	30.00	16.15	0	0	0	0	0
25591.84	5.68	30.00	15.06	0	0	0	0	0
26367.35	5.35	30.00	14.08	0	0	0	0	0
27142.86	5.05	30.00	13.20	0	0	0	0	0
27918.37	4.78	30.00	12.41	0	0	0	0	0
28693.88	4.53	30.00	11.70	0	0	0	0	0
29469.39	4.30	30.00	11.05	0	0	0	0	0
30244.90	4.08	30.00	10.46	0	0	0	0	0
31020.41	3.88	30.00	9.92	0	0	0	0	0
31795.92	3.70	30.00	9.41	0	0	0	0	0
32571.43	3.52	30.00	8.94	0	0	0	0	0
33346.94	3.36	30.00	8.51	0	0	0	0	0
34122.45	3.21	30.00	8.11	0	0	0	0	0
34897.96	3.07	30.00	7.73	0	0	0	0	0
35673.47	2.94	30.00	7.38	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
36448.98	0.00	30.00	0.00	0	0	0	0	0
37224.49	0.00	30.00	0.00	0	0	0	0	0
38000.00	0.00	30.00	0.00	0	0	0	0	0
0.00	0.00	40.00	0.00	1	0	1	0	0
775.51	0.00	40.00	0.00	1	0	1	0	0
1551.02	0.00	40.00	0.00	1	0	1	0	0
2326.53	0.00	40.00	0.00	1	0	1	0	0
3102.04	0.00	40.00	0.00	1	0	1	0	0
3877.55	0.00	40.00	0.00	1	0	1	0	0
4653.06	0.00	40.00	0.00	1	0	1	0	0
5428.57	0.00	40.00	0.00	1	0	1	0	0
6204.08	0.00	40.00	0.00	1	0	1	0	0
6979.59	0.00	40.00	0.00	1	0	1	0	0
7755.10	0.00	40.00	0.00	1	0	1	0	0
8530.61	0.00	40.00	0.00	1	0	1	0	0
9306.12	0.00	40.00	0.00	1	0	1	0	0
10081.63	35.65	40.00	10000.00	1	0	0	0	1
10857.14	30.16	40.00	10000.00	1	0	0	0	1
11632.65	26.07	40.00	274.10	1	0	0	0	1
12408.16	22.92	40.00	136.69	1	0	0	0	1
13183.67	20.39	40.00	95.73	1	0	0	0	1
13959.18	18.32	40.00	77.39	1	0	0	0	1
14734.69	16.58	40.00	63.29	1	0	0	0	1
15510.20	15.08	40.00	53.10	1	0	0	0	1
16285.71	13.78	40.00	46.44	1	0	0	0	1
17061.22	12.62	40.00	40.96	1	0	0	0	1
17836.73	11.59	40.00	36.41	0	0	0	0	0
18612.24	10.66	40.00	32.58	0	0	0	0	0
19387.76	9.83	40.00	29.34	0	0	0	0	0
20163.27	9.10	40.00	26.58	0	0	0	0	0
20938.78	8.44	40.00	24.20	0	0	0	0	0
21714.29	7.86	40.00	22.14	0	0	0	0	0
22489.80	7.33	40.00	20.34	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
23265.31	6.85	40.00	18.77	0	0	0	0	0
24040.82	6.42	40.00	17.38	0	0	0	0	0
24816.33	6.03	40.00	16.15	0	0	0	0	0
25591.84	5.68	40.00	15.06	0	0	0	0	0
26367.35	5.35	40.00	14.08	0	0	0	0	0
27142.86	5.05	40.00	13.20	0	0	0	0	0
27918.37	4.78	40.00	12.41	0	0	0	0	0
28693.88	4.53	40.00	11.70	0	0	0	0	0
29469.39	4.30	40.00	11.05	0	0	0	0	0
30244.90	4.08	40.00	10.46	0	0	0	0	0
31020.41	3.88	40.00	9.92	0	0	0	0	0
31795.92	3.70	40.00	9.41	0	0	0	0	0
32571.43	3.52	40.00	8.94	0	0	0	0	0
