Report document

Report generated: 2021-06-09 16:28:25.023289

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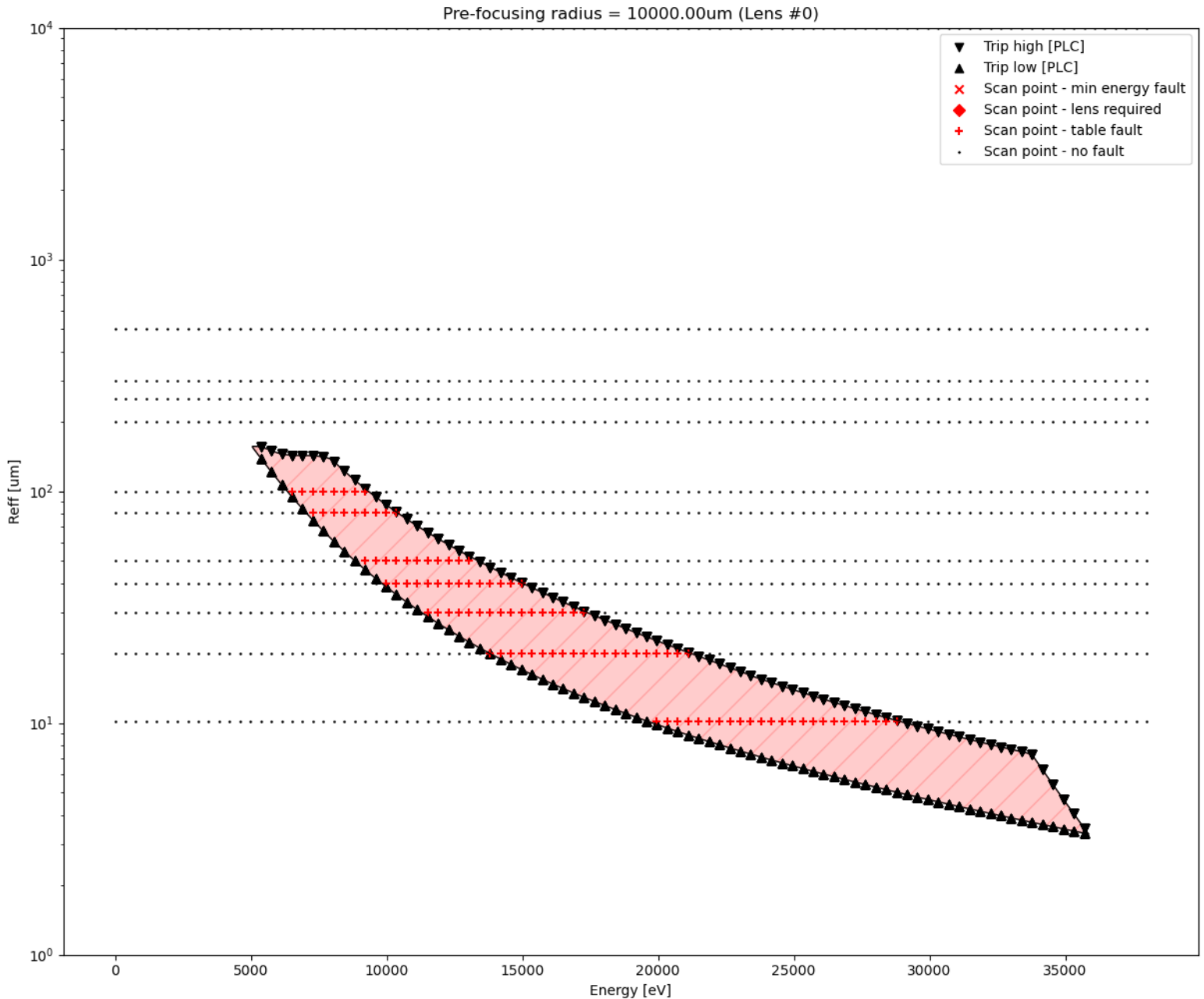
Scan 1: No pre-focusing lens

Data generated: 2021-06-09 23:28:24
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
383.84	0.00	10000.00	0.00	0	0	0	0	0
767.68	0.00	10000.00	0.00	0	0	0	0	0
1151.52	0.00	10000.00	0.00	0	0	0	0	0
1535.35	0.00	10000.00	0.00	0	0	0	0	0
1919.19	0.00	10000.00	0.00	0	0	0	0	0
2303.03	0.00	10000.00	0.00	0	0	0	0	0
2686.87	0.00	10000.00	0.00	0	0	0	0	0
3070.71	0.00	10000.00	0.00	0	0	0	0	0
3454.55	0.00	10000.00	0.00	0	0	0	0	0
3838.38	0.00	10000.00	0.00	0	0	0	0	0
4222.22	0.00	10000.00	0.00	0	0	0	0	0
4606.06	0.00	10000.00	0.00	0	0	0	0	0
4989.90	0.00	10000.00	0.00	0	0	0	0	0
5373.74	138.55	10000.00	155.28	0	0	0	0	0
5757.58	121.28	10000.00	149.55	0	0	0	0	0
6141.41	106.69	10000.00	144.76	0	0	0	0	0
6525.25	94.35	10000.00	142.79	0	0	0	0	0
6909.09	83.87	10000.00	142.55	0	0	0	0	0
7292.93	74.95	10000.00	142.26	0	0	0	0	0
7676.77	67.31	10000.00	140.43	0	0	0	0	0
8060.61	60.74	10000.00	134.34	0	0	0	0	0
8444.44	55.06	10000.00	122.20	0	0	0	0	0
8828.28	50.13	10000.00	111.69	0	0	0	0	0
9212.12	45.83	10000.00	102.55	0	0	0	0	0
9595.96	42.06	10000.00	94.56	0	0	0	0	0
9979.80	38.73	10000.00	87.53	0	0	0	0	0
10363.64	35.80	10000.00	81.31	0	0	0	0	0
10747.47	33.19	10000.00	75.77	0	0	0	0	0
11131.31	30.86	10000.00	70.83	0	0	0	0	0
11515.15	28.78	10000.00	66.40	0	0	0	0	0
11898.99	26.91	10000.00	62.39	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
12282.83	25.22	10000.00	58.76	0	0	0	0	0
12666.67	23.70	10000.00	55.43	0	0	0	0	0
13050.50	22.31	10000.00	52.42	0	0	0	0	0
13434.34	21.05	10000.00	49.64	0	0	0	0	0
13818.18	19.91	10000.00	47.04	0	0	0	0	0
14202.02	18.85	10000.00	44.62	0	0	0	0	0
14585.86	17.89	10000.00	42.37	0	0	0	0	0
14969.70	17.00	10000.00	40.29	0	0	0	0	0
15353.54	16.18	10000.00	38.35	0	0	0	0	0
15737.37	15.43	10000.00	36.53	0	0	0	0	0
16121.21	14.72	10000.00	34.84	0	0	0	0	0
16505.05	14.07	10000.00	33.25	0	0	0	0	0
16888.89	13.47	10000.00	31.76	0	0	0	0	0
17272.73	12.90	10000.00	30.36	0	0	0	0	0
17656.57	12.38	10000.00	29.04	0	0	0	0	0
18040.40	11.89	10000.00	27.80	0	0	0	0	0
18424.24	11.42	10000.00	26.64	0	0	0	0	0
18808.08	10.99	10000.00	25.54	0	0	0	0	0
19191.92	10.58	10000.00	24.51	0	0	0	0	0
19575.76	10.20	10000.00	23.54	0	0	0	0	0
19959.60	9.84	10000.00	22.62	0	0	0	0	0
20343.43	9.50	10000.00	21.76	0	0	0	0	0
20727.27	9.18	10000.00	20.94	0	0	0	0	0
21111.11	8.87	10000.00	20.16	0	0	0	0	0
21494.95	8.58	10000.00	19.41	0	0	0	0	0
21878.79	8.31	10000.00	18.70	0	0	0	0	0
22262.63	8.05	10000.00	18.01	0	0	0	0	0
22646.46	7.80	10000.00	17.34	0	0	0	0	0
23030.30	7.56	10000.00	16.69	0	0	0	0	0
23414.14	7.34	10000.00	16.05	0	0	0	0	0
23797.98	7.12	10000.00	15.45	0	0	0	0	0
24181.82	6.92	10000.00	14.93	0	0	0	0	0
24565.66	6.72	10000.00	14.43	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
24949.49	6.53	10000.00	13.95	0	0	0	0	0
25333.33	6.36	10000.00	13.50	0	0	0	0	0
25717.17	6.18	10000.00	13.07	0	0	0	0	0
26101.01	6.02	10000.00	12.66	0	0	0	0	0
26484.85	5.86	10000.00	12.26	0	0	0	0	0
26868.69	5.71	10000.00	11.89	0	0	0	0	0
27252.53	5.56	10000.00	11.53	0	0	0	0	0
27636.36	5.42	10000.00	11.19	0	0	0	0	0
28020.20	5.28	10000.00	10.86	0	0	0	0	0
28404.04	5.15	10000.00	10.55	0	0	0	0	0
28787.88	5.03	10000.00	10.25	0	0	0	0	0
29171.72	4.91	10000.00	9.96	0	0	0	0	0
29555.55	4.79	10000.00	9.69	0	0	0	0	0
29939.39	4.67	10000.00	9.43	0	0	0	0	0
30323.23	4.57	10000.00	9.18	0	0	0	0	0
30707.07	4.46	10000.00	8.94	0	0	0	0	0
31090.91	4.36	10000.00	8.71	0	0	0	0	0
31474.75	4.26	10000.00	8.49	0	0	0	0	0
31858.59	4.16	10000.00	8.27	0	0	0	0	0
32242.42	4.07	10000.00	8.07	0	0	0	0	0
32626.26	3.98	10000.00	7.88	0	0	0	0	0
33010.10	3.89	10000.00	7.69	0	0	0	0	0
33393.94	3.81	10000.00	7.51	0	0	0	0	0
33777.78	3.72	10000.00	7.29	0	0	0	0	0
34161.62	3.64	10000.00	6.28	0	0	0	0	0
34545.45	3.57	10000.00	5.42	0	0	0	0	0
34929.29	3.49	10000.00	4.69	0	0	0	0	0
35313.13	3.42	10000.00	4.06	0	0	0	0	0
35696.97	3.34	10000.00	3.52	0	0	0	0	0
36080.81	0.00	10000.00	0.00	0	0	0	0	0
36464.64	0.00	10000.00	0.00	0	0	0	0	0
36848.48	0.00	10000.00	0.00	0	0	0	0	0
37232.32	0.00	10000.00	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
37616.16	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
383.84	0.00	10.17	0.00	0	0	0	0	0
767.68	0.00	10.17	0.00	0	0	0	0	0
1151.52	0.00	10.17	0.00	0	0	0	0	0
1535.35	0.00	10.17	0.00	0	0	0	0	0
1919.19	0.00	10.17	0.00	0	0	0	0	0
2303.03	0.00	10.17	0.00	0	0	0	0	0
2686.87	0.00	10.17	0.00	0	0	0	0	0
3070.71	0.00	10.17	0.00	0	0	0	0	0
3454.55	0.00	10.17	0.00	0	0	0	0	0
3838.38	0.00	10.17	0.00	0	0	0	0	0
4222.22	0.00	10.17	0.00	0	0	0	0	0
4606.06	0.00	10.17	0.00	0	0	0	0	0
4989.90	0.00	10.17	0.00	0	0	0	0	0
5373.74	138.55	10.17	155.28	0	0	0	0	0
5757.58	121.28	10.17	149.55	0	0	0	0	0
6141.41	106.69	10.17	144.76	0	0	0	0	0
6525.25	94.35	10.17	142.79	0	0	0	0	0
6909.09	83.87	10.17	142.55	0	0	0	0	0
7292.93	74.95	10.17	142.26	0	0	0	0	0
7676.77	67.31	10.17	140.43	0	0	0	0	0
8060.61	60.74	10.17	134.34	0	0	0	0	0
8444.44	55.06	10.17	122.20	0	0	0	0	0
8828.28	50.13	10.17	111.69	0	0	0	0	0
9212.12	45.83	10.17	102.55	0	0	0	0	0
9595.96	42.06	10.17	94.56	0	0	0	0	0
9979.80	38.73	10.17	87.53	0	0	0	0	0
10363.64	35.80	10.17	81.31	0	0	0	0	0
10747.47	33.19	10.17	75.77	0	0	0	0	0
11131.31	30.86	10.17	70.83	0	0	0	0	0
11515.15	28.78	10.17	66.40	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
11898.99	26.91	10.17	62.39	0	0	0	0	0
12282.83	25.22	10.17	58.76	0	0	0	0	0
12666.67	23.70	10.17	55.43	0	0	0	0	0
13050.50	22.31	10.17	52.42	0	0	0	0	0
13434.34	21.05	10.17	49.64	0	0	0	0	0
13818.18	19.91	10.17	47.04	0	0	0	0	0
14202.02	18.85	10.17	44.62	0	0	0	0	0
14585.86	17.89	10.17	42.37	0	0	0	0	0
14969.70	17.00	10.17	40.29	0	0	0	0	0
15353.54	16.18	10.17	38.35	0	0	0	0	0
15737.37	15.43	10.17	36.53	0	0	0	0	0
16121.21	14.72	10.17	34.84	0	0	0	0	0
16505.05	14.07	10.17	33.25	0	0	0	0	0
16888.89	13.47	10.17	31.76	0	0	0	0	0
17272.73	12.90	10.17	30.36	0	0	0	0	0
17656.57	12.38	10.17	29.04	0	0	0	0	0
18040.40	11.89	10.17	27.80	0	0	0	0	0
18424.24	11.42	10.17	26.64	0	0	0	0	0
18808.08	10.99	10.17	25.54	0	0	0	0	0
19191.92	10.58	10.17	24.51	0	0	0	0	0
19575.76	10.20	10.17	23.54	0	0	0	0	0
19959.60	9.84	10.17	22.62	1	0	0	0	1
20343.43	9.50	10.17	21.76	1	0	0	0	1
20727.27	9.18	10.17	20.94	1	0	0	0	1
21111.11	8.87	10.17	20.16	1	0	0	0	1
21494.95	8.58	10.17	19.41	1	0	0	0	1
21878.79	8.31	10.17	18.70	1	0	0	0	1
22262.63	8.05	10.17	18.01	1	0	0	0	1
22646.46	7.80	10.17	17.34	1	0	0	0	1
23030.30	7.56	10.17	16.69	1	0	0	0	1
23414.14	7.34	10.17	16.05	1	0	0	0	1
23797.98	7.12	10.17	15.45	1	0	0	0	1
24181.82	6.92	10.17	14.93	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
24565.66	6.72	10.17	14.43	1	0	0	0	1
24949.49	6.53	10.17	13.95	1	0	0	0	1
25333.33	6.36	10.17	13.50	1	0	0	0	1
25717.17	6.18	10.17	13.07	1	0	0	0	1
26101.01	6.02	10.17	12.66	1	0	0	0	1
26484.85	5.86	10.17	12.26	1	0	0	0	1
26868.69	5.71	10.17	11.89	1	0	0	0	1
27252.53	5.56	10.17	11.53	1	0	0	0	1
27636.36	5.42	10.17	11.19	1	0	0	0	1
28020.20	5.28	10.17	10.86	1	0	0	0	1
28404.04	5.15	10.17	10.55	1	0	0	0	1
28787.88	5.03	10.17	10.25	1	0	0	0	1
29171.72	4.91	10.17	9.96	0	0	0	0	0
29555.55	4.79	10.17	9.69	0	0	0	0	0
29939.39	4.67	10.17	9.43	0	0	0	0	0
30323.23	4.57	10.17	9.18	0	0	0	0	0
30707.07	4.46	10.17	8.94	0	0	0	0	0
31090.91	4.36	10.17	8.71	0	0	0	0	0
31474.75	4.26	10.17	8.49	0	0	0	0	0
31858.59	4.16	10.17	8.27	0	0	0	0	0
32242.42	4.07	10.17	8.07	0	0	0	0	0
32626.26	3.98	10.17	7.88	0	0	0	0	0
33010.10	3.89	10.17	7.69	0	0	0	0	0
33393.94	3.81	10.17	7.51	0	0	0	0	0
33777.78	3.72	10.17	7.29	0	0	0	0	0
34161.62	3.64	10.17	6.28	0	0	0	0	0
34545.45	3.57	10.17	5.42	0	0	0	0	0
34929.29	3.49	10.17	4.69	0	0	0	0	0
35313.13	3.42	10.17	4.06	0	0	0	0	0
35696.97	3.34	10.17	3.52	0	0	0	0	0
36080.81	0.00	10.17	0.00	0	0	0	0	0
36464.64	0.00	10.17	0.00	0	0	0	0	0
36848.48	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
37232.32	0.00	10.17	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	20.00	0.00	0	0	0	0	0
767.68	0.00	20.00	0.00	0	0	0	0	0
1151.52	0.00	20.00	0.00	0	0	0	0	0
1535.35	0.00	20.00	0.00	0	0	0	0	0
1919.19	0.00	20.00	0.00	0	0	0	0	0
2303.03	0.00	20.00	0.00	0	0	0	0	0
2686.87	0.00	20.00	0.00	0	0	0	0	0
3070.71	0.00	20.00	0.00	0	0	0	0	0
3454.55	0.00	20.00	0.00	0	0	0	0	0
3838.38	0.00	20.00	0.00	0	0	0	0	0
4222.22	0.00	20.00	0.00	0	0	0	0	0
4606.06	0.00	20.00	0.00	0	0	0	0	0
4989.90	0.00	20.00	0.00	0	0	0	0	0
5373.74	138.55	20.00	155.28	0	0	0	0	0
5757.58	121.28	20.00	149.55	0	0	0	0	0
6141.41	106.69	20.00	144.76	0	0	0	0	0
6525.25	94.35	20.00	142.79	0	0	0	0	0
6909.09	83.87	20.00	142.55	0	0	0	0	0
7292.93	74.95	20.00	142.26	0	0	0	0	0
7676.77	67.31	20.00	140.43	0	0	0	0	0
8060.61	60.74	20.00	134.34	0	0	0	0	0
8444.44	55.06	20.00	122.20	0	0	0	0	0
8828.28	50.13	20.00	111.69	0	0	0	0	0
9212.12	45.83	20.00	102.55	0	0	0	0	0
9595.96	42.06	20.00	94.56	0	0	0	0	0
9979.80	38.73	20.00	87.53	0	0	0	0	0
10363.64	35.80	20.00	81.31	0	0	0	0	0
10747.47	33.19	20.00	75.77	0	0	0	0	0
11131.31	30.86	20.00	70.83	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
11515.15	28.78	20.00	66.40	0	0	0	0	0
11898.99	26.91	20.00	62.39	0	0	0	0	0
12282.83	25.22	20.00	58.76	0	0	0	0	0
12666.67	23.70	20.00	55.43	0	0	0	0	0
13050.50	22.31	20.00	52.42	0	0	0	0	0
13434.34	21.05	20.00	49.64	0	0	0	0	0
13818.18	19.91	20.00	47.04	1	0	0	0	1
14202.02	18.85	20.00	44.62	1	0	0	0	1
14585.86	17.89	20.00	42.37	1	0	0	0	1
14969.70	17.00	20.00	40.29	1	0	0	0	1
15353.54	16.18	20.00	38.35	1	0	0	0	1
15737.37	15.43	20.00	36.53	1	0	0	0	1
16121.21	14.72	20.00	34.84	1	0	0	0	1
16505.05	14.07	20.00	33.25	1	0	0	0	1
16888.89	13.47	20.00	31.76	1	0	0	0	1
17272.73	12.90	20.00	30.36	1	0	0	0	1
17656.57	12.38	20.00	29.04	1	0	0	0	1
18040.40	11.89	20.00	27.80	1	0	0	0	1
18424.24	11.42	20.00	26.64	1	0	0	0	1
18808.08	10.99	20.00	25.54	1	0	0	0	1
19191.92	10.58	20.00	24.51	1	0	0	0	1
19575.76	10.20	20.00	23.54	1	0	0	0	1
19959.60	9.84	20.00	22.62	1	0	0	0	1
20343.43	9.50	20.00	21.76	1	0	0	0	1
20727.27	9.18	20.00	20.94	1	0	0	0	1
21111.11	8.87	20.00	20.16	1	0	0	0	1
21494.95	8.58	20.00	19.41	0	0	0	0	0
21878.79	8.31	20.00	18.70	0	0	0	0	0
22262.63	8.05	20.00	18.01	0	0	0	0	0
22646.46	7.80	20.00	17.34	0	0	0	0	0
23030.30	7.56	20.00	16.69	0	0	0	0	0
23414.14	7.34	20.00	16.05	0	0	0	0	0
23797.98	7.12	20.00	15.45	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
24181.82	6.92	20.00	14.93	0	0	0	0	0
24565.66	6.72	20.00	14.43	0	0	0	0	0
24949.49	6.53	20.00	13.95	0	0	0	0	0
25333.33	6.36	20.00	13.50	0	0	0	0	0
25717.17	6.18	20.00	13.07	0	0	0	0	0
26101.01	6.02	20.00	12.66	0	0	0	0	0
26484.85	5.86	20.00	12.26	0	0	0	0	0
26868.69	5.71	20.00	11.89	0	0	0	0	0
27252.53	5.56	20.00	11.53	0	0	0	0	0
27636.36	5.42	20.00	11.19	0	0	0	0	0
28020.20	5.28	20.00	10.86	0	0	0	0	0
28404.04	5.15	20.00	10.55	0	0	0	0	0
28787.88	5.03	20.00	10.25	0	0	0	0	0
29171.72	4.91	20.00	9.96	0	0	0	0	0
29555.55	4.79	20.00	9.69	0	0	0	0	0
29939.39	4.67	20.00	9.43	0	0	0	0	0
30323.23	4.57	20.00	9.18	0	0	0	0	0
30707.07	4.46	20.00	8.94	0	0	0	0	0
31090.91	4.36	20.00	8.71	0	0	0	0	0
31474.75	4.26	20.00	8.49	0	0	0	0	0
31858.59	4.16	20.00	8.27	0	0	0	0	0
32242.42	4.07	20.00	8.07	0	0	0	0	0
32626.26	3.98	20.00	7.88	0	0	0	0	0
33010.10	3.89	20.00	7.69	0	0	0	0	0
33393.94	3.81	20.00	7.51	0	0	0	0	0
33777.78	3.72	20.00	7.29	0	0	0	0	0
34161.62	3.64	20.00	6.28	0	0	0	0	0
34545.45	3.57	20.00	5.42	0	0	0	0	0
34929.29	3.49	20.00	4.69	0	0	0	0	0
35313.13	3.42	20.00	4.06	0	0	0	0	0
35696.97	3.34	20.00	3.52	0	0	0	0	0
36080.81	0.00	20.00	0.00	0	0	0	0	0
36464.64	0.00	20.00	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
36848.48	0.00	20.00	0.00	0	0	0	0	0
37232.32	0.00	20.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	30.00	0.00	0	0	0	0	0
767.68	0.00	30.00	0.00	0	0	0	0	0
1151.52	0.00	30.00	0.00	0	0	0	0	0
1535.35	0.00	30.00	0.00	0	0	0	0	0
1919.19	0.00	30.00	0.00	0	0	0	0	0
2303.03	0.00	30.00	0.00	0	0	0	0	0
2686.87	0.00	30.00	0.00	0	0	0	0	0
3070.71	0.00	30.00	0.00	0	0	0	0	0
3454.55	0.00	30.00	0.00	0	0	0	0	0
3838.38	0.00	30.00	0.00	0	0	0	0	0
4222.22	0.00	30.00	0.00	0	0	0	0	0
4606.06	0.00	30.00	0.00	0	0	0	0	0
4989.90	0.00	30.00	0.00	0	0	0	0	0
5373.74	138.55	30.00	155.28	0	0	0	0	0
5757.58	121.28	30.00	149.55	0	0	0	0	0
6141.41	106.69	30.00	144.76	0	0	0	0	0
6525.25	94.35	30.00	142.79	0	0	0	0	0
6909.09	83.87	30.00	142.55	0	0	0	0	0
7292.93	74.95	30.00	142.26	0	0	0	0	0
7676.77	67.31	30.00	140.43	0	0	0	0	0
8060.61	60.74	30.00	134.34	0	0	0	0	0
8444.44	55.06	30.00	122.20	0	0	0	0	0
8828.28	50.13	30.00	111.69	0	0	0	0	0
9212.12	45.83	30.00	102.55	0	0	0	0	0
9595.96	42.06	30.00	94.56	0	0	0	0	0
9979.80	38.73	30.00	87.53	0	0	0	0	0
10363.64	35.80	30.00	81.31	0	0	0	0	0
10747.47	33.19	30.00	75.77	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
11131.31	30.86	30.00	70.83	0	0	0	0	0
11515.15	28.78	30.00	66.40	1	0	0	0	1
11898.99	26.91	30.00	62.39	1	0	0	0	1
12282.83	25.22	30.00	58.76	1	0	0	0	1
12666.67	23.70	30.00	55.43	1	0	0	0	1
13050.50	22.31	30.00	52.42	1	0	0	0	1
13434.34	21.05	30.00	49.64	1	0	0	0	1
13818.18	19.91	30.00	47.04	1	0	0	0	1
14202.02	18.85	30.00	44.62	1	0	0	0	1
14585.86	17.89	30.00	42.37	1	0	0	0	1
14969.70	17.00	30.00	40.29	1	0	0	0	1
15353.54	16.18	30.00	38.35	1	0	0	0	1
15737.37	15.43	30.00	36.53	1	0	0	0	1
16121.21	14.72	30.00	34.84	1	0	0	0	1
16505.05	14.07	30.00	33.25	1	0	0	0	1
16888.89	13.47	30.00	31.76	1	0	0	0	1
17272.73	12.90	30.00	30.36	1	0	0	0	1
17656.57	12.38	30.00	29.04	0	0	0	0	0
18040.40	11.89	30.00	27.80	0	0	0	0	0
18424.24	11.42	30.00	26.64	0	0	0	0	0
18808.08	10.99	30.00	25.54	0	0	0	0	0
19191.92	10.58	30.00	24.51	0	0	0	0	0
19575.76	10.20	30.00	23.54	0	0	0	0	0
19959.60	9.84	30.00	22.62	0	0	0	0	0
20343.43	9.50	30.00	21.76	0	0	0	0	0
20727.27	9.18	30.00	20.94	0	0	0	0	0
21111.11	8.87	30.00	20.16	0	0	0	0	0
21494.95	8.58	30.00	19.41	0	0	0	0	0
21878.79	8.31	30.00	18.70	0	0	0	0	0
22262.63	8.05	30.00	18.01	0	0	0	0	0
22646.46	7.80	30.00	17.34	0	0	0	0	0
23030.30	7.56	30.00	16.69	0	0	0	0	0
23414.14	7.34	30.00	16.05	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
23797.98	7.12	30.00	15.45	0	0	0	0	0
24181.82	6.92	30.00	14.93	0	0	0	0	0
24565.66	6.72	30.00	14.43	0	0	0	0	0
24949.49	6.53	30.00	13.95	0	0	0	0	0
25333.33	6.36	30.00	13.50	0	0	0	0	0
25717.17	6.18	30.00	13.07	0	0	0	0	0
26101.01	6.02	30.00	12.66	0	0	0	0	0
26484.85	5.86	30.00	12.26	0	0	0	0	0
26868.69	5.71	30.00	11.89	0	0	0	0	0
27252.53	5.56	30.00	11.53	0	0	0	0	0
27636.36	5.42	30.00	11.19	0	0	0	0	0
28020.20	5.28	30.00	10.86	0	0	0	0	0
28404.04	5.15	30.00	10.55	0	0	0	0	0
28787.88	5.03	30.00	10.25	0	0	0	0	0
29171.72	4.91	30.00	9.96	0	0	0	0	0
29555.55	4.79	30.00	9.69	0	0	0	0	0
29939.39	4.67	30.00	9.43	0	0	0	0	0
30323.23	4.57	30.00	9.18	0	0	0	0	0
30707.07	4.46	30.00	8.94	0	0	0	0	0
31090.91	4.36	30.00	8.71	0	0	0	0	0
31474.75	4.26	30.00	8.49	0	0	0	0	0
31858.59	4.16	30.00	8.27	0	0	0	0	0
32242.42	4.07	30.00	8.07	0	0	0	0	0
32626.26	3.98	30.00	7.88	0	0	0	0	0
33010.10	3.89	30.00	7.69	0	0	0	0	0
33393.94	3.81	30.00	7.51	0	0	0	0	0
33777.78	3.72	30.00	7.29	0	0	0	0	0
34161.62	3.64	30.00	6.28	0	0	0	0	0
34545.45	3.57	30.00	5.42	0	0	0	0	0
34929.29	3.49	30.00	4.69	0	0	0	0	0
35313.13	3.42	30.00	4.06	0	0	0	0	0
35696.97	3.34	30.00	3.52	0	0	0	0	0
36080.81	0.00	30.00	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
36464.64	0.00	30.00	0.00	0	0	0	0	0
36848.48	0.00	30.00	0.00	0	0	0	0	0
37232.32	0.00	30.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	40.00	0.00	0	0	0	0	0
767.68	0.00	40.00	0.00	0	0	0	0	0
1151.52	0.00	40.00	0.00	0	0	0	0	0
1535.35	0.00	40.00	0.00	0	0	0	0	0
1919.19	0.00	40.00	0.00	0	0	0	0	0
2303.03	0.00	40.00	0.00	0	0	0	0	0
2686.87	0.00	40.00	0.00	0	0	0	0	0
3070.71	0.00	40.00	0.00	0	0	0	0	0
3454.55	0.00	40.00	0.00	0	0	0	0	0
3838.38	0.00	40.00	0.00	0	0	0	0	0
4222.22	0.00	40.00	0.00	0	0	0	0	0
4606.06	0.00	40.00	0.00	0	0	0	0	0
4989.90	0.00	40.00	0.00	0	0	0	0	0
5373.74	138.55	40.00	155.28	0	0	0	0	0
5757.58	121.28	40.00	149.55	0	0	0	0	0
6141.41	106.69	40.00	144.76	0	0	0	0	0
6525.25	94.35	40.00	142.79	0	0	0	0	0
6909.09	83.87	40.00	142.55	0	0	0	0	0
7292.93	74.95	40.00	142.26	0	0	0	0	0
7676.77	67.31	40.00	140.43	0	0	0	0	0
8060.61	60.74	40.00	134.34	0	0	0	0	0
8444.44	55.06	40.00	122.20	0	0	0	0	0
8828.28	50.13	40.00	111.69	0	0	0	0	0
9212.12	45.83	40.00	102.55	0	0	0	0	0
9595.96	42.06	40.00	94.56	0	0	0	0	0
9979.80	38.73	40.00	87.53	1	0	0	0	1
10363.64	35.80	40.00	81.31	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
10747.47	33.19	40.00	75.77	1	0	0	0	1
11131.31	30.86	40.00	70.83	1	0	0	0	1
11515.15	28.78	40.00	66.40	1	0	0	0	1
11898.99	26.91	40.00	62.39	1	0	0	0	1
12282.83	25.22	40.00	58.76	1	0	0	0	1
12666.67	23.70	40.00	55.43	1	0	0	0	1
13050.50	22.31	40.00	52.42	1	0	0	0	1
13434.34	21.05	40.00	49.64	1	0	0	0	1
13818.18	19.91	40.00	47.04	1	0	0	0	1
14202.02	18.85	40.00	44.62	1	0	0	0	1
14585.86	17.89	40.00	42.37	1	0	0	0	1
14969.70	17.00	40.00	40.29	1	0	0	0	1
15353.54	16.18	40.00	38.35	0	0	0	0	0
15737.37	15.43	40.00	36.53	0	0	0	0	0
16121.21	14.72	40.00	34.84	0	0	0	0	0
16505.05	14.07	40.00	33.25	0	0	0	0	0
16888.89	13.47	40.00	31.76	0	0	0	0	0
17272.73	12.90	40.00	30.36	0	0	0	0	0
17656.57	12.38	40.00	29.04	0	0	0	0	0
18040.40	11.89	40.00	27.80	0	0	0	0	0
18424.24	11.42	40.00	26.64	0	0	0	0	0
18808.08	10.99	40.00	25.54	0	0	0	0	0
19191.92	10.58	40.00	24.51	0	0	0	0	0
19575.76	10.20	40.00	23.54	0	0	0	0	0
19959.60	9.84	40.00	22.62	0	0	0	0	0
20343.43	9.50	40.00	21.76	0	0	0	0	0
20727.27	9.18	40.00	20.94	0	0	0	0	0
21111.11	8.87	40.00	20.16	0	0	0	0	0
21494.95	8.58	40.00	19.41	0	0	0	0	0
21878.79	8.31	40.00	18.70	0	0	0	0	0
22262.63	8.05	40.00	18.01	0	0	0	0	0
22646.46	7.80	40.00	17.34	0	0	0	0	0
23030.30	7.56	40.00	16.69	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
23414.14	7.34	40.00	16.05	0	0	0	0	0
23797.98	7.12	40.00	15.45	0	0	0	0	0
24181.82	6.92	40.00	14.93	0	0	0	0	0
24565.66	6.72	40.00	14.43	0	0	0	0	0
24949.49	6.53	40.00	13.95	0	0	0	0	0
25333.33	6.36	40.00	13.50	0	0	0	0	0
25717.17	6.18	40.00	13.07	0	0	0	0	0
26101.01	6.02	40.00	12.66	0	0	0	0	0
26484.85	5.86	40.00	12.26	0	0	0	0	0
26868.69	5.71	40.00	11.89	0	0	0	0	0
27252.53	5.56	40.00	11.53	0	0	0	0	0
27636.36	5.42	40.00	11.19	0	0	0	0	0
28020.20	5.28	40.00	10.86	0	0	0	0	0
28404.04	5.15	40.00	10.55	0	0	0	0	0
28787.88	5.03	40.00	10.25	0	0	0	0	0
29171.72	4.91	40.00	9.96	0	0	0	0	0
29555.55	4.79	40.00	9.69	0	0	0	0	0
29939.39	4.67	40.00	9.43	0	0	0	0	0
30323.23	4.57	40.00	9.18	0	0	0	0	0
30707.07	4.46	40.00	8.94	0	0	0	0	0
31090.91	4.36	40.00	8.71	0	0	0	0	0
31474.75	4.26	40.00	8.49	0	0	0	0	0
31858.59	4.16	40.00	8.27	0	0	0	0	0
32242.42	4.07	40.00	8.07	0	0	0	0	0
32626.26	3.98	40.00	7.88	0	0	0	0	0
33010.10	3.89	40.00	7.69	0	0	0	0	0
33393.94	3.81	40.00	7.51	0	0	0	0	0
33777.78	3.72	40.00	7.29	0	0	0	0	0
34161.62	3.64	40.00	6.28	0	0	0	0	0
34545.45	3.57	40.00	5.42	0	0	0	0	0
34929.29	3.49	40.00	4.69	0	0	0	0	0
35313.13	3.42	40.00	4.06	0	0	0	0	0
35696.97	3.34	40.00	3.52	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
36080.81	0.00	40.00	0.00	0	0	0	0	0
36464.64	0.00	40.00	0.00	0	0	0	0	0
36848.48	0.00	40.00	0.00	0	0	0	0	0
37232.32	0.00	40.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	50.00	0.00	0	0	0	0	0
767.68	0.00	50.00	0.00	0	0	0	0	0
1151.52	0.00	50.00	0.00	0	0	0	0	0
1535.35	0.00	50.00	0.00	0	0	0	0	0
1919.19	0.00	50.00	0.00	0	0	0	0	0
2303.03	0.00	50.00	0.00	0	0	0	0	0
2686.87	0.00	50.00	0.00	0	0	0	0	0
3070.71	0.00	50.00	0.00	0	0	0	0	0
3454.55	0.00	50.00	0.00	0	0	0	0	0
3838.38	0.00	50.00	0.00	0	0	0	0	0
4222.22	0.00	50.00	0.00	0	0	0	0	0
4606.06	0.00	50.00	0.00	0	0	0	0	0
4989.90	0.00	50.00	0.00	0	0	0	0	0
5373.74	138.55	50.00	155.28	0	0	0	0	0
5757.58	121.28	50.00	149.55	0	0	0	0	0
6141.41	106.69	50.00	144.76	0	0	0	0	0
6525.25	94.35	50.00	142.79	0	0	0	0	0
6909.09	83.87	50.00	142.55	0	0	0	0	0
7292.93	74.95	50.00	142.26	0	0	0	0	0
7676.77	67.31	50.00	140.43	0	0	0	0	0
8060.61	60.74	50.00	134.34	0	0	0	0	0
8444.44	55.06	50.00	122.20	0	0	0	0	0
8828.28	50.13	50.00	111.69	0	0	0	0	0
9212.12	45.83	50.00	102.55	1	0	0	0	1
9595.96	42.06	50.00	94.56	1	0	0	0	1
9979.80	38.73	50.00	87.53	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
10363.64	35.80	50.00	81.31	1	0	0	0	1
10747.47	33.19	50.00	75.77	1	0	0	0	1
11131.31	30.86	50.00	70.83	1	0	0	0	1
11515.15	28.78	50.00	66.40	1	0	0	0	1
11898.99	26.91	50.00	62.39	1	0	0	0	1
12282.83	25.22	50.00	58.76	1	0	0	0	1
12666.67	23.70	50.00	55.43	1	0	0	0	1
13050.50	22.31	50.00	52.42	1	0	0	0	1
13434.34	21.05	50.00	49.64	0	0	0	0	0
13818.18	19.91	50.00	47.04	0	0	0	0	0
14202.02	18.85	50.00	44.62	0	0	0	0	0
14585.86	17.89	50.00	42.37	0	0	0	0	0
14969.70	17.00	50.00	40.29	0	0	0	0	0
15353.54	16.18	50.00	38.35	0	0	0	0	0
15737.37	15.43	50.00	36.53	0	0	0	0	0
16121.21	14.72	50.00	34.84	0	0	0	0	0
16505.05	14.07	50.00	33.25	0	0	0	0	0
16888.89	13.47	50.00	31.76	0	0	0	0	0
17272.73	12.90	50.00	30.36	0	0	0	0	0
17656.57	12.38	50.00	29.04	0	0	0	0	0
18040.40	11.89	50.00	27.80	0	0	0	0	0
18424.24	11.42	50.00	26.64	0	0	0	0	0
18808.08	10.99	50.00	25.54	0	0	0	0	0
19191.92	10.58	50.00	24.51	0	0	0	0	0
19575.76	10.20	50.00	23.54	0	0	0	0	0
19959.60	9.84	50.00	22.62	0	0	0	0	0
20343.43	9.50	50.00	21.76	0	0	0	0	0
20727.27	9.18	50.00	20.94	0	0	0	0	0
21111.11	8.87	50.00	20.16	0	0	0	0	0
21494.95	8.58	50.00	19.41	0	0	0	0	0
21878.79	8.31	50.00	18.70	0	0	0	0	0
22262.63	8.05	50.00	18.01	0	0	0	0	0
22646.46	7.80	50.00	17.34	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
23030.30	7.56	50.00	16.69	0	0	0	0	0
23414.14	7.34	50.00	16.05	0	0	0	0	0
23797.98	7.12	50.00	15.45	0	0	0	0	0
24181.82	6.92	50.00	14.93	0	0	0	0	0
24565.66	6.72	50.00	14.43	0	0	0	0	0
24949.49	6.53	50.00	13.95	0	0	0	0	0
25333.33	6.36	50.00	13.50	0	0	0	0	0
25717.17	6.18	50.00	13.07	0	0	0	0	0
26101.01	6.02	50.00	12.66	0	0	0	0	0
26484.85	5.86	50.00	12.26	0	0	0	0	0
26868.69	5.71	50.00	11.89	0	0	0	0	0
27252.53	5.56	50.00	11.53	0	0	0	0	0
27636.36	5.42	50.00	11.19	0	0	0	0	0
28020.20	5.28	50.00	10.86	0	0	0	0	0
28404.04	5.15	50.00	10.55	0	0	0	0	0
28787.88	5.03	50.00	10.25	0	0	0	0	0
29171.72	4.91	50.00	9.96	0	0	0	0	0
29555.55	4.79	50.00	9.69	0	0	0	0	0
29939.39	4.67	50.00	9.43	0	0	0	0	0
30323.23	4.57	50.00	9.18	0	0	0	0	0
30707.07	4.46	50.00	8.94	0	0	0	0	0
31090.91	4.36	50.00	8.71	0	0	0	0	0
31474.75	4.26	50.00	8.49	0	0	0	0	0
31858.59	4.16	50.00	8.27	0	0	0	0	0
32242.42	4.07	50.00	8.07	0	0	0	0	0
32626.26	3.98	50.00	7.88	0	0	0	0	0
33010.10	3.89	50.00	7.69	0	0	0	0	0
33393.94	3.81	50.00	7.51	0	0	0	0	0
33777.78	3.72	50.00	7.29	0	0	0	0	0
34161.62	3.64	50.00	6.28	0	0	0	0	0
34545.45	3.57	50.00	5.42	0	0	0	0	0
34929.29	3.49	50.00	4.69	0	0	0	0	0
35313.13	3.42	50.00	4.06	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
35696.97	3.34	50.00	3.52	0	0	0	0	0
36080.81	0.00	50.00	0.00	0	0	0	0	0
36464.64	0.00	50.00	0.00	0	0	0	0	0
36848.48	0.00	50.00	0.00	0	0	0	0	0
37232.32	0.00	50.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	81.08	0.00	0	0	0	0	0
767.68	0.00	81.08	0.00	0	0	0	0	0
1151.52	0.00	81.08	0.00	0	0	0	0	0
1535.35	0.00	81.08	0.00	0	0	0	0	0
1919.19	0.00	81.08	0.00	0	0	0	0	0
2303.03	0.00	81.08	0.00	0	0	0	0	0
2686.87	0.00	81.08	0.00	0	0	0	0	0
3070.71	0.00	81.08	0.00	0	0	0	0	0
3454.55	0.00	81.08	0.00	0	0	0	0	0
3838.38	0.00	81.08	0.00	0	0	0	0	0
4222.22	0.00	81.08	0.00	0	0	0	0	0
4606.06	0.00	81.08	0.00	0	0	0	0	0
4989.90	0.00	81.08	0.00	0	0	0	0	0
5373.74	138.55	81.08	155.28	0	0	0	0	0
5757.58	121.28	81.08	149.55	0	0	0	0	0
6141.41	106.69	81.08	144.76	0	0	0	0	0
6525.25	94.35	81.08	142.79	0	0	0	0	0
6909.09	83.87	81.08	142.55	0	0	0	0	0
7292.93	74.95	81.08	142.26	1	0	0	0	1
7676.77	67.31	81.08	140.43	1	0	0	0	1
8060.61	60.74	81.08	134.34	1	0	0	0	1
8444.44	55.06	81.08	122.20	1	0	0	0	1
8828.28	50.13	81.08	111.69	1	0	0	0	1
9212.12	45.83	81.08	102.55	1	0	0	0	1
9595.96	42.06	81.08	94.56	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
9979.80	38.73	81.08	87.53	1	0	0	0	1
10363.64	35.80	81.08	81.31	1	0	0	0	1
10747.47	33.19	81.08	75.77	0	0	0	0	0
11131.31	30.86	81.08	70.83	0	0	0	0	0
11515.15	28.78	81.08	66.40	0	0	0	0	0
11898.99	26.91	81.08	62.39	0	0	0	0	0
12282.83	25.22	81.08	58.76	0	0	0	0	0
12666.67	23.70	81.08	55.43	0	0	0	0	0
13050.50	22.31	81.08	52.42	0	0	0	0	0
13434.34	21.05	81.08	49.64	0	0	0	0	0
13818.18	19.91	81.08	47.04	0	0	0	0	0
14202.02	18.85	81.08	44.62	0	0	0	0	0
14585.86	17.89	81.08	42.37	0	0	0	0	0
14969.70	17.00	81.08	40.29	0	0	0	0	0
15353.54	16.18	81.08	38.35	0	0	0	0	0
15737.37	15.43	81.08	36.53	0	0	0	0	0
16121.21	14.72	81.08	34.84	0	0	0	0	0
16505.05	14.07	81.08	33.25	0	0	0	0	0
16888.89	13.47	81.08	31.76	0	0	0	0	0
17272.73	12.90	81.08	30.36	0	0	0	0	0
17656.57	12.38	81.08	29.04	0	0	0	0	0
18040.40	11.89	81.08	27.80	0	0	0	0	0
18424.24	11.42	81.08	26.64	0	0	0	0	0
18808.08	10.99	81.08	25.54	0	0	0	0	0
19191.92	10.58	81.08	24.51	0	0	0	0	0
19575.76	10.20	81.08	23.54	0	0	0	0	0
19959.60	9.84	81.08	22.62	0	0	0	0	0
20343.43	9.50	81.08	21.76	0	0	0	0	0
20727.27	9.18	81.08	20.94	0	0	0	0	0
21111.11	8.87	81.08	20.16	0	0	0	0	0
21494.95	8.58	81.08	19.41	0	0	0	0	0
21878.79	8.31	81.08	18.70	0	0	0	0	0
22262.63	8.05	81.08	18.01	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
22646.46	7.80	81.08	17.34	0	0	0	0	0
23030.30	7.56	81.08	16.69	0	0	0	0	0
23414.14	7.34	81.08	16.05	0	0	0	0	0
23797.98	7.12	81.08	15.45	0	0	0	0	0
24181.82	6.92	81.08	14.93	0	0	0	0	0
24565.66	6.72	81.08	14.43	0	0	0	0	0
24949.49	6.53	81.08	13.95	0	0	0	0	0
25333.33	6.36	81.08	13.50	0	0	0	0	0
25717.17	6.18	81.08	13.07	0	0	0	0	0
26101.01	6.02	81.08	12.66	0	0	0	0	0
26484.85	5.86	81.08	12.26	0	0	0	0	0
26868.69	5.71	81.08	11.89	0	0	0	0	0
27252.53	5.56	81.08	11.53	0	0	0	0	0
27636.36	5.42	81.08	11.19	0	0	0	0	0
28020.20	5.28	81.08	10.86	0	0	0	0	0
28404.04	5.15	81.08	10.55	0	0	0	0	0
28787.88	5.03	81.08	10.25	0	0	0	0	0
29171.72	4.91	81.08	9.96	0	0	0	0	0
29555.55	4.79	81.08	9.69	0	0	0	0	0
29939.39	4.67	81.08	9.43	0	0	0	0	0
30323.23	4.57	81.08	9.18	0	0	0	0	0
30707.07	4.46	81.08	8.94	0	0	0	0	0
31090.91	4.36	81.08	8.71	0	0	0	0	0
31474.75	4.26	81.08	8.49	0	0	0	0	0
31858.59	4.16	81.08	8.27	0	0	0	0	0
32242.42	4.07	81.08	8.07	0	0	0	0	0
32626.26	3.98	81.08	7.88	0	0	0	0	0
33010.10	3.89	81.08	7.69	0	0	0	0	0
33393.94	3.81	81.08	7.51	0	0	0	0	0
33777.78	3.72	81.08	7.29	0	0	0	0	0
34161.62	3.64	81.08	6.28	0	0	0	0	0
34545.45	3.57	81.08	5.42	0	0	0	0	0
34929.29	3.49	81.08	4.69	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
35313.13	3.42	81.08	4.06	0	0	0	0	0
35696.97	3.34	81.08	3.52	0	0	0	0	0
36080.81	0.00	81.08	0.00	0	0	0	0	0
36464.64	0.00	81.08	0.00	0	0	0	0	0
36848.48	0.00	81.08	0.00	0	0	0	0	0
37232.32	0.00	81.08	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	100.00	0.00	0	0	0	0	0
767.68	0.00	100.00	0.00	0	0	0	0	0
1151.52	0.00	100.00	0.00	0	0	0	0	0
1535.35	0.00	100.00	0.00	0	0	0	0	0
1919.19	0.00	100.00	0.00	0	0	0	0	0
2303.03	0.00	100.00	0.00	0	0	0	0	0
2686.87	0.00	100.00	0.00	0	0	0	0	0
3070.71	0.00	100.00	0.00	0	0	0	0	0
3454.55	0.00	100.00	0.00	0	0	0	0	0
3838.38	0.00	100.00	0.00	0	0	0	0	0
4222.22	0.00	100.00	0.00	0	0	0	0	0
4606.06	0.00	100.00	0.00	0	0	0	0	0
4989.90	0.00	100.00	0.00	0	0	0	0	0
5373.74	138.55	100.00	155.28	0	0	0	0	0
5757.58	121.28	100.00	149.55	0	0	0	0	0
6141.41	106.69	100.00	144.76	0	0	0	0	0
6525.25	94.35	100.00	142.79	1	0	0	0	1
6909.09	83.87	100.00	142.55	1	0	0	0	1
7292.93	74.95	100.00	142.26	1	0	0	0	1
7676.77	67.31	100.00	140.43	1	0	0	0	1
8060.61	60.74	100.00	134.34	1	0	0	0	1
8444.44	55.06	100.00	122.20	1	0	0	0	1
8828.28	50.13	100.00	111.69	1	0	0	0	1
9212.12	45.83	100.00	102.55	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
9595.96	42.06	100.00	94.56	0	0	0	0	0
9979.80	38.73	100.00	87.53	0	0	0	0	0
10363.64	35.80	100.00	81.31	0	0	0	0	0
10747.47	33.19	100.00	75.77	0	0	0	0	0
11131.31	30.86	100.00	70.83	0	0	0	0	0
11515.15	28.78	100.00	66.40	0	0	0	0	0
11898.99	26.91	100.00	62.39	0	0	0	0	0
12282.83	25.22	100.00	58.76	0	0	0	0	0
12666.67	23.70	100.00	55.43	0	0	0	0	0
13050.50	22.31	100.00	52.42	0	0	0	0	0
13434.34	21.05	100.00	49.64	0	0	0	0	0
13818.18	19.91	100.00	47.04	0	0	0	0	0
14202.02	18.85	100.00	44.62	0	0	0	0	0
14585.86	17.89	100.00	42.37	0	0	0	0	0
14969.70	17.00	100.00	40.29	0	0	0	0	0
15353.54	16.18	100.00	38.35	0	0	0	0	0
15737.37	15.43	100.00	36.53	0	0	0	0	0
16121.21	14.72	100.00	34.84	0	0	0	0	0
16505.05	14.07	100.00	33.25	0	0	0	0	0
16888.89	13.47	100.00	31.76	0	0	0	0	0
17272.73	12.90	100.00	30.36	0	0	0	0	0
17656.57	12.38	100.00	29.04	0	0	0	0	0
18040.40	11.89	100.00	27.80	0	0	0	0	0
18424.24	11.42	100.00	26.64	0	0	0	0	0
18808.08	10.99	100.00	25.54	0	0	0	0	0
19191.92	10.58	100.00	24.51	0	0	0	0	0
19575.76	10.20	100.00	23.54	0	0	0	0	0
19959.60	9.84	100.00	22.62	0	0	0	0	0
20343.43	9.50	100.00	21.76	0	0	0	0	0
20727.27	9.18	100.00	20.94	0	0	0	0	0
21111.11	8.87	100.00	20.16	0	0	0	0	0
21494.95	8.58	100.00	19.41	0	0	0	0	0
21878.79	8.31	100.00	18.70	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
22262.63	8.05	100.00	18.01	0	0	0	0	0
22646.46	7.80	100.00	17.34	0	0	0	0	0
23030.30	7.56	100.00	16.69	0	0	0	0	0
23414.14	7.34	100.00	16.05	0	0	0	0	0
23797.98	7.12	100.00	15.45	0	0	0	0	0
24181.82	6.92	100.00	14.93	0	0	0	0	0
24565.66	6.72	100.00	14.43	0	0	0	0	0
24949.49	6.53	100.00	13.95	0	0	0	0	0
25333.33	6.36	100.00	13.50	0	0	0	0	0
25717.17	6.18	100.00	13.07	0	0	0	0	0
26101.01	6.02	100.00	12.66	0	0	0	0	0
26484.85	5.86	100.00	12.26	0	0	0	0	0
26868.69	5.71	100.00	11.89	0	0	0	0	0
27252.53	5.56	100.00	11.53	0	0	0	0	0
27636.36	5.42	100.00	11.19	0	0	0	0	0
28020.20	5.28	100.00	10.86	0	0	0	0	0
28404.04	5.15	100.00	10.55	0	0	0	0	0
28787.88	5.03	100.00	10.25	0	0	0	0	0
29171.72	4.91	100.00	9.96	0	0	0	0	0
29555.55	4.79	100.00	9.69	0	0	0	0	0
29939.39	4.67	100.00	9.43	0	0	0	0	0
30323.23	4.57	100.00	9.18	0	0	0	0	0
30707.07	4.46	100.00	8.94	0	0	0	0	0
31090.91	4.36	100.00	8.71	0	0	0	0	0
31474.75	4.26	100.00	8.49	0	0	0	0	0
31858.59	4.16	100.00	8.27	0	0	0	0	0
32242.42	4.07	100.00	8.07	0	0	0	0	0
32626.26	3.98	100.00	7.88	0	0	0	0	0
33010.10	3.89	100.00	7.69	0	0	0	0	0
33393.94	3.81	100.00	7.51	0	0	0	0	0
33777.78	3.72	100.00	7.29	0	0	0	0	0
34161.62	3.64	100.00	6.28	0	0	0	0	0
34545.45	3.57	100.00	5.42	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
34929.29	3.49	100.00	4.69	0	0	0	0	0
35313.13	3.42	100.00	4.06	0	0	0	0	0
35696.97	3.34	100.00	3.52	0	0	0	0	0
36080.81	0.00	100.00	0.00	0	0	0	0	0
36464.64	0.00	100.00	0.00	0	0	0	0	0
36848.48	0.00	100.00	0.00	0	0	0	0	0
37232.32	0.00	100.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	200.00	0.00	0	0	0	0	0
767.68	0.00	200.00	0.00	0	0	0	0	0
1151.52	0.00	200.00	0.00	0	0	0	0	0
1535.35	0.00	200.00	0.00	0	0	0	0	0
1919.19	0.00	200.00	0.00	0	0	0	0	0
2303.03	0.00	200.00	0.00	0	0	0	0	0
2686.87	0.00	200.00	0.00	0	0	0	0	0
3070.71	0.00	200.00	0.00	0	0	0	0	0
3454.55	0.00	200.00	0.00	0	0	0	0	0
3838.38	0.00	200.00	0.00	0	0	0	0	0
4222.22	0.00	200.00	0.00	0	0	0	0	0
4606.06	0.00	200.00	0.00	0	0	0	0	0
4989.90	0.00	200.00	0.00	0	0	0	0	0
5373.74	138.55	200.00	155.28	0	0	0	0	0
5757.58	121.28	200.00	149.55	0	0	0	0	0
6141.41	106.69	200.00	144.76	0	0	0	0	0
6525.25	94.35	200.00	142.79	0	0	0	0	0
6909.09	83.87	200.00	142.55	0	0	0	0	0
7292.93	74.95	200.00	142.26	0	0	0	0	0
7676.77	67.31	200.00	140.43	0	0	0	0	0
8060.61	60.74	200.00	134.34	0	0	0	0	0
8444.44	55.06	200.00	122.20	0	0	0	0	0
8828.28	50.13	200.00	111.69	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
9212.12	45.83	200.00	102.55	0	0	0	0	0
9595.96	42.06	200.00	94.56	0	0	0	0	0
9979.80	38.73	200.00	87.53	0	0	0	0	0
10363.64	35.80	200.00	81.31	0	0	0	0	0
10747.47	33.19	200.00	75.77	0	0	0	0	0
11131.31	30.86	200.00	70.83	0	0	0	0	0
11515.15	28.78	200.00	66.40	0	0	0	0	0
11898.99	26.91	200.00	62.39	0	0	0	0	0
12282.83	25.22	200.00	58.76	0	0	0	0	0
12666.67	23.70	200.00	55.43	0	0	0	0	0
13050.50	22.31	200.00	52.42	0	0	0	0	0
13434.34	21.05	200.00	49.64	0	0	0	0	0
13818.18	19.91	200.00	47.04	0	0	0	0	0
14202.02	18.85	200.00	44.62	0	0	0	0	0
14585.86	17.89	200.00	42.37	0	0	0	0	0
14969.70	17.00	200.00	40.29	0	0	0	0	0
15353.54	16.18	200.00	38.35	0	0	0	0	0
15737.37	15.43	200.00	36.53	0	0	0	0	0
16121.21	14.72	200.00	34.84	0	0	0	0	0
16505.05	14.07	200.00	33.25	0	0	0	0	0
16888.89	13.47	200.00	31.76	0	0	0	0	0
17272.73	12.90	200.00	30.36	0	0	0	0	0
17656.57	12.38	200.00	29.04	0	0	0	0	0
18040.40	11.89	200.00	27.80	0	0	0	0	0
18424.24	11.42	200.00	26.64	0	0	0	0	0
18808.08	10.99	200.00	25.54	0	0	0	0	0
19191.92	10.58	200.00	24.51	0	0	0	0	0
19575.76	10.20	200.00	23.54	0	0	0	0	0
19959.60	9.84	200.00	22.62	0	0	0	0	0
20343.43	9.50	200.00	21.76	0	0	0	0	0
20727.27	9.18	200.00	20.94	0	0	0	0	0
21111.11	8.87	200.00	20.16	0	0	0	0	0
21494.95	8.58	200.00	19.41	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
21878.79	8.31	200.00	18.70	0	0	0	0	0
22262.63	8.05	200.00	18.01	0	0	0	0	0
22646.46	7.80	200.00	17.34	0	0	0	0	0
23030.30	7.56	200.00	16.69	0	0	0	0	0
23414.14	7.34	200.00	16.05	0	0	0	0	0
23797.98	7.12	200.00	15.45	0	0	0	0	0
24181.82	6.92	200.00	14.93	0	0	0	0	0
24565.66	6.72	200.00	14.43	0	0	0	0	0
24949.49	6.53	200.00	13.95	0	0	0	0	0
25333.33	6.36	200.00	13.50	0	0	0	0	0
25717.17	6.18	200.00	13.07	0	0	0	0	0
26101.01	6.02	200.00	12.66	0	0	0	0	0
26484.85	5.86	200.00	12.26	0	0	0	0	0
26868.69	5.71	200.00	11.89	0	0	0	0	0
27252.53	5.56	200.00	11.53	0	0	0	0	0
27636.36	5.42	200.00	11.19	0	0	0	0	0
28020.20	5.28	200.00	10.86	0	0	0	0	0
28404.04	5.15	200.00	10.55	0	0	0	0	0
28787.88	5.03	200.00	10.25	0	0	0	0	0
29171.72	4.91	200.00	9.96	0	0	0	0	0
29555.55	4.79	200.00	9.69	0	0	0	0	0
29939.39	4.67	200.00	9.43	0	0	0	0	0
30323.23	4.57	200.00	9.18	0	0	0	0	0
30707.07	4.46	200.00	8.94	0	0	0	0	0
31090.91	4.36	200.00	8.71	0	0	0	0	0
31474.75	4.26	200.00	8.49	0	0	0	0	0
31858.59	4.16	200.00	8.27	0	0	0	0	0
32242.42	4.07	200.00	8.07	0	0	0	0	0
32626.26	3.98	200.00	7.88	0	0	0	0	0
33010.10	3.89	200.00	7.69	0	0	0	0	0
33393.94	3.81	200.00	7.51	0	0	0	0	0
33777.78	3.72	200.00	7.29	0	0	0	0	0
34161.62	3.64	200.00	6.28	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
34545.45	3.57	200.00	5.42	0	0	0	0	0
34929.29	3.49	200.00	4.69	0	0	0	0	0
35313.13	3.42	200.00	4.06	0	0	0	0	0
35696.97	3.34	200.00	3.52	0	0	0	0	0
36080.81	0.00	200.00	0.00	0	0	0	0	0
36464.64	0.00	200.00	0.00	0	0	0	0	0
36848.48	0.00	200.00	0.00	0	0	0	0	0
37232.32	0.00	200.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	250.00	0.00	0	0	0	0	0
767.68	0.00	250.00	0.00	0	0	0	0	0
1151.52	0.00	250.00	0.00	0	0	0	0	0
1535.35	0.00	250.00	0.00	0	0	0	0	0
1919.19	0.00	250.00	0.00	0	0	0	0	0
2303.03	0.00	250.00	0.00	0	0	0	0	0
2686.87	0.00	250.00	0.00	0	0	0	0	0
3070.71	0.00	250.00	0.00	0	0	0	0	0
3454.55	0.00	250.00	0.00	0	0	0	0	0
3838.38	0.00	250.00	0.00	0	0	0	0	0
4222.22	0.00	250.00	0.00	0	0	0	0	0
4606.06	0.00	250.00	0.00	0	0	0	0	0
4989.90	0.00	250.00	0.00	0	0	0	0	0
5373.74	138.55	250.00	155.28	0	0	0	0	0
5757.58	121.28	250.00	149.55	0	0	0	0	0
6141.41	106.69	250.00	144.76	0	0	0	0	0
6525.25	94.35	250.00	142.79	0	0	0	0	0
6909.09	83.87	250.00	142.55	0	0	0	0	0
7292.93	74.95	250.00	142.26	0	0	0	0	0
7676.77	67.31	250.00	140.43	0	0	0	0	0
8060.61	60.74	250.00	134.34	0	0	0	0	0
8444.44	55.06	250.00	122.20	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
8828.28	50.13	250.00	111.69	0	0	0	0	0
9212.12	45.83	250.00	102.55	0	0	0	0	0
9595.96	42.06	250.00	94.56	0	0	0	0	0
9979.80	38.73	250.00	87.53	0	0	0	0	0
10363.64	35.80	250.00	81.31	0	0	0	0	0
10747.47	33.19	250.00	75.77	0	0	0	0	0
11131.31	30.86	250.00	70.83	0	0	0	0	0
11515.15	28.78	250.00	66.40	0	0	0	0	0
11898.99	26.91	250.00	62.39	0	0	0	0	0
12282.83	25.22	250.00	58.76	0	0	0	0	0
12666.67	23.70	250.00	55.43	0	0	0	0	0
13050.50	22.31	250.00	52.42	0	0	0	0	0
13434.34	21.05	250.00	49.64	0	0	0	0	0
13818.18	19.91	250.00	47.04	0	0	0	0	0
14202.02	18.85	250.00	44.62	0	0	0	0	0
14585.86	17.89	250.00	42.37	0	0	0	0	0
14969.70	17.00	250.00	40.29	0	0	0	0	0
15353.54	16.18	250.00	38.35	0	0	0	0	0
15737.37	15.43	250.00	36.53	0	0	0	0	0
16121.21	14.72	250.00	34.84	0	0	0	0	0
16505.05	14.07	250.00	33.25	0	0	0	0	0
16888.89	13.47	250.00	31.76	0	0	0	0	0
17272.73	12.90	250.00	30.36	0	0	0	0	0
17656.57	12.38	250.00	29.04	0	0	0	0	0
18040.40	11.89	250.00	27.80	0	0	0	0	0
18424.24	11.42	250.00	26.64	0	0	0	0	0
18808.08	10.99	250.00	25.54	0	0	0	0	0
19191.92	10.58	250.00	24.51	0	0	0	0	0
19575.76	10.20	250.00	23.54	0	0	0	0	0
19959.60	9.84	250.00	22.62	0	0	0	0	0
20343.43	9.50	250.00	21.76	0	0	0	0	0
20727.27	9.18	250.00	20.94	0	0	0	0	0
21111.11	8.87	250.00	20.16	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
21494.95	8.58	250.00	19.41	0	0	0	0	0
21878.79	8.31	250.00	18.70	0	0	0	0	0
22262.63	8.05	250.00	18.01	0	0	0	0	0
22646.46	7.80	250.00	17.34	0	0	0	0	0
23030.30	7.56	250.00	16.69	0	0	0	0	0
23414.14	7.34	250.00	16.05	0	0	0	0	0
23797.98	7.12	250.00	15.45	0	0	0	0	0
24181.82	6.92	250.00	14.93	0	0	0	0	0
24565.66	6.72	250.00	14.43	0	0	0	0	0
24949.49	6.53	250.00	13.95	0	0	0	0	0
25333.33	6.36	250.00	13.50	0	0	0	0	0
25717.17	6.18	250.00	13.07	0	0	0	0	0
26101.01	6.02	250.00	12.66	0	0	0	0	0
26484.85	5.86	250.00	12.26	0	0	0	0	0
26868.69	5.71	250.00	11.89	0	0	0	0	0
27252.53	5.56	250.00	11.53	0	0	0	0	0
27636.36	5.42	250.00	11.19	0	0	0	0	0
28020.20	5.28	250.00	10.86	0	0	0	0	0
28404.04	5.15	250.00	10.55	0	0	0	0	0
28787.88	5.03	250.00	10.25	0	0	0	0	0
29171.72	4.91	250.00	9.96	0	0	0	0	0
29555.55	4.79	250.00	9.69	0	0	0	0	0
29939.39	4.67	250.00	9.43	0	0	0	0	0
30323.23	4.57	250.00	9.18	0	0	0	0	0
30707.07	4.46	250.00	8.94	0	0	0	0	0
31090.91	4.36	250.00	8.71	0	0	0	0	0
31474.75	4.26	250.00	8.49	0	0	0	0	0
31858.59	4.16	250.00	8.27	0	0	0	0	0
32242.42	4.07	250.00	8.07	0	0	0	0	0
32626.26	3.98	250.00	7.88	0	0	0	0	0
33010.10	3.89	250.00	7.69	0	0	0	0	0
33393.94	3.81	250.00	7.51	0	0	0	0	0
33777.78	3.72	250.00	7.29	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
34161.62	3.64	250.00	6.28	0	0	0	0	0
34545.45	3.57	250.00	5.42	0	0	0	0	0
34929.29	3.49	250.00	4.69	0	0	0	0	0
35313.13	3.42	250.00	4.06	0	0	0	0	0
35696.97	3.34	250.00	3.52	0	0	0	0	0
36080.81	0.00	250.00	0.00	0	0	0	0	0
36464.64	0.00	250.00	0.00	0	0	0	0	0
36848.48	0.00	250.00	0.00	0	0	0	0	0
37232.32	0.00	250.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	300.00	0.00	0	0	0	0	0
767.68	0.00	300.00	0.00	0	0	0	0	0
1151.52	0.00	300.00	0.00	0	0	0	0	0
1535.35	0.00	300.00	0.00	0	0	0	0	0
1919.19	0.00	300.00	0.00	0	0	0	0	0
2303.03	0.00	300.00	0.00	0	0	0	0	0
2686.87	0.00	300.00	0.00	0	0	0	0	0
3070.71	0.00	300.00	0.00	0	0	0	0	0
3454.55	0.00	300.00	0.00	0	0	0	0	0
3838.38	0.00	300.00	0.00	0	0	0	0	0
4222.22	0.00	300.00	0.00	0	0	0	0	0
4606.06	0.00	300.00	0.00	0	0	0	0	0
4989.90	0.00	300.00	0.00	0	0	0	0	0
5373.74	138.55	300.00	155.28	0	0	0	0	0
5757.58	121.28	300.00	149.55	0	0	0	0	0
6141.41	106.69	300.00	144.76	0	0	0	0	0
6525.25	94.35	300.00	142.79	0	0	0	0	0
6909.09	83.87	300.00	142.55	0	0	0	0	0
7292.93	74.95	300.00	142.26	0	0	0	0	0
7676.77	67.31	300.00	140.43	0	0	0	0	0
8060.61	60.74	300.00	134.34	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
8444.44	55.06	300.00	122.20	0	0	0	0	0
8828.28	50.13	300.00	111.69	0	0	0	0	0
9212.12	45.83	300.00	102.55	0	0	0	0	0
9595.96	42.06	300.00	94.56	0	0	0	0	0
9979.80	38.73	300.00	87.53	0	0	0	0	0
10363.64	35.80	300.00	81.31	0	0	0	0	0
10747.47	33.19	300.00	75.77	0	0	0	0	0
11131.31	30.86	300.00	70.83	0	0	0	0	0
11515.15	28.78	300.00	66.40	0	0	0	0	0
11898.99	26.91	300.00	62.39	0	0	0	0	0
12282.83	25.22	300.00	58.76	0	0	0	0	0
12666.67	23.70	300.00	55.43	0	0	0	0	0
13050.50	22.31	300.00	52.42	0	0	0	0	0
13434.34	21.05	300.00	49.64	0	0	0	0	0
13818.18	19.91	300.00	47.04	0	0	0	0	0
14202.02	18.85	300.00	44.62	0	0	0	0	0
14585.86	17.89	300.00	42.37	0	0	0	0	0
14969.70	17.00	300.00	40.29	0	0	0	0	0
15353.54	16.18	300.00	38.35	0	0	0	0	0
15737.37	15.43	300.00	36.53	0	0	0	0	0
16121.21	14.72	300.00	34.84	0	0	0	0	0
16505.05	14.07	300.00	33.25	0	0	0	0	0
16888.89	13.47	300.00	31.76	0	0	0	0	0
17272.73	12.90	300.00	30.36	0	0	0	0	0
17656.57	12.38	300.00	29.04	0	0	0	0	0
18040.40	11.89	300.00	27.80	0	0	0	0	0
18424.24	11.42	300.00	26.64	0	0	0	0	0
18808.08	10.99	300.00	25.54	0	0	0	0	0
19191.92	10.58	300.00	24.51	0	0	0	0	0
19575.76	10.20	300.00	23.54	0	0	0	0	0
19959.60	9.84	300.00	22.62	0	0	0	0	0
20343.43	9.50	300.00	21.76	0	0	0	0	0
20727.27	9.18	300.00	20.94	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
21111.11	8.87	300.00	20.16	0	0	0	0	0
21494.95	8.58	300.00	19.41	0	0	0	0	0
21878.79	8.31	300.00	18.70	0	0	0	0	0
22262.63	8.05	300.00	18.01	0	0	0	0	0
22646.46	7.80	300.00	17.34	0	0	0	0	0
23030.30	7.56	300.00	16.69	0	0	0	0	0
23414.14	7.34	300.00	16.05	0	0	0	0	0
23797.98	7.12	300.00	15.45	0	0	0	0	0
24181.82	6.92	300.00	14.93	0	0	0	0	0
24565.66	6.72	300.00	14.43	0	0	0	0	0
24949.49	6.53	300.00	13.95	0	0	0	0	0
25333.33	6.36	300.00	13.50	0	0	0	0	0
25717.17	6.18	300.00	13.07	0	0	0	0	0
26101.01	6.02	300.00	12.66	0	0	0	0	0
26484.85	5.86	300.00	12.26	0	0	0	0	0
26868.69	5.71	300.00	11.89	0	0	0	0	0
27252.53	5.56	300.00	11.53	0	0	0	0	0
27636.36	5.42	300.00	11.19	0	0	0	0	0
28020.20	5.28	300.00	10.86	0	0	0	0	0
28404.04	5.15	300.00	10.55	0	0	0	0	0
28787.88	5.03	300.00	10.25	0	0	0	0	0
29171.72	4.91	300.00	9.96	0	0	0	0	0
29555.55	4.79	300.00	9.69	0	0	0	0	0
29939.39	4.67	300.00	9.43	0	0	0	0	0
30323.23	4.57	300.00	9.18	0	0	0	0	0
30707.07	4.46	300.00	8.94	0	0	0	0	0
31090.91	4.36	300.00	8.71	0	0	0	0	0
31474.75	4.26	300.00	8.49	0	0	0	0	0
31858.59	4.16	300.00	8.27	0	0	0	0	0
32242.42	4.07	300.00	8.07	0	0	0	0	0
32626.26	3.98	300.00	7.88	0	0	0	0	0
33010.10	3.89	300.00	7.69	0	0	0	0	0
33393.94	3.81	300.00	7.51	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
33777.78	3.72	300.00	7.29	0	0	0	0	0
34161.62	3.64	300.00	6.28	0	0	0	0	0
34545.45	3.57	300.00	5.42	0	0	0	0	0
34929.29	3.49	300.00	4.69	0	0	0	0	0
35313.13	3.42	300.00	4.06	0	0	0	0	0
35696.97	3.34	300.00	3.52	0	0	0	0	0
36080.81	0.00	300.00	0.00	0	0	0	0	0
36464.64	0.00	300.00	0.00	0	0	0	0	0
36848.48	0.00	300.00	0.00	0	0	0	0	0
37232.32	0.00	300.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	500.00	0.00	0	0	0	0	0
767.68	0.00	500.00	0.00	0	0	0	0	0
1151.52	0.00	500.00	0.00	0	0	0	0	0
1535.35	0.00	500.00	0.00	0	0	0	0	0
1919.19	0.00	500.00	0.00	0	0	0	0	0
2303.03	0.00	500.00	0.00	0	0	0	0	0
2686.87	0.00	500.00	0.00	0	0	0	0	0
3070.71	0.00	500.00	0.00	0	0	0	0	0
3454.55	0.00	500.00	0.00	0	0	0	0	0
3838.38	0.00	500.00	0.00	0	0	0	0	0
4222.22	0.00	500.00	0.00	0	0	0	0	0
4606.06	0.00	500.00	0.00	0	0	0	0	0
4989.90	0.00	500.00	0.00	0	0	0	0	0
5373.74	138.55	500.00	155.28	0	0	0	0	0
5757.58	121.28	500.00	149.55	0	0	0	0	0
6141.41	106.69	500.00	144.76	0	0	0	0	0
6525.25	94.35	500.00	142.79	0	0	0	0	0
6909.09	83.87	500.00	142.55	0	0	0	0	0
7292.93	74.95	500.00	142.26	0	0	0	0	0
7676.77	67.31	500.00	140.43	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
8060.61	60.74	500.00	134.34	0	0	0	0	0
8444.44	55.06	500.00	122.20	0	0	0	0	0
8828.28	50.13	500.00	111.69	0	0	0	0	0
9212.12	45.83	500.00	102.55	0	0	0	0	0
9595.96	42.06	500.00	94.56	0	0	0	0	0
9979.80	38.73	500.00	87.53	0	0	0	0	0
10363.64	35.80	500.00	81.31	0	0	0	0	0
10747.47	33.19	500.00	75.77	0	0	0	0	0
11131.31	30.86	500.00	70.83	0	0	0	0	0
11515.15	28.78	500.00	66.40	0	0	0	0	0
11898.99	26.91	500.00	62.39	0	0	0	0	0
12282.83	25.22	500.00	58.76	0	0	0	0	0
12666.67	23.70	500.00	55.43	0	0	0	0	0
13050.50	22.31	500.00	52.42	0	0	0	0	0
13434.34	21.05	500.00	49.64	0	0	0	0	0
13818.18	19.91	500.00	47.04	0	0	0	0	0
14202.02	18.85	500.00	44.62	0	0	0	0	0
14585.86	17.89	500.00	42.37	0	0	0	0	0
14969.70	17.00	500.00	40.29	0	0	0	0	0
15353.54	16.18	500.00	38.35	0	0	0	0	0
15737.37	15.43	500.00	36.53	0	0	0	0	0
16121.21	14.72	500.00	34.84	0	0	0	0	0
16505.05	14.07	500.00	33.25	0	0	0	0	0
16888.89	13.47	500.00	31.76	0	0	0	0	0
17272.73	12.90	500.00	30.36	0	0	0	0	0
17656.57	12.38	500.00	29.04	0	0	0	0	0
18040.40	11.89	500.00	27.80	0	0	0	0	0
18424.24	11.42	500.00	26.64	0	0	0	0	0
18808.08	10.99	500.00	25.54	0	0	0	0	0
19191.92	10.58	500.00	24.51	0	0	0	0	0
19575.76	10.20	500.00	23.54	0	0	0	0	0
19959.60	9.84	500.00	22.62	0	0	0	0	0
20343.43	9.50	500.00	21.76	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
20727.27	9.18	500.00	20.94	0	0	0	0	0
21111.11	8.87	500.00	20.16	0	0	0	0	0
21494.95	8.58	500.00	19.41	0	0	0	0	0
21878.79	8.31	500.00	18.70	0	0	0	0	0
22262.63	8.05	500.00	18.01	0	0	0	0	0
22646.46	7.80	500.00	17.34	0	0	0	0	0
23030.30	7.56	500.00	16.69	0	0	0	0	0
23414.14	7.34	500.00	16.05	0	0	0	0	0
23797.98	7.12	500.00	15.45	0	0	0	0	0
24181.82	6.92	500.00	14.93	0	0	0	0	0
24565.66	6.72	500.00	14.43	0	0	0	0	0
24949.49	6.53	500.00	13.95	0	0	0	0	0
25333.33	6.36	500.00	13.50	0	0	0	0	0
25717.17	6.18	500.00	13.07	0	0	0	0	0
26101.01	6.02	500.00	12.66	0	0	0	0	0
26484.85	5.86	500.00	12.26	0	0	0	0	0
26868.69	5.71	500.00	11.89	0	0	0	0	0
27252.53	5.56	500.00	11.53	0	0	0	0	0
27636.36	5.42	500.00	11.19	0	0	0	0	0
28020.20	5.28	500.00	10.86	0	0	0	0	0
28404.04	5.15	500.00	10.55	0	0	0	0	0
28787.88	5.03	500.00	10.25	0	0	0	0	0
29171.72	4.91	500.00	9.96	0	0	0	0	0
29555.55	4.79	500.00	9.69	0	0	0	0	0
29939.39	4.67	500.00	9.43	0	0	0	0	0
30323.23	4.57	500.00	9.18	0	0	0	0	0
30707.07	4.46	500.00	8.94	0	0	0	0	0
31090.91	4.36	500.00	8.71	0	0	0	0	0
31474.75	4.26	500.00	8.49	0	0	0	0	0
31858.59	4.16	500.00	8.27	0	0	0	0	0
32242.42	4.07	500.00	8.07	0	0	0	0	0
32626.26	3.98	500.00	7.88	0	0	0	0	0
33010.10	3.89	500.00	7.69	0	0	0	0	0

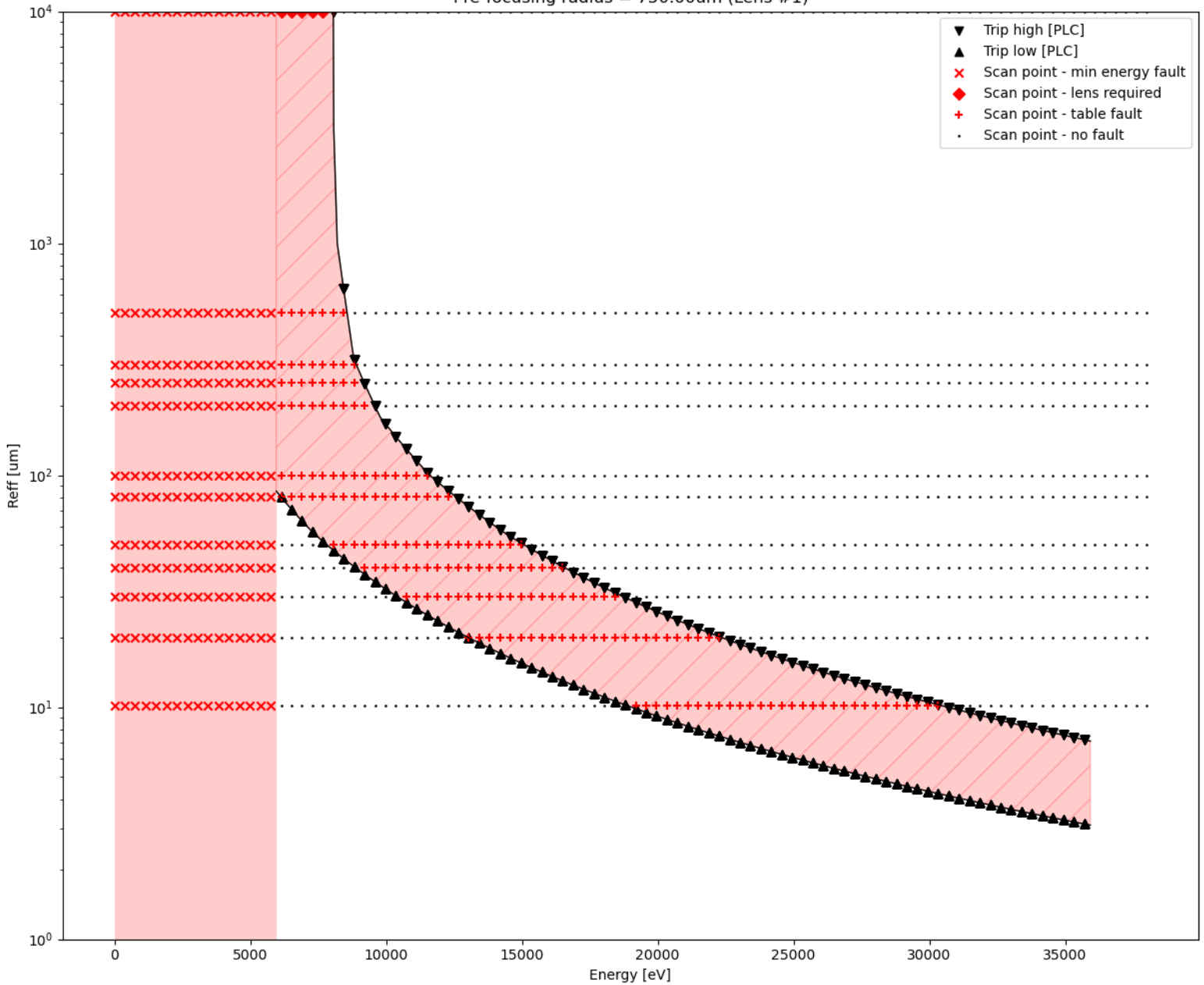| Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
33393.94	3.81	500.00	7.51	0	0	0	0	0
33777.78	3.72	500.00	7.29	0	0	0	0	0
34161.62	3.64	500.00	6.28	0	0	0	0	0
34545.45	3.57	500.00	5.42	0	0	0	0	0
34929.29	3.49	500.00	4.69	0	0	0	0	0
35313.13	3.42	500.00	4.06	0	0	0	0	0
35696.97	3.34	500.00	3.52	0	0	0	0	0