33346.94	3.36	40.00	8.51	0	0	0	0	0
34122.45	3.21	40.00	8.11	0	0	0	0	0
34897.96	3.07	40.00	7.73	0	0	0	0	0
35673.47	2.94	40.00	7.38	0	0	0	0	0
36448.98	0.00	40.00	0.00	0	0	0	0	0
37224.49	0.00	40.00	0.00	0	0	0	0	0
38000.00	0.00	40.00	0.00	0	0	0	0	0
0.00	0.00	50.00	0.00	1	0	1	0	0
775.51	0.00	50.00	0.00	1	0	1	0	0
1551.02	0.00	50.00	0.00	1	0	1	0	0
2326.53	0.00	50.00	0.00	1	0	1	0	0
3102.04	0.00	50.00	0.00	1	0	1	0	0
3877.55	0.00	50.00	0.00	1	0	1	0	0
4653.06	0.00	50.00	0.00	1	0	1	0	0
5428.57	0.00	50.00	0.00	1	0	1	0	0
6204.08	0.00	50.00	0.00	1	0	1	0	0
6979.59	0.00	50.00	0.00	1	0	1	0	0
7755.10	0.00	50.00	0.00	1	0	1	0	0
8530.61	0.00	50.00	0.00	1	0	1	0	0
9306.12	0.00	50.00	0.00	1	0	1	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
10081.63	35.65	50.00	10000.00	1	0	0	0	1
10857.14	30.16	50.00	10000.00	1	0	0	0	1
11632.65	26.07	50.00	274.10	1	0	0	0	1
12408.16	22.92	50.00	136.69	1	0	0	0	1
13183.67	20.39	50.00	95.73	1	0	0	0	1
13959.18	18.32	50.00	77.39	1	0	0	0	1
14734.69	16.58	50.00	63.29	1	0	0	0	1
15510.20	15.08	50.00	53.10	1	0	0	0	1
16285.71	13.78	50.00	46.44	0	0	0	0	0
17061.22	12.62	50.00	40.96	0	0	0	0	0
17836.73	11.59	50.00	36.41	0	0	0	0	0
18612.24	10.66	50.00	32.58	0	0	0	0	0
19387.76	9.83	50.00	29.34	0	0	0	0	0
20163.27	9.10	50.00	26.58	0	0	0	0	0
20938.78	8.44	50.00	24.20	0	0	0	0	0
21714.29	7.86	50.00	22.14	0	0	0	0	0
22489.80	7.33	50.00	20.34	0	0	0	0	0
23265.31	6.85	50.00	18.77	0	0	0	0	0
24040.82	6.42	50.00	17.38	0	0	0	0	0
24816.33	6.03	50.00	16.15	0	0	0	0	0
25591.84	5.68	50.00	15.06	0	0	0	0	0
26367.35	5.35	50.00	14.08	0	0	0	0	0
27142.86	5.05	50.00	13.20	0	0	0	0	0
27918.37	4.78	50.00	12.41	0	0	0	0	0
28693.88	4.53	50.00	11.70	0	0	0	0	0
29469.39	4.30	50.00	11.05	0	0	0	0	0
30244.90	4.08	50.00	10.46	0	0	0	0	0
31020.41	3.88	50.00	9.92	0	0	0	0	0
31795.92	3.70	50.00	9.41	0	0	0	0	0
32571.43	3.52	50.00	8.94	0	0	0	0	0
33346.94	3.36	50.00	8.51	0	0	0	0	0
34122.45	3.21	50.00	8.11	0	0	0	0	0
34897.96	3.07	50.00	7.73	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
35673.47	2.94	50.00	7.38	0	0	0	0	0
36448.98	0.00	50.00	0.00	0	0	0	0	0
37224.49	0.00	50.00	0.00	0	0	0	0	0
38000.00	0.00	50.00	0.00	0	0	0	0	0
0.00	0.00	81.08	0.00	1	0	1	0	0
775.51	0.00	81.08	0.00	1	0	1	0	0
1551.02	0.00	81.08	0.00	1	0	1	0	0
2326.53	0.00	81.08	0.00	1	0	1	0	0