36080.81	0.00	500.00	0.00	0	0	0	0	0
36464.64	0.00	500.00	0.00	0	0	0	0	0
36848.48	0.00	500.00	0.00	0	0	0	0	0
37232.32	0.00	500.00	0.00	0	0	0	0	0
37616.16	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: 2021-06-09 23:28:24
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
383.84	0.00	10000.00	0.00	1	0	1	0	0
767.68	0.00	10000.00	0.00	1	0	1	0	0
1151.52	0.00	10000.00	0.00	1	0	1	0	0
1535.35	0.00	10000.00	0.00	1	0	1	0	0
1919.19	0.00	10000.00	0.00	1	0	1	0	0
2303.03	0.00	10000.00	0.00	1	0	1	0	0
2686.87	0.00	10000.00	0.00	1	0	1	0	0
3070.71	0.00	10000.00	0.00	1	0	1	0	0
3454.55	0.00	10000.00	0.00	1	0	1	0	0
3838.38	0.00	10000.00	0.00	1	0	1	0	0
4222.22	0.00	10000.00	0.00	1	0	1	0	0
4606.06	0.00	10000.00	0.00	1	0	1	0	0
4989.90	0.00	10000.00	0.00	1	0	1	0	0
5373.74	0.00	10000.00	0.00	1	0	1	0	0
5757.58	0.00	10000.00	0.00	1	0	1	0	0
6141.41	80.41	10000.00	10000.00	1	0	0	1	1
6525.25	71.19	10000.00	10000.00	1	0	0	1	1
6909.09	63.47	10000.00	10000.00	1	0	0	1	1
7292.93	56.93	10000.00	10000.00	1	0	0	1	1
7676.77	51.84	10000.00	10000.00	1	0	0	1	1
8060.61	47.49	10000.00	10000.00	1	0	0	0	1
8444.44	43.69	10000.00	634.33	0	0	0	0	0
8828.28	40.33	10000.00	314.60	0	0	0	0	0
9212.12	37.36	10000.00	248.76	0	0	0	0	0
9595.96	34.71	10000.00	198.60	0	0	0	0	0
9979.80	32.34	10000.00	166.66	0	0	0	0	0
10363.64	30.21	10000.00	146.70	0	0	0	0	0
10747.47	28.29	10000.00	129.73	0	0	0	0	0
11131.31	26.55	10000.00	115.23	0	0	0	0	0
11515.15	24.97	10000.00	102.75	0	0	0	0	0
11898.99	23.53	10000.00	93.58	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
12282.83	22.22	10000.00	85.94	0	0	0	0	0
12666.67	21.01	10000.00	79.14	0	0	0	0	0
13050.50	19.91	10000.00	73.05	0	0	0	0	0
13434.34	18.88	10000.00	67.59	0	0	0	0	0
13818.18	17.94	10000.00	62.67	0	0	0	0	0
14202.02	17.07	10000.00	58.23	0	0	0	0	0
14585.86	16.26	10000.00	54.34	0	0	0	0	0
14969.70	15.51	10000.00	51.02	0	0	0	0	0
15353.54	14.81	10000.00	47.98	0	0	0	0	0
15737.37	14.16	10000.00	45.21	0	0	0	0	0
16121.21	13.55	10000.00	42.67	0	0	0	0	0
16505.05	12.98	10000.00	40.34	0	0	0	0	0
16888.89	12.45	10000.00	38.19	0	0	0	0	0
17272.73	11.95	10000.00	36.21	0	0	0	0	0
17656.57	11.48	10000.00	34.38	0	0	0	0	0
18040.40	11.03	10000.00	32.69	0	0	0	0	0
18424.24	10.62	10000.00	31.12	0	0	0	0	0
18808.08	10.22	10000.00	29.66	0	0	0	0	0
19191.92	9.85	10000.00	28.30	0	0	0	0	0
19575.76	9.50	10000.00	27.03	0	0	0	0	0
19959.60	9.17	10000.00	25.84	0	0	0	0	0
20343.43	8.85	10000.00	24.74	0	0	0	0	0
20727.27	8.56	10000.00	23.70	0	0	0	0	0
21111.11	8.27	10000.00	22.73	0	0	0	0	0
21494.95	8.00	10000.00	21.82	0	0	0	0	0
21878.79	7.75	10000.00	20.96	0	0	0	0	0
22262.63	7.50	10000.00	20.15	0	0	0	0	0
22646.46	7.27	10000.00	19.39	0	0	0	0	0
23030.30	7.05	10000.00	18.67	0	0	0	0	0
23414.14	6.84	10000.00	18.00	0	0	0	0	0
23797.98	6.64	10000.00	17.35	0	0	0	0	0
24181.82	6.44	10000.00	16.75	0	0	0	0	0
24565.66	6.26	10000.00	16.17	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
24949.49	6.08	10000.00	15.63	0	0	0	0	0
25333.33	5.91	10000.00	15.11	0	0	0	0	0
25717.17	5.75	10000.00	14.62	0	0	0	0	0
26101.01	5.60	10000.00	14.15	0	0	0	0	0
26484.85	5.45	10000.00	13.71	0	0	0	0	0
26868.69	5.31	10000.00	13.29	0	0	0	0	0
27252.53	5.17	10000.00	12.88	0	0	0	0	0
27636.36	5.04	10000.00	12.50	0	0	0	0	0
28020.20	4.91	10000.00	12.13	0	0	0	0	0
28404.04	4.79	10000.00	11.78	0	0	0	0	0
28787.88	4.67	10000.00	11.45	0	0	0	0	0
29171.72	4.56	10000.00	11.13	0	0	0	0	0
29555.55	4.45	10000.00	10.82	0	0	0	0	0
29939.39	4.34	10000.00	10.53	0	0	0	0	0
30323.23	4.24	10000.00	10.25	0	0	0	0	0
30707.07	4.14	10000.00	9.98	0	0	0	0	0
31090.91	4.05	10000.00	9.71	0	0	0	0	0
31474.75	3.96	10000.00	9.46	0	0	0	0	0
31858.59	3.87	10000.00	9.22	0	0	0	0	0
32242.42	3.79	10000.00	8.99	0	0	0	0	0
32626.26	3.70	10000.00	8.77	0	0	0	0	0
33010.10	3.63	10000.00	8.55	0	0	0	0	0
33393.94	3.55	10000.00	8.34	0	0	0	0	0
33777.78	3.47	10000.00	8.14	0	0	0	0	0
34161.62	3.40	10000.00	7.95	0	0	0	0	0
34545.45	3.33	10000.00	7.76	0	0	0	0	0
34929.29	3.27	10000.00	7.58	0	0	0	0	0
35313.13	3.20	10000.00	7.41	0	0	0	0	0
35696.97	3.14	10000.00	7.24	0	0	0	0	0
36080.81	0.00	10000.00	0.00	0	0	0	0	0
36464.64	0.00	10000.00	0.00	0	0	0	0	0
36848.48	0.00	10000.00	0.00	0	0	0	0	0
37232.32	0.00	10000.00	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
37616.16	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
383.84	0.00	10.17	0.00	1	0	1	0	0
767.68	0.00	10.17	0.00	1	0	1	0	0
1151.52	0.00	10.17	0.00	1	0	1	0	0
1535.35	0.00	10.17	0.00	1	0	1	0	0
1919.19	0.00	10.17	0.00	1	0	1	0	0
2303.03	0.00	10.17	0.00	1	0	1	0	0
2686.87	0.00	10.17	0.00	1	0	1	0	0
3070.71	0.00	10.17	0.00	1	0	1	0	0
3454.55	0.00	10.17	0.00	1	0	1	0	0
3838.38	0.00	10.17	0.00	1	0	1	0	0
4222.22	0.00	10.17	0.00	1	0	1	0	0
4606.06	0.00	10.17	0.00	1	0	1	0	0
4989.90	0.00	10.17	0.00	1	0	1	0	0
5373.74	0.00	10.17	0.00	1	0	1	0	0
5757.58	0.00	10.17	0.00	1	0	1	0	0
6141.41	80.41	10.17	10000.00	0	0	0	0	0
6525.25	71.19	10.17	10000.00	0	0	0	0	0
6909.09	63.47	10.17	10000.00	0	0	0	0	0
7292.93	56.93	10.17	10000.00	0	0	0	0	0
7676.77	51.84	10.17	10000.00	0	0	0	0	0
8060.61	47.49	10.17	10000.00	0	0	0	0	0
8444.44	43.69	10.17	634.33	0	0	0	0	0
8828.28	40.33	10.17	314.60	0	0	0	0	0
9212.12	37.36	10.17	248.76	0	0	0	0	0
9595.96	34.71	10.17	198.60	0	0	0	0	0
9979.80	32.34	10.17	166.66	0	0	0	0	0
10363.64	30.21	10.17	146.70	0	0	0	0	0
10747.47	28.29	10.17	129.73	0	0	0	0	0
11131.31	26.55	10.17	115.23	0	0	0	0	0
11515.15	24.97	10.17	102.75	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
11898.99	23.53	10.17	93.58	0	0	0	0	0
12282.83	22.22	10.17	85.94	0	0	0	0	0
12666.67	21.01	10.17	79.14	0	0	0	0	0
13050.50	19.91	10.17	73.05	0	0	0	0	0
13434.34	18.88	10.17	67.59	0	0	0	0	0
13818.18	17.94	10.17	62.67	0	0	0	0	0
14202.02	17.07	10.17	58.23	0	0	0	0	0
14585.86	16.26	10.17	54.34	0	0	0	0	0
14969.70	15.51	10.17	51.02	0	0	0	0	0
15353.54	14.81	10.17	47.98	0	0	0	0	0
15737.37	14.16	10.17	45.21	0	0	0	0	0
16121.21	13.55	10.17	42.67	0	0	0	0	0
16505.05	12.98	10.17	40.34	0	0	0	0	0
16888.89	12.45	10.17	38.19	0	0	0	0	0
17272.73	11.95	10.17	36.21	0	0	0	0	0
17656.57	11.48	10.17	34.38	0	0	0	0	0
18040.40	11.03	10.17	32.69	0	0	0	0	0
18424.24	10.62	10.17	31.12	0	0	0	0	0
18808.08	10.22	10.17	29.66	0	0	0	0	0
19191.92	9.85	10.17	28.30	1	0	0	0	1
19575.76	9.50	10.17	27.03	1	0	0	0	1
19959.60	9.17	10.17	25.84	1	0	0	0	1
20343.43	8.85	10.17	24.74	1	0	0	0	1
20727.27	8.56	10.17	23.70	1	0	0	0	1
21111.11	8.27	10.17	22.73	1	0	0	0	1
21494.95	8.00	10.17	21.82	1	0	0	0	1
21878.79	7.75	10.17	20.96	1	0	0	0	1
22262.63	7.50	10.17	20.15	1	0	0	0	1
22646.46	7.27	10.17	19.39	1	0	0	0	1
23030.30	7.05	10.17	18.67	1	0	0	0	1
23414.14	6.84	10.17	18.00	1	0	0	0	1
23797.98	6.64	10.17	17.35	1	0	0	0	1
24181.82	6.44	10.17	16.75	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
24565.66	6.26	10.17	16.17	1	0	0	0	1
24949.49	6.08	10.17	15.63	1	0	0	0	1
25333.33	5.91	10.17	15.11	1	0	0	0	1
25717.17	5.75	10.17	14.62	1	0	0	0	1
26101.01	5.60	10.17	14.15	1	0	0	0	1
26484.85	5.45	10.17	13.71	1	0	0	0	1
26868.69	5.31	10.17	13.29	1	0	0	0	1
27252.53	5.17	10.17	12.88	1	0	0	0	1
27636.36	5.04	10.17	12.50	1	0	0	0	1
28020.20	4.91	10.17	12.13	1	0	0	0	1
28404.04	4.79	10.17	11.78	1	0	0	0	1
28787.88	4.67	10.17	11.45	1	0	0	0	1
29171.72	4.56	10.17	11.13	1	0	0	0	1
29555.55	4.45	10.17	10.82	1	0	0	0	1
29939.39	4.34	10.17	10.53	1	0	0	0	1
30323.23	4.24	10.17	10.25	1	0	0	0	1
30707.07	4.14	10.17	9.98	0	0	0	0	0
31090.91	4.05	10.17	9.71	0	0	0	0	0
31474.75	3.96	10.17	9.46	0	0	0	0	0
31858.59	3.87	10.17	9.22	0	0	0	0	0
32242.42	3.79	10.17	8.99	0	0	0	0	0
32626.26	3.70	10.17	8.77	0	0	0	0	0
33010.10	3.63	10.17	8.55	0	0	0	0	0
33393.94	3.55	10.17	8.34	0	0	0	0	0
33777.78	3.47	10.17	8.14	0	0	0	0	0
34161.62	3.40	10.17	7.95	0	0	0	0	0
34545.45	3.33	10.17	7.76	0	0	0	0	0
34929.29	3.27	10.17	7.58	0	0	0	0	0
35313.13	3.20	10.17	7.41	0	0	0	0	0
35696.97	3.14	10.17	7.24	0	0	0	0	0
36080.81	0.00	10.17	0.00	0	0	0	0	0
36464.64	0.00	10.17	0.00	0	0	0	0	0
36848.48	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
37232.32	0.00	10.17	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	20.00	0.00	1	0	1	0	0
767.68	0.00	20.00	0.00	1	0	1	0	0
1151.52	0.00	20.00	0.00	1	0	1	0	0
1535.35	0.00	20.00	0.00	1	0	1	0	0
1919.19	0.00	20.00	0.00	1	0	1	0	0
2303.03	0.00	20.00	0.00	1	0	1	0	0
2686.87	0.00	20.00	0.00	1	0	1	0	0
3070.71	0.00	20.00	0.00	1	0	1	0	0
3454.55	0.00	20.00	0.00	1	0	1	0	0
3838.38	0.00	20.00	0.00	1	0	1	0	0
4222.22	0.00	20.00	0.00	1	0	1	0	0
4606.06	0.00	20.00	0.00	1	0	1	0	0
4989.90	0.00	20.00	0.00	1	0	1	0	0
5373.74	0.00	20.00	0.00	1	0	1	0	0
5757.58	0.00	20.00	0.00	1	0	1	0	0
6141.41	80.41	20.00	10000.00	0	0	0	0	0
6525.25	71.19	20.00	10000.00	0	0	0	0	0
6909.09	63.47	20.00	10000.00	0	0	0	0	0
7292.93	56.93	20.00	10000.00	0	0	0	0	0
7676.77	51.84	20.00	10000.00	0	0	0	0	0
8060.61	47.49	20.00	10000.00	0	0	0	0	0
8444.44	43.69	20.00	634.33	0	0	0	0	0
8828.28	40.33	20.00	314.60	0	0	0	0	0
9212.12	37.36	20.00	248.76	0	0	0	0	0
9595.96	34.71	20.00	198.60	0	0	0	0	0
9979.80	32.34	20.00	166.66	0	0	0	0	0
10363.64	30.21	20.00	146.70	0	0	0	0	0
10747.47	28.29	20.00	129.73	0	0	0	0	0
11131.31	26.55	20.00	115.23	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
11515.15	24.97	20.00	102.75	0	0	0	0	0
11898.99	23.53	20.00	93.58	0	0	0	0	0
12282.83	22.22	20.00	85.94	0	0	0	0	0
12666.67	21.01	20.00	79.14	0	0	0	0	0
13050.50	19.91	20.00	73.05	1	0	0	0	1
13434.34	18.88	20.00	67.59	1	0	0	0	1
13818.18	17.94	20.00	62.67	1	0	0	0	1
14202.02	17.07	20.00	58.23	1	0	0	0	1
14585.86	16.26	20.00	54.34	1	0	0	0	1
14969.70	15.51	20.00	51.02	1	0	0	0	1
15353.54	14.81	20.00	47.98	1	0	0	0	1
15737.37	14.16	20.00	45.21	1	0	0	0	1
16121.21	13.55	20.00	42.67	1	0	0	0	1
16505.05	12.98	20.00	40.34	1	0	0	0	1
16888.89	12.45	20.00	38.19	1	0	0	0	1
17272.73	11.95	20.00	36.21	1	0	0	0	1
17656.57	11.48	20.00	34.38	1	0	0	0	1
18040.40	11.03	20.00	32.69	1	0	0	0	1
18424.24	10.62	20.00	31.12	1	0	0	0	1
18808.08	10.22	20.00	29.66	1	0	0	0	1
19191.92	9.85	20.00	28.30	1	0	0	0	1
19575.76	9.50	20.00	27.03	1	0	0	0	1
19959.60	9.17	20.00	25.84	1	0	0	0	1
20343.43	8.85	20.00	24.74	1	0	0	0	1
20727.27	8.56	20.00	23.70	1	0	0	0	1
21111.11	8.27	20.00	22.73	1	0	0	0	1
21494.95	8.00	20.00	21.82	1	0	0	0	1
21878.79	7.75	20.00	20.96	1	0	0	0	1
22262.63	7.50	20.00	20.15	1	0	0	0	1
22646.46	7.27	20.00	19.39	0	0	0	0	0
23030.30	7.05	20.00	18.67	0	0	0	0	0
23414.14	6.84	20.00	18.00	0	0	0	0	0
23797.98	6.64	20.00	17.35	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
24181.82	6.44	20.00	16.75	0	0	0	0	0
24565.66	6.26	20.00	16.17	0	0	0	0	0
24949.49	6.08	20.00	15.63	0	0	0	0	0
25333.33	5.91	20.00	15.11	0	0	0	0	0
25717.17	5.75	20.00	14.62	0	0	0	0	0
26101.01	5.60	20.00	14.15	0	0	0	0	0
26484.85	5.45	20.00	13.71	0	0	0	0	0
26868.69	5.31	20.00	13.29	0	0	0	0	0
27252.53	5.17	20.00	12.88	0	0	0	0	0
27636.36	5.04	20.00	12.50	0	0	0	0	0
28020.20	4.91	20.00	12.13	0	0	0	0	0
28404.04	4.79	20.00	11.78	0	0	0	0	0
28787.88	4.67	20.00	11.45	0	0	0	0	0
29171.72	4.56	20.00	11.13	0	0	0	0	0
29555.55	4.45	20.00	10.82	0	0	0	0	0
29939.39	4.34	20.00	10.53	0	0	0	0	0
30323.23	4.24	20.00	10.25	0	0	0	0	0
30707.07	4.14	20.00	9.98	0	0	0	0	0
31090.91	4.05	20.00	9.71	0	0	0	0	0
31474.75	3.96	20.00	9.46	0	0	0	0	0
31858.59	3.87	20.00	9.22	0	0	0	0	0
32242.42	3.79	20.00	8.99	0	0	0	0	0
32626.26	3.70	20.00	8.77	0	0	0	0	0
33010.10	3.63	20.00	8.55	0	0	0	0	0
33393.94	3.55	20.00	8.34	0	0	0	0	0
33777.78	3.47	20.00	8.14	0	0	0	0	0
34161.62	3.40	20.00	7.95	0	0	0	0	0
34545.45	3.33	20.00	7.76	0	0	0	0	0
34929.29	3.27	20.00	7.58	0	0	0	0	0
35313.13	3.20	20.00	7.41	0	0	0	0	0
35696.97	3.14	20.00	7.24	0	0	0	0	0
36080.81	0.00	20.00	0.00	0	0	0	0	0
36464.64	0.00	20.00	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
36848.48	0.00	20.00	0.00	0	0	0	0	0
37232.32	0.00	20.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	30.00	0.00	1	0	1	0	0
767.68	0.00	30.00	0.00	1	0	1	0	0
1151.52	0.00	30.00	0.00	1	0	1	0	0
1535.35	0.00	30.00	0.00	1	0	1	0	0
1919.19	0.00	30.00	0.00	1	0	1	0	0
2303.03	0.00	30.00	0.00	1	0	1	0	0
2686.87	0.00	30.00	0.00	1	0	1	0	0
3070.71	0.00	30.00	0.00	1	0	1	0	0
3454.55	0.00	30.00	0.00	1	0	1	0	0
3838.38	0.00	30.00	0.00	1	0	1	0	0
4222.22	0.00	30.00	0.00	1	0	1	0	0
4606.06	0.00	30.00	0.00	1	0	1	0	0
4989.90	0.00	30.00	0.00	1	0	1	0	0
5373.74	0.00	30.00	0.00	1	0	1	0	0
5757.58	0.00	30.00	0.00	1	0	1	0	0
6141.41	80.41	30.00	10000.00	0	0	0	0	0
6525.25	71.19	30.00	10000.00	0	0	0	0	0
6909.09	63.47	30.00	10000.00	0	0	0	0	0
7292.93	56.93	30.00	10000.00	0	0	0	0	0
7676.77	51.84	30.00	10000.00	0	0	0	0	0
8060.61	47.49	30.00	10000.00	0	0	0	0	0
8444.44	43.69	30.00	634.33	0	0	0	0	0
8828.28	40.33	30.00	314.60	0	0	0	0	0
9212.12	37.36	30.00	248.76	0	0	0	0	0
9595.96	34.71	30.00	198.60	0	0	0	0	0
9979.80	32.34	30.00	166.66	0	0	0	0	0
10363.64	30.21	30.00	146.70	0	0	0	0	0
10747.47	28.29	30.00	129.73	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
11131.31	26.55	30.00	115.23	1	0	0	0	1
11515.15	24.97	30.00	102.75	1	0	0	0	1
11898.99	23.53	30.00	93.58	1	0	0	0	1
12282.83	22.22	30.00	85.94	1	0	0	0	1
12666.67	21.01	30.00	79.14	1	0	0	0	1
13050.50	19.91	30.00	73.05	1	0	0	0	1
13434.34	18.88	30.00	67.59	1	0	0	0	1
13818.18	17.94	30.00	62.67	1	0	0	0	1
14202.02	17.07	30.00	58.23	1	0	0	0	1
14585.86	16.26	30.00	54.34	1	0	0	0	1
14969.70	15.51	30.00	51.02	1	0	0	0	1
15353.54	14.81	30.00	47.98	1	0	0	0	1
15737.37	14.16	30.00	45.21	1	0	0	0	1
16121.21	13.55	30.00	42.67	1	0	0	0	1
16505.05	12.98	30.00	40.34	1	0	0	0	1
16888.89	12.45	30.00	38.19	1	0	0	0	1
17272.73	11.95	30.00	36.21	1	0	0	0	1
17656.57	11.48	30.00	34.38	1	0	0	0	1
18040.40	11.03	30.00	32.69	1	0	0	0	1
18424.24	10.62	30.00	31.12	1	0	0	0	1
18808.08	10.22	30.00	29.66	0	0	0	0	0
19191.92	9.85	30.00	28.30	0	0	0	0	0
19575.76	9.50	30.00	27.03	0	0	0	0	0
19959.60	9.17	30.00	25.84	0	0	0	0	0
20343.43	8.85	30.00	24.74	0	0	0	0	0
20727.27	8.56	30.00	23.70	0	0	0	0	0
21111.11	8.27	30.00	22.73	0	0	0	0	0
21494.95	8.00	30.00	21.82	0	0	0	0	0
21878.79	7.75	30.00	20.96	0	0	0	0	0
22262.63	7.50	30.00	20.15	0	0	0	0	0
22646.46	7.27	30.00	19.39	0	0	0	0	0
23030.30	7.05	30.00	18.67	0	0	0	0	0
23414.14	6.84	30.00	18.00	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
23797.98	6.64	30.00	17.35	0	0	0	0	0
24181.82	6.44	30.00	16.75	0	0	0	0	0
24565.66	6.26	30.00	16.17	0	0	0	0	0
24949.49	6.08	30.00	15.63	0	0	0	0	0
25333.33	5.91	30.00	15.11	0	0	0	0	0
25717.17	5.75	30.00	14.62	0	0	0	0	0
26101.01	5.60	30.00	14.15	0	0	0	0	0
26484.85	5.45	30.00	13.71	0	0	0	0	0
26868.69	5.31	30.00	13.29	0	0	0	0	0
27252.53	5.17	30.00	12.88	0	0	0	0	0
27636.36	5.04	30.00	12.50	0	0	0	0	0
28020.20	4.91	30.00	12.13	0	0	0	0	0
28404.04	4.79	30.00	11.78	0	0	0	0	0
28787.88	4.67	30.00	11.45	0	0	0	0	0
29171.72	4.56	30.00	11.13	0	0	0	0	0
29555.55	4.45	30.00	10.82	0	0	0	0	0
29939.39	4.34	30.00	10.53	0	0	0	0	0
30323.23	4.24	30.00	10.25	0	0	0	0	0
30707.07	4.14	30.00	9.98	0	0	0	0	0
31090.91	4.05	30.00	9.71	0	0	0	0	0
31474.75	3.96	30.00	9.46	0	0	0	0	0
31858.59	3.87	30.00	9.22	0	0	0	0	0
32242.42	3.79	30.00	8.99	0	0	0	0	0
32626.26	3.70	30.00	8.77	0	0	0	0	0
33010.10	3.63	30.00	8.55	0	0	0	0	0
33393.94	3.55	30.00	8.34	0	0	0	0	0
33777.78	3.47	30.00	8.14	0	0	0	0	0
34161.62	3.40	30.00	7.95	0	0	0	0	0
34545.45	3.33	30.00	7.76	0	0	0	0	0
34929.29	3.27	30.00	7.58	0	0	0	0	0
35313.13	3.20	30.00	7.41	0	0	0	0	0
35696.97	3.14	30.00	7.24	0	0	0	0	0
36080.81	0.00	30.00	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
36464.64	0.00	30.00	0.00	0	0	0	0	0
36848.48	0.00	30.00	0.00	0	0	0	0	0
37232.32	0.00	30.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	40.00	0.00	1	0	1	0	0
767.68	0.00	40.00	0.00	1	0	1	0	0
1151.52	0.00	40.00	0.00	1	0	1	0	0
1535.35	0.00	40.00	0.00	1	0	1	0	0
1919.19	0.00	40.00	0.00	1	0	1	0	0
2303.03	0.00	40.00	0.00	1	0	1	0	0
2686.87	0.00	40.00	0.00	1	0	1	0	0
3070.71	0.00	40.00	0.00	1	0	1	0	0
3454.55	0.00	40.00	0.00	1	0	1	0	0
3838.38	0.00	40.00	0.00	1	0	1	0	0
4222.22	0.00	40.00	0.00	1	0	1	0	0
4606.06	0.00	40.00	0.00	1	0	1	0	0
4989.90	0.00	40.00	0.00	1	0	1	0	0
5373.74	0.00	40.00	0.00	1	0	1	0	0
5757.58	0.00	40.00	0.00	1	0	1	0	0
6141.41	80.41	40.00	10000.00	0	0	0	0	0
6525.25	71.19	40.00	10000.00	0	0	0	0	0
6909.09	63.47	40.00	10000.00	0	0	0	0	0
7292.93	56.93	40.00	10000.00	0	0	0	0	0
7676.77	51.84	40.00	10000.00	0	0	0	0	0
8060.61	47.49	40.00	10000.00	0	0	0	0	0
8444.44	43.69	40.00	634.33	0	0	0	0	0
8828.28	40.33	40.00	314.60	0	0	0	0	0
9212.12	37.36	40.00	248.76	1	0	0	0	1
9595.96	34.71	40.00	198.60	1	0	0	0	1
9979.80	32.34	40.00	166.66	1	0	0	0	1
10363.64	30.21	40.00	146.70	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
10747.47	28.29	40.00	129.73	1	0	0	0	1
11131.31	26.55	40.00	115.23	1	0	0	0	1
11515.15	24.97	40.00	102.75	1	0	0	0	1
11898.99	23.53	40.00	93.58	1	0	0	0	1
12282.83	22.22	40.00	85.94	1	0	0	0	1
12666.67	21.01	40.00	79.14	1	0	0	0	1
13050.50	19.91	40.00	73.05	1	0	0	0	1
13434.34	18.88	40.00	67.59	1	0	0	0	1
13818.18	17.94	40.00	62.67	1	0	0	0	1
14202.02	17.07	40.00	58.23	1	0	0	0	1
14585.86	16.26	40.00	54.34	1	0	0	0	1
14969.70	15.51	40.00	51.02	1	0	0	0	1
15353.54	14.81	40.00	47.98	1	0	0	0	1
15737.37	14.16	40.00	45.21	1	0	0	0	1
16121.21	13.55	40.00	42.67	1	0	0	0	1
16505.05	12.98	40.00	40.34	1	0	0	0	1
16888.89	12.45	40.00	38.19	0	0	0	0	0
17272.73	11.95	40.00	36.21	0	0	0	0	0
17656.57	11.48	40.00	34.38	0	0	0	0	0
18040.40	11.03	40.00	32.69	0	0	0	0	0
18424.24	10.62	40.00	31.12	0	0	0	0	0
18808.08	10.22	40.00	29.66	0	0	0	0	0
19191.92	9.85	40.00	28.30	0	0	0	0	0
19575.76	9.50	40.00	27.03	0	0	0	0	0
19959.60	9.17	40.00	25.84	0	0	0	0	0
20343.43	8.85	40.00	24.74	0	0	0	0	0
20727.27	8.56	40.00	23.70	0	0	0	0	0
21111.11	8.27	40.00	22.73	0	0	0	0	0
21494.95	8.00	40.00	21.82	0	0	0	0	0
21878.79	7.75	40.00	20.96	0	0	0	0	0
22262.63	7.50	40.00	20.15	0	0	0	0	0
22646.46	7.27	40.00	19.39	0	0	0	0	0
23030.30	7.05	40.00	18.67	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
23414.14	6.84	40.00	18.00	0	0	0	0	0
23797.98	6.64	40.00	17.35	0	0	0	0	0
24181.82	6.44	40.00	16.75	0	0	0	0	0
24565.66	6.26	40.00	16.17	0	0	0	0	0
24949.49	6.08	40.00	15.63	0	0	0	0	0
25333.33	5.91	40.00	15.11	0	0	0	0	0
25717.17	5.75	40.00	14.62	0	0	0	0	0
26101.01	5.60	40.00	14.15	0	0	0	0	0
26484.85	5.45	40.00	13.71	0	0	0	0	0
26868.69	5.31	40.00	13.29	0	0	0	0	0
27252.53	5.17	40.00	12.88	0	0	0	0	0
27636.36	5.04	40.00	12.50	0	0	0	0	0
28020.20	4.91	40.00	12.13	0	0	0	0	0
28404.04	4.79	40.00	11.78	0	0	0	0	0
28787.88	4.67	40.00	11.45	0	0	0	0	0
29171.72	4.56	40.00	11.13	0	0	0	0	0
29555.55	4.45	40.00	10.82	0	0	0	0	0
29939.39	4.34	40.00	10.53	0	0	0	0	0
30323.23	4.24	40.00	10.25	0	0	0	0	0
30707.07	4.14	40.00	9.98	0	0	0	0	0
31090.91	4.05	40.00	9.71	0	0	0	0	0
31474.75	3.96	40.00	9.46	0	0	0	0	0
31858.59	3.87	40.00	9.22	0	0	0	0	0
32242.42	3.79	40.00	8.99	0	0	0	0	0
32626.26	3.70	40.00	8.77	0	0	0	0	0
33010.10	3.63	40.00	8.55	0	0	0	0	0
33393.94	3.55	40.00	8.34	0	0	0	0	0
33777.78	3.47	40.00	8.14	0	0	0	0	0
34161.62	3.40	40.00	7.95	0	0	0	0	0
34545.45	3.33	40.00	7.76	0	0	0	0	0
34929.29	3.27	40.00	7.58	0	0	0	0	0
35313.13	3.20	40.00	7.41	0	0	0	0	0
35696.97	3.14	40.00	7.24	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
36080.81	0.00	40.00	0.00	0	0	0	0	0
36464.64	0.00	40.00	0.00	0	0	0	0	0
36848.48	0.00	40.00	0.00	0	0	0	0	0
37232.32	0.00	40.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	50.00	0.00	1	0	1	0	0
767.68	0.00	50.00	0.00	1	0	1	0	0
1151.52	0.00	50.00	0.00	1	0	1	0	0
1535.35	0.00	50.00	0.00	1	0	1	0	0
1919.19	0.00	50.00	0.00	1	0	1	0	0
2303.03	0.00	50.00	0.00	1	0	1	0	0
2686.87	0.00	50.00	0.00	1	0	1	0	0
3070.71	0.00	50.00	0.00	1	0	1	0	0
3454.55	0.00	50.00	0.00	1	0	1	0	0
3838.38	0.00	50.00	0.00	1	0	1	0	0
4222.22	0.00	50.00	0.00	1	0	1	0	0
4606.06	0.00	50.00	0.00	1	0	1	0	0
4989.90	0.00	50.00	0.00	1	0	1	0	0
5373.74	0.00	50.00	0.00	1	0	1	0	0
5757.58	0.00	50.00	0.00	1	0	1	0	0
6141.41	80.41	50.00	10000.00	0	0	0	0	0
6525.25	71.19	50.00	10000.00	0	0	0	0	0
6909.09	63.47	50.00	10000.00	0	0	0	0	0
7292.93	56.93	50.00	10000.00	0	0	0	0	0
7676.77	51.84	50.00	10000.00	0	0	0	0	0
8060.61	47.49	50.00	10000.00	1	0	0	0	1
8444.44	43.69	50.00	634.33	1	0	0	0	1
8828.28	40.33	50.00	314.60	1	0	0	0	1
9212.12	37.36	50.00	248.76	1	0	0	0	1
9595.96	34.71	50.00	198.60	1	0	0	0	1
9979.80	32.34	50.00	166.66	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
10363.64	30.21	50.00	146.70	1	0	0	0	1
10747.47	28.29	50.00	129.73	1	0	0	0	1
11131.31	26.55	50.00	115.23	1	0	0	0	1
11515.15	24.97	50.00	102.75	1	0	0	0	1
11898.99	23.53	50.00	93.58	1	0	0	0	1
12282.83	22.22	50.00	85.94	1	0	0	0	1
12666.67	21.01	50.00	79.14	1	0	0	0	1
13050.50	19.91	50.00	73.05	1	0	0	0	1
13434.34	18.88	50.00	67.59	1	0	0	0	1
13818.18	17.94	50.00	62.67	1	0	0	0	1
14202.02	17.07	50.00	58.23	1	0	0	0	1
14585.86	16.26	50.00	54.34	1	0	0	0	1
14969.70	15.51	50.00	51.02	1	0	0	0	1
15353.54	14.81	50.00	47.98	0	0	0	0	0
15737.37	14.16	50.00	45.21	0	0	0	0	0
16121.21	13.55	50.00	42.67	0	0	0	0	0
16505.05	12.98	50.00	40.34	0	0	0	0	0
16888.89	12.45	50.00	38.19	0	0	0	0	0
17272.73	11.95	50.00	36.21	0	0	0	0	0
17656.57	11.48	50.00	34.38	0	0	0	0	0
18040.40	11.03	50.00	32.69	0	0	0	0	0
18424.24	10.62	50.00	31.12	0	0	0	0	0
18808.08	10.22	50.00	29.66	0	0	0	0	0
19191.92	9.85	50.00	28.30	0	0	0	0	0
19575.76	9.50	50.00	27.03	0	0	0	0	0
19959.60	9.17	50.00	25.84	0	0	0	0	0
20343.43	8.85	50.00	24.74	0	0	0	0	0
20727.27	8.56	50.00	23.70	0	0	0	0	0
21111.11	8.27	50.00	22.73	0	0	0	0	0
21494.95	8.00	50.00	21.82	0	0	0	0	0
21878.79	7.75	50.00	20.96	0	0	0	0	0
22262.63	7.50	50.00	20.15	0	0	0	0	0
22646.46	7.27	50.00	19.39	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
23030.30	7.05	50.00	18.67	0	0	0	0	0
23414.14	6.84	50.00	18.00	0	0	0	0	0
23797.98	6.64	50.00	17.35	0	0	0	0	0
24181.82	6.44	50.00	16.75	0	0	0	0	0
24565.66	6.26	50.00	16.17	0	0	0	0	0
24949.49	6.08	50.00	15.63	0	0	0	0	0
25333.33	5.91	50.00	15.11	0	0	0	0	0
25717.17	5.75	50.00	14.62	0	0	0	0	0
26101.01	5.60	50.00	14.15	0	0	0	0	0
26484.85	5.45	50.00	13.71	0	0	0	0	0
26868.69	5.31	50.00	13.29	0	0	0	0	0
27252.53	5.17	50.00	12.88	0	0	0	0	0
27636.36	5.04	50.00	12.50	0	0	0	0	0
28020.20	4.91	50.00	12.13	0	0	0	0	0
28404.04	4.79	50.00	11.78	0	0	0	0	0
28787.88	4.67	50.00	11.45	0	0	0	0	0
29171.72	4.56	50.00	11.13	0	0	0	0	0
29555.55	4.45	50.00	10.82	0	0	0	0	0
29939.39	4.34	50.00	10.53	0	0	0	0	0
30323.23	4.24	50.00	10.25	0	0	0	0	0
30707.07	4.14	50.00	9.98	0	0	0	0	0
31090.91	4.05	50.00	9.71	0	0	0	0	0
31474.75	3.96	50.00	9.46	0	0	0	0	0
31858.59	3.87	50.00	9.22	0	0	0	0	0
32242.42	3.79	50.00	8.99	0	0	0	0	0
32626.26	3.70	50.00	8.77	0	0	0	0	0
33010.10	3.63	50.00	8.55	0	0	0	0	0
33393.94	3.55	50.00	8.34	0	0	0	0	0
33777.78	3.47	50.00	8.14	0	0	0	0	0
34161.62	3.40	50.00	7.95	0	0	0	0	0
34545.45	3.33	50.00	7.76	0	0	0	0	0
34929.29	3.27	50.00	7.58	0	0	0	0	0
35313.13	3.20	50.00	7.41	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