3102.04	0.00	81.08	0.00	1	0	1	0	0
3877.55	0.00	81.08	0.00	1	0	1	0	0
4653.06	0.00	81.08	0.00	1	0	1	0	0
5428.57	0.00	81.08	0.00	1	0	1	0	0
6204.08	0.00	81.08	0.00	1	0	1	0	0
6979.59	0.00	81.08	0.00	1	0	1	0	0
7755.10	0.00	81.08	0.00	1	0	1	0	0
8530.61	0.00	81.08	0.00	1	0	1	0	0
9306.12	0.00	81.08	0.00	1	0	1	0	0
10081.63	35.65	81.08	10000.00	1	0	0	0	1
10857.14	30.16	81.08	10000.00	1	0	0	0	1
11632.65	26.07	81.08	274.10	1	0	0	0	1
12408.16	22.92	81.08	136.69	1	0	0	0	1
13183.67	20.39	81.08	95.73	1	0	0	0	1
13959.18	18.32	81.08	77.39	0	0	0	0	0
14734.69	16.58	81.08	63.29	0	0	0	0	0
15510.20	15.08	81.08	53.10	0	0	0	0	0
16285.71	13.78	81.08	46.44	0	0	0	0	0
17061.22	12.62	81.08	40.96	0	0	0	0	0
17836.73	11.59	81.08	36.41	0	0	0	0	0
18612.24	10.66	81.08	32.58	0	0	0	0	0
19387.76	9.83	81.08	29.34	0	0	0	0	0
20163.27	9.10	81.08	26.58	0	0	0	0	0
20938.78	8.44	81.08	24.20	0	0	0	0	0
21714.29	7.86	81.08	22.14	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
22489.80	7.33	81.08	20.34	0	0	0	0	0
23265.31	6.85	81.08	18.77	0	0	0	0	0
24040.82	6.42	81.08	17.38	0	0	0	0	0
24816.33	6.03	81.08	16.15	0	0	0	0	0
25591.84	5.68	81.08	15.06	0	0	0	0	0
26367.35	5.35	81.08	14.08	0	0	0	0	0
27142.86	5.05	81.08	13.20	0	0	0	0	0
27918.37	4.78	81.08	12.41	0	0	0	0	0
28693.88	4.53	81.08	11.70	0	0	0	0	0
29469.39	4.30	81.08	11.05	0	0	0	0	0
30244.90	4.08	81.08	10.46	0	0	0	0	0
31020.41	3.88	81.08	9.92	0	0	0	0	0
31795.92	3.70	81.08	9.41	0	0	0	0	0
32571.43	3.52	81.08	8.94	0	0	0	0	0
33346.94	3.36	81.08	8.51	0	0	0	0	0
34122.45	3.21	81.08	8.11	0	0	0	0	0
34897.96	3.07	81.08	7.73	0	0	0	0	0
35673.47	2.94	81.08	7.38	0	0	0	0	0
36448.98	0.00	81.08	0.00	0	0	0	0	0
37224.49	0.00	81.08	0.00	0	0	0	0	0
38000.00	0.00	81.08	0.00	0	0	0	0	0
0.00	0.00	100.00	0.00	1	0	1	0	0
775.51	0.00	100.00	0.00	1	0	1	0	0
1551.02	0.00	100.00	0.00	1	0	1	0	0
2326.53	0.00	100.00	0.00	1	0	1	0	0
3102.04	0.00	100.00	0.00	1	0	1	0	0
3877.55	0.00	100.00	0.00	1	0	1	0	0
4653.06	0.00	100.00	0.00	1	0	1	0	0
5428.57	0.00	100.00	0.00	1	0	1	0	0
6204.08	0.00	100.00	0.00	1	0	1	0	0
6979.59	0.00	100.00	0.00	1	0	1	0	0
7755.10	0.00	100.00	0.00	1	0	1	0	0
8530.61	0.00	100.00	0.00	1	0	1	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
9306.12	0.00	100.00	0.00	1	0	1	0	0
10081.63	35.65	100.00	10000.00	1	0	0	0	1