35696.97	3.14	50.00	7.24	0	0	0	0	0
36080.81	0.00	50.00	0.00	0	0	0	0	0
36464.64	0.00	50.00	0.00	0	0	0	0	0
36848.48	0.00	50.00	0.00	0	0	0	0	0
37232.32	0.00	50.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	81.08	0.00	1	0	1	0	0
767.68	0.00	81.08	0.00	1	0	1	0	0
1151.52	0.00	81.08	0.00	1	0	1	0	0
1535.35	0.00	81.08	0.00	1	0	1	0	0
1919.19	0.00	81.08	0.00	1	0	1	0	0
2303.03	0.00	81.08	0.00	1	0	1	0	0
2686.87	0.00	81.08	0.00	1	0	1	0	0
3070.71	0.00	81.08	0.00	1	0	1	0	0
3454.55	0.00	81.08	0.00	1	0	1	0	0
3838.38	0.00	81.08	0.00	1	0	1	0	0
4222.22	0.00	81.08	0.00	1	0	1	0	0
4606.06	0.00	81.08	0.00	1	0	1	0	0
4989.90	0.00	81.08	0.00	1	0	1	0	0
5373.74	0.00	81.08	0.00	1	0	1	0	0
5757.58	0.00	81.08	0.00	1	0	1	0	0
6141.41	80.41	81.08	10000.00	1	0	0	0	1
6525.25	71.19	81.08	10000.00	1	0	0	0	1
6909.09	63.47	81.08	10000.00	1	0	0	0	1
7292.93	56.93	81.08	10000.00	1	0	0	0	1
7676.77	51.84	81.08	10000.00	1	0	0	0	1
8060.61	47.49	81.08	10000.00	1	0	0	0	1
8444.44	43.69	81.08	634.33	1	0	0	0	1
8828.28	40.33	81.08	314.60	1	0	0	0	1
9212.12	37.36	81.08	248.76	1	0	0	0	1
9595.96	34.71	81.08	198.60	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
9979.80	32.34	81.08	166.66	1	0	0	0	1
10363.64	30.21	81.08	146.70	1	0	0	0	1
10747.47	28.29	81.08	129.73	1	0	0	0	1
11131.31	26.55	81.08	115.23	1	0	0	0	1
11515.15	24.97	81.08	102.75	1	0	0	0	1
11898.99	23.53	81.08	93.58	1	0	0	0	1
12282.83	22.22	81.08	85.94	1	0	0	0	1
12666.67	21.01	81.08	79.14	0	0	0	0	0
13050.50	19.91	81.08	73.05	0	0	0	0	0
13434.34	18.88	81.08	67.59	0	0	0	0	0
13818.18	17.94	81.08	62.67	0	0	0	0	0
14202.02	17.07	81.08	58.23	0	0	0	0	0
14585.86	16.26	81.08	54.34	0	0	0	0	0
14969.70	15.51	81.08	51.02	0	0	0	0	0
15353.54	14.81	81.08	47.98	0	0	0	0	0
15737.37	14.16	81.08	45.21	0	0	0	0	0
16121.21	13.55	81.08	42.67	0	0	0	0	0
16505.05	12.98	81.08	40.34	0	0	0	0	0
16888.89	12.45	81.08	38.19	0	0	0	0	0
17272.73	11.95	81.08	36.21	0	0	0	0	0
17656.57	11.48	81.08	34.38	0	0	0	0	0
18040.40	11.03	81.08	32.69	0	0	0	0	0
18424.24	10.62	81.08	31.12	0	0	0	0	0
18808.08	10.22	81.08	29.66	0	0	0	0	0
19191.92	9.85	81.08	28.30	0	0	0	0	0
19575.76	9.50	81.08	27.03	0	0	0	0	0
19959.60	9.17	81.08	25.84	0	0	0	0	0
20343.43	8.85	81.08	24.74	0	0	0	0	0
20727.27	8.56	81.08	23.70	0	0	0	0	0
21111.11	8.27	81.08	22.73	0	0	0	0	0
21494.95	8.00	81.08	21.82	0	0	0	0	0
21878.79	7.75	81.08	20.96	0	0	0	0	0
22262.63	7.50	81.08	20.15	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
22646.46	7.27	81.08	19.39	0	0	0	0	0
23030.30	7.05	81.08	18.67	0	0	0	0	0
23414.14	6.84	81.08	18.00	0	0	0	0	0
23797.98	6.64	81.08	17.35	0	0	0	0	0
24181.82	6.44	81.08	16.75	0	0	0	0	0
24565.66	6.26	81.08	16.17	0	0	0	0	0
24949.49	6.08	81.08	15.63	0	0	0	0	0
25333.33	5.91	81.08	15.11	0	0	0	0	0
25717.17	5.75	81.08	14.62	0	0	0	0	0
26101.01	5.60	81.08	14.15	0	0	0	0	0
26484.85	5.45	81.08	13.71	0	0	0	0	0
26868.69	5.31	81.08	13.29	0	0	0	0	0
27252.53	5.17	81.08	12.88	0	0	0	0	0
27636.36	5.04	81.08	12.50	0	0	0	0	0
28020.20	4.91	81.08	12.13	0	0	0	0	0
28404.04	4.79	81.08	11.78	0	0	0	0	0
28787.88	4.67	81.08	11.45	0	0	0	0	0
29171.72	4.56	81.08	11.13	0	0	0	0	0
29555.55	4.45	81.08	10.82	0	0	0	0	0
29939.39	4.34	81.08	10.53	0	0	0	0	0
30323.23	4.24	81.08	10.25	0	0	0	0	0
30707.07	4.14	81.08	9.98	0	0	0	0	0
31090.91	4.05	81.08	9.71	0	0	0	0	0
31474.75	3.96	81.08	9.46	0	0	0	0	0
31858.59	3.87	81.08	9.22	0	0	0	0	0
32242.42	3.79	81.08	8.99	0	0	0	0	0
32626.26	3.70	81.08	8.77	0	0	0	0	0
33010.10	3.63	81.08	8.55	0	0	0	0	0
33393.94	3.55	81.08	8.34	0	0	0	0	0
33777.78	3.47	81.08	8.14	0	0	0	0	0
34161.62	3.40	81.08	7.95	0	0	0	0	0
34545.45	3.33	81.08	7.76	0	0	0	0	0
34929.29	3.27	81.08	7.58	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
35313.13	3.20	81.08	7.41	0	0	0	0	0
35696.97	3.14	81.08	7.24	0	0	0	0	0
36080.81	0.00	81.08	0.00	0	0	0	0	0
36464.64	0.00	81.08	0.00	0	0	0	0	0
36848.48	0.00	81.08	0.00	0	0	0	0	0
37232.32	0.00	81.08	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	100.00	0.00	1	0	1	0	0
767.68	0.00	100.00	0.00	1	0	1	0	0
1151.52	0.00	100.00	0.00	1	0	1	0	0
1535.35	0.00	100.00	0.00	1	0	1	0	0
1919.19	0.00	100.00	0.00	1	0	1	0	0
2303.03	0.00	100.00	0.00	1	0	1	0	0
2686.87	0.00	100.00	0.00	1	0	1	0	0
3070.71	0.00	100.00	0.00	1	0	1	0	0
3454.55	0.00	100.00	0.00	1	0	1	0	0
3838.38	0.00	100.00	0.00	1	0	1	0	0
4222.22	0.00	100.00	0.00	1	0	1	0	0
4606.06	0.00	100.00	0.00	1	0	1	0	0
4989.90	0.00	100.00	0.00	1	0	1	0	0
5373.74	0.00	100.00	0.00	1	0	1	0	0
5757.58	0.00	100.00	0.00	1	0	1	0	0
6141.41	80.41	100.00	10000.00	1	0	0	0	1
6525.25	71.19	100.00	10000.00	1	0	0	0	1
6909.09	63.47	100.00	10000.00	1	0	0	0	1
7292.93	56.93	100.00	10000.00	1	0	0	0	1
7676.77	51.84	100.00	10000.00	1	0	0	0	1
8060.61	47.49	100.00	10000.00	1	0	0	0	1
8444.44	43.69	100.00	634.33	1	0	0	0	1
8828.28	40.33	100.00	314.60	1	0	0	0	1
9212.12	37.36	100.00	248.76	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
9595.96	34.71	100.00	198.60	1	0	0	0	1
9979.80	32.34	100.00	166.66	1	0	0	0	1
10363.64	30.21	100.00	146.70	1	0	0	0	1
10747.47	28.29	100.00	129.73	1	0	0	0	1
11131.31	26.55	100.00	115.23	1	0	0	0	1
11515.15	24.97	100.00	102.75	1	0	0	0	1
11898.99	23.53	100.00	93.58	0	0	0	0	0
12282.83	22.22	100.00	85.94	0	0	0	0	0
12666.67	21.01	100.00	79.14	0	0	0	0	0
13050.50	19.91	100.00	73.05	0	0	0	0	0
13434.34	18.88	100.00	67.59	0	0	0	0	0
13818.18	17.94	100.00	62.67	0	0	0	0	0
14202.02	17.07	100.00	58.23	0	0	0	0	0
14585.86	16.26	100.00	54.34	0	0	0	0	0
14969.70	15.51	100.00	51.02	0	0	0	0	0
15353.54	14.81	100.00	47.98	0	0	0	0	0
15737.37	14.16	100.00	45.21	0	0	0	0	0
16121.21	13.55	100.00	42.67	0	0	0	0	0
16505.05	12.98	100.00	40.34	0	0	0	0	0
16888.89	12.45	100.00	38.19	0	0	0	0	0
17272.73	11.95	100.00	36.21	0	0	0	0	0
17656.57	11.48	100.00	34.38	0	0	0	0	0
18040.40	11.03	100.00	32.69	0	0	0	0	0
18424.24	10.62	100.00	31.12	0	0	0	0	0
18808.08	10.22	100.00	29.66	0	0	0	0	0
19191.92	9.85	100.00	28.30	0	0	0	0	0
19575.76	9.50	100.00	27.03	0	0	0	0	0
19959.60	9.17	100.00	25.84	0	0	0	0	0
20343.43	8.85	100.00	24.74	0	0	0	0	0
20727.27	8.56	100.00	23.70	0	0	0	0	0
21111.11	8.27	100.00	22.73	0	0	0	0	0
21494.95	8.00	100.00	21.82	0	0	0	0	0
21878.79	7.75	100.00	20.96	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
22262.63	7.50	100.00	20.15	0	0	0	0	0
22646.46	7.27	100.00	19.39	0	0	0	0	0
23030.30	7.05	100.00	18.67	0	0	0	0	0
23414.14	6.84	100.00	18.00	0	0	0	0	0
23797.98	6.64	100.00	17.35	0	0	0	0	0
24181.82	6.44	100.00	16.75	0	0	0	0	0
24565.66	6.26	100.00	16.17	0	0	0	0	0
24949.49	6.08	100.00	15.63	0	0	0	0	0
25333.33	5.91	100.00	15.11	0	0	0	0	0
25717.17	5.75	100.00	14.62	0	0	0	0	0
26101.01	5.60	100.00	14.15	0	0	0	0	0
26484.85	5.45	100.00	13.71	0	0	0	0	0
26868.69	5.31	100.00	13.29	0	0	0	0	0
27252.53	5.17	100.00	12.88	0	0	0	0	0
27636.36	5.04	100.00	12.50	0	0	0	0	0
28020.20	4.91	100.00	12.13	0	0	0	0	0
28404.04	4.79	100.00	11.78	0	0	0	0	0
28787.88	4.67	100.00	11.45	0	0	0	0	0
29171.72	4.56	100.00	11.13	0	0	0	0	0
29555.55	4.45	100.00	10.82	0	0	0	0	0
29939.39	4.34	100.00	10.53	0	0	0	0	0
30323.23	4.24	100.00	10.25	0	0	0	0	0
30707.07	4.14	100.00	9.98	0	0	0	0	0
31090.91	4.05	100.00	9.71	0	0	0	0	0
31474.75	3.96	100.00	9.46	0	0	0	0	0
31858.59	3.87	100.00	9.22	0	0	0	0	0
32242.42	3.79	100.00	8.99	0	0	0	0	0
32626.26	3.70	100.00	8.77	0	0	0	0	0
33010.10	3.63	100.00	8.55	0	0	0	0	0
33393.94	3.55	100.00	8.34	0	0	0	0	0
33777.78	3.47	100.00	8.14	0	0	0	0	0
34161.62	3.40	100.00	7.95	0	0	0	0	0
34545.45	3.33	100.00	7.76	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
34929.29	3.27	100.00	7.58	0	0	0	0	0
35313.13	3.20	100.00	7.41	0	0	0	0	0
35696.97	3.14	100.00	7.24	0	0	0	0	0
36080.81	0.00	100.00	0.00	0	0	0	0	0
36464.64	0.00	100.00	0.00	0	0	0	0	0
36848.48	0.00	100.00	0.00	0	0	0	0	0
37232.32	0.00	100.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	200.00	0.00	1	0	1	0	0
767.68	0.00	200.00	0.00	1	0	1	0	0
1151.52	0.00	200.00	0.00	1	0	1	0	0
1535.35	0.00	200.00	0.00	1	0	1	0	0
1919.19	0.00	200.00	0.00	1	0	1	0	0
2303.03	0.00	200.00	0.00	1	0	1	0	0
2686.87	0.00	200.00	0.00	1	0	1	0	0
3070.71	0.00	200.00	0.00	1	0	1	0	0
3454.55	0.00	200.00	0.00	1	0	1	0	0
3838.38	0.00	200.00	0.00	1	0	1	0	0
4222.22	0.00	200.00	0.00	1	0	1	0	0
4606.06	0.00	200.00	0.00	1	0	1	0	0
4989.90	0.00	200.00	0.00	1	0	1	0	0
5373.74	0.00	200.00	0.00	1	0	1	0	0
5757.58	0.00	200.00	0.00	1	0	1	0	0
6141.41	80.41	200.00	10000.00	1	0	0	0	1
6525.25	71.19	200.00	10000.00	1	0	0	0	1
6909.09	63.47	200.00	10000.00	1	0	0	0	1
7292.93	56.93	200.00	10000.00	1	0	0	0	1
7676.77	51.84	200.00	10000.00	1	0	0	0	1
8060.61	47.49	200.00	10000.00	1	0	0	0	1
8444.44	43.69	200.00	634.33	1	0	0	0	1
8828.28	40.33	200.00	314.60	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
9212.12	37.36	200.00	248.76	1	0	0	0	1
9595.96	34.71	200.00	198.60	0	0	0	0	0
9979.80	32.34	200.00	166.66	0	0	0	0	0
10363.64	30.21	200.00	146.70	0	0	0	0	0
10747.47	28.29	200.00	129.73	0	0	0	0	0
11131.31	26.55	200.00	115.23	0	0	0	0	0
11515.15	24.97	200.00	102.75	0	0	0	0	0
11898.99	23.53	200.00	93.58	0	0	0	0	0
12282.83	22.22	200.00	85.94	0	0	0	0	0
12666.67	21.01	200.00	79.14	0	0	0	0	0
13050.50	19.91	200.00	73.05	0	0	0	0	0
13434.34	18.88	200.00	67.59	0	0	0	0	0
13818.18	17.94	200.00	62.67	0	0	0	0	0
14202.02	17.07	200.00	58.23	0	0	0	0	0
14585.86	16.26	200.00	54.34	0	0	0	0	0
14969.70	15.51	200.00	51.02	0	0	0	0	0
15353.54	14.81	200.00	47.98	0	0	0	0	0
15737.37	14.16	200.00	45.21	0	0	0	0	0
16121.21	13.55	200.00	42.67	0	0	0	0	0
16505.05	12.98	200.00	40.34	0	0	0	0	0
16888.89	12.45	200.00	38.19	0	0	0	0	0
17272.73	11.95	200.00	36.21	0	0	0	0	0
17656.57	11.48	200.00	34.38	0	0	0	0	0
18040.40	11.03	200.00	32.69	0	0	0	0	0
18424.24	10.62	200.00	31.12	0	0	0	0	0
18808.08	10.22	200.00	29.66	0	0	0	0	0
19191.92	9.85	200.00	28.30	0	0	0	0	0
19575.76	9.50	200.00	27.03	0	0	0	0	0
19959.60	9.17	200.00	25.84	0	0	0	0	0
20343.43	8.85	200.00	24.74	0	0	0	0	0
20727.27	8.56	200.00	23.70	0	0	0	0	0
21111.11	8.27	200.00	22.73	0	0	0	0	0
21494.95	8.00	200.00	21.82	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
21878.79	7.75	200.00	20.96	0	0	0	0	0
22262.63	7.50	200.00	20.15	0	0	0	0	0
22646.46	7.27	200.00	19.39	0	0	0	0	0
23030.30	7.05	200.00	18.67	0	0	0	0	0
23414.14	6.84	200.00	18.00	0	0	0	0	0
23797.98	6.64	200.00	17.35	0	0	0	0	0
24181.82	6.44	200.00	16.75	0	0	0	0	0
24565.66	6.26	200.00	16.17	0	0	0	0	0
24949.49	6.08	200.00	15.63	0	0	0	0	0
25333.33	5.91	200.00	15.11	0	0	0	0	0
25717.17	5.75	200.00	14.62	0	0	0	0	0
26101.01	5.60	200.00	14.15	0	0	0	0	0
26484.85	5.45	200.00	13.71	0	0	0	0	0
26868.69	5.31	200.00	13.29	0	0	0	0	0
27252.53	5.17	200.00	12.88	0	0	0	0	0
27636.36	5.04	200.00	12.50	0	0	0	0	0
28020.20	4.91	200.00	12.13	0	0	0	0	0
28404.04	4.79	200.00	11.78	0	0	0	0	0
28787.88	4.67	200.00	11.45	0	0	0	0	0
29171.72	4.56	200.00	11.13	0	0	0	0	0
29555.55	4.45	200.00	10.82	0	0	0	0	0
29939.39	4.34	200.00	10.53	0	0	0	0	0
30323.23	4.24	200.00	10.25	0	0	0	0	0
30707.07	4.14	200.00	9.98	0	0	0	0	0
31090.91	4.05	200.00	9.71	0	0	0	0	0
31474.75	3.96	200.00	9.46	0	0	0	0	0
31858.59	3.87	200.00	9.22	0	0	0	0	0
32242.42	3.79	200.00	8.99	0	0	0	0	0
32626.26	3.70	200.00	8.77	0	0	0	0	0
33010.10	3.63	200.00	8.55	0	0	0	0	0
33393.94	3.55	200.00	8.34	0	0	0	0	0
33777.78	3.47	200.00	8.14	0	0	0	0	0
34161.62	3.40	200.00	7.95	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
34545.45	3.33	200.00	7.76	0	0	0	0	0
34929.29	3.27	200.00	7.58	0	0	0	0	0
35313.13	3.20	200.00	7.41	0	0	0	0	0
35696.97	3.14	200.00	7.24	0	0	0	0	0
36080.81	0.00	200.00	0.00	0	0	0	0	0
36464.64	0.00	200.00	0.00	0	0	0	0	0
36848.48	0.00	200.00	0.00	0	0	0	0	0
37232.32	0.00	200.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	250.00	0.00	1	0	1	0	0
767.68	0.00	250.00	0.00	1	0	1	0	0
1151.52	0.00	250.00	0.00	1	0	1	0	0
1535.35	0.00	250.00	0.00	1	0	1	0	0
1919.19	0.00	250.00	0.00	1	0	1	0	0
2303.03	0.00	250.00	0.00	1	0	1	0	0
2686.87	0.00	250.00	0.00	1	0	1	0	0
3070.71	0.00	250.00	0.00	1	0	1	0	0
3454.55	0.00	250.00	0.00	1	0	1	0	0
3838.38	0.00	250.00	0.00	1	0	1	0	0
4222.22	0.00	250.00	0.00	1	0	1	0	0
4606.06	0.00	250.00	0.00	1	0	1	0	0
4989.90	0.00	250.00	0.00	1	0	1	0	0
5373.74	0.00	250.00	0.00	1	0	1	0	0
5757.58	0.00	250.00	0.00	1	0	1	0	0
6141.41	80.41	250.00	10000.00	1	0	0	0	1
6525.25	71.19	250.00	10000.00	1	0	0	0	1
6909.09	63.47	250.00	10000.00	1	0	0	0	1
7292.93	56.93	250.00	10000.00	1	0	0	0	1
7676.77	51.84	250.00	10000.00	1	0	0	0	1
8060.61	47.49	250.00	10000.00	1	0	0	0	1
8444.44	43.69	250.00	634.33	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
8828.28	40.33	250.00	314.60	1	0	0	0	1
9212.12	37.36	250.00	248.76	0	0	0	0	0
9595.96	34.71	250.00	198.60	0	0	0	0	0
9979.80	32.34	250.00	166.66	0	0	0	0	0
10363.64	30.21	250.00	146.70	0	0	0	0	0
10747.47	28.29	250.00	129.73	0	0	0	0	0
11131.31	26.55	250.00	115.23	0	0	0	0	0
11515.15	24.97	250.00	102.75	0	0	0	0	0
11898.99	23.53	250.00	93.58	0	0	0	0	0
12282.83	22.22	250.00	85.94	0	0	0	0	0
12666.67	21.01	250.00	79.14	0	0	0	0	0
13050.50	19.91	250.00	73.05	0	0	0	0	0
13434.34	18.88	250.00	67.59	0	0	0	0	0
13818.18	17.94	250.00	62.67	0	0	0	0	0
14202.02	17.07	250.00	58.23	0	0	0	0	0
14585.86	16.26	250.00	54.34	0	0	0	0	0
14969.70	15.51	250.00	51.02	0	0	0	0	0
15353.54	14.81	250.00	47.98	0	0	0	0	0
15737.37	14.16	250.00	45.21	0	0	0	0	0
16121.21	13.55	250.00	42.67	0	0	0	0	0
16505.05	12.98	250.00	40.34	0	0	0	0	0
16888.89	12.45	250.00	38.19	0	0	0	0	0
17272.73	11.95	250.00	36.21	0	0	0	0	0
17656.57	11.48	250.00	34.38	0	0	0	0	0
18040.40	11.03	250.00	32.69	0	0	0	0	0
18424.24	10.62	250.00	31.12	0	0	0	0	0
18808.08	10.22	250.00	29.66	0	0	0	0	0
19191.92	9.85	250.00	28.30	0	0	0	0	0
19575.76	9.50	250.00	27.03	0	0	0	0	0
19959.60	9.17	250.00	25.84	0	0	0	0	0
20343.43	8.85	250.00	24.74	0	0	0	0	0
20727.27	8.56	250.00	23.70	0	0	0	0	0
21111.11	8.27	250.00	22.73	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
21494.95	8.00	250.00	21.82	0	0	0	0	0
21878.79	7.75	250.00	20.96	0	0	0	0	0
22262.63	7.50	250.00	20.15	0	0	0	0	0
22646.46	7.27	250.00	19.39	0	0	0	0	0
23030.30	7.05	250.00	18.67	0	0	0	0	0
23414.14	6.84	250.00	18.00	0	0	0	0	0
23797.98	6.64	250.00	17.35	0	0	0	0	0
24181.82	6.44	250.00	16.75	0	0	0	0	0
24565.66	6.26	250.00	16.17	0	0	0	0	0
24949.49	6.08	250.00	15.63	0	0	0	0	0
25333.33	5.91	250.00	15.11	0	0	0	0	0
25717.17	5.75	250.00	14.62	0	0	0	0	0
26101.01	5.60	250.00	14.15	0	0	0	0	0
26484.85	5.45	250.00	13.71	0	0	0	0	0
26868.69	5.31	250.00	13.29	0	0	0	0	0
27252.53	5.17	250.00	12.88	0	0	0	0	0
27636.36	5.04	250.00	12.50	0	0	0	0	0
28020.20	4.91	250.00	12.13	0	0	0	0	0
28404.04	4.79	250.00	11.78	0	0	0	0	0
28787.88	4.67	250.00	11.45	0	0	0	0	0
29171.72	4.56	250.00	11.13	0	0	0	0	0
29555.55	4.45	250.00	10.82	0	0	0	0	0
29939.39	4.34	250.00	10.53	0	0	0	0	0
30323.23	4.24	250.00	10.25	0	0	0	0	0
30707.07	4.14	250.00	9.98	0	0	0	0	0
31090.91	4.05	250.00	9.71	0	0	0	0	0
31474.75	3.96	250.00	9.46	0	0	0	0	0
31858.59	3.87	250.00	9.22	0	0	0	0	0
32242.42	3.79	250.00	8.99	0	0	0	0	0
32626.26	3.70	250.00	8.77	0	0	0	0	0
33010.10	3.63	250.00	8.55	0	0	0	0	0
33393.94	3.55	250.00	8.34	0	0	0	0	0
33777.78	3.47	250.00	8.14	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
34161.62	3.40	250.00	7.95	0	0	0	0	0
34545.45	3.33	250.00	7.76	0	0	0	0	0
34929.29	3.27	250.00	7.58	0	0	0	0	0
35313.13	3.20	250.00	7.41	0	0	0	0	0
35696.97	3.14	250.00	7.24	0	0	0	0	0
36080.81	0.00	250.00	0.00	0	0	0	0	0
36464.64	0.00	250.00	0.00	0	0	0	0	0
36848.48	0.00	250.00	0.00	0	0	0	0	0
37232.32	0.00	250.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	300.00	0.00	1	0	1	0	0
767.68	0.00	300.00	0.00	1	0	1	0	0
1151.52	0.00	300.00	0.00	1	0	1	0	0
1535.35	0.00	300.00	0.00	1	0	1	0	0
1919.19	0.00	300.00	0.00	1	0	1	0	0
2303.03	0.00	300.00	0.00	1	0	1	0	0
2686.87	0.00	300.00	0.00	1	0	1	0	0
3070.71	0.00	300.00	0.00	1	0	1	0	0
3454.55	0.00	300.00	0.00	1	0	1	0	0
3838.38	0.00	300.00	0.00	1	0	1	0	0
4222.22	0.00	300.00	0.00	1	0	1	0	0
4606.06	0.00	300.00	0.00	1	0	1	0	0
4989.90	0.00	300.00	0.00	1	0	1	0	0
5373.74	0.00	300.00	0.00	1	0	1	0	0
5757.58	0.00	300.00	0.00	1	0	1	0	0
6141.41	80.41	300.00	10000.00	1	0	0	0	1
6525.25	71.19	300.00	10000.00	1	0	0	0	1
6909.09	63.47	300.00	10000.00	1	0	0	0	1
7292.93	56.93	300.00	10000.00	1	0	0	0	1
7676.77	51.84	300.00	10000.00	1	0	0	0	1
8060.61	47.49	300.00	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
8444.44	43.69	300.00	634.33	1	0	0	0	1
8828.28	40.33	300.00	314.60	1	0	0	0	1
9212.12	37.36	300.00	248.76	0	0	0	0	0
9595.96	34.71	300.00	198.60	0	0	0	0	0
9979.80	32.34	300.00	166.66	0	0	0	0	0
10363.64	30.21	300.00	146.70	0	0	0	0	0
10747.47	28.29	300.00	129.73	0	0	0	0	0
11131.31	26.55	300.00	115.23	0	0	0	0	0
11515.15	24.97	300.00	102.75	0	0	0	0	0
11898.99	23.53	300.00	93.58	0	0	0	0	0
12282.83	22.22	300.00	85.94	0	0	0	0	0
12666.67	21.01	300.00	79.14	0	0	0	0	0
13050.50	19.91	300.00	73.05	0	0	0	0	0
13434.34	18.88	300.00	67.59	0	0	0	0	0
13818.18	17.94	300.00	62.67	0	0	0	0	0
14202.02	17.07	300.00	58.23	0	0	0	0	0
14585.86	16.26	300.00	54.34	0	0	0	0	0
14969.70	15.51	300.00	51.02	0	0	0	0	0
15353.54	14.81	300.00	47.98	0	0	0	0	0
15737.37	14.16	300.00	45.21	0	0	0	0	0
16121.21	13.55	300.00	42.67	0	0	0	0	0
16505.05	12.98	300.00	40.34	0	0	0	0	0
16888.89	12.45	300.00	38.19	0	0	0	0	0
17272.73	11.95	300.00	36.21	0	0	0	0	0
17656.57	11.48	300.00	34.38	0	0	0	0	0
18040.40	11.03	300.00	32.69	0	0	0	0	0
18424.24	10.62	300.00	31.12	0	0	0	0	0
18808.08	10.22	300.00	29.66	0	0	0	0	0
19191.92	9.85	300.00	28.30	0	0	0	0	0
19575.76	9.50	300.00	27.03	0	0	0	0	0
19959.60	9.17	300.00	25.84	0	0	0	0	0
20343.43	8.85	300.00	24.74	0	0	0	0	0
20727.27	8.56	300.00	23.70	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
21111.11	8.27	300.00	22.73	0	0	0	0	0
21494.95	8.00	300.00	21.82	0	0	0	0	0
21878.79	7.75	300.00	20.96	0	0	0	0	0
22262.63	7.50	300.00	20.15	0	0	0	0	0
22646.46	7.27	300.00	19.39	0	0	0	0	0
23030.30	7.05	300.00	18.67	0	0	0	0	0
23414.14	6.84	300.00	18.00	0	0	0	0	0
23797.98	6.64	300.00	17.35	0	0	0	0	0
24181.82	6.44	300.00	16.75	0	0	0	0	0
24565.66	6.26	300.00	16.17	0	0	0	0	0
24949.49	6.08	300.00	15.63	0	0	0	0	0
25333.33	5.91	300.00	15.11	0	0	0	0	0
25717.17	5.75	300.00	14.62	0	0	0	0	0
26101.01	5.60	300.00	14.15	0	0	0	0	0
26484.85	5.45	300.00	13.71	0	0	0	0	0
26868.69	5.31	300.00	13.29	0	0	0	0	0
27252.53	5.17	300.00	12.88	0	0	0	0	0
27636.36	5.04	300.00	12.50	0	0	0	0	0
28020.20	4.91	300.00	12.13	0	0	0	0	0
28404.04	4.79	300.00	11.78	0	0	0	0	0
28787.88	4.67	300.00	11.45	0	0	0	0	0
29171.72	4.56	300.00	11.13	0	0	0	0	0
29555.55	4.45	300.00	10.82	0	0	0	0	0
29939.39	4.34	300.00	10.53	0	0	0	0	0
30323.23	4.24	300.00	10.25	0	0	0	0	0
30707.07	4.14	300.00	9.98	0	0	0	0	0
31090.91	4.05	300.00	9.71	0	0	0	0	0
31474.75	3.96	300.00	9.46	0	0	0	0	0
31858.59	3.87	300.00	9.22	0	0	0	0	0
32242.42	3.79	300.00	8.99	0	0	0	0	0
32626.26	3.70	300.00	8.77	0	0	0	0	0
33010.10	3.63	300.00	8.55	0	0	0	0	0
33393.94	3.55	300.00	8.34	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
33777.78	3.47	300.00	8.14	0	0	0	0	0
34161.62	3.40	300.00	7.95	0	0	0	0	0
34545.45	3.33	300.00	7.76	0	0	0	0	0
34929.29	3.27	300.00	7.58	0	0	0	0	0
35313.13	3.20	300.00	7.41	0	0	0	0	0
35696.97	3.14	300.00	7.24	0	0	0	0	0
36080.81	0.00	300.00	0.00	0	0	0	0	0
36464.64	0.00	300.00	0.00	0	0	0	0	0
36848.48	0.00	300.00	0.00	0	0	0	0	0
37232.32	0.00	300.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	500.00	0.00	1	0	1	0	0
767.68	0.00	500.00	0.00	1	0	1	0	0
1151.52	0.00	500.00	0.00	1	0	1	0	0
1535.35	0.00	500.00	0.00	1	0	1	0	0
1919.19	0.00	500.00	0.00	1	0	1	0	0
2303.03	0.00	500.00	0.00	1	0	1	0	0
2686.87	0.00	500.00	0.00	1	0	1	0	0
3070.71	0.00	500.00	0.00	1	0	1	0	0
3454.55	0.00	500.00	0.00	1	0	1	0	0
3838.38	0.00	500.00	0.00	1	0	1	0	0
4222.22	0.00	500.00	0.00	1	0	1	0	0
4606.06	0.00	500.00	0.00	1	0	1	0	0
4989.90	0.00	500.00	0.00	1	0	1	0	0
5373.74	0.00	500.00	0.00	1	0	1	0	0
5757.58	0.00	500.00	0.00	1	0	1	0	0
6141.41	80.41	500.00	10000.00	1	0	0	0	1
6525.25	71.19	500.00	10000.00	1	0	0	0	1
6909.09	63.47	500.00	10000.00	1	0	0	0	1
7292.93	56.93	500.00	10000.00	1	0	0	0	1
7676.77	51.84	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
8060.61	47.49	500.00	10000.00	1	0	0	0	1
8444.44	43.69	500.00	634.33	1	0	0	0	1
8828.28	40.33	500.00	314.60	0	0	0	0	0
9212.12	37.36	500.00	248.76	0	0	0	0	0
9595.96	34.71	500.00	198.60	0	0	0	0	0
9979.80	32.34	500.00	166.66	0	0	0	0	0
10363.64	30.21	500.00	146.70	0	0	0	0	0
10747.47	28.29	500.00	129.73	0	0	0	0	0
11131.31	26.55	500.00	115.23	0	0	0	0	0
11515.15	24.97	500.00	102.75	0	0	0	0	0
11898.99	23.53	500.00	93.58	0	0	0	0	0
12282.83	22.22	500.00	85.94	0	0	0	0	0
12666.67	21.01	500.00	79.14	0	0	0	0	0
13050.50	19.91	500.00	73.05	0	0	0	0	0
13434.34	18.88	500.00	67.59	0	0	0	0	0
13818.18	17.94	500.00	62.67	0	0	0	0	0
14202.02	17.07	500.00	58.23	0	0	0	0	0
14585.86	16.26	500.00	54.34	0	0	0	0	0
14969.70	15.51	500.00	51.02	0	0	0	0	0
15353.54	14.81	500.00	47.98	0	0	0	0	0
15737.37	14.16	500.00	45.21	0	0	0	0	0
16121.21	13.55	500.00	42.67	0	0	0	0	0
16505.05	12.98	500.00	40.34	0	0	0	0	0
16888.89	12.45	500.00	38.19	0	0	0	0	0
17272.73	11.95	500.00	36.21	0	0	0	0	0
17656.57	11.48	500.00	34.38	0	0	0	0	0
18040.40	11.03	500.00	32.69	0	0	0	0	0
18424.24	10.62	500.00	31.12	0	0	0	0	0
18808.08	10.22	500.00	29.66	0	0	0	0	0
19191.92	9.85	500.00	28.30	0	0	0	0	0
19575.76	9.50	500.00	27.03	0	0	0	0	0
19959.60	9.17	500.00	25.84	0	0	0	0	0
20343.43	8.85	500.00	24.74	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
20727.27	8.56	500.00	23.70	0	0	0	0	0
21111.11	8.27	500.00	22.73	0	0	0	0	0
21494.95	8.00	500.00	21.82	0	0	0	0	0
21878.79	7.75	500.00	20.96	0	0	0	0	0
22262.63	7.50	500.00	20.15	0	0	0	0	0
22646.46	7.27	500.00	19.39	0	0	0	0	0
23030.30	7.05	500.00	18.67	0	0	0	0	0
23414.14	6.84	500.00	18.00	0	0	0	0	0
23797.98	6.64	500.00	17.35	0	0	0	0	0
24181.82	6.44	500.00	16.75	0	0	0	0	0
24565.66	6.26	500.00	16.17	0	0	0	0	0
24949.49	6.08	500.00	15.63	0	0	0	0	0
25333.33	5.91	500.00	15.11	0	0	0	0	0
25717.17	5.75	500.00	14.62	0	0	0	0	0
26101.01	5.60	500.00	14.15	0	0	0	0	0
26484.85	5.45	500.00	13.71	0	0	0	0	0
26868.69	5.31	500.00	13.29	0	0	0	0	0
27252.53	5.17	500.00	12.88	0	0	0	0	0
27636.36	5.04	500.00	12.50	0	0	0	0	0
28020.20	4.91	500.00	12.13	0	0	0	0	0
28404.04	4.79	500.00	11.78	0	0	0	0	0
28787.88	4.67	500.00	11.45	0	0	0	0	0
29171.72	4.56	500.00	11.13	0	0	0	0	0
29555.55	4.45	500.00	10.82	0	0	0	0	0
29939.39	4.34	500.00	10.53	0	0	0	0	0
30323.23	4.24	500.00	10.25	0	0	0	0	0
30707.07	4.14	500.00	9.98	0	0	0	0	0
31090.91	4.05	500.00	9.71	0	0	0	0	0
31474.75	3.96	500.00	9.46	0	0	0	0	0
31858.59	3.87	500.00	9.22	0	0	0	0	0
32242.42	3.79	500.00	8.99	0	0	0	0	0
32626.26	3.70	500.00	8.77	0	0	0	0	0
33010.10	3.63	500.00	8.55	0	0	0	0	0

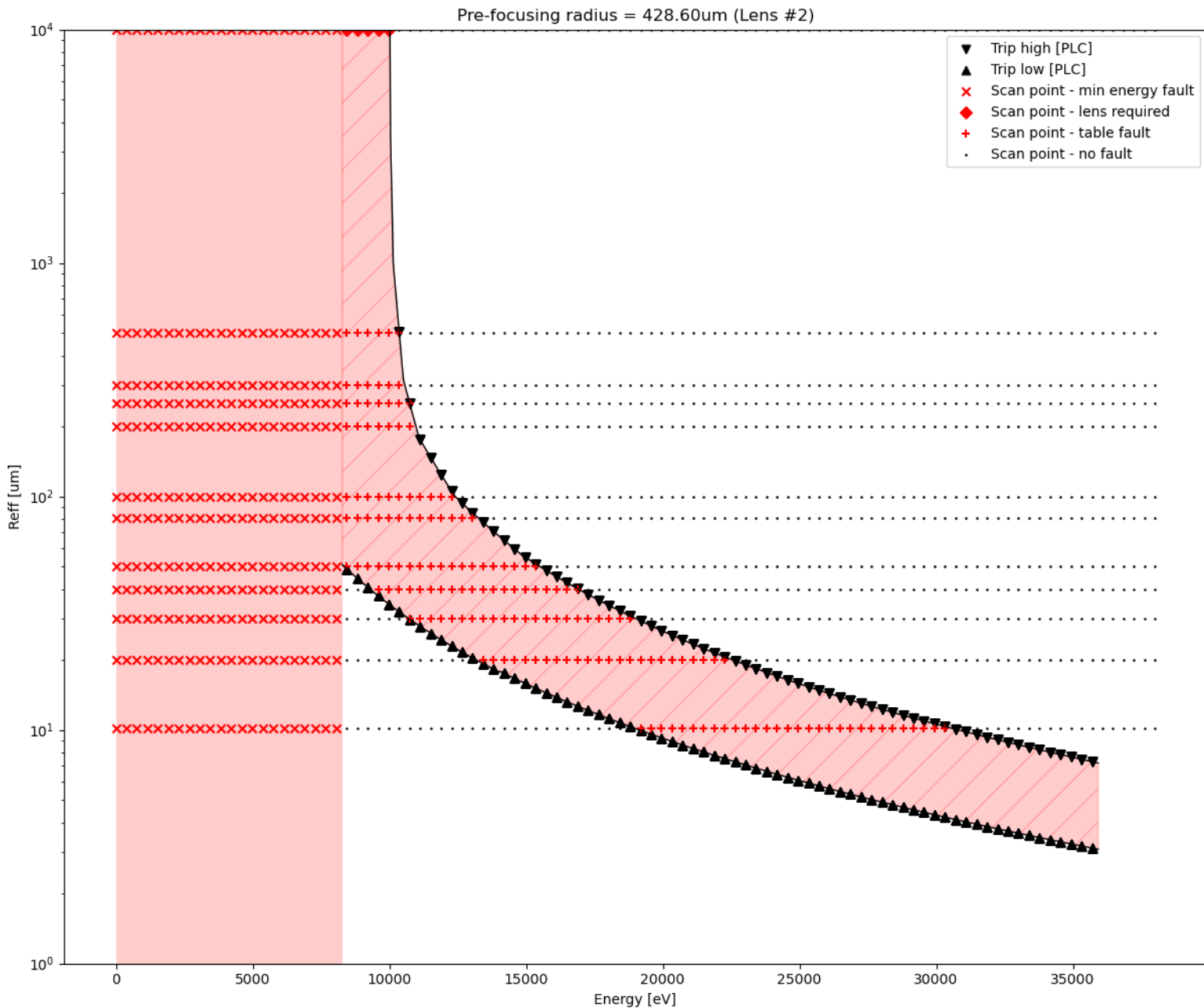| Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
33393.94	3.55	500.00	8.34	0	0	0	0	0
33777.78	3.47	500.00	8.14	0	0	0	0	0
34161.62	3.40	500.00	7.95	0	0	0	0	0
34545.45	3.33	500.00	7.76	0	0	0	0	0
34929.29	3.27	500.00	7.58	0	0	0	0	0
35313.13	3.20	500.00	7.41	0	0	0	0	0
35696.97	3.14	500.00	7.24	0	0	0	0	0
36080.81	0.00	500.00	0.00	0	0	0	0	0
36464.64	0.00	500.00	0.00	0	0	0	0	0
36848.48	0.00	500.00	0.00	0	0	0	0	0
37232.32	0.00	500.00	0.00	0	0	0	0	0
37616.16	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: 2021-06-09 23:28:24
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
383.84	0.00	10000.00	0.00	1	0	1	0	0
767.68	0.00	10000.00	0.00	1	0	1	0	0
1151.52	0.00	10000.00	0.00	1	0	1	0	0
1535.35	0.00	10000.00	0.00	1	0	1	0	0
1919.19	0.00	10000.00	0.00	1	0	1	0	0
2303.03	0.00	10000.00	0.00	1	0	1	0	0
2686.87	0.00	10000.00	0.00	1	0	1	0	0
3070.71	0.00	10000.00	0.00	1	0	1	0	0
3454.55	0.00	10000.00	0.00	1	0	1	0	0
3838.38	0.00	10000.00	0.00	1	0	1	0	0
4222.22	0.00	10000.00	0.00	1	0	1	0	0
4606.06	0.00	10000.00	0.00	1	0	1	0	0
4989.90	0.00	10000.00	0.00	1	0	1	0	0
5373.74	0.00	10000.00	0.00	1	0	1	0	0
5757.58	0.00	10000.00	0.00	1	0	1	0	0
6141.41	0.00	10000.00	0.00	1	0	1	0	0
6525.25	0.00	10000.00	0.00	1	0	1	0	0
6909.09	0.00	10000.00	0.00	1	0	1	0	0
7292.93	0.00	10000.00	0.00	1	0	1	0	0
7676.77	0.00	10000.00	0.00	1	0	1	0	0
8060.61	0.00	10000.00	0.00	1	0	1	0	0
8444.44	48.92	10000.00	10000.00	1	0	0	1	1
8828.28	44.56	10000.00	10000.00	1	0	0	1	1
9212.12	40.78	10000.00	10000.00	1	0	0	1	1
9595.96	37.48	10000.00	10000.00	1	0	0	1	1
9979.80	34.58	10000.00	10000.00	1	0	0	1	1
10363.64	32.03	10000.00	505.26	0	0	0	0	0
10747.47	29.76	10000.00	250.10	0	0	0	0	0
11131.31	27.74	10000.00	174.70	0	0	0	0	0
11515.15	25.94	10000.00	146.72	0	0	0	0	0
11898.99	24.31	10000.00	123.92	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
12282.83	22.84	10000.00	105.23	0	0	0	0	0
12666.67	21.52	10000.00	93.52	0	0	0	0	0
13050.50	20.31	10000.00	84.99	0	0	0	0	0
13434.34	19.21	10000.00	77.44	0	0	0	0	0
13818.18	18.21	10000.00	70.75	0	0	0	0	0
14202.02	17.45	10000.00	64.80	0	0	0	0	0
14585.86	16.60	10000.00	59.49	0	0	0	0	0
14969.70	15.82	10000.00	54.90	0	0	0	0	0
15353.54	15.09	10000.00	51.39	0	0	0	0	0
15737.37	14.41	10000.00	48.20	0	0	0	0	0
16121.21	13.77	10000.00	45.30	0	0	0	0	0
16505.05	13.18	10000.00	42.65	0	0	0	0	0
16888.89	12.62	10000.00	40.23	0	0	0	0	0
17272.73	12.11	10000.00	38.01	0	0	0	0	0
17656.57	11.62	10000.00	35.97	0	0	0	0	0
18040.40	11.16	10000.00	34.10	0	0	0	0	0
18424.24	10.73	10000.00	32.36	0	0	0	0	0
18808.08	10.32	10000.00	30.76	0	0	0	0	0
19191.92	9.94	10000.00	29.28	0	0	0	0	0
19575.76	9.58	10000.00	27.90	0	0	0	0	0
19959.60	9.24	10000.00	26.62	0	0	0	0	0
20343.43	8.92	10000.00	25.43	0	0	0	0	0
20727.27	8.61	10000.00	24.32	0	0	0	0	0
21111.11	8.32	10000.00	23.28	0	0	0	0	0
21494.95	8.04	10000.00	22.31	0	0	0	0	0
21878.79	7.78	10000.00	21.40	0	0	0	0	0
22262.63	7.53	10000.00	20.54	0	0	0	0	0
22646.46	7.30	10000.00	19.74	0	0	0	0	0
23030.30	7.07	10000.00	18.99	0	0	0	0	0
23414.14	6.86	10000.00	18.28	0	0	0	0	0
23797.98	6.65	10000.00	17.61	0	0	0	0	0
24181.82	6.45	10000.00	16.98	0	0	0	0	0
24565.66	6.27	10000.00	16.39	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
24949.49	6.09	10000.00	15.82	0	0	0	0	0
25333.33	5.92	10000.00	15.29	0	0	0	0	0
25717.17	5.75	10000.00	14.79	0	0	0	0	0
26101.01	5.60	10000.00	14.31	0	0	0	0	0
26484.85	5.45	10000.00	13.85	0	0	0	0	0
26868.69	5.30	10000.00	13.42	0	0	0	0	0
27252.53	5.16	10000.00	13.01	0	0	0	0	0
27636.36	5.03	10000.00	12.62	0	0	0	0	0
28020.20	4.90	10000.00	12.25	0	0	0	0	0
28404.04	4.78	10000.00	11.89	0	0	0	0	0
28787.88	4.66	10000.00	11.55	0	0	0	0	0
29171.72	4.55	10000.00	11.23	0	0	0	0	0
29555.55	4.44	10000.00	10.92	0	0	0	0	0
29939.39	4.33	10000.00	10.63	0	0	0	0	0
30323.23	4.23	10000.00	10.34	0	0	0	0	0
30707.07	4.13	10000.00	10.07	0	0	0	0	0
31090.91	4.04	10000.00	9.81	0	0	0	0	0
31474.75	3.94	10000.00	9.56	0	0	0	0	0
31858.59	3.86	10000.00	9.31	0	0	0	0	0
32242.42	3.77	10000.00	9.08	0	0	0	0	0
32626.26	3.69	10000.00	8.85	0	0	0	0	0
33010.10	3.61	10000.00	8.64	0	0	0	0	0
33393.94	3.53	10000.00	8.43	0	0	0	0	0
33777.78	3.46	10000.00	8.22	0	0	0	0	0
34161.62	3.38	10000.00	8.03	0	0	0	0	0
34545.45	3.31	10000.00	7.84	0	0	0	0	0
34929.29	3.25	10000.00	7.66	0	0	0	0	0
35313.13	3.18	10000.00	7.48	0	0	0	0	0
35696.97	3.12	10000.00	7.31	0	0	0	0	0
36080.81	0.00	10000.00	0.00	0	0	0	0	0
36464.64	0.00	10000.00	0.00	0	0	0	0	0
36848.48	0.00	10000.00	0.00	0	0	0	0	0
37232.32	0.00	10000.00	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
37616.16	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
383.84	0.00	10.17	0.00	1	0	1	0	0
767.68	0.00	10.17	0.00	1	0	1	0	0
1151.52	0.00	10.17	0.00	1	0	1	0	0
1535.35	0.00	10.17	0.00	1	0	1	0	0
1919.19	0.00	10.17	0.00	1	0	1	0	0
2303.03	0.00	10.17	0.00	1	0	1	0	0
2686.87	0.00	10.17	0.00	1	0	1	0	0
3070.71	0.00	10.17	0.00	1	0	1	0	0
3454.55	0.00	10.17	0.00	1	0	1	0	0
3838.38	0.00	10.17	0.00	1	0	1	0	0
4222.22	0.00	10.17	0.00	1	0	1	0	0
4606.06	0.00	10.17	0.00	1	0	1	0	0
4989.90	0.00	10.17	0.00	1	0	1	0	0
5373.74	0.00	10.17	0.00	1	0	1	0	0
5757.58	0.00	10.17	0.00	1	0	1	0	0
6141.41	0.00	10.17	0.00	1	0	1	0	0
6525.25	0.00	10.17	0.00	1	0	1	0	0
6909.09	0.00	10.17	0.00	1	0	1	0	0
7292.93	0.00	10.17	0.00	1	0	1	0	0
7676.77	0.00	10.17	0.00	1	0	1	0	0
8060.61	0.00	10.17	0.00	1	0	1	0	0
8444.44	48.92	10.17	10000.00	0	0	0	0	0
8828.28	44.56	10.17	10000.00	0	0	0	0	0
9212.12	40.78	10.17	10000.00	0	0	0	0	0
9595.96	37.48	10.17	10000.00	0	0	0	0	0
9979.80	34.58	10.17	10000.00	0	0	0	0	0
10363.64	32.03	10.17	505.26	0	0	0	0	0
10747.47	29.76	10.17	250.10	0	0	0	0	0
11131.31	27.74	10.17	174.70	0	0	0	0	0
11515.15	25.94	10.17	146.72	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
11898.99	24.31	10.17	123.92	0	0	0	0	0
12282.83	22.84	10.17	105.23	0	0	0	0	0
12666.67	21.52	10.17	93.52	0	0	0	0	0
13050.50	20.31	10.17	84.99	0	0	0	0	0
13434.34	19.21	10.17	77.44	0	0	0	0	0
13818.18	18.21	10.17	70.75	0	0	0	0	0
14202.02	17.45	10.17	64.80	0	0	0	0	0
14585.86	16.60	10.17	59.49	0	0	0	0	0
14969.70	15.82	10.17	54.90	0	0	0	0	0
15353.54	15.09	10.17	51.39	0	0	0	0	0
15737.37	14.41	10.17	48.20	0	0	0	0	0
16121.21	13.77	10.17	45.30	0	0	0	0	0
16505.05	13.18	10.17	42.65	0	0	0	0	0
16888.89	12.62	10.17	40.23	0	0	0	0	0
17272.73	12.11	10.17	38.01	0	0	0	0	0
17656.57	11.62	10.17	35.97	0	0	0	0	0
18040.40	11.16	10.17	34.10	0	0	0	0	0
18424.24	10.73	10.17	32.36	0	0	0	0	0
18808.08	10.32	10.17	30.76	0	0	0	0	0
19191.92	9.94	10.17	29.28	1	0	0	0	1
19575.76	9.58	10.17	27.90	1	0	0	0	1
19959.60	9.24	10.17	26.62	1	0	0	0	1
20343.43	8.92	10.17	25.43	1	0	0	0	1
20727.27	8.61	10.17	24.32	1	0	0	0	1
21111.11	8.32	10.17	23.28	1	0	0	0	1
21494.95	8.04	10.17	22.31	1	0	0	0	1
21878.79	7.78	10.17	21.40	1	0	0	0	1
22262.63	7.53	10.17	20.54	1	0	0	0	1
22646.46	7.30	10.17	19.74	1	0	0	0	1
23030.30	7.07	10.17	18.99	1	0	0	0	1
23414.14	6.86	10.17	18.28	1	0	0	0	1
23797.98	6.65	10.17	17.61	1	0	0	0	1
24181.82	6.45	10.17	16.98	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
24565.66	6.27	10.17	16.39	1	0	0	0	1
24949.49	6.09	10.17	15.82	1	0	0	0	1
25333.33	5.92	10.17	15.29	1	0	0	0	1
25717.17	5.75	10.17	14.79	1	0	0	0	1
26101.01	5.60	10.17	14.31	1	0	0	0	1
26484.85	5.45	10.17	13.85	1	0	0	0	1
26868.69	5.30	10.17	13.42	1	0	0	0	1
27252.53	5.16	10.17	13.01	1	0	0	0	1
27636.36	5.03	10.17	12.62	1	0	0	0	1
28020.20	4.90	10.17	12.25	1	0	0	0	1
28404.04	4.78	10.17	11.89	1	0	0	0	1
28787.88	4.66	10.17	11.55	1	0	0	0	1
29171.72	4.55	10.17	11.23	1	0	0	0	1
29555.55	4.44	10.17	10.92	1	0	0	0	1
29939.39	4.33	10.17	10.63	1	0	0	0	1
30323.23	4.23	10.17	10.34	1	0	0	0	1
30707.07	4.13	10.17	10.07	0	0	0	0	0
31090.91	4.04	10.17	9.81	0	0	0	0	0
31474.75	3.94	10.17	9.56	0	0	0	0	0
31858.59	3.86	10.17	9.31	0	0	0	0	0
32242.42	3.77	10.17	9.08	0	0	0	0	0
32626.26	3.69	10.17	8.85	0	0	0	0	0
33010.10	3.61	10.17	8.64	0	0	0	0	0
33393.94	3.53	10.17	8.43	0	0	0	0	0
33777.78	3.46	10.17	8.22	0	0	0	0	0
34161.62	3.38	10.17	8.03	0	0	0	0	0
34545.45	3.31	10.17	7.84	0	0	0	0	0
34929.29	3.25	10.17	7.66	0	0	0	0	0
35313.13	3.18	10.17	7.48	0	0	0	0	0
35696.97	3.12	10.17	7.31	0	0	0	0	0
36080.81	0.00	10.17	0.00	0	0	0	0	0
36464.64	0.00	10.17	0.00	0	0	0	0	0
36848.48	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
37232.32	0.00	10.17	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	20.00	0.00	1	0	1	0	0
767.68	0.00	20.00	0.00	1	0	1	0	0
1151.52	0.00	20.00	0.00	1	0	1	0	0
1535.35	0.00	20.00	0.00	1	0	1	0	0
1919.19	0.00	20.00	0.00	1	0	1	0	0
2303.03	0.00	20.00	0.00	1	0	1	0	0
2686.87	0.00	20.00	0.00	1	0	1	0	0
3070.71	0.00	20.00	0.00	1	0	1	0	0
3454.55	0.00	20.00	0.00	1	0	1	0	0
3838.38	0.00	20.00	0.00	1	0	1	0	0
4222.22	0.00	20.00	0.00	1	0	1	0	0
4606.06	0.00	20.00	0.00	1	0	1	0	0
4989.90	0.00	20.00	0.00	1	0	1	0	0
5373.74	0.00	20.00	0.00	1	0	1	0	0
5757.58	0.00	20.00	0.00	1	0	1	0	0
6141.41	0.00	20.00	0.00	1	0	1	0	0
6525.25	0.00	20.00	0.00	1	0	1	0	0
6909.09	0.00	20.00	0.00	1	0	1	0	0
7292.93	0.00	20.00	0.00	1	0	1	0	0
7676.77	0.00	20.00	0.00	1	0	1	0	0
8060.61	0.00	20.00	0.00	1	0	1	0	0
8444.44	48.92	20.00	10000.00	0	0	0	0	0
8828.28	44.56	20.00	10000.00	0	0	0	0	0
9212.12	40.78	20.00	10000.00	0	0	0	0	0
9595.96	37.48	20.00	10000.00	0	0	0	0	0
9979.80	34.58	20.00	10000.00	0	0	0	0	0
10363.64	32.03	20.00	505.26	0	0	0	0	0
10747.47	29.76	20.00	250.10	0	0	0	0	0
11131.31	27.74	20.00	174.70	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
11515.15	25.94	20.00	146.72	0	0	0	0	0
11898.99	24.31	20.00	123.92	0	0	0	0	0
12282.83	22.84	20.00	105.23	0	0	0	0	0
12666.67	21.52	20.00	93.52	0	0	0	0	0
13050.50	20.31	20.00	84.99	0	0	0	0	0
13434.34	19.21	20.00	77.44	1	0	0	0	1
13818.18	18.21	20.00	70.75	1	0	0	0	1
14202.02	17.45	20.00	64.80	1	0	0	0	1
14585.86	16.60	20.00	59.49	1	0	0	0	1
14969.70	15.82	20.00	54.90	1	0	0	0	1
15353.54	15.09	20.00	51.39	1	0	0	0	1
15737.37	14.41	20.00	48.20	1	0	0	0	1
16121.21	13.77	20.00	45.30	1	0	0	0	1
16505.05	13.18	20.00	42.65	1	0	0	0	1
16888.89	12.62	20.00	40.23	1	0	0	0	1
17272.73	12.11	20.00	38.01	1	0	0	0	1
17656.57	11.62	20.00	35.97	1	0	0	0	1
18040.40	11.16	20.00	34.10	1	0	0	0	1
18424.24	10.73	20.00	32.36	1	0	0	0	1
18808.08	10.32	20.00	30.76	1	0	0	0	1
19191.92	9.94	20.00	29.28	1	0	0	0	1
19575.76	9.58	20.00	27.90	1	0	0	0	1
19959.60	9.24	20.00	26.62	1	0	0	0	1
20343.43	8.92	20.00	25.43	1	0	0	0	1
20727.27	8.61	20.00	24.32	1	0	0	0	1
21111.11	8.32	20.00	23.28	1	0	0	0	1
21494.95	8.04	20.00	22.31	1	0	0	0	1
21878.79	7.78	20.00	21.40	1	0	0	0	1
22262.63	7.53	20.00	20.54	1	0	0	0	1
22646.46	7.30	20.00	19.74	0	0	0	0	0
23030.30	7.07	20.00	18.99	0	0	0	0	0
23414.14	6.86	20.00	18.28	0	0	0	0	0
23797.98	6.65	20.00	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
24181.82	6.45	20.00	16.98	0	0	0	0	0
24565.66	6.27	20.00	16.39	0	0	0	0	0
24949.49	6.09	20.00	15.82	0	0	0	0	0
25333.33	5.92	20.00	15.29	0	0	0	0	0
25717.17	5.75	20.00	14.79	0	0	0	0	0
26101.01	5.60	20.00	14.31	0	0	0	0	0
26484.85	5.45	20.00	13.85	0	0	0	0	0
26868.69	5.30	20.00	13.42	0	0	0	0	0
27252.53	5.16	20.00	13.01	0	0	0	0	0
27636.36	5.03	20.00	12.62	0	0	0	0	0
28020.20	4.90	20.00	12.25	0	0	0	0	0
28404.04	4.78	20.00	11.89	0	0	0	0	0
28787.88	4.66	20.00	11.55	0	0	0	0	0
29171.72	4.55	20.00	11.23	0	0	0	0	0
29555.55	4.44	20.00	10.92	0	0	0	0	0
29939.39	4.33	20.00	10.63	0	0	0	0	0
30323.23	4.23	20.00	10.34	0	0	0	0	0
30707.07	4.13	20.00	10.07	0	0	0	0	0
31090.91	4.04	20.00	9.81	0	0	0	0	0
31474.75	3.94	20.00	9.56	0	0	0	0	0
31858.59	3.86	20.00	9.31	0	0	0	0	0
32242.42	3.77	20.00	9.08	0	0	0	0	0
32626.26	3.69	20.00	8.85	0	0	0	0	0
33010.10	3.61	20.00	8.64	0	0	0	0	0
33393.94	3.53	20.00	8.43	0	0	0	0	0
33777.78	3.46	20.00	8.22	0	0	0	0	0
34161.62	3.38	20.00	8.03	0	0	0	0	0
34545.45	3.31	20.00	7.84	0	0	0	0	0
34929.29	3.25	20.00	7.66	0	0	0	0	0
35313.13	3.18	20.00	7.48	0	0	0	0	0
35696.97	3.12	20.00	7.31	0	0	0	0	0
36080.81	0.00	20.00	0.00	0	0	0	0	0
36464.64	0.00	20.00	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
36848.48	0.00	20.00	0.00	0	0	0	0	0
37232.32	0.00	20.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	30.00	0.00	1	0	1	0	0
767.68	0.00	30.00	0.00	1	0	1	0	0
1151.52	0.00	30.00	0.00	1	0	1	0	0
1535.35	0.00	30.00	0.00	1	0	1	0	0
1919.19	0.00	30.00	0.00	1	0	1	0	0
2303.03	0.00	30.00	0.00	1	0	1	0	0
2686.87	0.00	30.00	0.00	1	0	1	0	0
3070.71	0.00	30.00	0.00	1	0	1	0	0
3454.55	0.00	30.00	0.00	1	0	1	0	0
3838.38	0.00	30.00	0.00	1	0	1	0	0
4222.22	0.00	30.00	0.00	1	0	1	0	0
4606.06	0.00	30.00	0.00	1	0	1	0	0
4989.90	0.00	30.00	0.00	1	0	1	0	0
5373.74	0.00	30.00	0.00	1	0	1	0	0
5757.58	0.00	30.00	0.00	1	0	1	0	0
6141.41	0.00	30.00	0.00	1	0	1	0	0
6525.25	0.00	30.00	0.00	1	0	1	0	0
6909.09	0.00	30.00	0.00	1	0	1	0	0
7292.93	0.00	30.00	0.00	1	0	1	0	0
7676.77	0.00	30.00	0.00	1	0	1	0	0
8060.61	0.00	30.00	0.00	1	0	1	0	0
8444.44	48.92	30.00	10000.00	0	0	0	0	0
8828.28	44.56	30.00	10000.00	0	0	0	0	0
9212.12	40.78	30.00	10000.00	0	0	0	0	0
9595.96	37.48	30.00	10000.00	0	0	0	0	0
9979.80	34.58	30.00	10000.00	0	0	0	0	0
10363.64	32.03	30.00	505.26	0	0	0	0	0
10747.47	29.76	30.00	250.10	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
11131.31	27.74	30.00	174.70	1	0	0	0	1
11515.15	25.94	30.00	146.72	1	0	0	0	1
11898.99	24.31	30.00	123.92	1	0	0	0	1
12282.83	22.84	30.00	105.23	1	0	0	0	1
12666.67	21.52	30.00	93.52	1	0	0	0	1
13050.50	20.31	30.00	84.99	1	0	0	0	1
13434.34	19.21	30.00	77.44	1	0	0	0	1
13818.18	18.21	30.00	70.75	1	0	0	0	1
14202.02	17.45	30.00	64.80	1	0	0	0	1
14585.86	16.60	30.00	59.49	1	0	0	0	1
14969.70	15.82	30.00	54.90	1	0	0	0	1
15353.54	15.09	30.00	51.39	1	0	0	0	1
15737.37	14.41	30.00	48.20	1	0	0	0	1
16121.21	13.77	30.00	45.30	1	0	0	0	1
16505.05	13.18	30.00	42.65	1	0	0	0	1
16888.89	12.62	30.00	40.23	1	0	0	0	1
17272.73	12.11	30.00	38.01	1	0	0	0	1
17656.57	11.62	30.00	35.97	1	0	0	0	1
18040.40	11.16	30.00	34.10	1	0	0	0	1
18424.24	10.73	30.00	32.36	1	0	0	0	1
18808.08	10.32	30.00	30.76	1	0	0	0	1
19191.92	9.94	30.00	29.28	0	0	0	0	0
19575.76	9.58	30.00	27.90	0	0	0	0	0
19959.60	9.24	30.00	26.62	0	0	0	0	0
20343.43	8.92	30.00	25.43	0	0	0	0	0
20727.27	8.61	30.00	24.32	0	0	0	0	0
21111.11	8.32	30.00	23.28	0	0	0	0	0
21494.95	8.04	30.00	22.31	0	0	0	0	0
21878.79	7.78	30.00	21.40	0	0	0	0	0
22262.63	7.53	30.00	20.54	0	0	0	0	0
22646.46	7.30	30.00	19.74	0	0	0	0	0
23030.30	7.07	30.00	18.99	0	0	0	0	0
23414.14	6.86	30.00	18.28	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
23797.98	6.65	30.00	17.61	0	0	0	0	0
24181.82	6.45	30.00	16.98	0	0	0	0	0
24565.66	6.27	30.00	16.39	0	0	0	0	0
24949.49	6.09	30.00	15.82	0	0	0	0	0
25333.33	5.92	30.00	15.29	0	0	0	0	0
25717.17	5.75	30.00	14.79	0	0	0	0	0
26101.01	5.60	30.00	14.31	0	0	0	0	0
26484.85	5.45	30.00	13.85	0	0	0	0	0
26868.69	5.30	30.00	13.42	0	0	0	0	0
27252.53	5.16	30.00	13.01	0	0	0	0	0
27636.36	5.03	30.00	12.62	0	0	0	0	0
28020.20	4.90	30.00	12.25	0	0	0	0	0
28404.04	4.78	30.00	11.89	0	0	0	0	0
28787.88	4.66	30.00	11.55	0	0	0	0	0
29171.72	4.55	30.00	11.23	0	0	0	0	0
29555.55	4.44	30.00	10.92	0	0	0	0	0
29939.39	4.33	30.00	10.63	0	0	0	0	0
30323.23	4.23	30.00	10.34	0	0	0	0	0
30707.07	4.13	30.00	10.07	0	0	0	0	0
31090.91	4.04	30.00	9.81	0	0	0	0	0
31474.75	3.94	30.00	9.56	0	0	0	0	0
31858.59	3.86	30.00	9.31	0	0	0	0	0
32242.42	3.77	30.00	9.08	0	0	0	0	0
32626.26	3.69	30.00	8.85	0	0	0	0	0
33010.10	3.61	30.00	8.64	0	0	0	0	0
33393.94	3.53	30.00	8.43	0	0	0	0	0
33777.78	3.46	30.00	8.22	0	0	0	0	0
34161.62	3.38	30.00	8.03	0	0	0	0	0
34545.45	3.31	30.00	7.84	0	0	0	0	0
34929.29	3.25	30.00	7.66	0	0	0	0	0
35313.13	3.18	30.00	7.48	0	0	0	0	0
35696.97	3.12	30.00	7.31	0	0	0	0	0
36080.81	0.00	30.00	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
36464.64	0.00	30.00	0.00	0	0	0	0	0
36848.48	0.00	30.00	0.00	0	0	0	0	0
37232.32	0.00	30.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	40.00	0.00	1	0	1	0	0
767.68	0.00	40.00	0.00	1	0	1	0	0
1151.52	0.00	40.00	0.00	1	0	1	0	0
1535.35	0.00	40.00	0.00	1	0	1	0	0
1919.19	0.00	40.00	0.00	1	0	1	0	0
2303.03	0.00	40.00	0.00	1	0	1	0	0
2686.87	0.00	40.00	0.00	1	0	1	0	0
3070.71	0.00	40.00	0.00	1	0	1	0	0
3454.55	0.00	40.00	0.00	1	0	1	0	0
3838.38	0.00	40.00	0.00	1	0	1	0	0
4222.22	0.00	40.00	0.00	1	0	1	0	0
4606.06	0.00	40.00	0.00	1	0	1	0	0
4989.90	0.00	40.00	0.00	1	0	1	0	0
5373.74	0.00	40.00	0.00	1	0	1	0	0
5757.58	0.00	40.00	0.00	1	0	1	0	0
6141.41	0.00	40.00	0.00	1	0	1	0	0
6525.25	0.00	40.00	0.00	1	0	1	0	0
6909.09	0.00	40.00	0.00	1	0	1	0	0
7292.93	0.00	40.00	0.00	1	0	1	0	0
7676.77	0.00	40.00	0.00	1	0	1	0	0
8060.61	0.00	40.00	0.00	1	0	1	0	0
8444.44	48.92	40.00	10000.00	0	0	0	0	0
8828.28	44.56	40.00	10000.00	0	0	0	0	0
9212.12	40.78	40.00	10000.00	0	0	0	0	0
9595.96	37.48	40.00	10000.00	1	0	0	0	1
9979.80	34.58	40.00	10000.00	1	0	0	0	1
10363.64	32.03	40.00	505.26	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
10747.47	29.76	40.00	250.10	1	0	0	0	1
11131.31	27.74	40.00	174.70	1	0	0	0	1
11515.15	25.94	40.00	146.72	1	0	0	0	1
11898.99	24.31	40.00	123.92	1	0	0	0	1
12282.83	22.84	40.00	105.23	1	0	0	0	1
12666.67	21.52	40.00	93.52	1	0	0	0	1
13050.50	20.31	40.00	84.99	1	0	0	0	1
13434.34	19.21	40.00	77.44	1	0	0	0	1
13818.18	18.21	40.00	70.75	1	0	0	0	1
14202.02	17.45	40.00	64.80	1	0	0	0	1
14585.86	16.60	40.00	59.49	1	0	0	0	1
14969.70	15.82	40.00	54.90	1	0	0	0	1
15353.54	15.09	40.00	51.39	1	0	0	0	1
15737.37	14.41	40.00	48.20	1	0	0	0	1
16121.21	13.77	40.00	45.30	1	0	0	0	1
16505.05	13.18	40.00	42.65	1	0	0	0	1
16888.89	12.62	40.00	40.23	1	0	0	0	1
17272.73	12.11	40.00	38.01	0	0	0	0	0
17656.57	11.62	40.00	35.97	0	0	0	0	0
18040.40	11.16	40.00	34.10	0	0	0	0	0
18424.24	10.73	40.00	32.36	0	0	0	0	0
18808.08	10.32	40.00	30.76	0	0	0	0	0
19191.92	9.94	40.00	29.28	0	0	0	0	0
19575.76	9.58	40.00	27.90	0	0	0	0	0
19959.60	9.24	40.00	26.62	0	0	0	0	0
20343.43	8.92	40.00	25.43	0	0	0	0	0
20727.27	8.61	40.00	24.32	0	0	0	0	0
21111.11	8.32	40.00	23.28	0	0	0	0	0
21494.95	8.04	40.00	22.31	0	0	0	0	0
21878.79	7.78	40.00	21.40	0	0	0	0	0
22262.63	7.53	40.00	20.54	0	0	0	0	0
22646.46	7.30	40.00	19.74	0	0	0	0	0
23030.30	7.07	40.00	18.99	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
23414.14	6.86	40.00	18.28	0	0	0	0	0
23797.98	6.65	40.00	17.61	0	0	0	0	0
24181.82	6.45	40.00	16.98	0	0	0	0	0
24565.66	6.27	40.00	16.39	0	0	0	0	0
24949.49	6.09	40.00	15.82	0	0	0	0	0
25333.33	5.92	40.00	15.29	0	0	0	0	0
25717.17	5.75	40.00	14.79	0	0	0	0	0
26101.01	5.60	40.00	14.31	0	0	0	0	0
26484.85	5.45	40.00	13.85	0	0	0	0	0
26868.69	5.30	40.00	13.42	0	0	0	0	0
27252.53	5.16	40.00	13.01	0	0	0	0	0
27636.36	5.03	40.00	12.62	0	0	0	0	0
28020.20	4.90	40.00	12.25	0	0	0	0	0
28404.04	4.78	40.00	11.89	0	0	0	0	0
28787.88	4.66	40.00	11.55	0	0	0	0	0
29171.72	4.55	40.00	11.23	0	0	0	0	0
29555.55	4.44	40.00	10.92	0	0	0	0	0
29939.39	4.33	40.00	10.63	0	0	0	0	0
30323.23	4.23	40.00	10.34	0	0	0	0	0
30707.07	4.13	40.00	10.07	0	0	0	0	0
31090.91	4.04	40.00	9.81	0	0	0	0	0
31474.75	3.94	40.00	9.56	0	0	0	0	0
31858.59	3.86	40.00	9.31	0	0	0	0	0
32242.42	3.77	40.00	9.08	0	0	0	0	0
32626.26	3.69	40.00	8.85	0	0	0	0	0
33010.10	3.61	40.00	8.64	0	0	0	0	0
33393.94	3.53	40.00	8.43	0	0	0	0	0
33777.78	3.46	40.00	8.22	0	0	0	0	0
34161.62	3.38	40.00	8.03	0	0	0	0	0
34545.45	3.31	40.00	7.84	0	0	0	0	0
34929.29	3.25	40.00	7.66	0	0	0	0	0
35313.13	3.18	40.00	7.48	0	0	0	0	0
35696.97	3.12	40.00	7.31	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
36080.81	0.00	40.00	0.00	0	0	0	0	0
36464.64	0.00	40.00	0.00	0	0	0	0	0
36848.48	0.00	40.00	0.00	0	0	0	0	0
37232.32	0.00	40.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	50.00	0.00	1	0	1	0	0
767.68	0.00	50.00	0.00	1	0	1	0	0
1151.52	0.00	50.00	0.00	1	0	1	0	0
1535.35	0.00	50.00	0.00	1	0	1	0	0
1919.19	0.00	50.00	0.00	1	0	1	0	0
2303.03	0.00	50.00	0.00	1	0	1	0	0
2686.87	0.00	50.00	0.00	1	0	1	0	0
3070.71	0.00	50.00	0.00	1	0	1	0	0
3454.55	0.00	50.00	0.00	1	0	1	0	0
3838.38	0.00	50.00	0.00	1	0	1	0	0
4222.22	0.00	50.00	0.00	1	0	1	0	0
4606.06	0.00	50.00	0.00	1	0	1	0	0
4989.90	0.00	50.00	0.00	1	0	1	0	0
5373.74	0.00	50.00	0.00	1	0	1	0	0
5757.58	0.00	50.00	0.00	1	0	1	0	0
6141.41	0.00	50.00	0.00	1	0	1	0	0
6525.25	0.00	50.00	0.00	1	0	1	0	0
6909.09	0.00	50.00	0.00	1	0	1	0	0
7292.93	0.00	50.00	0.00	1	0	1	0	0
7676.77	0.00	50.00	0.00	1	0	1	0	0
8060.61	0.00	50.00	0.00	1	0	1	0	0
8444.44	48.92	50.00	10000.00	1	0	0	0	1
8828.28	44.56	50.00	10000.00	1	0	0	0	1
9212.12	40.78	50.00	10000.00	1	0	0	0	1
9595.96	37.48	50.00	10000.00	1	0	0	0	1
9979.80	34.58	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
10363.64	32.03	50.00	505.26	1	0	0	0	1
10747.47	29.76	50.00	250.10	1	0	0	0	1
11131.31	27.74	50.00	174.70	1	0	0	0	1
11515.15	25.94	50.00	146.72	1	0	0	0	1
11898.99	24.31	50.00	123.92	1	0	0	0	1
12282.83	22.84	50.00	105.23	1	0	0	0	1
12666.67	21.52	50.00	93.52	1	0	0	0	1
13050.50	20.31	50.00	84.99	1	0	0	0	1
13434.34	19.21	50.00	77.44	1	0	0	0	1
13818.18	18.21	50.00	70.75	1	0	0	0	1
14202.02	17.45	50.00	64.80	1	0	0	0	1
14585.86	16.60	50.00	59.49	1	0	0	0	1
14969.70	15.82	50.00	54.90	1	0	0	0	1
15353.54	15.09	50.00	51.39	1	0	0	0	1
15737.37	14.41	50.00	48.20	0	0	0	0	0
16121.21	13.77	50.00	45.30	0	0	0	0	0
16505.05	13.18	50.00	42.65	0	0	0	0	0
16888.89	12.62	50.00	40.23	0	0	0	0	0
17272.73	12.11	50.00	38.01	0	0	0	0	0
17656.57	11.62	50.00	35.97	0	0	0	0	0
18040.40	11.16	50.00	34.10	0	0	0	0	0
18424.24	10.73	50.00	32.36	0	0	0	0	0
18808.08	10.32	50.00	30.76	0	0	0	0	0
19191.92	9.94	50.00	29.28	0	0	0	0	0
19575.76	9.58	50.00	27.90	0	0	0	0	0
19959.60	9.24	50.00	26.62	0	0	0	0	0
20343.43	8.92	50.00	25.43	0	0	0	0	0
20727.27	8.61	50.00	24.32	0	0	0	0	0
21111.11	8.32	50.00	23.28	0	0	0	0	0
21494.95	8.04	50.00	22.31	0	0	0	0	0
21878.79	7.78	50.00	21.40	0	0	0	0	0
22262.63	7.53	50.00	20.54	0	0	0	0	0
22646.46	7.30	50.00	19.74	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
23030.30	7.07	50.00	18.99	0	0	0	0	0
23414.14	6.86	50.00	18.28	0	0	0	0	0
23797.98	6.65	50.00	17.61	0	0	0	0	0
24181.82	6.45	50.00	16.98	0	0	0	0	0
24565.66	6.27	50.00	16.39	0	0	0	0	0
24949.49	6.09	50.00	15.82	0	0	0	0	0
25333.33	5.92	50.00	15.29	0	0	0	0	0
25717.17	5.75	50.00	14.79	0	0	0	0	0
26101.01	5.60	50.00	14.31	0	0	0	0	0
26484.85	5.45	50.00	13.85	0	0	0	0	0
26868.69	5.30	50.00	13.42	0	0	0	0	0
27252.53	5.16	50.00	13.01	0	0	0	0	0
27636.36	5.03	50.00	12.62	0	0	0	0	0
28020.20	4.90	50.00	12.25	0	0	0	0	0
28404.04	4.78	50.00	11.89	0	0	0	0	0
28787.88	4.66	50.00	11.55	0	0	0	0	0
29171.72	4.55	50.00	11.23	0	0	0	0	0
29555.55	4.44	50.00	10.92	0	0	0	0	0
29939.39	4.33	50.00	10.63	0	0	0	0	0
30323.23	4.23	50.00	10.34	0	0	0	0	0
30707.07	4.13	50.00	10.07	0	0	0	0	0
31090.91	4.04	50.00	9.81	0	0	0	0	0
31474.75	3.94	50.00	9.56	0	0	0	0	0
31858.59	3.86	50.00	9.31	0	0	0	0	0
32242.42	3.77	50.00	9.08	0	0	0	0	0
32626.26	3.69	50.00	8.85	0	0	0	0	0
33010.10	3.61	50.00	8.64	0	0	0	0	0
33393.94	3.53	50.00	8.43	0	0	0	0	0
33777.78	3.46	50.00	8.22	0	0	0	0	0
34161.62	3.38	50.00	8.03	0	0	0	0	0
34545.45	3.31	50.00	7.84	0	0	0	0	0
34929.29	3.25	50.00	7.66	0	0	0	0	0
35313.13	3.18	50.00	7.48	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