10857.14	30.16	100.00	10000.00	1	0	0	0	1
11632.65	26.07	100.00	274.10	1	0	0	0	1
12408.16	22.92	100.00	136.69	1	0	0	0	1
13183.67	20.39	100.00	95.73	0	0	0	0	0
13959.18	18.32	100.00	77.39	0	0	0	0	0
14734.69	16.58	100.00	63.29	0	0	0	0	0
15510.20	15.08	100.00	53.10	0	0	0	0	0
16285.71	13.78	100.00	46.44	0	0	0	0	0
17061.22	12.62	100.00	40.96	0	0	0	0	0
17836.73	11.59	100.00	36.41	0	0	0	0	0
18612.24	10.66	100.00	32.58	0	0	0	0	0
19387.76	9.83	100.00	29.34	0	0	0	0	0
20163.27	9.10	100.00	26.58	0	0	0	0	0
20938.78	8.44	100.00	24.20	0	0	0	0	0
21714.29	7.86	100.00	22.14	0	0	0	0	0
22489.80	7.33	100.00	20.34	0	0	0	0	0
23265.31	6.85	100.00	18.77	0	0	0	0	0
24040.82	6.42	100.00	17.38	0	0	0	0	0
24816.33	6.03	100.00	16.15	0	0	0	0	0
25591.84	5.68	100.00	15.06	0	0	0	0	0
26367.35	5.35	100.00	14.08	0	0	0	0	0
27142.86	5.05	100.00	13.20	0	0	0	0	0
27918.37	4.78	100.00	12.41	0	0	0	0	0
28693.88	4.53	100.00	11.70	0	0	0	0	0
29469.39	4.30	100.00	11.05	0	0	0	0	0
30244.90	4.08	100.00	10.46	0	0	0	0	0
31020.41	3.88	100.00	9.92	0	0	0	0	0
31795.92	3.70	100.00	9.41	0	0	0	0	0
32571.43	3.52	100.00	8.94	0	0	0	0	0
33346.94	3.36	100.00	8.51	0	0	0	0	0
34122.45	3.21	100.00	8.11	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
34897.96	3.07	100.00	7.73	0	0	0	0	0
35673.47	2.94	100.00	7.38	0	0	0	0	0
36448.98	0.00	100.00	0.00	0	0	0	0	0
37224.49	0.00	100.00	0.00	0	0	0	0	0
38000.00	0.00	100.00	0.00	0	0	0	0	0
0.00	0.00	200.00	0.00	1	0	1	0	0
775.51	0.00	200.00	0.00	1	0	1	0	0
1551.02	0.00	200.00	0.00	1	0	1	0	0
2326.53	0.00	200.00	0.00	1	0	1	0	0
3102.04	0.00	200.00	0.00	1	0	1	0	0
3877.55	0.00	200.00	0.00	1	0	1	0	0
4653.06	0.00	200.00	0.00	1	0	1	0	0
5428.57	0.00	200.00	0.00	1	0	1	0	0
6204.08	0.00	200.00	0.00	1	0	1	0	0
6979.59	0.00	200.00	0.00	1	0	1	0	0
7755.10	0.00	200.00	0.00	1	0	1	0	0
8530.61	0.00	200.00	0.00	1	0	1	0	0
9306.12	0.00	200.00	0.00	1	0	1	0	0
10081.63	35.65	200.00	10000.00	1	0	0	0	1
10857.14	30.16	200.00	10000.00	1	0	0	0	1
11632.65	26.07	200.00	274.10	1	0	0	0	1
12408.16	22.92	200.00	136.69	0	0	0	0	0
13183.67	20.39	200.00	95.73	0	0	0	0	0
13959.18	18.32	200.00	77.39	0	0	0	0	0
14734.69	16.58	200.00	63.29	0	0	0	0	0
15510.20	15.08	200.00	53.10	0	0	0	0	0
16285.71	13.78	200.00	46.44	0	0	0	0	0
17061.22	12.62	200.00	40.96	0	0	0	0	0
17836.73	11.59	200.00	36.41	0	0	0	0	0
18612.24	10.66	200.00	32.58	0	0	0	0	0
19387.76	9.83	200.00	29.34	0	0	0	0	0
20163.27	9.10	200.00	26.58	0	0	0	0	0
20938.78	8.44	200.00	24.20	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
21714.29	7.86	200.00	22.14	0	0	0	0	0
22489.80	7.33	200.00	20.34	0	0	0	0	0
23265.31	6.85	200.00	18.77	0	0	0	0	0
24040.82	6.42	200.00	17.38	0	0	0	0	0
24816.33	6.03	200.00	16.15	0	0	0	0	0
25591.84	5.68	200.00	15.06	0	0	0	0	0
26367.35	5.35	200.00	14.08	0	0	0	0	0
27142.86	5.05	200.00	13.20	0	0	0	0	0
27918.37	4.78	200.00	12.41	0	0	0	0	0
28693.88	4.53	200.00	11.70	0	0	0	0	0
29469.39	4.30	200.00	11.05	0	0	0	0	0
30244.90	4.08	200.00	10.46	0	0	0	0	0
31020.41	3.88	200.00	9.92	0	0	0	0	0
31795.92	3.70	200.00	9.41	0	0	0	0	0
32571.43	3.52	200.00	8.94	0	0	0	0	0
33346.94	3.36	200.00	8.51	0	0	0	0	0
34122.45	3.21	200.00	8.11	0	0	0	0	0
34897.96	3.07	200.00	7.73	0	0	0	0	0
35673.47	2.94	200.00	7.38	0	0	0	0	0
36448.98	0.00	200.00	0.00	0	0	0	0	0
37224.49	0.00	200.00	0.00	0	0	0	0	0
38000.00	0.00	200.00	0.00	0	0	0	0	0
0.00	0.00	250.00	0.00	1	0	1	0	0
775.51	0.00	250.00	0.00	1	0	1	0	0
1551.02	0.00	250.00	0.00	1	0	1	0	0
2326.53	0.00	250.00	0.00	1	0	1	0	0
3102.04	0.00	250.00	0.00	1	0	1	0	0
3877.55	0.00	250.00	0.00	1	0	1	0	0
4653.06	0.00	250.00	0.00	1	0	1	0	0
5428.57	0.00	250.00	0.00	1	0	1	0	0
6204.08	0.00	250.00	0.00	1	0	1	0	0
6979.59	0.00	250.00	0.00	1	0	1	0	0
7755.10	0.00	250.00	0.00	1	0	1	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
8530.61	0.00	250.00	0.00	1	0	1	0	0
9306.12	0.00	250.00	0.00	1	0	1	0	0
10081.63	35.65	250.00	10000.00	1	0	0	0	1
10857.14	30.16	250.00	10000.00	1	0	0	0	1
11632.65	26.07	250.00	274.10	1	0	0	0	1
12408.16	22.92	250.00	136.69	0	0	0	0	0
13183.67	20.39	250.00	95.73	0	0	0	0	0
13959.18	18.32	250.00	77.39	0	0	0	0	0
14734.69	16.58	250.00	63.29	0	0	0	0	0
15510.20	15.08	250.00	53.10	0	0	0	0	0
16285.71	13.78	250.00	46.44	0	0	0	0	0
17061.22	12.62	250.00	40.96	0	0	0	0	0
17836.73	11.59	250.00	36.41	0	0	0	0	0
18612.24	10.66	250.00	32.58	0	0	0	0	0
19387.76	9.83	250.00	29.34	0	0	0	0	0
20163.27	9.10	250.00	26.58	0	0	0	0	0
20938.78	8.44	250.00	24.20	0	0	0	0	0
21714.29	7.86	250.00	22.14	0	0	0	0	0
22489.80	7.33	250.00	20.34	0	0	0	0	0
23265.31	6.85	250.00	18.77	0	0	0	0	0
24040.82	6.42	250.00	17.38	0	0	0	0	0