35696.97	3.12	50.00	7.31	0	0	0	0	0
36080.81	0.00	50.00	0.00	0	0	0	0	0
36464.64	0.00	50.00	0.00	0	0	0	0	0
36848.48	0.00	50.00	0.00	0	0	0	0	0
37232.32	0.00	50.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	81.08	0.00	1	0	1	0	0
767.68	0.00	81.08	0.00	1	0	1	0	0
1151.52	0.00	81.08	0.00	1	0	1	0	0
1535.35	0.00	81.08	0.00	1	0	1	0	0
1919.19	0.00	81.08	0.00	1	0	1	0	0
2303.03	0.00	81.08	0.00	1	0	1	0	0
2686.87	0.00	81.08	0.00	1	0	1	0	0
3070.71	0.00	81.08	0.00	1	0	1	0	0
3454.55	0.00	81.08	0.00	1	0	1	0	0
3838.38	0.00	81.08	0.00	1	0	1	0	0
4222.22	0.00	81.08	0.00	1	0	1	0	0
4606.06	0.00	81.08	0.00	1	0	1	0	0
4989.90	0.00	81.08	0.00	1	0	1	0	0
5373.74	0.00	81.08	0.00	1	0	1	0	0
5757.58	0.00	81.08	0.00	1	0	1	0	0
6141.41	0.00	81.08	0.00	1	0	1	0	0
6525.25	0.00	81.08	0.00	1	0	1	0	0
6909.09	0.00	81.08	0.00	1	0	1	0	0
7292.93	0.00	81.08	0.00	1	0	1	0	0
7676.77	0.00	81.08	0.00	1	0	1	0	0
8060.61	0.00	81.08	0.00	1	0	1	0	0
8444.44	48.92	81.08	10000.00	1	0	0	0	1
8828.28	44.56	81.08	10000.00	1	0	0	0	1
9212.12	40.78	81.08	10000.00	1	0	0	0	1
9595.96	37.48	81.08	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
9979.80	34.58	81.08	10000.00	1	0	0	0	1
10363.64	32.03	81.08	505.26	1	0	0	0	1
10747.47	29.76	81.08	250.10	1	0	0	0	1
11131.31	27.74	81.08	174.70	1	0	0	0	1
11515.15	25.94	81.08	146.72	1	0	0	0	1
11898.99	24.31	81.08	123.92	1	0	0	0	1
12282.83	22.84	81.08	105.23	1	0	0	0	1
12666.67	21.52	81.08	93.52	1	0	0	0	1
13050.50	20.31	81.08	84.99	1	0	0	0	1
13434.34	19.21	81.08	77.44	0	0	0	0	0
13818.18	18.21	81.08	70.75	0	0	0	0	0
14202.02	17.45	81.08	64.80	0	0	0	0	0
14585.86	16.60	81.08	59.49	0	0	0	0	0
14969.70	15.82	81.08	54.90	0	0	0	0	0
15353.54	15.09	81.08	51.39	0	0	0	0	0
15737.37	14.41	81.08	48.20	0	0	0	0	0
16121.21	13.77	81.08	45.30	0	0	0	0	0
16505.05	13.18	81.08	42.65	0	0	0	0	0
16888.89	12.62	81.08	40.23	0	0	0	0	0
17272.73	12.11	81.08	38.01	0	0	0	0	0
17656.57	11.62	81.08	35.97	0	0	0	0	0
18040.40	11.16	81.08	34.10	0	0	0	0	0
18424.24	10.73	81.08	32.36	0	0	0	0	0
18808.08	10.32	81.08	30.76	0	0	0	0	0
19191.92	9.94	81.08	29.28	0	0	0	0	0
19575.76	9.58	81.08	27.90	0	0	0	0	0
19959.60	9.24	81.08	26.62	0	0	0	0	0
20343.43	8.92	81.08	25.43	0	0	0	0	0
20727.27	8.61	81.08	24.32	0	0	0	0	0
21111.11	8.32	81.08	23.28	0	0	0	0	0
21494.95	8.04	81.08	22.31	0	0	0	0	0
21878.79	7.78	81.08	21.40	0	0	0	0	0
22262.63	7.53	81.08	20.54	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
22646.46	7.30	81.08	19.74	0	0	0	0	0
23030.30	7.07	81.08	18.99	0	0	0	0	0
23414.14	6.86	81.08	18.28	0	0	0	0	0
23797.98	6.65	81.08	17.61	0	0	0	0	0
24181.82	6.45	81.08	16.98	0	0	0	0	0
24565.66	6.27	81.08	16.39	0	0	0	0	0
24949.49	6.09	81.08	15.82	0	0	0	0	0
25333.33	5.92	81.08	15.29	0	0	0	0	0
25717.17	5.75	81.08	14.79	0	0	0	0	0
26101.01	5.60	81.08	14.31	0	0	0	0	0
26484.85	5.45	81.08	13.85	0	0	0	0	0
26868.69	5.30	81.08	13.42	0	0	0	0	0
27252.53	5.16	81.08	13.01	0	0	0	0	0
27636.36	5.03	81.08	12.62	0	0	0	0	0
28020.20	4.90	81.08	12.25	0	0	0	0	0
28404.04	4.78	81.08	11.89	0	0	0	0	0
28787.88	4.66	81.08	11.55	0	0	0	0	0
29171.72	4.55	81.08	11.23	0	0	0	0	0
29555.55	4.44	81.08	10.92	0	0	0	0	0
29939.39	4.33	81.08	10.63	0	0	0	0	0
30323.23	4.23	81.08	10.34	0	0	0	0	0
30707.07	4.13	81.08	10.07	0	0	0	0	0
31090.91	4.04	81.08	9.81	0	0	0	0	0
31474.75	3.94	81.08	9.56	0	0	0	0	0
31858.59	3.86	81.08	9.31	0	0	0	0	0
32242.42	3.77	81.08	9.08	0	0	0	0	0
32626.26	3.69	81.08	8.85	0	0	0	0	0
33010.10	3.61	81.08	8.64	0	0	0	0	0
33393.94	3.53	81.08	8.43	0	0	0	0	0
33777.78	3.46	81.08	8.22	0	0	0	0	0
34161.62	3.38	81.08	8.03	0	0	0	0	0
34545.45	3.31	81.08	7.84	0	0	0	0	0
34929.29	3.25	81.08	7.66	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
35313.13	3.18	81.08	7.48	0	0	0	0	0
35696.97	3.12	81.08	7.31	0	0	0	0	0
36080.81	0.00	81.08	0.00	0	0	0	0	0
36464.64	0.00	81.08	0.00	0	0	0	0	0
36848.48	0.00	81.08	0.00	0	0	0	0	0
37232.32	0.00	81.08	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	100.00	0.00	1	0	1	0	0
767.68	0.00	100.00	0.00	1	0	1	0	0
1151.52	0.00	100.00	0.00	1	0	1	0	0
1535.35	0.00	100.00	0.00	1	0	1	0	0
1919.19	0.00	100.00	0.00	1	0	1	0	0
2303.03	0.00	100.00	0.00	1	0	1	0	0
2686.87	0.00	100.00	0.00	1	0	1	0	0
3070.71	0.00	100.00	0.00	1	0	1	0	0
3454.55	0.00	100.00	0.00	1	0	1	0	0
3838.38	0.00	100.00	0.00	1	0	1	0	0
4222.22	0.00	100.00	0.00	1	0	1	0	0
4606.06	0.00	100.00	0.00	1	0	1	0	0
4989.90	0.00	100.00	0.00	1	0	1	0	0
5373.74	0.00	100.00	0.00	1	0	1	0	0
5757.58	0.00	100.00	0.00	1	0	1	0	0
6141.41	0.00	100.00	0.00	1	0	1	0	0
6525.25	0.00	100.00	0.00	1	0	1	0	0
6909.09	0.00	100.00	0.00	1	0	1	0	0
7292.93	0.00	100.00	0.00	1	0	1	0	0
7676.77	0.00	100.00	0.00	1	0	1	0	0
8060.61	0.00	100.00	0.00	1	0	1	0	0
8444.44	48.92	100.00	10000.00	1	0	0	0	1
8828.28	44.56	100.00	10000.00	1	0	0	0	1
9212.12	40.78	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
9595.96	37.48	100.00	10000.00	1	0	0	0	1
9979.80	34.58	100.00	10000.00	1	0	0	0	1
10363.64	32.03	100.00	505.26	1	0	0	0	1
10747.47	29.76	100.00	250.10	1	0	0	0	1
11131.31	27.74	100.00	174.70	1	0	0	0	1
11515.15	25.94	100.00	146.72	1	0	0	0	1
11898.99	24.31	100.00	123.92	1	0	0	0	1
12282.83	22.84	100.00	105.23	1	0	0	0	1
12666.67	21.52	100.00	93.52	0	0	0	0	0
13050.50	20.31	100.00	84.99	0	0	0	0	0
13434.34	19.21	100.00	77.44	0	0	0	0	0
13818.18	18.21	100.00	70.75	0	0	0	0	0
14202.02	17.45	100.00	64.80	0	0	0	0	0
14585.86	16.60	100.00	59.49	0	0	0	0	0
14969.70	15.82	100.00	54.90	0	0	0	0	0
15353.54	15.09	100.00	51.39	0	0	0	0	0
15737.37	14.41	100.00	48.20	0	0	0	0	0
16121.21	13.77	100.00	45.30	0	0	0	0	0
16505.05	13.18	100.00	42.65	0	0	0	0	0
16888.89	12.62	100.00	40.23	0	0	0	0	0
17272.73	12.11	100.00	38.01	0	0	0	0	0
17656.57	11.62	100.00	35.97	0	0	0	0	0
18040.40	11.16	100.00	34.10	0	0	0	0	0
18424.24	10.73	100.00	32.36	0	0	0	0	0
18808.08	10.32	100.00	30.76	0	0	0	0	0
19191.92	9.94	100.00	29.28	0	0	0	0	0
19575.76	9.58	100.00	27.90	0	0	0	0	0
19959.60	9.24	100.00	26.62	0	0	0	0	0
20343.43	8.92	100.00	25.43	0	0	0	0	0
20727.27	8.61	100.00	24.32	0	0	0	0	0
21111.11	8.32	100.00	23.28	0	0	0	0	0
21494.95	8.04	100.00	22.31	0	0	0	0	0
21878.79	7.78	100.00	21.40	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
22262.63	7.53	100.00	20.54	0	0	0	0	0
22646.46	7.30	100.00	19.74	0	0	0	0	0
23030.30	7.07	100.00	18.99	0	0	0	0	0
23414.14	6.86	100.00	18.28	0	0	0	0	0
23797.98	6.65	100.00	17.61	0	0	0	0	0
24181.82	6.45	100.00	16.98	0	0	0	0	0
24565.66	6.27	100.00	16.39	0	0	0	0	0
24949.49	6.09	100.00	15.82	0	0	0	0	0
25333.33	5.92	100.00	15.29	0	0	0	0	0
25717.17	5.75	100.00	14.79	0	0	0	0	0
26101.01	5.60	100.00	14.31	0	0	0	0	0
26484.85	5.45	100.00	13.85	0	0	0	0	0
26868.69	5.30	100.00	13.42	0	0	0	0	0
27252.53	5.16	100.00	13.01	0	0	0	0	0
27636.36	5.03	100.00	12.62	0	0	0	0	0
28020.20	4.90	100.00	12.25	0	0	0	0	0
28404.04	4.78	100.00	11.89	0	0	0	0	0
28787.88	4.66	100.00	11.55	0	0	0	0	0
29171.72	4.55	100.00	11.23	0	0	0	0	0
29555.55	4.44	100.00	10.92	0	0	0	0	0
29939.39	4.33	100.00	10.63	0	0	0	0	0
30323.23	4.23	100.00	10.34	0	0	0	0	0
30707.07	4.13	100.00	10.07	0	0	0	0	0
31090.91	4.04	100.00	9.81	0	0	0	0	0
31474.75	3.94	100.00	9.56	0	0	0	0	0
31858.59	3.86	100.00	9.31	0	0	0	0	0
32242.42	3.77	100.00	9.08	0	0	0	0	0
32626.26	3.69	100.00	8.85	0	0	0	0	0
33010.10	3.61	100.00	8.64	0	0	0	0	0
33393.94	3.53	100.00	8.43	0	0	0	0	0
33777.78	3.46	100.00	8.22	0	0	0	0	0
34161.62	3.38	100.00	8.03	0	0	0	0	0
34545.45	3.31	100.00	7.84	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
34929.29	3.25	100.00	7.66	0	0	0	0	0
35313.13	3.18	100.00	7.48	0	0	0	0	0
35696.97	3.12	100.00	7.31	0	0	0	0	0
36080.81	0.00	100.00	0.00	0	0	0	0	0
36464.64	0.00	100.00	0.00	0	0	0	0	0
36848.48	0.00	100.00	0.00	0	0	0	0	0
37232.32	0.00	100.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	200.00	0.00	1	0	1	0	0
767.68	0.00	200.00	0.00	1	0	1	0	0
1151.52	0.00	200.00	0.00	1	0	1	0	0
1535.35	0.00	200.00	0.00	1	0	1	0	0
1919.19	0.00	200.00	0.00	1	0	1	0	0
2303.03	0.00	200.00	0.00	1	0	1	0	0
2686.87	0.00	200.00	0.00	1	0	1	0	0
3070.71	0.00	200.00	0.00	1	0	1	0	0
3454.55	0.00	200.00	0.00	1	0	1	0	0
3838.38	0.00	200.00	0.00	1	0	1	0	0
4222.22	0.00	200.00	0.00	1	0	1	0	0
4606.06	0.00	200.00	0.00	1	0	1	0	0
4989.90	0.00	200.00	0.00	1	0	1	0	0
5373.74	0.00	200.00	0.00	1	0	1	0	0
5757.58	0.00	200.00	0.00	1	0	1	0	0
6141.41	0.00	200.00	0.00	1	0	1	0	0
6525.25	0.00	200.00	0.00	1	0	1	0	0
6909.09	0.00	200.00	0.00	1	0	1	0	0
7292.93	0.00	200.00	0.00	1	0	1	0	0
7676.77	0.00	200.00	0.00	1	0	1	0	0
8060.61	0.00	200.00	0.00	1	0	1	0	0
8444.44	48.92	200.00	10000.00	1	0	0	0	1
8828.28	44.56	200.00	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
9212.12	40.78	200.00	10000.00	1	0	0	0	1
9595.96	37.48	200.00	10000.00	1	0	0	0	1
9979.80	34.58	200.00	10000.00	1	0	0	0	1
10363.64	32.03	200.00	505.26	1	0	0	0	1
10747.47	29.76	200.00	250.10	1	0	0	0	1
11131.31	27.74	200.00	174.70	0	0	0	0	0
11515.15	25.94	200.00	146.72	0	0	0	0	0
11898.99	24.31	200.00	123.92	0	0	0	0	0
12282.83	22.84	200.00	105.23	0	0	0	0	0
12666.67	21.52	200.00	93.52	0	0	0	0	0
13050.50	20.31	200.00	84.99	0	0	0	0	0
13434.34	19.21	200.00	77.44	0	0	0	0	0
13818.18	18.21	200.00	70.75	0	0	0	0	0
14202.02	17.45	200.00	64.80	0	0	0	0	0
14585.86	16.60	200.00	59.49	0	0	0	0	0
14969.70	15.82	200.00	54.90	0	0	0	0	0
15353.54	15.09	200.00	51.39	0	0	0	0	0
15737.37	14.41	200.00	48.20	0	0	0	0	0
16121.21	13.77	200.00	45.30	0	0	0	0	0
16505.05	13.18	200.00	42.65	0	0	0	0	0
16888.89	12.62	200.00	40.23	0	0	0	0	0
17272.73	12.11	200.00	38.01	0	0	0	0	0
17656.57	11.62	200.00	35.97	0	0	0	0	0
18040.40	11.16	200.00	34.10	0	0	0	0	0
18424.24	10.73	200.00	32.36	0	0	0	0	0
18808.08	10.32	200.00	30.76	0	0	0	0	0
19191.92	9.94	200.00	29.28	0	0	0	0	0
19575.76	9.58	200.00	27.90	0	0	0	0	0
19959.60	9.24	200.00	26.62	0	0	0	0	0
20343.43	8.92	200.00	25.43	0	0	0	0	0
20727.27	8.61	200.00	24.32	0	0	0	0	0
21111.11	8.32	200.00	23.28	0	0	0	0	0
21494.95	8.04	200.00	22.31	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
21878.79	7.78	200.00	21.40	0	0	0	0	0
22262.63	7.53	200.00	20.54	0	0	0	0	0
22646.46	7.30	200.00	19.74	0	0	0	0	0
23030.30	7.07	200.00	18.99	0	0	0	0	0
23414.14	6.86	200.00	18.28	0	0	0	0	0
23797.98	6.65	200.00	17.61	0	0	0	0	0
24181.82	6.45	200.00	16.98	0	0	0	0	0
24565.66	6.27	200.00	16.39	0	0	0	0	0
24949.49	6.09	200.00	15.82	0	0	0	0	0
25333.33	5.92	200.00	15.29	0	0	0	0	0
25717.17	5.75	200.00	14.79	0	0	0	0	0
26101.01	5.60	200.00	14.31	0	0	0	0	0
26484.85	5.45	200.00	13.85	0	0	0	0	0
26868.69	5.30	200.00	13.42	0	0	0	0	0
27252.53	5.16	200.00	13.01	0	0	0	0	0
27636.36	5.03	200.00	12.62	0	0	0	0	0
28020.20	4.90	200.00	12.25	0	0	0	0	0
28404.04	4.78	200.00	11.89	0	0	0	0	0
28787.88	4.66	200.00	11.55	0	0	0	0	0
29171.72	4.55	200.00	11.23	0	0	0	0	0
29555.55	4.44	200.00	10.92	0	0	0	0	0
29939.39	4.33	200.00	10.63	0	0	0	0	0
30323.23	4.23	200.00	10.34	0	0	0	0	0
30707.07	4.13	200.00	10.07	0	0	0	0	0
31090.91	4.04	200.00	9.81	0	0	0	0	0
31474.75	3.94	200.00	9.56	0	0	0	0	0
31858.59	3.86	200.00	9.31	0	0	0	0	0
32242.42	3.77	200.00	9.08	0	0	0	0	0
32626.26	3.69	200.00	8.85	0	0	0	0	0
33010.10	3.61	200.00	8.64	0	0	0	0	0
33393.94	3.53	200.00	8.43	0	0	0	0	0
33777.78	3.46	200.00	8.22	0	0	0	0	0
34161.62	3.38	200.00	8.03	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
34545.45	3.31	200.00	7.84	0	0	0	0	0
34929.29	3.25	200.00	7.66	0	0	0	0	0
35313.13	3.18	200.00	7.48	0	0	0	0	0
35696.97	3.12	200.00	7.31	0	0	0	0	0
36080.81	0.00	200.00	0.00	0	0	0	0	0
36464.64	0.00	200.00	0.00	0	0	0	0	0
36848.48	0.00	200.00	0.00	0	0	0	0	0
37232.32	0.00	200.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	250.00	0.00	1	0	1	0	0
767.68	0.00	250.00	0.00	1	0	1	0	0
1151.52	0.00	250.00	0.00	1	0	1	0	0
1535.35	0.00	250.00	0.00	1	0	1	0	0
1919.19	0.00	250.00	0.00	1	0	1	0	0
2303.03	0.00	250.00	0.00	1	0	1	0	0
2686.87	0.00	250.00	0.00	1	0	1	0	0
3070.71	0.00	250.00	0.00	1	0	1	0	0
3454.55	0.00	250.00	0.00	1	0	1	0	0
3838.38	0.00	250.00	0.00	1	0	1	0	0
4222.22	0.00	250.00	0.00	1	0	1	0	0
4606.06	0.00	250.00	0.00	1	0	1	0	0
4989.90	0.00	250.00	0.00	1	0	1	0	0
5373.74	0.00	250.00	0.00	1	0	1	0	0
5757.58	0.00	250.00	0.00	1	0	1	0	0
6141.41	0.00	250.00	0.00	1	0	1	0	0
6525.25	0.00	250.00	0.00	1	0	1	0	0
6909.09	0.00	250.00	0.00	1	0	1	0	0
7292.93	0.00	250.00	0.00	1	0	1	0	0
7676.77	0.00	250.00	0.00	1	0	1	0	0
8060.61	0.00	250.00	0.00	1	0	1	0	0
8444.44	48.92	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
8828.28	44.56	250.00	10000.00	1	0	0	0	1
9212.12	40.78	250.00	10000.00	1	0	0	0	1
9595.96	37.48	250.00	10000.00	1	0	0	0	1
9979.80	34.58	250.00	10000.00	1	0	0	0	1
10363.64	32.03	250.00	505.26	1	0	0	0	1
10747.47	29.76	250.00	250.10	1	0	0	0	1
11131.31	27.74	250.00	174.70	0	0	0	0	0
11515.15	25.94	250.00	146.72	0	0	0	0	0
11898.99	24.31	250.00	123.92	0	0	0	0	0
12282.83	22.84	250.00	105.23	0	0	0	0	0
12666.67	21.52	250.00	93.52	0	0	0	0	0
13050.50	20.31	250.00	84.99	0	0	0	0	0
13434.34	19.21	250.00	77.44	0	0	0	0	0
13818.18	18.21	250.00	70.75	0	0	0	0	0
14202.02	17.45	250.00	64.80	0	0	0	0	0
14585.86	16.60	250.00	59.49	0	0	0	0	0
14969.70	15.82	250.00	54.90	0	0	0	0	0
15353.54	15.09	250.00	51.39	0	0	0	0	0
15737.37	14.41	250.00	48.20	0	0	0	0	0
16121.21	13.77	250.00	45.30	0	0	0	0	0
16505.05	13.18	250.00	42.65	0	0	0	0	0
16888.89	12.62	250.00	40.23	0	0	0	0	0
17272.73	12.11	250.00	38.01	0	0	0	0	0
17656.57	11.62	250.00	35.97	0	0	0	0	0
18040.40	11.16	250.00	34.10	0	0	0	0	0
18424.24	10.73	250.00	32.36	0	0	0	0	0
18808.08	10.32	250.00	30.76	0	0	0	0	0
19191.92	9.94	250.00	29.28	0	0	0	0	0
19575.76	9.58	250.00	27.90	0	0	0	0	0
19959.60	9.24	250.00	26.62	0	0	0	0	0
20343.43	8.92	250.00	25.43	0	0	0	0	0
20727.27	8.61	250.00	24.32	0	0	0	0	0
21111.11	8.32	250.00	23.28	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
21494.95	8.04	250.00	22.31	0	0	0	0	0
21878.79	7.78	250.00	21.40	0	0	0	0	0
22262.63	7.53	250.00	20.54	0	0	0	0	0
22646.46	7.30	250.00	19.74	0	0	0	0	0
23030.30	7.07	250.00	18.99	0	0	0	0	0
23414.14	6.86	250.00	18.28	0	0	0	0	0
23797.98	6.65	250.00	17.61	0	0	0	0	0
24181.82	6.45	250.00	16.98	0	0	0	0	0
24565.66	6.27	250.00	16.39	0	0	0	0	0
24949.49	6.09	250.00	15.82	0	0	0	0	0
25333.33	5.92	250.00	15.29	0	0	0	0	0
25717.17	5.75	250.00	14.79	0	0	0	0	0
26101.01	5.60	250.00	14.31	0	0	0	0	0
26484.85	5.45	250.00	13.85	0	0	0	0	0
26868.69	5.30	250.00	13.42	0	0	0	0	0
27252.53	5.16	250.00	13.01	0	0	0	0	0
27636.36	5.03	250.00	12.62	0	0	0	0	0
28020.20	4.90	250.00	12.25	0	0	0	0	0
28404.04	4.78	250.00	11.89	0	0	0	0	0
28787.88	4.66	250.00	11.55	0	0	0	0	0
29171.72	4.55	250.00	11.23	0	0	0	0	0
29555.55	4.44	250.00	10.92	0	0	0	0	0
29939.39	4.33	250.00	10.63	0	0	0	0	0
30323.23	4.23	250.00	10.34	0	0	0	0	0
30707.07	4.13	250.00	10.07	0	0	0	0	0
31090.91	4.04	250.00	9.81	0	0	0	0	0
31474.75	3.94	250.00	9.56	0	0	0	0	0
31858.59	3.86	250.00	9.31	0	0	0	0	0
32242.42	3.77	250.00	9.08	0	0	0	0	0
32626.26	3.69	250.00	8.85	0	0	0	0	0
33010.10	3.61	250.00	8.64	0	0	0	0	0
33393.94	3.53	250.00	8.43	0	0	0	0	0
33777.78	3.46	250.00	8.22	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
34161.62	3.38	250.00	8.03	0	0	0	0	0
34545.45	3.31	250.00	7.84	0	0	0	0	0
34929.29	3.25	250.00	7.66	0	0	0	0	0
35313.13	3.18	250.00	7.48	0	0	0	0	0
35696.97	3.12	250.00	7.31	0	0	0	0	0
36080.81	0.00	250.00	0.00	0	0	0	0	0
36464.64	0.00	250.00	0.00	0	0	0	0	0
36848.48	0.00	250.00	0.00	0	0	0	0	0
37232.32	0.00	250.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	300.00	0.00	1	0	1	0	0
767.68	0.00	300.00	0.00	1	0	1	0	0
1151.52	0.00	300.00	0.00	1	0	1	0	0
1535.35	0.00	300.00	0.00	1	0	1	0	0
1919.19	0.00	300.00	0.00	1	0	1	0	0
2303.03	0.00	300.00	0.00	1	0	1	0	0
2686.87	0.00	300.00	0.00	1	0	1	0	0
3070.71	0.00	300.00	0.00	1	0	1	0	0
3454.55	0.00	300.00	0.00	1	0	1	0	0
3838.38	0.00	300.00	0.00	1	0	1	0	0
4222.22	0.00	300.00	0.00	1	0	1	0	0
4606.06	0.00	300.00	0.00	1	0	1	0	0
4989.90	0.00	300.00	0.00	1	0	1	0	0
5373.74	0.00	300.00	0.00	1	0	1	0	0
5757.58	0.00	300.00	0.00	1	0	1	0	0
6141.41	0.00	300.00	0.00	1	0	1	0	0
6525.25	0.00	300.00	0.00	1	0	1	0	0
6909.09	0.00	300.00	0.00	1	0	1	0	0
7292.93	0.00	300.00	0.00	1	0	1	0	0
7676.77	0.00	300.00	0.00	1	0	1	0	0
8060.61	0.00	300.00	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
8444.44	48.92	300.00	10000.00	1	0	0	0	1
8828.28	44.56	300.00	10000.00	1	0	0	0	1
9212.12	40.78	300.00	10000.00	1	0	0	0	1
9595.96	37.48	300.00	10000.00	1	0	0	0	1
9979.80	34.58	300.00	10000.00	1	0	0	0	1
10363.64	32.03	300.00	505.26	1	0	0	0	1
10747.47	29.76	300.00	250.10	0	0	0	0	0
11131.31	27.74	300.00	174.70	0	0	0	0	0
11515.15	25.94	300.00	146.72	0	0	0	0	0
11898.99	24.31	300.00	123.92	0	0	0	0	0
12282.83	22.84	300.00	105.23	0	0	0	0	0
12666.67	21.52	300.00	93.52	0	0	0	0	0
13050.50	20.31	300.00	84.99	0	0	0	0	0
13434.34	19.21	300.00	77.44	0	0	0	0	0
13818.18	18.21	300.00	70.75	0	0	0	0	0
14202.02	17.45	300.00	64.80	0	0	0	0	0
14585.86	16.60	300.00	59.49	0	0	0	0	0
14969.70	15.82	300.00	54.90	0	0	0	0	0
15353.54	15.09	300.00	51.39	0	0	0	0	0
15737.37	14.41	300.00	48.20	0	0	0	0	0
16121.21	13.77	300.00	45.30	0	0	0	0	0
16505.05	13.18	300.00	42.65	0	0	0	0	0
16888.89	12.62	300.00	40.23	0	0	0	0	0
17272.73	12.11	300.00	38.01	0	0	0	0	0
17656.57	11.62	300.00	35.97	0	0	0	0	0
18040.40	11.16	300.00	34.10	0	0	0	0	0
18424.24	10.73	300.00	32.36	0	0	0	0	0
18808.08	10.32	300.00	30.76	0	0	0	0	0
19191.92	9.94	300.00	29.28	0	0	0	0	0
19575.76	9.58	300.00	27.90	0	0	0	0	0
19959.60	9.24	300.00	26.62	0	0	0	0	0
20343.43	8.92	300.00	25.43	0	0	0	0	0
20727.27	8.61	300.00	24.32	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
21111.11	8.32	300.00	23.28	0	0	0	0	0
21494.95	8.04	300.00	22.31	0	0	0	0	0
21878.79	7.78	300.00	21.40	0	0	0	0	0
22262.63	7.53	300.00	20.54	0	0	0	0	0
22646.46	7.30	300.00	19.74	0	0	0	0	0
23030.30	7.07	300.00	18.99	0	0	0	0	0
23414.14	6.86	300.00	18.28	0	0	0	0	0
23797.98	6.65	300.00	17.61	0	0	0	0	0
24181.82	6.45	300.00	16.98	0	0	0	0	0
24565.66	6.27	300.00	16.39	0	0	0	0	0
24949.49	6.09	300.00	15.82	0	0	0	0	0
25333.33	5.92	300.00	15.29	0	0	0	0	0
25717.17	5.75	300.00	14.79	0	0	0	0	0
26101.01	5.60	300.00	14.31	0	0	0	0	0
26484.85	5.45	300.00	13.85	0	0	0	0	0
26868.69	5.30	300.00	13.42	0	0	0	0	0
27252.53	5.16	300.00	13.01	0	0	0	0	0
27636.36	5.03	300.00	12.62	0	0	0	0	0
28020.20	4.90	300.00	12.25	0	0	0	0	0
28404.04	4.78	300.00	11.89	0	0	0	0	0
28787.88	4.66	300.00	11.55	0	0	0	0	0
29171.72	4.55	300.00	11.23	0	0	0	0	0
29555.55	4.44	300.00	10.92	0	0	0	0	0
29939.39	4.33	300.00	10.63	0	0	0	0	0
30323.23	4.23	300.00	10.34	0	0	0	0	0
30707.07	4.13	300.00	10.07	0	0	0	0	0
31090.91	4.04	300.00	9.81	0	0	0	0	0
31474.75	3.94	300.00	9.56	0	0	0	0	0
31858.59	3.86	300.00	9.31	0	0	0	0	0
32242.42	3.77	300.00	9.08	0	0	0	0	0
32626.26	3.69	300.00	8.85	0	0	0	0	0
33010.10	3.61	300.00	8.64	0	0	0	0	0
33393.94	3.53	300.00	8.43	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
33777.78	3.46	300.00	8.22	0	0	0	0	0
34161.62	3.38	300.00	8.03	0	0	0	0	0
34545.45	3.31	300.00	7.84	0	0	0	0	0
34929.29	3.25	300.00	7.66	0	0	0	0	0
35313.13	3.18	300.00	7.48	0	0	0	0	0
35696.97	3.12	300.00	7.31	0	0	0	0	0
36080.81	0.00	300.00	0.00	0	0	0	0	0
36464.64	0.00	300.00	0.00	0	0	0	0	0
36848.48	0.00	300.00	0.00	0	0	0	0	0
37232.32	0.00	300.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	500.00	0.00	1	0	1	0	0
767.68	0.00	500.00	0.00	1	0	1	0	0
1151.52	0.00	500.00	0.00	1	0	1	0	0
1535.35	0.00	500.00	0.00	1	0	1	0	0
1919.19	0.00	500.00	0.00	1	0	1	0	0
2303.03	0.00	500.00	0.00	1	0	1	0	0
2686.87	0.00	500.00	0.00	1	0	1	0	0
3070.71	0.00	500.00	0.00	1	0	1	0	0
3454.55	0.00	500.00	0.00	1	0	1	0	0
3838.38	0.00	500.00	0.00	1	0	1	0	0
4222.22	0.00	500.00	0.00	1	0	1	0	0
4606.06	0.00	500.00	0.00	1	0	1	0	0
4989.90	0.00	500.00	0.00	1	0	1	0	0
5373.74	0.00	500.00	0.00	1	0	1	0	0
5757.58	0.00	500.00	0.00	1	0	1	0	0
6141.41	0.00	500.00	0.00	1	0	1	0	0
6525.25	0.00	500.00	0.00	1	0	1	0	0
6909.09	0.00	500.00	0.00	1	0	1	0	0
7292.93	0.00	500.00	0.00	1	0	1	0	0
7676.77	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
8060.61	0.00	500.00	0.00	1	0	1	0	0
8444.44	48.92	500.00	10000.00	1	0	0	0	1
8828.28	44.56	500.00	10000.00	1	0	0	0	1
9212.12	40.78	500.00	10000.00	1	0	0	0	1
9595.96	37.48	500.00	10000.00	1	0	0	0	1
9979.80	34.58	500.00	10000.00	1	0	0	0	1
10363.64	32.03	500.00	505.26	1	0	0	0	1
10747.47	29.76	500.00	250.10	0	0	0	0	0
11131.31	27.74	500.00	174.70	0	0	0	0	0
11515.15	25.94	500.00	146.72	0	0	0	0	0
11898.99	24.31	500.00	123.92	0	0	0	0	0
12282.83	22.84	500.00	105.23	0	0	0	0	0
12666.67	21.52	500.00	93.52	0	0	0	0	0
13050.50	20.31	500.00	84.99	0	0	0	0	0
13434.34	19.21	500.00	77.44	0	0	0	0	0
13818.18	18.21	500.00	70.75	0	0	0	0	0
14202.02	17.45	500.00	64.80	0	0	0	0	0
14585.86	16.60	500.00	59.49	0	0	0	0	0
14969.70	15.82	500.00	54.90	0	0	0	0	0
15353.54	15.09	500.00	51.39	0	0	0	0	0
15737.37	14.41	500.00	48.20	0	0	0	0	0
16121.21	13.77	500.00	45.30	0	0	0	0	0
16505.05	13.18	500.00	42.65	0	0	0	0	0
16888.89	12.62	500.00	40.23	0	0	0	0	0
17272.73	12.11	500.00	38.01	0	0	0	0	0
17656.57	11.62	500.00	35.97	0	0	0	0	0
18040.40	11.16	500.00	34.10	0	0	0	0	0
18424.24	10.73	500.00	32.36	0	0	0	0	0
18808.08	10.32	500.00	30.76	0	0	0	0	0
19191.92	9.94	500.00	29.28	0	0	0	0	0
19575.76	9.58	500.00	27.90	0	0	0	0	0
19959.60	9.24	500.00	26.62	0	0	0	0	0
20343.43	8.92	500.00	25.43	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
20727.27	8.61	500.00	24.32	0	0	0	0	0
21111.11	8.32	500.00	23.28	0	0	0	0	0
21494.95	8.04	500.00	22.31	0	0	0	0	0
21878.79	7.78	500.00	21.40	0	0	0	0	0
22262.63	7.53	500.00	20.54	0	0	0	0	0
22646.46	7.30	500.00	19.74	0	0	0	0	0
23030.30	7.07	500.00	18.99	0	0	0	0	0
23414.14	6.86	500.00	18.28	0	0	0	0	0
23797.98	6.65	500.00	17.61	0	0	0	0	0
24181.82	6.45	500.00	16.98	0	0	0	0	0
24565.66	6.27	500.00	16.39	0	0	0	0	0
24949.49	6.09	500.00	15.82	0	0	0	0	0
25333.33	5.92	500.00	15.29	0	0	0	0	0
25717.17	5.75	500.00	14.79	0	0	0	0	0
26101.01	5.60	500.00	14.31	0	0	0	0	0
26484.85	5.45	500.00	13.85	0	0	0	0	0
26868.69	5.30	500.00	13.42	0	0	0	0	0
27252.53	5.16	500.00	13.01	0	0	0	0	0
27636.36	5.03	500.00	12.62	0	0	0	0	0
28020.20	4.90	500.00	12.25	0	0	0	0	0
28404.04	4.78	500.00	11.89	0	0	0	0	0
28787.88	4.66	500.00	11.55	0	0	0	0	0
29171.72	4.55	500.00	11.23	0	0	0	0	0
29555.55	4.44	500.00	10.92	0	0	0	0	0
29939.39	4.33	500.00	10.63	0	0	0	0	0
30323.23	4.23	500.00	10.34	0	0	0	0	0
30707.07	4.13	500.00	10.07	0	0	0	0	0
31090.91	4.04	500.00	9.81	0	0	0	0	0
31474.75	3.94	500.00	9.56	0	0	0	0	0
31858.59	3.86	500.00	9.31	0	0	0	0	0
32242.42	3.77	500.00	9.08	0	0	0	0	0
32626.26	3.69	500.00	8.85	0	0	0	0	0
33010.10	3.61	500.00	8.64	0	0	0	0	0

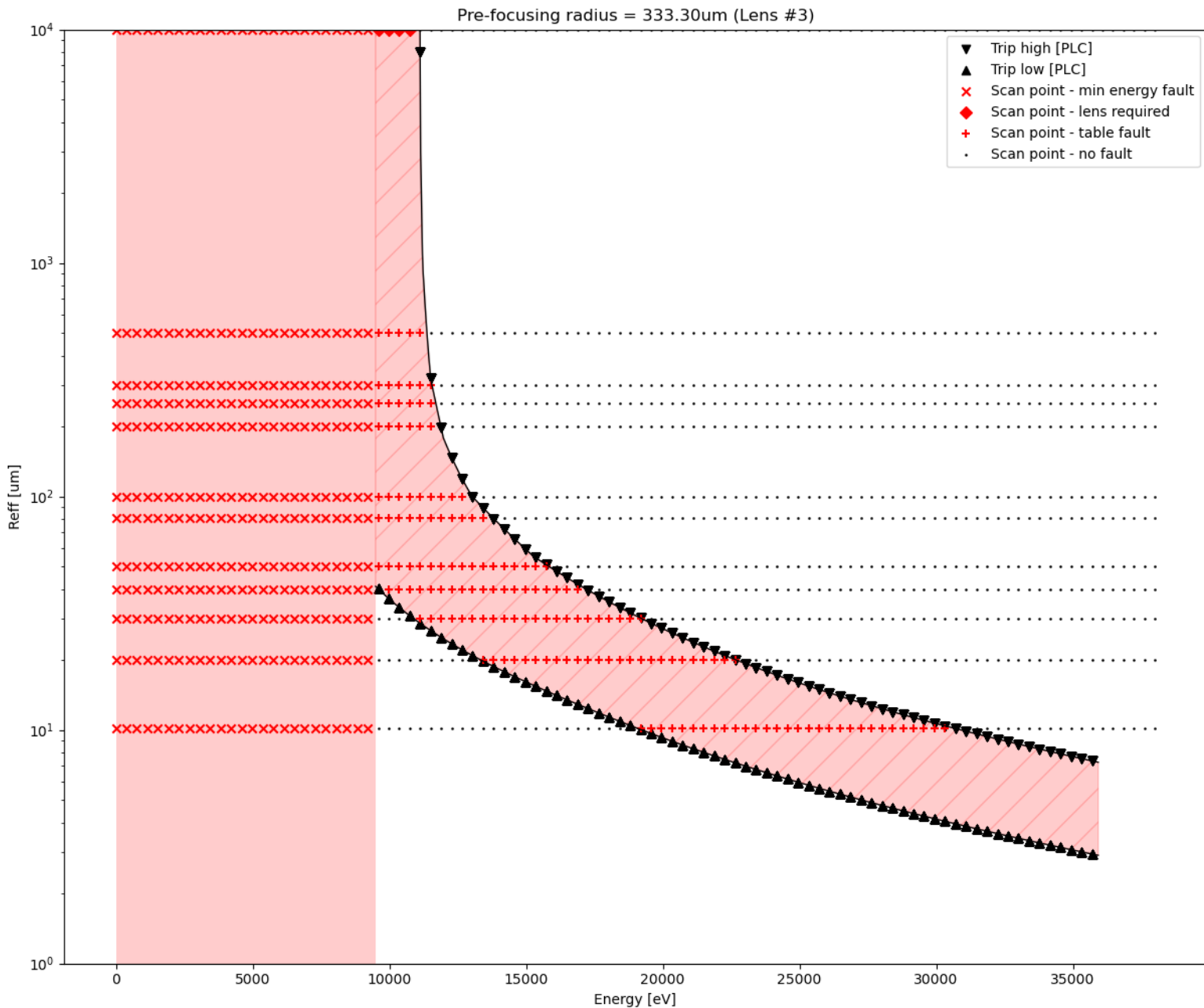| Energy [eV]	Trip low [um]	TFS Radius [um]	Trip high [um]	Faulted	State Fault	Min Energy Fault	Lens Required Fault	Table Fault
33393.94	3.53	500.00	8.43	0	0	0	0	0
33777.78	3.46	500.00	8.22	0	0	0	0	0
34161.62	3.38	500.00	8.03	0	0	0	0	0
34545.45	3.31	500.00	7.84	0	0	0	0	0
34929.29	3.25	500.00	7.66	0	0	0	0	0