24816.33	6.03	250.00	16.15	0	0	0	0	0
25591.84	5.68	250.00	15.06	0	0	0	0	0
26367.35	5.35	250.00	14.08	0	0	0	0	0
27142.86	5.05	250.00	13.20	0	0	0	0	0
27918.37	4.78	250.00	12.41	0	0	0	0	0
28693.88	4.53	250.00	11.70	0	0	0	0	0
29469.39	4.30	250.00	11.05	0	0	0	0	0
30244.90	4.08	250.00	10.46	0	0	0	0	0
31020.41	3.88	250.00	9.92	0	0	0	0	0
31795.92	3.70	250.00	9.41	0	0	0	0	0
32571.43	3.52	250.00	8.94	0	0	0	0	0
33346.94	3.36	250.00	8.51	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
34122.45	3.21	250.00	8.11	0	0	0	0	0
34897.96	3.07	250.00	7.73	0	0	0	0	0
35673.47	2.94	250.00	7.38	0	0	0	0	0
36448.98	0.00	250.00	0.00	0	0	0	0	0
37224.49	0.00	250.00	0.00	0	0	0	0	0
38000.00	0.00	250.00	0.00	0	0	0	0	0
0.00	0.00	300.00	0.00	1	0	1	0	0
775.51	0.00	300.00	0.00	1	0	1	0	0
1551.02	0.00	300.00	0.00	1	0	1	0	0
2326.53	0.00	300.00	0.00	1	0	1	0	0
3102.04	0.00	300.00	0.00	1	0	1	0	0
3877.55	0.00	300.00	0.00	1	0	1	0	0
4653.06	0.00	300.00	0.00	1	0	1	0	0
5428.57	0.00	300.00	0.00	1	0	1	0	0
6204.08	0.00	300.00	0.00	1	0	1	0	0
6979.59	0.00	300.00	0.00	1	0	1	0	0
7755.10	0.00	300.00	0.00	1	0	1	0	0
8530.61	0.00	300.00	0.00	1	0	1	0	0
9306.12	0.00	300.00	0.00	1	0	1	0	0
10081.63	35.65	300.00	10000.00	1	0	0	0	1
10857.14	30.16	300.00	10000.00	1	0	0	0	1
11632.65	26.07	300.00	274.10	0	0	0	0	0
12408.16	22.92	300.00	136.69	0	0	0	0	0
13183.67	20.39	300.00	95.73	0	0	0	0	0
13959.18	18.32	300.00	77.39	0	0	0	0	0
14734.69	16.58	300.00	63.29	0	0	0	0	0
15510.20	15.08	300.00	53.10	0	0	0	0	0
16285.71	13.78	300.00	46.44	0	0	0	0	0
17061.22	12.62	300.00	40.96	0	0	0	0	0
17836.73	11.59	300.00	36.41	0	0	0	0	0
18612.24	10.66	300.00	32.58	0	0	0	0	0
19387.76	9.83	300.00	29.34	0	0	0	0	0
20163.27	9.10	300.00	26.58	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
20938.78	8.44	300.00	24.20	0	0	0	0	0
21714.29	7.86	300.00	22.14	0	0	0	0	0
22489.80	7.33	300.00	20.34	0	0	0	0	0
23265.31	6.85	300.00	18.77	0	0	0	0	0
24040.82	6.42	300.00	17.38	0	0	0	0	0
24816.33	6.03	300.00	16.15	0	0	0	0	0
25591.84	5.68	300.00	15.06	0	0	0	0	0
26367.35	5.35	300.00	14.08	0	0	0	0	0
27142.86	5.05	300.00	13.20	0	0	0	0	0
27918.37	4.78	300.00	12.41	0	0	0	0	0
28693.88	4.53	300.00	11.70	0	0	0	0	0
29469.39	4.30	300.00	11.05	0	0	0	0	0
30244.90	4.08	300.00	10.46	0	0	0	0	0
31020.41	3.88	300.00	9.92	0	0	0	0	0
31795.92	3.70	300.00	9.41	0	0	0	0	0
32571.43	3.52	300.00	8.94	0	0	0	0	0
33346.94	3.36	300.00	8.51	0	0	0	0	0
34122.45	3.21	300.00	8.11	0	0	0	0	0
34897.96	3.07	300.00	7.73	0	0	0	0	0
35673.47	2.94	300.00	7.38	0	0	0	0	0
36448.98	0.00	300.00	0.00	0	0	0	0	0
37224.49	0.00	300.00	0.00	0	0	0	0	0
38000.00	0.00	300.00	0.00	0	0	0	0	0
0.00	0.00	500.00	0.00	1	0	1	0	0
775.51	0.00	500.00	0.00	1	0	1	0	0
1551.02	0.00	500.00	0.00	1	0	1	0	0
2326.53	0.00	500.00	0.00	1	0	1	0	0
3102.04	0.00	500.00	0.00	1	0	1	0	0
3877.55	0.00	500.00	0.00	1	0	1	0	0
4653.06	0.00	500.00	0.00	1	0	1	0	0
5428.57	0.00	500.00	0.00	1	0	1	0	0
6204.08	0.00	500.00	0.00	1	0	1	0	0
6979.59	0.00	500.00	0.00	1	0	1	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
7755.10	0.00	500.00	0.00	1	0	1	0	0
8530.61	0.00	500.00	0.00	1	0	1	0	0
9306.12	0.00	500.00	0.00	1	0	1	0	0
10081.63	35.65	500.00	10000.00	1	0	0	0	1
10857.14	30.16	500.00	10000.00	1	0	0	0	1
11632.65	26.07	500.00	274.10	0	0	0	0	0
12408.16	22.92	500.00	136.69	0	0	0	0	0
13183.67	20.39	500.00	95.73	0	0	0	0	0
13959.18	18.32	500.00	77.39	0	0	0	0	0
14734.69	16.58	500.00	63.29	0	0	0	0	0
15510.20	15.08	500.00	53.10	0	0	0	0	0
16285.71	13.78	500.00	46.44	0	0	0	0	0
17061.22	12.62	500.00	40.96	0	0	0	0	0
17836.73	11.59	500.00	36.41	0	0	0	0	0
18612.24	10.66	500.00	32.58	0	0	0	0	0
19387.76	9.83	500.00	29.34	0	0	0	0	0
20163.27	9.10	500.00	26.58	0	0	0	0	0
20938.78	8.44	500.00	24.20	0	0	0	0	0
21714.29	7.86	500.00	22.14	0	0	0	0	0
22489.80	7.33	500.00	20.34	0	0	0	0	0
23265.31	6.85	500.00	18.77	0	0	0	0	0
24040.82	6.42	500.00	17.38	0	0	0	0	0
24816.33	6.03	500.00	16.15	0	0	0	0	0
25591.84	5.68	500.00	15.06	0	0	0	0	0
26367.35	5.35	500.00	14.08	0	0	0	0	0
27142.86	5.05	500.00	13.20	0	0	0	0	0
27918.37	4.78	500.00	12.41	0	0	0	0	0
28693.88	4.53	500.00	11.70	0	0	0	0	0
29469.39	4.30	500.00	11.05	0	0	0	0	0
30244.90	4.08	500.00	10.46	0	0	0	0	0
31020.41	3.88	500.00	9.92	0	0	0	0	0
31795.92	3.70	500.00	9.41	0	0	0	0	0
32571.43	3.52	500.00	8.94	0	0	0	0	0

Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
33346.94	3.36	500.00	8.51	0	0	0	0	0
34122.45	3.21	500.00	8.11	0	0	0	0	0
34897.96	3.07	500.00	7.73	0	0	0	0	0
35673.47	2.94	500.00	7.38	0	0	0	0	0
36448.98	0.00	500.00	0.00	0	0	0	0	0
37224.49	0.00	500.00	0.00	0	0	0	0	0
38000.00	0.00	500.00	0.00	0	0	0	0	0