35313.13	3.18	500.00	7.48	0	0	0	0	0
35696.97	3.12	500.00	7.31	0	0	0	0	0
36080.81	0.00	500.00	0.00	0	0	0	0	0
36464.64	0.00	500.00	0.00	0	0	0	0	0
36848.48	0.00	500.00	0.00	0	0	0	0	0
37232.32	0.00	500.00	0.00	0	0	0	0	0
37616.16	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: 2021-06-09 23:28:24
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
383.84	0.00	10000.00	0.00	1	0	1	0	0
767.68	0.00	10000.00	0.00	1	0	1	0	0
1151.52	0.00	10000.00	0.00	1	0	1	0	0
1535.35	0.00	10000.00	0.00	1	0	1	0	0
1919.19	0.00	10000.00	0.00	1	0	1	0	0
2303.03	0.00	10000.00	0.00	1	0	1	0	0
2686.87	0.00	10000.00	0.00	1	0	1	0	0
3070.71	0.00	10000.00	0.00	1	0	1	0	0
3454.55	0.00	10000.00	0.00	1	0	1	0	0
3838.38	0.00	10000.00	0.00	1	0	1	0	0
4222.22	0.00	10000.00	0.00	1	0	1	0	0
4606.06	0.00	10000.00	0.00	1	0	1	0	0
4989.90	0.00	10000.00	0.00	1	0	1	0	0
5373.74	0.00	10000.00	0.00	1	0	1	0	0
5757.58	0.00	10000.00	0.00	1	0	1	0	0
6141.41	0.00	10000.00	0.00	1	0	1	0	0
6525.25	0.00	10000.00	0.00	1	0	1	0	0
6909.09	0.00	10000.00	0.00	1	0	1	0	0
7292.93	0.00	10000.00	0.00	1	0	1	0	0
7676.77	0.00	10000.00	0.00	1	0	1	0	0
8060.61	0.00	10000.00	0.00	1	0	1	0	0
8444.44	0.00	10000.00	0.00	1	0	1	0	0
8828.28	0.00	10000.00	0.00	1	0	1	0	0
9212.12	0.00	10000.00	0.00	1	0	1	0	0
9595.96	40.16	10000.00	10000.00	1	0	0	1	1
9979.80	36.51	10000.00	10000.00	1	0	0	1	1
10363.64	33.45	10000.00	10000.00	1	0	0	1	1
10747.47	30.83	10000.00	10000.00	1	0	0	1	1
11131.31	28.58	10000.00	8019.78	0	0	0	0	0
11515.15	26.62	10000.00	322.10	0	0	0	0	0
11898.99	24.90	10000.00	196.50	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
12282.83	23.38	10000.00	147.01	0	0	0	0	0
12666.67	22.02	10000.00	118.90	0	0	0	0	0
13050.50	20.79	10000.00	99.42	0	0	0	0	0
13434.34	19.68	10000.00	89.25	0	0	0	0	0
13818.18	18.67	10000.00	80.37	0	0	0	0	0
14202.02	17.75	10000.00	72.58	0	0	0	0	0
14585.86	16.89	10000.00	65.72	0	0	0	0	0
14969.70	16.10	10000.00	59.67	0	0	0	0	0
15353.54	15.37	10000.00	54.61	0	0	0	0	0
15737.37	14.68	10000.00	51.01	0	0	0	0	0
16121.21	14.04	10000.00	47.74	0	0	0	0	0
16505.05	13.44	10000.00	44.78	0	0	0	0	0
16888.89	12.87	10000.00	42.09	0	0	0	0	0
17272.73	12.33	10000.00	39.64	0	0	0	0	0
17656.57	11.82	10000.00	37.39	0	0	0	0	0
18040.40	11.34	10000.00	35.34	0	0	0	0	0
18424.24	10.88	10000.00	33.45	0	0	0	0	0
18808.08	10.44	10000.00	31.71	0	0	0	0	0
19191.92	10.03	10000.00	30.11	0	0	0	0	0
19575.76	9.64	10000.00	28.63	0	0	0	0	0
19959.60	9.28	10000.00	27.26	0	0	0	0	0
20343.43	8.94	10000.00	25.99	0	0	0	0	0
20727.27	8.61	10000.00	24.81	0	0	0	0	0
21111.11	8.31	10000.00	23.71	0	0	0	0	0
21494.95	8.02	10000.00	22.69	0	0	0	0	0
21878.79	7.74	10000.00	21.74	0	0	0	0	0
22262.63	7.48	10000.00	20.84	0	0	0	0	0
22646.46	7.23	10000.00	20.01	0	0	0	0	0
23030.30	6.99	10000.00	19.22	0	0	0	0	0
23414.14	6.77	10000.00	18.49	0	0	0	0	0
23797.98	6.55	10000.00	17.80	0	0	0	0	0
24181.82	6.35	10000.00	17.14	0	0	0	0	0
24565.66	6.16	10000.00	16.53	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
24949.49	5.97	10000.00	15.95	0	0	0	0	0
25333.33	5.79	10000.00	15.41	0	0	0	0	0
25717.17	5.62	10000.00	14.89	0	0	0	0	0
26101.01	5.46	10000.00	14.40	0	0	0	0	0
26484.85	5.31	10000.00	13.94	0	0	0	0	0
26868.69	5.16	10000.00	13.50	0	0	0	0	0
27252.53	5.01	10000.00	13.09	0	0	0	0	0
27636.36	4.88	10000.00	12.69	0	0	0	0	0
28020.20	4.75	10000.00	12.32	0	0	0	0	0
28404.04	4.62	10000.00	11.96	0	0	0	0	0
28787.88	4.50	10000.00	11.62	0	0	0	0	0
29171.72	4.38	10000.00	11.30	0	0	0	0	0
29555.55	4.27	10000.00	10.99	0	0	0	0	0
29939.39	4.16	10000.00	10.69	0	0	0	0	0
30323.23	4.06	10000.00	10.41	0	0	0	0	0
30707.07	3.96	10000.00	10.13	0	0	0	0	0
31090.91	3.86	10000.00	9.87	0	0	0	0	0
31474.75	3.77	10000.00	9.62	0	0	0	0	0
31858.59	3.68	10000.00	9.37	0	0	0	0	0
32242.42	3.60	10000.00	9.14	0	0	0	0	0
32626.26	3.51	10000.00	8.91	0	0	0	0	0
33010.10	3.43	10000.00	8.69	0	0	0	0	0
33393.94	3.35	10000.00	8.48	0	0	0	0	0
33777.78	3.28	10000.00	8.28	0	0	0	0	0
34161.62	3.21	10000.00	8.09	0	0	0	0	0
34545.45	3.14	10000.00	7.90	0	0	0	0	0
34929.29	3.07	10000.00	7.71	0	0	0	0	0
35313.13	3.00	10000.00	7.54	0	0	0	0	0
35696.97	2.94	10000.00	7.37	0	0	0	0	0
36080.81	0.00	10000.00	0.00	0	0	0	0	0
36464.64	0.00	10000.00	0.00	0	0	0	0	0
36848.48	0.00	10000.00	0.00	0	0	0	0	0
37232.32	0.00	10000.00	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
37616.16	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
383.84	0.00	10.17	0.00	1	0	1	0	0
767.68	0.00	10.17	0.00	1	0	1	0	0
1151.52	0.00	10.17	0.00	1	0	1	0	0
1535.35	0.00	10.17	0.00	1	0	1	0	0
1919.19	0.00	10.17	0.00	1	0	1	0	0
2303.03	0.00	10.17	0.00	1	0	1	0	0
2686.87	0.00	10.17	0.00	1	0	1	0	0
3070.71	0.00	10.17	0.00	1	0	1	0	0
3454.55	0.00	10.17	0.00	1	0	1	0	0
3838.38	0.00	10.17	0.00	1	0	1	0	0
4222.22	0.00	10.17	0.00	1	0	1	0	0
4606.06	0.00	10.17	0.00	1	0	1	0	0
4989.90	0.00	10.17	0.00	1	0	1	0	0
5373.74	0.00	10.17	0.00	1	0	1	0	0
5757.58	0.00	10.17	0.00	1	0	1	0	0
6141.41	0.00	10.17	0.00	1	0	1	0	0
6525.25	0.00	10.17	0.00	1	0	1	0	0
6909.09	0.00	10.17	0.00	1	0	1	0	0
7292.93	0.00	10.17	0.00	1	0	1	0	0
7676.77	0.00	10.17	0.00	1	0	1	0	0
8060.61	0.00	10.17	0.00	1	0	1	0	0
8444.44	0.00	10.17	0.00	1	0	1	0	0
8828.28	0.00	10.17	0.00	1	0	1	0	0
9212.12	0.00	10.17	0.00	1	0	1	0	0
9595.96	40.16	10.17	10000.00	0	0	0	0	0
9979.80	36.51	10.17	10000.00	0	0	0	0	0
10363.64	33.45	10.17	10000.00	0	0	0	0	0
10747.47	30.83	10.17	10000.00	0	0	0	0	0
11131.31	28.58	10.17	8019.78	0	0	0	0	0
11515.15	26.62	10.17	322.10	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
11898.99	24.90	10.17	196.50	0	0	0	0	0
12282.83	23.38	10.17	147.01	0	0	0	0	0
12666.67	22.02	10.17	118.90	0	0	0	0	0
13050.50	20.79	10.17	99.42	0	0	0	0	0
13434.34	19.68	10.17	89.25	0	0	0	0	0
13818.18	18.67	10.17	80.37	0	0	0	0	0
14202.02	17.75	10.17	72.58	0	0	0	0	0
14585.86	16.89	10.17	65.72	0	0	0	0	0
14969.70	16.10	10.17	59.67	0	0	0	0	0
15353.54	15.37	10.17	54.61	0	0	0	0	0
15737.37	14.68	10.17	51.01	0	0	0	0	0
16121.21	14.04	10.17	47.74	0	0	0	0	0
16505.05	13.44	10.17	44.78	0	0	0	0	0
16888.89	12.87	10.17	42.09	0	0	0	0	0
17272.73	12.33	10.17	39.64	0	0	0	0	0
17656.57	11.82	10.17	37.39	0	0	0	0	0
18040.40	11.34	10.17	35.34	0	0	0	0	0
18424.24	10.88	10.17	33.45	0	0	0	0	0
18808.08	10.44	10.17	31.71	0	0	0	0	0
19191.92	10.03	10.17	30.11	1	0	0	0	1
19575.76	9.64	10.17	28.63	1	0	0	0	1
19959.60	9.28	10.17	27.26	1	0	0	0	1
20343.43	8.94	10.17	25.99	1	0	0	0	1
20727.27	8.61	10.17	24.81	1	0	0	0	1
21111.11	8.31	10.17	23.71	1	0	0	0	1
21494.95	8.02	10.17	22.69	1	0	0	0	1
21878.79	7.74	10.17	21.74	1	0	0	0	1
22262.63	7.48	10.17	20.84	1	0	0	0	1
22646.46	7.23	10.17	20.01	1	0	0	0	1
23030.30	6.99	10.17	19.22	1	0	0	0	1
23414.14	6.77	10.17	18.49	1	0	0	0	1
23797.98	6.55	10.17	17.80	1	0	0	0	1
24181.82	6.35	10.17	17.14	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
24565.66	6.16	10.17	16.53	1	0	0	0	1
24949.49	5.97	10.17	15.95	1	0	0	0	1
25333.33	5.79	10.17	15.41	1	0	0	0	1
25717.17	5.62	10.17	14.89	1	0	0	0	1
26101.01	5.46	10.17	14.40	1	0	0	0	1
26484.85	5.31	10.17	13.94	1	0	0	0	1
26868.69	5.16	10.17	13.50	1	0	0	0	1
27252.53	5.01	10.17	13.09	1	0	0	0	1
27636.36	4.88	10.17	12.69	1	0	0	0	1
28020.20	4.75	10.17	12.32	1	0	0	0	1
28404.04	4.62	10.17	11.96	1	0	0	0	1
28787.88	4.50	10.17	11.62	1	0	0	0	1
29171.72	4.38	10.17	11.30	1	0	0	0	1
29555.55	4.27	10.17	10.99	1	0	0	0	1
29939.39	4.16	10.17	10.69	1	0	0	0	1
30323.23	4.06	10.17	10.41	1	0	0	0	1
30707.07	3.96	10.17	10.13	0	0	0	0	0
31090.91	3.86	10.17	9.87	0	0	0	0	0
31474.75	3.77	10.17	9.62	0	0	0	0	0
31858.59	3.68	10.17	9.37	0	0	0	0	0
32242.42	3.60	10.17	9.14	0	0	0	0	0
32626.26	3.51	10.17	8.91	0	0	0	0	0
33010.10	3.43	10.17	8.69	0	0	0	0	0
33393.94	3.35	10.17	8.48	0	0	0	0	0
33777.78	3.28	10.17	8.28	0	0	0	0	0
34161.62	3.21	10.17	8.09	0	0	0	0	0
34545.45	3.14	10.17	7.90	0	0	0	0	0
34929.29	3.07	10.17	7.71	0	0	0	0	0
35313.13	3.00	10.17	7.54	0	0	0	0	0
35696.97	2.94	10.17	7.37	0	0	0	0	0
36080.81	0.00	10.17	0.00	0	0	0	0	0
36464.64	0.00	10.17	0.00	0	0	0	0	0
36848.48	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
37232.32	0.00	10.17	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	20.00	0.00	1	0	1	0	0
767.68	0.00	20.00	0.00	1	0	1	0	0
1151.52	0.00	20.00	0.00	1	0	1	0	0
1535.35	0.00	20.00	0.00	1	0	1	0	0
1919.19	0.00	20.00	0.00	1	0	1	0	0
2303.03	0.00	20.00	0.00	1	0	1	0	0
2686.87	0.00	20.00	0.00	1	0	1	0	0
3070.71	0.00	20.00	0.00	1	0	1	0	0
3454.55	0.00	20.00	0.00	1	0	1	0	0
3838.38	0.00	20.00	0.00	1	0	1	0	0
4222.22	0.00	20.00	0.00	1	0	1	0	0
4606.06	0.00	20.00	0.00	1	0	1	0	0
4989.90	0.00	20.00	0.00	1	0	1	0	0
5373.74	0.00	20.00	0.00	1	0	1	0	0
5757.58	0.00	20.00	0.00	1	0	1	0	0
6141.41	0.00	20.00	0.00	1	0	1	0	0
6525.25	0.00	20.00	0.00	1	0	1	0	0
6909.09	0.00	20.00	0.00	1	0	1	0	0
7292.93	0.00	20.00	0.00	1	0	1	0	0
7676.77	0.00	20.00	0.00	1	0	1	0	0
8060.61	0.00	20.00	0.00	1	0	1	0	0
8444.44	0.00	20.00	0.00	1	0	1	0	0
8828.28	0.00	20.00	0.00	1	0	1	0	0
9212.12	0.00	20.00	0.00	1	0	1	0	0
9595.96	40.16	20.00	10000.00	0	0	0	0	0
9979.80	36.51	20.00	10000.00	0	0	0	0	0
10363.64	33.45	20.00	10000.00	0	0	0	0	0
10747.47	30.83	20.00	10000.00	0	0	0	0	0
11131.31	28.58	20.00	8019.78	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
11515.15	26.62	20.00	322.10	0	0	0	0	0
11898.99	24.90	20.00	196.50	0	0	0	0	0
12282.83	23.38	20.00	147.01	0	0	0	0	0
12666.67	22.02	20.00	118.90	0	0	0	0	0
13050.50	20.79	20.00	99.42	0	0	0	0	0
13434.34	19.68	20.00	89.25	1	0	0	0	1
13818.18	18.67	20.00	80.37	1	0	0	0	1
14202.02	17.75	20.00	72.58	1	0	0	0	1
14585.86	16.89	20.00	65.72	1	0	0	0	1
14969.70	16.10	20.00	59.67	1	0	0	0	1
15353.54	15.37	20.00	54.61	1	0	0	0	1
15737.37	14.68	20.00	51.01	1	0	0	0	1
16121.21	14.04	20.00	47.74	1	0	0	0	1
16505.05	13.44	20.00	44.78	1	0	0	0	1
16888.89	12.87	20.00	42.09	1	0	0	0	1
17272.73	12.33	20.00	39.64	1	0	0	0	1
17656.57	11.82	20.00	37.39	1	0	0	0	1
18040.40	11.34	20.00	35.34	1	0	0	0	1
18424.24	10.88	20.00	33.45	1	0	0	0	1
18808.08	10.44	20.00	31.71	1	0	0	0	1
19191.92	10.03	20.00	30.11	1	0	0	0	1
19575.76	9.64	20.00	28.63	1	0	0	0	1
19959.60	9.28	20.00	27.26	1	0	0	0	1
20343.43	8.94	20.00	25.99	1	0	0	0	1
20727.27	8.61	20.00	24.81	1	0	0	0	1
21111.11	8.31	20.00	23.71	1	0	0	0	1
21494.95	8.02	20.00	22.69	1	0	0	0	1
21878.79	7.74	20.00	21.74	1	0	0	0	1
22262.63	7.48	20.00	20.84	1	0	0	0	1
22646.46	7.23	20.00	20.01	1	0	0	0	1
23030.30	6.99	20.00	19.22	0	0	0	0	0
23414.14	6.77	20.00	18.49	0	0	0	0	0
23797.98	6.55	20.00	17.80	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
24181.82	6.35	20.00	17.14	0	0	0	0	0
24565.66	6.16	20.00	16.53	0	0	0	0	0
24949.49	5.97	20.00	15.95	0	0	0	0	0
25333.33	5.79	20.00	15.41	0	0	0	0	0
25717.17	5.62	20.00	14.89	0	0	0	0	0
26101.01	5.46	20.00	14.40	0	0	0	0	0
26484.85	5.31	20.00	13.94	0	0	0	0	0
26868.69	5.16	20.00	13.50	0	0	0	0	0
27252.53	5.01	20.00	13.09	0	0	0	0	0
27636.36	4.88	20.00	12.69	0	0	0	0	0
28020.20	4.75	20.00	12.32	0	0	0	0	0
28404.04	4.62	20.00	11.96	0	0	0	0	0
28787.88	4.50	20.00	11.62	0	0	0	0	0
29171.72	4.38	20.00	11.30	0	0	0	0	0
29555.55	4.27	20.00	10.99	0	0	0	0	0
29939.39	4.16	20.00	10.69	0	0	0	0	0
30323.23	4.06	20.00	10.41	0	0	0	0	0
30707.07	3.96	20.00	10.13	0	0	0	0	0
31090.91	3.86	20.00	9.87	0	0	0	0	0
31474.75	3.77	20.00	9.62	0	0	0	0	0
31858.59	3.68	20.00	9.37	0	0	0	0	0
32242.42	3.60	20.00	9.14	0	0	0	0	0
32626.26	3.51	20.00	8.91	0	0	0	0	0
33010.10	3.43	20.00	8.69	0	0	0	0	0
33393.94	3.35	20.00	8.48	0	0	0	0	0
33777.78	3.28	20.00	8.28	0	0	0	0	0
34161.62	3.21	20.00	8.09	0	0	0	0	0
34545.45	3.14	20.00	7.90	0	0	0	0	0
34929.29	3.07	20.00	7.71	0	0	0	0	0
35313.13	3.00	20.00	7.54	0	0	0	0	0
35696.97	2.94	20.00	7.37	0	0	0	0	0
36080.81	0.00	20.00	0.00	0	0	0	0	0
36464.64	0.00	20.00	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
36848.48	0.00	20.00	0.00	0	0	0	0	0
37232.32	0.00	20.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	30.00	0.00	1	0	1	0	0
767.68	0.00	30.00	0.00	1	0	1	0	0
1151.52	0.00	30.00	0.00	1	0	1	0	0
1535.35	0.00	30.00	0.00	1	0	1	0	0
1919.19	0.00	30.00	0.00	1	0	1	0	0
2303.03	0.00	30.00	0.00	1	0	1	0	0
2686.87	0.00	30.00	0.00	1	0	1	0	0
3070.71	0.00	30.00	0.00	1	0	1	0	0
3454.55	0.00	30.00	0.00	1	0	1	0	0
3838.38	0.00	30.00	0.00	1	0	1	0	0
4222.22	0.00	30.00	0.00	1	0	1	0	0
4606.06	0.00	30.00	0.00	1	0	1	0	0
4989.90	0.00	30.00	0.00	1	0	1	0	0
5373.74	0.00	30.00	0.00	1	0	1	0	0
5757.58	0.00	30.00	0.00	1	0	1	0	0
6141.41	0.00	30.00	0.00	1	0	1	0	0
6525.25	0.00	30.00	0.00	1	0	1	0	0
6909.09	0.00	30.00	0.00	1	0	1	0	0
7292.93	0.00	30.00	0.00	1	0	1	0	0
7676.77	0.00	30.00	0.00	1	0	1	0	0
8060.61	0.00	30.00	0.00	1	0	1	0	0
8444.44	0.00	30.00	0.00	1	0	1	0	0
8828.28	0.00	30.00	0.00	1	0	1	0	0
9212.12	0.00	30.00	0.00	1	0	1	0	0
9595.96	40.16	30.00	10000.00	0	0	0	0	0
9979.80	36.51	30.00	10000.00	0	0	0	0	0
10363.64	33.45	30.00	10000.00	0	0	0	0	0
10747.47	30.83	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
11131.31	28.58	30.00	8019.78	1	0	0	0	1
11515.15	26.62	30.00	322.10	1	0	0	0	1
11898.99	24.90	30.00	196.50	1	0	0	0	1
12282.83	23.38	30.00	147.01	1	0	0	0	1
12666.67	22.02	30.00	118.90	1	0	0	0	1
13050.50	20.79	30.00	99.42	1	0	0	0	1
13434.34	19.68	30.00	89.25	1	0	0	0	1
13818.18	18.67	30.00	80.37	1	0	0	0	1
14202.02	17.75	30.00	72.58	1	0	0	0	1
14585.86	16.89	30.00	65.72	1	0	0	0	1
14969.70	16.10	30.00	59.67	1	0	0	0	1
15353.54	15.37	30.00	54.61	1	0	0	0	1
15737.37	14.68	30.00	51.01	1	0	0	0	1
16121.21	14.04	30.00	47.74	1	0	0	0	1
16505.05	13.44	30.00	44.78	1	0	0	0	1
16888.89	12.87	30.00	42.09	1	0	0	0	1
17272.73	12.33	30.00	39.64	1	0	0	0	1
17656.57	11.82	30.00	37.39	1	0	0	0	1
18040.40	11.34	30.00	35.34	1	0	0	0	1
18424.24	10.88	30.00	33.45	1	0	0	0	1
18808.08	10.44	30.00	31.71	1	0	0	0	1
19191.92	10.03	30.00	30.11	1	0	0	0	1
19575.76	9.64	30.00	28.63	0	0	0	0	0
19959.60	9.28	30.00	27.26	0	0	0	0	0
20343.43	8.94	30.00	25.99	0	0	0	0	0
20727.27	8.61	30.00	24.81	0	0	0	0	0
21111.11	8.31	30.00	23.71	0	0	0	0	0
21494.95	8.02	30.00	22.69	0	0	0	0	0
21878.79	7.74	30.00	21.74	0	0	0	0	0
22262.63	7.48	30.00	20.84	0	0	0	0	0
22646.46	7.23	30.00	20.01	0	0	0	0	0
23030.30	6.99	30.00	19.22	0	0	0	0	0
23414.14	6.77	30.00	18.49	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
23797.98	6.55	30.00	17.80	0	0	0	0	0
24181.82	6.35	30.00	17.14	0	0	0	0	0
24565.66	6.16	30.00	16.53	0	0	0	0	0
24949.49	5.97	30.00	15.95	0	0	0	0	0
25333.33	5.79	30.00	15.41	0	0	0	0	0
25717.17	5.62	30.00	14.89	0	0	0	0	0
26101.01	5.46	30.00	14.40	0	0	0	0	0
26484.85	5.31	30.00	13.94	0	0	0	0	0
26868.69	5.16	30.00	13.50	0	0	0	0	0
27252.53	5.01	30.00	13.09	0	0	0	0	0
27636.36	4.88	30.00	12.69	0	0	0	0	0
28020.20	4.75	30.00	12.32	0	0	0	0	0
28404.04	4.62	30.00	11.96	0	0	0	0	0
28787.88	4.50	30.00	11.62	0	0	0	0	0
29171.72	4.38	30.00	11.30	0	0	0	0	0
29555.55	4.27	30.00	10.99	0	0	0	0	0
29939.39	4.16	30.00	10.69	0	0	0	0	0
30323.23	4.06	30.00	10.41	0	0	0	0	0
30707.07	3.96	30.00	10.13	0	0	0	0	0
31090.91	3.86	30.00	9.87	0	0	0	0	0
31474.75	3.77	30.00	9.62	0	0	0	0	0
31858.59	3.68	30.00	9.37	0	0	0	0	0
32242.42	3.60	30.00	9.14	0	0	0	0	0
32626.26	3.51	30.00	8.91	0	0	0	0	0
33010.10	3.43	30.00	8.69	0	0	0	0	0
33393.94	3.35	30.00	8.48	0	0	0	0	0
33777.78	3.28	30.00	8.28	0	0	0	0	0
34161.62	3.21	30.00	8.09	0	0	0	0	0
34545.45	3.14	30.00	7.90	0	0	0	0	0
34929.29	3.07	30.00	7.71	0	0	0	0	0
35313.13	3.00	30.00	7.54	0	0	0	0	0
35696.97	2.94	30.00	7.37	0	0	0	0	0
36080.81	0.00	30.00	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
36464.64	0.00	30.00	0.00	0	0	0	0	0
36848.48	0.00	30.00	0.00	0	0	0	0	0
37232.32	0.00	30.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	40.00	0.00	1	0	1	0	0
767.68	0.00	40.00	0.00	1	0	1	0	0
1151.52	0.00	40.00	0.00	1	0	1	0	0
1535.35	0.00	40.00	0.00	1	0	1	0	0
1919.19	0.00	40.00	0.00	1	0	1	0	0
2303.03	0.00	40.00	0.00	1	0	1	0	0
2686.87	0.00	40.00	0.00	1	0	1	0	0
3070.71	0.00	40.00	0.00	1	0	1	0	0
3454.55	0.00	40.00	0.00	1	0	1	0	0
3838.38	0.00	40.00	0.00	1	0	1	0	0
4222.22	0.00	40.00	0.00	1	0	1	0	0
4606.06	0.00	40.00	0.00	1	0	1	0	0
4989.90	0.00	40.00	0.00	1	0	1	0	0
5373.74	0.00	40.00	0.00	1	0	1	0	0
5757.58	0.00	40.00	0.00	1	0	1	0	0
6141.41	0.00	40.00	0.00	1	0	1	0	0
6525.25	0.00	40.00	0.00	1	0	1	0	0
6909.09	0.00	40.00	0.00	1	0	1	0	0
7292.93	0.00	40.00	0.00	1	0	1	0	0
7676.77	0.00	40.00	0.00	1	0	1	0	0
8060.61	0.00	40.00	0.00	1	0	1	0	0
8444.44	0.00	40.00	0.00	1	0	1	0	0
8828.28	0.00	40.00	0.00	1	0	1	0	0
9212.12	0.00	40.00	0.00	1	0	1	0	0
9595.96	40.16	40.00	10000.00	0	0	0	0	0
9979.80	36.51	40.00	10000.00	1	0	0	0	1
10363.64	33.45	40.00	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
10747.47	30.83	40.00	10000.00	1	0	0	0	1
11131.31	28.58	40.00	8019.78	1	0	0	0	1
11515.15	26.62	40.00	322.10	1	0	0	0	1
11898.99	24.90	40.00	196.50	1	0	0	0	1
12282.83	23.38	40.00	147.01	1	0	0	0	1
12666.67	22.02	40.00	118.90	1	0	0	0	1
13050.50	20.79	40.00	99.42	1	0	0	0	1
13434.34	19.68	40.00	89.25	1	0	0	0	1
13818.18	18.67	40.00	80.37	1	0	0	0	1
14202.02	17.75	40.00	72.58	1	0	0	0	1
14585.86	16.89	40.00	65.72	1	0	0	0	1
14969.70	16.10	40.00	59.67	1	0	0	0	1
15353.54	15.37	40.00	54.61	1	0	0	0	1
15737.37	14.68	40.00	51.01	1	0	0	0	1
16121.21	14.04	40.00	47.74	1	0	0	0	1
16505.05	13.44	40.00	44.78	1	0	0	0	1
16888.89	12.87	40.00	42.09	1	0	0	0	1
17272.73	12.33	40.00	39.64	0	0	0	0	0
17656.57	11.82	40.00	37.39	0	0	0	0	0
18040.40	11.34	40.00	35.34	0	0	0	0	0
18424.24	10.88	40.00	33.45	0	0	0	0	0
18808.08	10.44	40.00	31.71	0	0	0	0	0
19191.92	10.03	40.00	30.11	0	0	0	0	0
19575.76	9.64	40.00	28.63	0	0	0	0	0
19959.60	9.28	40.00	27.26	0	0	0	0	0
20343.43	8.94	40.00	25.99	0	0	0	0	0
20727.27	8.61	40.00	24.81	0	0	0	0	0
21111.11	8.31	40.00	23.71	0	0	0	0	0
21494.95	8.02	40.00	22.69	0	0	0	0	0
21878.79	7.74	40.00	21.74	0	0	0	0	0
22262.63	7.48	40.00	20.84	0	0	0	0	0
22646.46	7.23	40.00	20.01	0	0	0	0	0
23030.30	6.99	40.00	19.22	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
23414.14	6.77	40.00	18.49	0	0	0	0	0
23797.98	6.55	40.00	17.80	0	0	0	0	0
24181.82	6.35	40.00	17.14	0	0	0	0	0
24565.66	6.16	40.00	16.53	0	0	0	0	0
24949.49	5.97	40.00	15.95	0	0	0	0	0
25333.33	5.79	40.00	15.41	0	0	0	0	0
25717.17	5.62	40.00	14.89	0	0	0	0	0
26101.01	5.46	40.00	14.40	0	0	0	0	0
26484.85	5.31	40.00	13.94	0	0	0	0	0
26868.69	5.16	40.00	13.50	0	0	0	0	0
27252.53	5.01	40.00	13.09	0	0	0	0	0
27636.36	4.88	40.00	12.69	0	0	0	0	0
28020.20	4.75	40.00	12.32	0	0	0	0	0
28404.04	4.62	40.00	11.96	0	0	0	0	0
28787.88	4.50	40.00	11.62	0	0	0	0	0
29171.72	4.38	40.00	11.30	0	0	0	0	0
29555.55	4.27	40.00	10.99	0	0	0	0	0
29939.39	4.16	40.00	10.69	0	0	0	0	0
30323.23	4.06	40.00	10.41	0	0	0	0	0
30707.07	3.96	40.00	10.13	0	0	0	0	0
31090.91	3.86	40.00	9.87	0	0	0	0	0
31474.75	3.77	40.00	9.62	0	0	0	0	0
31858.59	3.68	40.00	9.37	0	0	0	0	0
32242.42	3.60	40.00	9.14	0	0	0	0	0
32626.26	3.51	40.00	8.91	0	0	0	0	0
33010.10	3.43	40.00	8.69	0	0	0	0	0
33393.94	3.35	40.00	8.48	0	0	0	0	0
33777.78	3.28	40.00	8.28	0	0	0	0	0
34161.62	3.21	40.00	8.09	0	0	0	0	0
34545.45	3.14	40.00	7.90	0	0	0	0	0
34929.29	3.07	40.00	7.71	0	0	0	0	0
35313.13	3.00	40.00	7.54	0	0	0	0	0
35696.97	2.94	40.00	7.37	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
36080.81	0.00	40.00	0.00	0	0	0	0	0
36464.64	0.00	40.00	0.00	0	0	0	0	0
36848.48	0.00	40.00	0.00	0	0	0	0	0
37232.32	0.00	40.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	50.00	0.00	1	0	1	0	0
767.68	0.00	50.00	0.00	1	0	1	0	0
1151.52	0.00	50.00	0.00	1	0	1	0	0
1535.35	0.00	50.00	0.00	1	0	1	0	0
1919.19	0.00	50.00	0.00	1	0	1	0	0
2303.03	0.00	50.00	0.00	1	0	1	0	0
2686.87	0.00	50.00	0.00	1	0	1	0	0
3070.71	0.00	50.00	0.00	1	0	1	0	0
3454.55	0.00	50.00	0.00	1	0	1	0	0
3838.38	0.00	50.00	0.00	1	0	1	0	0
4222.22	0.00	50.00	0.00	1	0	1	0	0
4606.06	0.00	50.00	0.00	1	0	1	0	0
4989.90	0.00	50.00	0.00	1	0	1	0	0
5373.74	0.00	50.00	0.00	1	0	1	0	0
5757.58	0.00	50.00	0.00	1	0	1	0	0
6141.41	0.00	50.00	0.00	1	0	1	0	0
6525.25	0.00	50.00	0.00	1	0	1	0	0
6909.09	0.00	50.00	0.00	1	0	1	0	0
7292.93	0.00	50.00	0.00	1	0	1	0	0
7676.77	0.00	50.00	0.00	1	0	1	0	0
8060.61	0.00	50.00	0.00	1	0	1	0	0
8444.44	0.00	50.00	0.00	1	0	1	0	0
8828.28	0.00	50.00	0.00	1	0	1	0	0
9212.12	0.00	50.00	0.00	1	0	1	0	0
9595.96	40.16	50.00	10000.00	1	0	0	0	1
9979.80	36.51	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
10363.64	33.45	50.00	10000.00	1	0	0	0	1
10747.47	30.83	50.00	10000.00	1	0	0	0	1
11131.31	28.58	50.00	8019.78	1	0	0	0	1
11515.15	26.62	50.00	322.10	1	0	0	0	1
11898.99	24.90	50.00	196.50	1	0	0	0	1
12282.83	23.38	50.00	147.01	1	0	0	0	1
12666.67	22.02	50.00	118.90	1	0	0	0	1
13050.50	20.79	50.00	99.42	1	0	0	0	1
13434.34	19.68	50.00	89.25	1	0	0	0	1
13818.18	18.67	50.00	80.37	1	0	0	0	1
14202.02	17.75	50.00	72.58	1	0	0	0	1
14585.86	16.89	50.00	65.72	1	0	0	0	1
14969.70	16.10	50.00	59.67	1	0	0	0	1
15353.54	15.37	50.00	54.61	1	0	0	0	1
15737.37	14.68	50.00	51.01	1	0	0	0	1
16121.21	14.04	50.00	47.74	0	0	0	0	0
16505.05	13.44	50.00	44.78	0	0	0	0	0
16888.89	12.87	50.00	42.09	0	0	0	0	0
17272.73	12.33	50.00	39.64	0	0	0	0	0
17656.57	11.82	50.00	37.39	0	0	0	0	0
18040.40	11.34	50.00	35.34	0	0	0	0	0
18424.24	10.88	50.00	33.45	0	0	0	0	0
18808.08	10.44	50.00	31.71	0	0	0	0	0
19191.92	10.03	50.00	30.11	0	0	0	0	0
19575.76	9.64	50.00	28.63	0	0	0	0	0
19959.60	9.28	50.00	27.26	0	0	0	0	0
20343.43	8.94	50.00	25.99	0	0	0	0	0
20727.27	8.61	50.00	24.81	0	0	0	0	0
21111.11	8.31	50.00	23.71	0	0	0	0	0
21494.95	8.02	50.00	22.69	0	0	0	0	0
21878.79	7.74	50.00	21.74	0	0	0	0	0
22262.63	7.48	50.00	20.84	0	0	0	0	0
22646.46	7.23	50.00	20.01	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
23030.30	6.99	50.00	19.22	0	0	0	0	0
23414.14	6.77	50.00	18.49	0	0	0	0	0
23797.98	6.55	50.00	17.80	0	0	0	0	0
24181.82	6.35	50.00	17.14	0	0	0	0	0
24565.66	6.16	50.00	16.53	0	0	0	0	0
24949.49	5.97	50.00	15.95	0	0	0	0	0
25333.33	5.79	50.00	15.41	0	0	0	0	0
25717.17	5.62	50.00	14.89	0	0	0	0	0
26101.01	5.46	50.00	14.40	0	0	0	0	0
26484.85	5.31	50.00	13.94	0	0	0	0	0
26868.69	5.16	50.00	13.50	0	0	0	0	0
27252.53	5.01	50.00	13.09	0	0	0	0	0
27636.36	4.88	50.00	12.69	0	0	0	0	0
28020.20	4.75	50.00	12.32	0	0	0	0	0
28404.04	4.62	50.00	11.96	0	0	0	0	0
28787.88	4.50	50.00	11.62	0	0	0	0	0
29171.72	4.38	50.00	11.30	0	0	0	0	0
29555.55	4.27	50.00	10.99	0	0	0	0	0
29939.39	4.16	50.00	10.69	0	0	0	0	0
30323.23	4.06	50.00	10.41	0	0	0	0	0
30707.07	3.96	50.00	10.13	0	0	0	0	0
31090.91	3.86	50.00	9.87	0	0	0	0	0
31474.75	3.77	50.00	9.62	0	0	0	0	0
31858.59	3.68	50.00	9.37	0	0	0	0	0
32242.42	3.60	50.00	9.14	0	0	0	0	0
32626.26	3.51	50.00	8.91	0	0	0	0	0
33010.10	3.43	50.00	8.69	0	0	0	0	0
33393.94	3.35	50.00	8.48	0	0	0	0	0
33777.78	3.28	50.00	8.28	0	0	0	0	0
34161.62	3.21	50.00	8.09	0	0	0	0	0
34545.45	3.14	50.00	7.90	0	0	0	0	0
34929.29	3.07	50.00	7.71	0	0	0	0	0
35313.13	3.00	50.00	7.54	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
35696.97	2.94	50.00	7.37	0	0	0	0	0
36080.81	0.00	50.00	0.00	0	0	0	0	0
36464.64	0.00	50.00	0.00	0	0	0	0	0
36848.48	0.00	50.00	0.00	0	0	0	0	0
37232.32	0.00	50.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	81.08	0.00	1	0	1	0	0
767.68	0.00	81.08	0.00	1	0	1	0	0
1151.52	0.00	81.08	0.00	1	0	1	0	0
1535.35	0.00	81.08	0.00	1	0	1	0	0
1919.19	0.00	81.08	0.00	1	0	1	0	0
2303.03	0.00	81.08	0.00	1	0	1	0	0
2686.87	0.00	81.08	0.00	1	0	1	0	0
3070.71	0.00	81.08	0.00	1	0	1	0	0
3454.55	0.00	81.08	0.00	1	0	1	0	0
3838.38	0.00	81.08	0.00	1	0	1	0	0
4222.22	0.00	81.08	0.00	1	0	1	0	0
4606.06	0.00	81.08	0.00	1	0	1	0	0
4989.90	0.00	81.08	0.00	1	0	1	0	0
5373.74	0.00	81.08	0.00	1	0	1	0	0
5757.58	0.00	81.08	0.00	1	0	1	0	0
6141.41	0.00	81.08	0.00	1	0	1	0	0
6525.25	0.00	81.08	0.00	1	0	1	0	0
6909.09	0.00	81.08	0.00	1	0	1	0	0
7292.93	0.00	81.08	0.00	1	0	1	0	0
7676.77	0.00	81.08	0.00	1	0	1	0	0
8060.61	0.00	81.08	0.00	1	0	1	0	0
8444.44	0.00	81.08	0.00	1	0	1	0	0
8828.28	0.00	81.08	0.00	1	0	1	0	0
9212.12	0.00	81.08	0.00	1	0	1	0	0
9595.96	40.16	81.08	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
9979.80	36.51	81.08	10000.00	1	0	0	0	1
10363.64	33.45	81.08	10000.00	1	0	0	0	1
10747.47	30.83	81.08	10000.00	1	0	0	0	1
11131.31	28.58	81.08	8019.78	1	0	0	0	1
11515.15	26.62	81.08	322.10	1	0	0	0	1
11898.99	24.90	81.08	196.50	1	0	0	0	1
12282.83	23.38	81.08	147.01	1	0	0	0	1
12666.67	22.02	81.08	118.90	1	0	0	0	1
13050.50	20.79	81.08	99.42	1	0	0	0	1
13434.34	19.68	81.08	89.25	1	0	0	0	1
13818.18	18.67	81.08	80.37	0	0	0	0	0
14202.02	17.75	81.08	72.58	0	0	0	0	0
14585.86	16.89	81.08	65.72	0	0	0	0	0
14969.70	16.10	81.08	59.67	0	0	0	0	0
15353.54	15.37	81.08	54.61	0	0	0	0	0
15737.37	14.68	81.08	51.01	0	0	0	0	0
16121.21	14.04	81.08	47.74	0	0	0	0	0
16505.05	13.44	81.08	44.78	0	0	0	0	0
16888.89	12.87	81.08	42.09	0	0	0	0	0
17272.73	12.33	81.08	39.64	0	0	0	0	0
17656.57	11.82	81.08	37.39	0	0	0	0	0
18040.40	11.34	81.08	35.34	0	0	0	0	0
18424.24	10.88	81.08	33.45	0	0	0	0	0
18808.08	10.44	81.08	31.71	0	0	0	0	0
19191.92	10.03	81.08	30.11	0	0	0	0	0
19575.76	9.64	81.08	28.63	0	0	0	0	0
19959.60	9.28	81.08	27.26	0	0	0	0	0
20343.43	8.94	81.08	25.99	0	0	0	0	0
20727.27	8.61	81.08	24.81	0	0	0	0	0
21111.11	8.31	81.08	23.71	0	0	0	0	0
21494.95	8.02	81.08	22.69	0	0	0	0	0
21878.79	7.74	81.08	21.74	0	0	0	0	0
22262.63	7.48	81.08	20.84	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
22646.46	7.23	81.08	20.01	0	0	0	0	0
23030.30	6.99	81.08	19.22	0	0	0	0	0
23414.14	6.77	81.08	18.49	0	0	0	0	0
23797.98	6.55	81.08	17.80	0	0	0	0	0
24181.82	6.35	81.08	17.14	0	0	0	0	0
24565.66	6.16	81.08	16.53	0	0	0	0	0
24949.49	5.97	81.08	15.95	0	0	0	0	0
25333.33	5.79	81.08	15.41	0	0	0	0	0
25717.17	5.62	81.08	14.89	0	0	0	0	0
26101.01	5.46	81.08	14.40	0	0	0	0	0
26484.85	5.31	81.08	13.94	0	0	0	0	0
26868.69	5.16	81.08	13.50	0	0	0	0	0
27252.53	5.01	81.08	13.09	0	0	0	0	0
27636.36	4.88	81.08	12.69	0	0	0	0	0
28020.20	4.75	81.08	12.32	0	0	0	0	0
28404.04	4.62	81.08	11.96	0	0	0	0	0
28787.88	4.50	81.08	11.62	0	0	0	0	0
29171.72	4.38	81.08	11.30	0	0	0	0	0
29555.55	4.27	81.08	10.99	0	0	0	0	0
29939.39	4.16	81.08	10.69	0	0	0	0	0
30323.23	4.06	81.08	10.41	0	0	0	0	0
30707.07	3.96	81.08	10.13	0	0	0	0	0
31090.91	3.86	81.08	9.87	0	0	0	0	0
31474.75	3.77	81.08	9.62	0	0	0	0	0
31858.59	3.68	81.08	9.37	0	0	0	0	0
32242.42	3.60	81.08	9.14	0	0	0	0	0
32626.26	3.51	81.08	8.91	0	0	0	0	0
33010.10	3.43	81.08	8.69	0	0	0	0	0
33393.94	3.35	81.08	8.48	0	0	0	0	0
33777.78	3.28	81.08	8.28	0	0	0	0	0
34161.62	3.21	81.08	8.09	0	0	0	0	0
34545.45	3.14	81.08	7.90	0	0	0	0	0
34929.29	3.07	81.08	7.71	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
35313.13	3.00	81.08	7.54	0	0	0	0	0
35696.97	2.94	81.08	7.37	0	0	0	0	0
36080.81	0.00	81.08	0.00	0	0	0	0	0
36464.64	0.00	81.08	0.00	0	0	0	0	0
36848.48	0.00	81.08	0.00	0	0	0	0	0
37232.32	0.00	81.08	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	100.00	0.00	1	0	1	0	0
767.68	0.00	100.00	0.00	1	0	1	0	0
1151.52	0.00	100.00	0.00	1	0	1	0	0
1535.35	0.00	100.00	0.00	1	0	1	0	0
1919.19	0.00	100.00	0.00	1	0	1	0	0
2303.03	0.00	100.00	0.00	1	0	1	0	0
2686.87	0.00	100.00	0.00	1	0	1	0	0
3070.71	0.00	100.00	0.00	1	0	1	0	0
3454.55	0.00	100.00	0.00	1	0	1	0	0
3838.38	0.00	100.00	0.00	1	0	1	0	0
4222.22	0.00	100.00	0.00	1	0	1	0	0
4606.06	0.00	100.00	0.00	1	0	1	0	0
4989.90	0.00	100.00	0.00	1	0	1	0	0
5373.74	0.00	100.00	0.00	1	0	1	0	0
5757.58	0.00	100.00	0.00	1	0	1	0	0
6141.41	0.00	100.00	0.00	1	0	1	0	0
6525.25	0.00	100.00	0.00	1	0	1	0	0
6909.09	0.00	100.00	0.00	1	0	1	0	0
7292.93	0.00	100.00	0.00	1	0	1	0	0
7676.77	0.00	100.00	0.00	1	0	1	0	0
8060.61	0.00	100.00	0.00	1	0	1	0	0
8444.44	0.00	100.00	0.00	1	0	1	0	0
8828.28	0.00	100.00	0.00	1	0	1	0	0
9212.12	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
9595.96	40.16	100.00	10000.00	1	0	0	0	1
9979.80	36.51	100.00	10000.00	1	0	0	0	1
10363.64	33.45	100.00	10000.00	1	0	0	0	1
10747.47	30.83	100.00	10000.00	1	0	0	0	1
11131.31	28.58	100.00	8019.78	1	0	0	0	1
11515.15	26.62	100.00	322.10	1	0	0	0	1
11898.99	24.90	100.00	196.50	1	0	0	0	1
12282.83	23.38	100.00	147.01	1	0	0	0	1
12666.67	22.02	100.00	118.90	1	0	0	0	1
13050.50	20.79	100.00	99.42	0	0	0	0	0
13434.34	19.68	100.00	89.25	0	0	0	0	0
13818.18	18.67	100.00	80.37	0	0	0	0	0
14202.02	17.75	100.00	72.58	0	0	0	0	0
14585.86	16.89	100.00	65.72	0	0	0	0	0
14969.70	16.10	100.00	59.67	0	0	0	0	0
15353.54	15.37	100.00	54.61	0	0	0	0	0
15737.37	14.68	100.00	51.01	0	0	0	0	0
16121.21	14.04	100.00	47.74	0	0	0	0	0
16505.05	13.44	100.00	44.78	0	0	0	0	0
16888.89	12.87	100.00	42.09	0	0	0	0	0
17272.73	12.33	100.00	39.64	0	0	0	0	0
17656.57	11.82	100.00	37.39	0	0	0	0	0
18040.40	11.34	100.00	35.34	0	0	0	0	0
18424.24	10.88	100.00	33.45	0	0	0	0	0
18808.08	10.44	100.00	31.71	0	0	0	0	0
19191.92	10.03	100.00	30.11	0	0	0	0	0
19575.76	9.64	100.00	28.63	0	0	0	0	0
19959.60	9.28	100.00	27.26	0	0	0	0	0
20343.43	8.94	100.00	25.99	0	0	0	0	0
20727.27	8.61	100.00	24.81	0	0	0	0	0
21111.11	8.31	100.00	23.71	0	0	0	0	0
21494.95	8.02	100.00	22.69	0	0	0	0	0
21878.79	7.74	100.00	21.74	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
22262.63	7.48	100.00	20.84	0	0	0	0	0
22646.46	7.23	100.00	20.01	0	0	0	0	0
23030.30	6.99	100.00	19.22	0	0	0	0	0
23414.14	6.77	100.00	18.49	0	0	0	0	0
23797.98	6.55	100.00	17.80	0	0	0	0	0
24181.82	6.35	100.00	17.14	0	0	0	0	0
24565.66	6.16	100.00	16.53	0	0	0	0	0
24949.49	5.97	100.00	15.95	0	0	0	0	0
25333.33	5.79	100.00	15.41	0	0	0	0	0
25717.17	5.62	100.00	14.89	0	0	0	0	0
26101.01	5.46	100.00	14.40	0	0	0	0	0
26484.85	5.31	100.00	13.94	0	0	0	0	0
26868.69	5.16	100.00	13.50	0	0	0	0	0
27252.53	5.01	100.00	13.09	0	0	0	0	0
27636.36	4.88	100.00	12.69	0	0	0	0	0
28020.20	4.75	100.00	12.32	0	0	0	0	0
28404.04	4.62	100.00	11.96	0	0	0	0	0
28787.88	4.50	100.00	11.62	0	0	0	0	0
29171.72	4.38	100.00	11.30	0	0	0	0	0
29555.55	4.27	100.00	10.99	0	0	0	0	0
29939.39	4.16	100.00	10.69	0	0	0	0	0
30323.23	4.06	100.00	10.41	0	0	0	0	0
30707.07	3.96	100.00	10.13	0	0	0	0	0
31090.91	3.86	100.00	9.87	0	0	0	0	0
31474.75	3.77	100.00	9.62	0	0	0	0	0
31858.59	3.68	100.00	9.37	0	0	0	0	0
32242.42	3.60	100.00	9.14	0	0	0	0	0
32626.26	3.51	100.00	8.91	0	0	0	0	0
33010.10	3.43	100.00	8.69	0	0	0	0	0
33393.94	3.35	100.00	8.48	0	0	0	0	0
33777.78	3.28	100.00	8.28	0	0	0	0	0
34161.62	3.21	100.00	8.09	0	0	0	0	0
34545.45	3.14	100.00	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
34929.29	3.07	100.00	7.71	0	0	0	0	0
35313.13	3.00	100.00	7.54	0	0	0	0	0
35696.97	2.94	100.00	7.37	0	0	0	0	0
36080.81	0.00	100.00	0.00	0	0	0	0	0
36464.64	0.00	100.00	0.00	0	0	0	0	0
36848.48	0.00	100.00	0.00	0	0	0	0	0
37232.32	0.00	100.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	200.00	0.00	1	0	1	0	0
767.68	0.00	200.00	0.00	1	0	1	0	0
1151.52	0.00	200.00	0.00	1	0	1	0	0
1535.35	0.00	200.00	0.00	1	0	1	0	0
1919.19	0.00	200.00	0.00	1	0	1	0	0
2303.03	0.00	200.00	0.00	1	0	1	0	0
2686.87	0.00	200.00	0.00	1	0	1	0	0
3070.71	0.00	200.00	0.00	1	0	1	0	0
3454.55	0.00	200.00	0.00	1	0	1	0	0
3838.38	0.00	200.00	0.00	1	0	1	0	0
4222.22	0.00	200.00	0.00	1	0	1	0	0
4606.06	0.00	200.00	0.00	1	0	1	0	0
4989.90	0.00	200.00	0.00	1	0	1	0	0
5373.74	0.00	200.00	0.00	1	0	1	0	0
5757.58	0.00	200.00	0.00	1	0	1	0	0
6141.41	0.00	200.00	0.00	1	0	1	0	0
6525.25	0.00	200.00	0.00	1	0	1	0	0
6909.09	0.00	200.00	0.00	1	0	1	0	0
7292.93	0.00	200.00	0.00	1	0	1	0	0
7676.77	0.00	200.00	0.00	1	0	1	0	0
8060.61	0.00	200.00	0.00	1	0	1	0	0
8444.44	0.00	200.00	0.00	1	0	1	0	0
8828.28	0.00	200.00	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
9212.12	0.00	200.00	0.00	1	0	1	0	0
9595.96	40.16	200.00	10000.00	1	0	0	0	1
9979.80	36.51	200.00	10000.00	1	0	0	0	1
10363.64	33.45	200.00	10000.00	1	0	0	0	1
10747.47	30.83	200.00	10000.00	1	0	0	0	1
11131.31	28.58	200.00	8019.78	1	0	0	0	1
11515.15	26.62	200.00	322.10	1	0	0	0	1
11898.99	24.90	200.00	196.50	0	0	0	0	0
12282.83	23.38	200.00	147.01	0	0	0	0	0
12666.67	22.02	200.00	118.90	0	0	0	0	0
13050.50	20.79	200.00	99.42	0	0	0	0	0
13434.34	19.68	200.00	89.25	0	0	0	0	0
13818.18	18.67	200.00	80.37	0	0	0	0	0
14202.02	17.75	200.00	72.58	0	0	0	0	0
14585.86	16.89	200.00	65.72	0	0	0	0	0
14969.70	16.10	200.00	59.67	0	0	0	0	0
15353.54	15.37	200.00	54.61	0	0	0	0	0
15737.37	14.68	200.00	51.01	0	0	0	0	0
16121.21	14.04	200.00	47.74	0	0	0	0	0
16505.05	13.44	200.00	44.78	0	0	0	0	0
16888.89	12.87	200.00	42.09	0	0	0	0	0
17272.73	12.33	200.00	39.64	0	0	0	0	0
17656.57	11.82	200.00	37.39	0	0	0	0	0
18040.40	11.34	200.00	35.34	0	0	0	0	0
18424.24	10.88	200.00	33.45	0	0	0	0	0
18808.08	10.44	200.00	31.71	0	0	0	0	0
19191.92	10.03	200.00	30.11	0	0	0	0	0
19575.76	9.64	200.00	28.63	0	0	0	0	0
19959.60	9.28	200.00	27.26	0	0	0	0	0
20343.43	8.94	200.00	25.99	0	0	0	0	0
20727.27	8.61	200.00	24.81	0	0	0	0	0
21111.11	8.31	200.00	23.71	0	0	0	0	0
21494.95	8.02	200.00	22.69	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
21878.79	7.74	200.00	21.74	0	0	0	0	0
22262.63	7.48	200.00	20.84	0	0	0	0	0
22646.46	7.23	200.00	20.01	0	0	0	0	0
23030.30	6.99	200.00	19.22	0	0	0	0	0
23414.14	6.77	200.00	18.49	0	0	0	0	0
23797.98	6.55	200.00	17.80	0	0	0	0	0
24181.82	6.35	200.00	17.14	0	0	0	0	0
24565.66	6.16	200.00	16.53	0	0	0	0	0
24949.49	5.97	200.00	15.95	0	0	0	0	0
25333.33	5.79	200.00	15.41	0	0	0	0	0
25717.17	5.62	200.00	14.89	0	0	0	0	0
26101.01	5.46	200.00	14.40	0	0	0	0	0
26484.85	5.31	200.00	13.94	0	0	0	0	0
26868.69	5.16	200.00	13.50	0	0	0	0	0
27252.53	5.01	200.00	13.09	0	0	0	0	0
27636.36	4.88	200.00	12.69	0	0	0	0	0
28020.20	4.75	200.00	12.32	0	0	0	0	0
28404.04	4.62	200.00	11.96	0	0	0	0	0
28787.88	4.50	200.00	11.62	0	0	0	0	0
29171.72	4.38	200.00	11.30	0	0	0	0	0
29555.55	4.27	200.00	10.99	0	0	0	0	0
29939.39	4.16	200.00	10.69	0	0	0	0	0
30323.23	4.06	200.00	10.41	0	0	0	0	0
30707.07	3.96	200.00	10.13	0	0	0	0	0
31090.91	3.86	200.00	9.87	0	0	0	0	0
31474.75	3.77	200.00	9.62	0	0	0	0	0
31858.59	3.68	200.00	9.37	0	0	0	0	0
32242.42	3.60	200.00	9.14	0	0	0	0	0
32626.26	3.51	200.00	8.91	0	0	0	0	0
33010.10	3.43	200.00	8.69	0	0	0	0	0
33393.94	3.35	200.00	8.48	0	0	0	0	0
33777.78	3.28	200.00	8.28	0	0	0	0	0
34161.62	3.21	200.00	8.09	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
34545.45	3.14	200.00	7.90	0	0	0	0	0
34929.29	3.07	200.00	7.71	0	0	0	0	0
35313.13	3.00	200.00	7.54	0	0	0	0	0
35696.97	2.94	200.00	7.37	0	0	0	0	0
36080.81	0.00	200.00	0.00	0	0	0	0	0
36464.64	0.00	200.00	0.00	0	0	0	0	0
36848.48	0.00	200.00	0.00	0	0	0	0	0
37232.32	0.00	200.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	250.00	0.00	1	0	1	0	0
767.68	0.00	250.00	0.00	1	0	1	0	0
1151.52	0.00	250.00	0.00	1	0	1	0	0
1535.35	0.00	250.00	0.00	1	0	1	0	0
1919.19	0.00	250.00	0.00	1	0	1	0	0
2303.03	0.00	250.00	0.00	1	0	1	0	0
2686.87	0.00	250.00	0.00	1	0	1	0	0
3070.71	0.00	250.00	0.00	1	0	1	0	0
3454.55	0.00	250.00	0.00	1	0	1	0	0
3838.38	0.00	250.00	0.00	1	0	1	0	0
4222.22	0.00	250.00	0.00	1	0	1	0	0
4606.06	0.00	250.00	0.00	1	0	1	0	0
4989.90	0.00	250.00	0.00	1	0	1	0	0
5373.74	0.00	250.00	0.00	1	0	1	0	0
5757.58	0.00	250.00	0.00	1	0	1	0	0
6141.41	0.00	250.00	0.00	1	0	1	0	0
6525.25	0.00	250.00	0.00	1	0	1	0	0
6909.09	0.00	250.00	0.00	1	0	1	0	0
7292.93	0.00	250.00	0.00	1	0	1	0	0
7676.77	0.00	250.00	0.00	1	0	1	0	0
8060.61	0.00	250.00	0.00	1	0	1	0	0
8444.44	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
8828.28	0.00	250.00	0.00	1	0	1	0	0
9212.12	0.00	250.00	0.00	1	0	1	0	0
9595.96	40.16	250.00	10000.00	1	0	0	0	1
9979.80	36.51	250.00	10000.00	1	0	0	0	1
10363.64	33.45	250.00	10000.00	1	0	0	0	1
10747.47	30.83	250.00	10000.00	1	0	0	0	1
11131.31	28.58	250.00	8019.78	1	0	0	0	1
11515.15	26.62	250.00	322.10	1	0	0	0	1
11898.99	24.90	250.00	196.50	0	0	0	0	0
12282.83	23.38	250.00	147.01	0	0	0	0	0
12666.67	22.02	250.00	118.90	0	0	0	0	0
13050.50	20.79	250.00	99.42	0	0	0	0	0
13434.34	19.68	250.00	89.25	0	0	0	0	0
13818.18	18.67	250.00	80.37	0	0	0	0	0
14202.02	17.75	250.00	72.58	0	0	0	0	0
14585.86	16.89	250.00	65.72	0	0	0	0	0
14969.70	16.10	250.00	59.67	0	0	0	0	0
15353.54	15.37	250.00	54.61	0	0	0	0	0
15737.37	14.68	250.00	51.01	0	0	0	0	0
16121.21	14.04	250.00	47.74	0	0	0	0	0
16505.05	13.44	250.00	44.78	0	0	0	0	0
16888.89	12.87	250.00	42.09	0	0	0	0	0
17272.73	12.33	250.00	39.64	0	0	0	0	0
17656.57	11.82	250.00	37.39	0	0	0	0	0
18040.40	11.34	250.00	35.34	0	0	0	0	0
18424.24	10.88	250.00	33.45	0	0	0	0	0
18808.08	10.44	250.00	31.71	0	0	0	0	0
19191.92	10.03	250.00	30.11	0	0	0	0	0
19575.76	9.64	250.00	28.63	0	0	0	0	0
19959.60	9.28	250.00	27.26	0	0	0	0	0
20343.43	8.94	250.00	25.99	0	0	0	0	0
20727.27	8.61	250.00	24.81	0	0	0	0	0
21111.11	8.31	250.00	23.71	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
21494.95	8.02	250.00	22.69	0	0	0	0	0
21878.79	7.74	250.00	21.74	0	0	0	0	0
22262.63	7.48	250.00	20.84	0	0	0	0	0
22646.46	7.23	250.00	20.01	0	0	0	0	0
23030.30	6.99	250.00	19.22	0	0	0	0	0
23414.14	6.77	250.00	18.49	0	0	0	0	0
23797.98	6.55	250.00	17.80	0	0	0	0	0
24181.82	6.35	250.00	17.14	0	0	0	0	0
24565.66	6.16	250.00	16.53	0	0	0	0	0
24949.49	5.97	250.00	15.95	0	0	0	0	0
25333.33	5.79	250.00	15.41	0	0	0	0	0
25717.17	5.62	250.00	14.89	0	0	0	0	0
26101.01	5.46	250.00	14.40	0	0	0	0	0
26484.85	5.31	250.00	13.94	0	0	0	0	0
26868.69	5.16	250.00	13.50	0	0	0	0	0
27252.53	5.01	250.00	13.09	0	0	0	0	0
27636.36	4.88	250.00	12.69	0	0	0	0	0
28020.20	4.75	250.00	12.32	0	0	0	0	0
28404.04	4.62	250.00	11.96	0	0	0	0	0
28787.88	4.50	250.00	11.62	0	0	0	0	0
29171.72	4.38	250.00	11.30	0	0	0	0	0
29555.55	4.27	250.00	10.99	0	0	0	0	0
29939.39	4.16	250.00	10.69	0	0	0	0	0
30323.23	4.06	250.00	10.41	0	0	0	0	0
30707.07	3.96	250.00	10.13	0	0	0	0	0
31090.91	3.86	250.00	9.87	0	0	0	0	0
31474.75	3.77	250.00	9.62	0	0	0	0	0
31858.59	3.68	250.00	9.37	0	0	0	0	0
32242.42	3.60	250.00	9.14	0	0	0	0	0
32626.26	3.51	250.00	8.91	0	0	0	0	0
33010.10	3.43	250.00	8.69	0	0	0	0	0
33393.94	3.35	250.00	8.48	0	0	0	0	0
33777.78	3.28	250.00	8.28	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
34161.62	3.21	250.00	8.09	0	0	0	0	0
34545.45	3.14	250.00	7.90	0	0	0	0	0
34929.29	3.07	250.00	7.71	0	0	0	0	0
35313.13	3.00	250.00	7.54	0	0	0	0	0
35696.97	2.94	250.00	7.37	0	0	0	0	0
36080.81	0.00	250.00	0.00	0	0	0	0	0
36464.64	0.00	250.00	0.00	0	0	0	0	0
36848.48	0.00	250.00	0.00	0	0	0	0	0
37232.32	0.00	250.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	300.00	0.00	1	0	1	0	0
767.68	0.00	300.00	0.00	1	0	1	0	0
1151.52	0.00	300.00	0.00	1	0	1	0	0
1535.35	0.00	300.00	0.00	1	0	1	0	0
1919.19	0.00	300.00	0.00	1	0	1	0	0
2303.03	0.00	300.00	0.00	1	0	1	0	0
2686.87	0.00	300.00	0.00	1	0	1	0	0
3070.71	0.00	300.00	0.00	1	0	1	0	0
3454.55	0.00	300.00	0.00	1	0	1	0	0
3838.38	0.00	300.00	0.00	1	0	1	0	0
4222.22	0.00	300.00	0.00	1	0	1	0	0
4606.06	0.00	300.00	0.00	1	0	1	0	0
4989.90	0.00	300.00	0.00	1	0	1	0	0
5373.74	0.00	300.00	0.00	1	0	1	0	0
5757.58	0.00	300.00	0.00	1	0	1	0	0
6141.41	0.00	300.00	0.00	1	0	1	0	0
6525.25	0.00	300.00	0.00	1	0	1	0	0
6909.09	0.00	300.00	0.00	1	0	1	0	0
7292.93	0.00	300.00	0.00	1	0	1	0	0
7676.77	0.00	300.00	0.00	1	0	1	0	0
8060.61	0.00	300.00	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
8444.44	0.00	300.00	0.00	1	0	1	0	0
8828.28	0.00	300.00	0.00	1	0	1	0	0
9212.12	0.00	300.00	0.00	1	0	1	0	0
9595.96	40.16	300.00	10000.00	1	0	0	0	1
9979.80	36.51	300.00	10000.00	1	0	0	0	1
10363.64	33.45	300.00	10000.00	1	0	0	0	1
10747.47	30.83	300.00	10000.00	1	0	0	0	1
11131.31	28.58	300.00	8019.78	1	0	0	0	1
11515.15	26.62	300.00	322.10	1	0	0	0	1
11898.99	24.90	300.00	196.50	0	0	0	0	0
12282.83	23.38	300.00	147.01	0	0	0	0	0
12666.67	22.02	300.00	118.90	0	0	0	0	0
13050.50	20.79	300.00	99.42	0	0	0	0	0
13434.34	19.68	300.00	89.25	0	0	0	0	0
13818.18	18.67	300.00	80.37	0	0	0	0	0
14202.02	17.75	300.00	72.58	0	0	0	0	0
14585.86	16.89	300.00	65.72	0	0	0	0	0
14969.70	16.10	300.00	59.67	0	0	0	0	0
15353.54	15.37	300.00	54.61	0	0	0	0	0
15737.37	14.68	300.00	51.01	0	0	0	0	0
16121.21	14.04	300.00	47.74	0	0	0	0	0
16505.05	13.44	300.00	44.78	0	0	0	0	0
16888.89	12.87	300.00	42.09	0	0	0	0	0
17272.73	12.33	300.00	39.64	0	0	0	0	0
17656.57	11.82	300.00	37.39	0	0	0	0	0
18040.40	11.34	300.00	35.34	0	0	0	0	0
18424.24	10.88	300.00	33.45	0	0	0	0	0
18808.08	10.44	300.00	31.71	0	0	0	0	0
19191.92	10.03	300.00	30.11	0	0	0	0	0
19575.76	9.64	300.00	28.63	0	0	0	0	0
19959.60	9.28	300.00	27.26	0	0	0	0	0
20343.43	8.94	300.00	25.99	0	0	0	0	0
20727.27	8.61	300.00	24.81	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
21111.11	8.31	300.00	23.71	0	0	0	0	0
21494.95	8.02	300.00	22.69	0	0	0	0	0
21878.79	7.74	300.00	21.74	0	0	0	0	0
22262.63	7.48	300.00	20.84	0	0	0	0	0
22646.46	7.23	300.00	20.01	0	0	0	0	0
23030.30	6.99	300.00	19.22	0	0	0	0	0
23414.14	6.77	300.00	18.49	0	0	0	0	0
23797.98	6.55	300.00	17.80	0	0	0	0	0
24181.82	6.35	300.00	17.14	0	0	0	0	0
24565.66	6.16	300.00	16.53	0	0	0	0	0
24949.49	5.97	300.00	15.95	0	0	0	0	0
25333.33	5.79	300.00	15.41	0	0	0	0	0
25717.17	5.62	300.00	14.89	0	0	0	0	0
26101.01	5.46	300.00	14.40	0	0	0	0	0
26484.85	5.31	300.00	13.94	0	0	0	0	0
26868.69	5.16	300.00	13.50	0	0	0	0	0
27252.53	5.01	300.00	13.09	0	0	0	0	0
27636.36	4.88	300.00	12.69	0	0	0	0	0
28020.20	4.75	300.00	12.32	0	0	0	0	0
28404.04	4.62	300.00	11.96	0	0	0	0	0
28787.88	4.50	300.00	11.62	0	0	0	0	0
29171.72	4.38	300.00	11.30	0	0	0	0	0
29555.55	4.27	300.00	10.99	0	0	0	0	0
29939.39	4.16	300.00	10.69	0	0	0	0	0
30323.23	4.06	300.00	10.41	0	0	0	0	0
30707.07	3.96	300.00	10.13	0	0	0	0	0
31090.91	3.86	300.00	9.87	0	0	0	0	0
31474.75	3.77	300.00	9.62	0	0	0	0	0
31858.59	3.68	300.00	9.37	0	0	0	0	0
32242.42	3.60	300.00	9.14	0	0	0	0	0
32626.26	3.51	300.00	8.91	0	0	0	0	0
33010.10	3.43	300.00	8.69	0	0	0	0	0
33393.94	3.35	300.00	8.48	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
33777.78	3.28	300.00	8.28	0	0	0	0	0
34161.62	3.21	300.00	8.09	0	0	0	0	0
34545.45	3.14	300.00	7.90	0	0	0	0	0
34929.29	3.07	300.00	7.71	0	0	0	0	0
35313.13	3.00	300.00	7.54	0	0	0	0	0
35696.97	2.94	300.00	7.37	0	0	0	0	0
36080.81	0.00	300.00	0.00	0	0	0	0	0
36464.64	0.00	300.00	0.00	0	0	0	0	0
36848.48	0.00	300.00	0.00	0	0	0	0	0
37232.32	0.00	300.00	0.00	0	0	0	0	0
37616.16	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
383.84	0.00	500.00	0.00	1	0	1	0	0
767.68	0.00	500.00	0.00	1	0	1	0	0
1151.52	0.00	500.00	0.00	1	0	1	0	0
1535.35	0.00	500.00	0.00	1	0	1	0	0
1919.19	0.00	500.00	0.00	1	0	1	0	0
2303.03	0.00	500.00	0.00	1	0	1	0	0
2686.87	0.00	500.00	0.00	1	0	1	0	0
3070.71	0.00	500.00	0.00	1	0	1	0	0
3454.55	0.00	500.00	0.00	1	0	1	0	0
3838.38	0.00	500.00	0.00	1	0	1	0	0
4222.22	0.00	500.00	0.00	1	0	1	0	0
4606.06	0.00	500.00	0.00	1	0	1	0	0
4989.90	0.00	500.00	0.00	1	0	1	0	0
5373.74	0.00	500.00	0.00	1	0	1	0	0
5757.58	0.00	500.00	0.00	1	0	1	0	0
6141.41	0.00	500.00	0.00	1	0	1	0	0
6525.25	0.00	500.00	0.00	1	0	1	0	0
6909.09	0.00	500.00	0.00	1	0	1	0	0
7292.93	0.00	500.00	0.00	1	0	1	0	0
7676.77	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
8060.61	0.00	500.00	0.00	1	0	1	0	0
8444.44	0.00	500.00	0.00	1	0	1	0	0
8828.28	0.00	500.00	0.00	1	0	1	0	0
9212.12	0.00	500.00	0.00	1	0	1	0	0
9595.96	40.16	500.00	10000.00	1	0	0	0	1
9979.80	36.51	500.00	10000.00	1	0	0	0	1
10363.64	33.45	500.00	10000.00	1	0	0	0	1
10747.47	30.83	500.00	10000.00	1	0	0	0	1
11131.31	28.58	500.00	8019.78	1	0	0	0	1
11515.15	26.62	500.00	322.10	0	0	0	0	0
11898.99	24.90	500.00	196.50	0	0	0	0	0
12282.83	23.38	500.00	147.01	0	0	0	0	0
12666.67	22.02	500.00	118.90	0	0	0	0	0
13050.50	20.79	500.00	99.42	0	0	0	0	0
13434.34	19.68	500.00	89.25	0	0	0	0	0
13818.18	18.67	500.00	80.37	0	0	0	0	0
14202.02	17.75	500.00	72.58	0	0	0	0	0
14585.86	16.89	500.00	65.72	0	0	0	0	0
14969.70	16.10	500.00	59.67	0	0	0	0	0
15353.54	15.37	500.00	54.61	0	0	0	0	0
15737.37	14.68	500.00	51.01	0	0	0	0	0
16121.21	14.04	500.00	47.74	0	0	0	0	0
16505.05	13.44	500.00	44.78	0	0	0	0	0
16888.89	12.87	500.00	42.09	0	0	0	0	0
17272.73	12.33	500.00	39.64	0	0	0	0	0
17656.57	11.82	500.00	37.39	0	0	0	0	0
18040.40	11.34	500.00	35.34	0	0	0	0	0
18424.24	10.88	500.00	33.45	0	0	0	0	0
18808.08	10.44	500.00	31.71	0	0	0	0	0
19191.92	10.03	500.00	30.11	0	0	0	0	0
19575.76	9.64	500.00	28.63	0	0	0	0	0
19959.60	9.28	500.00	27.26	0	0	0	0	0
20343.43	8.94	500.00	25.99	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
20727.27	8.61	500.00	24.81	0	0	0	0	0
21111.11	8.31	500.00	23.71	0	0	0	0	0
21494.95	8.02	500.00	22.69	0	0	0	0	0
21878.79	7.74	500.00	21.74	0	0	0	0	0
22262.63	7.48	500.00	20.84	0	0	0	0	0
22646.46	7.23	500.00	20.01	0	0	0	0	0
23030.30	6.99	500.00	19.22	0	0	0	0	0
23414.14	6.77	500.00	18.49	0	0	0	0	0
23797.98	6.55	500.00	17.80	0	0	0	0	0
24181.82	6.35	500.00	17.14	0	0	0	0	0
24565.66	6.16	500.00	16.53	0	0	0	0	0
24949.49	5.97	500.00	15.95	0	0	0	0	0
25333.33	5.79	500.00	15.41	0	0	0	0	0
25717.17	5.62	500.00	14.89	0	0	0	0	0
26101.01	5.46	500.00	14.40	0	0	0	0	0
26484.85	5.31	500.00	13.94	0	0	0	0	0
26868.69	5.16	500.00	13.50	0	0	0	0	0
27252.53	5.01	500.00	13.09	0	0	0	0	0
27636.36	4.88	500.00	12.69	0	0	0	0	0
28020.20	4.75	500.00	12.32	0	0	0	0	0
28404.04	4.62	500.00	11.96	0	0	0	0	0
28787.88	4.50	500.00	11.62	0	0	0	0	0
29171.72	4.38	500.00	11.30	0	0	0	0	0
29555.55	4.27	500.00	10.99	0	0	0	0	0
29939.39	4.16	500.00	10.69	0	0	0	0	0
30323.23	4.06	500.00	10.41	0	0	0	0	0
30707.07	3.96	500.00	10.13	0	0	0	0	0
31090.91	3.86	500.00	9.87	0	0	0	0	0
31474.75	3.77	500.00	9.62	0	0	0	0	0
31858.59	3.68	500.00	9.37	0	0	0	0	0
32242.42	3.60	500.00	9.14	0	0	0	0	0
32626.26	3.51	500.00	8.91	0	0	0	0	0
33010.10	3.43	500.00	8.69	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
33393.94	3.35	500.00	8.48	0	0	0	0	0
33777.78	3.28	500.00	8.28	0	0	0	0	0
34161.62	3.21	500.00	8.09	0	0	0	0	0
34545.45	3.14	500.00	7.90	0	0	0	0	0
34929.29	3.07	500.00	7.71	0	0	0	0	0
35313.13	3.00	500.00	7.54	0	0	0	0	0
35696.97	2.94	500.00	7.37	0	0	0	0	0
36080.81	0.00	500.00	0.00	0	0	0	0	0
36464.64	0.00	500.00	0.00	0	0	0	0	0
36848.48	0.00	500.00	0.00	0	0	0	0	0
37232.32	0.00	500.00	0.00	0	0	0	0	0
37616.16	0.00	500.00	0.00	0	0	0	0	0
38000.00	0.00	500.00	0.00	0	0	0	0	0